



TOWN OF ERIE

645 Holbrook Street
Erie, CO 80516

Meeting Agenda

Town Council

Tuesday, September 2, 2025

6:00 PM

Council Chambers

Special Meeting

[Link to Watch or Comment Virtually: https://bit.ly/TC-Special-1stTuesday](https://bit.ly/TC-Special-1stTuesday)

I. Call Meeting to Order and Pledge of Allegiance

6:00 p.m.

II. Roll Call

III. Approval of the Agenda

6:00-6:05 p.m.

IV. Public Comment On Non-Agenda and Consent Items only.

6:05-6:15 p.m.

(This agenda item provides the public an opportunity to discuss items that are not on the agenda or consent agenda items only. The Town Council is not prepared to decide on matters brought up at this time, but if warranted, will place them on a future agenda.)

V. General Business

[25-474](#)

Police Facility Expansion Update

Attachments:

[09.02 Council Meeting Erie Police](#)

6:15-7:45 p.m.

Presenter(s): Lee Mathis, Chief of Police
D2C Architects

[25-478](#)

Sustainability Action Plan update and discussion with Town of Erie Town Council

Attachments:

[Presentation](#)

[Existing Conditions Analysis Memo](#)

[Equity Analysis](#)

[2019 Sustainability Plan](#)

7:45-8:30 p.m.

Presenter(s): Molly Marcucilli, Climate Mitigation and Resilience Planning Associate
Eryka Thorley, Sustainability Manager

[25-171](#)

Discussion of Oil and Gas in Erie

Attachments:[List of Plugged and Abandoned Wells by Date Plugged](#)[Oil and Gas Presentation](#)

8:30-9:15 p.m.

*Presenter(s): David Frank, Director of Environmental Services
Ben Kellond, Environmental Analyst*

VI. Adjournment

9:15 p.m.

(The Town Council's Goal is that all meetings be adjourned by 10:30pm. An agenda check will be conducted at or about 10:00 p.m., and no later than at the end of the first item finished after 10:00 p.m. Items not completed prior to adjournment will generally be taken up at the next regular meeting.)



TOWN OF ERIE

645 Holbrook Street
Erie, CO 80516

Town Council

Board Meeting Date: 9/2/2025

File #: 25-474, **Version:** 1

SUBJECT:

Police Facility Expansion Update

DEPARTMENT: Police

PRESENTER(S): Lee Mathis, Chief of Police
D2C Architects

TIME ESTIMATE: 90 minutes

For time estimate: please put 0 for Consent items.

FISCAL SUMMARY:

N/A

POLICY ISSUES:

Due to an increase in workload and the need for more officers to provide public safety services to a growing population, the police department needs an expanded facility.

STAFF RECOMMENDATION:

Information only

SUMMARY/KEY POINTS

- Update Council on need and progress for design of Police Facility Expansion.
- Provide information and statistics on increasing police workload and status of design for building expansion.
- Design work is almost complete for the expansion and pre-construction tasks can start 4th quarter of 2025, if Council approves funding in 2026 Budget.

BACKGROUND OF SUBJECT MATTER:

Following a space needs analysis in 2023, a design process was approved in 2024 and funded in the 2025 Budget.

This agenda item provides an update to the Council on the ongoing need for expansion and the progress of the design for the expanded police facility, which will include renovation of the existing

building and an approximately 33,000 square foot addition at the same site.

TOWN COUNCIL PRIORITY(S) ADDRESSED:

- ☐ Attractive Community Amenities
- ☐ Engaged and Diverse Community
- ☐ Prosperous Economy
- ☐ Well-Maintained Transportation Infrastructure
- ☐ Small Town Feel
- ☒ Safe and Healthy Community
- ☒ Effective Governance
- ☐ Environmentally Sustainable
- ☒ Fiscally Responsible

ATTACHMENT(S):

1. Presentation

At a 2024 Glance



Calls for Service
21,734



20%

Population
40,183



8%

Crime Reports
714



18%

Services NEEDS On The Rise

2023-2024 Comparison

Investigative Cases Assigned  8%

Animal Services  35%

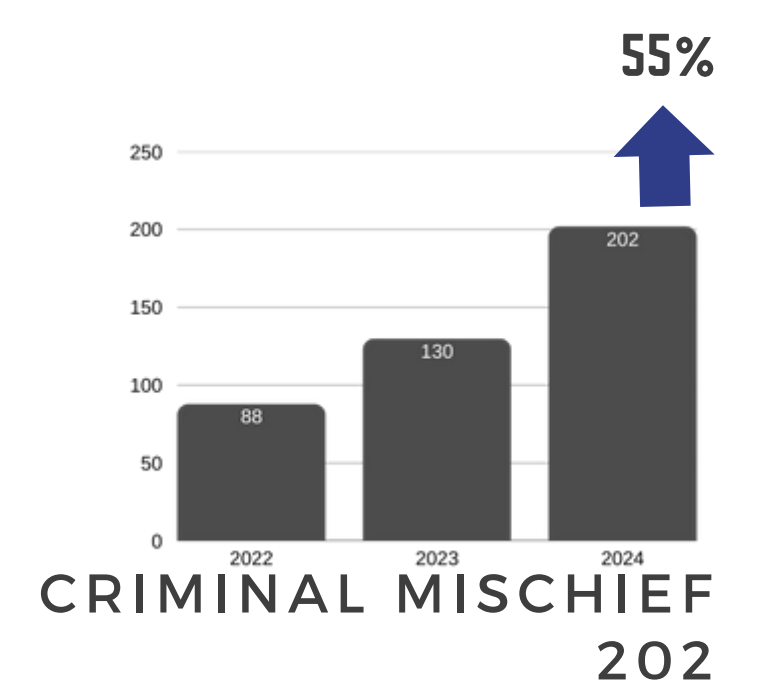
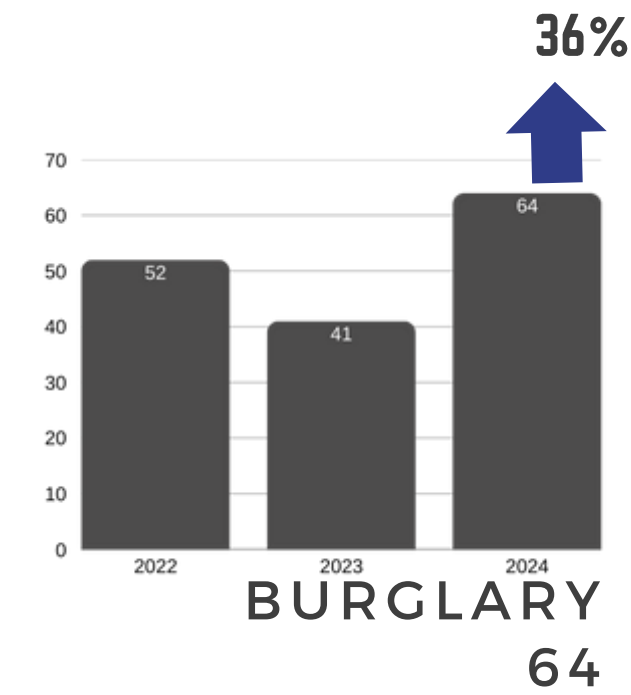
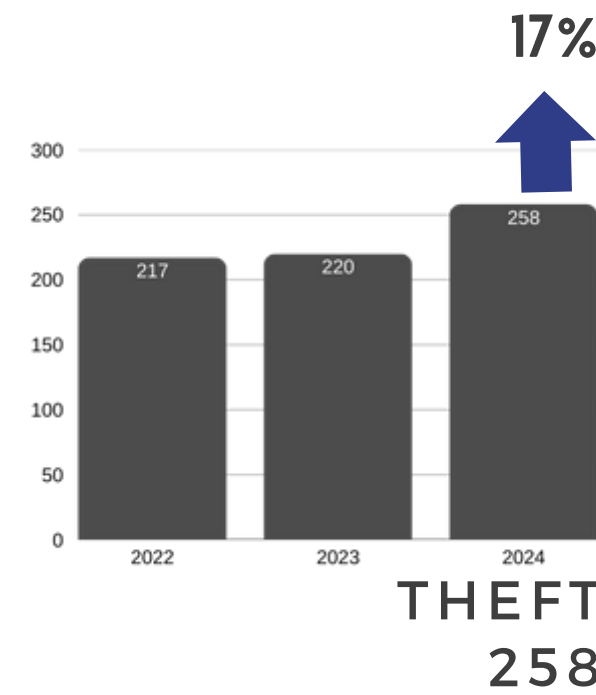
Victim Crime Callouts  13%

CoResponder  62%

Budget  5%

Crime COMMERCE Factor

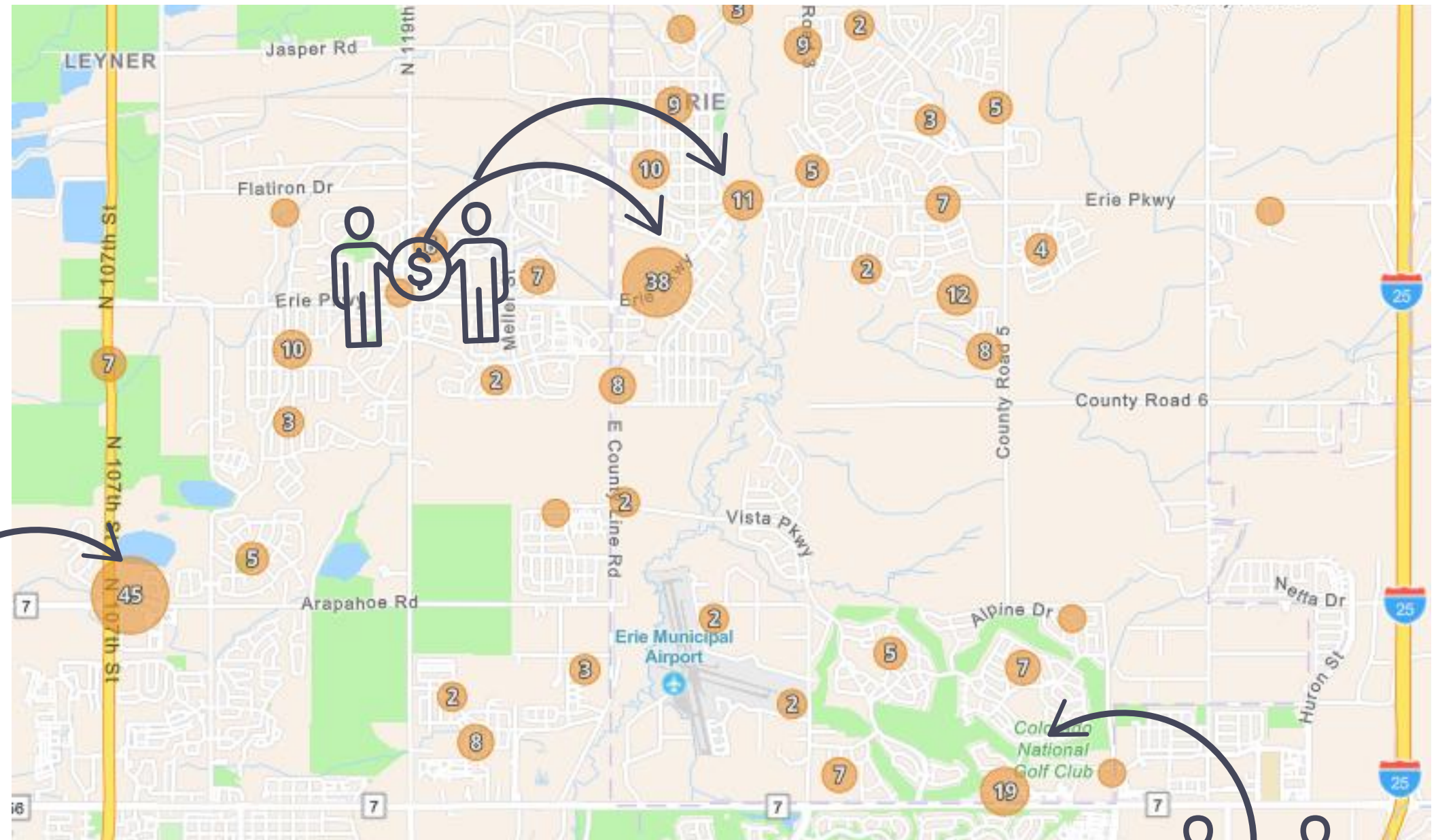
2023 - 2024 comparison



What might
Town Center bring?



6 **NEW** businesses
opened along 287 in
2024, namely King
Soopers.



4 **NEW** businesses
opened along Hwy 7 in 2024.



Crash LOCATIONS Report

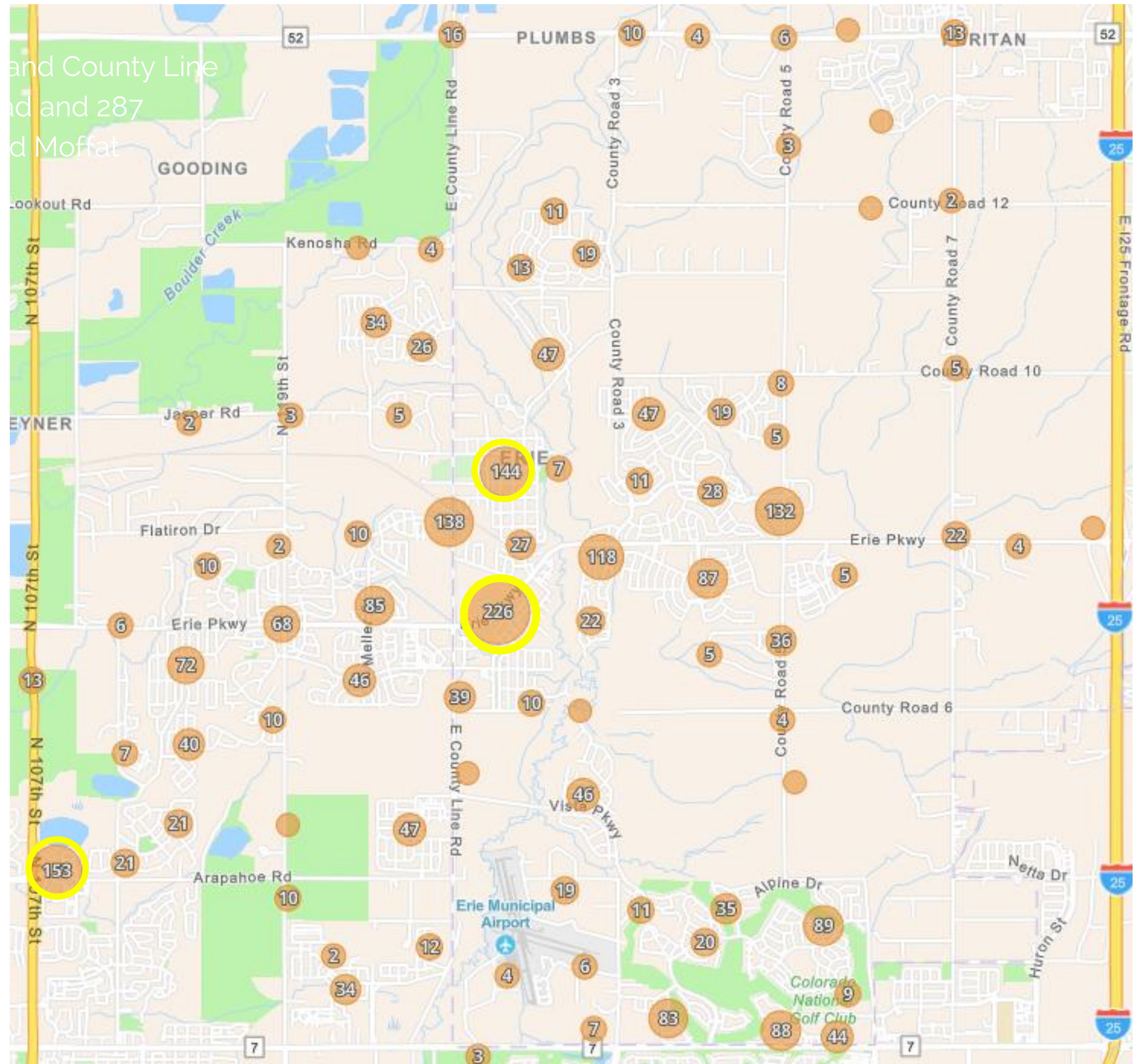
2023 - 2024
comparison

Injury Collisions  55%

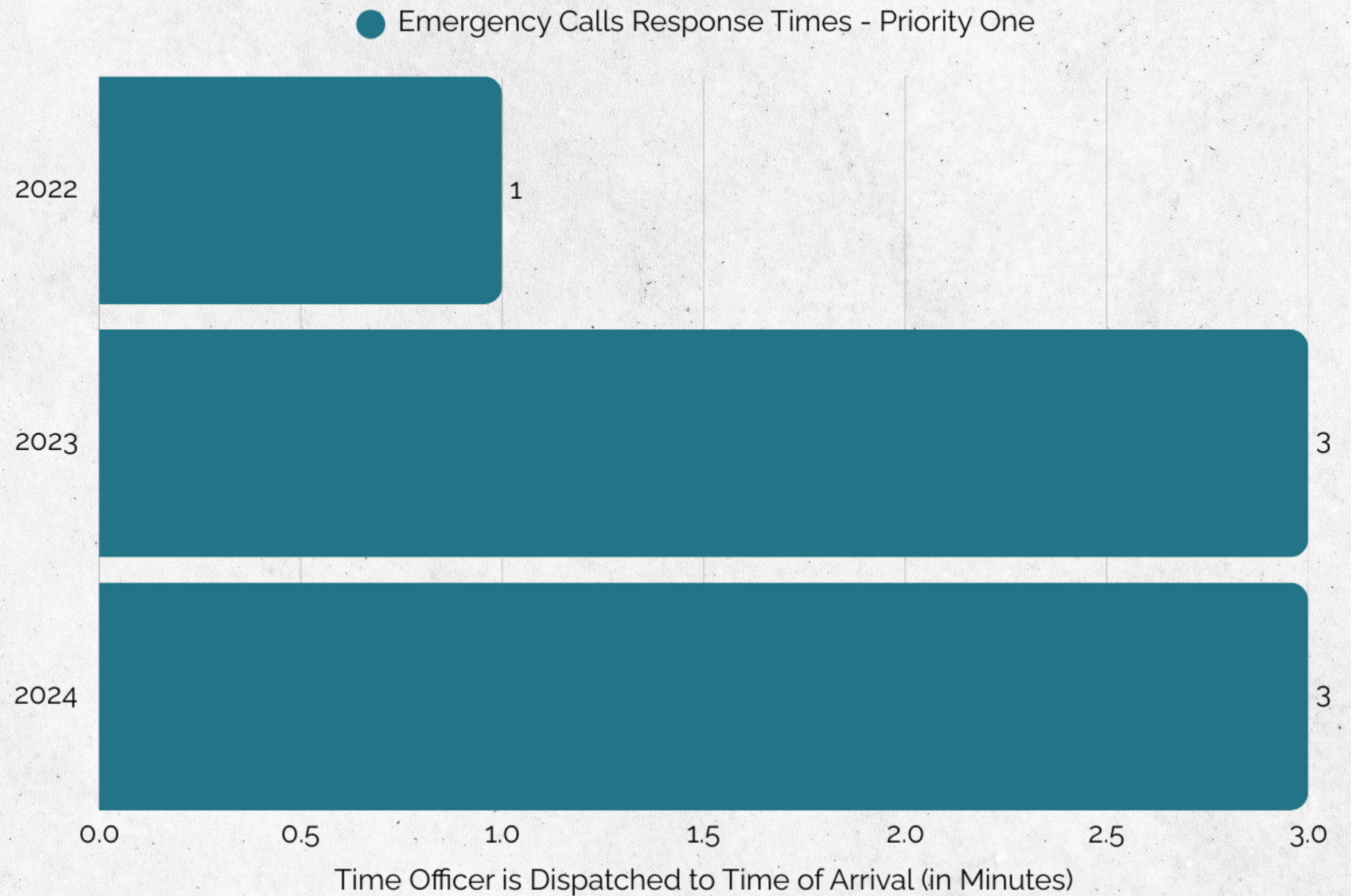
Property Damage Collisions  15%

Traffic Education  11%

Traffic Citations  19%

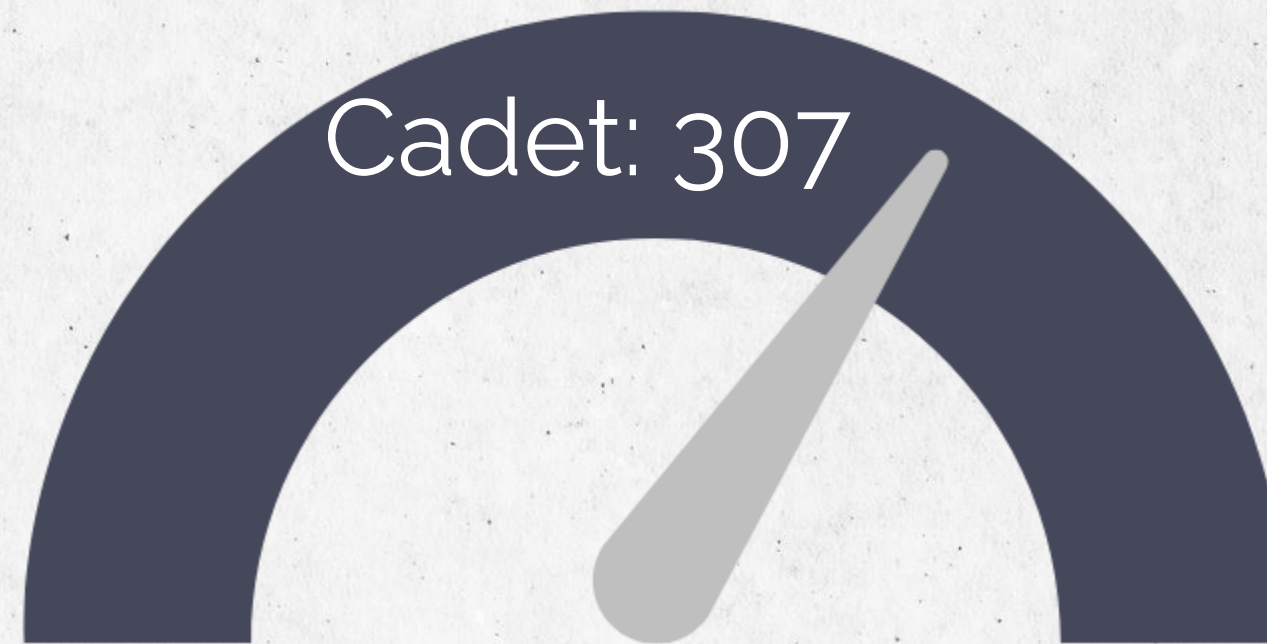


At a Glance RESPONSE TIMES

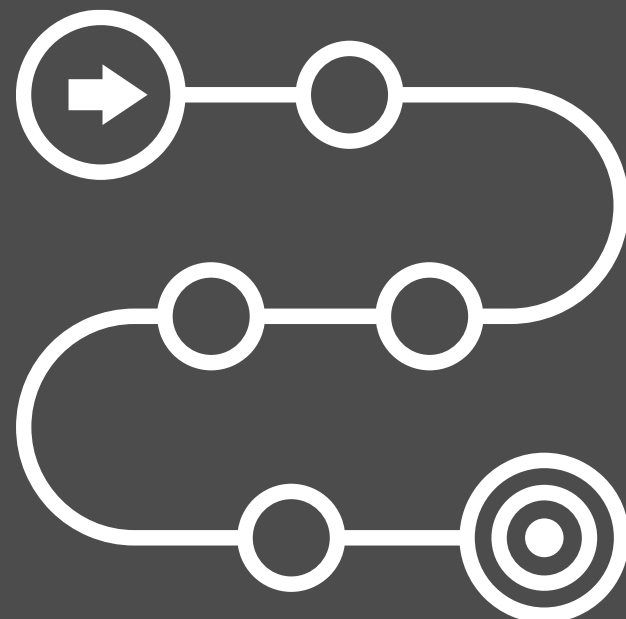


- Minimum staffing in a 24-hour period, **two officers** and one sergeant each shift.
- Priority two and three calls average a 3-6 minute response time over the last three years.

Clarify PATH TO COMMISSIONED Stages



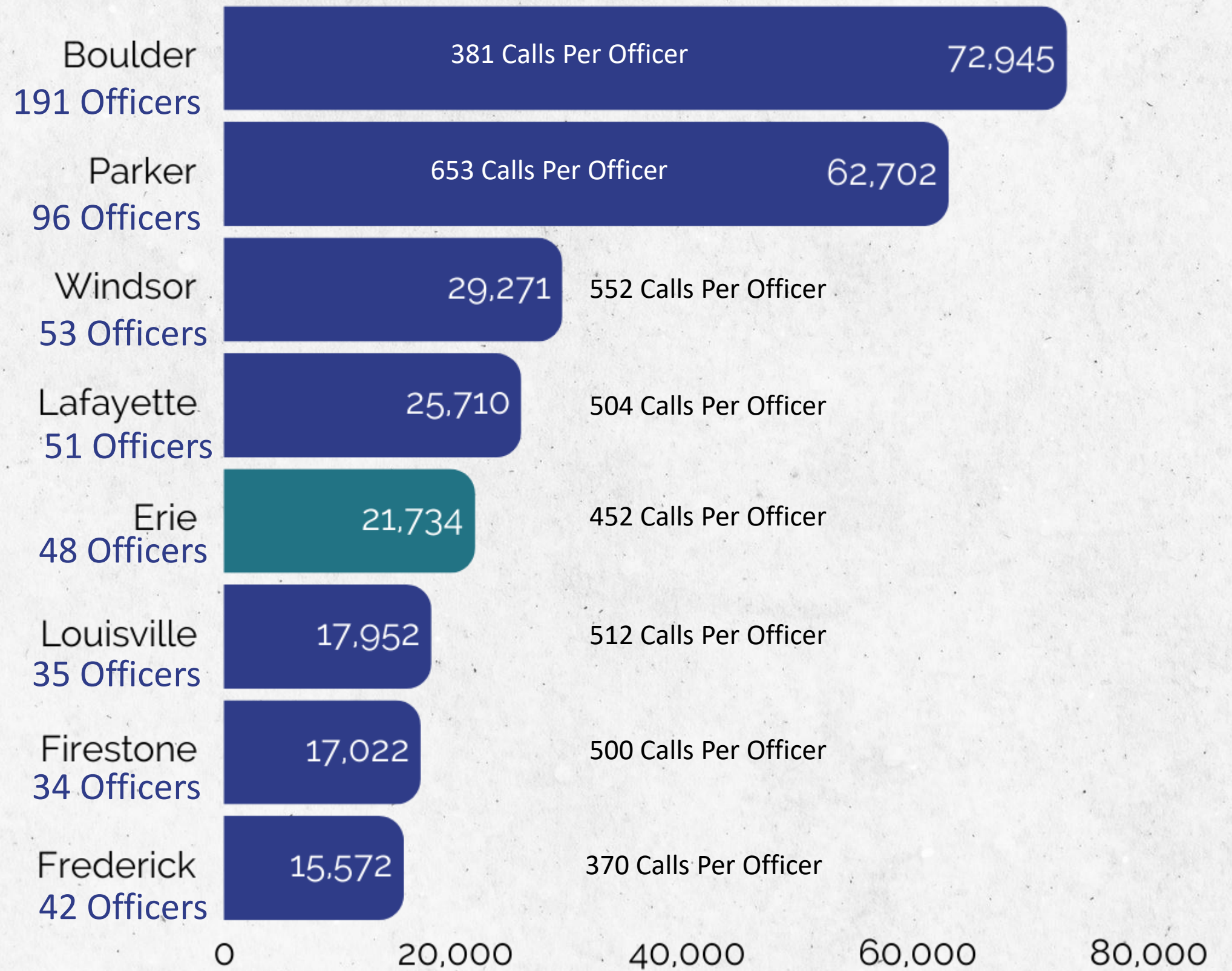
Average Days from job posting to Fully Commissioned Erie Officer



- **Authorized Strength:** Number of officers approved (48)
- **Field Training:** Officers in 17-week on-the-job training.
- **Fully Sworn and Certified / Fully Commissioned:** Officers who are sworn and have completed all training to act independently.

Calls for OFFICERS Service

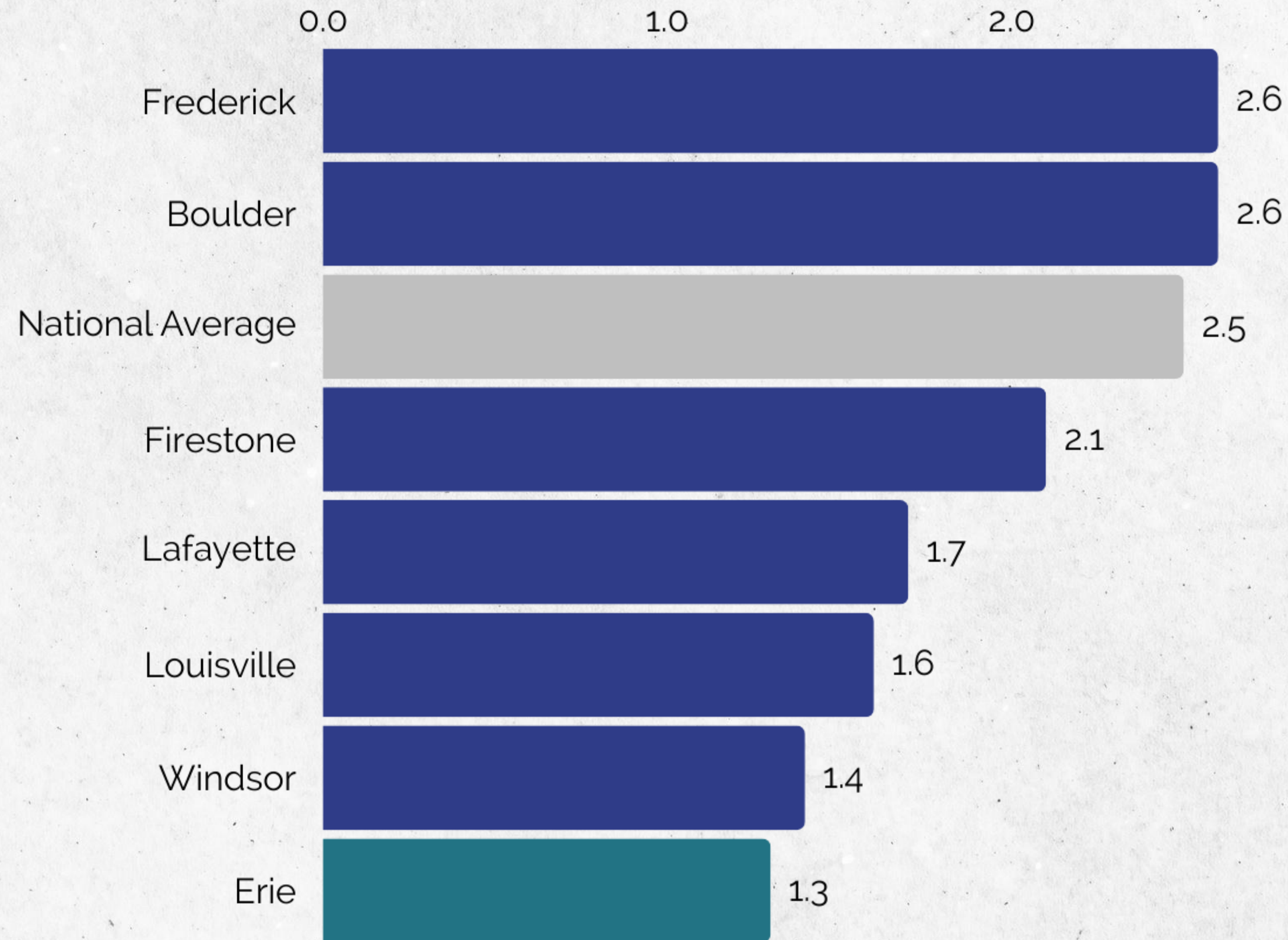
2023 Agency Comparison



Authorized OFFICERS

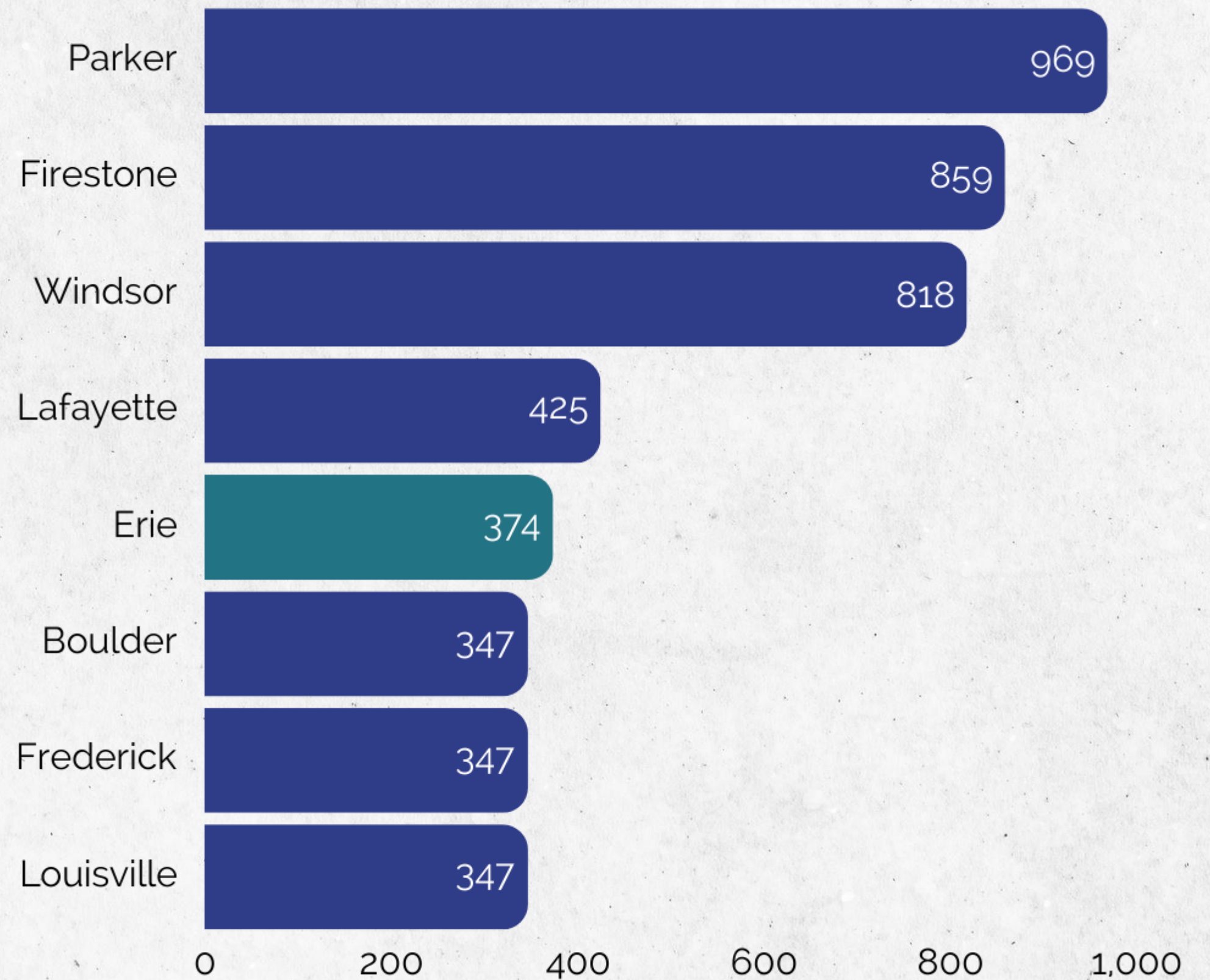
(Capita ratio per 1,000 in 2024)

Population



Square OFFICERS Footage

Comparison of similar
agencies



The Town of Erie's current police facility was designed to house 50 officers.
Current authorized sworn staff for Erie PD is 48.

Trusting DESIGN The Process



D2C ARCHITECTS
ARCHITECTURE | INTERIORS | SUSTAINABILITY

Meet the Team



Police FACILITY Comparisons

Police Facility Comparisons			
	Built	Sq. Footage	# Sworn
Firestone	2019	30K	28
Windsor	2024	45K	53
Parker	2010	50K	91
Englewood	2019	49K	78
Timnath	2022	22K	13
Northglenn	2017	48K	73
Broomfield	TBD	85K	198
Erie	2014	18K	48

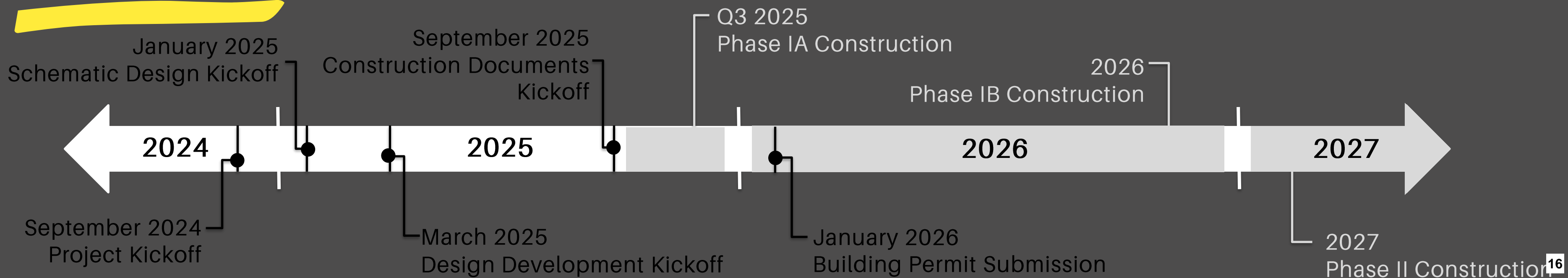
Recent Police Facility Project Costs *			
Location	Cost Per SF	Total Project Cost	Funding Sources
Firestone	\$ 1,071	\$ 32,134,800	6%Tax
Windsor	\$ 898	\$ 40,419,649	Capital Funds
Timanth	\$ 1,044	\$ 22,972,400	General Fund
Broomfield (In Design)	\$ 1,038	\$ 89,670,000	COPs
LoneTree (under construction)	\$ 1,096	\$ 41,631,280	COPs
Avg Cost per SF	\$ 1,029		

*Total project cost generated from available construction cost information plus average soft cost figure. Average Cost Escalation per year for commercial construction in Denver Metro Area estimated at 5-6%, subject to current economic factors at the time of construction

At a GOAL & TIMELINE Glance

- Design an addition to the existing Police Department Facility to support the Town's growing population
- Maintain existing facility operational during construction
- Preserve and enhance the facility's architectural expression

Project Timeline



Early SITE CONCEPTS Iterations

- Analysis on how to best use the site for expansion
- East vs. West



East Expansion



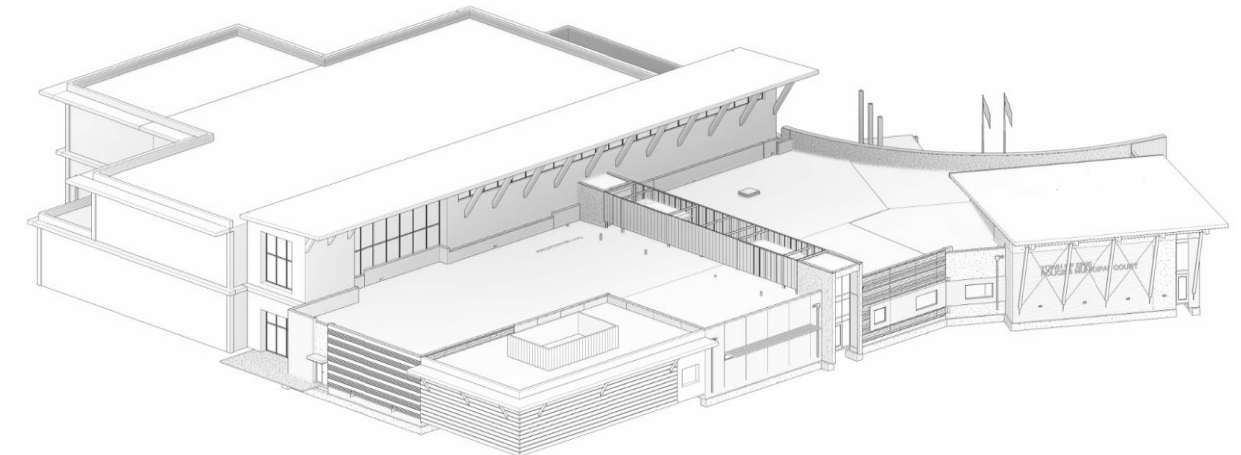
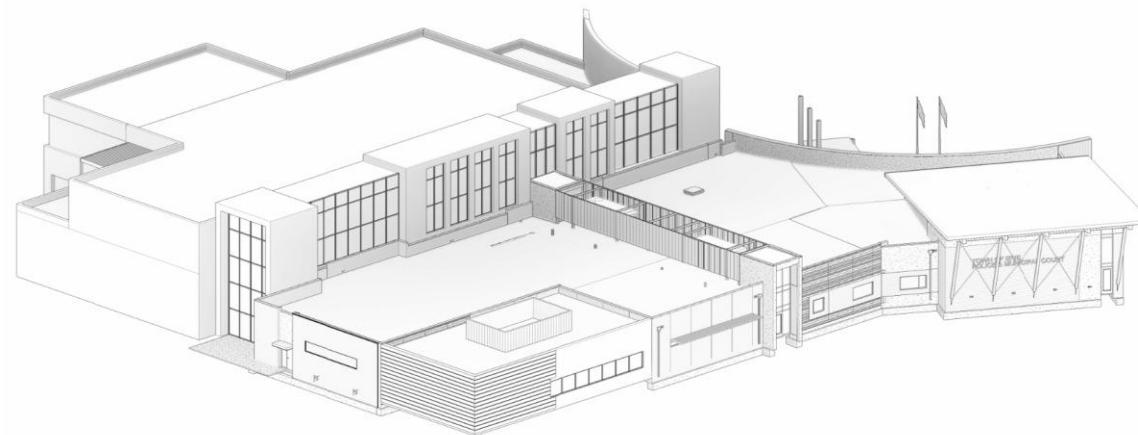
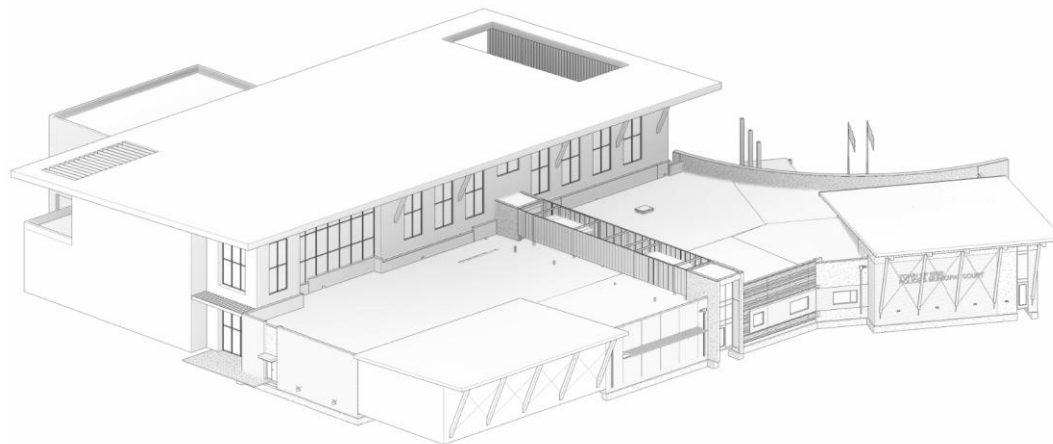
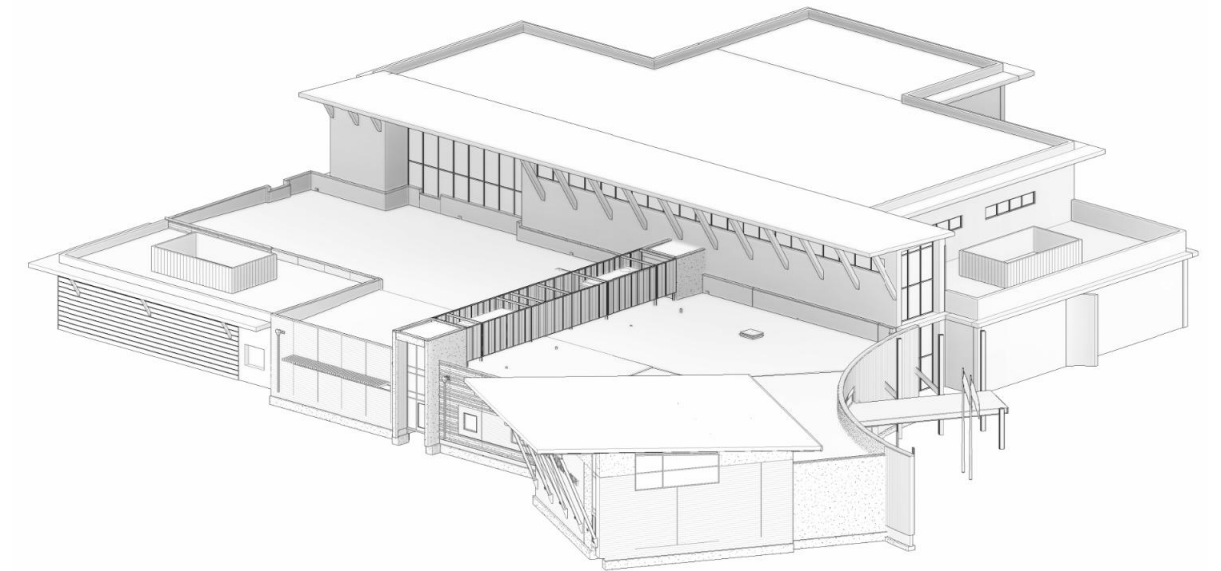
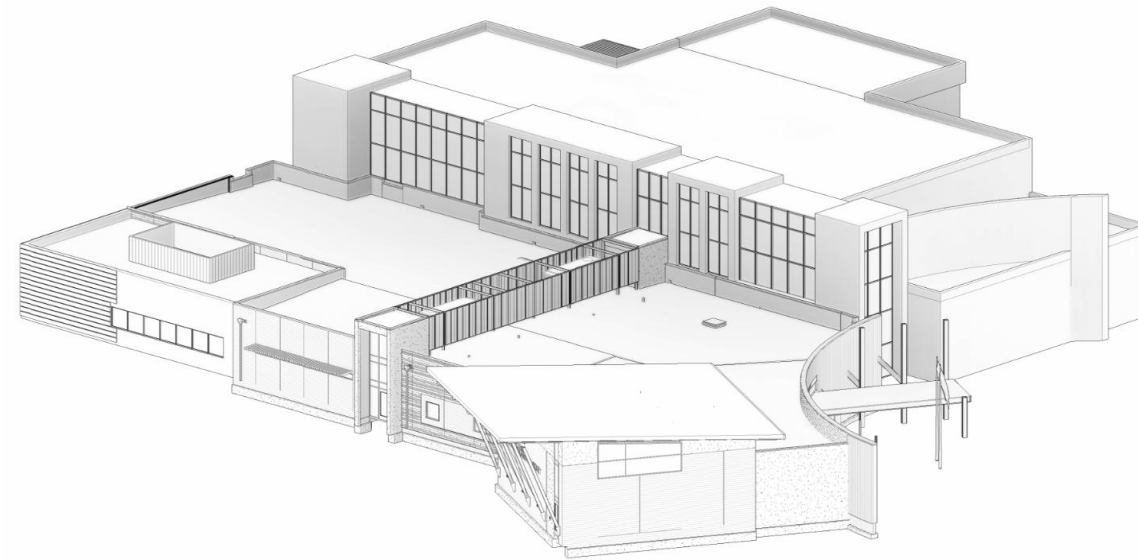
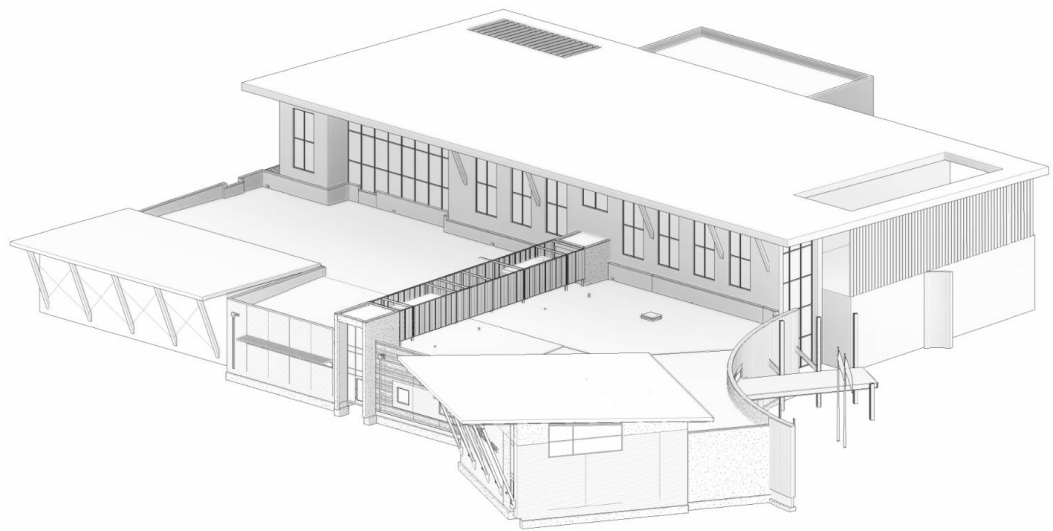
West Expansion

Finding TEAMWORK Solutions



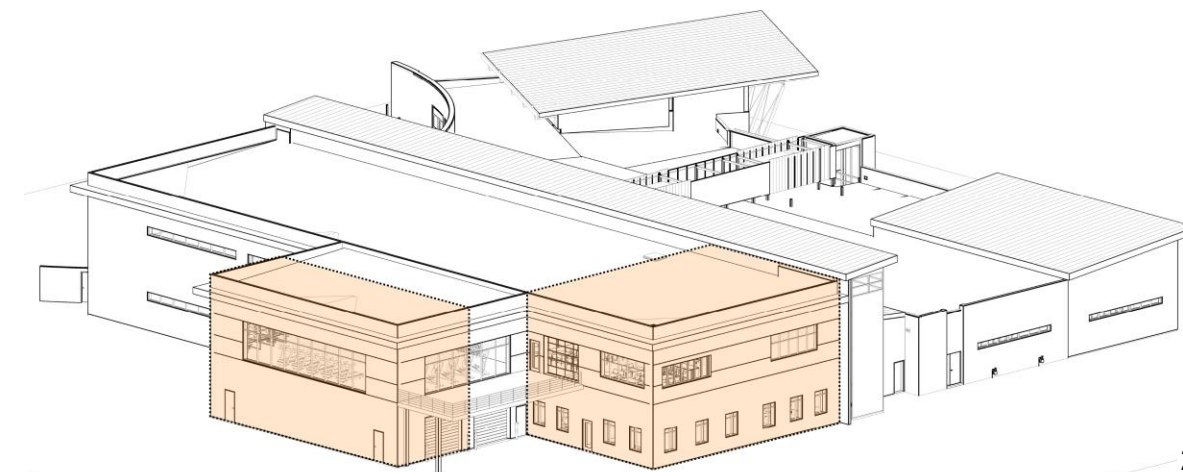
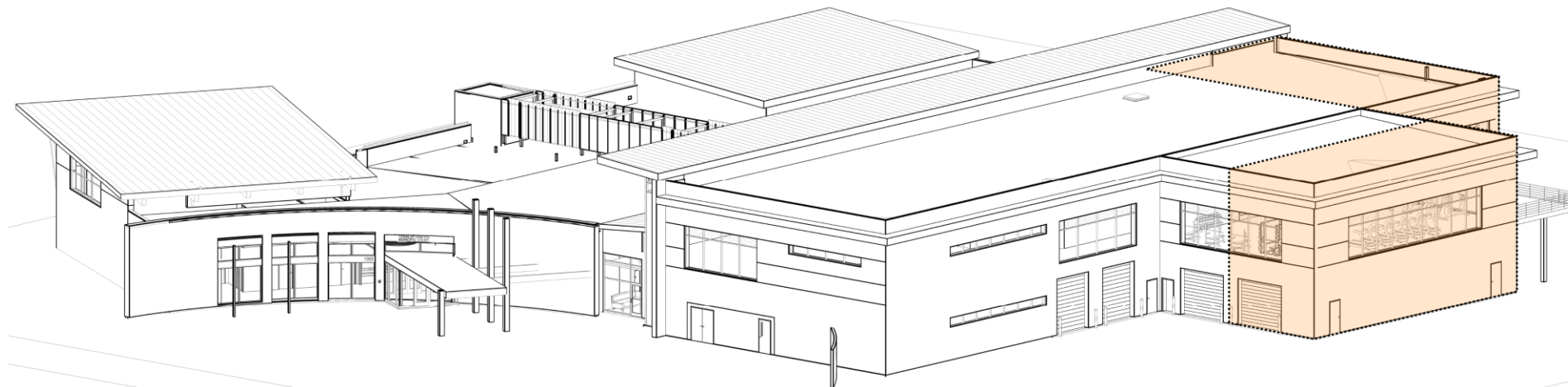
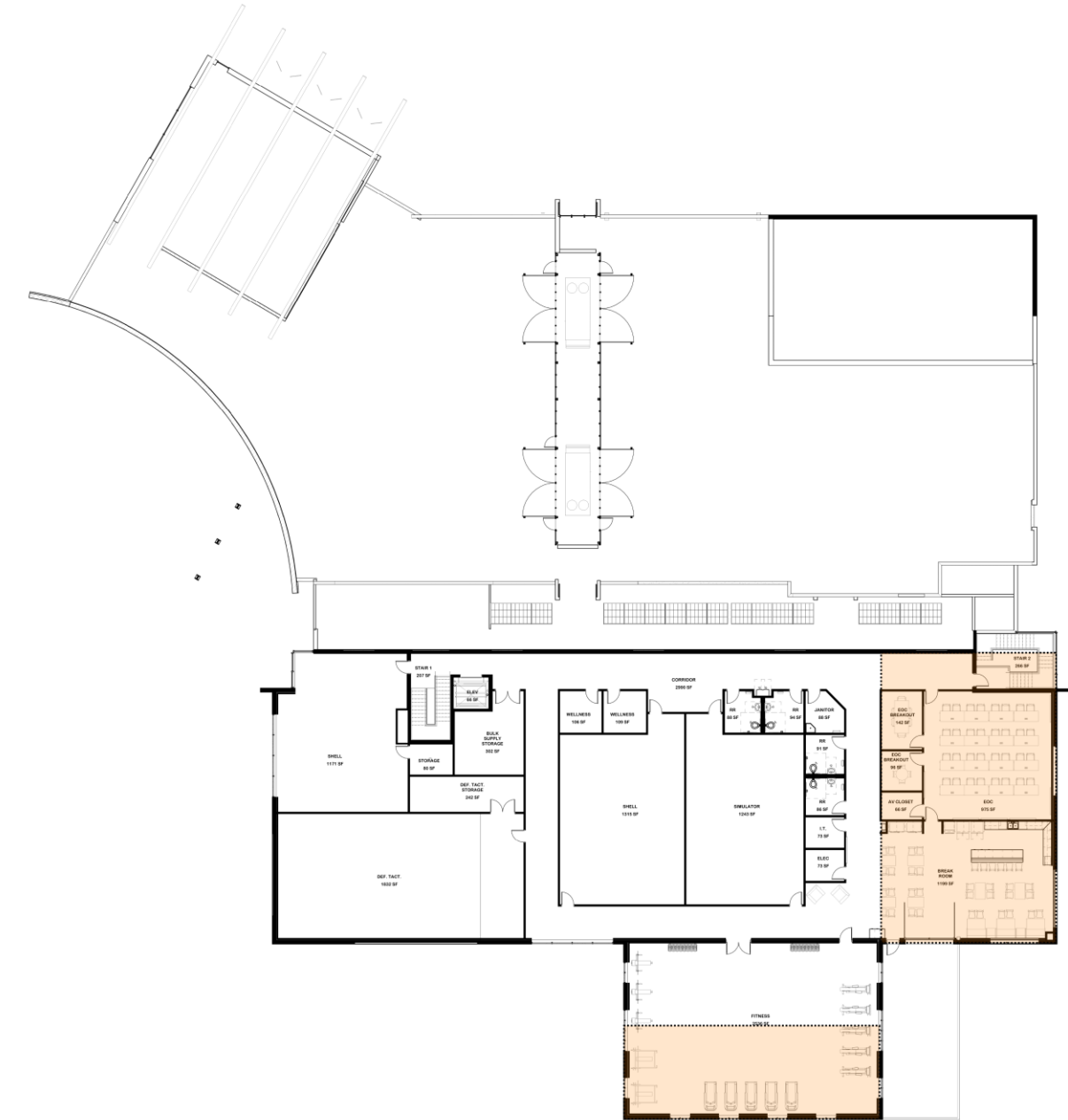
Taking CONCEPTUAL MASSING Shape

Exploration of building massing
options to best compliment the
existing facility



Optimizing FOOTPRINT RESIZE Space

- 15,000 SF reduction to stay within budget
- Account for future growth



PROPOSED DESIGN



Work in PROPOSED DESIGN Progress

- Staff Parking (secured): 103
- Public Parking: 56





North Entry



South Entry



Western Pedestrian Path





First Floor Spline



Patrol Briefing Room



Emergency Operations Center (EOC)



Second Floor Spline



Break Room

Police FACILITY Costs Cont.

- March 2025: Staff communicated a ROM Conceptual budget \$39.4M (2024 dollars) and a per year delay factor of 10% cost escalation for construction based on design consultant's recommendation. Current projection for construction escalation is between 5-6%
- Current cost estimate from Fransen Pittman (FP) is conservative at this phase of design (Design Development (DD)) at \$47.7M, Cost modeling sessions will continue where FP offers input towards potential cost savings for the Project
- Potential subcontractors are submitting proposals to FP based on current set of 100% Design Development documents. FP will produce an Initial Guaranteed Maximum Price (IGMP) for the project mid-late September establishing a Fixed Limit of Construction Cost, pending Town approval
- FP will submit a final Guaranteed Maximum Price (GMP) to the Town during this current Construction Documentation phase

Police Facility Costs Cont.



The Cost of Delay

- Estimated construction inflation is per year and subject to current economic factors
- Consulting and election costs are minimum costs
- Interest rate inflation refers to the cost of the dollar today, verses a one-year delay at a 2% inflation rate

Other factors:

- Interest rates are currently somewhat unpredictable
- The Town is currently under contract and in active design phase, lost funds from delay are unknown

Delay Factor	Cost
6% cost inflation for construction	\$2,862,000
Additional retrofitting costs	\$1,089,840
Consulting costs for feasibility of ballot item	\$20,000
Election costs	\$30,000
Interest rate inflation	\$784,313
Total Estimated Cost	\$4,786,153

Police

Next Steps

FACILITY EXPANSION

Pending Council Direction on Certificate of Participation Financing, staff will bring the following to Council/Planning Commission for approvals to stay on track for a January 2026 construction start:

- 1) October 14, 2025, Town Council Meeting: Construction Manager At Risk (CMAR) Amendment One for Early Release Bid Package #1 (BP01) - Buyout of Earthwork and Utilities subcontracts, Pre-cast concrete, Structural Steel, Mechanical, Electrical, Plumbing, Elevator
- 2) November 5, 2025, Planning Commission Hearing: Special Review Use and Site Development Plan (SDP) for Erie Police Department Addition and Renovation
- 3) November 18, 2025, Town Council Meeting: CMAR Amendment Two for early release Bid Package #2 - Earthwork/Utilities material and fabrication release, foundations
- 4) December 9, 2025, Town Council Meeting: SDP Approval
- 5) February 24, 2026, Town Council Meeting: CMAR Amendment Three for final Guaranteed Maximum Price

Decision

FACILITY EXPANSION

Direction Needed from Council

- Decide to fund with Certificates of Participation (COPs)
- Decide to fund with COPs and explore future public safety tax to pay off COP debt and fund future public safety needs
- Decide to fund through future ballot question without using COPs, delaying project into 2027 or beyond.
- Other?



TOWN OF ERIE

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Erie, CO 80516

Town Council

Board Meeting Date: 9/2/2025

File #: 25-478, **Version:** 1

SUBJECT:

Sustainability Action Plan update and discussion with Town of Erie Town Council

DEPARTMENT: Environmental Services

PRESENTER(S): Molly Marcucilli, Lotus Engineering & Sustainability Climate Mitigation and Resilience Planning Associate
Eryka Thorley, Sustainability Manager

TIME ESTIMATE: 45 minutes

For time estimate: please put 0 for Consent items.

FISCAL SUMMARY:

Cost as Recommended:	\$117,013.50
Balance Available:	\$73,618.05
Fund	General Fund
Line Item Number:	205-25-780-560100-252502 (Boulder County grant)
	100-25-780-560100-252502 (Erie grant match)
	100-25-780-560100-000000 (Consulting)
New Appropriation Required:	No

POLICY ISSUES:

Erie's Sustainability Action Plan update builds from its 2019 Sustainability Plan while incorporating new initiatives and information such as Erie's 2024 Climate Emergency Declaration, 2023 and 2025 Community Survey priorities, and recently adopted Beneficial Electrification Plan. This plan development contract was approved by Council on Jan. 28, 2025.

STAFF RECOMMENDATION:

Informational item with request for Council feedback on current plan update and overall trajectory.

SUMMARY/KEY POINTS

- This is an update about Erie's Sustainability Action Plan development process including an existing condition review and analysis, greenhouse gas emissions inventory review, draft plan strategies, and communication and engagement thus far.
- Staff and Lotus are requesting Council feedback regarding the current progression of the plan development and any visible gaps or needed focus areas moving forward.

- Erie's Sustainability Action Plan is scheduled for final presentation to Council and adoption in early 2026.

BACKGROUND OF SUBJECT MATTER:

In 2019, the Board of Trustees adopted the Town's first Sustainability Plan (attached), which included strong emissions reduction goals such as renewable energy adoption, transportation electrification and efficiencies, waste diversion, and related education and outreach. At the time, Erie did not yet have a townwide greenhouse gas inventory to develop specific emission reduction targets. In 2019, the Board committed to updating the Sustainability Plan every five years.

The Sustainability Action Plan incorporates the remaining 20% of ongoing actions and efforts of the 2019 plan with the Town's first climate action emissions-based targets based on its 2021 and 2023 community and municipal emissions inventories. This update includes a check-in regarding Erie's greenhouse gas emission sources and sectors, already completed plan update engagement with the Erie community and various partners, draft Sustainability Action Plan strategies, and Erie's recent 2025 Community Survey results.

The total cost of the plan development is \$117,013, with \$85,000 of the funds sourced from the Sustainability Division's 2025 Budget, \$30,506 from Boulder County's Environmental Sustainability Matching Grant, and the remaining \$1,507 from the Sustainability Division's Special Events budget.

This plan enables Erie to target additional grant funds such as the Department of Local Affairs recent Climate Resilience Challenge, which allows only communities with a Climate Action or Resilience Plan to apply for Project Implementation funds (up to \$2M) and other similar grant funding opportunities.

TOWN COUNCIL PRIORITY(S) ADDRESSED:

- ☒ Attractive Community Amenities
- ☒ Engaged and Diverse Community
- ☐ Prosperous Economy
- ☐ Well-Maintained Transportation Infrastructure
- ☒ Small Town Feel
- ☒ Safe and Healthy Community
- ☒ Effective Governance
- ☒ Environmentally Sustainable
- ☒ Fiscally Responsible

ATTACHMENT(S):

1. Presentation
2. Existing Conditions Analysis Memo
3. Equity Analysis
4. 2019 Sustainability Plan



Erie Sustainability Action Plan (SAP) Update

Town of Erie, Colorado
Town Council Study Session

**Molly Marcucilli | Climate Mitigation and Resilience
Planning Associate | Lotus Engineering &
Sustainability**

**Eryka Thorley | Sustainability Manager | Town of
Erie**

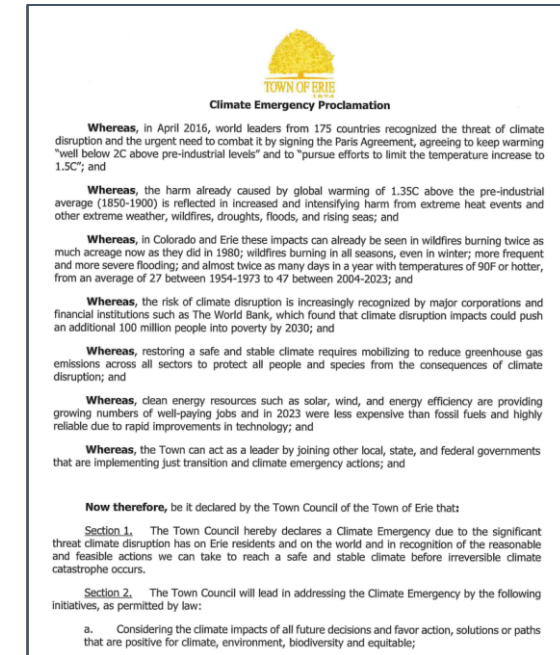
SAP Presentation Overview

- **Project Background & Timeline**
- **Greenhouse Gas (GHG) Emissions Overview**
- **Stakeholder and Community Engagement Updates**
- **Strategy Development**
- **Looking Ahead**
- **Q&A**



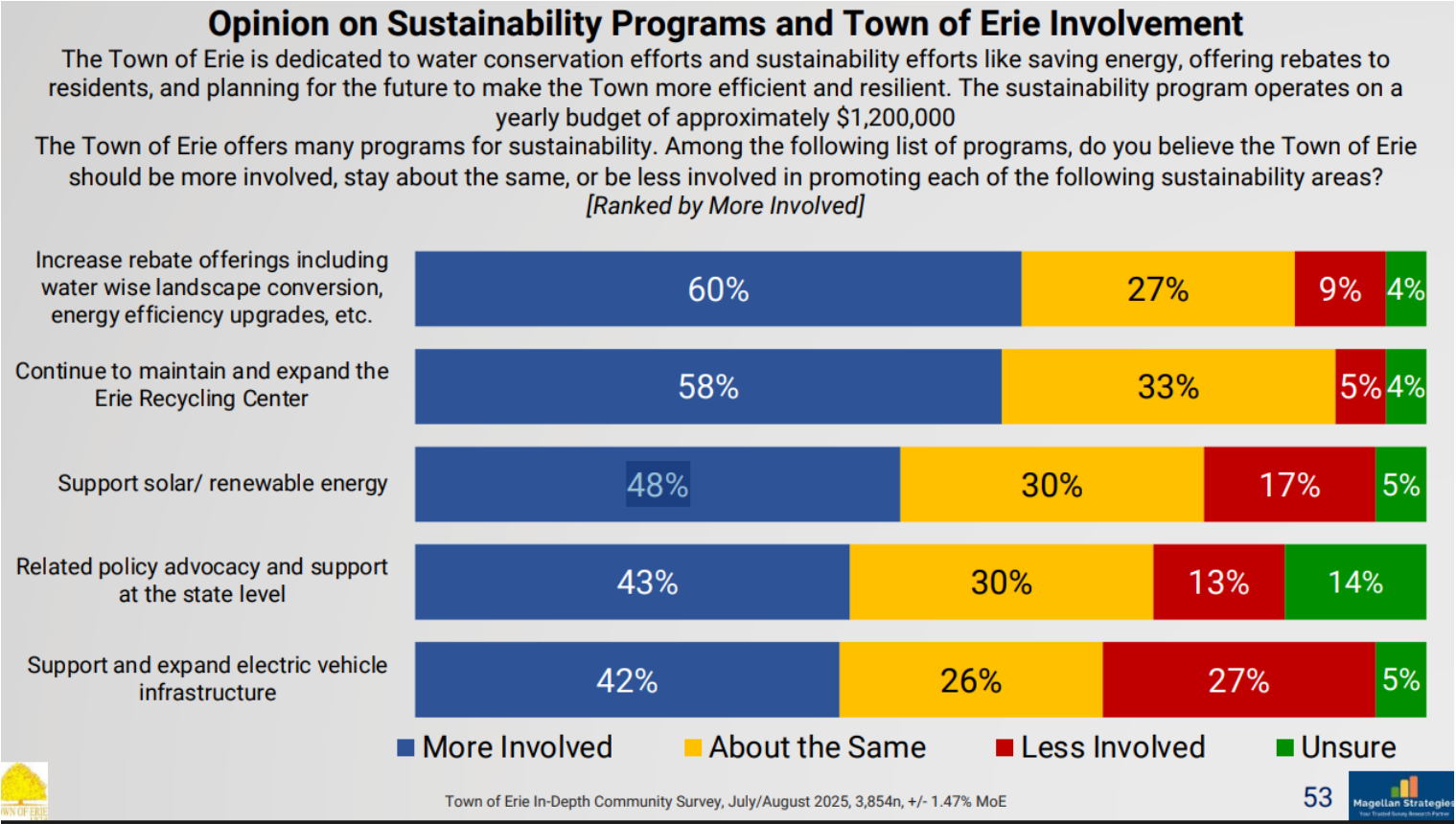
SAP Project Background

- Erie adopted a **Sustainability Plan in 2019**.
 - The 2019 plan was a 5-year plan.
 - Many strategies have been implemented! ~80%
- Town of Erie declared a **Climate Emergency** in 2024.
 - Initiative to adopt a **2025 Climate Action Plan**.
 - Renewable energy expansion across all Town operations.
 - Multi-modal zero and low emission transportation.
 - Additional zero waste and strategic waste diversion to reduce waste going to landfill.
 - Beneficial Electrification Plan adopted in May 2025.
- Erie conducted a **GHG Emissions Inventory** in 2021 and 2023.
 - This inventory will guide the direction of the new plan.



SAP Project Background

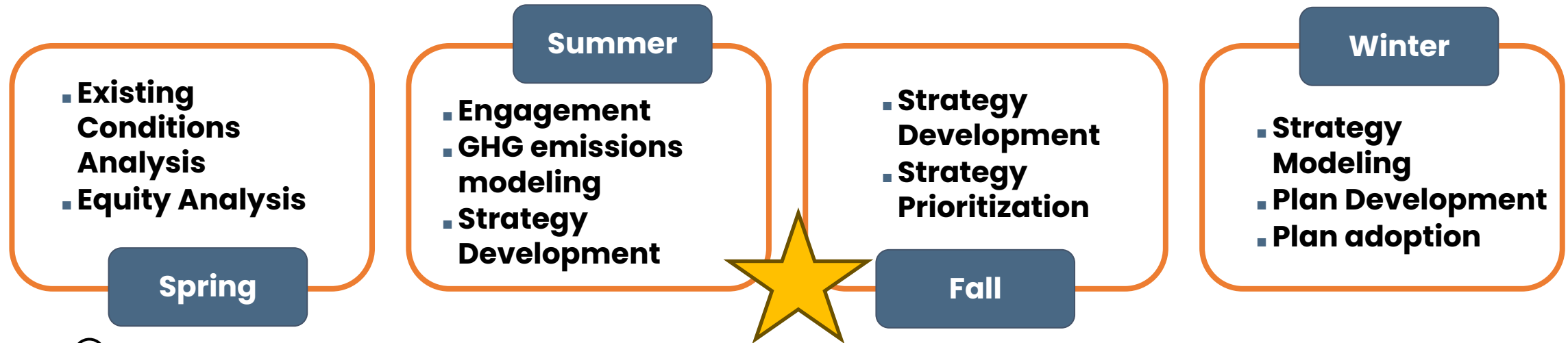
Sustainability programs & Town involvement identified as important by the community in recent and historical surveys.



SAP Project Timeline



- ✓ Staff Focus Group
- ✓ Farmers Market
- ✓ Steering Committee
- ✓ Charrette



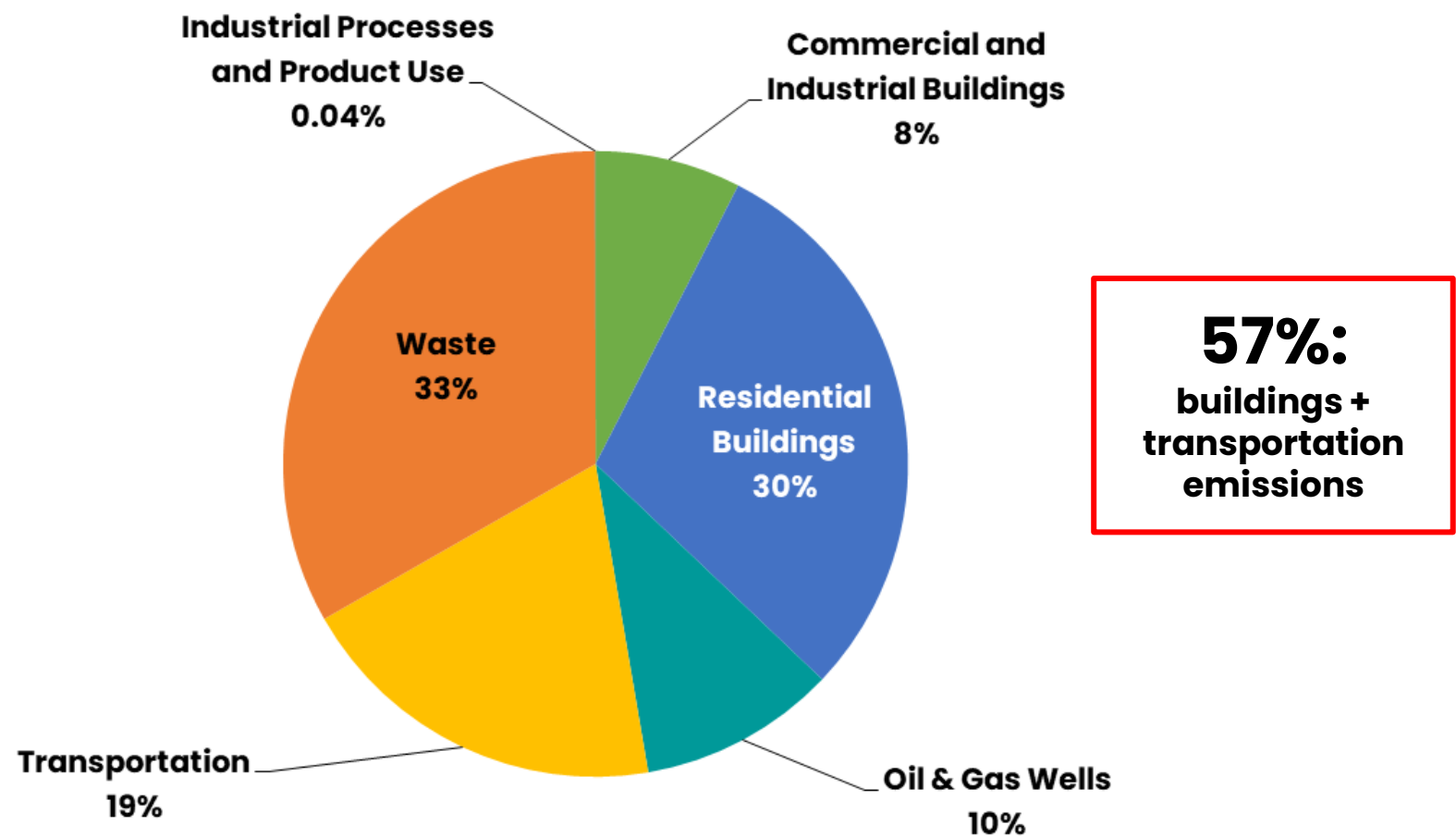
- ✓ Arbor/Earth Day Festival



SAP: Greenhouse Gas (GHG) Emissions Inventory Overview

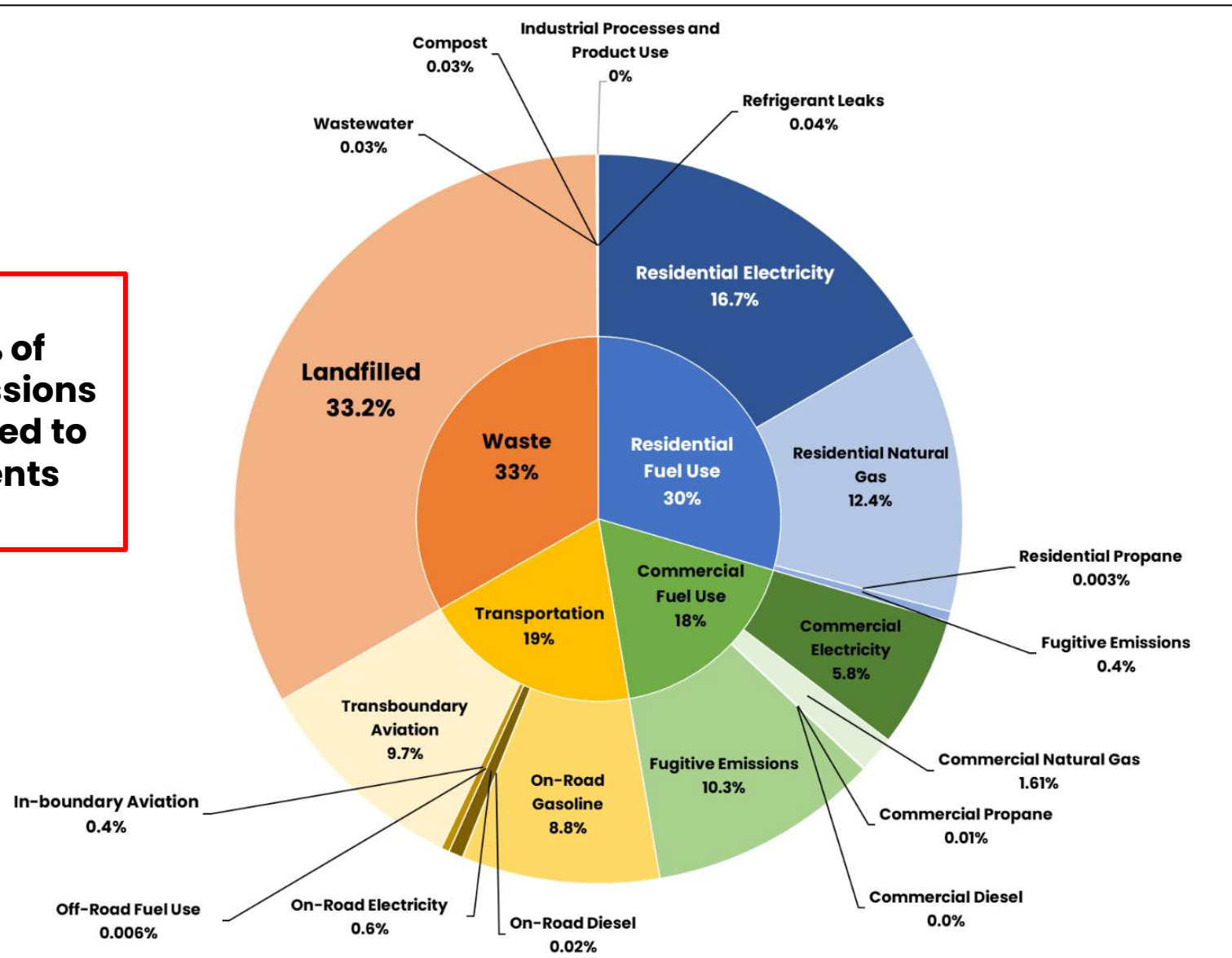


Community GHG Emissions by Sector (2023)

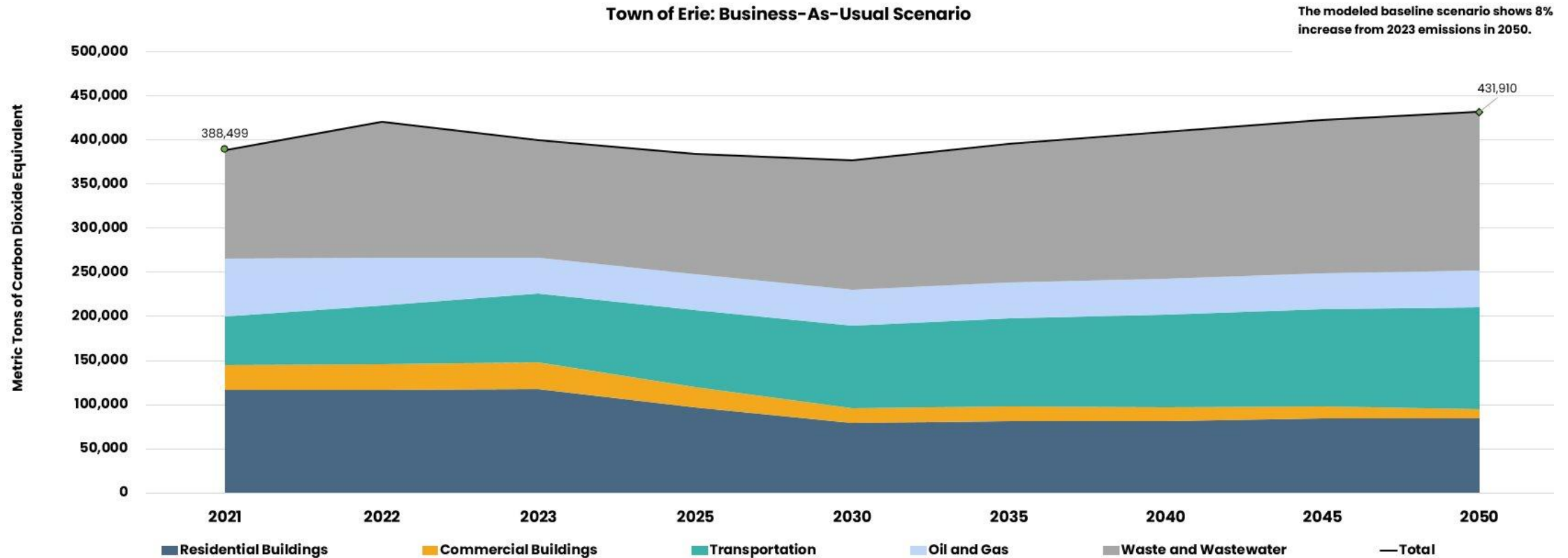


Community GHG Emissions by Source (2023)

About 5% of landfill emissions are attributed to Erie residents



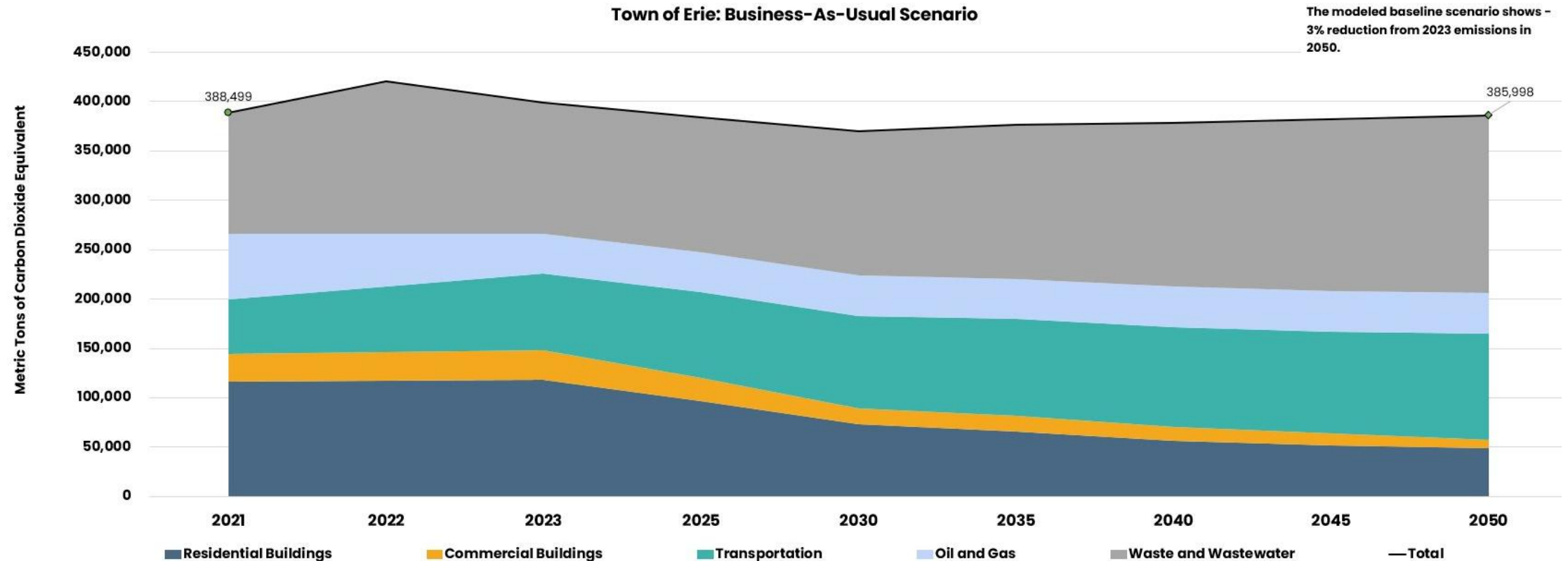
Low Electrification With Landfill, Oil and Gas, and Transboundary Aviation



Takeaways: Waste from landfills and transportation the largest emitters in 2050. This scenario shows an *increase* in emissions due to a combination of low electrification and steady landfill growth.



High Electrification With Landfill, Oil and Gas, and Transboundary Aviation



Takeaways: Waste from landfills and transportation remain the largest emitters in 2050.



SAP Stakeholder and Community Engagement Updates



Source: Town website





Arbor/Earth Day

- Kickoff at Arbor/Earth Day celebration
- Stats:
 - 1,000 attendees
 - 433 dot votes
 - 70 responses



Arbor/Earth Day



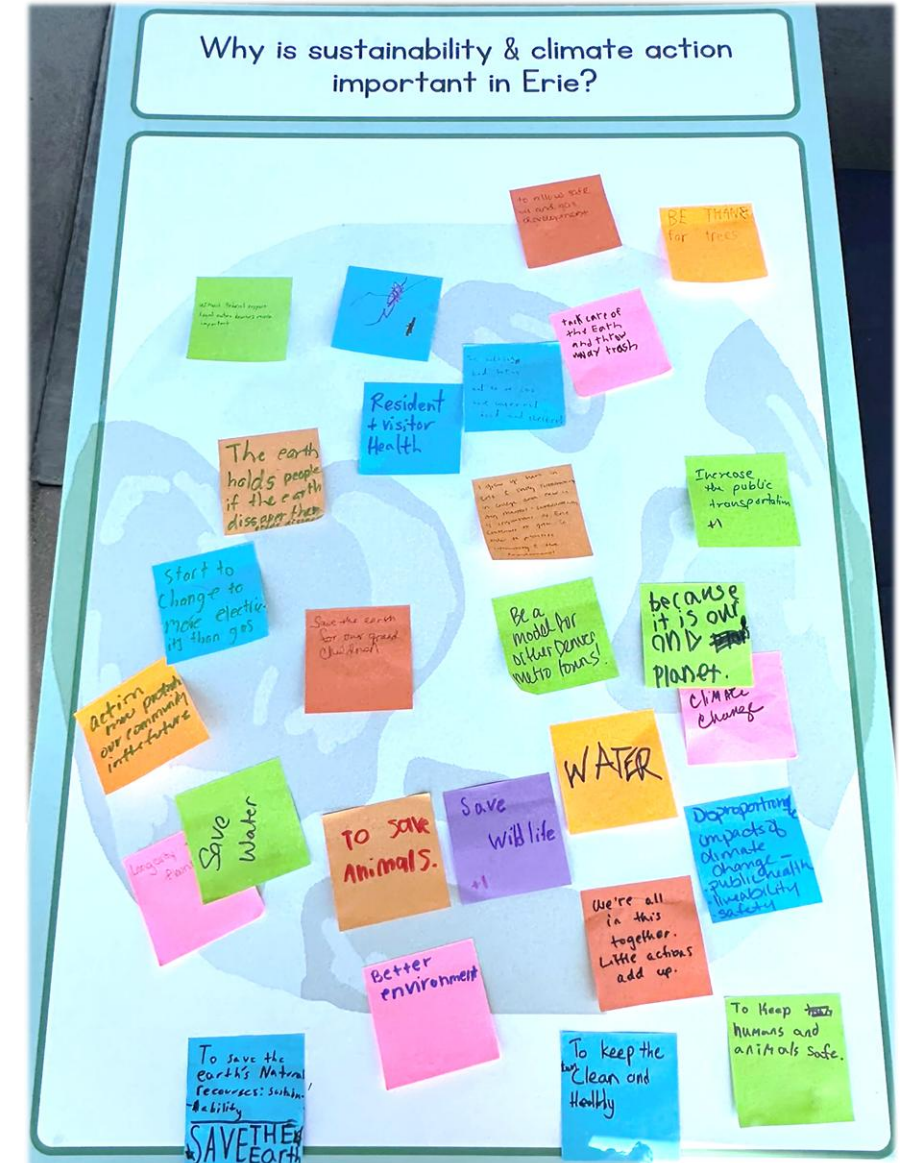
Focus Areas	Votes
Local Ecosystems and Watersheds	101
Waste Diversion	92
Land Use and Built Environment	85
Transportation and Mobility	65
Education and Outreach	55
Buildings and Energy Use	35



Arbor/Earth Day

Why is sustainability & climate action important in Erie?

- 27 responses
- Key themes:
 - Public health and safety
 - Protect natural resources and wildlife
 - Be a leader in the region
 - Little/local actions add up
 - Longevity and future generations



Erie Farmers Market



Tabled at farmers markets to raise awareness and collect input on the Resilience Action Plan and SAP.

- Stats:
 - ~350 interactions across 5 farmers markets
- All respondents said it was "important or "very important" for Erie to **protect its natural environment**.
- The **most selected topics of priority** for the SAP included:
 - Public transportation and multimodal access
 - Waste diversion
 - Nature-based solutions
 - Renewable energy





Staff Focus Group

- Met with key Erie staff to receive general guidance on plan direction.
- Staff support the plan focus areas and strategy topics.
- Ideas:
 - Benchmarking for smaller buildings
 - Geothermal for municipal buildings
 - Transit access improvements
 - E-bikes and e-car share
 - Organics collection





Steering Committee Meeting #1

- **Steering Committee Overview:**

- Community representatives and Town staff to inform plan development.

- **Meeting #1 Objectives:**

- Provide feedback on vision statement & guiding principles for the SAP.
- Ideate new strategies to build on 2019 plan.

Source: Erie Uplink



Steering Committee Meeting #1

What makes Erie special?



Core Values Identified:

- Quality of life
- Achievable goals
- Equity and access
- Resilience and vitality
- Rural and natural character
- Clean, healthy, safe
- Fiscal responsibility
- Workforce and opportunity



Charette

- Met with Town board members, community leaders, and representatives to identify priorities for the SAP and community values.
- Priorities identified:
 - Walkability and bikeability
 - Education
 - Lead by example
 - Waste diversion



Other SAP Engagement Tactics

Sustainability in Action

Sustainability Accomplishments

First established in 2019, the Town's Sustainability Division leads projects and initiatives that make a real difference in Erie. From scaling water conservation and renewable energy adoption, to improving waste diversion rates and creating sustainability first policies, the Sustainability Division works together with residents and businesses to reduce the climate change impact of Town actions and the activities of its inhabitants. These efforts are a testament to the power of the Erie community and our shared commitment to environmental stewardship. Below, explore our accomplishments and how we are making a positive impact, one step at a time.



Emerging Themes from SAP Engagement

- **Important focus areas:**
 - Waste diversion, multimodal transportation access, renewable energy, and protection of natural resources.
- **Core values:**
 - Quality of life, equity, resilience, open space & recreation, and public health.
- To date, this project is **well-received** by everyone we have engaged with thus far.



Source: Uncover Colorado | C.L Baker



SAP Strategy Development



SAP Strategy Development

Town of Erie Plans	Countywide and Regional Plans	Also led by:
Comprehensive Plan	Boulder County Sustainability, Climate Action, and Resilience Plan	Community input from tabling events
Water and Drought Plan	Boulder County Transportation Plan	Steering Committee
Energy Action Plans	DRCOG Priority Climate Action Plan	Staff engagement
Beneficial Electrification Plan	BoCo Regional Transportation Electrification Plan	Charette
Transportation & Mobility Plan	Weld County Environmental Services	Consultant expertise & best practices
Parks, Recreation, Open Space, & Trails Plan		



Sectors for the SAP

Sector	Description
Buildings & Energy	Building electrification, energy efficiency, renewable energy adoption, energy code
Waste & Materials Diversion	Residential and commercial composting, waste diversion, circularity
Transportation & Mobility	Vehicle electrification, expanding transit + transportation infrastructure
Nature-Based Solutions	Protecting the natural environment, resilience, agriculture
Education & Outreach	Educate and empower the community to take part in advancing sustainability and climate action

Equity and resilience built into each sector



Draft SAP Strategies

Buildings & Energy

TOPIC AREAS



- Advanced energy code adoption
- Benchmarking and reporting
- Programs for low-income households
- Renewable energy adoption

Transportation & Mobility

TOPIC AREAS



- Improving and promoting trails, paths, and alternative transportation
- Car and bike share
- Continued community & town EV adoption
- Subsidized transit passes

Waste & Materials Diversion

TOPIC AREAS



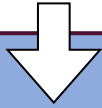
- Expand Recycling Center services
- Curbside composting
- Universal Zero Waste Ordinance
- C&D waste diversion
- Education



Draft SAP Strategies

Nature-Based Solutions

TOPIC AREAS



- Community agriculture
- Regenerative agriculture
- WaterWise, native landscaping, xeriscaping, and pollinator friendly practices
- Green infrastructure

Education & Outreach

TOPIC AREAS



- Green Business Network
- Expand outreach (and targeted outreach) to promote energy efficiency and renewable energy resources
- Multimodal transportation advocacy

Goal-Setting

We will identify short-term and long-term goals within each sector to keep Erie on track to meet the 2030 & 2050 goals of this plan.



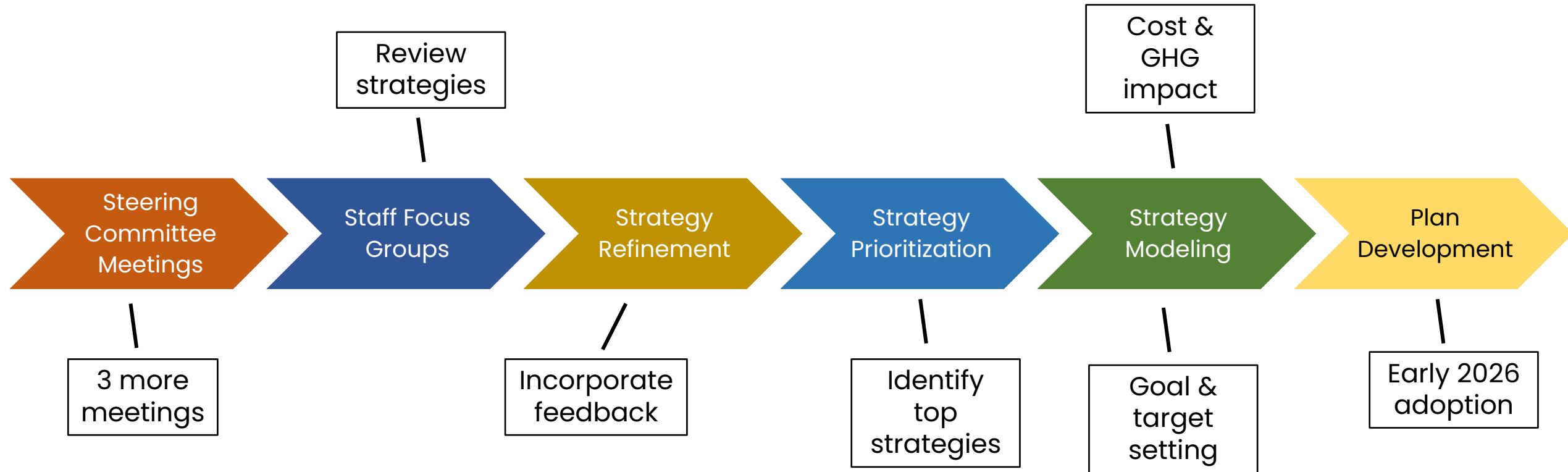
Looking Ahead



Source: Town website



SAP Next Steps





Questions?

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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 [Sustainability Master Plan](#) 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 sector-organized 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.¹ 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 [Existing Conditions spreadsheet](#). 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.

2. 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 glean 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

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) [Building Policy Collaborative \(BPC\)](#)
 - 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.
- [Colorado Energy Office \(CEO\)](#): Heat pump tax credits, community solar for low-income residents (under development), home electrification and appliance rebates, home energy efficiency rebates.
- [Energy Smart Colorado](#): 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.
- [Colorado Green Business Network \(CBGN\)](#): 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.
- [United Power](#): 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.

- 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:
 - [CEO Fleet-ZERO EV Charging Grant](#): offered twice per year in Spring and Fall.
 - [CEO Charge Ahead Grant](#): EV charging infrastructure – application rounds annually in January, May, and September.
- SB24-230 Oil and Gas 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.
- [DRCOG Way-to-Go](#) 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

- [CO Circular Communities](#): Statewide program that provides financial and technical assistance to enhance circularity across the state and help organizations achieve their waste diversion and diversion goals.
- [CBGN](#): 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
- [C-PACE](#) - offers rebates and incentives for hang washing sink aerators, kitchen sink aerators, pre-rinse spray valves, outdoor irrigation evaluations, and more.

- [Climate Innovation Fund](#) – supports local projects focused on carbon dioxide removal (CDR) and landscape resilience and restoration.
- [Boulder County](#) – 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 [Colorado Wildlife Habitat Program \(CWHP\) 2025 Request for Proposals \(RFP\)](#). 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

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

Town of Erie Equity Analysis

Purpose

This internal document provides a historical and cultural overview of the Town of Erie (Town or Erie), community demographics, and socioeconomic and environmental vulnerabilities. These findings will help the project team refine the stakeholder engagement approach and inform strategy development to ensure the final Sustainability Action Plan (SAP) update is culturally relevant, historically informed, and mitigates potential inequitable outcomes.

Key Findings

- Strategy development must consider the unique discussion around extractive industries like oil and gas, and health and environmental risk.
- Strategy development and stakeholder engagement must consider that Erie is part of two counties, each with different levels of environmental protection.
- Previous engagement and educational attainment levels suggest a population engaged in sustainability. Engagement tactics like surveys and town halls may be successful.
- Strategy development and stakeholder engagement should be mindful that while Erie's census data suggests potential homogeneity, frequently, this data can render communities nearly invisible. Engagement tactics like leveraging cultural brokers, community-based organizations, and meetings-in-a-box may be successful in illuminating sustainability-related opportunities within and for hard-to-reach communities.

Introduction

Erie is situated in the Colorado Front Range and lies within both Boulder and Weld Counties. The Town boasts prairie lands, mountain views, recreation opportunities, and a unique, small-town charm. According to the U.S. Census, the median age of Erie

residents is 37.6, the racial make-up of Erie is majority White, and the median income is \$163,644 (the median income in Colorado is \$92,291).¹

Erie is growing rapidly. Housing in Erie is considered expensive by national standards, and has been for decades. Housing costs are expected to keep rising.² The majority of the housing stock was built recently, resulting in a lack of rental units and limited housing choices, especially for those who plan to buy and have an annual household income under \$150,000.³ As of 2020, a quarter of the households in Erie were estimated to pay 30% or more of their income for housing costs.⁴

Erie is located in a non-attainment area, which means it does not meet federal air quality standards.⁵ As identified by socioeconomic and environmental vulnerability indices (see Community Data Analysis section below), 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. Although most sites are located outside of Erie's borders, oil and gas have been prevalent in and around Erie for decades. This means that Erie residents are exposed to the environmental and health implications that come from methane concentrations, well leaks, air pollution, water contamination, noise pollution, and volatile organic compound (VOC) detection.⁶

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 when looking at Environmental Justice Index's (EJI) Climate Burden Rank. Although none of these environmental burdens fall directly within Erie's town boundary, they are still important to note as environmental burdens transcend jurisdictional borders. None of the census tracts in Erie are designated as "disproportionately impacted;" which is characterized by EnviroScreen as a community where over 40% of households are low-income

¹ [U.S. Census: Erie, CO](#)

² [Town of Erie Affordable Housing Needs Assessment and Strategy](#)

³ [Town of Erie Affordable Housing Needs Assessment and Strategy](#)

⁴ [Town of Erie Affordable Housing Needs Assessment and Strategy](#)

⁵ [Weld County Air Quality webpage](#)

⁶ [2024 Oil and Gas Activity Map](#)

households, over 40% of the community is people of color, over 50% of households experience housing cost burden, and over 20% of community members experience linguistic isolation. However, with these types of thresholds, that does not mean disparity does not exist. The planning process is tasked with illuminating any gaps in this data that it discovers. Perhaps one area that the discussion of disparity can or should start is with the manufactured home communities that exist within Erie. Manufactured homes can be associated with increased vulnerability to extreme weather events, high energy costs, and predatory lending practices.

This equity analysis underscores the importance of considering the context of Erie's history, demographics, and environmental/health risks when developing Erie's Sustainability Action Plan update to ensure fair and equitable outcomes in the community.

Erie's Roots: Community History and Overview

The Arapaho, Cheyenne, Ute, and Sioux tribes occupied what is now known as the Town of Erie before it was settled in the mid-1800s and named in 1867 after Erie,⁷ Pennsylvania, the former home of early settler Richard Van Valkenburg. The first settlers lived along Coal Creek and found their way as farmers or merchants,⁸ until the discovery of coal in the area in the 1860s, which sparked the arrival of the railroad. Erie became an up-and-coming coal mining hub in the Northern Colorado Coal Field, connecting Erie's resources to the wider region and spurring population growth. By the late 1800s, Erie had grown into a livable community, with multiple churches and businesses, and even its own newspaper.⁹

FARMING AND AGRICULTURE

The Town of Erie is situated in a semi-arid prairie and foothill region that initially attracted homesteaders looking for land to farm and ranch. With insufficient rainfall in this region, early settlers began to adopt irrigation. Starting in 1859, farmers began

⁷ [Native Land Digital](#)

⁸ [Town of Erie History](#)

⁹ [Town of Erie History](#)

building canal networks, which led to the rapid growth of ditch companies that supplied water for agriculture.¹⁰

Weld County, one of the two counties Erie straddles, is one of the top agricultural production counties in Colorado. It started with cattle ranching in the 1860s, and by the 1870s, farming became a big player in Weld County's economy and workforce.

Agriculture has been a consistent economic player in Weld County since World War II,¹¹ boasting 2.5 million acres of agriculture, with 75% dedicated to farming and livestock. Weld County is Colorado's top producer of beef, grain, sugar beets, and dairy; and is often among the top ten counties nationally for agricultural sales, exceeding \$1 billion annually across its over 3,000 farms. Annually, over 875,000 acres are planted, with more than 300,000 acres being irrigated cropland.¹²

EXTRACTIVE INDUSTRIES: MINING, OIL AND GAS

Coal mining was the foundational industry for the Town, and that extractive legacy continues today in the form of oil and gas. The arrival of the Boulder Valley Railroad in 1871 boosted the coal industry in Erie and the surrounding Northern Coalfield and prompted the opening of the first official coal mine in Erie in 1876.¹³ Erie's first commercial coal mine was the Briggs Mine and was the foundation for Erie's most significant industry in the 19th and early 20th century.¹⁴

Erie's mining workers encountered dangerous working conditions, with many facing accidents and fatalities, and low pay. This prompted the creation of worker unions throughout the early 1900s to advocate for better working conditions, but the unions ultimately withdrew without much success.¹⁵

¹⁰ [Erie Historic Preservation Plan](#)

¹¹ [Erie Historic Preservation Plan](#)

¹² [Right to Farm – Agriculture in Weld County](#)

¹³ [Town of Erie History](#)

¹⁴ [Town of Erie History](#)

¹⁵ [Columbine Mine Massacre](#)

The coal mining industry in Erie began to decline after the Great Depression and World War II, with most mines closing by 1960. The Eagle Mine, one of the last operating in the area, closed in 1978, marking the end of Erie's coal mining¹⁶.

As coal mining declined, oil and gas drilling gradually replaced it.¹⁷ Colorado is a top U.S. oil producer, accounting for almost four percent of national output and reserves, with production more than doubling between 2010 and 2023 due to drilling technology.¹⁸ In the words of the Erie Protector, a resident-run website created to keep other residents informed of oil and gas activity in the area, "Erie is on the front lines of the battle between responsible residential development and oil & gas exploration of the Denver-Julesburg basin." Northeastern Colorado's Denver-Julesburg Basin is the main producing area, and Weld County, which is located within the basin, is responsible for 80% of the state's output from the Niobrara Shale, including the Wattenberg field.¹⁹ The Wattenberg oil field was ranked the 4th largest in the nation in 2015 in the U.S. Energy Information Administration's 'Top 100 U.S. Oil and Gas Fields.'²⁰

Erie must negotiate the economic and industrial significance of the Denver-Julesburg Basin and the growing concern of residents around the health and environmental risk due to oil and gas. This negotiation is further complicated by Erie's position straddling two counties. Boulder County enforces a 2,000-foot buffer between wells and homes, while Weld County enforces 500 feet.²¹ Most recently, the Colorado Energy and Carbon Management Commission approved a plan for Civitas Resources, a Colorado oil and gas production company, to drill 26 wells at the Draco site near Erie, despite community concerns and opposition. The drilling site is located near a planned 1,400-home subdivision, a school, and a park. Civitas committed to best practices, air

¹⁶ [Erie Historic Preservation Plan](#)

¹⁷ [Erie Historic Preservation Plan](#)

¹⁸ [U.S. EIA Colorado Profile Analysis](#)

¹⁹ [U.S. EIA Colorado Profile Analysis](#)

²⁰ [Top 100 U.S Oil and Gas Fields](#)

²¹ (<https://www.environmentenergyleader.com/stories/health-concerns-and-public-debate-over-oil-and-gas-development-in-erie-colorado,54392>).

monitoring, and less-polluting equipment, also agreeing to plug old wells and remove tanks.²²

Erie Demographics and Trends

POPULATION GROWTH

The Front Range is projected to continue its population growth trend. Erie's population has grown approximately 9.1% since late 2023, up from the 2022 (6.7%) and 2023 population growth rates (5.8%).²³ By 2040, the state's population is expected to reach 7.8 million, with 83% (6.5 million) living along the Front Range.²⁴

Erie added about 4,980 new homes between 2010 and 2023, averaging roughly 383 units per year, representing an average annual growth rate of 4.2%.²⁵

ECONOMY

Employment opportunities in Erie grew 6.24% from 2022-2023, and as of 2023, there are approximately 17,200 individuals employed in Erie. The largest sectors are Professional, Scientific, & Technical Services (2,747 people), Educational Services (2,281 people), and Manufacturing (2,051 people). The highest paying industries are Mining, Quarrying, & Oil & Gas Extraction (\$191,719), Wholesale Trade (\$160,850), and Utilities (\$141,944).²⁶

DEMOGRAPHIC MAKEUP

The median age in Erie is 37, the median household income is \$160,000, and 80% of the Erie population identifies as white alone, with about 10% of Erie's population identifying as Hispanic or Latino, 37% of which has a household income of less than \$75,000.²⁷

Table 1. Demographic data from the U.S. Census.²⁸

²² [Colorado regulators sign off on oil and gas drilling near new Erie housing development](#)

²³ [Town of Erie: Erie Population 2024 Year-End Estimate](#)

²⁴ [Erie Historic Preservation Plan](#)

²⁵ [Economic Market Analysis](#)

²⁶ [Data USA](#)

²⁷ [U.S. Census: Erie, CO](#)

²⁸ [U.S. Census: Erie, CO](#)

Metric	Erie	Colorado
Total population	30,038	5,773,714
Median age	37.6	37.9
Older population (65 years and older)	10%	16.1%
Median household income	\$163,644	\$92,911
Employment rate	73.6%	65.4%
Poverty rate	3%	9.3%
Housing units	Of the 10,332 total housing units, 10,047 are occupied.	2,636,534 ²⁹
Race	80.7% of the Erie population identified as white alone; the second largest group was Hispanic or Latino, comprising 10.2%.	70.7% of the Colorado population identified as white alone; the second largest group was Hispanic or Latino, comprising 21.9%.
Languages (other than English spoken at home)	10.5%	16%

Equity in Erie

One of the key components of the 2019 Sustainability Master Plan is equity. Specifically, providing sustainability resources and services equitably across the community. The Town of Erie also convened a Diversity, Equity, and Inclusion (DEI) committee task force, which consists of seven community members who work on issues of DEI with support

²⁹ [Colorado Department of Local Affairs](#)

from the Town of Erie.³⁰ This task force should be consulted to review the strategies for the Sustainability Action Plan update to elevate the voices of those who have lived experience in Erie and to help inform the direction and implementation of the plan.

The Town of Erie Comprehensive Plan elevated the principles of “celebrating difference [...] recognizing the power of open dialogue [...] and making informed decisions that create an equitable community.”³¹ The core values listed in the Comprehensive Plan are as follows:

- Erie is resilient and adaptable.
- Erie is tailored to the community’s needs.
- Erie is connected physically and socially.

The Town of Erie has demonstrated commitment to advancing equity in the community through its work on the 2019 Sustainability Master Plan and the Comprehensive Plan. This Sustainability Action Plan update presents an opportunity to advance equity even further as the Town combats the impacts of a changing climate and strives towards a more sustainable future.

Community Data Analysis

Lotus compiled data from recognized socioeconomic and environmental vulnerability indices to further determine community concerns and vulnerabilities in the Town of Erie. The databases include Colorado EnviroScreen, Climate and Economic Justice Screening Tool (CEJST), Environmental Justice Index (EJI), and EJ (Environmental Justice) Screen.

COLORADO ENVIROSCREEN

The Colorado EnviroScreen tool was developed by the Colorado Department of Public Health and Environment and provides data at multiple geographic levels to help identify environmental and health burdens across different communities.³² The data is available at the census block group, census tract, and county levels. The tool

³⁰ [Town of Erie Diversity, Equity, & Inclusion Task Force](#)

³¹ [Town of Erie Comprehensive Plan](#)

³² [Colorado EnviroScreen](#)

includes 35 indicators to calculate a score that provides a quantifiable measurement of combined environmental stressors. The tool gathers data from different state and federal sources and uses five categories of data: environmental exposures, environmental effects, climate vulnerability, sensitive populations, and demographics. The tool uses a percentile ranking score to compare data. If Erie gets a 90th percentile score, this means that Erie ranks higher than 90% of other Colorado jurisdictions. Figure 1 shows the different colors based on percentile ranges. Table 2 below outlines each census block in Erie's environmental burdens and its percentile ranking.

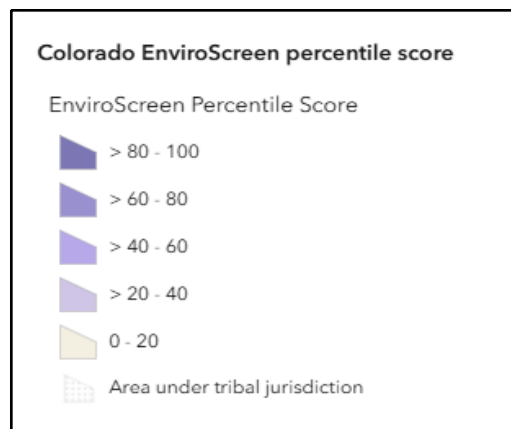


Figure 1. Colorado EnviroScreen percentile score legend.

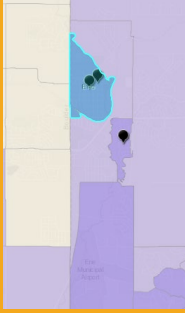
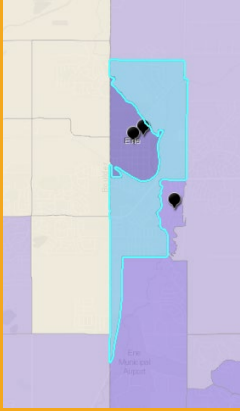
According to this tool, Erie is burdened with several environmental indicators, namely air toxic emissions, fine particle pollution, environmental exposures, and floodplain in certain areas, all of which rank in the 90th percentile or above.

- **Air toxic emissions:** measures of toxic air pollutants contributing to health risks.
- **Fine particle pollution:** measures of fine particulate matter linked to respiratory and cardiovascular problems.
- **Environmental exposures:** includes factors like air pollution, drinking water quality, and noise. Direct exposure to these pollutants can harm human health.
- **Floodplain:** identifies areas at risk for flooding.

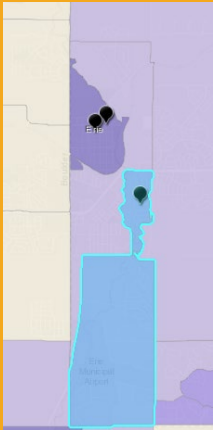
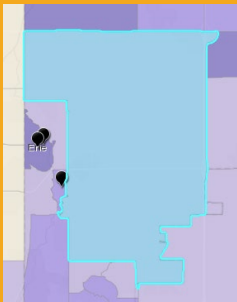
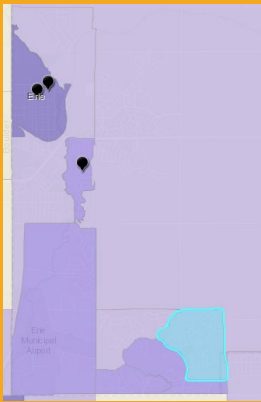
Only results that are in the 80th percentile or above are shown. The results also include a picture in the left column that showcases the area evaluated. The colors help understand how data varies from location to location.

Table 2. Colorado EnviroScreen results for Erie.

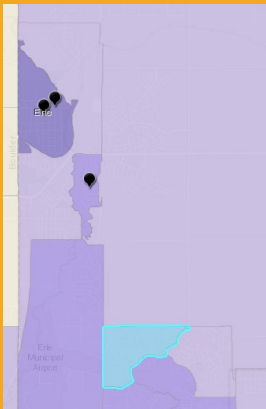
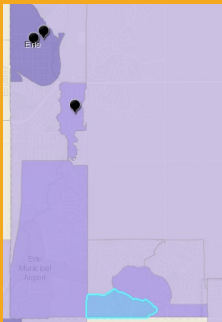
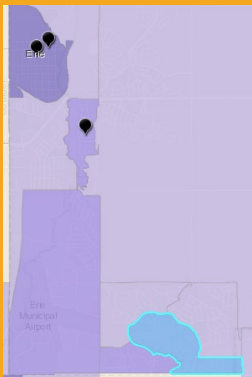
Census Block Group	Indicator	Percentile Ranking Score
081230020071	Environmental Exposures	88th percentile

(Old Town area) 	Pollution and Climate Burden	81st percentile
	Drought	87th percentile
	Air Toxics Emissions	94th percentile
	Fine Particle Pollution	95th percentile
	Proximity to Oil and Gas	85th percentile
	Floodplains	85th percentile
Census Block Group	Indicator	Percentile Ranking Score
081230020072 	Air Toxics Emissions	96th percentile
	Fine Particle Pollution	95th percentile
	Proximity to Oil and Gas	85th percentile
	Drought	87th percentile
	Floodplains	84th percentile
Census Block Group	Indicator	Percentile Ranking Score
081230020073	Environmental Exposures	94th percentile
	Pollution and Climate Burden	84th percentile
	Fine Particle Pollution	95th percentile
	Proximity to Oil and Gas	82nd percentile
	Drought	87th percentile



	Floodplains	98th percentile
Census Block Group	Indicator	Percentile Ranking Score
081230020091 	Air Toxics Emissions	96th percentile
	Fine Particle Pollution	90th percentile
	Proximity to Oil and Gas	90th percentile
	Drought	87th percentile
Census Block Group	Indicator	Percentile Ranking Score
081230020084 	Environmental Exposures	80th percentile
	Air Toxics Emissions	98th percentile
	Fine Particle Pollution	96th percentile
	Drought	87th percentile
Census Block Group	Indicator	Percentile Ranking Score



081230020082 	Pollution and Climate Burden	80th percentile
	Environmental Exposures	92nd percentile
	Air Toxics Emissions	99th percentile
	Fine Particle Pollution	96th percentile
	Proximity to Oil and Gas	82nd percentile
	Drought	87th percentile
Census Block Group	Indicator	Percentile Ranking Score
081230020083 	Air Toxics Emissions	96th percentile
	Fine Particle Pollution	96th percentile
	Drought	87th percentile
Census Block Group	Indicator	Percentile Ranking Score
081230020081 	Pollution and Climate Burden	83rd percentile
	Environmental Exposures	94th percentile
	Air Toxics Emissions	97th percentile
	Fine Particle Pollution	96th percentile
	Drought	87th percentile



DISPROPORTIONATELY IMPACTED COMMUNITIES MAP

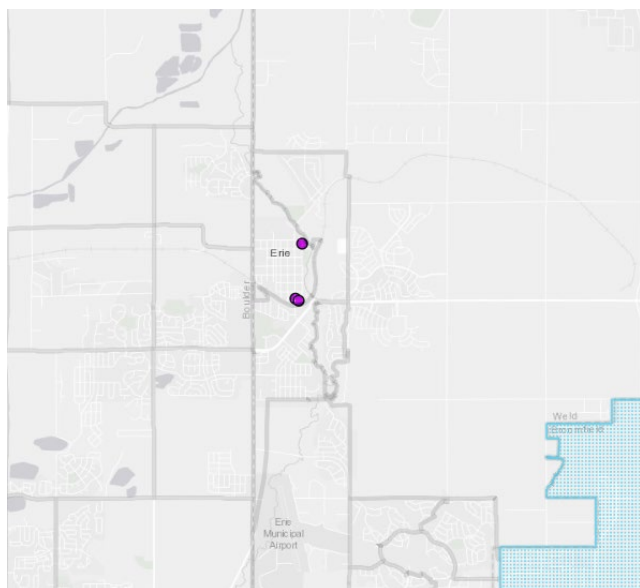


Figure 2. None of the Erie census tracts are disproportionately impacted. The purple circles indicate manufactured home parks.

EnviroScreen's Disproportionately Impacted Community Map examines and identifies areas where low-income households make up over 40% of the population, people of color make up over 40% of the population, housing cost burdened households make up over 50% of the population, and people who are linguistically isolated make up over 20% of the population. It also looks at the overall EnviroScreen percentile score above 80, if an area is within a [Justice 40](#) census tract, and if an area is under tribal jurisdiction. Figure 2 shows that no census tract in Erie is considered

disproportionately impacted. However, the purple dots on the figure show where manufactured home communities are located in Erie. The manufactured home parks identified include Erie Meadows and Erie Mobile Home Park. Identification of manufactured home communities is important when considering equity implications of Erie's Sustainability Action Plan update, as they are generally a large source of unsubsidized affordable housing across the U.S., typically housing low-income and disadvantaged communities.³³ They can also be vulnerable to limited financing opportunities,³⁴ impacts of natural hazards like flooding or extreme heat, and displacement.³⁵ Limited data has been found on Erie's manufactured home parks, and there is an opportunity for further research.

CLIMATE AND ECONOMIC JUSTICE SCREENING TOOL (CEJST)

³³ [Business Insider Article](#)

³⁴ [U.S. Department of Housing and Urban Development \(HUD\)](#)

³⁵ [Mobile Home Parks and Disasters: Understanding Risk to the Third Housing Type in the United States \(Free Article\)](#)

The Climate and Economic Justice Screening Tool (CEJST) is a tool created by the Environmental Protection Agency (EPA) that evaluates a community's social, environmental, and health burdens to identify communities that are considered disadvantaged.³⁶ A community is considered disadvantaged if it meets more than one burden threshold or at least one associated socioeconomic threshold.³⁷ The tool uses percentiles, which show how much burden each tract experiences compared to other tracts nationally. According to the CEJST tool, none of the census tracts in Erie are identified as disadvantaged.

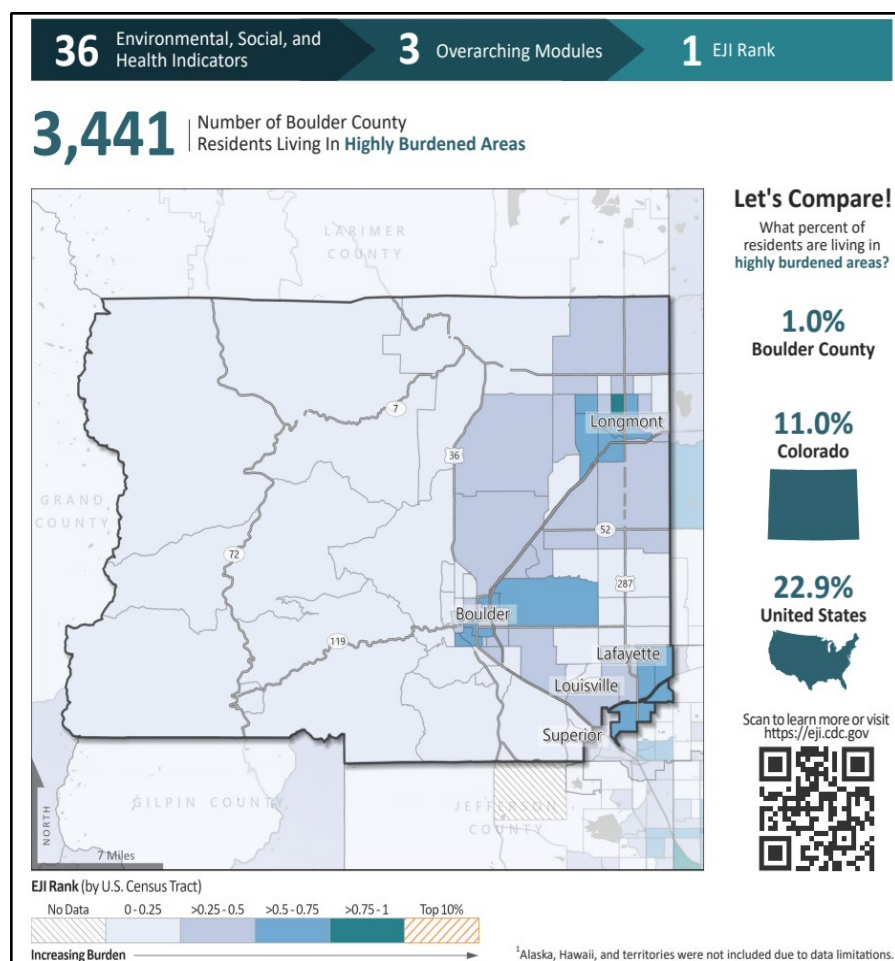


Figure 3. Boulder County EJI score, which shows comparisons to the state and national levels.

ENVIRONMENTAL JUSTICE INDEX (EJI)

The Environmental Justice Index (EJI) is a tool created by the Center for Disease Control (CDC) and provides County Maps that “offer summary information and visualizations that can provide insights into patterns and drivers of environmental injustice for the most burdened communities in each county.”³⁸ The EJI ranks are based on percentile rankings of all tracts in the contiguous United States. The EJI data

³⁶ [CEJST](#)

³⁷ [CEJST](#)

³⁸ [EJI County Maps](#)

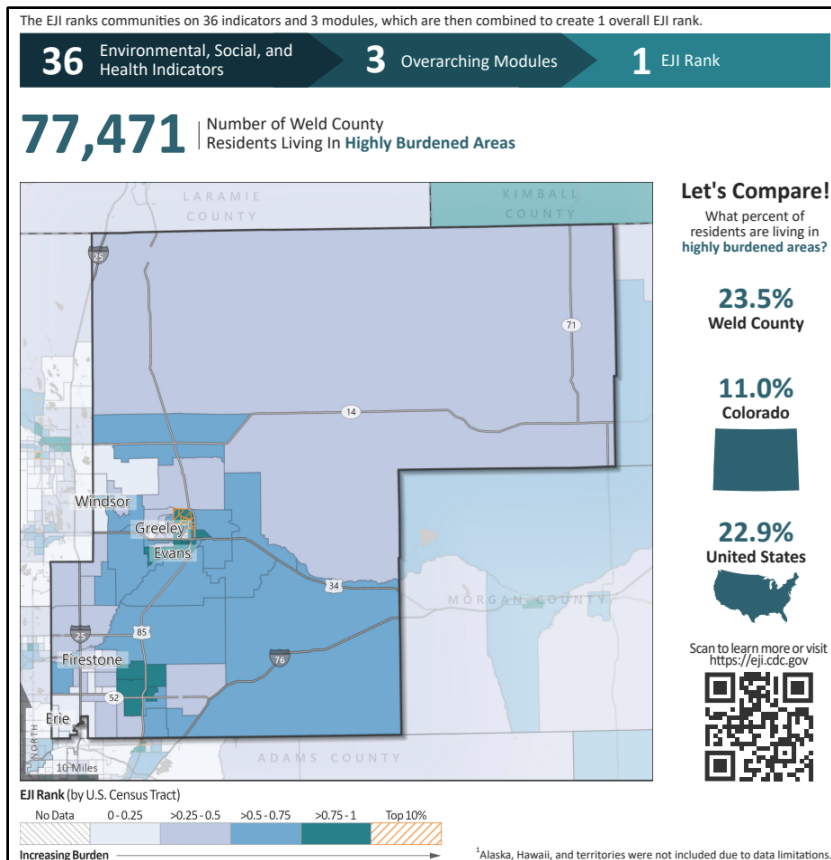


Figure 4. Weld County EJI score, which shows comparisons to the state and national levels.

reveals that Erie is not considered a highly burdened area. When looking at broader statistics, Erie's situation presents a mixed picture when it comes to comparing the two counties it straddles. On the one hand, 1% of Boulder County residents live in highly burdened areas; Boulder County is also well below state (11%) and national levels (22.9%). On the other hand, 23.5% of residents in Weld County live in highly burdened areas, which means the county's percentage of highly burdened population

surpasses both state (11%) and national levels (22.9%). This creates a unique landscape for Erie as it falls within both counties. However, while these highly burdened areas fall within Boulder and Weld Counties, they are not located within Erie's town boundary. Figures 3 and 4 show the results for Boulder County and Weld County.

EJI supplements its findings with a Climate Burden Rank, which measures cumulative climate-related impacts on community health. The EJI data identified 28 Weld County tracts and one Boulder County tract with significant environmental burdens. Of the climate-related stressors, extreme heat and wildfire smoke emerged as the biggest contributors and ranked highest in terms of burden impact for both counties. Although none of these environmental burdens fall directly within Erie's town boundary, they are still important to note as environmental burdens transcend jurisdictional borders. Figures 5 and 6 show the results of the climate burden rank for Boulder County and Weld County.

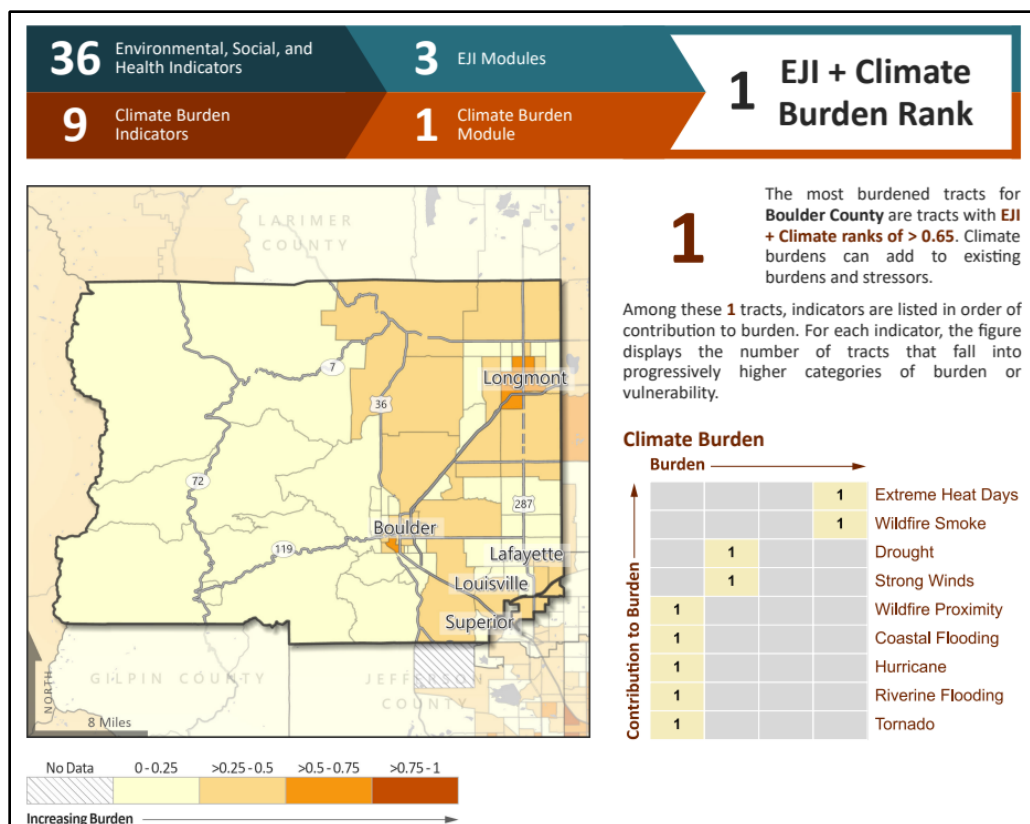


Figure 5. EJI Climate Burden Rank for Boulder County



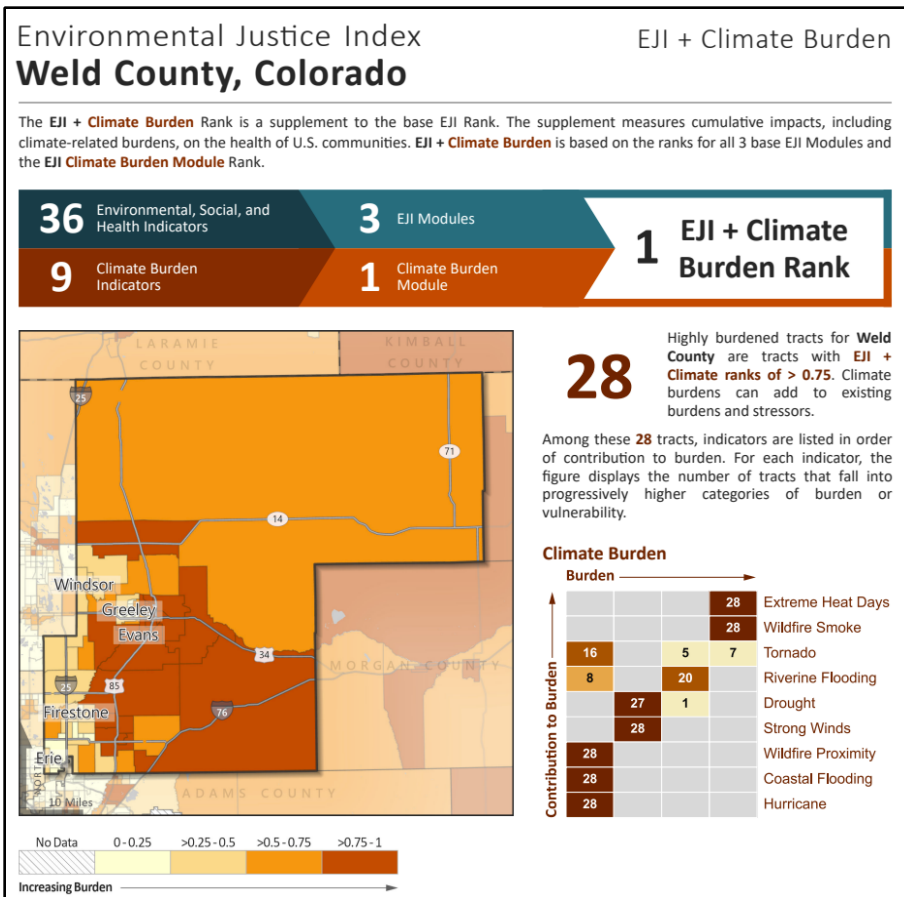


Figure 6. EJI Climate Burden Rank for Weld County

The EJI tool can also be used at the census tract level. The results from that data can be found below in Table 3. Figure 7 below provides the geographic location of Erie's census tracts.

Table 3. EJI Indicator Data for the seven census tracts in Erie.

Weld County						
Census tracts are within the following area: East of County Line Rd, North of E Baseline Rd, South of County Rd 16 ½, and West of I-25.						
Census Tract	Overall EJI Percentile Rank	Social Environmental Percentile	Air Pollution Percentile	Environmental Burden Percentile	Extreme Heat Days Percentile	Wildfire Smoke Percentile
20.10	60th	82nd	95th	83rd	83rd	82nd
20.09	15th	26th	95th	66th	83rd	81st

20.08	17th	30th	95th	64th	78th	80th
20.07	21st	36th	85th	55th	80th	81st
Boulder County <i>Census tracts are within the following area: East of N 95th St, West of County Line Rd, North of E Baseline Rd, South of Kenosha Rd/ Lookout Rd, and West of County Line Rd.</i>						
Census Tract	Overall EJ Percentile Rank	Social Environmental Percentile	Air Pollution Percentile	Environmental Burden Percentile	Extreme Heat Days Percentile	Wildfire Smoke Percentile
129.07	18th	31st	84th	70th	78th	80th
128.01	9th	17th	82nd	53rd	78th	80th
128.02	4th	9th	82nd	33rd	80th	81st

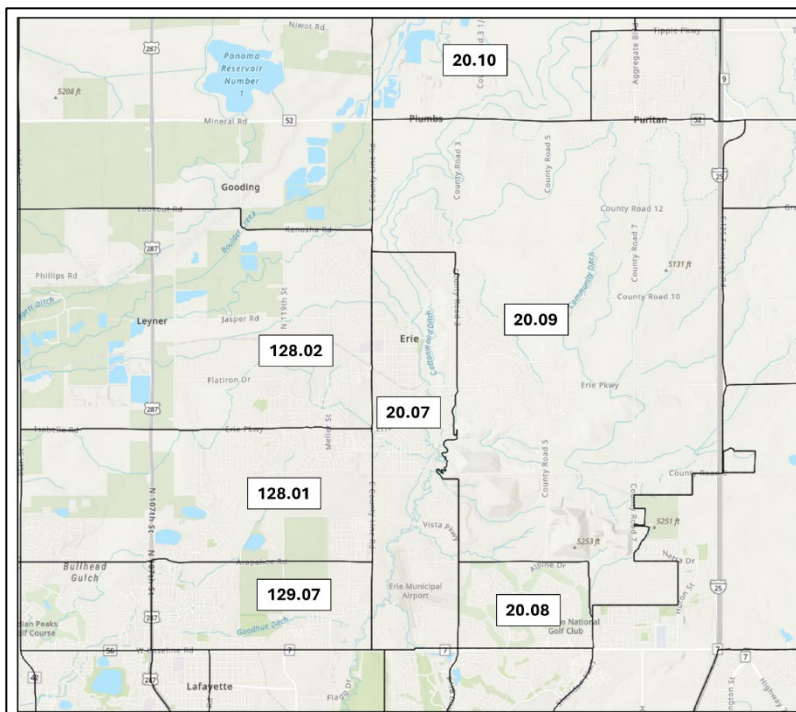


Figure 7. Census tracts in Erie

Within these census tracts, all have a high prevalence of air pollution, extreme heat days, and wildfire smoke. Overall score, social environment rank, and environmental burden vary based on census tract. These results corroborate findings from looking at the county level data and indicators.

ENVIRONMENTAL JUSTICE SCREEN (EJ SCREEN)

EJScreen is a mapping tool from the EPA that visualizes environmental and socioeconomic indicators for a given area, providing data at both

the state and national levels.³⁹ The two biggest indicators that came up for Erie were

³⁹ [EJScreen](#)

ozone and wildfire risk. Ozone is an environmental burden indicator that “measures how much ground-level ozone people might be exposed to by looking at the highest levels of ozone recorded at the ground-level and averaging the top ten days of the year.” Figure 8 shows the results for exposure to ozone, which ranks in the 93rd percentile, and Figure 9 shows the results for exposure to wildfire risk in Erie, which ranks in the 90th percentile. This means that Erie residents are at high risk, due to the high percentile scores, of ozone and wildfires.

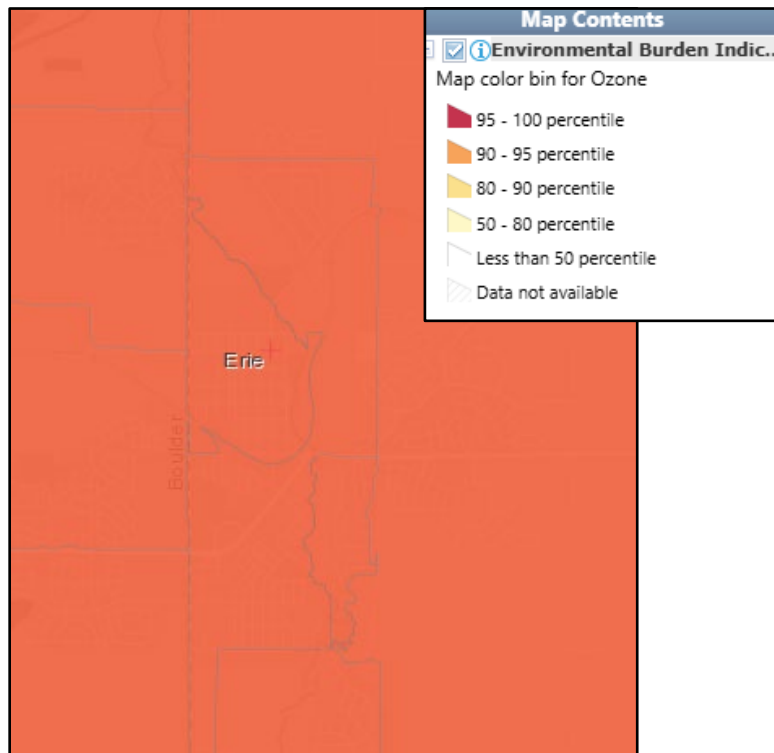


Figure 8. Ozone exposure in Erie.

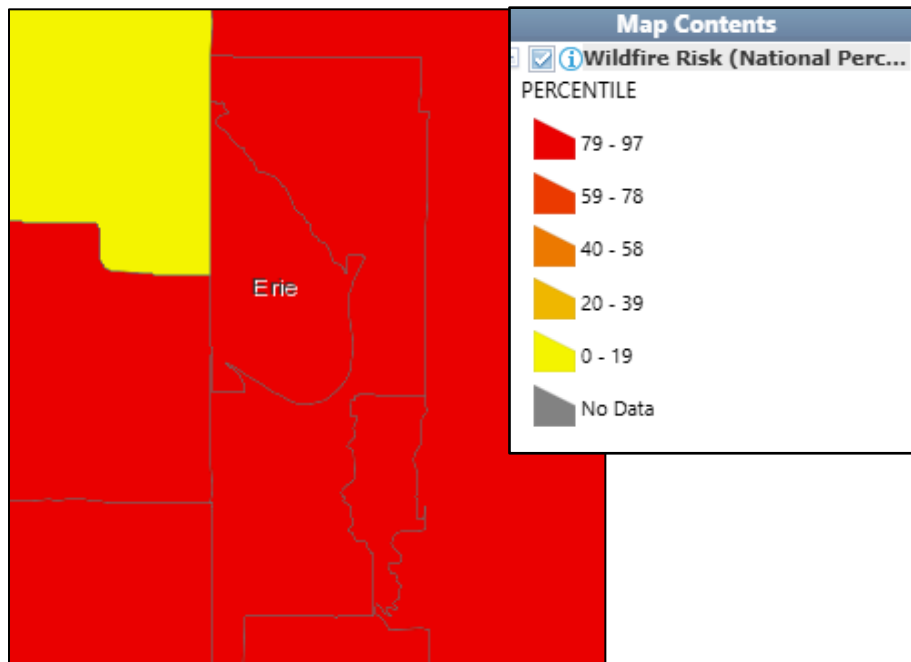


Figure 9. Wildfire risk exposure in Erie.

Key Considerations for Sustainability Action Plan Update Development

HISTORICAL CONTEXT

Oil and gas has a strong presence in and around Erie. The work done through this plan will need to consider its presence and potential implications on public and environmental health, and recommend strategies to mitigate any negative impacts associated with this industry. Additionally, 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.

DEMOGRAPHIC MAKEUP

Erie is a relatively young, white, and affluent community, but there are areas in the Town with lower incomes. Reaching these populations and developing targeted strategies will be paramount in ensuring implementation of this plan will not create more burdens or unintended consequences for these lower income communities.

ENVIRONMENTAL RISKS AND HAZARDS

Based on data findings, strategies should address or account for risks the Erie community faces, such as air toxics, fine particle pollution, proximity to oil and gas operations, floodplains, and high risk of ozone, wildfires, and drought. Although no census tracts in Erie are designated as “disproportionately impacted,” this does not mean no one is disproportionately impacted. Careful consideration of environmental impacts to each sector of the community should be a priority in the SAP update.

SOCIOECONOMIC VULNERABILITIES

Based on data findings, Erie’s socioeconomic vulnerabilities are minimal. However, disparities may still exist. Exploration of Erie’s manufactured home parks, consideration of lower income communities, and expansion of types of housing stock should be priorities as the SAP’s strategies are developed, ensuring they support the households most in need, level the playing field, and create more housing options for Erie residents.

Equity Tool Questions for Strategy Development & Implementation

As Erie’s Sustainability Action Plan update is developed, the below questions should be asked throughout the different phases of strategy and plan development to ensure strategy implementation yields fair and equitable outcomes for all residents.

Strategy Development

These questions should be asked as specific strategies are being developed for the plan.

- What do we know about historic and current community issues related to this focus area and strategy topic? What don’t we know?
 - What resources and stakeholders have more information?
 - How do we reach these stakeholders to ensure their voices are heard?
- How can we use this strategy to address those issues? Or, in other words, what might a fair outcome for all look like for this potential strategy?
 - What are the barriers to a fair outcome for all involved?
 - What actions can we add to the strategy to ensure fair outcomes?

Strategy Prioritization

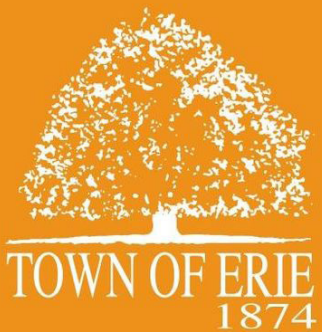
If strategies are going to be prioritized to identify a set of top strategies for implementation, the prioritization methodology should address the below questions, and they should be considered during the prioritization process.

- How well does each strategy help Erie meet community goals or address priority issues?
 - Does this policy, program, practice, or decision address existing community concerns?
- What data do we have on the community's priorities? What does the data indicate we should prioritize concerning these strategies?

Strategy Implementation

The Strategy Prioritization phase may identify top priority strategies to implement, but as strategies are developed, the details of implementation of each strategy should be considered to ensure feasibility of the strategy and equitable outcomes.

- Are all current and historical community identities currently consulted and/or represented in making changes, policies, or decisions?
- How are each of these identities affected by a policy/procedure?
 - More specifically, is there potential for negative impacts on the group?
 - Are there groups that are disproportionately, consistently, or habitually bearing negative impacts?
- How will the implementation of this policy, program, practice, or decision strive to reduce the previously identified barriers?
- Does this policy, program, practice, or decision seek to restore confidence in safety or contribute to the economic vibrancy of all communities?
- Does this policy, program, practice, or decision serve to enhance the community character inclusively?



SUSTAINABILITY MASTER PLAN

November 2019





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LETTER FROM THE SUSTAINABILITY ADVISORY BOARD



Dear Erie Community:

I am pleased to introduce the Sustainability Master Plan for the Town of Erie.

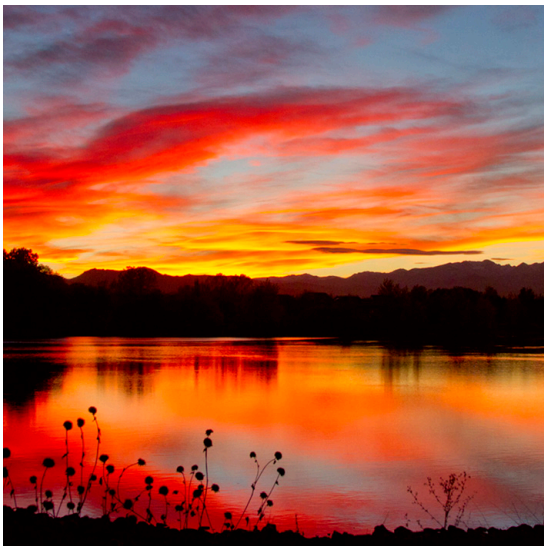
There are many different meanings of "Sustainability", however, like many concepts, the simplest definition might be the most meaningful. Sustainability is the capacity to endure. The Erie community has always been the reason for the endurance of our town, and the most critical contributions to sustainability in Erie have always come from the individuals and organizations throughout our community. Over the last year as we developed this Master Plan, the Sustainability Advisory Board worked hard to meet the community to not only hear ideas and requests, but also observe sustainable practices currently in place. This guidance became our foundation.

The Sustainability Advisory Board, teamed together with Lotus Engineering and Sustainability, and town staff to build on this foundation as we developed a Master Plan with a purpose of providing the town with focal points and direction to in order to implement, grow and optimize environmental, economic, and social sustainability within Erie.

The Sustainability Advisory Board realizes that progress in any of the directions laid out within our plan will require ongoing engagement from our town and decision makers at every level. We look forward to helping the Town meet these commitments and serving as an ongoing resource and advocates for the Sustainability Master Plan as it reflects our determination as well as our confidence in the continued endurance and sustainability of Erie.

J.P. Manza

Chairman of the Sustainability Advisory Board



Town of Erie Sustainability Advisory Board.

In order (left to right)

Back row: James Manza, Adam Jackson, Tom Doyle, Jeff Percell.

Front row: Monali Mujumdar, Berenice Garcia Tellez, Anna Clark

ACKNOWLEDGMENTS

The development of this *Sustainability Master Plan* would not have been possible without the dedicated participation and support of Town staff, members of the Sustainability Advisory Board, and representatives of various partner organizations. The Town of Erie would like to acknowledge and thank the following people for their participation:

TOWN OF ERIE SUSTAINABILITY ADVISORY BOARD

Adam Jackson	James Manza
Anna Clark	Jeff Percell
Berenice Garcia Tellez	Monali Mujumdar
Christiaan Van Woudenberg <i>(Board of Trustees Liaison)</i>	Tom Doyle

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Fred Starr	Lyndsy Willette
Hannah Hippley	Malcom Flemming
Jesse Ascunce	Raelynn Ferrera
Jody Lambert	Todd Fessenden
Joe Smith	Wendi Palmer

PARTNER ORGANIZATIONS

Carson Priest, <i>Smart Commute Metro North</i>	Neal Lurie, <i>Resource Central</i>
Cody Lillstrom, <i>Boulder County</i>	Perry Edman, <i>Regional Transportation District</i>
Gina Carnahan, <i>Xcel Energy</i>	Phil Brink, <i>Erie Open Space and Trails Advisory Board</i>
Jerry Marizza, <i>United Power</i>	Rosie Briggs, <i>EcoCycle</i>
Karen Stuart, <i>Smart Commute Metro North</i>	Sage Thornbrugh, <i>Regional Transportation District</i>
Kate Bailey, <i>EcoCycle</i>	Scott Wingfield, <i>Erie Chamber of Commerce</i>
Ken Martin, <i>Erie Open Space and Trails Advisory Board</i>	Tammy Herreid, <i>Smart Commute Metro North</i>
Lea Yancey, <i>Boulder County</i>	Tim Broderick, <i>Boulder County</i>
Nataly Handlos, <i>Regional Transportation District</i>	



CONSULTANT TEAM

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Emily Artale, <i>Co-Owner and Principal Engineer</i>	Rachel Meier, <i>Research Associate</i>
Hillary Dobos, <i>Co-Owner and Principal</i>	



LAYOUT DESIGN

Adrian Newman, *Creative Professional*

■ EXECUTIVE SUMMARY

The Town of Erie is a beautiful community on the plains east of the Rocky Mountains in Colorado, and the community is fast becoming a national leader for providing a high quality of life for residents. The sweeping and majestic mountain vistas, beautiful open and natural spaces, abundant recreational opportunities, and small-town feel are rightful sources of pride for the community.

Erie is one of the fastest growing communities in the Front Range region and is recognized as one of the best places to raise a family. On the sustainability front, momentum is gaining, and in 2018 the Town Board of Trustees committed to creating a Sustainability Advisory Board that was tasked with the development of the Town's first community-driven **Sustainability Master Plan**; this Plan is the next step in the Town and community's work to secure a sustainable future and a high quality of life for everyone that calls Erie home.

ERIE'S SUSTAINABLE FUTURE

As Erie continues to grow, sustainability has become an integral part of the Town's near- and long-term vision. The community has illustrated their commitment to sustainability through a citizen-led Sustainability Advisory Board, in the election of Board of Trustee leadership that is supportive of sustainability efforts, in feedback provided in recent community-wide surveys, and by their involvement in the development of this five-year **Sustainability Master Plan**. As Erie is a rapidly growing community that is anticipated to increase in population by four percent per year through 2035,¹ there is a critical need to ensure that sustainability is woven throughout the policies, decisions, and developments at support the community's growth.

This five-year plan provides a roadmap and approach through which the community can protect natural resources, support the local economy and culture, and promote a sustainable lifestyle for its residents and visitors. This plan builds off other community master plans (such as the Town's Transportation Master Plan and Water Conservation Master Plan) and is intended to serve as a guiding document, framework, and decision-making tool for future community sustainability planning and programming. The Plan does this by defining the sustainability strategies, actions, implementation timelines, and targets towards which the community will strive.

Erie's **Sustainability Master Plan** focuses on opportunities that directly enhance the Town's overall sustainability by leveraging resources, including those available at a state and county level, and supplementing those resources where necessary to ensure equitable access to sustainability measures across the whole community. One key component of this Plan includes the effort to provide sustainability resources and services equitably across the entire community, which crosses over two counties and two utility service territories, each of which provide varying levels of support and resources for sustainability.

ERIE'S SUSTAINABILITY VISION

As the Town of Erie grows and expands, we will become a leader in sustainability by providing outreach and leadership alongside inclusive and accessible opportunities that support the growth of our economy and engage the community while protecting our natural environment.

The Plan is split into four sectors: energy use; transportation; waste, recycling, and composting; and outreach and education. It should be noted that water was not addressed as a stand-alone sector in the **Sustainability Master Plan** due to the fact that the Town has an existing Water Conservation Master Plan. Each sector in the Plan has priorities, specific strategies, and potential action items, as well as targets that will be used to measure and gauge Erie's success over the coming years. Each priority and strategy were selected and vetted by Town staff, Erie's Sustainability Advisory Board, and the general public. The sustainability priorities for the Town of Erie are detailed below for each sector included in the Plan. The full Sustainability Master Plan document provides additional information about specific strategies and actions to implement by sector.

¹ For more information see: www.erieco.gov/DocumentCenter/View/10412/Erie_Energy-Action-Plan_-FINAL-4-5-18?bidId=

ENERGY USE SECTOR

Erie's energy use sector is split into four sub-topics, each with a specific priority that Erie will work to accomplish in the coming years.



Codes and Policies Priority

Use Erie's building codes to incentivize green building, energy efficiency, and the use of renewable energy in new construction.

Building Energy Use Priority

Encourage new development and existing buildings to conserve the use of natural resources and actively utilize available incentives and rebates for green building and renewable energy.

Renewable Energy Empowerment and Innovation Priority

Provide education and incentives to encourage the use of renewable energy and energy storage within the community.

Municipal Leadership Priority

Illustrate the Town's commitment to sustainability by reducing energy and water use in municipal buildings and supplying Town buildings with renewable energy.

ENERGY SECTOR TARGETS

- Reduce average household electricity use by 3% by 2025 (with a stretch goal of a 5% reduction).
- Increase the number of green buildings that are tracked in the community annually.
- Source 25% of commercial electricity use from renewable resources by 2025.*
- Reduce average household natural gas use by 3% by 2025 (with a stretch goal of a 5% reduction).
- Source 25% of community-wide electricity use from renewable resources by 2025.*
- Source 20% of residential electricity use from renewable resources by 2025 (with a stretch goal of 30%)*.

**Above and beyond what is already included in the utilities' fuel mix. All targets will be measured against a 2018 baseline.*

TRANSPORTATION SECTOR



Erie's transportation sector has two subtopics and four related priorities that Erie will work to accomplish in the coming years.

Mode Shift Priorities:

Provide access to transportation options and solutions that reduce community vehicle miles traveled, reduce congestion, enhance community connectivity, and increase the use of alternative modes of transportation.

Work with regional partners to identify regional solutions to congestion and single-occupancy vehicle use.

Support the development of the local economy to reduce commuting outside of Erie for work, errands, and play.

Electric Vehicle Priority:

Encourage the use of electric vehicles by providing incentives to purchase vehicles and installing publicly available charging stations.

ERIE'S TRANSPORTATION SECTOR TARGETS

- Determine a baseline and increase transit ridership by 10% by 2025.
- Increase transit serving the community by adding one additional daily bus route by 2025 (with a stretch goal of 2 additional daily bus routes).
- Increase the share of electric vehicles registered in the community by 25% by 2025 (with a stretch goal of 50%).

All targets will be measured against a 2018 baseline, unless otherwise noted.

WASTE, RECYCLING, AND COMPOSTING SECTOR



Erie's waste, recycling, and composting sector is split into three subtopics and Erie has identified four priorities that the Town and community will work to accomplish in the coming years.

Recycling and Composting Priorities:

Provide options to make diverting waste through reuse, recycling, and composting easy, accessible, and a viable option for all residents and business owners.

Be active participants in the Resource Conservation Advisory Board and support regional and state efforts to coordinate on policies and programs and encourage recycling and reuse.

Construction and Demolition Waste Priority:

Ensure that all construction in Erie diverts construction and demolition waste to the greatest degree possible.

Town Facilities and Events Priority:

Reduce waste at Town events and facilities by improving access to recycling and composting and implementing sustainable purchasing policies.

ERIE'S WASTE SECTOR TARGET

- Currently, waste tonnage and diversion rates are not tracked by haulers in Erie. Therefore, Erie will establish a waste baseline and set a target for increased diversion by 2022.



EDUCATION AND OUTREACH SECTOR



The education and outreach sector addresses how Erie will engage the broader community and its wide set of partners locally and across the region in order to ensure success of the Town's sustainability initiatives. All activities related to community engagement, marketing, and education (including events, workshops, and branding campaigns) fall under this cross-cutting sector, and the Town and community have identified two priorities that they will collaborate on accomplishing over the coming years. This sector supports the energy, transportation, and waste sectors.

Erie's Education and Outreach Sector Priorities:

Use innovative and engaging techniques to educate all community members about the importance of and value of participating in the Town's sustainability efforts.

Build capacity internally by hiring dedicated staff and developing collaborative partnerships with local and regional organizations.

ERIE'S EDUCATION AND OUTREACH SECTOR TARGET

- Double the number of businesses participating in the Erie Green Business Program by 2025 (compared to a 2020 baseline).
- Host or participate in a minimum of five community events annually to educate the community about sustainability.





Erie, the *Best Place* To Raise A Family



As a growing community in the Front Range region, Erie recognizes its responsibility to provide the best possible quality of life for residents while ensuring long-term fiscal responsibility and environmental sustainability. The Town's Sustainability Master Plan will help Erie realize its vision of sustainability by providing a roadmap of strategies and actions that will enhance community sustainability and overall quality of life. Erie believes in the power of its entire community to work together to implement the strategies identified in this Plan for the benefit of all community members and looks forward to engaging residents, businesses, and visitors to the community in these efforts, in order to create a healthier and more sustainable future for all.



Town of Erie Sustainability Master Plan

8

■ INTRODUCTION

In March 2018 the Town of Erie (the Town or Erie) Board of Trustees created the Erie Sustainability Advisory Board (SAB) and tasked the SAB with the creation of a **Sustainability Master Plan** (Plan) that would guide the Town towards the implementation of policies, programs, and projects that enhance sustainability throughout this community (Ordinance 14-2018).² To support this work, Erie hired Lotus Engineering and Sustainability, LLC. (Lotus), to conduct research, facilitate stakeholder engagement sessions, and guide the Town and SAB through the process of developing this plan. The result is a detailed and actionable Plan that identifies a vision for a sustainable Town of Erie, provides details on specific strategies the Town will pursue to achieve this vision, and sets measurable targets so that the Town can assess its success over the coming years.

Erie's Sustainable Future

As Erie continues to grow, sustainability has become an integral part of the Town's vision for the future to ensure the protection of natural resources, support the local economy and culture, and to promote a healthy lifestyle for its residents and visitors.

Erie's SAB was established with the goal of defining what sustainability means for Erie, promoting awareness, and encouraging sustainable activities throughout the community. The duties bestowed upon the SAB by the Erie Town Board of Trustees also included creating the **Sustainability Master Plan** presented here. This Plan is intended to serve as a guiding document and decision-making tool for future community sustainability work by defining the sustainability strategies, implementation timelines, and targets towards which the community will strive. The strategies included in the Plan identify what the Town will do over the coming years, but do not specifically identify how the Town will implement these strategies; however, the Plan provides guiding principles for action that will ensure the Town can "hit the ground running" with strategy implementation. Erie will strive to implement the strategies identified within this Plan over the next five years.

The first step in the planning process for developing Erie's **Sustainability Master Plan** was to identify the vision for a sustainable Erie that the Town and the SAB wished to achieve through the implementation of the plan. In preliminary meetings with the SAB and Town staff, participants were asked to identify the most important aspects of sustainability for their community and to rank these in order of importance. What resulted was a list of community values and attributes Erie wished to enhance and support through the implementation of the Plan. The planning team, including the consultants, used this list of attributes to develop the vision for sustainability in Erie, which is seen in the box below. Identifying this vision allowed the stakeholders and planning team to focus on the specific strategies and actions that will ensure this future state is realized.

ERIE'S SUSTAINABILITY VISION

As the Town of Erie grows and expands, we will become a leader in sustainability by providing outreach and leadership alongside inclusive and accessible opportunities that support the growth of our economy and engage the community while protecting our natural environment.

DEVELOPING THE SUSTAINABILITY MASTER PLAN

The **Sustainability Master Plan** integrates research on current activities within the Town, identifies opportunities for sustainability, and includes feedback from a robust stakeholder engagement process.

The consultant team met with Town staff and the SAB to identify the primary goals and priorities for the Plan; consultants also conducted an existing conditions analysis on current and proposed initiatives in the Town related to sustainability. This Plan complements Erie's many existing master plans already in place and will help advance future Town planning processes.

² For more information see <https://erieco.gov/1422/Sustainability-Advisory-Board>.

Specifically, this Plan builds off the strategies and priorities identified in the following Town of Erie Plans:

- Erie Water Conservation Master Plan (2014)
- Erie Wastewater Utility Plan Update (2015)
- Erie Comprehensive Plan (2016)
- Erie Parks, Recreation, Open Space, and Trails Master Plan (2016)
- Erie Energy Action Plan (2018)
- Erie Transportation Master Plan (2018)

Because Erie already has a Water Conservation Master Plan³ that identifies strategies to reduce water consumption and manage water issues, water use and conservation are not directly addressed in the **Sustainability Master Plan** other than in strategies in the outreach and education sector and where water use can also impact energy use in buildings.

Additionally, research on Erie's peer and neighboring communities and the consultant team's experience working in the industry informed the development of the initial list of potential strategies for Erie to consider in regard to sustainability. Lotus held numerous informational interviews with Town staff, SAB members, and potential partner agencies, hosted four in-depth meetings with the SAB, and facilitated two workshops with Town staff, the SAB, and potential partners. These activities provided insight into how Erie can build off of existing efforts in this space, opportunities for partnerships, and potential challenges along the path to sustainability. Ultimately, the feedback from these meetings and workshops allowed the consultant team to narrow the list of suggested strategies to those that are most relevant and actionable for Erie.

Input and feedback from the community was vital to the planning process, and the planning team attended two Farmers Markets and hosted a community open house to provide multiple forums and avenues for the community to review and provide feedback on the Plan. Additionally, feedback that the community previously provided through the biannual Town survey⁴ and in surveys conducted by the Sustainability Ad Hoc Committee (prior to the creation of the SAB) in past years was also used to understand the community's goals and aspirations in terms of sustainability. Based on the results from the most recent community survey (completed in 2019), there is broad support for Town-led sustainability initiatives by Erie's residents, with the greatest interest in recycling and composting programs, followed by an interest in municipal energy and water conservation programs. See Figure 2 for details on the survey results. Additionally, ninety-two percent of survey respondents indicated that "encouraging sustainability for both residential or commercial properties" was a somewhat important, very important, or essential funding priority for the Town, with over one-third of respondents ranking this in their top three funding priorities.⁵

Erie's **Sustainability Master Plan** focuses on opportunities that directly enhance the Town's overall sustainability by leveraging available resources, including those available at a state and county level, and supplementing those resources where necessary to ensure equitable access to sustainability measures across the whole community.

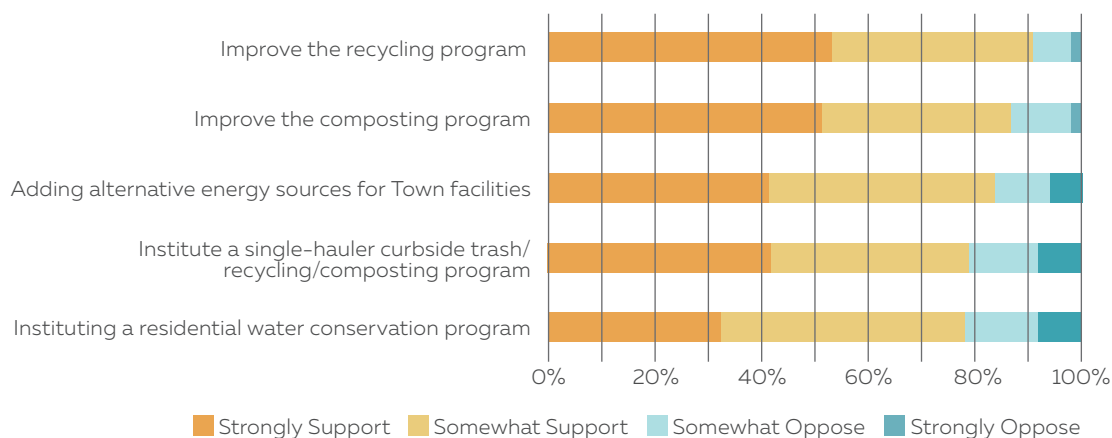


Figure 1: Community support for sustainability initiatives as indicated through results to the 2019 biannual Town Survey.

³ For more information see <https://www.erieco.gov/1062/Water-Conservation-Master-Plan>.

⁴ For more information see <https://erieco.gov/970/Community-Survey>.

⁵ For more information see <https://www.erieco.gov/DocumentCenter/View/12222/2019-Community-Survey-Results?bidId=>.

SUSTAINABILITY MASTER PLAN STRUCTURE

The **Sustainability Master Plan** includes strategies within the following sectors: energy use in buildings, transportation, waste and recycling, and outreach and education. These sectors present the areas where sustainable measures have the largest potential to benefit Erie and where Erie has the greatest opportunity to act in the near term. The strategies in the education and outreach sector are cross-cutting across all of the other sectors and will ensure that the community is broadly engaged in and informed of the Town's work in the other sectors. Each strategy has been assigned a priority level that was discussed and agreed to by Town staff and the SAB. The priority level assigned to strategies represents how aggressively the Town will work on a given strategy over the coming five years, and was assigned based on the following criteria: potential to reduce greenhouse gas emissions; alignment with the identified community co-benefits (see below); cost of implementation; cost of on-going maintenance; difficulty of implementation; time required for implementation; and time required for on-going maintenance.

Two topics not addressed in the Plan include 1) oil and gas operations in the community; and 2) greenhouse gas emissions created by activities in the community. Based on the changing nature of oil and gas operations and regulations within the State of Colorado, the decision was made that it would be best to omit oil and gas considerations from the Plan to allow Erie and the State to address oil and gas in a targeted and focused manner. Erie's Board of Trustees and Town leadership will continue to address oil and gas operations and their impact on Erie outside of the creation of this Plan.

Evaluating greenhouse gas emissions as a result of activities within a community is one of the primary ways to measure environmental impacts; however, a greenhouse gas emissions inventory has not yet been completed for the Town. Therefore, a greenhouse gas emissions-specific lens could not be used to analyze the potential strategies available to Erie. However, the Plan includes a strategy that the Town develop a greenhouse gas emissions inventory in the coming years to better understand and mitigate the environmental impacts of community-based activities.

Based on the results from the most recent community survey (completed in 2019), there is broad support for Town-led sustainability initiatives by Erie's residents, with the greatest interest in recycling and composting programs, followed by interest in municipal energy and water conservation programs.

While the goal of the plan is to lay the foundations for a sustainable community in the future, the starting block is to create an understanding of current conditions. For each sector in the Plan, a high-level view of the current conditions and trends is provided, along with sector priority goals and specific strategies vetted

against sustainability "co-benefits" for the community. Sustainability "co-benefits" are the specific attributes, values, and characteristics in the community that Erie hopes to enhance through the implementation of the selected sustainability

strategies; see the box to the left for more information. Unless specifically noted, the strategies will be on-going once started.

It is important to note that the education and outreach sector is a cross-cutting one that addresses how Erie will engage the broader community and its local and regional partners to ensure success of the Town's sustainability initiatives. All activities related to community engagement, marketing, developing new and strengthening existing partnerships, and building internal capacity fall under this sector.

Sustainability Co-Benefits

Sustainability can have broad benefits ('co-benefits', or 'triple-bottom line benefits') to a community outside of environmental impacts alone. Erie's stakeholders identified a number of co-benefits that they were interested in enhancing through the implementation of strategies within this Plan. Potential strategies for the community were vetted against these co-benefits to ensure that the selected strategies would have the greatest overall impact on the community. Erie's sustainability co-benefits are:

- Improved air quality and community health.
- Reduced congestion.
- Increased community resilience.
- Reduced energy use and expenditures.
- Protection of wildlife and biodiversity.
- Reduced consumption of natural resources.
- Reduced greenhouse gas emissions.
- Engaged community organizations.
- Support for a strong local economy.
- Making sustainability inclusive and equitable for the whole community.



ENERGY USE SECTOR

Energy consumption in buildings (i.e., electricity and natural gas use in buildings) typically represents the largest share of emissions across a community. This sector also often represents an area in which there is ample opportunity to create meaningful beneficial impacts in terms of emission reductions, energy use reductions, and supporting equity across the entire community.

Xcel Energy (Xcel) and United Power provide electricity and natural gas to Erie, with nearly an equal split of the Erie market. In 2017, Erie participated in the Xcel Partners in Energy program, which resulted in the development of an Energy Action Plan. Based on the Energy Action Plan, Erie's vision regarding energy use and energy efficiency is to be "...an engaged community that creates awareness, builds partnerships, and invests in energy strategies that responsibly pursue conservation, renewable energy generation, innovation, equity, and economic prosperity for the benefit of present and future generations."⁶

CURRENT CONDITIONS

Electricity and Natural Gas Use and Cost

Residential buildings represent the largest share of Erie's community-wide energy consumption. In 2016, residential buildings comprised 76 percent of community electricity consumption and 90 percent of community natural gas consumption.⁷ In 2018, residential energy use represented 73 percent of total community electricity use and 89 percent of community natural gas use (See Figure 2). This data indicates that the community continues to be primarily a 'bedroom community' of residential homes, but it is also evident that the commercial sector in Erie is slowly growing. Moving forward, Erie's population is expected to increase by roughly four percent annually through 2035.⁸ Similarly, the number of households is expected to more than double by 2032 (7,436 households in 2018 to 20,000 households by 2032).⁹ Although residential buildings in Erie dominate the community's energy use, the anticipated community growth presents the need

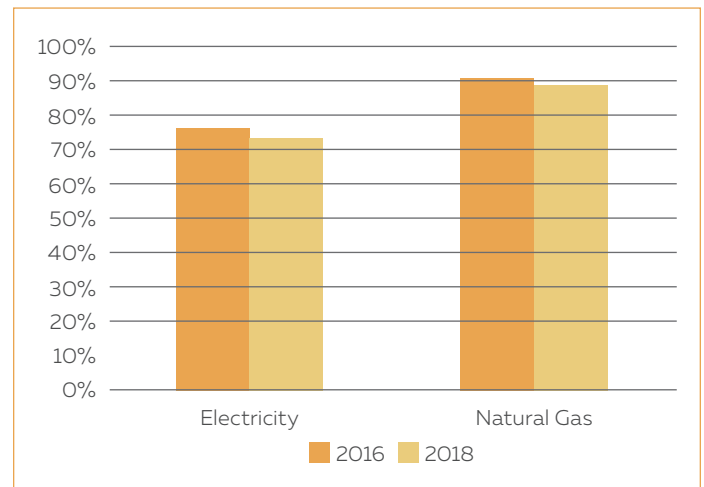


Figure 2: Share of community energy use that is from residential buildings in 2016 and 2018.

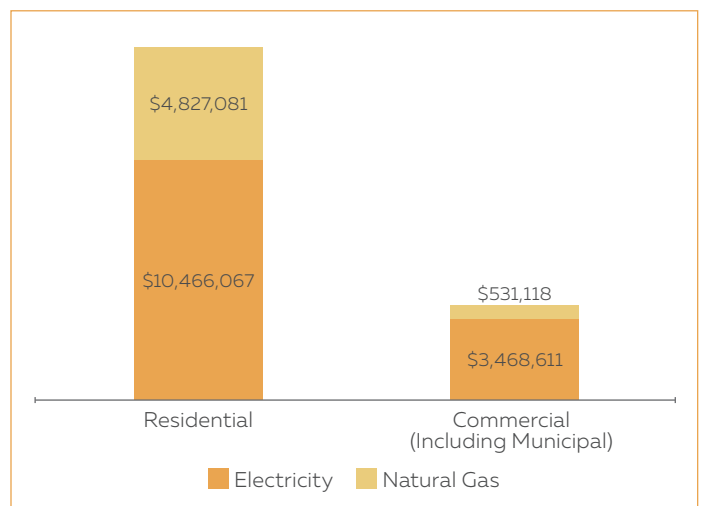


Figure 3: Dollars spent on building energy use in Erie in 2018.

⁶ For more information see: https://www.erieco.gov/DocumentCenter/View/10412/Erie_Energy-Action-Plan_-FINAL-4-5-18?bidId=

⁷ Ibid

⁸ Ibid

⁹ For more information, see video: <https://www.erieco.gov/606/Economic-Development>

for strategies and measures aimed toward reducing overall energy consumption, including in the commercial building sector. If unabated through effective policies and programs, it is likely that community energy use will grow in pace with population growth; the strategies below are structured to ensure that overall community population growth does not lead to a same level of growth in community energy use.

In 2018, residents of Erie paid over \$15,000,000 for electricity and natural gas in their homes; total household average expenditures on utility bills were \$2,057. Commercial and industrial customers in the community (including the Town's municipal buildings) spent nearly \$4,000,000 for these services in 2018 (See Figure 3).¹⁰

Renewable Energy Use

Xcel provides several renewable energy programs and offerings in which residential and commercial customers in Erie can participate; as only roughly half of the Town are Xcel customers, only those customers can participate in these programs. On-site solar installations are the most common way that customers in Erie access renewable energy, followed closely by purchased Renewable Energy Credits (RECs). All the renewable energy that United Power customers opt to consume in Erie is from on-site solar installations.

Of total community electricity use, almost seven percent is sourced from renewable energy above and beyond that which is included in each utility's fuel mix (i.e., customers opted in for renewable generation either through on-site systems or subscription programs for RECs). Residential customers in Erie opted into renewable programs for just over eight percent of their

Erie's Commercial Sector

Erie's commercial sector is comprised of approximately 2,200 businesses. Primary areas of business include professional, scientific, technical services, health care, and retail trade.

Because of the growth that Erie is anticipated to experience over the coming years (four percent annual growth in population through 2035), there is opportunity to ensure that new buildings are designed to be more energy efficient, take advantage of renewable energy resources, and improve occupant health.

By implementing sustainability measures, the community's energy use profile will not increase in pace with overall community growth.

electricity use, while commercial customers opted to source nearly four percent of their electricity use from renewable programs.

Though community solar programs are available to Erie customers of Xcel Energy, very few customers in Erie subscribe to community solar systems; no commercial customers in Erie utilize community solar programs, and very few residential customers do. Total subscriptions to community solar in 2018 equaled less than one-tenth of one percent of total community energy use.

ENERGY USE SECTOR PRIORITIES AND STRATEGIES

Based on conversations with Town staff, SAB members, and community partners, including representatives of the local utilities, as well as additional research on peer communities, four sub-topics within the energy use sector were identified including:

1. Codes and Policies.
2. Building Energy Use.
3. Energy Empowerment and Innovation.
4. Municipal Leadership.

Each sub-topic, and its associated priority goal and strategies, are provided below. The strategies provided complement existing efforts already undertaken by the Town. All the strategies for each energy sub-topic were selected with careful consideration to ensure the



Figure 4: Solar panels being installed at the Leon A. Wurl Service Center.

¹⁰ Based on data provided by Xcel Energy and United Power.

chosen strategies are realistic, economically viable, and will have a beneficial return in terms of a sustainable path forward for Erie.

Codes and Policies Strategies

As Erie is a rapidly growing community with an impressive amount of new construction occurring at any given time, one of the most impactful ways that Erie can mitigate future energy use is through the thoughtful application of building and energy codes that ensure that new construction is built to high-efficiency standards and encourages efficiency during major renovations of existing buildings. It is estimated that between 2010 and 2040 a nationwide savings of \$126 billion can be saved via energy codes for residential and commercial buildings.¹¹

Erie will use building codes to incentivize green building, energy efficiency, and the use of renewable energy in new construction. Specific strategies and their priority level for the Town are provided in Table 1 below.

Erie's Codes and Policies Priority

Use Erie's building codes to incentivize green building, energy efficiency, and the use of renewable energy in new construction.



STRATEGIES	Priority Level
E1. Adopt the most recent International Energy Conservation Code (IECC) every three years, starting with the 2015 IECC in 2020.	High
E2. Ensure ongoing education for planners, plan reviewers, building inspectors, developers, and builders on updates to building and energy codes, available design and green building resources, and enforcement mechanisms and incentives.	High
E3. Incentivize and educate on renewable energy (e.g., solar-ready homes) for new construction.	High
E4. Adopt an 'above' building code with incentives for increasing energy efficiency above and beyond standard code requirements.	Medium
E5. Explore incentivizing building energy benchmarking and reporting on green building certification for all commercial properties and residential properties over a certain size threshold.	Low
E6. Explore requiring or incentivizing reporting on energy efficiency in owner-occupied housing to meet a certain threshold at the time-of-sale.	Low
E7. Educate on and incentivize dark sky compliant and/or LED outdoor light fixtures.	Low

Table 1. Codes and Policies Strategies.

¹¹ For more information, see: www.energycodes.gov/program-impact-analysis

Guiding Principles for Implementing Codes and Policies Strategies

Successful implementation will rely upon Erie building off current work happening in the community, collaborating with potential partnering agencies and organizations, and working to educate staff and the broader community. The details provided on each strategy below include guiding principles for implementation that will ensure the Town's efforts are met with success.

> **STRATEGY E1. Adopt the most recent International Energy Conservation Code (IECC) every three years, starting with the 2015 IECC in 2020.**

The Town is already in the process of adopting the 2015 IECC, and this is expected to be finalized in 2020. This will move the Town up from the 2006 codes. IECC codes are released every three years, and research shows that buildings built to 2012 codes use approximately 19 to 24 percent less energy than buildings that comply with the 2006 codes.¹² Energy savings from the 2012 to 2015 codes are near 11% for commercial buildings; residential savings are generally slightly smaller.¹³ By adopting the most recent building codes, Erie can ensure that all new construction in the community is built to the strongest current code related to energy efficiency, therefore ensuring that community energy use does not rise in pace with overall community growth.

> **STRATEGY E2. Ensure ongoing education for planners, plan reviewers, building inspectors, developers, and builders on updates to building and energy codes, available design and green building resources, and enforcement mechanisms and incentives.**

In order for the other compliance and incentive-based strategies in this sector to be effective they must be well-communicated and understood by Town staff, developers and builders working in the community, and the general public. Erie can identify and secure funding to educate staff and provide technical assistance to developers. By partnering with other organizations to provide outreach, education, and training on green building, codes, and incentives, Erie can ensure these policies are adhered to and incentives are utilized. Training Town staff involved in

COMMUNITY VOICES

When the community was asked what they believe should be prioritized, one respondent said: "Incentivizing solar roofs"

the development review process will ensure that any variance requests from developers are balanced with energy efficiency benefits to the community.

> **STRATEGY E3. Incentivize and educate on renewable energy (e.g., solar-ready homes) for new construction.**

To ensure that all new homes already include or have the appropriate infrastructure to support renewable energy, Erie may revise current building codes and the development review process to be more 'solar-friendly'; elements of these types of code updates include streamlining solar permitting processes, addressing setback requirements in coordination with fire districts, collaborating with neighboring jurisdictions on consistent approaches, incentivizing solar ready-homes, and reducing the soft costs for solar system installs. This will help ensure that businesses, residents, and contractors have convenient, low-cost, and accessible solar options. Erie may also apply to receive state or national recognition for being a solar-friendly community.

COMMUNITY VOICES

When the community was asked what they believe should be prioritized, one respondent said: "Incentivize (or just require) highly energy and water efficient homes (i.e., through HERS, HES, Water Sense)."

¹² For more information see <https://www.energycodes.gov/sites/default/files/documents/PNNL-22760.pdf>.

¹³ For more information see https://www.energycodes.gov/sites/default/files/documents/2015_IECC_Commercial_Analysis.pdf.

> **STRATEGY E4. Adopt an 'above' building code with incentives for increasing energy efficiency above and beyond standard code requirements.**

Layering the existing compliance-based building code with incentives that encourage even greater levels of energy efficiency will further ensure that the community's energy use does not increase in pace with population growth. Erie may consider the following guidelines when implementing this strategy:

- Consider utilizing national programs such as the Energy Rating Index (ERI), ENERGY STAR, and the Department of Energy's (DOE) Zero Energy Ready Homes program to identify and recognize buildings that are designed and built using green building standards.
- Prioritize offsetting developer's variance requests with benefits to the community regarding energy efficiency, green building, and/or renewable energy (i.e., if a developer requests a variance for setbacks or other similar requirements in the design and permitting process, encourage the use of efficiency or green building design to offset these requests).
- Develop incentive-based codes for new construction that tie elements such as net-zero energy construction to incentives such as expedited permitting.
- Implement residential energy efficiency requirements for rental housing to ensure all community members benefit from energy efficiency (the City of Boulder SmartRegs program provides a good example).



Erie's Energy Sector Targets

Increase the number of green buildings
that are tracked in the community annually.

- Consider incentivizing or requiring electric heat in new buildings and during major renovations to existing buildings so that this energy load can be made carbon-free through the application of renewable energy (this is also known as 'building electrification').
- Consider opportunities to develop one or more new all-electric neighborhoods utilizing solar or district heating systems in Erie. These neighborhoods would have a lower environmental impact due to using solar or geo-thermal technology to power and heat homes, and would reduce costs for developers and the Town due to the lack of natural gas infrastructure needed in the community.

> **STRATEGY E5. Explore incentivizing building energy benchmarking and reporting on green building certification for all commercial properties and residential properties over a certain size threshold.**

Celebrating successes in the community and helping community members understand how energy is being used across Erie, and which businesses prioritize sustainability by following green building guidelines, can be an important way to raise awareness about efficiency efforts and make energy efficiency a social norm in Erie. Erie can engage businesses and building owners through the Erie Green Business program and utilize this tool to create value around saving energy, investing in green technology, and communicating those values to constituents. Erie can encourage and incentivize building energy benchmarking, where building owners analyze and report on annual energy use in buildings, and track the designation and certification of green buildings in order to ensure all community members understand how energy is used in the community and which building owners are being good stewards of the environment.

Help Erie Go Green!

If you own a home in Erie, consider getting a home energy assessment that may include an analysis and score for your home's energy efficiency attributes. Follow the recommendations in the audit to increase your home's efficiency.

Xcel customers can learn more about obtaining a home energy audit on Xcel's website. United Power customers can find more information on rebates and support at United Power's website.

If you are in the market for a house, consider asking sellers about the energy efficiency attributes of the homes you are looking at. Make it clear that energy efficiency is important to you!



> **STRATEGY E6. Explore requiring or incentivizing reporting on energy efficiency in owner-occupied housing to meet a certain threshold at the time-of-sale.**

In a booming housing market like Erie’s, there is ample opportunity to enhance awareness around efficiency and ensure that home energy use is a part of the conversation around home sales. Some communities across the country require or encourage disclosure of a home’s energy efficiency information at the time of sale, either through a normalizing tool like the DOE’s Home Energy Score or through a localized measuring tool like a home energy yardstick. By making efficiency part of the information provided to potential home buyers during the transaction process there is an opportunity to increase homeowners’ awareness around the long-term costs of energy associated with homeownership and the market value of an efficient home; this may aid in pushing the market towards greater energy efficiency across all homes. Erie may look to develop a pilot program in the coming years to explore the impact of this strategy.

> **STRATEGY E7. Educate on and incentivize dark sky compliant and/or LED outdoor light fixtures.**

Community surveys indicate that Erie residents value the dark night sky and wish to ensure that the asset remains a part of the community even as Erie grows. The Town is already actively switching most Town-owned outdoor fixtures to light-emitting diodes (LEDs), and Erie may consider incentivizing dark-sky compliant and LED outdoor light fixtures. The Town can educate residents and business owners about this effort through a ‘Lights out for Erie’ dark sky campaign.

Building Energy Use Strategies

Residential and commercial building energy use comprised roughly 40 percent of total nationwide energy consumption in 2018.¹⁴ In Erie in 2018, expenditures on electricity and natural gas in residential and commercial buildings amounted to nearly \$20 million. For residents and business owners on the Boulder County side of County Line Road, Erie currently promotes the use of EnergySmart and Partners for a Cleaner Environment (PACE) to increase energy efficiency in homes and businesses, respectively. As similar programs are not currently available to residents and business owners on the Weld County side of the dividing line, Erie’s goals for building energy use include encouraging new development and existing buildings

to conserve the use of natural resources in a way that is equitable for the whole community, regardless of geography, income, or any other factor. The Town will seek out and promote available incentives and rebates for green building and renewable energy initiatives for the whole community. Specific strategies and their priority level are provided in Table 2 below.

Erie’s Building Energy Use Priority

Encourage new development and existing buildings to conserve the use of natural resources and actively utilize available incentives and rebates for green building and renewable energy.

STRATEGIES	Priority Level
E8. Promote existing energy efficiency programs for commercial and residential users.	High
E9. Encourage building owners to utilize water-conserving landscaping practices and implement other measures that will reduce water use and align with the goals of Erie’s Water Conservation Master Plan.	High
E10. Promote existing weatherization services and solar incentives to qualifying low- and moderate-income residents by working with partners, and work to fill gaps in resources.	High
E11. Educate on and incentivize commercial building retro-commissioning.	Medium

Table 2. Building Energy Use Strategies.



Erie’s Energy Sector Targets

- Reduce average household electricity use by **3% by 2025** (with a stretch goal of a 5% reduction).
- Reduce average household natural gas use by **3% by 2025** (with a stretch goal of a 5% reduction).

¹⁴ For more information see www.eia.gov/tools/faqs/faq.php?id=86&t=1

Guiding Principles for Implementation of Building Energy Use Strategies

Each of the building energy use strategies is designed to result in an overall reduction of energy use by buildings in the community. Success will depend upon working with a variety of partner organizations and enhancing the benefits available through existing programs and policies. Details on how these strategies may be implemented are provided below.

> **STRATEGY E8. Promote existing energy efficiency programs for commercial and residential users.**

There are a multitude of existing energy efficiency programs available to support residents and business owners in reducing their energy use. Erie may partner with Boulder County, Xcel, and United Power to increase awareness of existing programs. If funding is located, Erie may consider providing support to Weld County residents and business owners that is similar to the support available through Boulder County's PACE and EnergySmart programs. Additionally, Erie may consider working with Weld County to ensure that similar incentives and services are provided to residents living on the Weld County side of the Town. Erie can also provide incentives and education on building energy audits available through local utilities and provide residential rebates for some common energy efficient upgrades. Finally, hosting engaging and fun informational sessions and providing giveaways like LED lightbulbs can help encourage people to look at their own energy use and how to reduce it.

> **STRATEGY E9. Encourage building owners to utilize water-conserving landscaping practices and implement other measures that will reduce water use and align with the goals of Erie's Water Conservation Master Plan.**

Water conservation efforts directly align with energy savings in many ways, and reducing the amount of water used in turn reduces the amount of energy needed to heat and pump water and reduces overall energy demand.¹⁵ Erie's Water Conservation Master Plan, currently being implemented, identifies many opportunities to address water conservation and reduce indoor and outdoor water use in the community.

Within its own operations, Erie is working to reduce water use and specifically reduce the use of potable water; in 2016 Erie began a 10-year plan to replace all water meters with Smart Meters that allow users to monitor water use and identify problem areas. Erie prioritizes the use of irrigation systems in open spaces and common areas that reduce potable water use.

Erie can work to educate builders on water conservation opportunities and work with Home-Owner Associations (HOAs) to ensure that homeowners have the option to install water-conserving landscaping. The Erie Board of Trustees recently passed a resolution that encourages the use of native plants and water-conserving landscaping (e.g., xeriscape) on Town properties and throughout the community, and there is clear interest in ensuring that both water and energy use are conserved through these efforts.

> **STRATEGY E10. Promote existing weatherization services and solar incentives to qualifying low- and moderate-income residents by working with partners, and work to fill gaps in resources.**

Currently there are multiple programs in Colorado that provide weatherization services for moderate- and low-income households. Erie will focus on ensuring that these programs are accessible to residents that live in mobile home parks and that these free services are communicated clearly to residents. In the near term, Erie may promote existing programs through Energy Outreach Colorado, Energy Smart Colorado, and other partners, such as the Colorado Affordable Residential Energy program (CARE) and look to fill in gaps in services in future years. Supporting such a program may be a natural fit for the SAB.

> **STRATEGY E11. Educate on and incentivize commercial building retro-commissioning.**

Retro-commissioning (i.e., the process of evaluating and, as needed, upgrading, repairing, or replacing mechanical systems in buildings) can provide significant energy savings for building owners. Studies show that retro-commissioning projects can range in cost from \$0.13 to \$2.00 per building square foot with payback periods of 0.2 to 2.1 years; overall annual energy savings from these projects hover around 16 percent for existing buildings.¹⁶ Erie may communicate the opportunity to realize these savings to commercial property owners in the community and provide incentives or other encouragement (such as recognition through the Erie Green Business Program) to ensure that commercial building owners consider this money- and energy-saving option.

¹⁵ For more information see: www.energystar.gov/products/saving_water_helps_protect_our_nations_water_supplies

¹⁶ For more information see: <http://cx.lbl.gov/documents/2009-assessment/lbnl-cx-cost-benefit.pdf>

RENEWABLE ENERGY EMPOWERMENT AND INNOVATION STRATEGIES

Many opportunities exist to increase the amount of renewable energy used in the Erie community, identify creative financing mechanisms for funding energy efficiency and renewable energy projects, and make use of innovative technology to advance Erie's sustainability goals. The goal of this sub-topic is to provide education and incentives to encourage the use of renewable energy and energy storage within the community, to capitalize on the opportunities to enhance renewable energy use in the community, and to locate funding sources to support strategies identified in other sub-topics. Specific strategies and their priority level are provided in Table 3 below.

STRATEGIES	Priority Level
E12. 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.	High
E13. Develop ongoing Town-supported renewable energy projects that benefit the whole community (e.g., community solar, etc.).	High
E14. Identify equitable programs to market and incentivize solar through cost savings and communication campaigns (e.g., bulk purchase programs, etc.).	High

Table 3. Renewable Energy Empowerment and Innovation Strategies

Erie's Energy Empowerment and Innovation Priority

Provide education and incentives to encourage the use of renewable energy and energy storage within the community.

Guiding Principles for Implementation of Renewable Energy Empowerment and Innovation Strategies

Transitioning to a greater share of renewable energy use in the community, exploring and developing innovative solutions, including energy storage, and identifying and leveraging funding opportunities available through utility partnerships and creative financing will ensure that Erie can successfully make significant progress towards sustainability in the near term. Details on the guiding principles for implementing these strategies are provided below.

> **STRATEGY E12.** *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.*

There is significant interest on the part of Town staff and SAB members to support further development and procurement of renewable energy in the community, and this work may require one (or more) innovative funding sources to ensure success. Erie will work to identify opportunities to fund energy efficiency and renewable energy projects and programs; this may include developing an energy impact offset



Erie's Energy Sector Targets

- Source 25% of community-wide electricity use from renewable resources by 2025.*
 - Source 20% of residential electricity use from renewable resources by 2025 (with a stretch goal of 30%).*
 - Source 25% of commercial electricity use from renewable resources by 2025.*
- *Above and beyond what is already included in the utilities' fuel mix.

¹⁶ For more information see: <http://cx.lbl.gov/documents/2009-assessment/lbnl-cx-cost-benefit.pdf>

fund or utilizing increased revenues from utility franchise agreements to support sustainability work. Additionally, grant funding for projects and programs in Erie may be available through the Boulder County Carbon Tax program, for which Erie is eligible to apply.

Erie may also identify opportunities to take advantage of recent enhancements in technology by partnering with a local utility to develop a Town-supported energy storage project that utilizes battery storage to shave peak at Town facilities; this would also help to reduce demand-related energy costs for the Town. Erie could consider the applicability of public-private partnerships and other investment vehicles (such as increasing outreach and awareness regarding the Colorado Commercial Property Assessed Clean Energy program [C-PACE]) to support investments in renewable energy and innovative technologies. Projects could include a district-scale renewable energy project, such as combined heat and power or geothermal heating and cooling, in greenfield developments in the community. Pursuing these projects could also allow Erie to provide commercial businesses in Erie the opportunity to take advantage of these clean energy and storage solutions and reduce their own costs of doing business in the long term. There may be an opportunity for renewable energy and innovative energy storage projects at the municipal airport, which is part of the Urban Renewal Authority, and at the landfill.

> **STRATEGY E13. Develop ongoing Town-supported renewable energy projects that benefit the whole community (e.g., community solar, etc.).**

Community solar is a unique way to procure renewable energy in which any individual homeowner, renter, or business can purchase electricity produced in a large solar array that serves many customers at once. Erie is interested in exploring opportunities to develop a community solar garden in partnership with the local utilities; capacity at this garden would be equitably available to all Erie residents and, ideally, provide cost savings on residential electricity in combination with providing the solar power. Erie may look into the opportunity to use various financial vehicles to utilize innovative technologies and implementation efforts, such as a floating solar array (i.e., a solar installation on a water source such as at the Town's water-treatment plant), partnering with HOAs for an HOA-owned array, or installing solar on covered parking lots.

> **STRATEGY E14. Identify equitable programs to market and incentivize solar through cost savings and communication campaigns (e.g., bulk purchase programs, etc.).**

By providing all residents and business owners with the information and education on available solar programs and supporting programs that will reduce solar costs for customers who choose to install on-site, Erie may be able to increase the amount of renewable energy that residents and businesses choose to consume by a significant amount. Bulk purchase programs, which can be administered by the Town or local partners, and educational campaigns on solar can be very impactful in providing the incentives and information needed for residents and businesses to choose to go solar. Many of Erie's neighbors are developing or have implemented bulk purchase programs, some in collaboration with the non-profit organizations Solar United Neighbors, which helps to organize and market the programs. Erie will ensure that these programs and information campaigns are equitably available to all members of the community, and, by combining this work with Strategy E13, Erie can ensure that access to renewable energy is available to all Erie residents and businesses.

COMMUNITY VOICES

When the community was asked what they would like prioritized, one respondent said: "A municipally-support solar farm on Town-owned open space with agriculture under the panels."

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Regardless of whether you own your home or rent in Erie, you always have the option of powering your home or business with renewable energy. Xcel Energy provides customers the option to subscribe to a community solar system or purchase RECs to offset your energy use. United Power also has community solar gardens, although currently they are at capacity, and have wait lists available. United Power customers can also purchase blocks of renewable energy (in the form of RECs) through the utility's Green Power Partners program.

MUNICIPAL LEADERSHIP STRATEGIES

Erie strives to be sustainable within Town operations, and the Town has already made many strides towards sustainability.

Many of Erie's Town-owned buildings and facilities are only powered with electricity; the environmental impact of this electricity can be offset with renewable resources, such as on-site or utility-scale solar. Currently, the Town uses automatic lighting controls and occupancy sensors in facilities and is upgrading all lighting in Town facilities (including streetlights in selected areas) to LED versus traditional lighting. The Town also has installed a solar array at the Leon A. Wurl Service Center and uses a solar thermal system to pre-heat water and reduce natural gas use at the Community Center. Further, multiple upgrades at Erie's Lynn R. Morgan Water Treatment Facility (including variable frequency drive installations and process control changes in pump operation programming) have resulted in the 2013–2018 annual costs to operate the facility being lower than the 2010 costs, even with significant increases in production to account for population increase. These upgrades have resulted in a reduction of the cost to produce a thousand gallons of clean water from \$0.25 per thousand gallons in 2011 to \$0.17 per thousand gallons in 2018. The cumulative savings from reduced costs due to plant upgrades over 2010 costs result in total saving to the Town of over \$360,000; this does not factor in inflation, the consideration of which would result in even greater savings.¹⁷ Erie is already pursuing upgrades at the wastewater treatment plant that are likely to result in similar energy and cost savings.

Through increased municipal leadership, Erie can further demonstrate a commitment to sustainability by reducing energy and water use in municipal buildings and supplying Town buildings with renewable energy. Specific strategies regarding municipal leadership in this space and their priority level are provided in Table 4.

Erie's Municipal Leadership Priority

Illustrate the Town's commitment to sustainability by reducing energy and water use in municipal buildings and supplying Town buildings with renewable energy.

STRATEGIES	Priority Level
E15. Supply municipal buildings with 100% renewable electricity (both through on-site installations and procurement decisions).	High
E16. Perform energy assessments on all existing municipal buildings and, when feasible, implement assessment recommendations for energy efficiency soon after.	High
E17. Implement benchmarking for municipal buildings.	Medium
E18. Require that all new government buildings and major renovations be ENERGY STAR certified.	Medium

Table 4. Municipal Leadership Strategies.

Guiding Principles for Implementation of Municipal Leadership Strategies

In order to engage the whole community and inspire residents and businesses in Erie to support the Town's sustainability goals and efforts, it remains important for the Town itself to lead by example. Details on the guiding principles for implementing these strategies to support municipal leadership in this space are provided below.

> STRATEGY E15. Supply municipal buildings with 100% renewable electricity (both through on-site installations and procurement decisions).

As Erie's Town-owned facilities are powered predominantly with electricity, the Town can make a significant environmental impact quickly by powering all town-owned facilities with renewable energy. As the Town showing leadership in this space can motivate change across the community, Erie may want to focus on visible on-site solar projects that illustrate

¹⁷ Data provided by Town of Erie's Public Works Department.

community leadership, such as a solar installation at the Community Center. Erie's Town-owned facilities also include historic structures such as the Town Hall; in this case, purchasing renewable energy through a REC program such as Xcel's Renewable Connects program may be the most feasible way to source renewable energy for that location. Additionally, Town-owned infrastructure other than buildings can also be addressed in this strategy, such as through continuing to upgrade streetlights with smart-control LEDs and installing solar-powered flashing pedestrian crossing signals in recreational areas and downtown. Erie may be able to receive logistical and financial support for this strategy from Boulder County.

> **STRATEGY E16. Perform energy assessments on all existing municipal buildings and, when feasible, implement assessment recommendations for energy efficiency soon after.**

Erie has made strides over the past several years to ensure that Town-owned facilities are reducing energy use where feasible, and this strategy addresses the need to assess and update the energy efficiency of Town facilities in a more structured manner. Erie will complete energy audits on all municipal buildings and also will implement efforts to track building energy intensity and perform retro-commissioning and upgrades to mechanical equipment, lighting, and plug loads in order to reduce overall energy use. Erie may consider utilizing creative financing mechanisms, such as Energy Performance Contracting, in order to ensure this strategy is successful and Town-owned facilities are made as efficient as possible.

> **STRATEGY E17. Implement benchmarking for municipal buildings.**

In order to track progress on efficiency gains and ensure that Erie's Town-owned facilities reduce energy use and costs, Erie will begin benchmarking municipal buildings in the coming five years. Erie will focus on electricity use first, as that is the prominent energy source for most of the Town's facilities based on data from the utilities serving the Town. Benchmarking will allow Erie to understand how the Town's facilities are performing next to each other, as well as next to regional and national building energy benchmarking data.

For over a decade, the Town has embarked on renewable energy initiatives to help reduce the energy impact from community buildings.

The Erie Community Center has a 70-panel thermal solar system, which preheats water before reaching the gas-fired water heaters thereby reducing the amount of natural gas used. The solar system was installed in 2008 and produces approximately 928 million British thermal units of energy.

In December 2010, the Town activated a 95.2-kilowatt photovoltaic solar array atop the Leon A. Wurl Service Center. The array produces approximately 127,000 kilowatt hours of electricity annually (between 20 and 30 percent of the electricity needs for the center).

> **STRATEGY E18. Require all new government buildings and major renovations be ENERGY STAR certified.**

As Erie continues to grow, it is likely that at some point new Town-owned facilities may need to be built or existing facilities may need to be renovated. The Town will continue to illustrate leadership by ensuring that all new buildings and major renovations abide by green building standards and can be certified as an ENERGY STAR compliant building. ENERGY STAR building certification was selected over other green building certification options (e.g., LEED) because it is more cost effective to obtain and allows for more customization in certifying an existing building. As Erie's Town Hall is a designated historic site, some exceptions may be made to this policy where needed in order to honor the historic character of the building.





TRANSPORTATION SECTOR

The transportation sector typically comprises approximately one-third to one-half of a community's total greenhouse gas emissions. According to the Environmental Protection Agency (EPA), passenger cars and light-duty trucks, including sport utility vehicles, pickup trucks, and minivans, are the largest source of transportation emissions and account for over half of the emissions from the transportation sector.¹⁸

CURRENT CONDITIONS

Erie is unique in that it is largely a "bedroom community" where most people commute to a nearby city for work. Erie is home to roughly 25,000 people and passenger vehicles are the most prevalent mode of transportation (85 percent).¹⁹ Figure 5 depicts the percentage of each mode of travel Erie's residents use for commuting to work; the vast majority of individuals drive to work in single occupancy vehicles. Erie's residents on average travel approximately 27.5 minutes each way to work and drive approximately 26,000 miles per household, per year.²⁰

Erie is a community that prides itself on having access to many community amenities, including open space and recreational amenities; as such, the community is home to an impressive number of trails and related bicycle infrastructure for a community of its size. Erie boasts over 40 miles of multi-use trails, including five miles of on-street bike facilities and six miles of other types of trails (i.e., neighborhood connector

paths and cul-de-sac links). One of the main trail networks in Erie, the Spine Trail connects the Town to multiple communities to the south and west, including Lafayette, Louisville, and Broomfield.

The community currently has limited options for public transportation service, with the Regional Transportation District's (RTD) JUMP and L/LX/LSX lines serving the Erie Community Center during limited peak weekday hours. Outside of these limited times, the closest public transit access with regular stops is in the neighboring communities of Lafayette and Niwot (roughly six to seven miles away).

Based on available data from Boulder County, roughly 1.1% of vehicles (or 40 total vehicles) registered to Erie residents in Boulder County are electric vehicles. No data was available from Weld County on the share of vehicles registered to Erie residents that are electric.

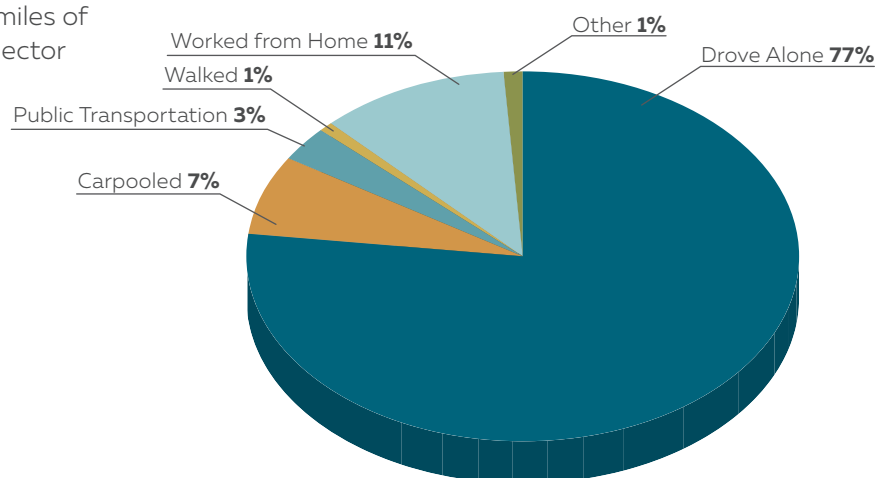


Figure 5: Means of travel to work for Erie residents.

¹⁸ For more information see: <https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions>

¹⁹ For more information see pages 1 and 4: <https://www.erieco.gov/DocumentCenter/View/293/Transportation-Master-Plan-2018?bidId=>

²⁰ For more information see <https://www.erieco.gov/DocumentCenter/View/293/Transportation-Master-Plan-2018?bidId=>.

TRANSPORTATION SECTOR PRIORITIES AND STRATEGIES

Erie's recently completed Transportation Master Plan identifies multiple projects to enhance bicycle infrastructure and other relevant roadway improvement projects. As such, the transportation strategies in the **Sustainability Master Plan** focus more on enhancing multi-modal connectivity, supporting an economic shift that will ensure that more trips can occur to destinations in the community (i.e., ensuing more residents of the community can also work in the community), and enhancing infrastructure and support for electric vehicles in the community. The two subtopics within the transportation sector include Transportation Mode Shift and Electric Vehicles, which are detailed in the sections below.

Transportation Mode Shift Strategies

The most common form of transportation used in Erie belongs to passenger vehicles at 85 percent, and opportunities exist for mode shifts to increase multi-modal options and encourage fewer trips to occur in single occupancy vehicles. Erie's priorities for a transportation mode shift are to provide safe and equitable access to multi-modal options, work with regional partners to implement transportation strategies, and support the development of the local economy to reduce overall community vehicle miles traveled. Specific strategies related to encouraging a mode shift and their priority level are provided in Table 5.

Erie's Transportation Mode Shift Priorities:

1. Provide access to transportation options and solutions that reduce community vehicle miles traveled, reduce congestion, enhance community connectivity, and increase the use of alternative modes of transportation.
2. Work with regional partners to identify regional solutions to congestion and single-occupancy vehicle use.
3. Support the development of the local economy to reduce commuting outside of Erie for work, errands, and play.

STRATEGIES	Priority Level
T1. Collaborate with regional agencies to develop approaches to provide safe and sustainable transportation management services and transit access within the community, in alignment with Erie's Transportation Master Plan.	High
T2. Ensure that all community members have safe and well-maintained access to sidewalks, bike lanes, and walking paths within current and new development.	Medium
T3. Require multi-modal connectivity and transit-oriented development principles at all new commercial developments to address first and last mile connections.	Medium
T4. Develop multi-lingual wayfinding and signage on trails, roads, and paths to support greater use of alternative forms of transportation.	Medium
T5. Focus on sustainable economic development opportunities and assets that increase the number of employers and jobs in Erie.	Medium
T6. Develop a community-wide anti-idling campaign.	Low

Table 5. Transportation Mode Shift Strategies.

Guiding Principles for Implementation of Transportation Mode Shift Strategies

The strategies identified that support a mode shift in Erie will be focused on enhancing multi-modal infrastructure and support systems and ensuring that Erie's residents can live, work, and play all within their own community. Details on the guiding principles for implementing these strategies are provided below.

> **Strategy T1. Collaborate with regional agencies to develop approaches to provide safe and sustainable transportation management services and transit access within the community, in alignment with Erie's Transportation Master Plan.**

To enhance transit access and sustainable transportation options in Erie, the Town will need to work closely with partners such as RTD, Boulder County, Smart Commute Metro North, and the North Area Transit Alliance, among others. Regional transportation planning, especially for transit, is a long-term process and it remains important for Erie to be a part of these conversations early on to ensure that transit decisions have positive benefits for the whole community.

Currently, Erie has limited transit service available in the community, and resident's use of these services is also limited. By developing a communications and marketing campaign that highlights transit opportunities and access in Erie, the Town may be able to increase ridership and, therefore, have more leverage to work with partners on increasing routes and access. The Town may consider organizing workplace transportation programs that encourage Town employees to take advantage of carpooling and vanpooling options and may communicate these options (which are supported by some of the aforementioned partners) to the general public. Erie will focus on education and outreach and partnership

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Interested in carpooling or vanpooling to work? The WayToGo program provides support in finding people to share your commute with. Go to <https://waytogo.org/getting-around/vanpool> and sign up to learn more and get connected with your new carpool buddies.

building in the first two years of implementation and focus on increasing transit ridership and access in subsequent years.

> **Strategy T2. Ensure that all community members have safe and well-maintained access to sidewalks, bike lanes, and walking paths within current and new development.**

Erie will continue to work to provide an interconnected network of streets, pedestrian and bicycle paths, and open space trails that allow community members to safely travel throughout the community without the use of a car. The implementation of this strategy may vary by the specifics of the neighborhood in question (e.g., implementation in the Air Park neighborhood may look different than in more standard residential neighborhoods). The Town will work with schools to ensure that any property renovations support walking, biking, carpooling, and busing to school. Trails within Erie's open space areas are required to be eight-feet wide with a four-foot soft shoulder; these trails connect with neighborhood trails throughout the community, and Erie will continue to work with developers to ensure that connector trails are also of sufficient width (i.e., at least eight feet) and are ADA-accessible. Erie is in the process of working with the City of Boulder, Boulder County, and other partners to develop a trail system that will connect the Town directly with Boulder, which will provide a non-vehicular commuting alternative to the many residents of Erie that work and recreate in the Boulder area.

COMMUNITY VOICES

When the community was asked what they would like to see prioritized, respondents said: "Improve bike safety and access (especially east of SH 287 and Erie Parkway)."

"Separated bike lanes."



Figure 6: A "sharrow" in Washington, D.C.

Moving forward, Erie may also work to educate drivers about safe driving when cyclists are on the road, as well as provide bicycle clinics to help people interested, but hesitant about cycling, to gain confidence. Enhanced signage and pavement markings, such as 'sharrows' (see Figure 6), help to inform drivers of the presence of cyclists on the road. Ensuring the safety of all travelers

in the Town remains of key importance to this strategy, and education and awareness building will be crucial to ensuring that safety.



Erie's Transportation Sector Targets

- Increase transit serving the community by adding **one additional daily bus route** by 2025 (with a stretch goal of 2 additional daily bus routes)
- Determine a baseline and **increase transit ridership by 10%** by 2025.

> **Strategy T3. Require multi-modal connectivity and transit-oriented development principles at all new commercial developments to address first and last mile connections.**

Erie will work with developers interested in building new commercial projects in the Town to ensure that these new developments support access to public transit and multi-modal connectivity and ensure that there are more destinations in the community that are accessible via walking, biking, or otherwise not using a car to travel. This will be specifically important to ensuring that multifamily housing is accessible via transit and multi-modal options, which can help to reduce the costs of transportation for families living in and near these developments.

COMMUNITY VOICES

When the community was asked what they would like to see prioritized, respondents said: "Better signage on bike paths & more connections"

> **Strategy T4. Develop multi-lingual wayfinding and signage on trails, roads, and paths to support greater use of alternative forms of transportation.**

Enhancing wayfinding and signage and ensuring that it is multi-lingual and accessible to the whole community can enhance safety for cyclists and others using these trails and paths and can also help to communicate how Erie's trail system can be used for travel within the community. By alerting trail users to various destinations within the community and other important information (such as the termination of a bicycle path), Erie can ensure that residents and visitors feel more comfortable and confident using the trail system and may be more likely to take the trails to their destination in the future.

> **Strategy T5. Focus on sustainable economic development opportunities and assets that increase the number of employers and jobs in Erie.**

As previously noted, Erie is primarily a community from which most residents travel out of to arrive at their places of work. By focusing on economic development opportunities and enhancing community assets that will bring jobs and employers to the community, Erie may be able to reduce the amount of travel by residents for work and play. Erie may consider exploring the development of an entrepreneurial center or co-working office space in the community, installing municipal broadband, and increasing the number of service-related businesses (e.g., cafes,

COMMUNITY VOICES

When the community was asked what they would like to see prioritized, respondents said: "Education about idling."

"More public transportation choices"

lunch restaurants, etc.) that are open during the day to support more workers staying in Erie and encourage more employers to make Erie their permanent home.

> **Strategy T6. Develop a community-wide anti-idling campaign.**

The Town has an anti-idling policy for Town-owned vehicles but ensuring that this policy is enforced and that the benefits of anti-idling are communicated to the community, remain of utmost importance. In particular, communicating about the negative air quality and health impacts near schools, where idling is prevalent in many communities, and near delivery areas like the downtown will encourage people to turn off their engines when their vehicles are not moving, thus reducing air pollution and related greenhouse gas emissions; see Figure 7 for an example of signage.



Figure 7: Example of signage for an idling campaign.

Simple signage to remind people about idling and its impacts can go far in influencing behavioral change. While this strategy doesn't directly result in a mode shift, it does enhance individuals' awareness of the impacts of transportation choices on health, which can inform future individual transportation choices.

Erie's Electric Vehicle Priority:
Encourage the use of electric vehicles by providing incentives to purchase vehicles and installing publicly available charging stations.

Electric Vehicles Strategies

Electric vehicles (EVs) present a significant opportunity to improve air quality and reduce the environmental impact of transportation activities in the community. An all-electric vehicle uses no gasoline and is powered only by its battery, which must be periodically recharged. Electricity is less expensive than petroleum and using it to power a vehicle does not produce tailpipe emissions (i.e., exhaust). Electric vehicles also typically require less maintenance, since electric motor drives have fewer moving parts compared to a traditional internal combustion engine. Additionally, if the EVs are powered by renewable energy, the emissions from the vehicle are effectively zero. Erie will prioritize supporting a transition to more electric vehicles in the community through policies, incentives, and by supporting the development of needed infrastructure.

In September 2019, The Town leased an EV to replace an existing traditional gasoline internal combustion engine vehicle that had come to the end of its useful life. This replacement could save Erie taxpayers approximately \$7,000 over the life of the vehicle. The Town plans to increase the use of these vehicles in the future and increase the number of electric vehicles charging stations in the community.

Specific strategies related to EVs and their priority level are provided in Table 6.

STRATEGIES	Priority Level
T7. Increase the number of EVs on the road through equitable programs and policies such as bulk purchase programs and improved charging infrastructure.	High
T8. Develop EV-ready building codes for residential and commercial new construction and incentivize during retrofit projects for existing residential and commercial buildings.	High
T9. Switch government fleet vehicles to electric vehicles or other high-efficiency vehicles within the replacement cycle (or sooner) and when appropriate models are available.	High
T10. Support state and regional goals for EV adoption, and work with regional partners and neighboring communities to reach these goals.	Low

Table 6. Electric Vehicles Strategies.

Guiding Principles for Implementation of Electric Vehicles Strategies

Erie can support the increased adoption of EVs through policies and programs, and the Town is already actively working to enhance EV infrastructure in the community. Details on the guiding principles for implementing these strategies are provided below.

> **Strategy T7. Increase the number of EVs on the road through equitable programs and policies such as bulk purchase programs and improved charging infrastructure.**

Ensuring that there is access within the community to EV infrastructure (i.e., charging stations) to reduce range anxiety for EV drivers, as well as providing education, outreach, and support for residents interested in owning EVs, can help to encourage greater adoption of these vehicles and will result in many benefits to the community including improved air quality and reduced emissions. The Town may be able to access grant funds to support the installation of charging infrastructure at Town-owned facilities that are open to the public and additionally may consider working with the Chamber of Commerce and the Erie Green Business Program to encourage and incentivize businesses to install charging stations at workplaces and for customers (some businesses may be able to access grant funds for charging infrastructure as well). Erie may also consider supporting bulk purchase programs, which cost the Town nothing to organize and implement but through which dealerships selling EVs can provide discounts to buyers due to the economies of scale realized by increased interest in the cars (this is a similar model to the solar bulk purchase programs mentioned in Strategy E14).

> **Strategy T8. Develop EV-ready building codes for residential and commercial building new construction and incentivize during retrofit projects for existing residential and commercial buildings.**

By adopting EV-ready building codes, Erie would be ensuring that all new construction is equipped and has the appropriate infrastructure to install a charging station if and when the building owner desires. Installing this infrastructure at the time of construction is significantly less expensive than doing so as a stand-alone project in the future. Erie will work to ensure that EV charging is made available specifically to attached housing properties and low-income residents within the community. Additionally, Erie will consider incentivizing adding EV-ready infrastructure to buildings during major renovation projects, which would be defined as when the project reaches a certain size or cost threshold. Finally, Erie will work to ensure that commercial parking lots of a certain size are either EV-ready or have charging stations installed for a certain number of spaces and will consider how to support the installation of Level III charging (i.e., DC fast charging) at strategic locations.



Erie's Transportation Sector Targets

Increase the share of EVs registered in the community by 25% by 2025 (with a stretch goal of 50%)

COMMUNITY VOICES

Based on a 2016 survey conducted by the SAB, residents would like to see more publicly accessible electric vehicle charging stations. Many residents expressed interest but were unsure of the logistics surrounding their use and practicality for their everyday lives.

Currently, Erie has four public charging stations. The Town is in the process of identifying priority locations for the installation of additional charging stations in the coming years.

> **Strategy T9. Switch government fleet vehicles to electric vehicles or other high-efficiency vehicles within the replacement cycle (or sooner) and when appropriate models are available.**

In 2019 Erie began leasing an EV for a fleet pool vehicle for Town staff to use when on official business for the Town. Due to the significant cost savings, Erie is likely to accrue from this vehicle (saving taxpayers an estimated \$7,000 over the life of the vehicle), Erie is interested in continuing to bring more EVs into the Town's fleet. Erie will evaluate the use of municipal vehicles in order to make informed decisions about which vehicles may be appropriately replaced with EVs and will also determine if there are other vehicles that may be replaced with hybrid or high-efficiency options in order to reduce both the costs and environmental impacts of Town operations. Erie may also consider exploring opportunities to enhance efficiency in Town fleet operations through the use of electronic fleet management systems to improve route and resource efficiencies, especially for large vehicles like snowplows.



Figure 8: The Town of Erie's first EV.



> **Strategy T10. Support state and regional goals for EV adoption, and work with regional partners and neighboring communities to reach these goals.**

Many of Erie's neighbors, as well as the State of Colorado at large, are working to enhance EV infrastructure and support the adoption of EVs across the state. Erie will collaborate with its neighbors on mutually beneficial efforts and goals to ensure that Erie can achieve its vision for enhanced EV adoption and cleaner air in the community in the most efficient way possible. Exploring public-private partnerships to establish a network of EV charging infrastructure across the region may be a viable option for this strategy.



WASTE, RECYCLING, AND COMPOSTING SECTOR

The Town recognizes the significant negative environmental and social impact created by waste, through both the decomposition of waste in a landfill that releases methane gas and by using vital community resources. By increasing conservation measures, composting, and recycling, significant reductions in the amount of waste generated in the community can be realized.

Composting and recycling strategies rise to the top of survey results, and resident feedback regarding what they would like the Town to do to enhance sustainability, and the strategies in this sector provide many opportunities to make an impact on waste in the community.

CURRENT CONDITIONS

The Town's current waste initiatives include annual spring and fall clean-up days, recycling and composting at the Erie Concerts in the Park, and an annual leaf composting event. Additionally, the 5th Annual Erie BrewFest (held in 2019) marked the first official zero waste event in Erie. As a result of the Town's efforts (in partnership with Eco-Cycle, who provided volunteers to help ensure recycling and composting occurred properly), 422 pounds of solid waste was diverted from the landfill (this represents 89 percent of all waste discarded at the event). The waste recovery equated to 935 pounds of avoided greenhouse gas emissions.²¹

The Town Public Works Department operates a recycling center in Erie, and residents have access to the Boulder County Recycling Drop-Off Center and Boulder County Hazardous Waste Center as well. However, it was noted in several conversations that the Town's recycling center is not functioning ideally due to a variety of reasons, including significant contamination issues at the drop-off site. Additionally, it was noted that the Town's recycling facility may not be large enough to accommodate the current or anticipated future need, does not offer composting or hard-to-recycle items, and is located in a floodplain, making any expansion to or retrofits of the facility difficult.

Landfill Gas to Energy—How does it work?

Landfill gas (LFG) is a natural byproduct of the decomposition of organic materials in landfills. LFG is composed of roughly 50 percent methane (the primary component of natural gas), 50 percent carbon dioxide, and a small amount of organic compounds.

Instead of escaping into the air, LFG can be captured, converted, and used as an energy source.

LFG is extracted from landfills using a series of wells and a blower/flare system. This system directs the collected gas to a central point where it can be transported, compressed, and filtered before it is combusted to generate electricity.

The Town embarked on a Gas to Energy Project in 2011. Through this project LFG is captured and combusted to generate electricity. The project was completed in conjunction with the landfill owner (Waste Connections), project developer (Aria Energy), and energy buyer (United Power).

There is no readily available data on waste and recycling activity in the Town (e.g., tons of waste disposed of, recycling diversion rate, etc.). The Town recognizes that efforts to increase waste reduction, composting, and recycling are important and that the tracking of such data is useful for understanding the effectiveness of the community's waste, recycling, and composting efforts; the suggested approach to tracking this data in the future is detailed in Strategy W2.

²¹ For more information, see: <https://www.erieco.gov/DocumentCenter/View/9805/Erie-BrewFest-Zero-Waste?bidId=>

WASTE, RECYCLING, AND COMPOSTING PRIORITIES AND STRATEGIES

Strategies surrounding waste, recycling, and composting present an area of great opportunity for Erie. The three subtopics identified for this area include recycling and composting, construction and demolition waste, and Town facilities and events. Each subtopic is discussed in the following sections.

Recycling and Composting Strategies

Recycling and composting present areas for progress and improvements where residents and business owners can see immediate and tangible results from conservation and diversion.

Priorities for recycling and composting include providing options to make diverting waste easy and accessible. Additionally, the Town strives to be active participants in the Boulder County Resource Conservation Advisory Board (RCAB) (which advises the Board of County Commissioners on major waste diversion policies and strategies) and supports regional and state efforts. Specific strategies related to recycling and composting and their priority level are provided in Table 7 below.

Erie’s Recycling and Composting Priorities:

1. Provide options to make diverting waste through reuse, recycling, and composting easy, accessible, and a viable option for all residents and business owners.
2. Be active participants in the Resource Conservation Advisory Board and support regional and state efforts to coordinate on policies and programs and encourage recycling and reuse.



STRATEGIES	Priority Level
W1. 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.	High
W2. Adopt 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.	High
W3. Explore a phased approach to ensure that curbside composting is available within the community to anyone who chooses to use it.	High
W4. Implement a phased approach to a Universal Zero Waste Ordinance.	High
W5. Work with regional organizations to expand easy and local access to materials reuse and hard-to-recycle services and events.	Medium

Table 7. Recycling and Composting Strategies.

Guiding Principles for Implementation of Recycling and Composting Strategies

Erie residents have expressed much interest in recycling and composting access within the community, and the strategies in this sub-topic are intended to ensure that every community member has access to these services and that the community diverts as much waste from the landfill as feasible. Details on the guiding principles for implementing these strategies are provided below.

> **Strategy W1. 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.**

As noted above, the current recycling center in Erie has multiple challenges that limit its success. Erie will work with the SAB and partners to identify viable tracts of land to which the recycling center can be relocated so that it is no longer in a flood plain. Erie will make enhancements to the recycling center, including improved signage and information on sorting recycling, perhaps separating out glass and cardboard, as they are more valuable commodities that the Town can potentially profit from. The Town will also consider any other items that can be accepted at the facility without significantly increasing staff time and management for the site. Erie will consider adding a yard waste collection area to the facility, where residents can drop off yard waste (such as leaves and grass clippings) that can be turned into mulch and/or compost that can be made available to residents and businesses. In doing so, Erie will need to carefully consider the impacts of such a facility on local pest issues, such as the emerald ash borer and pine beetle, to limit the spread of these pests.

> **Strategy W2. Adopt 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.**

Currently waste data, including tonnage of waste and diversion rates, are not tracked by haulers in Erie. In order for Erie to be able to measure the impact of the Town's waste strategies, this data will be needed. Erie can adopt the Re-TRAC Ordinance, which is a hauler license ordinance developed by Boulder County and made available to all communities within the County, to require that haulers track and report on waste and diversion rates within the Community. Erie has the option of adopting the ordinance in whole or in part, and Erie will work to ensure that the ordinance adopted in the Town also requires that haulers provide recycling



Erie's Waste Sector Target

- Currently, waste tonnage and diversion rates are not tracked by haulers in Erie. Therefore, Erie will **establish a waste baseline and set a target for increased diversion** by 2022v.

services to customers in Erie. Erie may also consider a Pay-As-You-Throw model, which incentivizes waste diversion by pricing recycling and composting at a lower rate than standard trash. Erie will require that all new commercial and multifamily developments include space for recycling bins in the design and construction of new facilities.

> **Strategy W3. Explore a phased approach to ensure that curbside composting is available within the community to anyone who chooses to use it.**

Working with Boulder County's RCAB and Zero Waste team, Erie will consider requiring the curbside collection of compostable materials by creating a subscription-based composting program for the residential sector. Erie will begin with a pilot program in the near term and work towards the adoption of the voluntary subscription program across the Town in the coming years. Additionally, Erie may conduct a study of where curbside composting is currently available and increase outreach and education about available services. Erie will also work with local schools to expand composting efforts in their facilities and work with the Erie Green Business Program to support food scrap composting at local businesses by providing incentives for pilot projects.

COMMUNITY VOICES

When the community was asked what they would like to see prioritized, respondents said: "More composting and recycling."

"Recycling pick-up weekly and curbside composting."

> **Strategy W4. Implement a phased approach to a Universal Zero Waste Ordinance.**

Erie’s ultimate aim is to be a zero-waste community and moving towards this in a phased approach that begins with education and incentives and eventually moves towards zero waste requirements. Erie will again work closely with both the Boulder County RCAB and the County’s zero waste team to implement this phased approach, which will begin with outreach and education about waste costs and opportunities and incentives to commercial and multi-family property owners to provide recycling and composting collection services. Funding may be available through Boulder County to support this work. Erie may consider conducting a business impact study to determine the impacts on the cost of doing business of such an ordinance and work to offset these costs through incentives and engagement programs (such as recognition through the Erie Green Business Program). Erie will also ensure that all municipally funded projects practice waste diversion to the highest level.

> **Strategy W5. Work with regional organizations to expand easy and local access to materials reuse and hard-to-recycle services and events.**

Erie will work with local partners, such as Boulder County, EcoCycle, and others, to expand access to hard-to-recycle items through events and drop-off locations. This may include expanding collection events for materials such as holiday items, Styrofoam, and batteries, or working with partners to collect appliances, mattresses, and other items at greater rates. Erie will support statewide product stewardship efforts and consider opportunities to reduce the use of single-use plastics in the community. Erie will also work with local businesses to divert food waste from restaurants and events to food kitchens and homeless shelters.

Construction and Demolition Waste Strategies

As Erie continues to grow in population, a parallel track of increased construction and demolition (C&D) waste will likely occur. This type of waste can be complex and is often comprised of many different materials (e.g., steel, wood, gypsum, etc.). Recycling and reusing waste from C&D projects is one way to reduce the environmental impact and lessen the burden on landfills. Cost-savings can also be realized by the reduction of waste generated as it reduces the amount of new material that needs to be purchased. Specific strategies related to C&D waste and their priority level are provided in Table 8.

Erie’s Construction and Demolition Waste Priority:

Ensure that all construction in Erie diverts construction and demolition waste to the greatest degree possible.

STRATEGIES	Priority Level
W6. In a phased approach, reward waste diversion on construction and demolition and public works projects.	Medium
W7. 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.	Medium

Table 8. Construction and Demolition Strategies.

COMMUNITY VOICES

When the community was asked what they would like to see prioritized, respondents said: “Thrift stores! Clothing, furniture, and other waste can be lowered by buying second-hand.”

Guiding Principles for Implementation of Construction and Demolition Waste Strategies

As Erie grows in size the amount of construction waste is likely to increase; this complicated waste stream requires careful management. Details on the guiding principles for implementing the strategies to support the greater diversion of C&D waste are provided below.

> **Strategy W6.** *In a phased approach, reward waste diversion on construction and demolition and public works projects.*

Due to the complicated nature of C&D waste, a phased approach towards requiring C&D waste diversion, beginning with rewarding C&D projects that divert high levels of waste (such as through recognition by the Town) is most likely to result in success. In the coming years, Erie will provide information and resources to businesses and developers regarding C&D diversion and look towards requiring the recycling of clean dimensional lumber from C&D projects.



Figure 9: Commercial building construction in Erie.

Erie’s Town Facilities and Events Priority:

Reduce waste at Town events and facilities by improving access to recycling and composting and implementing sustainable purchasing policies.

> **Strategy W7.** *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.*

Due to the rapid pace of construction in Erie, there may be an opportunity to develop a materials reuse center in partnership with local organizations (such as Resource Central) that serves as a collection center and store for reusable construction materials from around the region. Implementing this strategy would also create local jobs and enhance the strength of the local sustainable economy.

Town Facilities and Events Strategies

Erie prides itself on being a community where people love to live. To foster that community pride, Erie hosts approximately 40 community special events each year.²² To reduce waste at community events and facilities, Erie will prioritize improving access to recycling and composting and implementing sustainable purchasing policies.

Specific strategies related to waste generated at Town facilities and events and their priority level are provided in Table 9.

STRATEGIES	Priority Level
W8. Expand zero-waste policies for all Town events and meetings.	High
W9. Enhance the recycling infrastructure at Town facilities and in public locations, such as downtown and in outdoor commercial and community gathering spaces.	High
W10. Develop Town-wide green purchasing policies where cost-benefit is shown.	Medium

Table 9. Town Facilities and Events Strategies.

²² For more information, see: <https://www.erieco.gov/1540/Town-of-Erie-Special-Events>

Guiding Principles for Implementation of Town Facilities and Events Strategies

These strategies were developed with the ultimate goal of ensuring that Erie leads by example and provides community members and Town staff with ample opportunities to reduce waste generated and increase recycling and composting activities. Details on the guiding principles for implementing these strategies are provided below.

> **Strategy W8. Expand zero-waste policies for all Town events and meetings.**

Erie currently works with EcoCycle to support diversion at Town events such as the Town Fair, Concerts in the Park, and the Erie Brewfest. Moving forward, Erie will expand upon these efforts by working with vendors at Town events to ensure that they adhere to the Town's zero waste policies and provide information on zero waste policies and resources to vendors and others looking to host events in Erie. The Town will also implement zero-waste guidelines for internal Town events and meetings to ensure materials are recycled and composted appropriately and explore composting infrastructure at Town-owned facilities, beginning with 'simple' items like paper towels and other non-food items.

> **Strategy W9. Enhance the recycling infrastructure at Town facilities and in public locations, such as downtown and in outdoor commercial and community gathering spaces.**

Erie will improve and expand municipal recycling facilities to include additional bins at public parks and in community areas like downtown. In order to ensure successful recycling, effective and branded signage will be key to communicating to the public what can and cannot go into the recycling bins. To facilitate higher recycling rates, Erie will also ensure that recycling bins are placed directly next to trash bins in public spaces and will also work to measure and reduce waste per-capita for Town employees.

> **Strategy W10. Develop Town-wide green purchasing policies where cost-benefit is shown.**

In order to limit the negative environmental impact of its own operations, Erie will work to implement green purchasing decisions where appropriate and cost effective. By establishing a list of environmentally preferred products and adopting guidelines to limit the use of single-use plastic and disposable products in Town operations, Erie may be able to realize significant gains in reducing the amount of waste produced through Town operations. Erie may also consider purchasing and utilizing certified and locally generated compost for municipal projects, which supports the market for these goods and enhances the soil quality and water retention capabilities of the areas where the compost is used.

COMMUNITY VOICES

*When the community was asked what they would like to see prioritized, respondents said:
"Zero Waste Town events."*



EDUCATION AND OUTREACH SECTOR

Education and outreach efforts not only provide an opportunity for residents and business owners to become engaged in the Town's sustainability work but also allow for increased awareness regarding the opportunities to confront the sustainability challenges in the community, such as energy use, waste, congestion, and growth.

CURRENT CONDITIONS

Education and outreach are a vital component of the success of this Plan and their importance cannot be overstated. Current initiatives include environmental education associated with Earth Day celebrations; the year 2020 marks the 50th anniversary of Earth Day, and the Town's Annual Earth Day celebration will be the 23rd annual occurrence of the event. These large events increase awareness surrounding sustainability and demonstrate the Town's commitment to action.

EDUCATION AND OUTREACH PRIORITIES AND STRATEGIES

Strategies surrounding education and outreach aim to increase awareness, meaningfulness, and accountability for sustainability initiatives. This sector includes many strategies, as shown in Table 10.

In September 2019, the Town was awarded the Bronze Environmental Achievement Award by the Colorado Department of Public Health and Environment's Environmental Leadership Program.

The award was given for the voluntary and significant environmental achievements the Town has embarked upon, including the solar array on the Leon A. Wurl Service Center, solar thermal system at the Erie Community Center, automatic lighting controls in Town facilities, water conservation efforts, the annual spring and fall clean-up days, and the environmental education associated with the Arbor and Earth Day Celebrations.



Figure 10: Collecting feedback at Erie's Farmers Market.

STRATEGIES	Priority Level
EO1. Hire dedicated sustainability staff members that will coordinate and implement internal and community-wide sustainability projects and programs and build partnerships with local and regional organizations to collaborate on sustainability efforts.	High
EO2. Host creative and innovative events that engage all residents and businesses in resources for sustainability.	High
EO3. Ensure that all community events and functions include elements of sustainability in their implementation and messaging.	High
EO4. 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.	High
EO5. 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.	High
EO6. 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.	High

Table 10. Education and Outreach Strategies.

STRATEGIES	Priority Level
EO7. 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.	High
EO8. Ensure that all Town plans include sustainability (i.e. transportation master plans, water plan, etc.).	High
EO9. Develop a coordinated and branded marketing and communications campaign that is multilingual, multicultural, equitable, and inclusive.	High
EO10. Be active members in statewide organizations that are working on our behalf to combat climate change, such as Colorado Communities for Climate Action.	High
EO11. Host neighborhood sustainability competitions or challenges.	Medium
EO12. Support enhancement of the Erie Green Business Program.	Medium
EO13. 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.	Medium
EO14. 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.	Medium

Guiding Principles for Implementation of Education and Outreach Strategies

The strategies identified above for education and outreach aim to create an environment in which the whole community is engaged in sustainability. Further, the implementation of the education and outreach strategies will ensure that all of the other strategies identified in this plan are communicated to Erie's residents and businesses, made accessible to the entire community, and overall met with success. The following sections discuss the education and outreach sector strategies in detail.

> **Strategy EO1. Hire dedicated sustainability staff members that will coordinate and implement internal and community-wide sustainability projects and programs and build partnerships with local and regional organizations to collaborate on sustainability efforts.**

Building internal capacity by ensuring Erie has dedicated staff that can implement this Plan is crucial to the success of these strategies. Erie has recently hired its first dedicated sustainability position, a Sustainability and Water Conservation Specialist, and is looking to grow this team in future years both through more dedicated staff and collaborations within other departments in the Town through a staff 'Sustainability Team'. The staff will collaborate across departments and with partners to implement Erie's sustainability initiatives and leverage programs and resources (including funding) available from state, federal, and local non-governmental organizations (including schools, libraries, the business community, and other community organizations) to support Erie's sustainability work. Staff will also collaborate across other Front Range communities and utilities to share best practices, supplement resources, and work to leverage their combined power to enhance sustainability initiatives and work to provide more resources and support reduced energy costs across the community.

Erie's Education and Outreach Sector Priorities:

1. Use innovative and engaging techniques to educate all community members about the importance of and value of participating in the Town's sustainability efforts.
2. Build capacity internally by hiring dedicated staff and developing collaborative partnerships with local and regional organizations.

> **Strategy EO2. Host creative and innovative events that engage all residents and businesses in resources for sustainability.**

Erie is a lively, fun, and exciting place to live, and the Town wishes to build off of those assets when engaging residents and businesses in sustainability. Erie will develop sector-specific outreach and educational materials and host fun, creative, and compelling events to engage residents in sustainability; topics for engagement will include water conservation, waste reduction and home composting, energy conservation and renewable energy, and transportation access and options. Events and materials will be branded for Erie's sustainability efforts and will be multilingual and made accessible to all audiences across the community.

> **Strategy EO3. Ensure that all community events and functions include elements of sustainability in their implementation and messaging.**

As noted, Erie hosts many Town-sponsored events throughout the year; while many of these events already include elements of sustainability (such as recycling and composting options), the Town will also ensure that sustainability is a part of the messaging around events. Further, the Town is host to many events that are held by other organizations in the community, and Erie will provide information about the Town's sustainability policies, resources, and options in event permit applications.

> **Strategy EO8. Ensure that all Town plans include sustainability (i.e. transportation master plans, water plan, etc.).**

When developing and adopting a new master plan for the community, Erie always works to reference existing and past planning documents to maintain consistency of policy and implementation and ensure that the Town follows through with its intended plans. Future planning documents created for the Town, from master planning efforts to community and neighborhood-level plans, will incorporate sustainability where relevant and applicable to ensure that Erie's sustainability goals and initiatives are woven into the fabric of the community. Specifically, Erie will ensure that future updates to the Town's water conservation, transportation, and comprehensive plans include strong considerations for sustainability.

> **Strategy EO9. Develop a coordinated and branded marketing and communications campaign that is multilingual, multicultural, equitable, and inclusive.**

Erie is a diverse community that includes people of all ages, races, income levels, and cultural backgrounds. In order to engage the entire community in the Town's sustainability efforts, Erie will develop a coordinated branding and marketing campaign for Erie's sustainability initiatives that is multilingual, multicultural, and inclusive. Only by engaging and empowering the entire community to participate in and support sustainability initiatives will Erie realize success, and this strategy will ensure that the entire community is engaged in, excited about, and benefits from Erie's sustainability work. This campaign will rely on community-based social marketing and highlight Erie's sustainability goals and efforts. Erie may create a community spotlight program that highlights local residents acting on sustainability and create a digital platform for residents to share what they are doing at home for energy and water conservation, transportation efforts, and materials reuse.



Erie's Education and Outreach Sector Target

- **Double the number of businesses participating** in the Erie Green Business Program by 2025 (compared to a 2020 baseline).
- **Host or participate in a minimum of five community events** annually to educate the community about sustainability.

> **Strategy EO10. Be active members in statewide organizations that are working on our behalf to combat climate change, such as Colorado Communities for Climate Action.**

The Erie Board of Trustees approved the Town's participation in Colorado Communities for Climate Action, a collaboration of communities across the state working towards state-level legislative changes in support of sustainability initiatives. Erie will maintain active membership in this organization, and potentially identify other relevant organizations in which to participate, in order to ensure that the Town's voice is heard and influential in driving towards creating a sustainable future, not just for Erie, but for all residents of Colorado.

> **Strategy EO11. Host neighborhood sustainability competitions or challenges.**

Friendly competition can be a great motivator for individuals and communities, and Erie has the opportunity to leverage this in order to engage the broader community in supporting the Town's sustainability efforts. By engaging HOA groups and other community organizations in implementing sustainability projects and offering residents and businesses the opportunity to take pledges to illustrate their commitment to support sustainability goals, Erie can ensure that sustainability becomes a valued asset across the whole community. Erie may consider locating funding to provide mini grants to HOAs and neighborhood groups interested in developing local sustainability projects (such as a community clean-up or sustainability workshops) and could investigate the usefulness of a sustainability neighborhood challenge or recognition program to encourage participation.

> **Strategy EO12. Support enhancement of the Erie Green Business Program.**

The Erie Green Business Program recognizes local businesses that are taking steps to be more sustainable. The program was developed during the process of creating Erie's Energy Action Plan and has focused efforts over the last several years on supporting energy reductions in local businesses. Erie will work with the Chamber of Commerce to create a plan to expand and enhance the Green Business Program; specific initiatives may include using local events to recognize Erie's green businesses, developing a rating system to show which businesses are taking the greatest action on this front, and providing resources and information to businesses on reducing their environmental impact through waste reduction, energy and water conservation, and transportation initiatives. A focused branding campaign for the Green Business Program that highlights local businesses and also celebrates the hiring of local talent will help to market this program and the participating businesses to the general public.

> **Strategy EO13. 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.**

Erie has one existing community garden at Kenosha Farms and there is interest among community members in establishing more community gardens in the future. The Town will support the expansion of community gardens by helping to identify viable plots of land for gardens, providing letters of support for grant applications by groups trying to establish community gardens, and through other means, such as providing information on industry best practices and landscaping to ensure the gardens are sustainable. In collaboration with community groups and the SAB, Erie will work with community gardening organizations and experts to educate residents on rain barrels and xeriscape landscaping, as well as on gardening basics, food access and preservation, and backyard composting. Erie will ensure that residents are aware of recent State legislation that limits the ability of HOAs to require green grass in resident lawns (i.e., protects homeowner rights to xeriscape as desired), and will also look into policies that would protect single-family detached homeowners rights to keep backyard chickens and compost on their properties.

Further, Erie is currently implementing the Parks, Recreation, Open Space, and Trails Plan, which calls for the preservation of open space and agricultural land in the community where viable; in particular, the preservation of irrigated agricultural land is a key priority for Erie's citizen-led Open Space and Trails Advisory Board due to the fact that irrigated farm land (and natural spaces in general) provide many environmental and social benefits such as wildlife habitat, water infiltration, cooling effects for the surrounding area, providing stunning views, and reducing stress. In the past several years the Town has actively preserved existing irrigated farmland including the Allan Farm, the Wise Farm, and the Schofield Farm; collectively, this amounts to nearly 300 acres of preserved land. While most of this land is currently used to grow primarily grasses and hay, the Open Space and Trails Advisory Board has a particular interest in supporting any of the current landowners in transitioning to growing edible vegetable

crops that could be sold at the popular weekly Erie Farmers Market. Many sustainability benefits, from health benefits due to eating fresher food to reduced greenhouse gas emissions from not transporting food long distances, are gained by supporting and enhancing the availability of local food, and the **Sustainability Master Plan** supports these efforts to increase access to local food in an equitable way.

> **Strategy EO14. 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.**

Erie prioritizes the conservation and protection of natural lands and open spaces and works to ensure that the community has access to these valuable spaces through open space preservation policies. The Town requires all new developments to donate 17 acres of open space for every 1,000 new residents that the developments will add to the community (based on an assumed average household size of 3 people), and property taxes in the community also are used for open space and trails maintenance.

Based on feedback from the community, residents are interested in the Town ensuring that the use of chemicals, including herbicides and pesticides, are limited in open spaces and parks. The Erie Board of Trustees recently adopted a resolution guiding staff to utilize native plants and water conserving landscaping on Town-owned and managed properties, and the Town will work to ensure that the lessons learned from this initiative are shared with the broader community. Additionally, the Town may consider developing a pesticide plan to regulate when and where these chemicals are used on Town-owned properties. Erie will ensure that the Parks, Recreation, Open Space, and Trails Plan is implemented as defined in the document, and will also look to incorporate educational



features and accommodate outreach programs that teach residents about best practices for sustainable management of natural areas, green infrastructure for habitat protection, and opportunities to reduce potable water use through greywater irrigation and other landscaping techniques. Erie is in the process of revising the Unified Development Code for the Town, which provides guidance on landscaping and green infrastructure, and will ensure that sustainable land management is woven into these codes.

COMMUNITY VOICES

When the community was asked what they would like to see prioritized, respondents said: “Less pesticides and chemicals and more trees”

Working towards a more Sustainable Erie



As a growing community in the Front Range region, Erie recognizes its responsibility to provide the best possible quality of life for residents while ensuring long-term fiscal responsibility and environmental sustainability. This Plan identifies the strategies and actions that will lead to significant progress in terms of enhancing community sustainability and quality of life. Erie believes in the power of its entire community to work together for the benefit of all community members and looks forward to engaging residents, businesses, and visitors in order to create a healthier and more sustainable future for all. As directed in Erie's Town Ordinance 14-2018, which established the Sustainability Advisory Board, Erie will report on the progress achieved in regard to the strategies in this Plan to the Town Board of Trustees and the community on a bi-annual basis (i.e., twice every year).

This Plan identifies the actions that Erie, with the help of its community and partners, will embark upon in the coming five years and sets specific priorities and targets to measure how well the Town has made progress towards its vision of being a leader in sustainability. Please refer to Appendix A for the full list of priorities and related strategies that Erie has identified and intends to implement over the coming years. In the future, Erie will have the opportunity to build off this work to continue to make Erie the best place to raise a family, and a place that many people love to call home.

■ APPENDIX A: FULL LIST OF PRIORITIES AND STRATEGIES

Energy Code Sector

Codes and Policies Priority:

Use Erie's Building codes to incentivize green building, energy efficiency, and the use of renewable energy in new construction.



STRATEGIES

- E1.** Adopt the most recent International Energy Conservation Code (IECC) every three years, starting with the 2015 IECC in 2020.
- E2.** Ensure ongoing education for planners, plan reviewers, building inspectors, developers, and builders on updates to building and energy codes, available design and green building resources, and enforcement mechanisms and incentives.
- E3.** Incentivize and educate on renewable energy (e.g., solar-ready homes) for new construction.
- E4.** Adopt an 'above' building code with incentives for increasing energy efficiency above and beyond standard code requirements.
- E5.** Explore incentivizing building energy benchmarking and reporting on green building certification for all commercial properties and residential properties over a certain size threshold.
- E6.** Explore requiring or incentivizing reporting on energy efficiency in owner-occupied housing to meet a certain threshold at the time-of-sale.
- E7.** Educate on and incentivize dark sky compliant and/or LED outdoor light fixtures.

Building Energy Use Priority:

Encourage new development and existing buildings to conserve the use of natural resources and actively utilize available incentives and rebates for green building and renewable energy.



STRATEGIES

- E8.** Promote existing energy efficiency programs for commercial and residential users.
- E9.** Encourage building owners to utilize water-conserving landscaping practices and implement other measures that will reduce water use and align with the goals of Erie's Water Conservation Master Plan.
- E10.** Promote existing weatherization services and solar incentives to qualifying low- and moderate-income residents by working with partners, and work to fill gaps in resources.
- E11.** Educate on and incentivize commercial building retro-commissioning.

Renewable Energy Empowerment and Innovation Priority:

Provide education and incentives to encourage the use of renewable energy and energy storage within the community.



STRATEGIES

- E12.** 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.
- E13.** Develop ongoing Town-supported renewable energy projects that benefit the whole community (e.g., community solar, etc.).
- E14.** Identify equitable programs to market and incentivize solar through cost savings and communication campaigns (e.g., bulk purchase programs, etc.).

Municipal Leadership Priority:

Illustrate the Town's commitment to sustainability by reducing energy and water use in municipal buildings and supplying Town buildings with renewable energy.

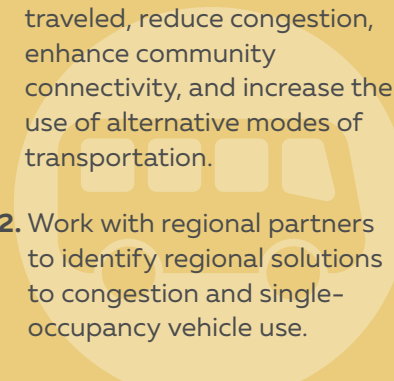


STRATEGIES

- E15.** Supply municipal buildings with 100% renewable electricity (both through on-site installations and procurement decisions).
- E16.** Perform energy assessments on all existing municipal buildings and, when feasible, implement assessment recommendations for energy efficiency soon after.
- E17.** Implement benchmarking for municipal buildings.
- E18.** Require that all new government buildings and major renovations be EnergyStar certified.

Transportation Sector

Mode Shift Priorities:

- 
- 1.** Provide access to transportation options and solutions that reduce community vehicle miles traveled, reduce congestion, enhance community connectivity, and increase the use of alternative modes of transportation.
 - 2.** Work with regional partners to identify regional solutions to congestion and single-occupancy vehicle use.
 - 3.** Support the development of the local economy to reduce commuting outside of Erie.

STRATEGIES

- T1.** Collaborate with regional agencies to develop approaches to provide safe and sustainable transportation management services and transit access within the community, in alignment with Erie's Transportation Master Plan.
- T2.** Ensure that all community members have safe and well-maintained access to sidewalks, bike lanes, and walking paths within current and new development.
- T3.** Require multi-modal connectivity and transit-oriented development principles at all new commercial developments to address first and last mile connections.
- T4.** Develop multi-lingual wayfinding and signage on trails, roads, and paths to support greater use of alternative forms of transportation.
- T5.** Focus on sustainable economic development opportunities and assets that increase the number of employers and jobs in Erie.
- T6.** Develop a community-wide anti-idling campaign.

Electric Vehicle Priority:

Encourage the use of electric vehicles by providing incentives to purchase vehicles and installing publicly available charging stations.

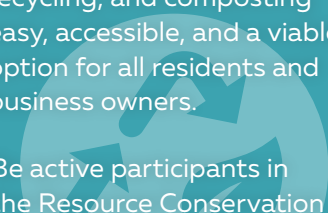


STRATEGIES

- T7.** Increase the number of EVs on the road through equitable programs and policies such as bulk purchase programs and improved charging infrastructure.
- T8.** Develop EV-ready building codes for residential and commercial buildings new construction and incentivize during retrofit projects for existing residential and commercial buildings.
- T9.** Switch government fleet vehicles to electric vehicles or other high-efficiency vehicles within the replacement cycle (or sooner) and when appropriate models are available.
- T10.** Support state and regional goals for EV adoption, and work with regional partners and neighboring communities to reach these goals.

Waste, Recycling, and Composting Sector

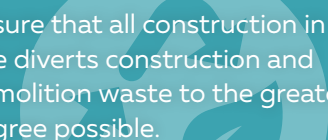
Recycling and Composting Priorities:

- 
1. Provide options to make diverting waste through reuse, recycling, and composting easy, accessible, and a viable option for all residents and business owners.
 2. Be active participants in the Resource Conservation Advisory Board and support regional and state efforts to coordinate on policies and programs and encourage recycling and reuse.

STRATEGIES

- W1.** 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.
- W2.** Adopt the Re-TRAC policy that ensures that waste diversion is tracked, and recycling is provided to all residents and businesses of Erie at minimal cost.
- W3.** Explore a phased approach to ensure that curbside composting is available within the community to anyone who chooses to use it.
- W4.** Implement a phased approach to a Universal Zero Waste Ordinance.
- W5.** Work with regional organizations to expand easy and local access to materials reuse and hard-to-recycle services and events.

Construction and Demolition Waste Priority:



Ensure that all construction in Erie diverts construction and demolition waste to the greatest degree possible.

STRATEGIES

- W6.** In a phased approach, reward waste diversion on construction and demolition and public works projects.
- W7.** 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.

Town Facilities and Events Priority:



Reduce waste at Town events and facilities by improving access to recycling and composting and implementing sustainable purchasing policies.

STRATEGIES

- W8.** Expand zero-waste policies for all Town events and meetings.
- W9.** Enhance the recycling infrastructure at Town facilities and in public locations, such as downtown and in outdoor commercial and community gathering spaces.
- W10.** Develop Town-wide green purchasing policies where cost-benefit is shown.

Education and Outreach Sector

Education and Outreach Priorities:

1. Use innovative and engaging techniques to educate all community members about the importance of and value of participating in the Town's sustainability efforts.
2. Build capacity internally by hiring dedicated staff and developing collaborative partnerships with local and regional organizations.



STRATEGIES

- EO1.** Hire dedicated sustainability staff members that will coordinate and implement internal and community-wide sustainability projects and programs and build partnerships with local and regional organizations to collaborate on sustainability efforts.
- EO2.** Host creative and innovative events that engage residents and businesses in resources for sustainability.
- EO3.** Ensure that all community events and functions include elements of sustainability in their implementation and messaging.
- EO4.** 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.
- EO5.** 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.
- EO6.** 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.
- EO7.** 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.
- EO8.** Ensure that all Town plans include sustainability (i.e. transportation master plans, water plan, etc.).
- EO9.** Develop a coordinated and branded marketing and communications campaign that is multilingual, multicultural, equitable, and inclusive.
- EO10.** Be active members in statewide organizations that are working on our behalf to combat climate change, such as Colorado Communities for Climate Action.
- EO11.** Host neighborhood sustainability competitions or challenges.
- EO12.** Support enhancement of the Erie Green Business Program.
- EO13.** 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.
- EO14.** 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.



TOWN OF ERIE
1874



November 2019

SUSTAINABILITY MASTER PLAN

The Town of Erie is a beautiful community on the eastern plains of the Rocky Mountains in Colorado, and the community is fast becoming a national leader for providing a high quality of life for residents. The sweeping and majestic mountain vistas, beautiful open and natural spaces, abundant recreational opportunities, and small-town feel are rightful sources of pride for the community.

Erie's Natural Wetlands



TOWN OF ERIE

645 Holbrook Street
Erie, CO 80516

Town Council

Board Meeting Date: 9/2/2025

File #: 25-171, **Version:** 1

SUBJECT:

Discussion of Oil and Gas in Erie

DEPARTMENT: Environmental Services Department

PRESENTER(S): David Frank, Director of Environmental Services
Ben Kellond, Environmental Analyst

TIME ESTIMATE: 45 minutes

SUMMARY AND BACKGROUND OF SUBJECT MATTER:

A brief presentation on the current status of Oil and Gas operations in the Town of Erie, followed by an opportunity for questions to address details and topics not covered in the presentation. Topics covered in the presentation:

1. General Overview of Erie Oil & Gas
2. Air Quality Monitoring
3. Resident Communication Channels
4. Draco OGD
5. Cumulative Impact Rulemaking
6. Data Falsification
7. Spill Report
8. Fines and Enforcement
9. Updates to Municipal Code

COUNCIL PRIORITIES ADDRESSED:

- ✓ Safe and Healthy Community
- ✓ Effective Governance
- ✓ Environmentally Sustainable

ATTACHMENTS:

1. Oil and Gas Presentation
2. List of Plugged and Abandoned Wells by Date Plugged

Facility Name/Number
UPRR 43 PAN AM I #28
YOUNG #1-23
WISE #1-14
ERIE CHAMPLIN #18-9
CPC #4-42-4
CPC #3-31-4
WILLIAM H PELTIER #1
THOMAS E UNIT #2
PEZOLDT UU # 32-11
HIPPEN UU #32-6
PEZOLDT UU #32-14
PEZOLDT UU #32-8
PEZOLDT UU #32-16
PEZOLDT UU #32-15
PEZOLDT UU #32-9
PEZOLDT UU #32-7
HIPPEN UU #32-5
ERIE EIGHT E UNIT #2
ERIE EIGHT E UNIT #1
HIPPEN UU #32-3
BARB LTD #30-9
BARB LTD #30-8
COAL CREEK #19-1
BAILEY #12-2
COAL CREEK #19-8
UPRR 43 PAN AM I #28-X
CHAMPLIN 86 AMOCO F #6
CHAMPLIN 86 AMOCO F #3
CANYON CREEK #8-6-13
YOUNG #6-23
BARB LTD #30-15
BARB LTD #30-1
BARB LTD #30-7
UPRR 43 PAN AM Q #1
CHAMPLIN 32-4 #2
YOUNG #3-25
CINQUE #1
LOVLEY-USX UU #15-16
CINQUE #2
SEC. 4 INVESTORS #34-4
CHAMPLIN 86 AMOCO Q #1
CINQUE #3
KRAMER #21-23
PRATT #1
WOOLLEY #41-7
PRATT #29-3
HIPPEN #1-32
WISE #31-14

WOOLLEY A #1-7
THOMAS & "E" UNIT #1
ERIE CHAMPLIN B UNIT #1
WOOLLEY F UNIT #1
BEARDEN #1
EAST ERIE #2-17 #1
THOMAS #7-12
EAST ERIE #1-17
TALLGRASS #31-17
SOSA A UNIT #1
PRATT & #39;F& #39; UNIT #1
CARR #1
PEZOLDT #1-32
VESSELS MINERALS #14-19
VESSELS MINERALS #13-19
NAAB-USX UU #3-4
BULTHAUP #9-6
CHAMPLIN 41-4 #1
VESSELS MINERALS #2-4-19
VESSELS MINERALS & #39;E& #39; #1
VESSELS #24-19
WILLIAM H PELTIER #2
BARB LTD & #39;K& #39; UNIT #1
VESSELS MINERALS #19-10
VESSELS MINERALS #19-16
VESSELS MINERALS E UNIT #2
EDWARD P COSTIGAN #1
COAL CREEK C UNIT #1
COAL CREEK #31-19
COAL CREEK #32-19
STATE OF COLORADO AL #2
WOOLLEY #42-7
ERIE CHAMPLIN B UNIT #2
UPRR 43 PAN AM AA #1
CPC 41-10 #1
SOSA #11-18
SOSA #21-18
SOSA #12-18
SOSA #22-18
VESSELS #23-19
SEC FOUR #33-4
HIPPEN UU #32-13
COSSLETT #31-22
BULTHAUP #40-6
BULTHAUP #23-6
VESSELS MINERALS #19-15
BULTHAUP #24-6
CHAMPLIN 86 G #1
TALLGRASS #12-17

TALLGRASS #33-17
TALLGRASS #14-17
TALLGRASS #22-17
TALLGRASS #13-17
CHAMPLIN #86 AMOCO G #2
TALLGRASS #23-17
TALLGRASS #10-17
TALLGRASS #37-17
TALLGRASS #16-17
TALLGRASS #24-17
TALLGRASS #15-17
VESSELS MINERALS #4-6-19
COMMONS #4-19
COMMONS #18-19
COMMONS #3-19
COMMONS #6-19
COMMONS #28-19
TALLGRASS #9-17
VESSELS MINERALS #6-8-19
ARAPAHOE #3-36
ARAPAHOE MC #36-5
TALLGRASS #11-17
COMMONS #5-19
SEC FOUR #3-4
SEC FOUR #4-4
SEC FOUR #31-4
SEC FOUR #6-4
COMMONS #21-19
SEC FOUR #5-4
SEC FOUR #21-4
CHAMPLIN 86 AMOCO O #9
IMPERIAL #15-31
COSTIGAN #43-20
ERIE CORP #11-10
ERIE CORP #22-10
ERIE CORP #42-10
SEC FOUR #14-4
ERIE CORP-USX UU #10-4
ERIE ROAD #32-15
VESSELS MINERALS #43-19
CHAMPLIN 32-10 #2
CHAMPLIN 86 AMOCO O #8
SEC FOUR #32-4
SEC FOUR #22-4
SEC FOUR #12-4
ERIE ROAD #42-15
ERIE CORP #42-4
PRATT #12-29
ERIE ROAD-USX UU #15-1

PRATT #0-2-29
CHAMPLIN 42-10 #4
CANYON CREEK #8-6-13 X
LOVELY #34-15
CANYON CREEK #4-6-13
CANYON CREEK #44-13
CANYON CREEK #34-13
CANYON CREEK #4-8-13
CANYON CREEK #4-13
BULTHAUP #10-6
KENNETH E. KOCH #A-1
CHAMPLIN 86 AMOCO F #5
CHAMPLIN 86 AMOCO F #4
WIGGETT #42-13
WIGGETT #8-2-13
WIGGETT #7-0-13
WARREN H WIGGETT #13-1
CHAMPLIN 86 AMOCO F #1
WIGGETT #4-0-13
WIGGETT #6-4-13
UPRR 43 PAN AM I #10
BROZOVICH 3-4 #1
CHAMPLIN 31-10 #3
UPRR 43 PAN AM I #19
BARB LTD #30-10
DUMP UU #28-06D
DUMP UU #28-5
UPRR 43 PAN AM B #11
CHAMPLIN 86 AMOCO F #2
DUMP UU #28-2
DUMP UU #28-3
HIPPEN #2-32
UPRR 43 PAN AM Q #2
UPRR 43 PAN AM I #20
CHAMPLIN 86 AMOCO #0 #1
UPRR 43 PAN AM I #9
ERIE CORP-USX UU #10-17
PEZOLDT UU #32-4J
BULTHAUP #39-6
SEC FOUR #35-4
SEC FOUR #13-4
BILLINGS #21-7
WOOLLEY #42-7
CINQUE FEDERAL #7-31
ALLAN H UNIT #1
UPRR 43 PAN AM B #1
COSTIGAN #6-8-20
COSTIGAN #34-20
PRATT #4-2-29

YOUNG MC #23-11D
YOUNG MC #26-03D
YOUNG MC #26-04D
YOUNG #5-23
DONLEY #2-36
DUMP UU #28-12
DUMP UU #28-11D
SCHULER #12-23
SCHULER #11-23
WOOLLEY #43-8
WOOLLEY #33-8
WOOLLEY #34-8
WOOLLEY #44-8
BULTHAUP #8-6
WOOLLEY K UNIT #1
BULTHAUP #15-6
SWINK #32-21
CHAMPLIN 86 AMOCO F #7
KRAMER #22-23
BEARDEN #23-6
WISE #1-14X
BEARDEN #14-6
BEARDEN #13-6
BEARDEN #2-4-6
CANYON CREEK #43-13
BULTHAUP #21-6
BULTHAUP #27-6
BULTHAUP #17-6
BULTHAUP #16-6
I & J #7-6
BEARDEN #2-8-6
CHAMPLIN 86 AMOCO UNIT L #1
BULTHAUP #1-6
UPRR 43 PAN AM I #27
CANYON CREEK #33-13
BEARDEN #24-6
COSTIGAN #8-8-20
COSTIGAN #33-20
LUMRY #31-24
LUMRY #42-24
COSTIGAN #8-6-20
UPRR 43 PAN AM B #7
WOOLLEY #22-7
ERIE #1-24
ARAPAHOE #2-26
WARREN H WIGGETT #13-2
WOOLLEY #2-4-7
WOOLLEY #4-0-7
WOOLLEY #11-7

WOOLLEY #21-7
PRATT #2-4-29
PRATT #22-29
PRATT #2-0-29
PRATT #21-29
WILLIAMS H. PELTIER #12-20
VESSELS #12-30
BEARDEN #0-6-6
THOMAS #33-7
THOMAS #2-8-7
THOMAS #24-7

Current Operator Name	Plugging Date	API Sequence Num
AMOCO PRODUCTION COMPANY	2/28/1980	9914
PATINA OIL & GAS CORPORATION	1/26/1995	6089
GERRITY OIL & GAS CORP	2/21/1995	6155
VESSELS OIL & GAS COMPANY	3/31/1996	19083
OCCIDENTAL PETROLEUM	6/24/1996	8861
OCCIDENTAL PETROLEUM	6/25/1996	8860
VESSELS OIL & GAS COMPANY	9/16/1996	8131
VESSELS OIL & GAS COMPANY	9/25/1996	12370
PATINA OIL & GAS CORPORATION	11/28/2000	17182
PATINA OIL & GAS CORPORATION	11/29/2000	17179
PATINA OIL & GAS CORPORATION	12/2/2000	17183
PATINA OIL & GAS CORPORATION	12/5/2000	17181
PATINA OIL & GAS CORPORATION	12/11/2000	17210
PATINA OIL & GAS CORPORATION	12/13/2000	17209
PATINA OIL & GAS CORPORATION	12/15/2000	17208
PATINA OIL & GAS CORPORATION	12/15/2000	17180
PATINA OIL & GAS CORPORATION	12/30/2000	17178
NORTH AMERICAN RESOURCES COMPANY	1/16/2001	6242
NORTH AMERICAN RESOURCES COMPANY	1/17/2001	6193
PATINA OIL & GAS CORPORATION	1/19/2001	17177
CIVITAS RESOURCES INC	5/30/2008	18929
CIVITAS RESOURCES INC	6/4/2008	18954
CIVITAS RESOURCES INC	6/23/2008	19064
CIVITAS RESOURCES INC	7/3/2008	6106
CIVITAS RESOURCES INC	6/25/2010	19065
KP KAUFFMAN COMPANY INC	6/23/2011	9921
KP KAUFFMAN COMPANY INC	10/25/2011	10473
KP KAUFFMAN COMPANY INC	2/13/2012	10465
CIVITAS RESOURCES INC	7/4/2012	6628
NOBLE ENERGY INC	10/13/2012	6257
CIVITAS RESOURCES INC	12/4/2012	18931
CIVITAS RESOURCES INC	12/13/2012	18982
CIVITAS RESOURCES INC	3/22/2013	18953
OCCIDENTAL PETROLEUM	4/3/2013	9720
OCCIDENTAL PETROLEUM	9/26/2013	8646
NOBLE ENERGY INC	10/10/2013	6252
FOUNDATION ENERGY MANAGEMENT LLC	9/3/2014	7562
OCCIDENTAL PETROLEUM	9/17/2014	14388
FOUNDATION ENERGY MANAGEMENT LLC	9/23/2014	7560
OCCIDENTAL PETROLEUM	10/20/2014	22438
OCCIDENTAL PETROLEUM	10/27/2014	14591
FOUNDATION ENERGY MANAGEMENT LLC	12/3/2014	7563
OCCIDENTAL PETROLEUM	6/26/2015	6465
KP KAUFFMAN COMPANY INC	10/21/2015	10417
CIVITAS RESOURCES INC	10/27/2015	23183
PDC ENERGY INC	11/18/2015	10861
CIVITAS RESOURCES INC	12/5/2015	11395
OCCIDENTAL PETROLEUM	5/2/2016	6463

CIVITAS RESOURCES INC	3/16/2017	9093
CIVITAS RESOURCES INC	4/6/2017	10710
CIVITAS RESOURCES INC	4/8/2017	12377
CIVITAS RESOURCES INC	4/13/2017	17688
CIVITAS RESOURCES INC	4/21/2017	9764
OCCIDENTAL PETROLEUM	5/2/2017	14447
CIVITAS RESOURCES INC	5/4/2017	19072
OCCIDENTAL PETROLEUM	5/8/2017	14410
OCCIDENTAL PETROLEUM	5/8/2017	25610
CIVITAS RESOURCES INC	5/8/2017	11698
CIVITAS RESOURCES INC	8/28/2017	17769
CIVITAS RESOURCES INC	9/7/2017	10017
CIVITAS RESOURCES INC	9/8/2017	15040
CIVITAS RESOURCES INC	9/21/2017	30279
CIVITAS RESOURCES INC	9/21/2017	30276
OCCIDENTAL PETROLEUM	10/12/2017	14387
OCCIDENTAL PETROLEUM	10/31/2017	29465
OCCIDENTAL PETROLEUM	11/8/2017	8645
CIVITAS RESOURCES INC	11/13/2017	30278
CIVITAS RESOURCES INC	11/13/2017	18689
CIVITAS RESOURCES INC	11/29/2017	23018
CIVITAS RESOURCES INC	12/5/2017	12614
CIVITAS RESOURCES INC	12/8/2017	10759
CIVITAS RESOURCES INC	12/13/2017	19032
CIVITAS RESOURCES INC	12/13/2017	19033
CIVITAS RESOURCES INC	12/13/2017	18593
CIVITAS RESOURCES INC	12/13/2017	10001
CIVITAS RESOURCES INC	1/5/2018	13804
CIVITAS RESOURCES INC	1/22/2018	23288
CIVITAS RESOURCES INC	1/22/2018	23287
OCCIDENTAL PETROLEUM	1/26/2018	12626
CIVITAS RESOURCES INC	2/23/2018	23185
CIVITAS RESOURCES INC	2/28/2018	12371
OCCIDENTAL PETROLEUM	3/21/2018	14914
OCCIDENTAL PETROLEUM	4/18/2018	8647
CIVITAS RESOURCES INC	5/30/2018	26237
CIVITAS RESOURCES INC	5/30/2018	26236
CIVITAS RESOURCES INC	5/31/2018	26239
CIVITAS RESOURCES INC	5/31/2018	26238
CIVITAS RESOURCES INC	6/28/2018	23009
OCCIDENTAL PETROLEUM	7/9/2018	29462
CIVITAS RESOURCES INC	7/28/2018	17220
CIVITAS RESOURCES INC	8/28/2018	21857
OCCIDENTAL PETROLEUM	9/18/2018	26891
OCCIDENTAL PETROLEUM	9/20/2018	26886
CIVITAS RESOURCES INC	9/24/2018	19209
OCCIDENTAL PETROLEUM	9/26/2018	26890
OCCIDENTAL PETROLEUM	10/12/2018	12406
OCCIDENTAL PETROLEUM	10/15/2018	26921

OCCIDENTAL PETROLEUM	10/15/2018	26925
OCCIDENTAL PETROLEUM	10/16/2018	26922
OCCIDENTAL PETROLEUM	10/16/2018	26923
OCCIDENTAL PETROLEUM	10/31/2018	26920
OCCIDENTAL PETROLEUM	12/11/2018	15066
OCCIDENTAL PETROLEUM	12/11/2018	26898
OCCIDENTAL PETROLEUM	12/11/2018	26899
OCCIDENTAL PETROLEUM	12/11/2018	26876
OCCIDENTAL PETROLEUM	12/13/2018	26903
OCCIDENTAL PETROLEUM	12/13/2018	26901
OCCIDENTAL PETROLEUM	12/13/2018	26900
CIVITAS RESOURCES INC	1/7/2019	30277
OCCIDENTAL PETROLEUM	2/5/2019	29925
OCCIDENTAL PETROLEUM	2/8/2019	29924
OCCIDENTAL PETROLEUM	2/8/2019	29919
OCCIDENTAL PETROLEUM	2/8/2019	29922
OCCIDENTAL PETROLEUM	2/11/2019	29921
OCCIDENTAL PETROLEUM	2/15/2019	26902
CIVITAS RESOURCES INC	2/15/2019	29476
CIVITAS RESOURCES INC	2/15/2019	6254
CIVITAS RESOURCES INC	2/15/2019	6410
OCCIDENTAL PETROLEUM	2/19/2019	26924
OCCIDENTAL PETROLEUM	2/19/2019	29923
OCCIDENTAL PETROLEUM	2/19/2019	29455
OCCIDENTAL PETROLEUM	2/19/2019	29454
OCCIDENTAL PETROLEUM	2/19/2019	29460
OCCIDENTAL PETROLEUM	2/19/2019	29453
OCCIDENTAL PETROLEUM	2/20/2019	29920
OCCIDENTAL PETROLEUM	2/20/2019	29452
OCCIDENTAL PETROLEUM	2/20/2019	29456
OCCIDENTAL PETROLEUM	2/20/2019	12929
OCCIDENTAL PETROLEUM	3/8/2019	20112
CIVITAS RESOURCES INC	3/27/2019	30059
OCCIDENTAL PETROLEUM	3/28/2019	22915
OCCIDENTAL PETROLEUM	3/28/2019	21636
OCCIDENTAL PETROLEUM	3/30/2019	21635
OCCIDENTAL PETROLEUM	4/1/2019	29457
OCCIDENTAL PETROLEUM	4/11/2019	14400
OCCIDENTAL PETROLEUM	4/17/2019	23993
CIVITAS RESOURCES INC	5/2/2019	29128
OCCIDENTAL PETROLEUM	5/7/2019	8648
OCCIDENTAL PETROLEUM	5/10/2019	12625
OCCIDENTAL PETROLEUM	5/10/2019	29463
OCCIDENTAL PETROLEUM	5/10/2019	29461
OCCIDENTAL PETROLEUM	5/10/2019	29459
OCCIDENTAL PETROLEUM	5/13/2019	22924
OCCIDENTAL PETROLEUM	5/13/2019	22119
CIVITAS RESOURCES INC	5/15/2019	32432
OCCIDENTAL PETROLEUM	5/17/2019	9741

CIVITAS RESOURCES INC	5/17/2019	32377
OCCIDENTAL PETROLEUM	5/29/2019	8823
CIVITAS RESOURCES INC	6/6/2019	6633
OCCIDENTAL PETROLEUM	6/25/2019	22711
CIVITAS RESOURCES INC	7/1/2019	6627
CIVITAS RESOURCES INC	7/1/2019	6629
CIVITAS RESOURCES INC	7/1/2019	6631
CIVITAS RESOURCES INC	7/2/2019	6634
CIVITAS RESOURCES INC	7/3/2019	6667
OCCIDENTAL PETROLEUM	7/17/2019	26888
OCCIDENTAL PETROLEUM	7/17/2019	12456
KP KAUFFMAN COMPANY INC	8/14/2019	10466
KP KAUFFMAN COMPANY INC	8/15/2019	10467
CIVITAS RESOURCES INC	8/28/2019	6569
CIVITAS RESOURCES INC	8/28/2019	6570
CIVITAS RESOURCES INC	8/29/2019	6589
CIVITAS RESOURCES INC	9/3/2019	6052
KP KAUFFMAN COMPANY INC	9/24/2019	10460
CIVITAS RESOURCES INC	9/24/2019	6565
CIVITAS RESOURCES INC	9/29/2019	6590
KP KAUFFMAN COMPANY INC	10/7/2019	8880
OCCIDENTAL PETROLEUM	10/7/2019	16503
OCCIDENTAL PETROLEUM	10/8/2019	8822
KP KAUFFMAN COMPANY INC	10/11/2019	9039
CIVITAS RESOURCES INC	10/16/2019	18930
CIVITAS RESOURCES INC	10/18/2019	25277
CIVITAS RESOURCES INC	10/18/2019	25289
OCCIDENTAL PETROLEUM	10/22/2019	9431
KP KAUFFMAN COMPANY INC	10/27/2019	10468
CIVITAS RESOURCES INC	10/30/2019	25679
CIVITAS RESOURCES INC	10/30/2019	25678
CIVITAS RESOURCES INC	11/5/2019	15113
OCCIDENTAL PETROLEUM	11/7/2019	15042
KP KAUFFMAN COMPANY INC	11/8/2019	9040
OCCIDENTAL PETROLEUM	11/12/2019	14470
KP KAUFFMAN COMPANY INC	11/15/2019	8879
OCCIDENTAL PETROLEUM	12/2/2019	9742
CIVITAS RESOURCES INC	12/9/2019	17184
OCCIDENTAL PETROLEUM	12/19/2019	26884
OCCIDENTAL PETROLEUM	1/3/2020	29464
OCCIDENTAL PETROLEUM	1/3/2020	29458
KP KAUFFMAN COMPANY INC	3/26/2020	23758
KP KAUFFMAN COMPANY INC	3/26/2020	23791
CIVITAS RESOURCES INC	4/28/2020	15443
CIVITAS RESOURCES INC	6/8/2020	6138
OCCIDENTAL PETROLEUM	11/2/2020	7568
CIVITAS RESOURCES INC	12/3/2020	30124
CIVITAS RESOURCES INC	2/25/2021	30058
CIVITAS RESOURCES INC	6/23/2021	32430

CIVITAS RESOURCES INC	6/30/2021	6560
CIVITAS RESOURCES INC	6/30/2021	6561
CIVITAS RESOURCES INC	6/30/2021	6562
CIVITAS RESOURCES INC	7/7/2021	6284
CIVITAS RESOURCES INC	7/26/2021	6247
CIVITAS RESOURCES INC	8/4/2021	25290
CIVITAS RESOURCES INC	8/4/2021	25276
OCCIDENTAL PETROLEUM	8/11/2021	6458
OCCIDENTAL PETROLEUM	8/12/2021	6457
CIVITAS RESOURCES INC	9/1/2021	22987
CIVITAS RESOURCES INC	9/8/2021	21437
CIVITAS RESOURCES INC	9/15/2021	23202
CIVITAS RESOURCES INC	9/22/2021	25271
OCCIDENTAL PETROLEUM	9/29/2021	26879
CIVITAS RESOURCES INC	9/29/2021	17689
OCCIDENTAL PETROLEUM	9/30/2021	26887
OCCIDENTAL PETROLEUM	11/1/2021	22066
KP KAUFFMAN COMPANY INC	3/24/2022	12624
OCCIDENTAL PETROLEUM	4/25/2022	6455
CIVITAS RESOURCES INC	6/29/2022	22162
CIVITAS RESOURCES INC	8/12/2022	6187
CIVITAS RESOURCES INC	10/4/2022	23001
CIVITAS RESOURCES INC	10/4/2022	23602
CIVITAS RESOURCES INC	11/7/2022	34942
CIVITAS RESOURCES INC	11/17/2022	6632
OCCIDENTAL PETROLEUM	11/28/2022	26883
OCCIDENTAL PETROLEUM	11/29/2022	26882
OCCIDENTAL PETROLEUM	11/29/2022	26880
OCCIDENTAL PETROLEUM	11/30/2022	26885
OCCIDENTAL PETROLEUM	11/30/2022	26878
CIVITAS RESOURCES INC	12/8/2022	34943
OCCIDENTAL PETROLEUM	12/19/2022	12613
OCCIDENTAL PETROLEUM	12/19/2022	26881
KP KAUFFMAN COMPANY INC	12/21/2022	9913
CIVITAS RESOURCES INC	2/10/2023	6630
CIVITAS RESOURCES INC	3/14/2023	23559
CIVITAS RESOURCES INC	3/21/2023	31717
CIVITAS RESOURCES INC	3/21/2023	23057
CIVITAS RESOURCES INC	5/15/2023	6576
CIVITAS RESOURCES INC	5/15/2023	6574
CIVITAS RESOURCES INC	6/8/2023	30790
KP KAUFFMAN COMPANY INC	10/16/2023	9018
CIVITAS RESOURCES INC	3/1/2024	32982
CIVITAS RESOURCES INC	3/1/2024	6127
CIVITAS RESOURCES INC	6/19/2024	6135
CIVITAS RESOURCES INC	8/16/2024	6108
CIVITAS RESOURCES INC	8/21/2024	32984
CIVITAS RESOURCES INC	8/21/2024	32986
CIVITAS RESOURCES INC	8/21/2024	32979

CIVITAS RESOURCES INC	8/28/2024	22015
CIVITAS RESOURCES INC	9/5/2024	32387
CIVITAS RESOURCES INC	9/5/2024	32434
CIVITAS RESOURCES INC	9/5/2024	32376
CIVITAS RESOURCES INC	9/5/2024	32428
CIVITAS RESOURCES INC	9/13/2024	23308
CIVITAS RESOURCES INC	9/30/2024	23987
CIVITAS RESOURCES INC	10/2/2024	34949
CIVITAS RESOURCES INC	10/3/2024	25964
CIVITAS RESOURCES INC	10/3/2024	26412
CIVITAS RESOURCES INC	10/3/2024	25395

Facility ID	Location ID	Facility Status	Latitude	Longitude
242123	318767	PA	40.060177	-104.991246
206594	379731	PA	40.038577	-105.076838
206660	379758	PA	40.049457	-105.076858
251280	409322	PA	40.04908	-105.039788
241073	406594	PA	40.082099	-105.001315
241072	406593	PA	40.085707	-105.005996
240343	406267	PA	40.04038	-105.02243
244575	408010	PA	40.061357	-105.042327
249379	408858	PA	40.005858	-105.029636
249376	408855	PA	40.009238	-105.029726
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Town of Erie - Oil & Gas Update

Erie Town Council
September 2, 2025

David Frank, Director of Environmental Services
Ben Kellond, Environmental Analyst

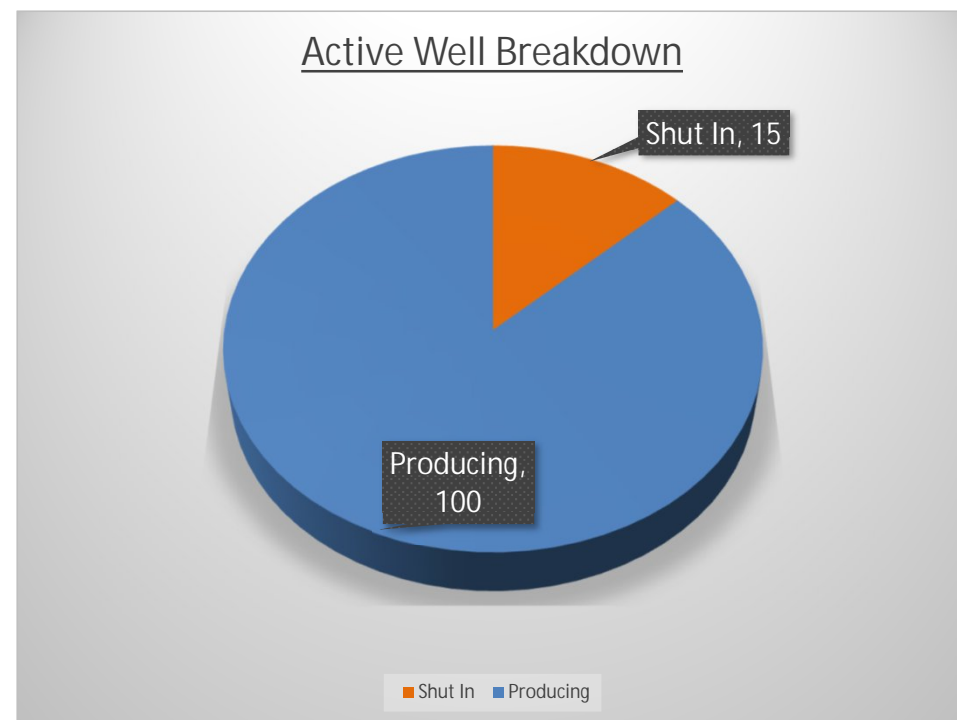
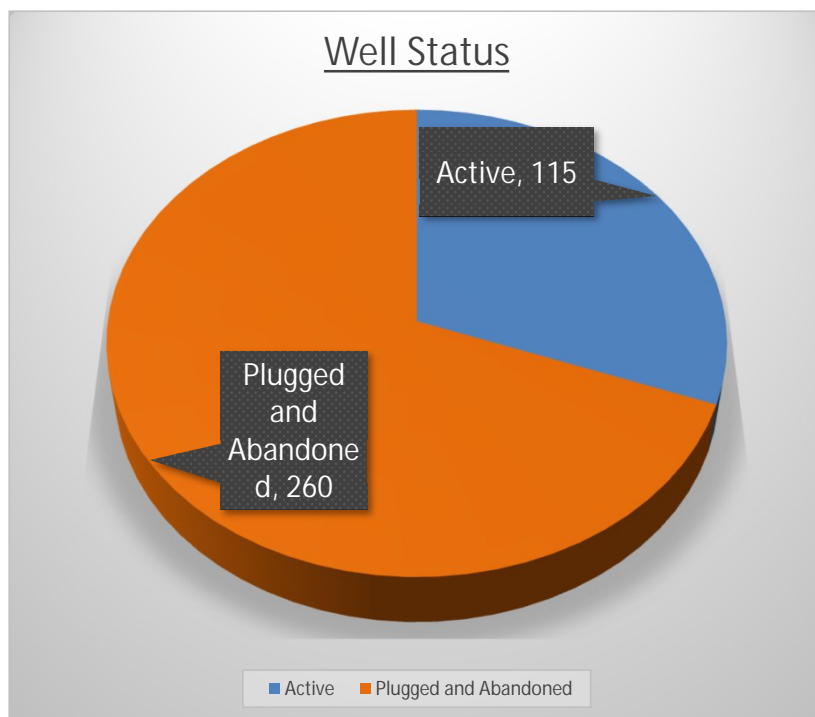


Agenda

1. General Overview of Erie Oil & Gas
2. Resident Communication Channels
3. Draco OGDG
4. Cumulative Impact Rulemaking
5. Data Falsification
6. Spill Report
7. Fines and Enforcement

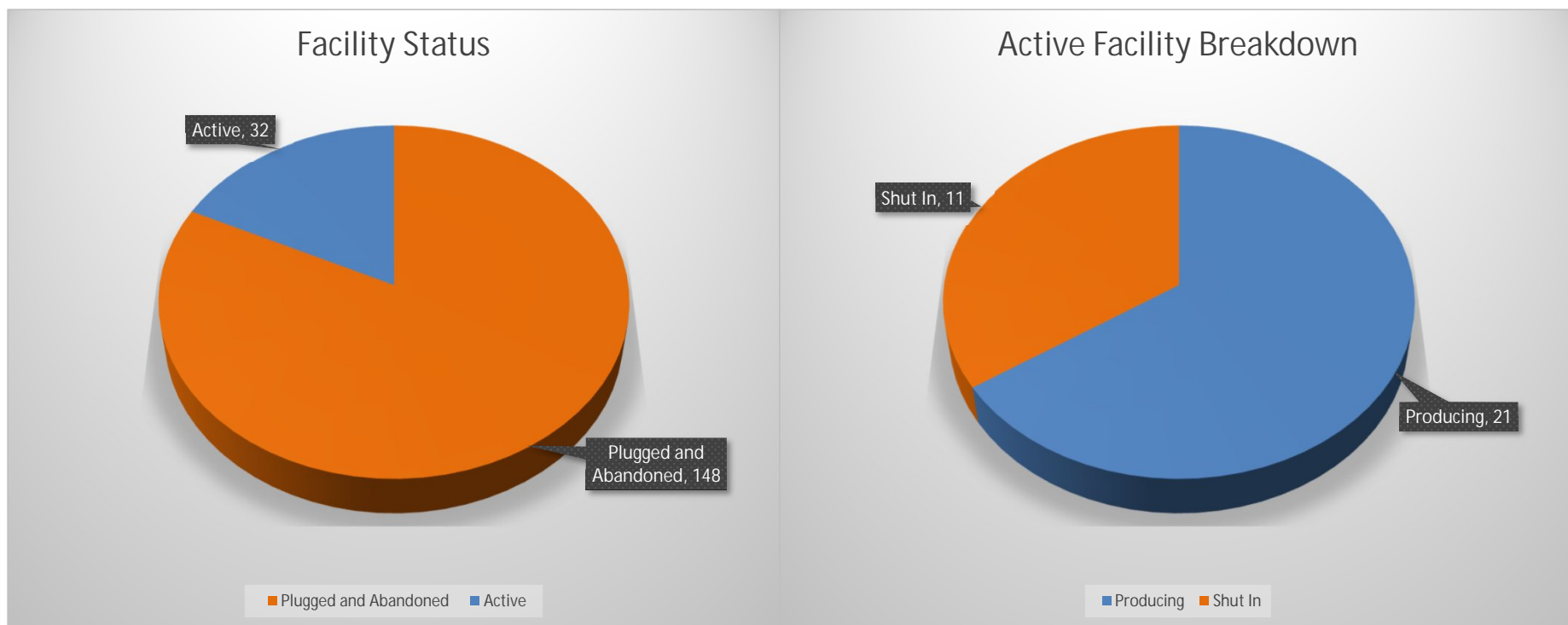
Erie Oil & Gas - Overview

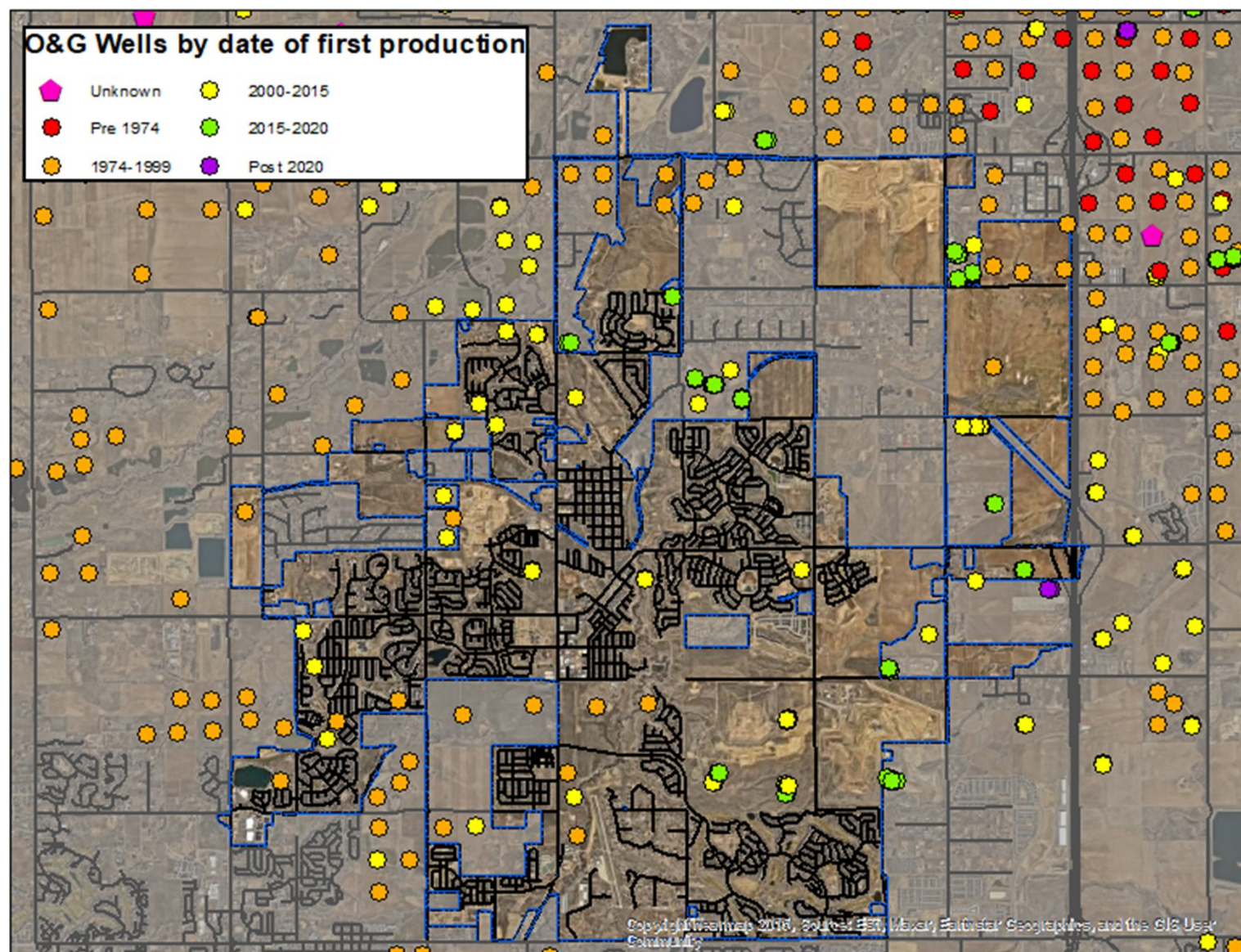
- Total Wells: 375



Erie Oil & Gas - Overview

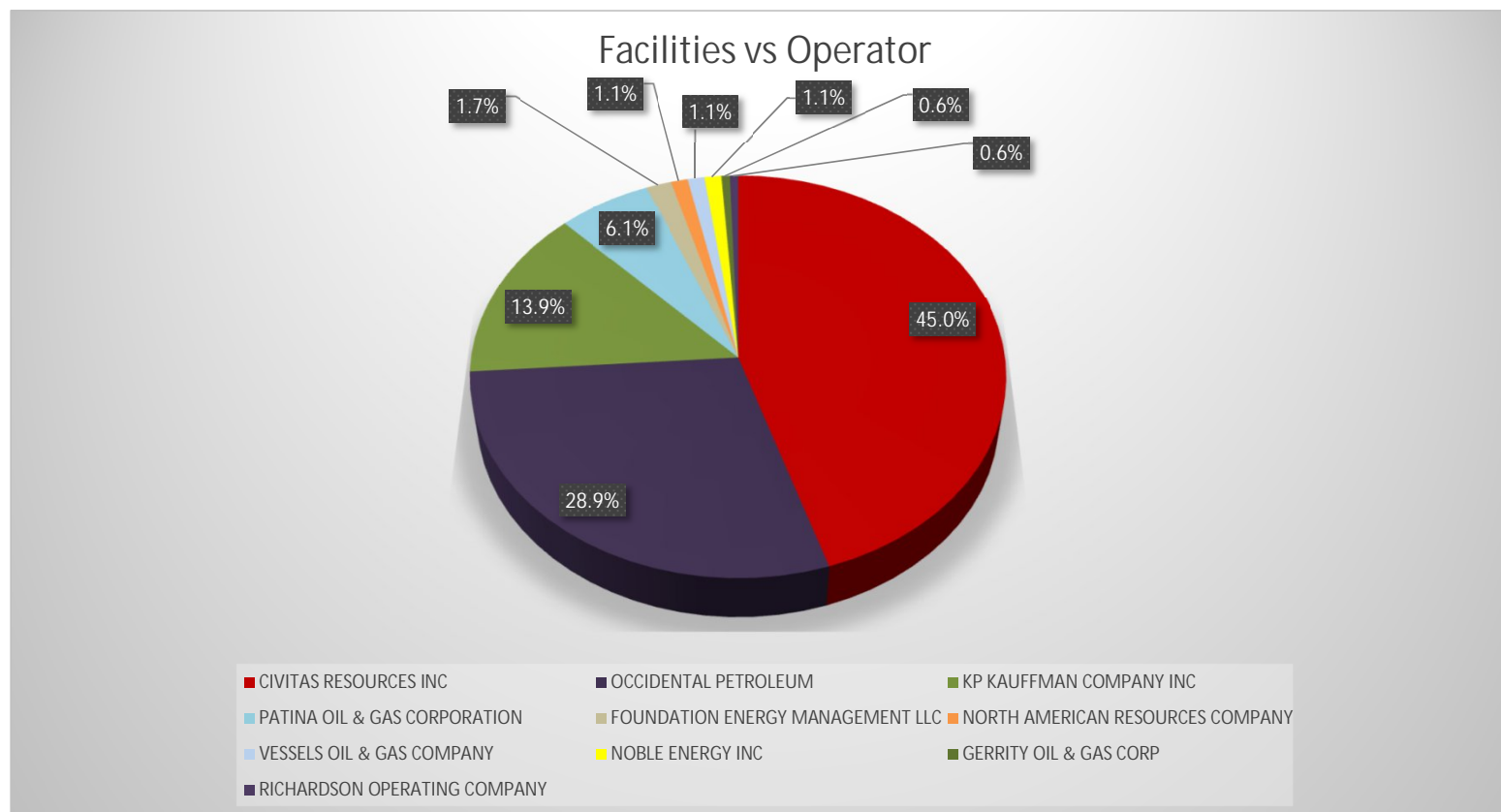
- Total Facilities: 180





Erie Oil & Gas - Overview

- Operators:

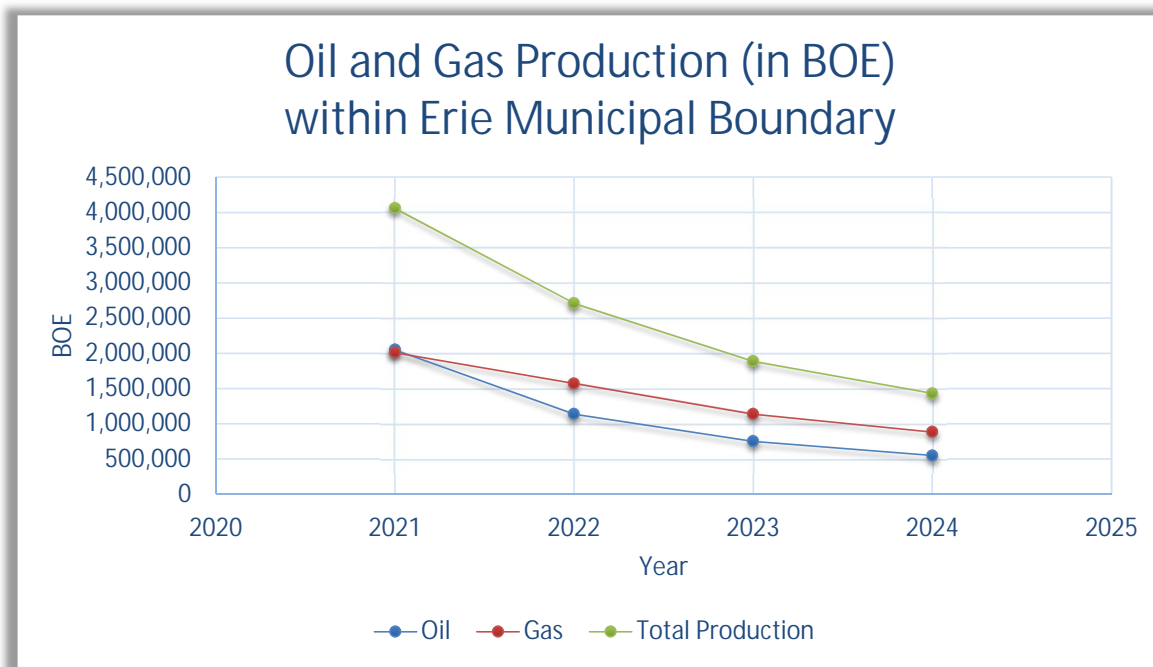




Erie Oil & Gas - Overview

- Production

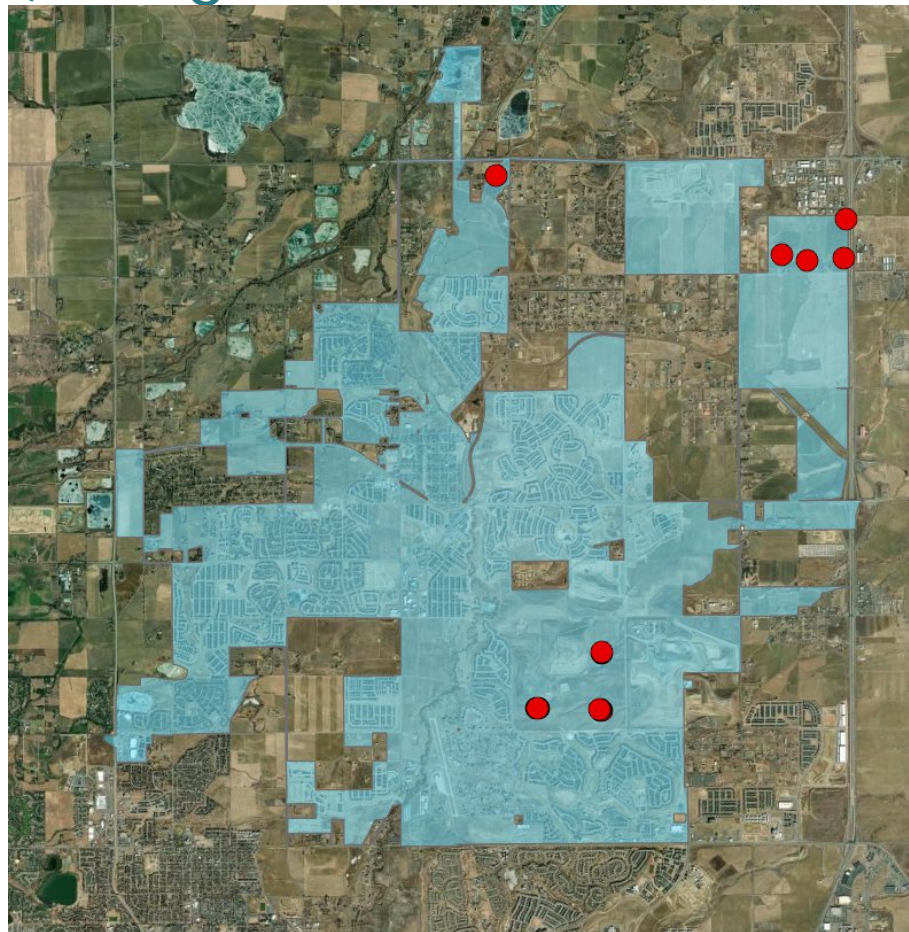
Rank	Jurisdiction	2024 Oil Production	% Change from 2023
1	UIC Weld	115,547,545	4.2%
2	Greeley	10,061,205	36.9%
3	Aurora	7,715,453	-0.6%
4	UIC Adams	7,074,756	-28.9%
5	UIC Arapahoe	6,326,610	275.6%
6	Rio Blanco County	2,970,596	-6.9%
7	Ft. Lupton	2,192,019	418.6%
8	Broomfield	2,006,722	-54.0%
9	Keensburg	1,832,096	-7.6%
10	Windsor	1,229,729	-37.8%
11	Johnstown	1,164,195	-25.2%
12	Garfield County	965,969	-8.5%
13	Northglenn	919,195	--
14	Lochbuie	813,446	-61.9%
15	UIC Larimer	796,293	-31.9%
16	Jackson County	784,205	-12.7%
17	Brighton	778,884	-45.0%
18	Frederick	637,098	-35.6%
19	Cheyenne County	592,318	-15.1%
20	Erie	547,910	-27.0%
21	Dacono	505,886	-29.0%





KP Kauffman (KPK) Litigation

- Ongoing court proceedings since NOAV in 2021
- 148 total violations since 2020
- Assets have potential to enter Orphan Well Program
- Within Erie
 - 21 Active Wells
 - 8 Active Facilities
- Rule 211 Hearing



Resident Communication - Current



Notify Me

- Plugging and Abandonment
- Spills and Leaks
- Move-In, Rig-Up
- Ongoing Remediation



Email Hotlines

- erieoilandgas@erieco.gov
- airquality@erieco.gov



Publicly Available Data & Information

- Air quality monitoring alerts
- Erie O&G Website
- O&G presentations to Council

Resident Communication - Future

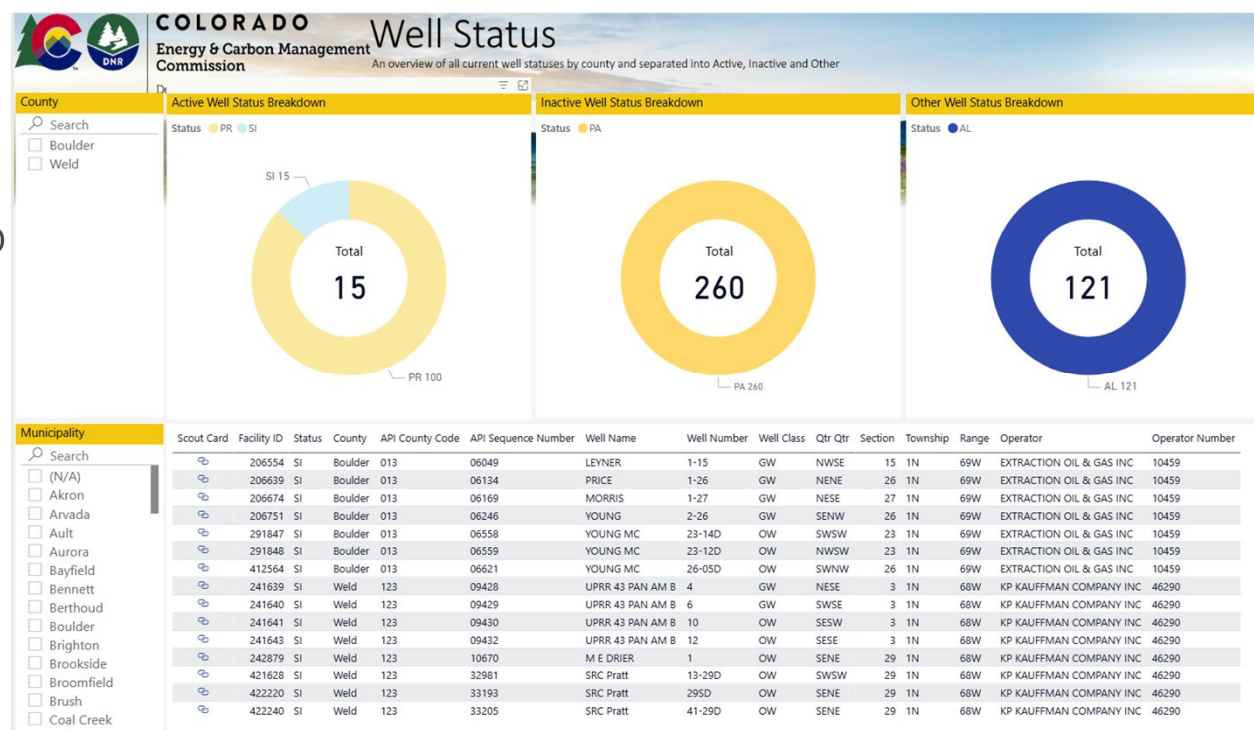
Future Communication

- Quarterly O&G Report – via Notify Me
- Inspection Program
 - Individual Facility Reports
 - Monthly Reports
- Website Updates - Ongoing



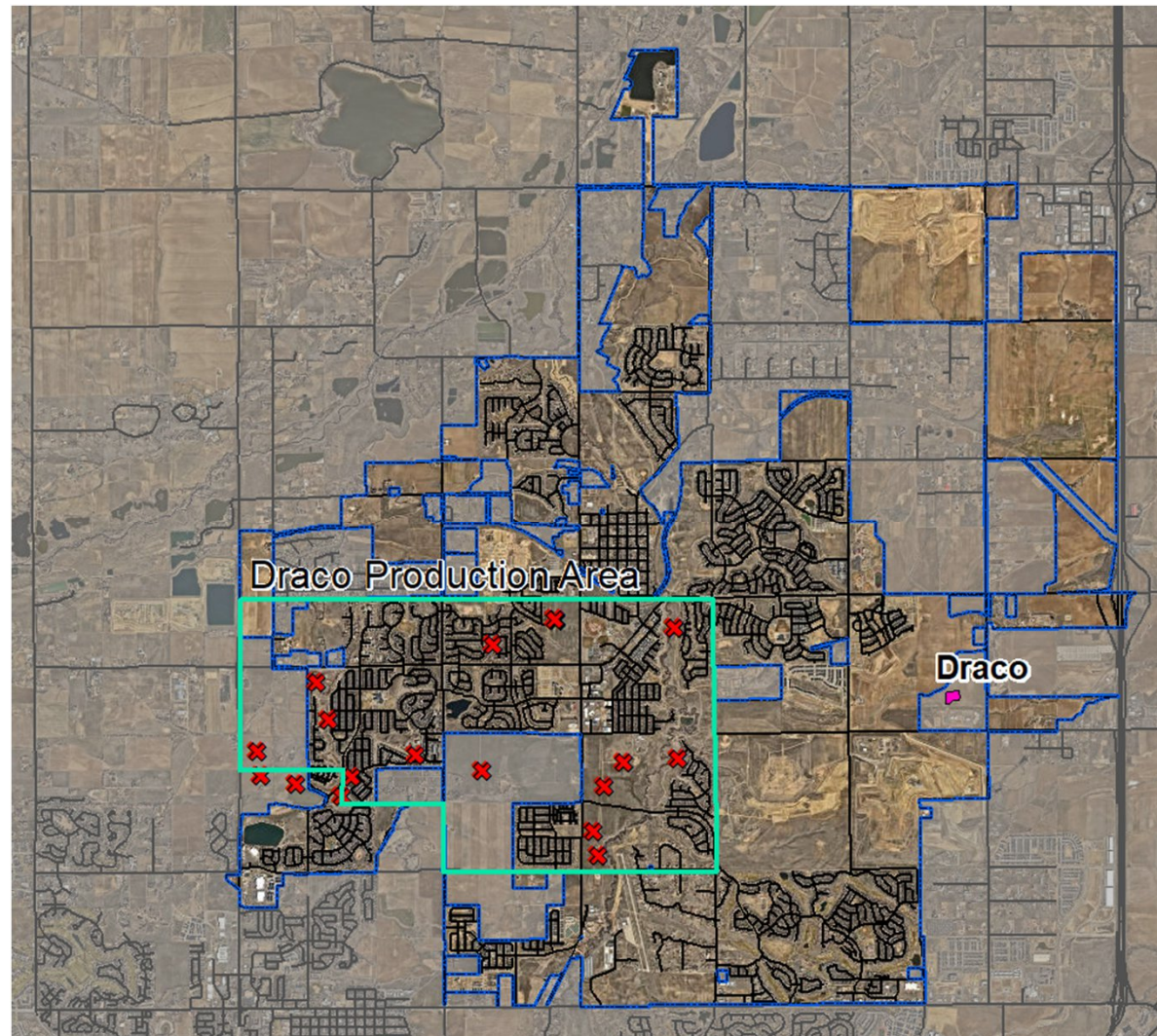
Resident Communication – Website Updates

- Erie O&G Live
- Interactive O&G Facility Map
- Inspection Program Hub
- Regulation Resources
- Air Quality Monitoring





Draco OGD



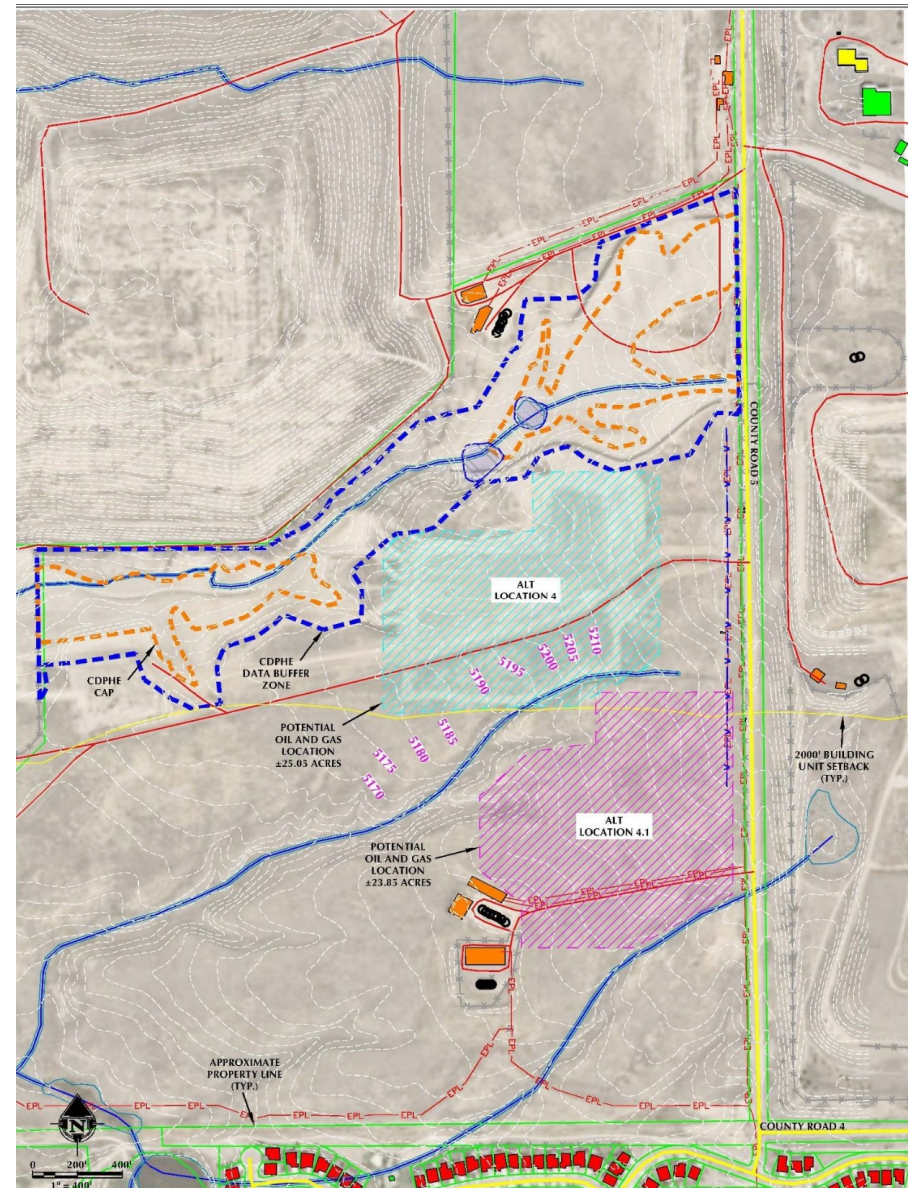
Draco OGD



Draco OGD

Alternate Location Four (AL4)

- Located at old Redtail Ranch development (North of the Vista Ridge neighborhood and West of WCR 5)
- Requires rezoning to Heavy Industrial





Draco OGD

Conditions of Approval

- ❑ Condensed Occupation
- ❑ Air Quality Monitoring
- ❑ Monitoring of Plugged and Abandoned Wells within DSU
- ❑ Landscaping and Visual Mitigation
- ❑ Traffic Studies
- ❑ Paving of County Road 6
- ❑ Plugging and Abandonment of Existing Wells

Draco OGD

Next Steps

- “Civitas permits were reviewed during the first & forth quarter of 2024. Upon approval of all the necessary permits, construction of the pad would begin during 3rd quarter of 2025 and is expected to take roughly 2 months. Drilling would commence shortly after and may take up to 8 months depending on the number of electric drilling rigs utilized. Once drilling is completed, crews will fracture the wells, another approximate 5-month process that is expected to be completed by summer 2026.
- Wells will be completed and prepped for production through 2026, and after a short period of well

Cumulative Impacts Rulemaking

The Good

- Application of NOx and GHG intensity targets
- Expanded Community Liaison role
- Form 2D (Collaboration between ECMC and CDPHE)
- New requirements for Pre-App hearings for OGD
- Additional notices and access to application process for local government

The Bad

- CI Communities – EnviroScreen score above 80th percentile

The Ugly

- Large shift in purpose and scope during rulemaking process

Data Falsification

What We Know

- ECMC has now identified 404 sites where falsified data was submitted
- ECMC has reviewed a total of 3,275 individual instances of falsified data
- ECMC has issued 7 Notice of Alleged Violations (NOAVs)
- Operators
 - Civitas
 - Chevron
 - Occidental (Oxy)
- Consulting Firms
 - Tasman Geosciences
 - Eagle Environmental

Data Falsification

- Two (2) locations proximal to Erie
 - Bryant 16, 23, 36-30 Wellheads and Flowlines
 - Bryant 9 & 34-30A Tank Battery
- One (1) location within Erie
 - I & J 7-6 and Bulthaup 21-6 Wellheads
- All locations are closed sites





Spring Hill - I & J 7-6 and Bulthaup 21-6





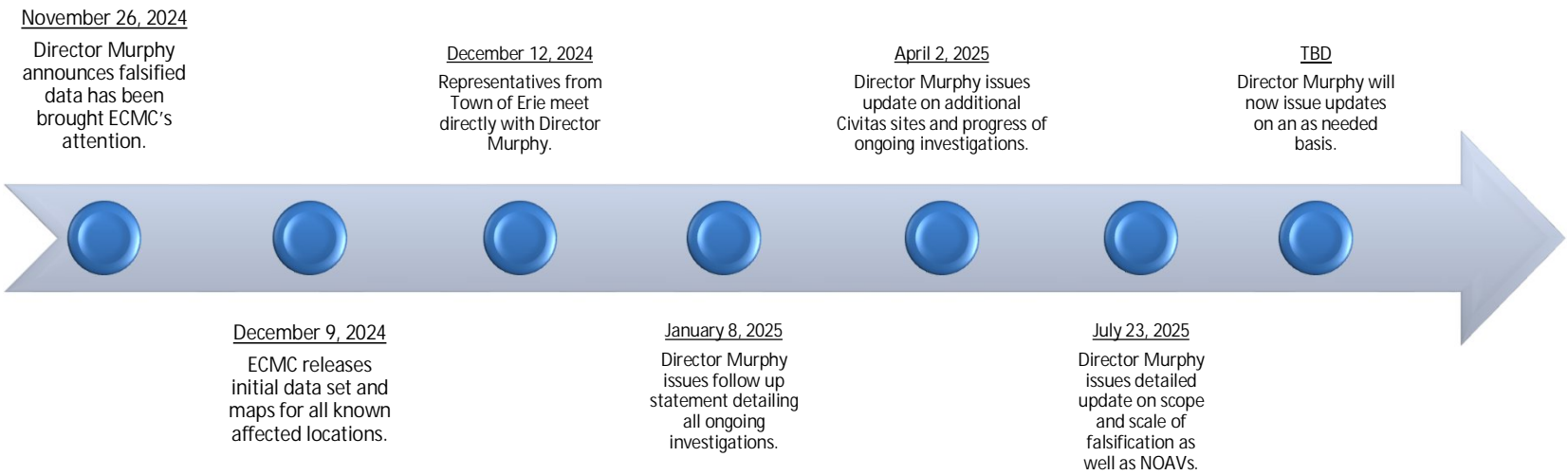
Data Falsification

What ECMC Is Doing

- ECMC Environmental Unit
- ECMC Quality Assurance Control Unit
- Department of Natural Resources Executive Directors Office
- Prosecutors and Law Enforcement



Data Falsification





Data Falsification

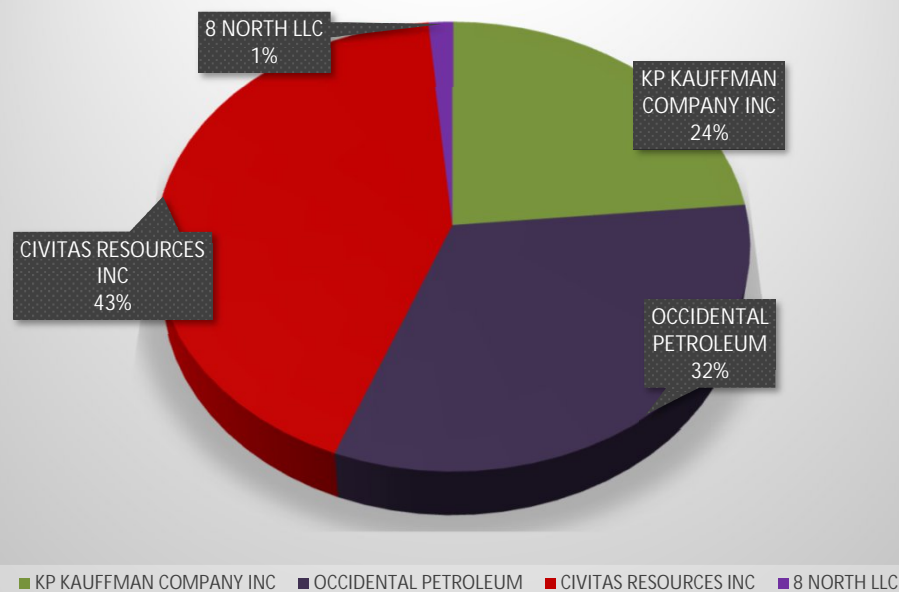
ECMC Statement

- “ECMC remains confident that the falsified data created no new risk to public health because the scope of the impacted data is limited to Site Investigation and Remediation Workplans for sites that had already been disturbed by oil and gas development. In other words, the disturbances from oil and gas operations at these sites is unchanged; the falsified data affects the degree of remediation work needed to remediate those disturbances.”

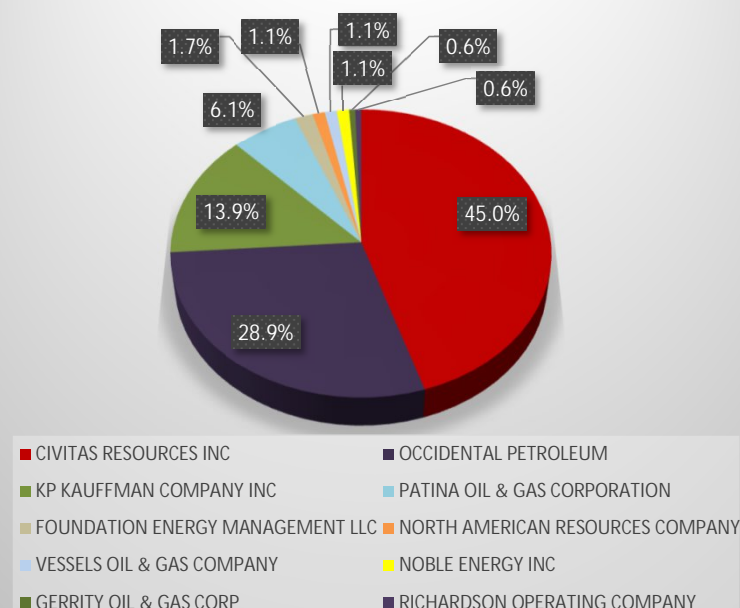
Spill Report (2018 – 2025)

- Civitas Resources Inc – 29 spills
- Occidental Petroleum (Kerr McGee)– 22 spills
- KP Kauffman Company Inc – 16 spills
- 8 North LLC – 1 Spill

2018-2025 Spills by Operator

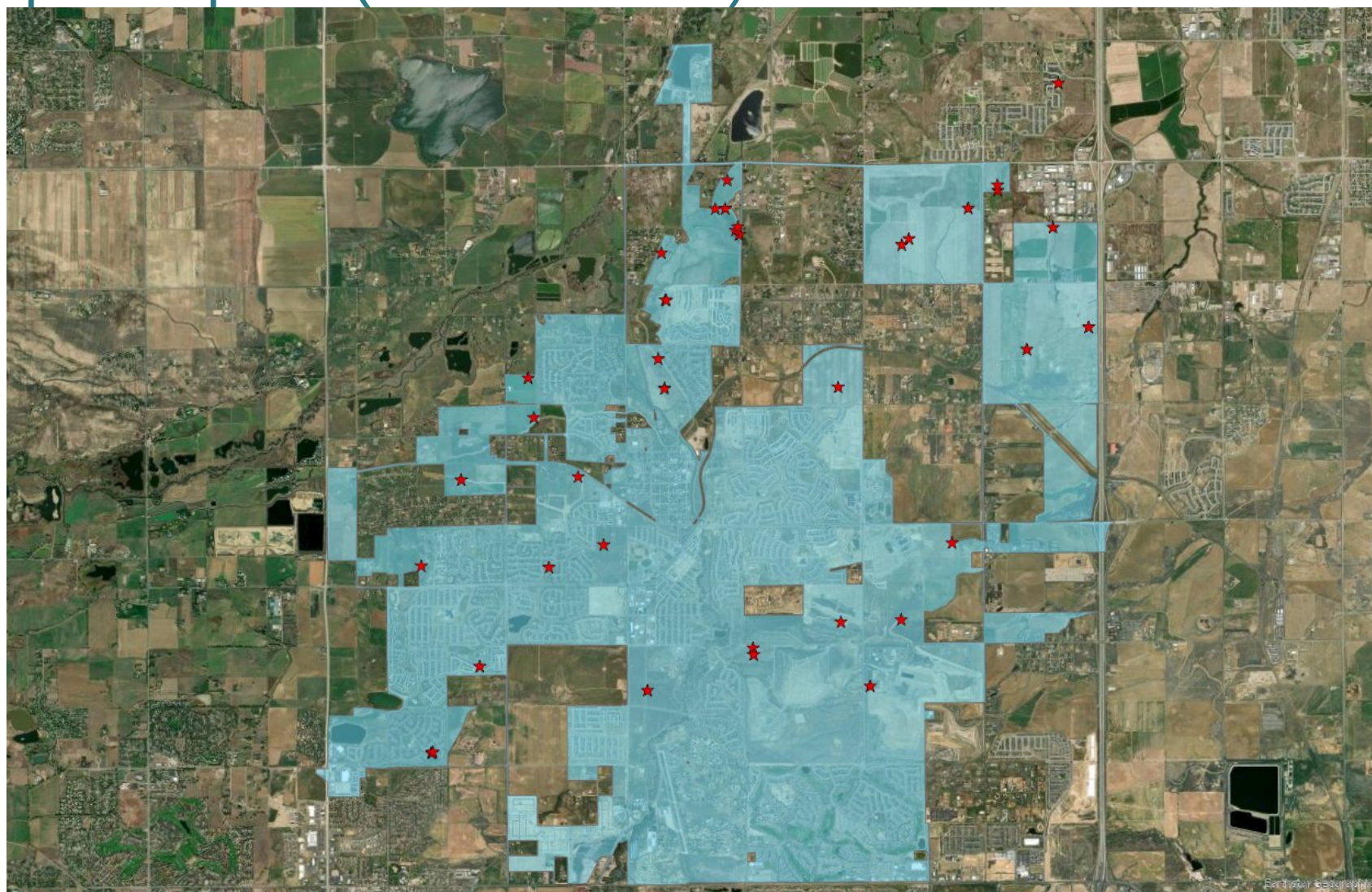


Facilities vs Operator

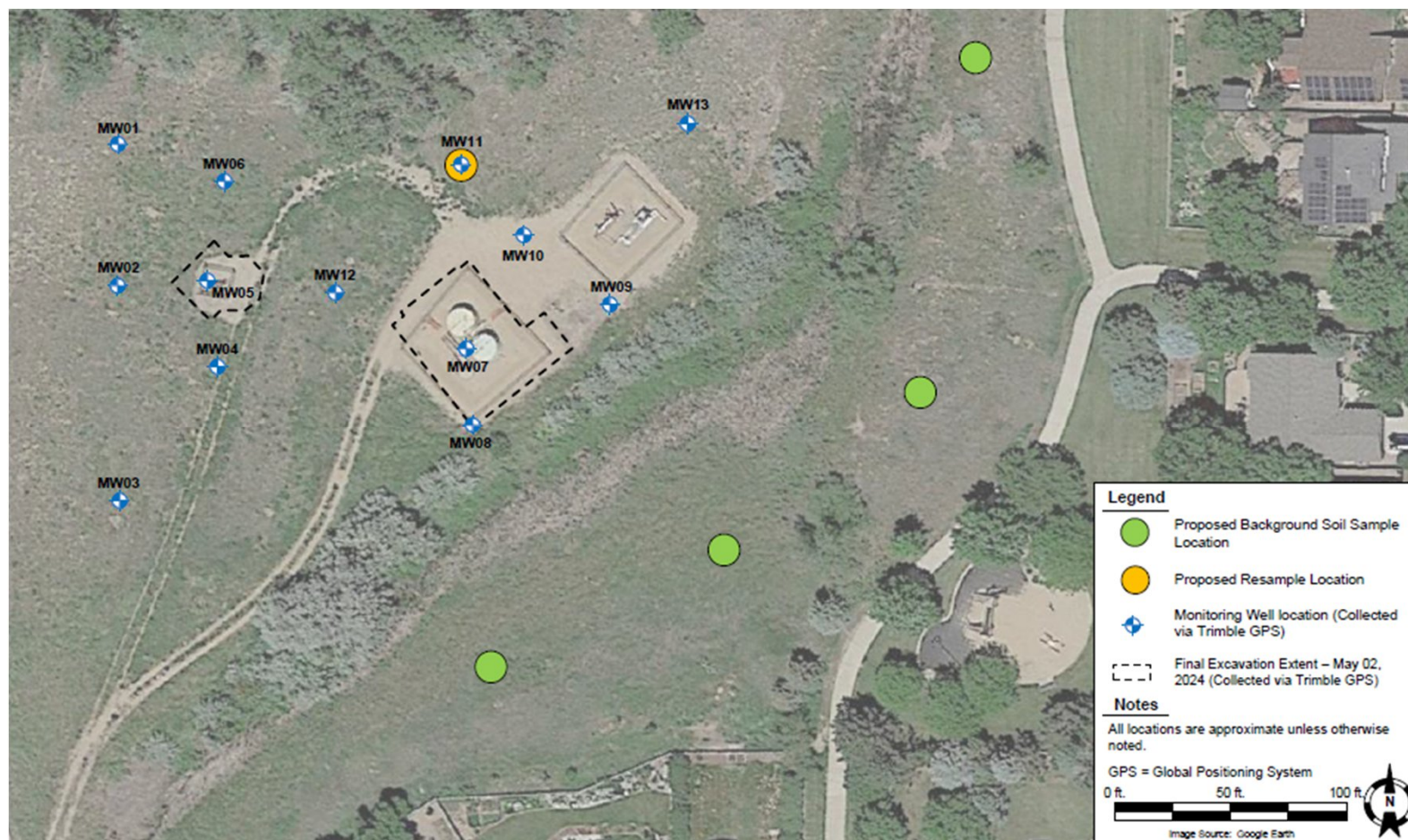




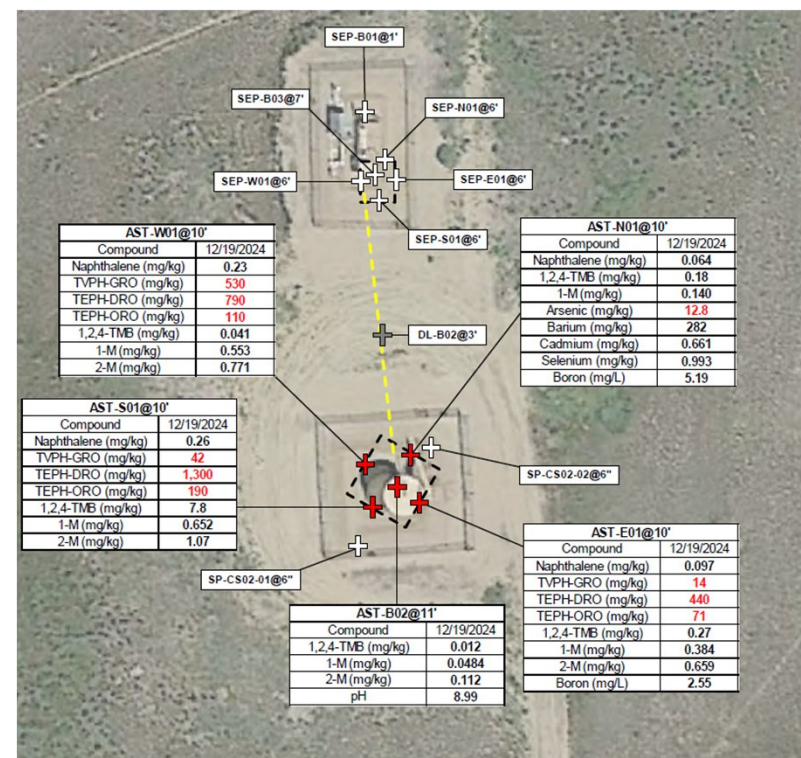
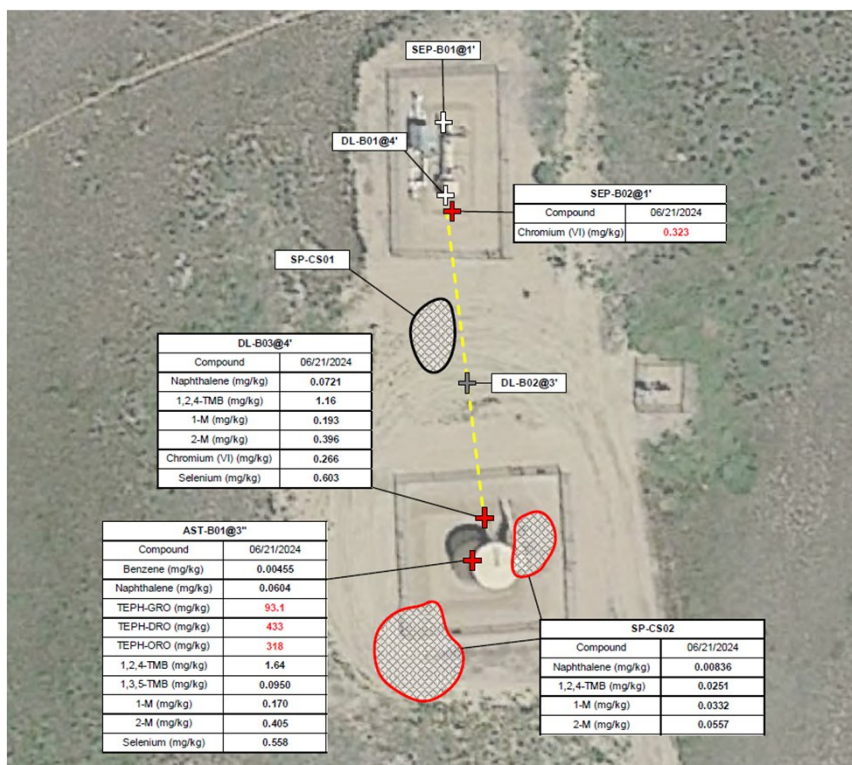
Spill Report (2018 – 2025)



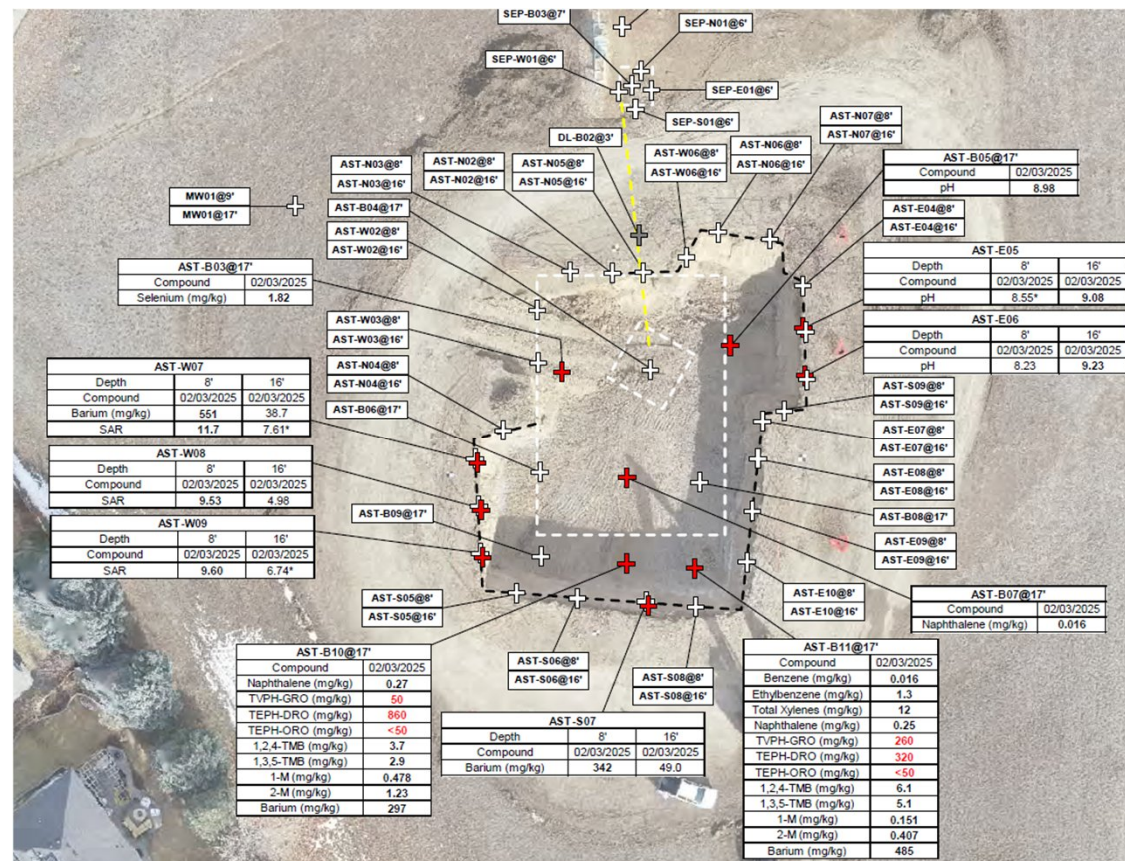
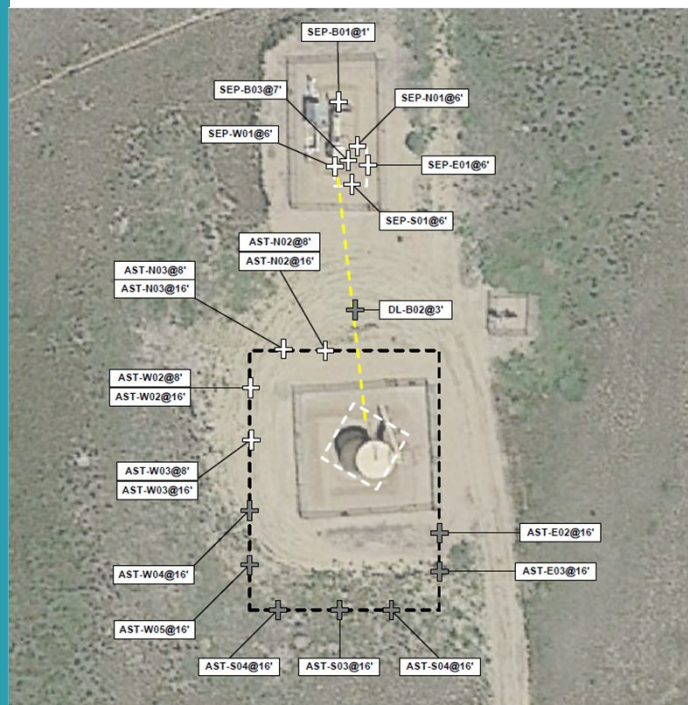
Spill Report – Erie 1-24



Spill Report – Arapahoe 61N69W 26SESW



Spill Report – Arapahoe 61N69W 26SESW



Fines, Enforcement & Inspections



Current Enforcement Capabilities

No specific language detailing ability to levy fines
Now a possibility under home rule



Outlook and Future Direction

Field Inspection Program

- Late 2025
- Goal to inspect all facilities and wells annually
- OGI Surveys



Future Updates to Municipal Code

- Right to Access and Inspect Facilities
- Annual Inspection or Registration Fee
- Fines and Penalties
 - Potentially Assessed Daily
- Protecting Municipal Water Supply
- Cumulative Impacts
- Deep Geothermal & Carbon Sequestration



Questions & Discussion