



SUSTAINABLE ADAMS COUNTY 2030 PLAN

2021 UPDATE



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EXECUTIVE SUMMARY

Adams County developed the first countywide sustainability plan in 2015. This plan, [Sustainable Adams County 2030](#), established Adams County's commitment to its vision of being **the most innovative and inclusive county in America for all families and businesses**. It set the stage for the county to tackle issues such as energy efficiency and renewable energy, waste reduction, water quality and quantity, transportation options, food access, and sustainable neighborhoods while ensuring county operations were leading the way for the community. The 2030 plan called for a reevaluation in 2020 to determine any need for revision, to ensure the long-term sustainability and success of Adams County. The update process began in late 2020 and coincided with Advancing Adams, a coordinated effort to develop the Comprehensive Plan, the Transportation Master Plan, and update the Parks, Open Space, and Trails (POST) plan.

Since the original plan's publication in 2015, there have been significant advances in the sustainability industry, from renewable energy, to electric vehicles (EVs), to policy changes at the local and state level. This Sustainability Plan update is an essential component to Adams County achieving its vision, mission, and goals and focuses on making the Sustainability Plan more measurable and actionable while aligning with industry best practices, market trends, and State of Colorado climate action goals. Implementation success was also a key consideration in the plan update, and all goals and strategies include clearly defined metrics, clearly defined roles and action steps, and a framework for implementation success is included in the plan.

SUSTAINABILITY FRAMEWORK

The plan is organized to align with eight sustainability topics. These topics were chosen based on the original 2030 plan, existing efforts related to sustainability within Adams County's internal purview, and topics important and impactful to the Adams County community. Many topic areas are also broken, by geographic scale, into focus areas representing county operations or the community, with separate considerations for each. At the community scale, unincorporated Adams County is the primary focus, as many of the cities in Adams County have their own sustainability plans and goals. All Sustainability Plan topics incorporated cross-cutting themes of equity, environmental justice, and resilience.



SUSTAINABILITY PLAN GOALS AND TARGETS

ENERGY



Goal 1: Incorporate energy efficiency and new energy technologies and building practices in new facilities and retrofit eligible existing facilities.

- Achieve 15% reduction in energy use intensity (EUI – energy use per square foot)
- Track the number of existing facility energy efficiency retrofits
- Incorporate at least 1 sustainable technology in each new facility



Goal 2: Increase use and procurement of renewable energy for county facilities.

- Achieve 50% renewable energy supply
- Increase number of facilities with on-site solar to 5



Goal 3: Expand, create, and advocate for equitable clean energy opportunities for all community members to reduce our carbon footprint.

- Create 1 solar co-op annually
- Increase number of CPACE projects in the county to 20
- Maintain or increase the number of participants in weatherization and Minor Home Repair programs
- Issue 2,600 total solar permits

WASTE



Goal 4: Reduce waste in county operations through source reduction, sustainable diversion practices, and fostering a waste reduction culture.

- Establish waste diversion rate through waste hauler tracking
- Establish construction and demolition diversion rate for each new construction or retrofit project
- Hold 4 employee education events per year about sustainability and waste reduction



Goal 5: Ensure all Adams County residents in unincorporated areas have access to recycling.

- 100% of private haulers in unincorporated Adams County provide recycling
- Achieve 30% increase over 2019 in hard-to-recycle waste and yard/green waste collected
- Achieve 25% of waste recycled or composted



Goal 6: Achieve 30% waste diversion at county-led events.

- Achieve 30% diversion rate at County-led events (e.g. Adams County Fair, Stars & Stripes)



Goal 7: Expand waste diversion and reduction practices in all new developments during construction.

- Reach a 35% waste diversion rate
- Establish construction and demolition diversion rate for each development project

WATER



Goal 8: Improve water use efficiency in county facilities and parks and promote the use of non-potable water supplies where available and feasible (including in public works operations).

- Meet efficiency benchmarks for all buildings for indoor water use, outdoor water use, and outdoor irrigation use
- Maintain or increase percent of water supply that is non-potable for facilities, parks and open space, and public works operations



Goal 9: Promote water use efficiency for new and redeveloped residential and commercial properties in unincorporated Adams County.

- Take 4 actions to improve indoor and outdoor water use efficiency (from categories education, financing, codes, programs)
- Increase participation in water use efficiency programs
- Increase estimated water savings associated with efficiency programs

LAND



Goal 10: Acquire and conserve land sustaining the level of service of parks and open space for economic, social, and environmental benefits.

- Maintain or increase number of acres of county-owned conservation easements
- Maintain or increase number of acres of county-owned land

SUSTAINABLE INFRASTRUCTURE



Goal 11: Use sustainable infrastructure in Public Works projects to maximize economic, environmental, and social durability and minimize economic impacts from natural hazards.

- Achieve a FEMA community rating score of 7
- Increase number of regional flood control/detention facilities implemented from Master Drainage Studies to 2
- Increase number of local water quality facilities owned and maintained by Adams County to 17
- Achieve a tree replacement rate of 100%
- Incorporate 4 ENVISION credits on 80% of projects
- Increase number of ENVISION certified staff to 30% of inspection and engineering staff
- Conduct 2 annual coordination meetings between Public Works and Utility/District partners
- Inspect 100% of dry outfalls for illicit discharges every 5 years in urbanized areas
- Conduct 10 educational activities above MS4 permit minimum requirements annually

TRANSPORTATION



Goal 12: Decrease county fleet emissions through vehicle and operational efficiency and fuel switching.

- Track total vehicle miles traveled and gallons of fuel consumed for county fleet
- Decrease hours of idling by 50%
- Electrify 75% of eligible light-duty vehicles
- Convert 25% of medium- to heavy-duty vehicles to alternative fuels



Goal 13: Support EV mobility and infrastructure across all of Adams County.

- Electrify 5% of all registered vehicles in Adams County



Goal 14: Support alternative modes of transportation and enhance mobility for all Adams County residents.

- Align with Transportation Master Plan performance measures once adopted (to be updated)

HEALTHY AND RESILIENT NEIGHBORHOODS



Goal 15: Increase access to resources, opportunities, and services supporting financial, mental, and physical well-being for all community members in Adams County.

- Track number of annual resource events
- Establish neighborhood groups in 50% or more neighborhoods with higher incidence of violations
- More than 50% of mini-grants funding awarded to neighborhoods with higher incidence of violations
- Provide a minimum of 2 educational events per neighborhood per year

AIR QUALITY



Goal 16: Reduce indoor and outdoor air quality impacts on disproportionately impacted communities through advocacy and mitigation practices.

- Track the number of environmental compliance and oil and gas inspections
- Maintain or increase the number of participants in Weatherization and Minor Home Repair programs
- Increase the number and type of air quality monitors to 4
- Provide 1 air quality education and awareness communication per quarter (excluding air quality alerts)

IMPLEMENTATION HIGHLIGHTS

Implementation is at the forefront of the Sustainability Plan update. All strategies have associated work plans that include action steps, lead and partner departments identified, and resources to support implementation. In addition, organization actions are outlined that will support long-term success, including formalizing the Sustainability Committee and holding routine implementation check-ins, annual reporting and communications about Sustainability Plan progress, and leveraging the Green Team to infuse a culture of sustainability throughout Adams County staff. The plan was developed to be dynamic in nature and conducting routine check-ins and reporting will allow any necessary changes or updates to strategies, tactics, or performance management to occur.





ADAMS COUNTY
GOVERNMENT CENTER

4030

INTRODUCTION

Adams County developed the first countywide sustainability plan in 2015. This plan, [Sustainable Adams County 2030](#), established Adams County’s commitment to its vision of being the most innovative and inclusive county in America for all families and businesses. It set the stage for the county to tackle issues such as energy efficiency and renewable energy, waste reduction, water quality and quantity, transportation options, food access, and sustainable neighborhoods while also ensuring county operations were leading the way for the community. The 2030 plan called for a reevaluation in 2020 to determine any need for revision, to ensure the long-term sustainability and success of Adams County.

This plan update focuses on making the Sustainability Plan more measurable and actionable while aligning with industry best practices, market trends, and State of Colorado climate action goals. Since the original plan’s publication in 2015, there have been significant advances in the sustainability industry, from renewable energy, to electric vehicles (EVs), to policy changes at the local and state level. This Sustainability Plan update (hereafter referred to as the 2030 Plan Update) is an essential component to Adams County achieving its vision, mission, and goals.

ADAMS COUNTY AT A GLANCE

Adams County, Colorado, is located north of the Denver metropolitan area — with a 2020 population of 519,572, a 17.7% growth rate since 2010. The county is expected to be one of the fastest-growing counties in Colorado, reaching an estimated population of 745,218 by 2040 (see Figure 1) (Colorado State Demographer, 2021). Most of this population growth is expected to occur in the western portion of the county, in the Denver Metro area. This growth will lead to increased demand for resources and added stress on existing systems, highlighting the need to integrate sustainability across the county as it continues to grow.

Sustainability priorities in these more urbanized areas of the county focus on resource conservation and alternatives, connections to natural resources, and adopting new technologies to support growth, especially in unincorporated areas. Eastern Adams County is primarily agricultural land important to the cultural heritage of Adams County and has different sustainability priorities than western Adams County as climate change impacts worsen. Priorities in eastern Adams County focus on land management, including opportunities for renewable energy production, sustaining agriculture and food production, and resource conservation.

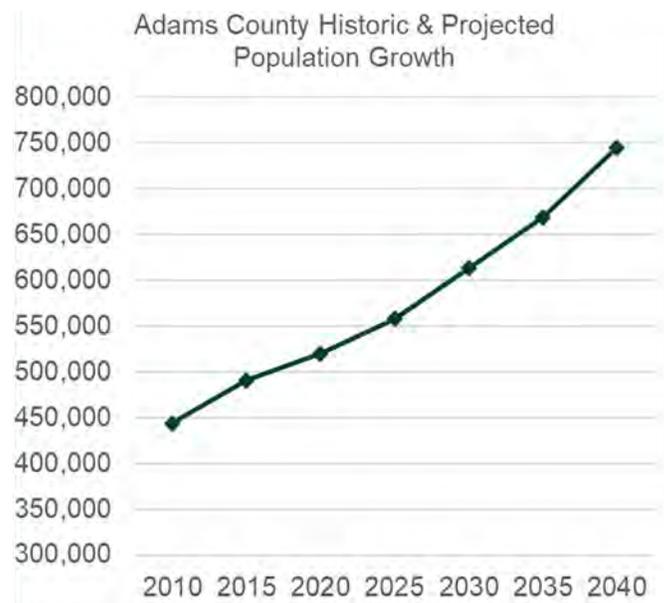


Figure 1: Projected Adams County population growth through 2040

The median household income in Adams County is \$70,282, slightly lower than the state of Colorado, though income growth is outpacing the state’s average. A significant portion of households in Adams County are considered low-to-moderate income, with 32.8% of households making less than \$50,000. This fact translates to less income available for personal and household changes related to sustainability and improved quality of life, such as energy efficiency upgrades that reduce energy bills and improve indoor air quality, that may require additional support from the county and partnerships with other agencies.

Adams County is already seeing the impacts of climate change, including drought, increased heat, and poor air quality from increased wildfires, emphasizing the need for sustainability practices and programs to both mitigate and adapt to worsening climate impacts. By 2050, Adams County could see an increase in average temperature of 2.5° to 5° F, more extreme heat days, more extreme weather, and increased and more severe drought conditions (Adams County, 2021). Further, these impacts are often exacerbated in communities of color and in low-income areas, disproportionately impacting their quality of life by contributing to poor health outcomes (e.g. asthma, heat stress, poor water quality). These communities often do not have well-maintained or well-built infrastructure to withstand major hazard events, making it difficult for them to recover from such events. Adams County is also home to landfill sites, industrial operations, and oil and gas development that may disproportionately impact these communities due to their proximity to harmful pollutants and noise emitted by these operations.

This sustainability plan update aims to achieve the Sustainable Adams County 2030 vision through innovation while also bolstering inclusivity by acknowledging and helping lessen the severity of climate impacts on the environment, people, and economy of Adams County.

GREENHOUSE GAS EMISSIONS SUMMARY

As part of the 2030 Plan Update, a new greenhouse gas (GHG) emissions inventory was completed to determine the scope, scale, and impact of emissions in Adams County. This inventory was completed for all of Adams County, including both unincorporated and incorporated areas. In 2019, Adams County emitted 7,181,627 metric tons of CO₂ equivalent (MTCO₂e); this is 13.8 MTCO₂e per capita. For the GHG emissions inventory, 2019 is used as the baseline year due to significant changes in operations and lifestyles caused by the COVID-19 pandemic in 2020. This addition to the 2030 Sustainability Plan is important to support the State of Colorado’s greenhouse gas reduction goals, set in [House Bill 19-1261](#), which aim to reduce emissions – by at least 50% by 2030 and 90% by 2050 – over 2005 levels.

CLIMATE & EQUITY RESOURCE

To understand the interaction between climate and equity in your neighborhood, visit the Colorado Department of Public Health & Environment’s [Climate Equity Data Viewer](#). This tool considers both environmental burden (e.g. air quality, proximity to traffic) and population characteristics (e.g. income, race/ethnicity).

Figure 2 shows a breakdown by sector. The largest sectors are energy, including natural gas and electricity, and transportation. These sectors account for 49% and 34%, respectively. In Adams County, energy industry and industrial processes and product use (IPPU) emissions are created by petroleum refining processes and combustion of non-natural gas fuels (e.g. fuel oil). These sectors combined account for 12% of community-wide emissions. Adams County's total GHG emissions account for approximately 6% of the State of Colorado's GHG emissions (Taylor, 2021). For comparison, Denver County's 2019 emissions following the same methodology and sectors result in 12.5 MTCO₂e, slightly lower than Adams County's per capita emissions (City and County of Denver, 2020).

The greenhouse gas inventory was developed to comply with the [Global Protocol for Community-Scale Greenhouse Gas Emissions Inventories](#) (GPC Protocol) BASIC reporting level within the boundary of Adams County. The GPC Protocol sets a clear, standard framework for reporting community GHG emissions, allowing for consistent reporting year to year and comparisons across communities. The GPC Protocol captures production and consumption activities taking place within the community.

An estimate was completed for county buildings and departmental operations based on available data. While this is not considered a protocol-compliant inventory, it helps inform the areas of impactful actions that can be taken to lower emissions. The county emissions estimate is shown in Figure 3. Energy use is the largest sector, accounting for 52% of county operations emissions. The transportation sector, including fleet operations, personal vehicles used for work purposes, and commuting, make up the second largest sector, with 44% of emissions.

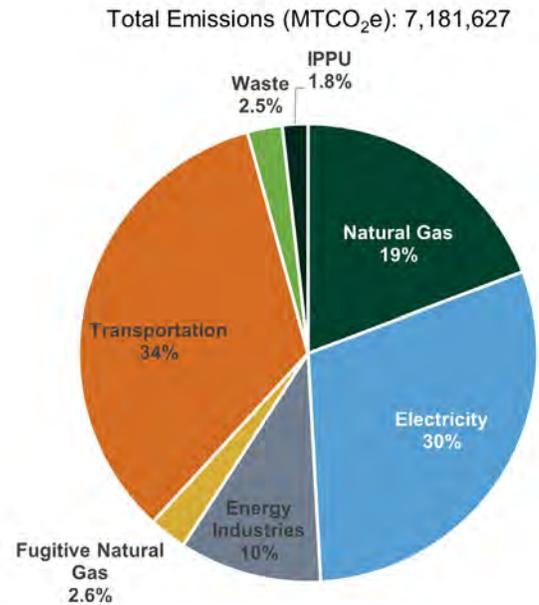


Figure 2: 2019 Adams County GHG Emissions by Sector

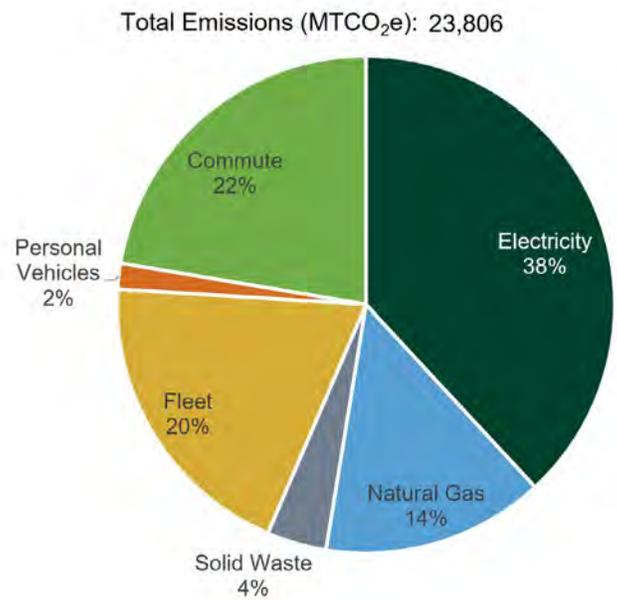


Figure 3: County Buildings and Departmental Operations GHG Emissions Estimate

PLANNING PROCESS

In 2020, the plan review and update process, spearheaded by the staff-led Sustainability Committee, began. The plan update focuses on making the Sustainability Plan more measurable, with clear implementation actions to ensure progress can be made toward the county's sustainability goals. The 2030 Plan Update Sustainability Plan update considers sustainability both within county operations and in the broader community, defined as unincorporated Adams County. The planning process occurred in three phases, each building on the previous phase, shown in Figure 4.



Figure 4: Sustainability Plan update process





ADVANCING ADAMS

The 2030 Plan Update occurred in conjunction with the Advancing Adams long-range planning effort to update the county Comprehensive Plan, Transportation Master Plan, and Parks, Open Space, and Trails (POST) Plan. These plans establish a community-wide vision, goals, and policies as Adams County continues to grow, and they define where and how growth will occur. The Sustainability Plan supports these efforts, by providing a tactical approach to addressing sustainability in Adams County. Many of the topics and issues identified in the Advancing Adams planning effort have direct ties to the Sustainability Plan, and vice versa, with mutual reinforcement of elevating sustainability in Adams County.

The planning teams coordinated throughout the planning processes to ensure these efforts were aligned and the correct goals and strategies are in the correct plan. For example, there may be sustainability opportunities such as development code changes or broader goals and strategies identified in this plan coinciding with the Comprehensive Plan.

COUNTY AND COMMUNITY ENGAGEMENT

The Sustainability Committee primarily led the development of the Sustainability Plan, with additional input from other subject matter experts within county staff, meeting four times during the course of this project to inform the plan update. Subject teams specific to the plan topics and operational lens (e.g. county or community focus) met three times to provide input on existing efforts, goals, metrics, targets, and strategies.

The Sustainability Plan leveraged Advancing Adams community outreach and engagement efforts and online surveys to provide an understanding of community needs and desires related to sustainability. Because of Advancing Adams' sustainability plan theme, many sustainability issues were raised during those engagement efforts. The online survey asked residents to provide feedback on where they would like to see sustainability in Adams County in the future and to provide ideas for ensuring equitable implementation of sustainability across the county. Survey results can be found in [Appendix A](#).



ADAMS COUNTY SUSTAINABILITY FRAMEWORK

VISION

Be the most innovative and inclusive county in America for all families and businesses.



PLAN TOPICS & TERMINOLOGY

The plan is organized to align with eight sustainability topics (see Figure 5). These topics were chosen based on the original 2030 plan, existing efforts related to sustainability within Adams County's internal purview, and topics that are important and impactful to the Adams County community. Many topic areas are also broken, by geographic scale, into focus areas representing county operations or the community, with separate considerations for each. At the community scale, unincorporated Adams County is the primary focus, as many of the cities in Adams County have their own sustainability plans and goals.

Each topic and focus area addressed in this plan includes a brief overview of the importance; cross-cutting themes, goals, metrics, and targets; and strategies. These items are described in more detail below. Also included is an overview of the topic area's role in climate mitigation and adaptation. Mitigation is considered the process of avoiding and reducing greenhouse gas emissions, while adaptation focuses on how to protect communities and ecosystems from the effects of climate change.

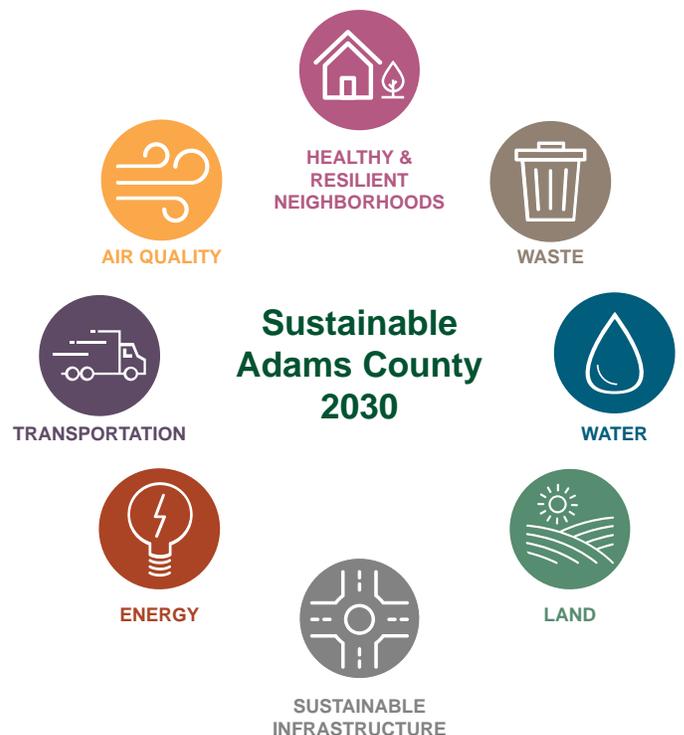


Figure 5: Sustainable Adams County 2030 Plan Topics

CROSS-CUTTING THEMES

Three cross-cutting themes were identified as important to the 2030 Plan Update: equity, environmental justice, and resilience. These themes permeate across all topic areas and helped guide strategy development and prioritization. Each topic and focus area includes connections to these three themes within the context of sustainability.

Equity: Recognizing each Adams County community member has different circumstances and correspondingly allocating opportunities and resources needed to equally thrive and succeed.

Environmental Justice: Addressing the needs or impacts of sustainability and climate change issues on disproportionately impacted communities. In this context, these communities are those that experience “first and worst” consequences and are typically communities of color and are also defined as low-income areas. In Adams County, disproportionately impacted areas are generally located in the southwest portion of the county, based on the Colorado Department of Public Health & Environment’s [Climate Equity Data Viewer](#).

Resiliency: Anticipating, accommodating, and adapting to climate-related hazards to ensure quality of life and continued operations.

These contextualized themes complement and reinforce the Advancing Adams plan values of equity, sustainability, and livability, providing an aligned, strategic approach to shaping the future of Adams County.



GOALS

Goals are value-based statements that help define the desired end result for each topic. In short, goals help answer the question what do we want to achieve through a certain set of actions?

METRICS AND TARGETS

Metrics are a standard of measure used to determine the impact of actions, while targets help show progress toward goals. Metrics and targets are the data points used to evaluate progress toward the established goals. While each goal can have multiple metrics that work together to show progress, each metric has one established target.

Metrics are quantifiable and data driven, having the ability to track a metric is critical. The metrics enumerated in this plan were selected based on relevance to the goal they measure and the ability of Adams County staff to collect, update, and report the necessary data on a regular basis. Baseline values were established for each metric to serve as the starting point progress will be measured against. For this plan update, 2019 is used as the baseline year (with some exceptions) due to significant changes in operations and lifestyles caused by the COVID-19 pandemic in 2020.



The targets were determined by evaluating historic trends, benchmark values, and staff input.

For more information on progress reporting and data tracking, see the [Implementation](#) chapter.

STRATEGIES

Strategies guide the actions that drive progress toward targets and goals. They are major initiatives the County and community can pursue to support sustainability. Strategies were vetted with Adams county staff, based on feasibility and sustainability impact, and prioritized into ongoing, near-, mid-, and long-term timelines defined as:

Ongoing – currently underway and will continue through 2030

Near-term – 2022 to 2024

Mid-term – 2024 to 2026

Long-term – 2026 to 2030

In addition to the strategy summaries contained in the sections below, [Appendix C](#) includes full strategy details, including implementation action steps, roles and responsibilities, and resources.



ENERGY



GOAL 1 Incorporate energy efficiency and new energy technologies and building practices in new facilities and retrofit eligible existing facilities.

GOAL 2 Increase use and procurement of renewable energy for county facilities.

GOAL 3 Expand, create, and advocate for equitable clean energy opportunities for all community members to reduce our carbon footprint.

GREENHOUSE GAS (GHG) FACTS



59% of GHG emissions come from the energy sector, including electricity, natural gas, and energy industries

42% of energy emissions come from the residential sector



58% of energy emissions come from commercial, industrial, and public sectors

ENERGY AT A GLANCE (2019)

4,072 Gigawatt hours

of electricity used across Adams County residential and commercial sectors – enough to power about **381,000 homes** for a year



258 million therms of natural gas used across Adams County – enough to power about **359,000 homes** for a year

3 energy generating stations operate in Adams County



774 oil and gas wells

24% of energy supplied to county facilities is from renewable sources



ENERGY is essential to quality of life in any community, providing electricity and natural gas to homes, businesses, and streetlights. It also provides jobs in Adams County and presents opportunities for future economic development. Energy also accounts for 59% of greenhouse gas emissions in Adams County, amplifying the need to transition to clean energy sources, such as wind and solar, and to reduce energy consumption.



As the county continues to grow, there will be an increased demand for energy across the community. Carefully planning new development, engaging existing homeowners and businesses in energy efficiency measures, and working with utility providers will ensure Adams County residents and businesses receive reliable power and help reduce greenhouse gas emissions – ensuring quality of life for the community.

The majority of natural gas (90%) in Adams County is provided by Xcel Energy, with the remaining 10% provided by Colorado Natural Gas. Adams County is serviced by four electricity providers: Xcel Energy, United Power, CORE electric cooperative (formerly IREA), and Morgan County Rural Electric Association (MCREA). Tri-State Generation and Transmission sells wholesale electricity to United Power and MCREA. Each utility has different sources of electricity generation, energy efficiency and renewable energy programs, and different goals for carbon-free electricity – all impacting Adams County goals and strategies. Xcel Energy has set a goal for 85% carbon-free electricity by 2030 (Xcel Energy, 2021), and Tri-State’s goal is to achieve 80% reduction in carbon dioxide emissions in wholesale electricity sales by 2030 (Tri-State, 2021). These goals will help reduce emissions in Adams County and across the state.



Adams County is also home to several large industrial facilities and hundreds of oil and gas wells that produce emissions and pollution, adversely impacting adjacent communities and neighborhoods. These impacts are also addressed in the [Air Quality](#) topic area.

The strategies in this plan focus on reducing consumption through energy efficiency practices and transitioning to renewable sources that can save residents, businesses, and county operations money, reduce greenhouse gas emissions, and provide support to disproportionately impacted communities.

ROLE IN CLIMATE MITIGATION & ADAPTATION

As the largest source of greenhouse gas (GHG) emissions both community-wide and for county facilities, energy plays a significant role in climate mitigation. Reducing energy consumption and transitioning to cleaner energy sources will reduce GHG emissions associated with energy, lessening the impacts of climate change. As electric utilities transition to cleaner electricity sources, such as wind and solar, natural gas will become a bigger source of GHG emissions. Natural gas also has adverse impacts on air quality by contributing to ozone issues in the Front Range. Because natural gas is primarily made up of methane, it is also a more potent greenhouse gas, having a global warming potential 28 times that of carbon dioxide (U.S. EPA, 2020). Natural gas can also have negative impacts on indoor air quality, leading to increased respiratory and health issues. This emphasizes the need to both reduce consumption of natural gas and transition to different fuel sources when possible.

CONNECTION TO ADVANCING ADAMS

Energy is a critical component of future growth and will be considered in updates to building and development codes – to encourage efficient and sustainable building practices as well as additional renewable energy installations throughout the community.

Community Action

*Here are just a few ways you
can make an impact...*

- Participate in your energy utility’s home or business assessment to get recommendations for savings and rebate programs related to replacing old and inefficient equipment:
 - » [United Power Rebates](#)
 - » [Xcel Energy Residential Services](#)
 - » [Xcel Energy Business Services](#)
 - » [CORE Energy Efficiency Resources](#)
 - » [MCREA Energy Center & Rebates](#)
- Low-income residents may qualify for energy conservation measures and appliance upgrades through the county [Weatherization](#) program.
- Explore ways to subscribe to renewable energy through your utility or add it to your home. Or contact [GRID Alternatives](#) to find out if you qualify for a free rooftop solar system.
- Upgrade to LED lighting, which can use 75% less energy and last 25 times longer than incandescent lighting (U.S. DOE, 2021).

COUNTY FACILITIES

County facilities' energy efforts focus on energy use, energy conservation, and energy sources in county operated facilities. Facilities Management is responsible for the construction, operation, and maintenance of county facilities and balances the need to maintain comfort in buildings with the need for conserving resources. Currently, the county operates 44 facilities – 29 are provided electricity by United Power, 13 by Xcel Energy, one by CORE Electric Cooperative, and one by MCREA. Xcel Energy provides natural gas to all buildings. This variation in utility providers impacts the energy source fuel mix provided to county facilities, as each utility has a varying amount of renewable energy supply on their electricity grid. In 2019, renewable energy was estimated to account for 24% of total county facilities' energy use.



Over the past several years, Adams County has invested in energy efficiency upgrades, demonstrating significant energy use reductions across county facilities. Some of the greatest successes have included upgrades to Heating, Ventilation, and Air Conditioning (HVAC) systems such as an investment in evaporative cooling at the Adams County Government Center. This remains an opportunity for the county to lead by example, while reducing operational costs, through continued energy efficiency upgrades to existing facilities.

SUCCESSSES

Adams County has had many sustainability successes related to this topic since the 2015 Sustainable Adams County plan. These include:

- County facilities have **reduced energy consumption by 49% per square foot since 2012**, achieving the initial 2030 Plan goal.
- Facilities & Fleet Management Department uses **EnergyCAP to track building energy use** for 23 buildings.
- The county has made significant upgrades to energy systems and implemented energy recovery systems that have made **significant impacts on energy conservation**.
- The Human Services Center and Government Center have **solar assist domestic water heating systems**.
- The Justice Center was recently retrofitted for energy recovery, resulting in a **40% energy reduction**.
- **2018 International Energy Conservation Code** is used for all new facilities, though the county strives to go beyond this by incorporating Leadership in Energy and Environmental Design (LEED) criteria.

CROSS-CUTTING THEMES



Equity

- Energy conservation reduces utility bill costs that are paid for by county revenue streams, keeping service costs down for taxpayers as well.



Environmental Justice

- Fossil fuel energy resources disproportionately impact communities of color and residents with low incomes. Transitioning away from these fuel sources is crucial for addressing environmental justice issues.



Resiliency

- Energy conservation and transitioning to renewable energy sources help mitigate the impacts of climate change.
- As climate change impacts increase, resilient buildings will be important to reducing resource demands and in considering the health and well-being of building occupants.



GOAL 1

Incorporate energy efficiency and new energy technologies and building practices in new facilities and retrofit eligible existing facilities.

METRICS & TARGETS

Metric	2019 Baseline	2030 Targets
Energy Use Intensity (EUI)	7.95 kWh/ft ² 0.31 therms/ft ²	15% reduction
Number of existing facility energy efficiency retrofits	N/A	Tracking Only
Number of sustainable technologies in new facilities (e.g. renewable energy, storage, recyclable materials, reduced carbon materials)	N/A	At least 1 per project

STRATEGIES

	Lead Division	Timing
1.1 Continue upgrading county facility energy systems	<i>Facilities</i>	Ongoing
1.2 Establish internal technology education and research working group	<i>Facilities</i>	Near-term
1.3 Train employees on energy efficiency practices	<i>Facilities</i>	Near-term
1.4 Develop sustainable, resilient, and health-focused design and operations guidelines	<i>Facilities</i>	Near-term
1.5 Explore building electrification options in new facilities	<i>Facilities</i>	Long-term





GOAL 2

Increase use and procurement of renewable energy for county facilities.

METRICS & TARGETS

Metric	2019 Baseline	2030 Targets
Percent renewable energy supply	24%	50%
Number of facilities with on-site solar	0	5

STRATEGIES

		Lead Division	Timing
2.1	Identify potential locations for solar installations on county property	Facilities	Near-term
2.2	Advocate for and pursue renewable energy procurement options with utilities	Facilities	Near-term
2.3	Incorporate renewable energy into new county facilities	Facilities	Mid-term

COMMUNITY

This focus area covers energy use in unincorporated Adams County, focusing on residential and commercial sectors. Xcel Energy provides electricity to 71% of residents and 88% of commercial and industrial customers in Adams County; United Power provides electricity to 26% of residents and 11% of commercial and industrial customers; CORE and MCREA cover the remaining 2% and 1% respectively.

In addition to promoting sustainable and efficient development as the county grows, addressing energy efficiency in existing homes is also critical to maintaining quality of life and reducing GHG emissions. More than 70% of homes in Adams County are over 20 years old (U.S. Census Bureau, 2020), likely resulting in lower efficiency homes and equipment and leading to higher energy bills. Among low-income residents, energy bills constitute a larger portion of monthly income (known as energy burden, Figure 6) (U.S. DOE, 2021). Strategies in this topic area emphasize connecting residents and businesses to low-cost resources to help them improve efficiency, reduce their energy burden, and utilize cleaner sources of energy.

Energy Burden in Adams County

Energy burden is the percent of monthly income a household spends on energy bills. The chart below shows the energy burden by state median income (SMI) bracket in Adams County. Colorado SMI is \$35,887 for individuals and \$72,331 for households. Lower-income residents spend more on their monthly utility bills.

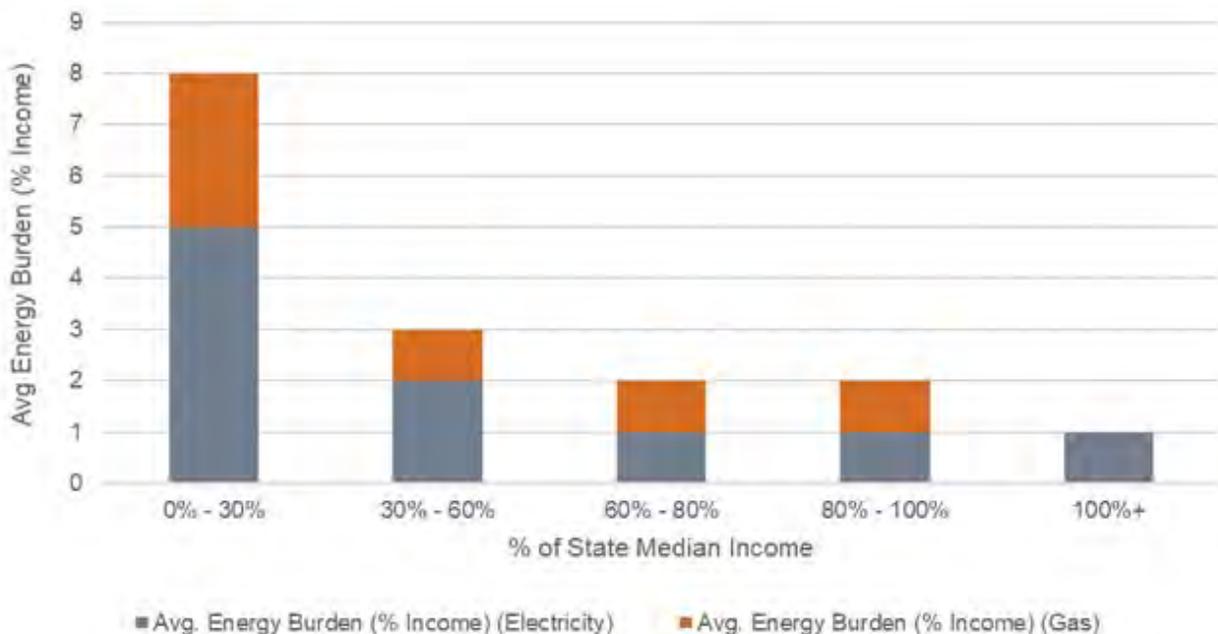
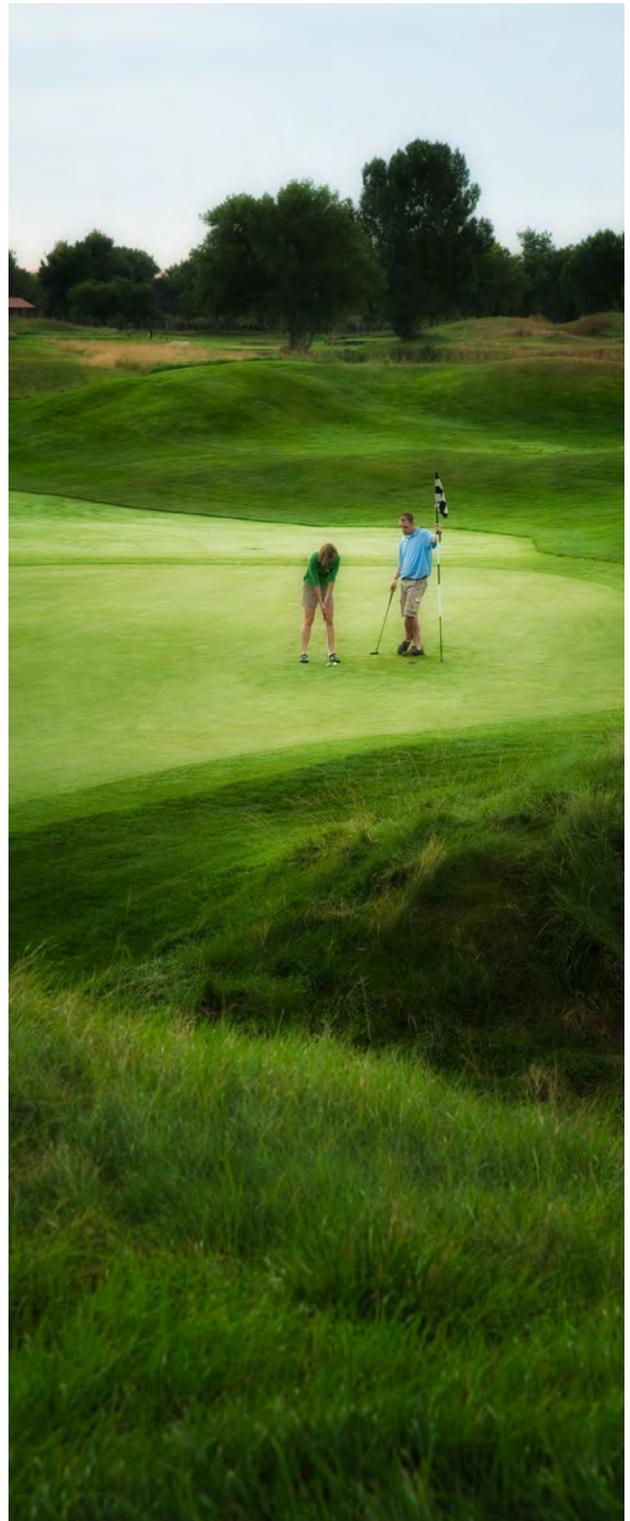


Figure 6: Energy burden of Adams County residents, as percent of state median income (SMI)

SUCCESSSES

Adams County has had many successes related to this topic area since the 2015 Sustainable Adams County plan. These successes include:

- Adams County adopted the **2018 International Energy Conservation Code (IECC)**
- **Weatherization services** for income-qualified customers are available through the [Arapahoe County Weatherization Division](#), which serves both Adams and Arapahoe counties, helping residents improve the energy efficiency of their homes.
- The [Minor Home Repair program](#) helps residents make **health, safety, and energy efficiency repairs to their homes**. The program is available to residents in unincorporated Adams County, the City of Brighton, the City of Federal Heights, and the City of Northglenn.
- Commercial Property Assessed Clean Energy (C-PACE) financing is available in Adams County, allowing commercial property owners to **pay for energy efficiency and renewable energy upgrades** via their property tax assessments.
- Development standards include:
 - » **Passive solar requirements** for mixed-use and non-residential blocks
 - » **Encouragement of sustainable development**, including integration of renewable energy, use of energy efficient materials, LEED, green roofs
 - » **Solar design standards**
- **SolSmart Gold designation** achieved by streamlining the solar installation process, including: establishing an e-permit system, providing a [list of resources](#) for residents and businesses interested in going solar, and reducing administrative fees.



CROSS-CUTTING THEMES



Equity

- The 0-30% area median income bracket in Adams County pays approximately 8% of their monthly income on energy bills, versus 3% or less for higher income brackets (U.S. Dept. of Energy, 2021), creating a higher energy burden. High energy bills impact communities with lower incomes more significantly than other communities.
- Residents with lower incomes, particularly those residents who do not meet the requirements for income-qualified programs, often cannot afford energy efficiency or renewable energy upgrades and may have limited options for assistance.
- Different electric utilities offer different programs and rebates to customers, possibly leading to inequitable distribution of resources.



Environmental Justice

- Emissions and other hazardous events from energy industry activities in Adams County are impacting communities of color and those with lower incomes disproportionately, resulting in increased health impacts.
- Older homes have less efficient systems, leading to worse indoor environmental quality and health outcomes.
- Reducing or eliminating natural gas use in buildings can improve indoor air quality and create safer environments. It can also reduce emissions associated with the gas production process, and pipeline leakage, which are significant contributors to emissions in Adams County.



Resiliency

- Reducing energy consumption through energy efficiency can lead to more stable grid operations in the event of disruptions, particularly as climate hazards worsen.
- Sustainable and resilient buildings can promote economic development and improve building occupant health, and they are better suited to withstand hazard events.
- Distributed renewable energy resources, like solar, can enhance the resilience of power systems.

GOAL 3

Expand, create, and advocate for equitable clean energy opportunities for all community members to reduce our carbon footprint.

METRICS & TARGETS

Metric	2019 Baseline	2030 Targets
Number of solar co-ops created	0	1 annually
Number of C-PACE projects	2	20
Number of participants in Weatherization programs	166	Maintain or increase over baseline
Number of participants in Minor Home Repair program	36	Maintain or increase over baseline
Number of solar permits issued	849 total (since 2011)	2,600 total (200 permits annually)

STRATEGIES

	Lead Division	Timing
3.1 Develop Energy Action Plan	<i>Economic Development</i>	Near-term
3.2 Establish sustainability points system for development code	<i>Development Services</i>	Near-term
3.3 Support solar cooperatives in Adams County	<i>Environmental Programs</i>	Ongoing
3.4 Continue partnering with Grid Alternatives	<i>Community Development</i>	Ongoing
3.5 Support residential energy efficiency outreach and upgrades	<i>Community Development</i>	Near-term
3.6 Support business energy efficiency outreach and upgrades	<i>Economic Development</i>	Near-term
3.7 Develop and fund energy services program to support communities experiencing disproportionate environmental impacts	<i>Environmental Programs, Community Development, Legislative Affairs</i>	Mid-term
3.8 Incentivize renewable energy project development	<i>Economic Development, Development Services</i>	Mid-term



WASTE



GOAL 4 Reduce waste in county operations through source reduction, sustainable diversion practices, and fostering a waste reduction culture.

GOAL 5 Ensure all Adams County residents in unincorporated areas have access to recycling.

GOAL 6 Achieve 30% waste diversion at county-led events.

GOAL 7 Expand waste diversion and reduction practices in all new developments during construction.

GREENHOUSE GAS (GHG) FACTS



3% of GHG emissions are from waste, including solid waste and wastewater treatment, attributable to Adams County residents.

Methane, the most common GHG associated with waste disposal, is **28 times more potent than carbon dioxide** (U.S. EPA, 2020).



Organic waste (food and yard/landscaping waste) is a significant contributor to methane emissions in landfills.

WASTE AT A GLANCE (2019)

205 historic landfill sites



2 operating landfills

16.2% of waste diverted from landfills via recycling or composting in the Front Range (CDPHE)



Generated **520 pounds of compost** from 900 pounds of food waste in 2019 at the Adams County Government Center in compost machine pilot program

WASTE considers the consumption and disposal of municipal solid waste (e.g. paper, plastics, food), as well as hazardous, electronics, construction and demolition, metal, and other miscellaneous items (e.g. tires). Population growth directly contributes to increased consumption of goods that must be disposed of, either in landfills or via recycling or composting. In Colorado, only 15.9% of waste was recycled in 2019, down from 17.2% in 2018 and well below the national average of 35% (Setzke, Bailey, & Katz, 2020).



Unincorporated Adams County is currently served by many private haulers, which in the past has made it difficult to have set standards and consistent service offerings; and, many of them do not offer waste diversion options such as recycling or composting. Recycling requirements vary depending on hauler, further complicating the issue of waste diversion. In addition, it is challenging to obtain data from waste haulers to calculate local diversion rates for both community and county facilities. Two major landfills currently operate in Adams County: the East Regional Landfill and the Tower Landfill. Both of these landfills also serve other communities along the Front Range, impacting land use, traffic, and emissions in Adams County.

Reducing waste at the source by reducing consumption is important to preventing new materials from entering the waste stream. Reduced material use has added benefits of conserving resources in upstream supply chains. Integrated Solid Waste Management principles, which consider reduction, collection, composting, recycling, and disposal, can help address many of the challenges Adams County faces related to waste.

ROLE IN CLIMATE MITIGATION & ADAPTATION



The portion of GHG emissions attributable to solid waste in Adams County considers only the landfill emissions of waste; it does not include the supply chain impacts of production which can be significant. The emissions from processing waste are included in other sectors, such as energy. Therefore, reducing consumption and increasing diversion can have significant impacts on climate by reducing emissions in multiple sectors.

Climate change causes more severe weather events in Adams County, which may result in surges of waste due to damage to homes and businesses. Managing and reducing waste to ensure availability of landfill space in the future, particularly considering landfills in Adams County receive waste from many other areas, will need to be considered. Careful selection of building materials and resilient design standards with improved durability will also lead to less waste generation.

CONNECTION TO ADVANCING ADAMS

Waste is a significant component associated with new development as the county grows. Development code updates, following the adoption of the Advancing Adams plans, will encourage waste diversion during the development process.

Community *Action*

Here are just a few ways you can make an impact...

- Look for products with less packaging and are more durable long-term.
- Use refillable, rechargeable, and reuseable products when possible.
- Reduce food waste by buying only what you need, sharing with neighbors and community organizations, and composting.
- Don't put hazardous materials in the trash – [take to appropriate facilities or county-sponsored drop-off events](#).
- Shop at thrift stores instead of buying new clothes or items.



COUNTY FACILITIES

This focus area covers waste reduction and diversion in county facilities. County transactions that can be done electronically through Information Technology & Innovation and procurement policies are strategies that can reduce waste generation. A contracted private hauler is responsible for transporting and disposing waste generated through county operations. Strategies in this topic consider ways to measure waste to understand current operations, increase diversion, and address procurement (to reduce consumption and buy more sustainably).



SUCCESSSES

Adams County has had many sustainability successes related to this topic since the 2015 Sustainable Adams County plan. These include:

- **Increased use of recyclable materials** in county building materials and supplies
- Waste diversion efforts at Adams County Fair **increased the amount of waste diverted** from the landfill
- **Donations** of used office supplies and furniture to local nonprofit organizations and schools ([Supply Donation Program](#))
- Green Team installed a **compost machine** in the Government Center Public Works break room to pilot composting on site. Compost was provided to employees, the Master Gardening program, and revegetation efforts at the Dahlia Yard
- Individual offices **do not have trash cans**
- Fleet **recycles oils, sheet metal, and tires**
- **Online transactions** opportunities have been expanded:
 - » Many offices take transactions online
 - » ePermit system has allowed many building permits to be filed online
 - » Department of Motor Vehicles (DMV) services can be completed online
 - » Property taxes can be paid online
 - » Stormwater permitting is being transitioned to online

CROSS-CUTTING THEMES



Equity

- Transitioning to online transaction systems may adversely impact those in the community without access to technology or with concerns about security of online transactions.



Environmental Justice

- Pollutants from landfills impact communities of color and low-income communities disproportionately, as these populations typically live closer to landfills (e.g., Tower Landfill). Pollutants include methane emissions, blowing trash, and noise pollution.



Resiliency

- Reducing waste will increase the longevity of existing landfills and prevent the need for finding new sites that disrupt neighborhoods.
- Increased climate-related hazard events such as severe storms, tornadoes, fires, etc., increase debris waste. Purchasing more durable, more resilient materials can help reduce debris from hazardous events.
- Multiple methods for conducting county business transactions increase resilience in case of hazardous events or situations in which business cannot be conducted in person, and it caters to residents by letting them choose the method(s) they prefer.



GOAL 4

Reduce waste in county operations through source reduction, sustainable diversion practices, and fostering a waste reduction culture.

METRICS & TARGETS

Metric	2019 Baseline	2030 Targets
Diversion rate	None	Establish diversion rate through waste hauler tracking
Construction & demolition diversion rate by project	None	Establish by project
Number of employee education opportunities about sustainability and waste reduction	4 events	4 events (1 per quarter)

STRATEGIES

		Lead Division	Timing
4.1	Train employees on waste diversion and ways to reduce consumption	<i>Facilities</i>	Near-term
4.2	Develop countywide sustainable procurement policies and provide employee training	<i>Finance, Facilities</i>	Near-term
4.3	Explore commercial scale options and implement potential end-uses for organic waste (e.g. food, landscaping)	<i>Facilities</i>	Near-term
4.4	Develop low-waste event and meeting guidelines	<i>Facilities</i>	Near-term
4.5	Collect waste data for county facilities and operations	<i>Facilities</i>	Near-term
4.6	Continue shifting transactions online with considerations toward equity and accessibility	<i>Information Technology & Innovation</i>	Ongoing
4.7	Establish construction and demolition waste management policies for county facilities and projects	<i>Facilities</i>	Near-term

COMMUNITY

This focus area addresses solid waste generated in unincorporated Adams County and at county-wide events such as the county fair. The community produces waste across residential and business functions. As the community continues to grow, increased waste generation is likely to occur. Waste will also be generated in new developments that support the expected growth of the county. Residents in the Front Range produce an estimated 5.8 pounds of waste per day per person that is sent to landfills (CDPHE, 2020).

Strategies to address community waste include code changes, education and awareness, recycling events, procurement policies, legislative advocacy, economic development, and attracting recycling and zero-waste end markets.

SUCSESSES

Adams County has had several sustainability successes related to this topic since the 2015 Sustainable Adams County plan. These include:

- **County hosts recycling events** throughout the year, in conjunction with member communities, to collect electronics, household hazardous waste, and other hard-to-recycle materials
- Tri-County Health Department provides an [A-to-Z-Recycle-Guide](#) that includes the **drop-off options** for the various products



CROSS-CUTTING THEMES



Equity

- Reusable or environmentally friendly goods and materials are often more expensive and are therefore inaccessible for some community members.
- Different waste haulers result in differing services offered across the county, meaning some residents and businesses do not have recycling or composting options.



Environmental Justice

- Pollutants from landfills impact communities of color and low-income communities disproportionately, as they typically live in closer proximity to landfills (e.g. Tower Landfill). Pollutants include methane emissions, blowing trash, and noise and traffic pollution.
- There are 205 historic landfills in Adams County, highly concentrated along the Platte River. There are many adjacent neighborhoods and businesses adversely impacted by these landfills that still emit methane and other pollutants despite not being actively used (Vasarhelyi, 2021).



Resiliency

- Reducing waste will increase longevity of landfills and prevent the need for finding new sites and disrupting neighborhoods.
- Increased climate-related hazardous events such as severe storms, tornadoes, fires, etc., lead to increased debris waste.





GOAL 5

Ensure all Adams County residents in unincorporated areas have access to recycling.

METRICS & TARGETS

Metric	2019 Baseline	2030 Targets
Number of private haulers providing recycling	0%	100% of private haulers in unincorporated Adams County provide recycling
Pounds of hard-to-recycle waste collected	283,295 lbs.	30% increase over 2019 (368,400 lbs.)
Diversion rate	16.2%	35%

STRATEGIES

Lead Division

Timing

5.1	Continue supporting hard-to-recycle waste events	<i>Environmental Programs</i>	Ongoing
5.2	Adopt waste hauler licensing ordinance and regulations	<i>Environmental Programs</i>	Near-term
5.3	Provide yard waste drop-off voucher program for unincorporated Adams County residents and businesses	<i>Environmental Programs</i>	Near-term
5.4	Hire Integrated Waste Management Specialist	<i>Environmental Programs</i>	Near-term
5.5	Conduct waste diversion education and outreach campaign	<i>Environmental Programs, Economic Development</i>	Mid-term
5.6	Provide neighborhood waste diversion opportunities	<i>Community Safety & Well-Being, Public Works</i>	Mid-term
5.7	Administer reporting system to track waste hauler annual recycling, composting, and landfilling metrics	<i>Environmental Programs</i>	Mid-term



GOAL 6

Achieve 30% waste diversion at county-led events.

METRICS & TARGETS

Metric	2019 Baseline	2030 Targets
Diversion rate at county-led events (e.g. Adams County Fair, Stars & Stripes)	N/A	50%

STRATEGIES

		Lead Division	Timing
6.1	Establish procurement requirements for event vendors and develop incentives to meet requirements	Fair and Special Events	Near-term
6.2	Develop zero waste guidelines for County events and facility rentals	Fair and Special Events	Near-term
6.3	Establish zero-waste volunteer program for county-led events	Fair and Special Events	Mid-term
6.4	Partner with Eco-Cycle for zero-waste events	Fair and Special Events	Mid-term





GOAL 7

Expand waste diversion and reduction practices in all new developments during construction.

METRICS & TARGETS

Metric	2019 Baseline	2030 Targets
Diversion rate	16.2%	35%
Construction and Demolition (C&D) Waste Diversion Rates	N/A	Per Project Waste Management Plans

STRATEGIES

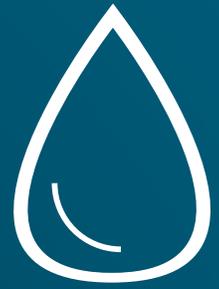
Lead Division

Timing

7.1	Advocate at state level for integrated waste management policies	<i>Legislative Affairs</i>	Ongoing
7.2	Update development standards to encourage all development projects to include construction and demolition debris recycling, composting, and data tracking	<i>Development Services</i>	Near-term
7.3	Incentivize circular economy, recycling, and other zero-waste markets	<i>Economic Development</i>	Mid-term



WATER



GOAL 8 Improve water use efficiency in county facilities and parks and promote the use of non-potable water supplies where available and feasible (including in public works operations).

GOAL 9 Promote water use efficiency for new and redeveloped residential and commercial properties in unincorporated Adams County.

WATER AT A GLANCE (2019)

Over 50 public water systems



Only **80%** of current agricultural demand is met on a statewide basis

Municipal and industrial water supplies are expected to have a **gap between supply and need between 250,000 and 750,000 acre feet (AF) by 2050**



More than **12%** of the South Platte River Basin's irrigated area **is expected to urbanize**, compared to 5% statewide

WATER is one of the most critical resources needed in our daily lives and is a cornerstone of Adams County’s heritage. Water supports community health and wellness by connecting community members with clean drinking water, water for cooking and cleaning, and water for recreation. Water supports the county’s economic prosperity across all business sectors, particularly agriculture and residential development. Water also supports county operations, including roadway maintenance and construction and parks maintenance. Finally, water is an iconic part of Adams County’s landscape. The South Platte River, one of eight major river systems paramount to Colorado’s identity as a headwater state, flows through the western portion of Adams County.

However, Colorado suffers from a gap between water supply and demand. The agricultural sector already experiences a 20% gap between available supply and demand. By 2050, this gap is expected to grow – between 18-43% beyond the current gap – despite an anticipated decline in irrigated area due to urbanization, aquifer sustainability, and agriculture to water transfers (CWCB, 2015). Though municipal and industrial (M&I) demands don’t currently experience a gap, the Colorado Water Plan estimates a gap ranging between 250,000 acre-feet (AF) to 750,000 AF annually by 2050, depending on realized climate impacts, population growth, economic growth, and conservation efforts (CWCB, 2015).

Despite these projected gaps, the Colorado Water Plan models show aggressive conservation efforts can significantly reduce projected gaps. For instance, assuming predicted temperature increases and significant population growth, municipal conservation efforts can reduce projected gaps by 325,000 AF (CWCB, 2015). Given these projected gaps between supply and demand, and the importance of a healthy community, economy, and environment to Adams County, it is crucial the county and community make best use of available water resources.

ROLE IN CLIMATE MITIGATION & ADAPTATION

Colorado’s climate is becoming hotter and drier. Additionally, climate change has increased the frequency and severity of droughts, wildfires, and flooding. All of these factors increase stress on the availability and quality of water supply.

Water contributes to GHG emissions indirectly through the energy used to pump, treat, and heat water. Thus, improving water efficiency decreases emissions through the “energy-water nexus.”

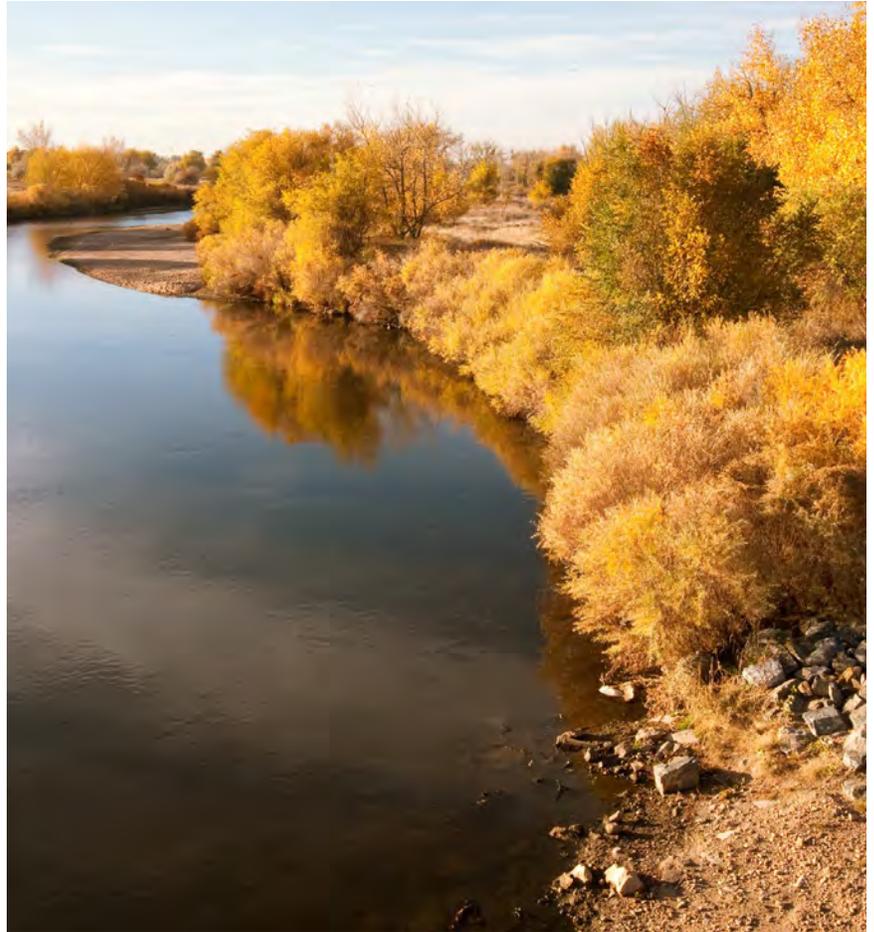
ESTIMATING THE ECONOMIC IMPACTS OF CLIMATE CHANGE

The Colorado Water Conservation Board developed the [Future Avoided Cost Explorer: Colorado Hazards](#) tool to estimate a range of annualized economic impacts associated with population growth and climate change. The tool allows users to select a population growth scenario (current, low growth, medium growth, high growth) and a climate scenario (current, moderate climate change, more severe climate change). Users can then explore economic impacts, by county, associated with drought, flood, and wildfire. Economic impacts are calculated for agriculture, infrastructure, recreation, and fire suppression costs. Depending on future population and climate conditions, the model predicts Adams County could see between \$3.6 million and \$11 million in annual damages due to drought.

CONNECTION TO ADVANCING ADAMS

Comprehensive plans can play a foundational role in water conservation by setting water-related goals and objectives, and integrating water-related policies and actions throughout the plan. Importantly, future land use and population growth will drive future water demands. For instance, encouraging smaller lots with less irrigable area may drive down water demand compared to larger lots with large, irrigated areas. The strategies in this sustainability plan complement water-saving efforts by promoting better data tracking and management for county facilities and water-saving strategies for both county facilities and the community.

The strategies in this sustainability plan also support the POST Plan by promoting the efficient use of water in parks and open spaces. See the Land section for connections to water quality.



Community *Action*

*Here are just a few ways you
can make an impact...*

- Take a look at your water utility bill and compare your use in summer versus winter months. This change is largely due to outdoor irrigation. Consider installing a more efficient irrigation system or even replacing a portion of your turf with low-water plants to see savings on your summer bill.
- Check out your water provider's website to see what programs, rebates, and educational opportunities they offer.
- Pay attention to your water bill – if you see big spikes that don't make sense based on how much water you've been using, you may have a leak that needs to be addressed.

COUNTY FACILITIES

Water is critical to county operations, including facility use, irrigation of parks and open spaces, public works operations (e.g. sweeping, fugitive dust control, gravel surfacing, gravel reclamation, and routing grading), and contractor use. The county owns facilities along with multiple parks and open spaces, all of which use a combination of potable and non-potable water supplies for domestic indoor use, cooling, irrigation, and other uses. The county receives potable water from multiple municipal water systems as well as non-potable water from ditch companies and groundwater wells. Riverdale Regional Park has its own water system that pumps and treats groundwater from the Lower Arapahoe Aquifer.

Water use data were analyzed for the period 2011-2020. Potable water use associated with county buildings has declined compared to 2011-2012, when the county implemented some indoor efficiency measures, and the statewide drought led to outdoor watering restrictions. Potable water associated with county buildings use has remained relatively flat since, for the period 2013-2020. In most cases, water use metering is combined, measuring both indoor and outdoor uses, and making it challenging to characterize water use and water savings opportunities. However, seasonal analysis and knowledge of on-site end uses can aid in the estimation of water use by end use type. A preliminary analysis of water-saving opportunities identified the following facilities to prioritize for action over the next several years.

BY THE NUMBERS



County facilities use **60 million gallons/year** of potable water, equivalent to usage in almost **500 single family homes** for one year.

The county uses **264 million gallons** of water (mostly non-potable) per year to irrigate the regional park, golf courses, and satellite parks.



Public Works uses about **5 million gallons** of water (approximately 99% non-potable) per year for operations.



FACILITY	POTENTIAL OPPORTUNITY
District Attorney office	High outdoor use
Justice Center	High outdoor use
Strasburg Public Works	High indoor and outdoor use
Sheriff & Coroner's offices	High indoor use
Jail	High indoor use
Public Works	High use

SUCCESSSES

Adams County has had several sustainability successes related to this topic since the 2015 Sustainable Adams County plan. These include:

- **Total potable water dropped significantly** between 2012 and 2013 and Adams County continues to pursue water efficiency projects on county properties.
- The county consistently **coordinates capital improvement road projects with water districts** to allow them to upgrade their older water systems and avoid water breaks on new pavement.
- Most of the county's water use is supplied by **raw water rather than potable water**.
- Adams County continues to improve water use tracking in **EnergyCAP** to distinguish between raw and potable water use, etc.



CROSS-CUTTING THEMES



Equity

- Colorado experiences a drought somewhere across the state in nine out of every 10 years. Improving the efficient use of water will help ensure Adams County can maintain levels of service in parks, open spaces, and public works, even in drought years.



Environmental Justice

- Public Works operations use water to conduct gravel maintenance, which reduces particulate matter air pollutants and improves air quality in rural areas.



Resiliency

- Colorado is projected to have a gap in water supply and demand in the future. Reducing reliance on potable water sources for facilities, parks, and county operations may increase Adams County's ability to cope with future water shortages.

GOAL 8

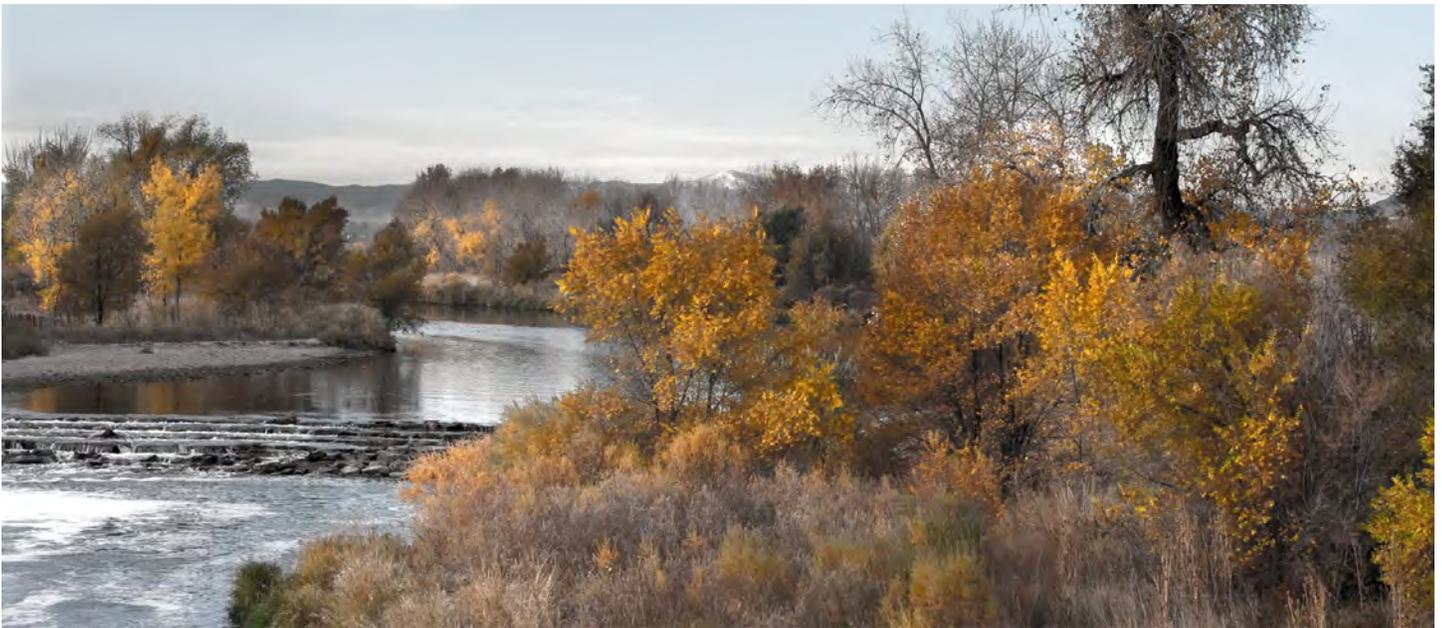
Improve water use efficiency in county facilities and parks and promote the use of non-potable water supplies where available and feasible (including in public works operations).

METRICS & TARGETS

Metric	2019 Baseline	2030 Targets
<i>Facilities</i>		
Indoor water use (total per sq. ft.)	80% of facilities met indoor efficiency benchmark	Meet all efficiency benchmarks for indoor domestic
Outdoor water use (total per sq. ft.)	33% of facilities met outdoor efficiency benchmark	Meet all efficiency benchmarks for outdoor irrigation use
% of water supply that is non-potable	4% of water use was non-potable	Maintain or increase percent of water supply that is non-potable
<i>Parks and Open Space</i>		
Outdoor water use (total per sq. ft.)	100% of parks met outdoor efficiency benchmark	Meet all efficiency benchmarks for outdoor irrigation use
% of water supply that is non-potable	92% of water use was non-potable	Maintain or increase the percent of water supply that is non-potable
<i>Public Works Operations</i>		
% of water supply that is non-potable	99% (estimated)	Maintain or increase the percent of water supply that is non-potable

STRATEGIES

		Lead Division	Timing
8.1	Analyze water use annually	<i>Facilities, Parks, Public Works Operations</i>	Ongoing
8.2	Implement new water conservation measures	<i>Facilities, Parks, Public Works Operations</i>	Ongoing
8.3	Monitor local and state regulations and policies	<i>Facilities, Parks, Public Works Operations</i>	Ongoing
8.4	Train employees on water-efficient practices	<i>Facilities, Parks, Public Works Operations</i>	Near-term
8.5	Centralize water use data management	<i>Facilities, Parks, Public Works Operations</i>	Near-term
8.6	Install water sub-metering and/or smart meters	<i>Facilities, Parks, Public Works Operations</i>	Near-term
8.7	Conduct on-site water assessments	<i>Facilities, Parks, Public Works Operations</i>	Near-term
8.8	Explore options to self-supply non-potable water	<i>Facilities, Parks, Public Works Operations</i>	Mid-term
8.9	Monitor water provider surplus water programs	<i>Facilities, Parks, Public Works Operations</i>	Mid-term



COMMUNITY

Increasing development density is correlated with decreasing water use, primarily attributable to reduced lot size and outdoor irrigation demand. Adams County is supportive of growth and development but also strives to encourage efficient use of the water supply. Each year, approximately 50-60% of total water use is for supplemental irrigation, representing a significant opportunity for water savings through a combination of low-water-using plants and efficient irrigation systems and practices. The strategies in this section focus on reducing outdoor water use for existing development by promoting the adoption of water-saving technologies and landscaping; and, for new development by promoting the use of C-PACE to incorporate water efficiency projects into new and redevelopment.

Water service in the county is fragmented, with almost 50 public water systems, including many municipal and special district water providers. Residents living in rural areas of unincorporated Adams County rely on private domestic water wells (also known as self-supplied use) rather than being served by a centralized water system. Self-supplied use presents a challenge in terms of ensuring equitable water quality, service, and reliability.

SUCCESSSES

Adams County has had several educational successes related to this topic since the 2015 Sustainable Adams County plan. These include:

- **County educates the public through programs such as:**
 - » Rain barrel education for homeowners
 - » Watershed models that are loaned out

CROSS-CUTTING THEMES



Equity

- There are over 50 water providers in Adams County, and many self-supplied users, making it difficult to ensure equity of service (e.g. water quantity, quality, reliability, access to conservation programs).



Resiliency

- Conservation can be considered a “new water supply” and can help stretch how far the current supply can go. For instance, a decline in water use per capita can increase the total population Adams County could support at full build out. However, the county must consider other potential uses (e.g. economic development, environmental protection) to determine the best use for the conserved water.
- Using native, low-water landscaping can add co-benefits such as boosting community aesthetic and providing habitat for pollinators.

GOAL 9

Promote water use efficiency for new and redeveloped residential and commercial properties in unincorporated Adams County.

METRICS & TARGETS

Metric	2019 Baseline	2030 Targets
Number of impactful actions to improve indoor and outdoor water use efficiency	N/A	Take 4 actions, preferably one per strategy category (Education, Financing, Codes, Programs)

STRATEGIES

		Lead Division	Timing
9.1	Conduct a water conservation and awareness campaign	<i>Communications, Development Services</i>	Ongoing
9.2	Promote C-PACE and Performance Contract programs to incorporate water efficiency for development and redevelopment projects	<i>Communications, Economic Development</i>	Ongoing
9.3	Develop a comprehensive countywide Water Element to complement the county's Comprehensive Plan	<i>Development Services</i>	Near-term
9.4	Develop a webpage to connect residents and businesses with water-saving resources	<i>Communications</i>	Near-term
9.5	Develop and adopt water-wise appliance, fixture, landscaping, and irrigation standards into building, landscape, and development codes	<i>Development Services, Building Safety</i>	Near-term
9.6	Develop financial incentive programs to promote water efficiency for residents and businesses	<i>Development Services, Economic Development</i>	Mid-term



LAND



GOAL 10

Acquire and conserve land that sustains the level of service of parks and open space for economic, social, and environmental benefits.

LAND AT A GLANCE (2019)

54 acres per 1,000 residents of publicly accessible parks, open space, and trails (POST Plan Existing Conditions)



5 developed parks



5 open space areas



40.75 miles of trails managed

Over the past 15 years, developed area land cover has **increased by 28%**, agricultural lands have **increased by about 2%**, and vegetative land cover has **decreased by nearly 9%**



LAND is central to Adams County’s heritage – whether it’s access to thousands of acres of conserved open space or the important role agriculture plays in supporting a thriving economy. Well-protected lands can provide innumerable benefits, including improved water quality and air quality, enhanced biodiversity, and even community health and well-being. However, development trends have put significant pressure on Adams County’s land, threatening the quantity and quality of protected open space. For instance, as a result of development and industrial and agricultural activity, water quality in the South Platte River has long been impaired in this area, even though some tributary waterways in the county are protected through the Natural Resource Conservation Overlay zone (Adams County, 2021).

While there exist opportunities to reduce the environmental impacts of Adams County’s agricultural land, the land remains an important opportunity for maintaining ecosystem services and economic production within the county. Statewide trends of transferring water from the agricultural sector to the local government sector are contributing to the loss of agricultural land.

The strategies in this section focus on continuing the county’s great work of preserving new open space and supporting the adoption of the POST plan. Note that while the strategies in this sustainability plan do not directly address agriculture, agriculture remains an important component of Adams County’s heritage and is addressed through the Advancing Adams plans.

ROLE IN CLIMATE MITIGATION & ADAPTATION

Though not accounted for in the county’s GHG emissions inventory, land management plays a critical role in both climate mitigation and adaptation. Land conserved as a natural resource can provide significant carbon sequestration opportunities. Healthy ecosystems pull carbon dioxide from the air and store the carbon in vegetation and in the soil. Additionally, every acre of conserved land is land not used for carbon-intensive development.

Conserved land also plays an important role in protecting communities against the impacts of climate change, such as flooding and wildfire. For instance, many ecosystems provide flood control by allowing water to soak into the vegetation and soil rather than running off and flooding urban areas.

SUCCESSSES

Adams County has had many sustainability successes related to this topic since the 2015 Sustainable Adams County plan. These include:

- Adams County voters approved a **permanent extension to the County Open Space Sales Tax** in 2020 that continues to fund the acquisition of open space.
- **Water quality monitoring programs** leverage community volunteers and a partnership with the Colorado School of Mines to monitor quality along Clear Creek.
- The county works closely with the Mile High Flood District to **enhance the regional drainage system** by purchasing land within floodplain areas, which also serves to preserve open space.

CONNECTION TO ADVANCING ADAMS

The strategies in this sustainability plan seek to support the POST plan by providing additional resources to operational activities in support of the POST plan goals. The targets and strategies tie directly to the POST plan.

Community Action

Here are just a few ways you can make an impact...

- Create a native oasis around your home by planting native trees, shrubs, grasses, and flowers.
- Find the nearest park or natural area and plan a trip to visit it. See if you can get there by carpooling, using public transit, or biking.

CROSS-CUTTING THEMES



Equity

- Adams County residents should have equitable access to land and water resources for recreation purposes.



Environmental Justice

- Disproportionately impacted communities may have less access to parks and open space compared to other communities in the county, which further exacerbates discrepancies related to environmental and public health.



Resiliency

- Resource conservation helps mitigate damage from climate change, such as reduced water availability during times of drought.

GOAL 10

Acquire and conserve land that sustains the level of service of parks and open space for economic, social, and environmental benefits.

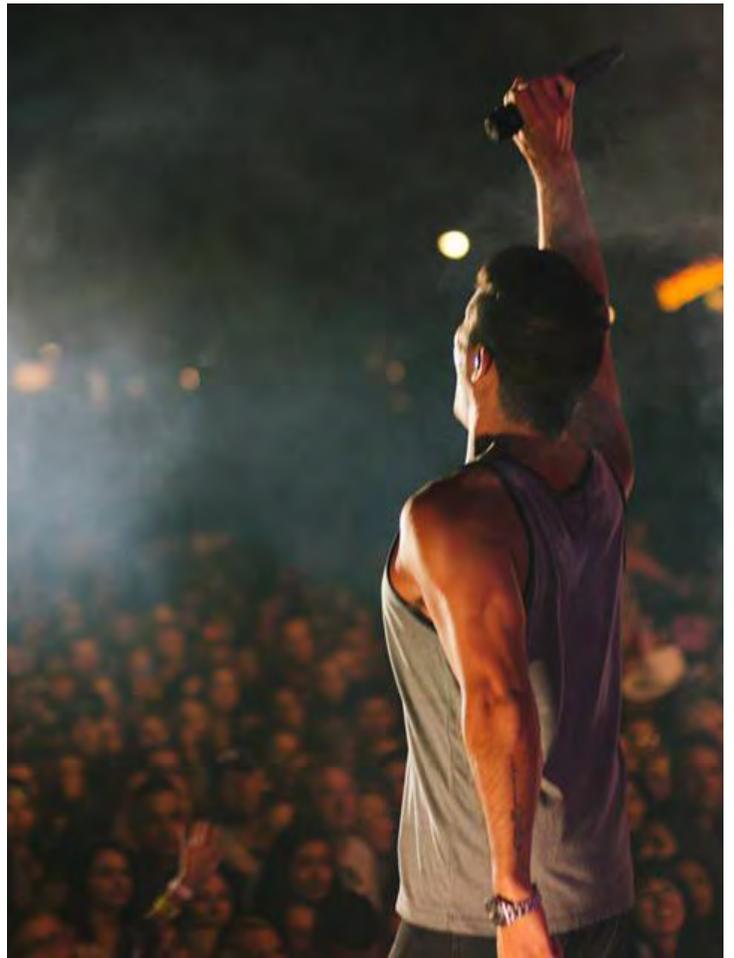
METRICS & TARGETS

Metric	2019 Baseline	2030 Targets
Acres of county-owned conservation easements	6,000 acres in conservation easements	Maintain or increase from 2019
Acres of county-owned land	3,000 acres in fee simple	Maintain or increase from 2019

STRATEGIES

	Lead Department	Timing
10.1 Continue using County Open Space Sales Tax dollars to acquire and conserve land	<i>Parks, Open Space & Cultural Arts</i>	Ongoing
10.2 Support implementation of the Adams County Parks, Open Space, and Trails Master Plan and the Riverdale Regional Park Master Plan	<i>Parks, Open Space & Cultural Arts</i>	Near-term







SUSTAINABLE INFRASTRUCTURE



GOAL 11

Use sustainable infrastructure in Public Works projects to maximize economic, environmental, and social durability and minimize economic impacts from natural hazards.

SUSTAINABLE INFRASTRUCTURE AT A GLANCE (2019)

Adams County is an **Institute for Sustainable Infrastructure ENVISION Supported Agency**



3 ENV SP on staff

FEMA Community Score of 9
allows residents to receive discounts on
flood insurance premiums



25 green public and private infrastructure projects
implemented through 2019

SAFE, RELIABLE INFRASTRUCTURE

is one of Adams County's core operational goals to support quality of life for residents and employees, meet the needs of businesses, and support economic development. In the context of this sustainability plan, infrastructure is primarily related to the county's Public Works Department Capital Improvement Program (CIP), which addresses projects in stormwater management, roadways, and more.

As development occurs in Adams County, so too does the need for roads and stormwater management. Without careful consideration and planning, development can fragment wildlife corridors, increase impervious areas and urban stormwater runoff, reduce groundwater infiltration, and reduce the amount of agricultural and rural land (that may have other, more beneficial, uses). Water quality can also be adversely impacted by construction and urban runoff.

Sustainable infrastructure focuses on incorporating sustainability and resiliency concepts into the design and construction of infrastructure projects.

ROLE IN CLIMATE MITIGATION & ADAPTATION

Climate change results in less frequent but more intense rainfall events, leading to larger volumes of stormwater that must be managed to minimize flooding damage. Green stormwater management practices aid in managing additional stormwater runoff and protecting water quality.

Climate change also causes added heat stress, as temperatures are expected to rise 2.5°F to 5°F by 2050 (Adams County, 2021). Sustainable infrastructure practices, such as maintaining tree canopies, reduce urban heat island effects through expanding the quality and quantity of green space. Green space also improves air quality, which is a significant issue impacting the Adams County community.

SUCCESSSES

Adams County has had many sustainability successes related to this topic since the 2015 Sustainable Adams County plan. These include:

- **County educates the public through programs** like storm drain marking, rain barrel education for homeowners, watershed models that are loaned out, and free stormwater audits for businesses.
- **Promote water quality** through free stormwater audits for businesses, stormwater illicit discharge education, "Adopt a Spot" programs, and Creek Day Cleanup events.
- Adams County was the first county in Colorado to become an **Institute for Sustainable Infrastructure ENVISION Supported Agency**, leveraging the ENVISION sustainable infrastructure framework on public works CIP projects. Three staff members are certified as ISI Envision sustainability professionals as of 2021. ENVISION for public infrastructure is similar to LEED certification for buildings.
- **Consistently coordinate CIP road projects with water districts** to allow them to upgrade their older water systems and avoid water breaks under new pavement.
- Public Works Stormwater Division assists the Community & Economic Development (CED) Department in **reviewing low-impact development (LID) techniques for new developments and redevelopments** larger than one acre in urbanized areas.

CONNECTION TO ADVANCING ADAMS

As the development code is updated following the adoption of the Advancing Adams plans, barriers to low-impact development and green infrastructure (GI) should be eliminated.

Community Action

Here are just a few ways you can make an impact...

- Build a [rain garden](#) at your home or business
- Keep fertilizers, yard waste, food waste, auto fluids, and animal waste out of stormwater drains
- Participate in public meetings about infrastructure projects to understand impacts and provide feedback to ensure projects are meeting the needs of the community

CROSS-CUTTING THEMES



Equity

- During community engagement phases of capital improvement projects, ensure all community member voices are heard by providing a range of opportunities to provide feedback and share project updates.
- Understand the social impacts of CIP projects on communities and incorporate ways to address or mitigate impacts. Social impacts might include impacts to public health, safe pedestrian access to services, or the exclusion of impacted communities from the process.



Environmental Justice

- Disproportionately impacted communities are exposed to flooding, water pollution, urban heat island effects, poor air quality, and other environmental hazards, and often lack the resources needed to relocate during emergency events and recover afterward. Incorporating sustainable infrastructure practices into county projects can make green space more accessible to these communities.



Resiliency

- Sustainable infrastructure solutions help mitigate the damages from climate and natural hazards, increase resilience to flood events, reduce urban heat island effects, and help prepare for drought by relieving stress on local water supplies.

GOAL 11

Use sustainable infrastructure in Public Works projects to maximize economic, environmental, and social durability and minimize economic impacts from natural hazards.

METRICS & TARGETS

Metric	2019 Baseline	2030 Targets
<i>Green Stormwater Management Approaches</i>		
FEMA Community Rating Score	9 ¹	7
Number of regional flood control/detention facilities implemented from Master Drainage Studies ²	1 (channels excluded) 3 (channels included)	Increase by 1 to 2
Number of local water quality facilities owned and maintained by Adams County ³	12 (local, public water quality-only ponds)	Increase by 5 constructed
Tree replacement rate (based on number of trees) ⁴	0% (replacement program started in 2020)	100% replacement rate
<i>Sustainable Infrastructure</i>		
Number of ENVISION credits incorporated on each project	0	4 credits on 80% of projects
Number of ENVISION certified staff	1 ⁵	30% of inspection and engineering staff
Number of coordination meetings between Public Works and Utility/District partners	1	2 annually
<i>Community Education Programs</i>		
Percent of dry outfalls inspected for illicit discharges every five years in urbanized areas	50%	100%
Number of stormwater educational activities above MS4 Permit minimum requirements.	4	10

1 FEMA Score 8 in 2021

2 Starting definition: Where regional is defined as serving >300 acre upstream stormshed, detention for flood control

3 Starting definition: Water-quality only ponds and rain gardens; trends are using regional facilities for detention/flood control and local facilities for water quality.

4 Conditional to the terms and conditions approved by County Attorney

5 Three staff members ENVISION certified as of 2021

STRATEGIES

		Lead Department	Timing
11.1	Incorporate Green Infrastructure and Low-Impact Development concepts into public works projects	<i>Public Works</i>	Ongoing
11.2	Implement master drainage studies	<i>Public Works</i>	Ongoing
11.3	Coordinate with utility and service provider partners to minimize future maintenance and infrastructure needs	<i>Public Works</i>	Ongoing
11.4	Plan community education events	<i>Public Works</i>	Ongoing
11.5	Expand the Tree Amenity Program	<i>Public Works</i>	Near-term
11.6	Develop and adopt resilient design performance standards for infrastructure, considering future impacts of climate change and adaptation ability	<i>Public Works</i>	Near-term
11.7	Execute a Public Works executive order that CIP projects be evaluated for ENVISION criteria, as appropriate, based on project function	<i>Public Works</i>	Mid-term
11.8	Include sustainability and resiliency considerations as part of procurement processes for infrastructure projects	<i>Public Works</i>	Mid-term





TRANSPORTATION



GOAL 12 Decrease county fleet emissions through vehicle and operational efficiency and fuel switching.

GOAL 13 Support EV mobility and infrastructure across all of Adams County.

GOAL 14 Support alternative modes of transportation and enhance mobility for all Adams County residents.

GREENHOUSE GAS (GHG) FACTS

 **34% of community GHG emissions** are from the transportation sector

An estimated **44% of county operations emissions** are related to transportation



TRANSPORTATION AT A GLANCE (2019)

78% of workers living in Adams County drive alone to work (U.S. Census Bureau, 2019)



 Approximately **1% of total vehicles** registered in Adams County are **electric or hybrid vehicles**

40.75 miles of trails maintained by Adams County



500+ fleet units used for county operations

Over **300,000 gallons of gasoline** and over **240,000 gallons of diesel** consumed by county fleet vehicles



TRANSPORTATION is one of the leading contributors to GHG emissions (GHG) and air pollutants in Adams County. Specifically, transportation contributes to ozone, carbon monoxide (CO), and particulate matter (PM 2.5, PM 10), which have significant and detrimental public health and environmental impacts (EPA, 2020). Several major interstates and highways run through the western portion of Adams County, disproportionately impacting nearby community members with noise and air pollution. Adams County is part of an EPA-designated eight-hour ozone nonattainment zone, highlighting the severity of the issue.

Reducing the number of total miles traveled by community members, supporting the adoption of alternative modes of transportation (e.g. carpooling, public transit, biking, and walking) and supporting the adoption of EVs can all reduce transportation-related emissions and air pollution. 71% of Adams County residents commute outside the county for work (U.S. Census Bureau, 2018) and 78% of workers living in Adams County drive alone to work (U.S. Census Bureau, 2019). This dominance of solo travel represents a significant opportunity to improve the sustainability of transportation.

However, Adams County faces several additional transportation challenges. For instance, the county does not own or operate a transit service, relying on the Regional Transportation District (RTD) to provide transit for a portion of the county. Though RTD's N-Line provides access to public transit for a portion of the county, residents in the central and eastern portions do not have access to public transit. Large portions of the county do not have high enough density to support alternative modes of transportation like public transit or bike infrastructure. Improving the sustainability of transportation in Adams County will require a coordinated and comprehensive effort with member jurisdictions and regional partners and organizations.

ROLE IN CLIMATE MITIGATION & ADAPTATION

Transportation is the second highest contributor to Adams County's GHG emissions. As electricity continues to transition to renewable energy sources, transportation is likely to become a larger portion of total emissions.

The majority of transportation emissions are associated with the total number of miles traveled by vehicles and the fuel efficiency of the vehicles. Though internal combustion engines have generally become more fuel efficient, they still contribute significantly to GHG emissions and also produce pollutants that exacerbate ozone and air quality issues in Adams County. These pollutants disproportionately impact communities along or near major transportation corridors.

Mitigating the impacts of the transportation sector, both for the purpose of lowering GHG emissions and improving the health of Adams County community members, can be accomplished by reducing the total amount of community travel, shifting travel to less impactful modes of transportation (e.g. walking, biking, public transit, carpooling), and increasing fuel efficiency. EVs are likely to play an important role in GHG and air pollution reduction, as they produce virtually no tail pipe emissions or pollutants.

CONNECTION TO ADVANCING ADAMS

Given the importance of development in determining the viability of transportation options, Adams County's Comprehensive Plan will be an important factor in the county's transportation future. Specifically, a more intentional approach to guiding density and developing multimodal hubs is required to support alternative modes of transportation in eastern Adams County. This sustainability plan supports Comprehensive Plan policies related to density and multimodal hubs.

The strategies outlined in this sustainability plan support Transportation Master Plan policies and infrastructure recommendations by calling for additional implementation capacity. The sustainability plan also supports the implementation of the POST plan through education and outreach to promote the use of trails.

Community *Action*

*Here are just a few ways you
can make an impact...*

- Taking a short trip? Walk, run, bike, scoot, or skate to nearby places.
- Consider mixing transportation modes, such as biking to an N-Line stop to go to downtown Denver.
- Challenge yourself to combine trips into one outing to cut down on total miles traveled.
- Do you travel more than 15 miles each way to work? Enroll in [Way to Go](#) vanpooling.
- Use [online tools](#) to see if an EV is right for you. Make sure to [leverage tax incentives and rebates](#) to lower the upfront costs.
- Check out [Smart Commute Metro North](#) to learn more about alternative commuting options, rewards for smart commuters, and even fun events.



COUNTY FLEET AND TRANSPORTATION

The county owns and operates over 500 fleet units, including passenger vehicles, off-road vehicles, heavy-duty trucks, buses, sweepers, and heavy equipment. As county operations continue to grow, so will the size of the fleet. Reducing total vehicle miles traveled (VMT) may be impractical given both the size of county operations and its growing fleet. Other options, like medium- and heavy-duty vehicle electrification, are still in the early stages of market offerings. Still, given that fleet operation contributes significantly to county operations emissions, identifying and adopting more sustainable transportation practices – such as maximizing route efficiency, reducing idling, and transitioning to alternative fuels – presents a significant opportunity for the county to decrease emissions and show leadership in transportation decarbonization.

SUCCESSSES

Adams County has had several sustainability successes related to this topic since the 2015 Sustainable Adams County plan. These include:

- Fleet includes **13 hybrid vehicles and 1 EV.**
- **Installed 6 new charging stations**, including 4 publicly available stations
- Public Works **reduced VMT for gravel operations by 24%** by hiring more efficient contractors for gravel maintenance.
- Began using **20% biodiesel blends** in medium-/heavy-duty vehicles in 2021

CROSS-CUTTING THEMES



Environmental Justice

- Transportation emissions and noise pollution from transportation have significant adverse impacts on communities located nearest highways and major roads. Reducing fleet noise and emissions can help alleviate these impacts.



Resiliency

- Transitioning to electric transportation options has the additional benefit of reducing gasoline and diesel transport, reducing the risk of spills and pollution.
- EVs can also act as energy storage when charged. They can be connected to building infrastructure (vehicle to building systems) to provide bi-directional power.



GOAL 12

Decrease county fleet emissions through vehicle and operational efficiency and fuel switching.

METRICS & TARGETS

Metric	2019 Baseline	2030 Targets
Total VMT for county operations	5,691,515	No target (tracking only)
Gallons of fuel consumed	302,927 gal. gasoline 242,418 gal. diesel	No target (tracking only)
Hours of idling during county operations	N/A	Decrease hours of idling by 50%
Percent of eligible light-duty vehicles converted to electric	1 EV (% TBD)	Electrify 75% of eligible light-duty vehicles
Percent of eligible medium- and heavy-duty vehicles replaced with EVs or using B-20 blends.	0	Convert 25% of medium- to heavy-duty vehicles to alternative fuels

STRATEGIES

Lead Department Timing

12.1 Encourage virtual meetings when feasible	<i>County Manager's Office</i>	Ongoing
12.2 Develop and implement EV procurement plan	<i>Fleet</i>	Ongoing & Near-term
12.3 Continue converting heavy-duty fleet vehicles to biofuels	<i>Fleet</i>	Ongoing & Near-term
12.4 Develop and implement anti-idling policy	<i>Fleet</i>	Near-term
12.5 Maximize efficiency of operational routes	<i>Fleet</i>	Near-term

COMMUNITY

Supporting safer, more efficient, and cleaner transportation options in Adams County will require a coordinated approach across departments and via partnerships with member jurisdictions and regional organizations. There are a wide range of options available to Adams County community members, including RTD's N-Line, MyWaytoGo vanpooling program, and A-Lift paratransit service. Additionally, while EVs currently represent a small portion of total vehicle registrations in Adams County, EV infrastructure is expected to grow across the region, allowing community members to recharge in more places. Still, the vast majority of these alternative transportation opportunities are unavailable or inadequate for community members living in the eastern portion of Adams County. The goals and strategies below aim to improve mobility for all Adams County community members, while reducing the GHG emissions and air pollutants associated with transportation.

SUCSESSES

Adams County has had many sustainability successes related to this topic since the 2015 Sustainable Adams County plan. These include:

- Community Development Block Grants (CDBG) funded **multimodal transportation projects** in unincorporated county and member communities.
- Adams County encourages community members to use **MyWaytoGo** (a vanpooling program) in partnership with Denver Regional Council of Governments (DRCOG).
- **A-Lift provides free paratransit service** for Adams County residents ages 55 years or older.
- **RTD N-line opened in 2020**, providing service from north Adams County to Denver's Union Station.
- **Transit-oriented development (TOD) guidelines** lay the foundation for future multimodal hubs.



CROSS-CUTTING THEMES



Equity

- Access to alternative transportation networks is limited, especially in rural parts of the county. The first-mile and last-mile connections (i.e. from home to transit stops or from transit stops to final destination) are also limited and can be a barrier to alternative transportation options for community members.
- Access to high-quality, ADA-accessible sidewalks and protected bike lanes should be equitable across neighborhoods and member communities.
- Compact development can increase access to transportation options.
- Equity needs to be considered when transitioning to EVs, as there can be significant associated upfront costs.



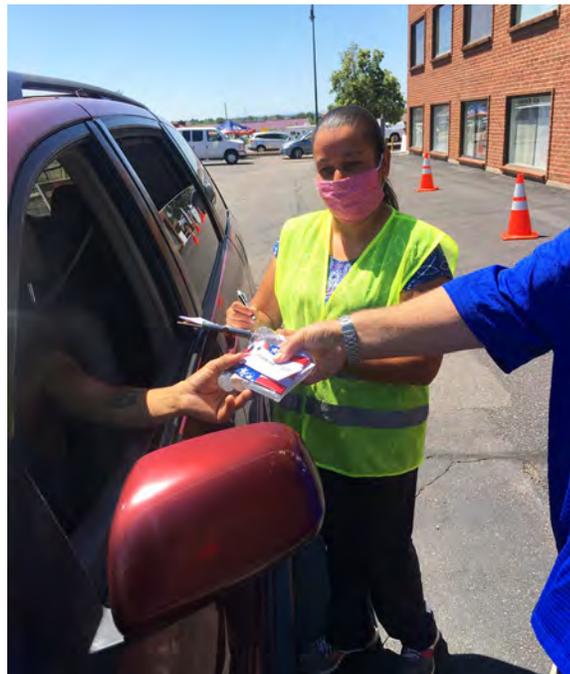
Environmental Justice

- Disproportionately impacted communities often have inadequate transportation infrastructure, putting these communities at greater risk for transportation safety concerns (e.g. ADA non-compliant sidewalks).



Resiliency

- During hazard events, a range of transportation options for community members can increase community resilience. For instance, robust transit opportunities can allow community members to safely get to work even during heat waves or snow storms, when it may be unsafe to bike or walk.
- Natural hazards – such as floods and winter storms – can cut off transportation corridors needed by emergency services and residents.
- Natural hazards can limit alternative modes of transportation such as transit, biking, and walking. This restriction can have a disproportionate impact on communities reliant on those modes of transportation (e.g. community members without access to a vehicle).





GOAL 13

Support EV mobility and infrastructure across all of Adams County.

METRICS & TARGETS

Metric	2019 Baseline	2030 Targets
Reduce vehicle miles traveled per capita	9,500 miles	Tracking only
Reduce single occupancy vehicle mode split	80%	Tracking only

STRATEGIES

Lead Department

Timing

13.1 Prioritize locations for EV charging stations

Economic Development

Near-term

13.2 Leverage grant funding to implement prioritized investments in EV charging

Economic Development

Near-term

13.3 Develop and implement communitywide EV readiness plan

Economic Development

Near-term

13.4 Support EV-ready codes in Adams County development codes and development codes of member communities

Development Services

Near-term

13.5 Implement EV education events for the community

Communications, Community Safety & Well-Being

Near-term

13.6 Partner with member communities to fund key fast-charging infrastructure

Economic Development

Mid-term

GOAL 14

Support alternative modes of transportation and enhance mobility for all Adams County residents.

METRICS & TARGETS

Metric	2019 Baseline	2030 Targets
Align with Transportation Master Plan performance measures	TBD	TBD

STRATEGIES

Lead Department

Timing

14.1	Support quality of transportation infrastructure with a focus on safety and environmental health	<i>Public Works</i>	Near-term
14.2	Leverage community partnerships to promote commuting programs	<i>Economic Development</i>	Near-term
14.3	Raise awareness of sustainable transportation options	<i>Communications</i>	Mid-term
14.4	Explore options to expand community transit programs and micro-mobility options to service first- and last-mile connections	<i>Community Safety & Well-Being</i>	Mid-term
14.5	Support policies in long-range plans that guide density necessary to enhance multimodal and first-mile/last-mile connections	<i>Development Services</i>	Mid-term
14.6	Develop and share map of bike infrastructure	<i>Information Technology & Innovation</i>	Mid-term



HEALTHY AND RESILIENT NEIGHBORHOODS



GOAL 15

Increase access to resources, opportunities, and services supporting financial, mental, and physical well-being for all community members in Adams County.

HEALTHY AND RESILIENT NEIGHBORHOODS AT A GLANCE (2019)

More than **9%** of Adams County residents
experience food insecurity



The **Adams County Social Vulnerability Index**, which measures vulnerabilities of communities to hazardous events, is 0.63 on a scale of 0-1.0, indicating a **moderate-to-high level of vulnerability**

19.4% of Hispanic/Latino Coloradans report fair or poor health; by comparison **13% of white** (non-Hispanic/Latino) reported fair or poor health



HEALTHY & RESILIENT NEIGHBORHOODS

that promote quality of life for all community members, including physical and mental health and community connectedness, is an important value in Adams County. These components of health and wellness are important factors in building community resilience, a community's ability to respond to or bounce back from shocks and stressors like heat waves and flood events. For instance, community members with lower rates of respiratory illness may be more able to cope with heat waves, since extreme temperatures can worsen air quality and exacerbate respiratory illness.

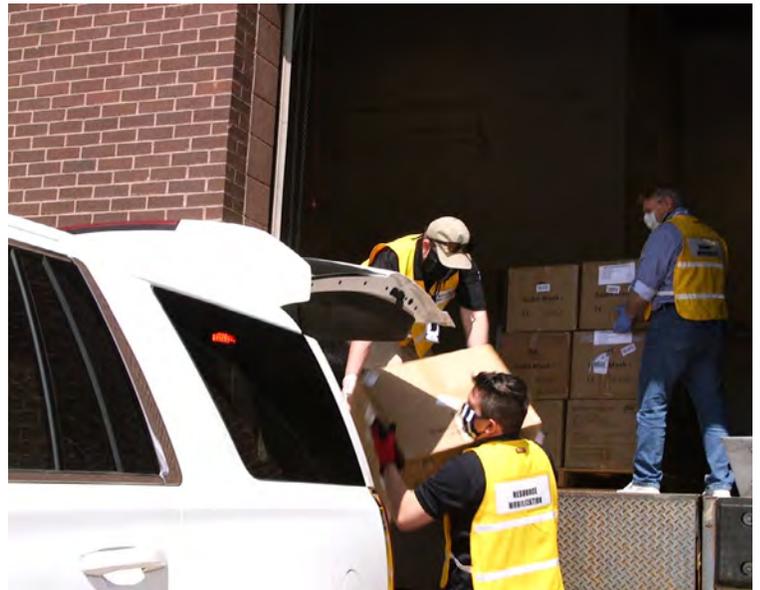
The built environment can also contribute to community resilience. For instance, living in an energy efficient home, living outside the boundaries of a floodplain, or close proximity to key services like grocery stores and community centers can all build community resilience.

Economic health and prosperity are important determinants of community health and adaptive capacity. A statewide survey conducted by the Colorado Health Institute found that individuals with incomes below the federal poverty line are twice as likely as other Coloradans to report fair or poor health (Colorado Health Institute, 2021). Healthcare costs impact the ability of Adams County community members to access the care they need. A survey of Adams County residents found 13.4% of residents had problems paying medical bills and 49.4% did not receive mental health care (Tri-County Health Department, 2019).

The strategies in this plan focus on bolstering existing initiatives, programs, and partnerships to continue connecting community members with the resources they need to thrive.

ROLE IN CLIMATE MITIGATION & ADAPTATION

Building resilient neighborhoods can help Adams County community members better adapt to the impacts of climate change, including flooding, extreme heat, and wildfires. Addressing and alleviating health challenges can reduce an individual's vulnerability to the impacts of hot days or wildfires. Cultivating preparedness can ensure all community members have access to the information and supplies they might need to cope with a flood event or other hazard. Importantly, enhancing community cohesion can ensure neighbors help uplift one another in time of need and can even lead to the sharing of resources to improve communitywide access to goods and services.



SUCCESSSES

Adams County has had many sustainability successes related to this topic since the 2015 Sustainable Adams County plan. These include:

- **Community Development Block Grants** are available to support minor home repairs.
- Adams County recently approved several positions to bolster staff capacity to build health, resiliency, and equity programming, including a **resiliency coordinator, community race equity coordinator, neighborhood services analyst, and public health policy & program specialist**.
- The Adams County neighborhood program successfully piloted the development of a **neighborhood policy guide** – a model that can be used to collect neighborhood-specific information and connect neighborhoods with appropriate programs and resources.
- [Eye on Adams](#) encourages civic participation in code enforcement.
- [Tri-County Health Department](#) offers several health and wellness programs, including **Healthy Living and radon testing kits**.
- **OneAdams** facilitates a socially distant neighborhood connection during COVID-19 restrictions.
- [Community Enrichment Grants](#) support neighborhood beautification and social cohesion efforts.
- Western Service Center continues to focus on **improving food access and providing food hubs**.

CONNECTION TO ADVANCING ADAMS

Many health and wellness issues are the result of pollution from industrial operations and transportation in the county. While sustainability can play a role in supporting education and programming to improve health outcomes for community members, the Comprehensive Plan plays an important role in guiding land use decisions related to extent and location of industrial uses and transportation corridors as well as proximity of residential developments and schools to these sources of pollution.

Community *Action*

*Here are just a few ways you
can make an impact...*

- Get to know your neighbors and organize a block party or join OneAdams to connect virtually.
- Check out the Adams County [Tool Shed](#) and organize a neighborhood cleanup event.
- Have a neighborhood improvement project in mind? Apply for a mini-grant to receive funding from the county to accomplish your project.
- Get involved in your local neighborhood group. Don't have a neighborhood group? Rally some of your neighbors and get one started.

CROSS-CUTTING THEMES



Equity

- Adams County’s population is growing but access to health and wellness services and healthy foods is not equitably available across the county.
- Nutrition education and knowledge can be inequitably distributed.
- Opportunities for beautification that provide neighborhood connection are often targeted toward wealthier and/or newer neighborhoods.



Environmental Justice

- Rates of health risks (e.g. asthma, obesity) are often higher in communities impacted by environmental injustices (NIH, 2021), putting these communities at higher risk during natural hazards caused by climate change.
- Similarly, low-income communities and communities of color are most likely to live near environmental hazards such as industrial facilities that produce GHG emissions and other pollution that contribute to and exacerbate health conditions (CDPHE, 2021).
- While these disproportionately impacted communities experience the greatest rates of health issues and are most at risk to environmental hazards, they often have the least access to healthy food options, health services, and health education.
- Events like the COVID-19 pandemic exemplify the importance of environmental justice – as many members of low-income communities and communities of color were disproportionately impacted by the virus.



Resiliency

- Developing social and neighborhood connections is an opportunity to enhance community resilience.
- Resilient infrastructure can also support community health and wellness:
 - » Safety shelters, cooling centers, and other similar centralized structures can ensure all residents have access to basic needs in the event of an emergency.
 - » Neighborhood centers, recreation centers, and senior centers can provide opportunities to connect residents to programming to support health and wellness.
- Improving physical health and wellness can improve personal resilience and lower the risk for illness.

GOAL 15

Increase access to resources, opportunities, and services supporting financial, mental, and physical well-being for all community members in Adams County.

METRICS & TARGETS

Metric	2019 Baseline	2030 Targets
Number of resource events	N/A	No target (tracking only)
Number of neighborhood groups	N/A	>50% of neighborhood groups in neighborhoods with higher incidence of violations
Number of opportunities created through mini-grants	N/A	>50% of grant funding awarded to neighborhoods with higher incidence of violations
Number of neighborhood education events by neighborhood	N/A	Minimum 2 education events per neighborhood per year

STRATEGIES

		Lead Department	Timing
15.1	Expand and promote existing programs for community-led neighborhood improvements	Community Safety & Well-Being	Near-term
15.2	Grow community partner networks to address resiliency gaps	Community Safety & Well-Being	Near-term
15.3	Participate in Sustainable Neighborhoods Network	Community Safety & Well-Being	Mid-term
15.4	Design and launch neighborhood capacity-building educational series	Community Safety & Well-Being	Mid-term



AIR QUALITY



GOAL 16

Reduce indoor and outdoor air quality impacts on disproportionately impacted communities through advocacy and mitigation practices.

AIR QUALITY AT A GLANCE (2019)

4.9 billion
annual vehicle miles traveled



205 historic landfill sites

11 Love My Air
air quality monitors



774 oil and gas wells

Over 440,000 feet
of natural gas pipelines



AIR QUALITY is a significant priority for Adams County due to its impact on public health, particularly for those who live in close proximity to transportation corridors, industrial activities, and oil and gas operations. Adams County is in an EPA eight-hour ozone non-attainment area because the state has not met the standards set to reduce air pollution. In addition to ground-level ozone, methane, nitrous oxide (NO_x), volatile organic compounds (VOCs), and particulate matter (PM) are significant contributors to air quality issues in Adams County. All these pollutants can cause or exacerbate respiratory issues (U.S. EPA, 2021), which have been worsened by the COVID-19 pandemic.

The transportation sector has significant negative impacts on air quality in the region, as several major transportation corridors route through southwest Adams County. Gasoline- and diesel-powered vehicles and equipment are a primary contributor to ozone. Pollutants from these vehicles, including NO_x, VOCs, and PM, are precursors to ozone formation (U.S. EPA, 2021). Small off-road, gas-powered equipment, such as lawn and garden equipment, snow and leaf blowers, pressure washers, and generators contribute to poor air quality through uncontrolled emissions. Despite their smaller size, these sources emit far more than automobile engines because they have fewer controls and are often two-stroke engines (Washington University in St. Louis, 2018) which are less efficient. Transportation emissions also impact indoor air quality, especially in homes located close to transportation corridors.

Methane pollution, another precursor to ozone formation, is primarily due to oil and gas wells, natural gas transmission operations, and landfill emissions; it is also a significant contributor to GHG emissions, with a global warming potential 28 times higher than carbon dioxide (U.S. EPA, 2020). The county has taken many steps to address emissions from these operations. Methane in natural gas in homes can have negative impacts on indoor air quality, leading to health problems – especially in older, less efficient homes with poor ventilation. Building more efficient homes, and all-electric homes, can help address indoor air quality in new homes. Providing energy efficiency solutions, ventilation, and indoor air purification systems can help address indoor air quality in existing and older homes.

Strategies in this topic area aim to increase monitoring and reporting of air quality to help the community understand the impacts and actions they can take, address indoor air quality issues, advocate for regulatory requirements, and transition away from small off-road, gas-powered equipment. The Transportation topic area addresses fuel switching and multimodal options, and the Energy topic area considers energy efficiency.



ROLE IN CLIMATE MITIGATION & ADAPTATION

Reducing transportation and natural gas GHG emissions through mitigation tactics will have direct impacts on air quality as well, as these sectors are the leading causes for ozone formation, particulate matter, and other air pollutants in Adams County. These topics are addressed throughout this plan and are also considered as air quality strategies.

As climate change worsens and wildfires become more prevalent, air quality is negatively impacted by wildfires across the Mountain West and in Colorado. Rising temperatures due to climate change lead to more ozone formation from transportation and small engines. The ability to adapt to these changes will be important for Adams County, particularly for communities that are disproportionately impacted.

Improving the urban tree canopy throughout the county is one adaptation technique considered in various sections of this plan. Trees provide carbon sequestration benefits and cooling effects (and therefore energy savings); reduce impacts from ozone, nitrous oxide, and particulate matter; provide improved community experience; and promote physical/mental well-being. Disproportionately impacted communities often have fewer trees in their neighborhoods, so they are unable to realize these benefits.

SUCCESSSES

Adams County has had many sustainability successes related to this topic since the 2015 Sustainable Adams County plan. These include:

- Adams County is an active member in the **Regional Air Quality Council (RAQC)**, **Colorado Department of Public Health and Environment (CDPHE)** air quality programs, and works with **Tri-County Health Department (TCHD)** to address air quality within the region.
- Active participant in the [Love My Air program](#), working to increase air monitoring within the county
- The [Minor Home Repair](#) program helps qualified residents with health, safety, and energy efficiency upgrades that can improve indoor air quality.
- Oil and Gas ([O&G traffic impact study](#)) highlights the **challenges of increased oil and gas activity** on traffic and transportation systems.
- **Oil and gas development regulations** that include a 2,000-ft. setback from residences, schools, water resources, and buildings, provide for increased scrutiny for proposed locations within 2,000-ft setback buffer, require full suite of air quality Best Management Practices (BMPs), incentivize use of electric drill rigs, pipelines, and low-odor muds to mitigate emissions to the fullest extent feasible.
- Adams County regularly submits public comments on rulemakings and permitting actions pertaining to air quality, GHG emissions, and oil and gas development at both the state and local level aimed at **addressing impacts to public health, safety, welfare, and the environment from the built environment.**

CONNECTION TO ADVANCING ADAMS

Each of the Advancing Adams plans can have significant impacts on air quality in the future development of Adams County and will take these impacts into consideration as the plans are developed. Considering air quality impacts in land use planning, such as the proximity of neighborhoods to major transportation corridors, industrial operations, landfills, and oil and gas operations, can help mitigate future impacts of air quality on residents. Land use planning, codes, and policies can also reduce urban heat island impacts. Transportation planning can inform considerations for multimodal options that can reduce air quality by providing options other than single occupancy vehicles. Parks and open space planning can provide additional urban tree canopy and carbon sequestration opportunities that will mitigate air quality and climate impacts.

Community Action

Here are just a few ways you can make an impact...

- Take public transit or ride your bike to reduce transportation pollution.
- Switch to electric- or battery-powered lawn and garden equipment.
- Plant trees in your yard or find out how you can help plant trees in your neighborhood.
- Join a citizen science air quality monitoring network, such as Purple Air.

CROSS-CUTTING THEMES



Equity

- Poor air quality can have impacts communitywide, even if the causes may be different.



Environmental Justice

- Poor air quality impacts low-income, elderly, disabled, and communities of color disproportionately, and they are often least able to relocate to areas with cleaner air. They also have less access to health services to manage health impacts from poor air quality and are often uninsured or underinsured.
- Areas of southwest Adams County, near large industrial facilities and major highways, are considered most at risk to climate issues, according to CDPHE.
- Neighborhoods most impacted by air quality issues also tend to have fewer parks and trees – land cover types that help clean the air.



Resiliency

- Air quality issues are exacerbated by climate change (e.g. drier, hotter days lead to increased ozone production, wildfires increasing PM pollution).
- Strategies included for other topics have co-benefits for improved air quality – for example, improved energy efficiency in buildings also improves indoor air quality.
- An improved urban tree canopy can reduce exposure to air pollution, improve carbon sequestration, and reduce urban heat island effects.

GOAL 16

Reduce indoor and outdoor air quality impacts on disproportionately impacted communities through advocacy and mitigation practices.

METRICS & TARGETS

Metric	2019 Baseline	2030 Targets
Number of environmental compliance and oil and gas inspections	67 environmental compliance inspections 494 oil and gas inspections	No target (tracking only)
Number of participants in Weatherization programs	166	Maintain or increase over baseline
Number of participants in Minor Home Repair program	36	Maintain or increase over baseline
Number and type of air quality monitors	0	4
Number of air quality education and awareness communications, excluding alerts	N/A	1 per quarter

STRATEGIES

		Lead Department	Timing
16.1	Continue advocacy for improved air pollution mitigation and monitoring at regional and state levels	Legislative Affairs	Ongoing
16.2	Explore options to expand tree plantings in areas with significant air quality impacts	Community Safety & Well-Being	Near-term
16.3	Increase measurement and reporting of air quality in Adams County	Environmental Programs	Near-term
16.4	Develop program to provide indoor air quality education, outreach, assessment, and resources to disproportionately impacted communities	Environmental Programs	Near-term
16.5	Support transition to electric- and/or battery-powered small engines through education, awareness, funding, and advocacy	Communications, Parks, Environmental Programs	Near-term



IMPLEMENTATION

ORGANIZATIONAL SUSTAINABILITY

Implementing sustainability across the Adams County organization will ensure the goals and targets of this plan are met and will set Adams County on a path of regional leadership in sustainability and maintaining a culture of sustainability over time. Strategies identified in this plan will help build and infuse a culture of sustainability across the organization, considering the social, environmental, and economic impacts of decisions. The opportunity to make impactful and meaningful decisions and processes an integral part of county governance is significant and Adams County is fully invested in doing so. As the county embarks on the initiatives and actions identified in this Sustainable Adams County 2030 Plan, engaging residents, organizations, businesses, and member communities across the county and region will provide great opportunity for every individual and group to contribute to positive change.



SUSTAINABILITY COMMITTEE

The county has made great strides in establishing sustainability across the organization, including the formation of the Sustainability Committee. Formalizing the role of committee members through job descriptions, regularly scheduled meetings, and updates to county management and the Board of County Commissioners will be crucial to ensuring sustainability stays at the forefront of operations and continues through staffing transitions and other changes.

The Sustainability Committee is primarily responsible for the implementation, progress, and monitoring of plan strategies, targets, and goals. Lead departments have been identified for each strategy, and each department has a lead champion involved in the Sustainability Committee. These departments will identify staff person(s) who will lead the implementation of the strategies through their daily work activities. Department champions will be responsible for reporting progress regularly to the committee via regularly scheduled meetings. Because strategies coordinate across departments and are often related, this cross-pollination is crucial to the success of the plan and to infusing sustainability throughout the organization. They will also be responsible for annual reporting updates to ensure transparency and accountability.

Table 1 provides a summary of number of strategies by lead department or division and relevant topic and focus areas. Partnering departments are not included in this count. Additional departments, such as Budget & Finance and Communications, will also be involved in partnering roles.

Table 1: Sustainability Strategies by Lead Department/Division

Division or Department (Dept. indicated in parentheses where applicable)	Number of Strategies Leading	Relevant Topic & Focus Areas
Facilities Operations Division (Facilities & Fleet Management)	24	  
Fleet Division (Facilities & Fleet Management)	4	
Public Works	17	  
Parks, Open Space & Cultural Arts	12	  
Fair and Special Events Division (Parks, Open Space & Cultural Arts)	4	
Economic Development Division (Community & Economic Development)	13	   
Environmental Program Division (Community & Economic Development)	11	  
Development Services Division (Community & Economic Development)	7	   
Community Development Division (Community & Economic Development)	2	
Community Safety & Well-Being	7	   
County Manager's Office	4	   

GREEN TEAM

The Green Team, an internal, staff-led volunteer group, is also a key aspect of organizational sustainability. The Green Team is responsible for championing sustainability activities across county facilities and promoting educational opportunities. Team duties include volunteering at and hosting events, providing information and educational opportunities, and highlighting successes. They will help spread the word about educational opportunities and county successes, continue volunteering at events, and be a key channel for communicating about the sustainability plan. Maintaining an active Green Team ensures sustainability is infused throughout the culture of Adams County operations.



A LIVING PLAN

The Sustainable Adams County 2030 Plan is intended to be a living document that county staff, elected officials, and community partners use to drive the county toward its vision of being the most innovative and inclusive county in America for all families and businesses. This sustainability plan can be applied by staff to guide annual work plans, by elected officials to prioritize policy action, and by community partners to identify opportunities to collaborate and contribute.

This plan identifies a broad range of actionable strategies that will increase sustainability across the community and within county operations. Some strategies can be implemented by staff or elected officials alone and some require partnerships across local, regional, and state government or between the public and private sector. These strategies are scheduled to be implemented over the next eight years. However, as a living plan, strategies should be revisited regularly to address new information, technologies, and resource development.

Because the Sustainability Plan is being updated in parallel with the Advancing Adams plan updates, the plan will be reviewed following the completion of the other Advancing Adams plans to ensure alignment. This update may include items such as minor updates to metrics, targets, and strategy details to ensure alignment and consistency with the other plans.

FUTURE PLAN UPDATES

Looking to the future, an update to the plan is recommended in 2026, about halfway to the 2030 goals, or as identified strategies are completed and new strategy ideas emerge. Similar to this 2021 update, existing targets and strategies should be reviewed to understand progress toward goals. Targets and strategies may need to be updated and new targets and strategies may be needed to continue making progress toward a sustainable Adams County as progress is made and technology advances.

PERFORMANCE MANAGEMENT

Regular monitoring of progress will keep implementation on track and on schedule. It can also help identify when corrective action should be taken, when timelines may need to be updated, when to start on subsequent or new strategies, or when plan needs or priorities have shifted and updates may be needed.

Tracking tools will be developed with the Sustainability Committee and Performance Measurement staff to ensure tracking is easy to maintain and can be completed annually. This process will not only help illustrate what sustainability milestones have been achieved but is essential in determining projects, programs, and policies that effectively achieve sustainability goals. A robust monitoring and evaluation process creates greater transparency and accountability, more effectively utilizes resources, and identifies areas for continued focus and/or improvement. [Appendix B](#) summarizes topic area targets, baseline values, and data sources. In the future, dashboards may be created to easily track, monitor, and share progress.

REPORTING AND COMMUNICATIONS

Performance should also be reported to ensure transparency and accountability. This process will be coordinated with the Sustainability Committee and Communications Department. This will include developing an annual sustainability report and keeping the Adams County sustainability website up to date with sustainability successes, stories, and ways for the community to get involved. Additional reporting and communications tools, such as an internal or external dashboard, may also be developed at a later date.

In addition, leveraging the county’s existing communications channels will be important for providing information about plan progress and building connections to ensure an equitable approach to implementation, participation, and benefits.



WEBSITE

Maintaining a sustainability landing page for all county efforts, both at the community and county facilities scale, will be a key tactic to informing the community about plan updates and progress. This resource can also be used to connect community members to sustainability resources such as energy and water utility rebates, waste reduction resources, transportation resources, and other information to help residents and businesses in their sustainability journeys.

ANNUAL SUSTAINABILITY REPORT

To communicate the results of the annual sustainability plan review and achievements, an annual sustainability report will be prepared to address:

- Implementation status (completed, in-progress, upcoming, and delayed/removed)
- Performance reporting (progress to targets, progress to goals)
- Emerging opportunities and priorities in the community and in county operations

The annual sustainability report will be developed by the Sustainability Committee, shared with the county Executive Leadership Team and Board of County Commissioners, and publicly via the county's communication channels.

COMMUNITY CONNECTIONS

The sustainability communications strategy may leverage the communications networks of established neighborhood groups and community-based organizations, to help distribute information to the community and to learn about their sustainability needs, interests, and priorities. This two-way communication will help spread the word about sustainability opportunities and achievements, will help guide strategy implementation to achieve maximum benefits for the intended audience, and will inform future plan updates. This will be managed in partnership with the Community Safety & Well-Being Department neighborhoods outreach. There are also many community-based organizations working to provide connections between residents, neighborhoods, employers, services, county staff, and other resources.





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APPENDIX A: COMMUNITY ENGAGEMENT

The Sustainability Plan leveraged the Advancing Adams community engagement process to ensure alignment across plans to address the county’s vision, mission, and goals and prevent public fatigue by providing coordinated opportunities for input.

Engagement results from Advancing Adams public outreach was shared with the Sustainability Plan team to incorporate relevant results and feedback into the planning process. This included online survey results and in-person activities at summer events that addressed priority areas for Adams County’s future.

Community engagement included an online survey, conducted in both English and Spanish, specific to Sustainability Plan priorities and strategies. The survey was advertised through the county’s communication channels and at the Adams County Fair, gathering a total of 43 responses. Responses were used to inform strategies in the Sustainability Plan. Figure 7 shows the percent of respondents who selected various sustainability topics as their top priorities (multiple answers were allowed). All survey results are also included.

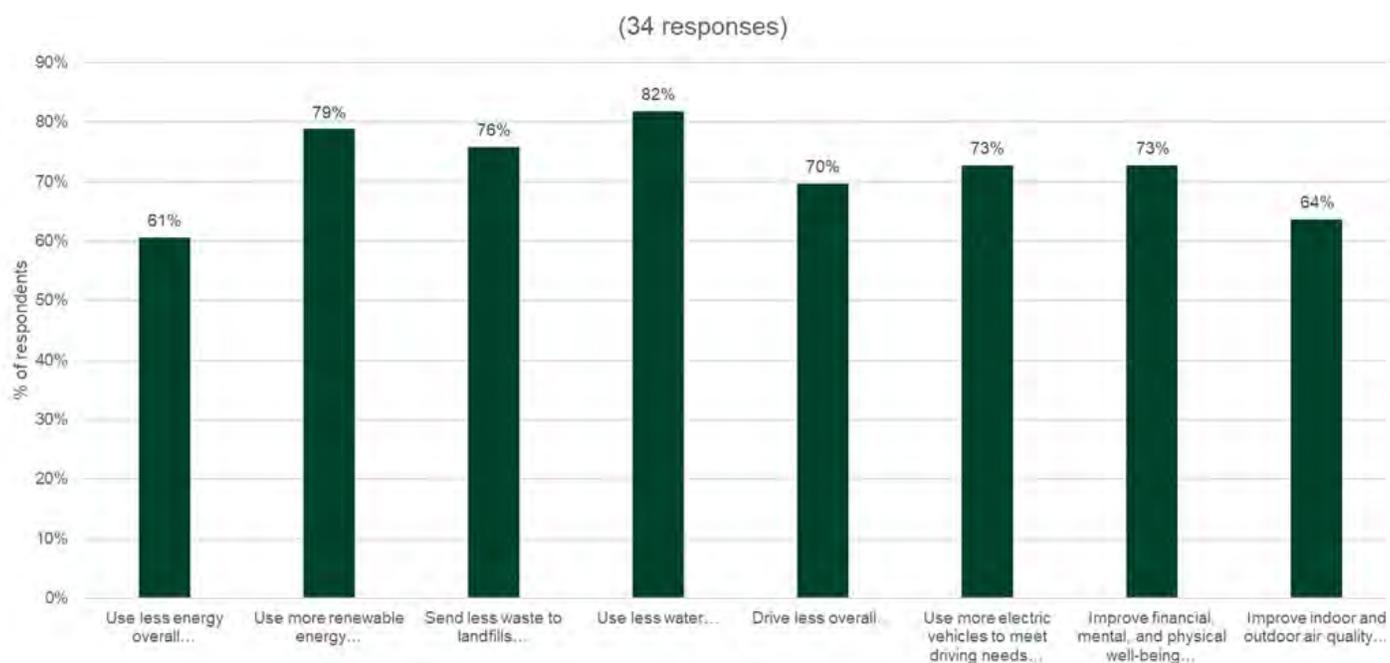


Figure 7: Adams County Sustainability Survey Results - Priority Topics

Q1 Do you value living in a County that prioritizes sustainability?

	English	Spanish	Percent
5 - Very much	29	3	73%
4 - Somewhat	5	0	11%
3 - Neutral	5	0	11%
2 - No	1	0	2%
1 - Not at all	1	0	2%
Total Responses	41	3	100%
Skipped	0	0	

Q2 Which statement do you agree with most:

	English	Spanish	Percent
Adams County should be a national example of sustainability	16	1	40%
Adams County should a state-wide example of sustainability	10	2	28%
Adams County should be a regional example of sustainability	5	0	12%
Adams County should focus on other priorities.	9	0	21%
Total Responses	40	3	
Skipped	1	0	

Q3 What can Adams County do to help you or the community... (select all)

	English	Spanish	Percent
Use less energy overall...	20	1	62%
Use more renewable energy (ex. solar, wind) to meet energy needs...	26	1	79%
Send less waste to landfills...	25	1	76%
Use less water...	27	1	82%
Drive less overall...	23	0	68%
Use more electric vehicles to meet driving needs...	24	0	71%
Improve financial, mental, and physical well-being...	24	0	71%
Improve indoor and outdoor air quality...	21	0	62%
Total Responses	33	1	
Skipped	8	2	

Q4 What idea(s) do you have to make sure all Adams County community members get to experience the benefits of sustainability?

Answered: 22

Skipped: 19

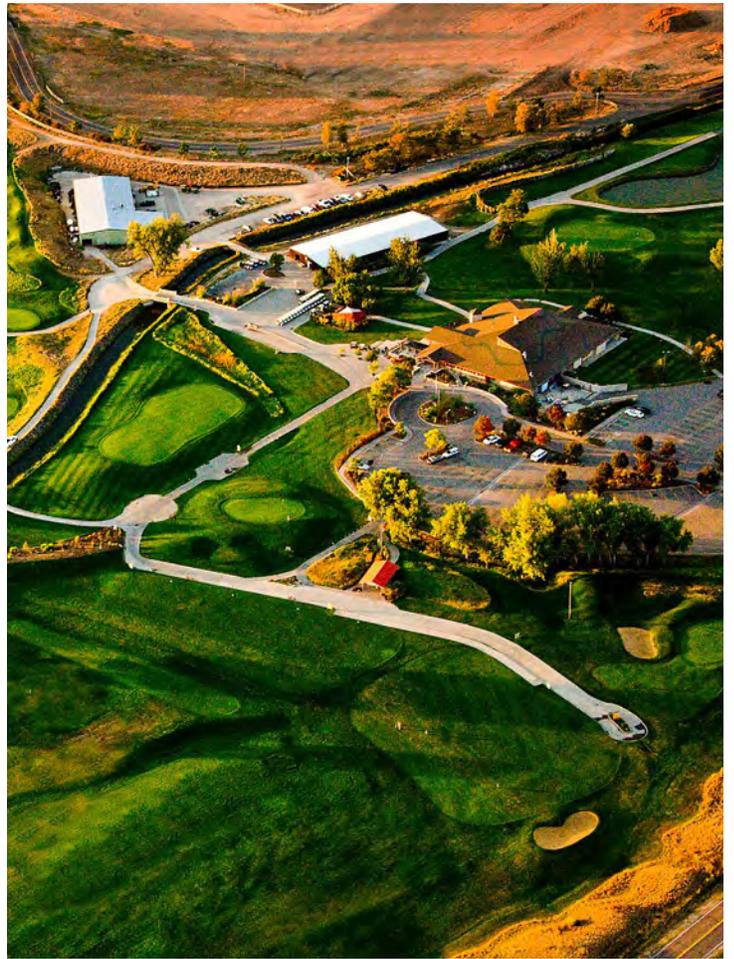
All work should be approached with an equity lens, all communications should be multi-lingual and multi-cultural, environmental justice should be centered in this work.
Make knowledge available to all. Public service messages online, radio and TV.
Make sure materials are translated into different languages commonly spoken in the county, partner with different community hubs for marginalized parts of the Adams County to ensure programs are well-suited for their needs and well-publicized, work with nursing homes to ensure sustainability measures reach those members of the community
Subsidies for residents in EJ communities or economically challenged to pay for indoor air monitoring and controls, vouchers for EV and charging stations and rooftop solar or participation in community solar gardens
Adams County should be focusing on things like infrastructure, not this crap.
Educate residents on the source of their energy, especially electricity. Promote the use of solar energy at home.
Create programs to assist with better land management, cleanup of residential blighted areas.
Take care of all community members. Like clean up the drugs and garbage on Federal Blvd. Make Hyland Hills clean out the Berkeley Hills Park pond. The algae is disgusting to see everyday. I pay plenty of taxes and see no benefit what so ever down here in southwest unincorporated adams county.
Job and professional skills training and placement in green industries
Whatever sustainability options are offered - offer them on at least a sliding cost/fee scale of some sort. Try to offer free (or free in exchange for service?) sustainability options for those who truly cannot pay for them.
Educate us on all of these things. We keep hearing about climate change and planet pollution. What are all of the things I can do as a resident in Adams County to help with all of these things? Small to big. I've reduced single use plastic, I recycle everything I believe I can through Waste Managements recycling program, I compost food waste, I combine my driving trips. I'm sure I can do more, I'm just not sure what all of my options and choices are. Maybe partner with the Brighton Chamber (disclaimer: I'm on the Board) so we can educate businesses about all of these things. Ch
Energy efficient light bulb give away
Ensure that sustainability actions are delivered equitably throughout the county.
Improve the tap water freshness/cleanliness/taste so we don't have to purchase it in plastic bottles.
EV kiosks; EV stations in low-income neighborhoods. Stop oil and gas permitting. Be the example. Convert gas-powered vehicles to electrical. Require electrical. Provide cooling stations.
Make sure apartment buildings are included, make grants so low-income people can put solar on their roofs
have a better community engagement program to see what the people are looking for and try to leverage state and federal programs to make those wishes happen
Until more charging stations exist, and more infrastructure is included in residential and commercial buildings for EV's, there isn't much that can be done.
To day my big topic is trees. Where Adams County can plant trees. Put in mediums that have trees and plants in them. Also, making walking the best exercise. Make the streets safer for walkers. Have walking events? Walking is a great form of exercise and a lovely past time.
mass transit
Provide trash cans and recycle bins at parks and bus stops
With no fracking, better transit and renewable resources all residents can enjoy cleaner air and make sure our water sources are safe.
Informar más a las comunidades de lo que el condado está haciendo ya que quizás muchas personas no están siendo informadas o no les está llegando información. (Inform communities more about what the county is doing as perhaps many people are not being informed or not getting information)
Reciclar en eventos del condado y ofrecer servicios de compostaje (Recycle at county events and offer composting services)

Q5 Additional Comments

Answered: 12

Skipped: 29

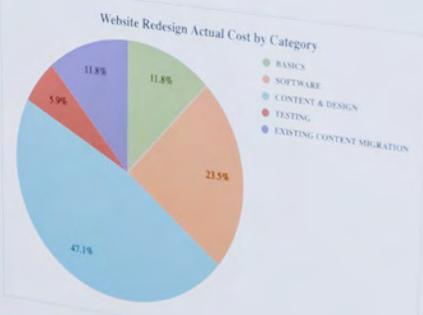
If the county actually did anything in this space it would be incredible to see, but past efforts, even when led by local champions, have been ignored at the least, and completely sabotaged at the most, by county leadership. If you really want this to happen you have to actually fund the programs and make the unpopular decision to require or at least incentivize behavior change through codes and policies.
Encouraging less meat consumption within the county through cooking classes, gardening courses, and partnerships with local restaurants would also improve sustainability within the county.
The County government buildings should set an example by committing to become 100% renewably powered by 2030. The government center should have solar panels/solar array installed immediately and consider a wind turbine to demonstrate its commitment.
Be more responsive and quit using COVID-19 as an excuse to do nothing.
Thanks for asking
Focus (in publicity) on the kind of life our children, grandchildren and future generations can have in Adams County that they will definitely not have if we do not adopt sustainability practices on a wide scale!
Get rid of all masks, we have bigger problems of people needing to work, and children being able to experience a normal school year.
Make oil & gas companies remove their leavings at their expense.
support innovative sustainability and conservation solutions, and help educate our community about them.
I think the county should look into a nuclear power plant using the newer technologies like are promoted by Bill Gates. They are safe and can assist in load issues on cloudy days or days with less wind.
It is still trees. I have seen many times where something looks good on paper but when it gets out into the world it falls very short of the description on paper. One other thing. Have the youth of our community involved in the effort. There is an art elementary school near me. The county could setup a competition for students to design a sustainability art fixture. Or from the STEM schools there could be a competition on some kind of solution. All built around education of the topic and youthful ideas.
Make a difference
Que les llegue información a las personas que no están familiarizadas con el internet ya que la mayoría de información es a través de internet. (That information reaches people who are not familiar with the internet)
Ofrecer incentivos y descuentos en los impuestos de propiedad a residentes que instalan equipos y mejoran sus casas para usar menos energía o agua. (Offer property tax incentives and discounts to residents who install equipment and upgrade their homes to use less energy or water)



Fill in your projected expenses here.
(Those "100" entries are placeholders.)

Fill in your actual expenses here.
(Those "100" entries are placeholders.)

	Budget	Actual	Amount Left
BASICS			
Domain name	100.00	100.00	0.00
Hosting*	100.00	100.00	0.00
SOFTWARE			
CMS*	100.00	100.00	0.00
Blog*	100.00	100.00	0.00
Landing Pages*	100.00	100.00	0.00
Analytics*	100.00	100.00	0.00
CONTENT & DESIGN			
Wireframes	100.00	100.00	0.00
Images and custom graphics	100.00	100.00	0.00
Mobile/responsive design*	100.00	100.00	0.00
SEO strategy and redirects	100.00	100.00	0.00
Copy writing	100.00	100.00	0.00
Copy editing	100.00	100.00	0.00
Advanced customization	100.00	100.00	0.00
Style sheets and templates	100.00	100.00	0.00
TESTING			
UAT testing	100.00	100.00	0.00
EXISTING CONTENT MIGRATION			
Blog migration*	100.00	100.00	0.00
Website and landing page migration*	100.00	100.00	0.00
TOTAL	\$1,700.00	\$1,700.00	\$



Expense Summary

	Budget	Actual	Amount Left
BASICS	\$ 200.00	\$ 200.00	\$
SOFTWARE	\$ 400.00	\$ 400.00	\$
CONTENT & DESIGN	\$ 800.00	\$ 800.00	\$
TESTING	\$ 200.00	\$ 200.00	\$
EXISTING CONTENT MIGRATION	\$ 300.00	\$ 300.00	\$
TOTAL	\$1,700.00	\$1,700.00	\$

Your category totals will automatically populate here.



APPENDIX B: PERFORMANCE MANAGEMENT



ENERGY



County Facilities

Target	Baseline	Data Source	Supporting Strategies
15% reduction in Energy Use Intensity (EUI)	7.95 kWh/ft ² 0.31 therms/ft ²	EnergyCAP	1.1 Continue upgrading county facility energy systems 1.3 Train employees on energy efficient practices 1.4 Develop sustainable, resilient, and health-focused design and operations guidelines
1 sustainable technology per project in new facilities (e.g. renewable energy, storage, recyclable materials, reduced carbon materials)	N/A	Facilities	1.2 Establish internal technology education and research working group 1.5 Explore building electrification options in new facilities
50% renewable energy supply	24%	Xcel Energy Community Energy Reports and United Power	2.1 Identify potential locations for solar installations on county property 2.2 Advocate for and pursue renewable energy procurement options with utilities 2.3 Incorporate renewable energy into new county facilities
5 facilities with on-site solar	0	Facilities	2.1 Identify potential locations for solar installations on county property 2.3 Incorporate renewable energy into new county facilities
Metric (Tracking Only)	Baseline	Data Source	Supporting Strategies
Number of existing facility energy efficiency retrofits	N/A	Facilities	1.1 Continue upgrading county facility energy systems


Community

Target	Baseline	Data Source	Supporting Strategies
1 new solar co-ops created annually	0	Environmental Programs	3.1 Develop Energy Action Plan 3.4 Continue partnering with Grid Alternatives
20 C-PACE projects	2	Colorado CPACE	3.1 Develop Energy Action Plan 3.6 Support business energy efficiency outreach and upgrades
Maintain or increase the number of participants in Weatherization programs	166	Arapahoe County Weatherization Division	3.1 Develop Energy Action Plan 3.5 Support residential energy efficiency outreach and upgrades
Maintain or increase the number of participants in Minor Home Repair program	36	Community Development	3.7 Develop and fund energy services program to support communities experiencing disproportionate environmental impacts
2,600 solar permits issued (200 annually)	849 total (since 2011)	Adams County Building Eye	3.1 Develop Energy Action Plan 3.8 Incentivize renewable energy project development

Additional Strategies

3.2 Establish sustainability points system for development code


WASTE

County Facilities

Target	Baseline	Data Source	Supporting Strategies
Establish diversion rate through waste hauler tracking	None	Waste hauler data	4.2 Develop countywide sustainable procurement policies and provide employee training 4.3 Explore commercial scale options and implement potential end-uses for organic waste (e.g. food, landscaping) 4.4 Develop low-waste event and meeting guidelines 4.5 Collect waste data for county facilities and operations 4.6 Continue shifting transactions online with considerations toward equity and accessibility
Establish Construction and Demolition diversion rate by project	None	Project Waste Management Plans	4.7 Establish construction and demolition waste management policies for county facilities and projects
4 employee education opportunities about sustainability and waste reduction annually (1 per quarter)	4 events	People & Culture	4.1 Train employees on waste diversion and ways to reduce consumption

Target	Baseline	Data Source	Supporting Strategies
100% of private haulers in unincorporated Adams County provide recycling	0%	Waste hauler licensing	5.2 Adopt waste hauler licensing ordinance and regulations
30% increase in pounds of hard-to-recycle waste and yard/green waste collected	283,295 lbs	Environmental Programs	5.1 Continue supporting hard-to-recycle waste events 5.3 Provide yard waste drop-off voucher program for unincorporated Adams County residents and businesses
35% of waste recycled or composted	16.2% (CDPHE, 2020)	Colorado Dept. of Public Health & Environment	5.4 Hire Integrated Waste Management Specialist 5.5 Conduct waste diversion education and outreach campaign 5.6 Provide neighborhood waste diversion opportunities 5.7 Administer reporting system to track waste hauler annual recycling, composting, and landfilling metrics 7.1 Advocate at state level for integrated waste management policies 7.3 Incentivize circular economy, recycling, and other zero-waste markets
30% diversion rate at county-led events (e.g., Adams County Fair, Stars & Stripes)	N/A	Waste hauler tracking	6.1 Establish procurement requirements for event vendors and develop incentives to meet requirements 6.2 Develop zero-waste guidelines for county events and facility rentals 6.3 Establish zero-waste volunteer program for county-led events 6.4 Partner with Eco-Cycle for zero-waste events
Construction and demolition (C&D) Waste Diversion Rates – Established per Project Waste Management Plan	N/A	Project Waste Management Plans	7.2 Update development standards to encourage development projects to include construction and demolition debris recycling, composting, and data tracking. 7.3 Incentivize circular economy, recycling, and other zero-waste markets



WATER



County Facilities

Target	Baseline	Data Source	Supporting Strategies
Facilities to meet all efficiency benchmarks for indoor domestic water use (total per sq. ft.)	80% of facilities met indoor efficiency benchmark	Energy CAP	8.1 Analyze water use annually 8.2 Implement new water conservation measures
Facilities to meet all efficiency benchmarks for outdoor irrigation use (total per sq. ft.)	33% of facilities met outdoor efficiency benchmark	Energy CAP	8.3 Monitor local and state regulations and policies 8.4 Train employees on water efficient practices 8.5 Centralize water use data management
Maintain or increase percent of water supply serving facilities that is non-potable	4% of water use was non-potable		8.6 Install water sub-metering and/or smart meters 8.7 Conduct on-site water assessments
Parks to meet all efficiency benchmarks for outdoor irrigation water use (total per sq. ft.)	100% of parks met outdoor efficiency benchmark	Parks, Open Space & Cultural Arts	8.8 Explore options to self-supply non-potable water 8.9 Monitor water provider surplus water programs
Maintain or increase percent of water supply serving Parks that is non-potable	92% of water use was non-potable	Parks, Open Space & Cultural Arts	
Maintain or increase percent of water supply serving Public Works Operations that is non-potable	99%	Public Works Operations	



Community

Target	Baseline	Data Source	Supporting Strategies
Take 4 impactful actions to improve indoor and outdoor water use efficiency, preferably one per strategy category (Education, Financing, Codes, Programs)	N/A	Internal Tracking of county-Led Activities	9.1 Conduct a water conservation and awareness campaign 9.2 Promote C-PACE and Performance Contract programs to incorporate water efficiency for development and redevelopment projects 9.3 Develop a comprehensive countywide Water Element to go along with the county's Comprehensive Plan 9.4 Develop a webpage to connect residents and businesses with water-saving resources 9.5 Develop and adopt water-wise appliance, fixture, landscaping, and irrigation standards into building, landscape, and development codes 9.6 Develop financial incentive programs to promote water efficiency for residents and businesses



LAND



County Facilities

Target	Baseline	Data Source	Supporting Strategies
Maintain or increase acres of county-owned conservation easements	6,000 acres in conservation easements	Parks, Open Space & Cultural Arts	10.1 Continue using county Open Space Sales Tax dollars to acquire and conserve land
Maintain or increase acres of county-owned land	3,000 acres in fee simple	Parks, Open Space & Cultural Arts	10.2 Support implementation of the Adams County Parks, Open Space, and Trails Master Plan and the Riverdale Regional Park Master Plan



SUSTAINABLE INFRASTRUCTURE



County Facilities

Target	Baseline	Data Source	Supporting Strategies
Achieve FEMA Community Rating Score of 7	9 ⁶	FEMA Community Rating System	11.1 Incorporate Green Infrastructure and Low-Impact Development concepts into public works projects 11.6 Develop and adopt resilient design performance standards for infrastructure, considering future impacts of climate change and adaptation ability
Increase number of regional flood control/detention facilities implemented from Master Drainage Studies ⁷ by 1-2	1 (channels excluded) 3 (channels included)	Public Works	11.2 Implement master drainage studies
Increase number of local water quality facilities owned and maintained by Adams County ⁸ by 5	12 (local, public water quality-only ponds)	Public Works	11.1 Incorporate Green Infrastructure and Low-Impact Development concepts into public works projects 11.2 Implement master drainage studies
Achieve a 100% tree replacement rate (based on number of trees)	0% (replacement program started in 2020)	Public Works	11.5 Expand the Tree Amenity Program

6 FEMA CRS Score was improved to 8 in 2021. Adams County evaluates the program every five years.

7 Starting definition: Where regional is defined as serving >300 acres upstream stormshed, detention for flood control

8 Starting definition: Water-quality only ponds and rain gardens; trends are using regional facilities for detention/flood control and local facilities for water quality.



SUSTAINABLE INFRASTRUCTURE (CONTINUED)



County Facilities

Target	Baseline	Data Source	Supporting Strategies
Incorporate 4 ENVISION credits on 80% of Public Works projects ⁹	0	Public Works	11.6 Develop and adopt resilient design performance standards for infrastructure, considering future impacts of climate change and adaptation ability 11.7 Execute a Public Works executive order that CIP projects be evaluated for ENVISION criteria, as appropriate, based on project function 11.8 Include sustainability and resiliency considerations as part of procurement processes for infrastructure projects
Achieve and maintain a rate of 30% of ENVISION certified staff in inspection and engineering services	1 ¹⁰	Public Works	11.7 Execute a Public Works executive order that CIP projects be evaluated for ENVISION criteria, as appropriate, based on project function
Host 2 coordination meetings between Public Works and Utility/District partners annually	1	Public Works	11.3 Coordinate with utility and service provider partners to minimize future maintenance and infrastructure needs
Inspect 100% of dry outfalls in urbanized areas for illicit discharges every five years	50%	Public Works	11.4 Plan community education events
Complete 10 stormwater educational activities above MS4 Permit minimum requirements	4	Public Works	11.4 Plan community education events

9 Conditional to the terms and conditions approved by County Attorney

10 Three staff members ENVISION certified as of 2021



TRANSPORTATION



County Facilities

Target	Baseline	Data Source	Supporting Strategies
Decrease hours of idling by 50%	N/A	PRECISE software reports	12.4: Develop and implement anti-idling policy
Electrify 75% of eligible light-duty vehicles	1 EV (% TBD)	Fleet vehicle inventory	12.2 Develop and implement EV procurement plan
Convert 25% of medium- to heavy-duty vehicles to alternative fuels	0	Fleet vehicle inventory	12.3 Continue converting heavy-duty fleet vehicles to biofuels
Metric (Tracking Only)	Baseline	Data Source	Supporting Strategies
Total VMT for county operations	5,691,515	Fleet	12.1 Encourage virtual meetings when feasible 12.5 Maximize efficiency of operational routes
Gallons of fuel consumed	302,927 gal. gasoline 242,418 gal. diesel	Fleet	



Community

Target	Baseline	Data Source	Supporting Strategies
Electrify 5% of total vehicles	0.45% (1,513)	DMV	13.1 Prioritize locations for EV charging stations 13.2 Leverage grant funding to implement prioritized investments in EV charging 13.3 Develop and implement communitywide EV readiness plan 13.4 Support EV-ready codes in Adams County development codes and development codes of member communities 13.5 Implement EV education events for the community 13.6 Partner with member communities to fund key fast-charging infrastructure
Reduce vehicle miles traveled per capita	9,500 miles	DRCOG	14.1 Support quality of transportation infrastructure with a focus on safety and environmental health 14.2 Leverage community partnerships to promote commuting programs 14.3 Raise awareness of sustainable transportation options
Reduce single occupancy vehicle mode split	80%	U.S. Census Bureau	14.4 Explore options to expand community transit programs and micro-mobility options to service first- and last-mile connections 14.5 Support policies in long-range plans that guide density necessary to enhance multimodal and first-mile/last-mile connections 14.6 Develop and share map of bike infrastructure



HEALTHY AND RESILIENT NEIGHBORHOODS



County Facilities

Target	Baseline	Data Source	Supporting Strategies
>50% of neighborhood groups in neighborhoods with higher incidence of violations	N/A	Community Safety & Well-Being	15.1 Expand and promote existing programs for community-led neighborhood improvements
>50% of grant funding awarded to neighborhoods with higher incidence of violations	N/A	Community Safety & Well-Being	15.1 Expand and promote existing programs for community-led neighborhood improvements
Minimum 2 education events per neighborhood per year	N/A	Community Safety & Well-Being	15.4 Design and launch neighborhood capacity-building educational series
Metric (Tracking Only)	Baseline	Data Source	Supporting Strategies
Number of resource events	N/A	Community Safety and Wellbeing	15.1 Expand and promote existing programs for community-led neighborhood improvements 15.4 Design and launch neighborhood capacity-building educational series

Additional Strategies

15.2 Grow community partner networks to address resiliency gaps

15.3 Participate in Sustainable Neighborhoods Network





AIR QUALITY



County Facilities

Target	Baseline	Data Source	Supporting Strategies
Maintain or increase the number of participants in Weatherization programs	166	Arapahoe County Weatherization Division	See Community Energy
Maintain or increase the number of participants in Minor Home Repair program	36	Community Development	See Community Energy
Install 4 air quality monitors	0	Environmental Programs	16.1 Continue advocacy for improved air pollution mitigation and monitoring at regional and state levels 16.3 Increase measurement and reporting of air quality in Adams County
Host 1 air quality education and awareness communication event per quarter, excluding alerts	N/A	Environmental Programs	16.4 Develop program to provide indoor air quality education, outreach, assessment, and resources to disproportionately impacted communities

Metric (Tracking Only)	Baseline	Data Source	Supporting Strategies
Number of environmental compliance and oil and gas inspections	67 environmental compliance inspections 494 oil and gas inspections	Environmental Programs	

Additional Strategies

- 16.2 Explore options to expand tree plantings in areas with significant air-quality impacts
- 16.5 Support transition to electric- and/or battery-powered small engines through education, awareness, funding, and advocacy



APPENDIX C: STRATEGY IMPLEMENTATION DETAILS



ENERGY



Goal 1: Incorporate energy efficiency and new energy technologies and building practices in new facilities and retrofit eligible existing facilities.

Strategy 1.1: Continue upgrading county facility energy systems

Description

Continue upgrading existing buildings energy systems to more efficient systems, building on past successes. Upgrades may include LED lighting, occupancy sensors, or upgrading HVAC systems.

Impacts and Considerations

- Costs can vary depending on upgrade; however, utility rebates can reduce upfront costs and upgrades are likely to result in energy and maintenance savings.
- Improved lighting, heating, and other systems can improve indoor environmental quality (e.g. indoor air quality, productivity).
- Upgrades that reduce overall county energy use will increase county resilience (less energy is required to support county operations) and decrease energy related GHG emissions.

Timing Ongoing

Actions

- Identify facilities with equipment that has not been upgraded (e.g. swapping florescent lighting with LED lighting, completing scheduled boiler replacements, retrofitting jail with improved air handling recovery).
- Explore options for completing building energy assessments through utilities to identify additional energy improvement opportunities.
- Leverage available utility rebates to implement energy improvements identified through energy assessments.
- Incorporate identified energy improvement projects into annual budget requests.
- Consider establishing Revolving Fund, where utility bill savings are added to a fund to pay for future energy efficiency upgrades.

Roles & Responsibilities

- **Lead department or organization:** Facilities
- **Partnering organization(s):** Xcel Energy, United Power, CORE, MCREA

Resources Available

- [Xcel Energy business assessments and rebates](#) offer free or low-cost resources to evaluate building energy use and can lower the upfront cost of energy efficiency investments.
- [United Power commercial energy audits and rebates](#) offer free or low-cost resources to evaluate building energy use and can lower the upfront cost of energy efficiency investments.
- Adams County currently uses EnergyCAP to track building energy data. EnergyCAP can help identify additional energy opportunities by flagging high-use buildings or buildings with large spikes in demand.

Resources Needed

- Funding for energy efficiency upgrades.

Strategy 1.2 Establish internal technology education and research working group

Description

Establish an internal technology education and research working group to explore new technological advancements for building design, operations, and maintenance. This working group will serve to centralize research often conducted in siloed departments, preventing duplication of efforts, and providing dedicated attention to keeping Adams County on the leading edge of energy action. In addition to energy, this working group may also consider water, waste, and transportation technologies.

Impacts and Considerations

- Requires dedicated staff time; can help pre-identify options for future projects

Timing

Near-Term (2022–2024)

Actions

- Determine structure and membership of group. Consider:
 - Who should be part of the working group? Can this be a function of the Sustainability Committee or should a separate group be formed?
 - Should there be a designated leader to facilitate the group?
 - How often should the group convene to review findings and determine next steps?
- Align research with sustainability plan goals.
- Develop a research plan outlining topics and technologies to research or partnerships to explore on quarterly or bi-annual basis.
- Establish methodology for centralizing and sharing research findings, partnership opportunities, and resources.
- Establish decision-making methodology to prioritize and pursue identified opportunities.

Roles & Responsibilities

- **Lead department or organization:** Facilities
- **Partnering department(s):** All departments on Sustainability Committee
- **Partnering organization(s):** TBD

Resources Available

- Organizations to consider partnering with for feasibility studies, recommendations, and implementation: NREL, ACRE, energy utilities, Colorado Department of Public Health and Environment (CDPHE), Eco-Cycle, Colorado Energy Office (CEO), U.S. Green Building Council.

Resources Needed

- Staff time to organize and participate in group.
- Cloud-based document and information sharing platform such as Google Docs, DropBox, or SharePoint.

Strategy 1.3 Train employees on energy-efficient practices

Description

As part of employee training series on sustainability, provide formal and informal education and training to maximize the energy efficiency of buildings. This strategy may be rolled into a larger training series along with employee trainings on waste and water. Training employees to be mindful of their energy use and take action to reduce wherever possible (e.g. utilizing blinds and shades, turning off computers, turning off lights when exiting rooms, etc.) can help reduce energy use in county facilities and also provide benefits at a broader community level. Additional training for facilities and maintenance staff will ensure energy-efficient operation of equipment and reducing bills and maintenance costs.

Impacts and Considerations

- Training for proper equipment operation can also result in maintenance savings.
- Training employees will also have community impacts as they can implement practices at home.

Timing

Near-Term (2022–2024)

Actions

- Coordinate training with other sustainability topic areas (see strategies 3.1 and 8.1).
- For general employee training:
 - Develop a list of training topics and resources.
 - Leverage resources such as building signage, internal tips page, employee newsletter to provide tips throughout buildings and advertise training opportunities
 - Training topics may include: energy efficiency 101, renewable energy, demand management, basics of system operation.
 - Develop a schedule of training topics and delivery method.
 - Determine who will provide training.
 - Develop training modules.
- For facilities and maintenance staff:
 - Identify a training lead or liaison for facility or specific equipment operation.
 - Target specific buildings and review operations processes (e.g. animal shelter, jail) to ensure energy efficiency and good indoor air quality.
 - Coordinate training with other employee education strategies in other sustainability plan topics (e.g. water and waste).

Roles & Responsibilities

- **Lead department or organization:** Facilities
- **Partnering department(s):** People & Culture, Green Team
- **Partnering organization(s):**

Resources Available

- Xcel Energy Partners in Energy (application required) can provide implementation support for free, including employee training
- [ENERGYSTAR Employee Education Kit](#)

Resources Needed

- Staff time to set up training schedule and topics
- Staff time to deliver trainings or find and coordinate with external resources
- Educational resources, such as building signage, county employee sustainability tips webpage, or employee newsletter

Strategy 1.4 Develop sustainable, resilient, and health-focused design and operations guidelines

Description

Formalize standardized sustainable design and operations guidelines that consider water and energy efficiency, waste reduction, sustainable materials, building occupant health, resiliency, and other concepts. Ensures that buildings are both designed AND operated with sustainability in mind. Goes beyond LEED requirements by considering resiliency and building occupant health.

Impacts and Considerations

- Low-to-medium savings potential from improved efficiency, operation
- Improved indoor environmental quality for occupants. High-performing buildings have shown 1-9% increase in productivity, 1-10% turnover reduction, 10-50% reduction in sick days ([Stok](#)). Improved building resiliency could be coupled with community benefits. Lead by example for community.

Timing

Near-Term (2022–2024)

Roles & Responsibilities

- **Lead department or organization:** Facilities
- **Partnering department(s):** Public Works

Actions

- Gather and review current design and operations guidelines for sustainability and resiliency.
- Compile potential sustainability strategies for consideration based on existing sustainability design standards (e.g. LEED, WELL, New Buildings Institute, World Green Building Council).
- Conduct internal review process to determine priority strategies to include in guidelines.
- Develop sustainable design and operations guidelines document to be used during operations of existing buildings, major retrofits, and design of new buildings.

Resources Available

- [WELL Building Standards](#)
- [NBI Resource Hub](#) for embodied carbon in buildings.
- [World Green Building Council](#) has established recommendations for reducing embodied carbon in buildings with recommended actions for various sectors to take.
- [Whole Building Design Guide](#)

Resources Needed

- Staff time or funding for third-party development

Remaining Strategies

Strategy 1.5 Pilot building electrification in new building(s)

Description

Pilot building electrification in at least one new building. Fully electric buildings run solely on electricity and do not require natural gas for heating. This allows all of a building's energy use to be supplied by renewable energy. When considered during building design and construction, all-electric design can be cost neutral in some utility territories by leveraging rebates and incentives.

Timing

Revisit to Long-Term
(2026 and beyond)

First Steps

- Develop anticipated list of new county facilities and building type through 2030 by utility service territory.
- Discuss potential rebate and incentive options with utility partners for full electric construction.
- Identify technologies available for electric space heating and cooling, water heating.
- Identify building envelope upgrades to ensure efficient operation.
- Work with architects and building commissioning contractors familiar with all electric buildings.

Goal 2: Increase use and procurement of renewable energy for county facilities

Strategy 2.1 Identify potential locations for renewable energy installations on county property.

Description

Conduct solar siting study of county facilities and land to identify potential locations to install solar, including former shooting range and landfill clean-up site. Explore feasibility of large-scale renewable projects to achieve net-zero electricity.

Impacts and Considerations

- Low cost to develop
- No-to-low cost savings if solar installed. GHG savings potential low to medium, depending on total installed. Some buildings may be candidates to entirely offset electricity consumption, resulting in significant GHG savings.
- Pre-identifying project locations will allow quicker project conversion.

Timing

Near-Term (2022–2024)

Roles & Responsibilities

- **Lead department or organization:** Facilities
- **Partnering department(s):**
- **Partnering organization(s):** Xcel Energy, United Power

Actions

- Conduct initial review of county facilities and land utilizing free tools.
- Determine if there are in-house resources capable of completing assessment or if outside services will be required.
- Complete solar siting study.
- Use results of solar siting study to determine which options to pursue.
- Work with utilities to understand feasibility of large-scale power purchase agreements.

Resources Available

- Guides
 - [SolSmart Toolkit for Local Governments - Solar Development on Public Facilities and Under-Utilized Land](#)
- Free modeling tools:
 - [EPA RE-Powering Mapper](#) – provides location information for brownfield sites that have been prescreened for renewable energy potential
 - [NREL System Advisor Model \(SAM\)](#) – free software to model types of renewable energy systems, including financial models

Resources Needed

- Potential funding needed for solar siting study

Strategy 2.2 Advocate for and pursue renewable energy procurement options with utilities

Description

Explore renewable procurement options through utilities and advocate for increased availability of procurement options.

Impacts and Considerations

- No cost savings but provides pathway to renewable energy target.
- Subscriptions support addition of renewable energy by utility provider.
- Covering all electricity with renewable energy would offset county GHG emissions by estimated 38%.

Timing

Near-Term (2022–2024)

Roles & Responsibilities

- **Lead department or organization:** Facilities
- **Partnering department(s):** Legislative Affairs

Actions

- Work with utility account managers and community representatives to assess costs for renewable energy subscriptions or on-site options for county facilities and county-owned streetlights.
 - Important to understand Renewable Energy Credit implications of programs when working with utility providers, as not all programs will count toward renewable energy goals.
- Work with utility community representatives to express interest in and explore additional renewable procurement product opportunities (e.g. Xcel Energy’s Renewable Connect offering)
- Continue to work with Colorado Communities for Climate Action (CC4CA) and other regional and state groups to strength state renewable energy and climate policy.

Resources Available

- Xcel Energy and United Power – actively pursuing more renewable energy options for customers. Examples include: Green Power Partners (United Power), Renewable*Connect and Windsorce (Xcel Energy)

Resources Needed

- Staff time for advocacy
- Additional budget approval for incremental cost of renewable energy subscription or on-site installations

Strategy 2.3 Incorporate renewable energy into new county facilities

Description

Include solar or geothermal energy options when designing and building new facilities. Including in the initial design and building can reduce costs associated with adding systems later.

Timing

Mid-Term (2024–2026)

Roles & Responsibilities

- **Lead department or organization:** Facilities
- **Partnering organizations(s):** Xcel Energy, United Power

First Steps

- Identify preferred list of geothermal or solar contractors.
- During capital projects planning process, work with geothermal or solar contractors to understand technical requirements and costs associated with including geothermal or solar in project.
- Work with utility providers to understand requirements or incentives, as applicable.



Goal 3: Expand, create, and advocate for equitable clean energy opportunities for all community members to reduce our carbon footprint.

Strategy 3.1 Develop Energy Action Plan

Description

Develop a municipal and communitywide Energy Action Plan through Xcel Energy Partners in Energy program. This program is a free resource to communities in Xcel Energy service territory. It provides collaboration opportunities with other utilities to address energy issues in communities and support implementation, such as education and outreach, connecting businesses to financing, developing programs, and other activities. Goals and strategies from the Sustainability Plan can feed directly into the Energy Action Plan, with additional benefits of deep data analysis and connecting to utility programs.

Impacts and Considerations

- Leverage free implementation resources through Xcel Energy.
- Collaborate with other utility providers.
- Energy Action Plan can support Sustainability Plan strategies.

Timing

Near-Term (2022–2024)

Roles & Responsibilities

- **Lead department or organization:** CED – Economic Development
- **Partnering department(s):** Facilities, Communications, Community Safety & Well-Being
- **Partnering organization(s):** Xcel Energy, United Power

Actions

- Apply to Partners in Energy by January 15 or July 15 of each year.
- Support two-year engagement through planning and implementation. Note that planning may largely focus on more targeted and detailed strategy development.
- Identify key community and county staff stakeholders.

Resources Available

- Partners in Energy provides free data, planning, and implementation support

Resources Needed

- Staff time to fill out application and be main point of contact for process

Strategy 3.2 Establish sustainability points system for development code

Description

Establish development code sustainability points system to promote sustainability during development. Considerations may include building design, energy and water conservation, transportation, and other sustainability aspects. Points systems allow developers to choose their path to compliance, rather than required to meet certain sustainability criteria that may not fit their site or needs.

Impacts and Considerations

- Implementation cost expected to be medium (staff and consultant time).
- Sustainable buildings realize energy benefits, reduced maintenance costs, increased occupant satisfaction, and lower CO2 emissions. [Stok](#) estimates over \$18/sq. ft. of added profit in commercial buildings.
- Several other communities in the Front Range have adopted sustainability points systems.

Timing

Near-Term (2022–2024)

Complete with other code updates recommended from Advancing Adams Plans

Actions

- Review existing development code for sustainability related items.
- Establish working group to discuss code updates.
- Research best practices and other community approaches
- Develop opportunity register of potential updates. Conduct analysis of impact.
- Provide recommendations for code updates as part of development standards update.
- Public outreach with businesses and developers
- Evaluate options to establish different standards for different land use zones.

Roles & Responsibilities

- **Lead department or organization:** Development Services (CED)
- **Partnering department(s):** Economic Development
- **Partnering organization(s):** Colorado Energy Office, Southwest Energy Efficiency Project (SWEEP)

Resources Available

- Many communities in Colorado have offered sustainability menu options to promote above-code development that can be leveraged to develop an Adams County specific menu.
 - [Lakewood Menu](#) and [Resource Guide](#) – for developments with cumulative gross square footage greater than 20,000 sq. ft.
 - [Golden Sustainability Menu](#)
 - City and County of Denver [Net Zero Energy New Buildings & Homes Implementation Plan](#)
 - [New Buildings Institute - Energy Code Roadmaps for Getting to Zero Outcomes](#)
- Colorado Energy Office provides support for building code updates.
- Xcel Energy recently launched a Codes & Standards program to help communities upgrade their building codes.

Resources Needed

- Staff time
- Funding for third-party development of recommendations

Strategy 3.3 Support solar cooperatives in Adams County

<p><i>Description</i></p> <p>Support solar cooperatives by providing seed funding and outreach.</p>	
<p><i>Impacts and Considerations</i></p> <ul style="list-style-type: none"> • Potential to provide savings for community members. • Engaging disproportionately impacted communities and providing access to resources can ensure equitable access to solar. • Targeting environmental justice communities can ensure equitable access to solar. 	
<p><i>Timing</i></p> <p>Ongoing</p>	<p><i>Actions</i></p> <ul style="list-style-type: none"> • Identify funding mechanism for solar cooperatives. • Develop and conduct outreach campaign for participation in solar cooperatives, providing resources and assistance for low-income households and communities affected by environmental injustices. • Coordinate with solar cooperative administrator.
<p><i>Roles & Responsibilities</i></p> <ul style="list-style-type: none"> • Lead department or organization: Environmental Programs (CED) • Partnering department(s): Communications • Partnering organization(s): CEO, Energy Outreach Colorado, adjacent municipalities 	
<p><i>Resources Available</i></p> <p><i>Resources Needed</i></p> <ul style="list-style-type: none"> • Staff time to manage contracts, conduct outreach 	

Strategy 3.4 Continue partnering with Grid Alternatives

<p><i>Description</i></p> <p>Continue partnership with Grid Alternatives to install solar and provide workforce training in Adams County.</p>	
<p><i>Impacts and Considerations</i></p> <ul style="list-style-type: none"> • Benefits for community include energy savings, job training, GHG savings. 	
<p><i>Timing</i></p> <p>Ongoing and Near-Term (2022–2024)</p>	<p><i>Actions</i></p> <ul style="list-style-type: none"> • Maintain existing contract. • Promote successes and benefits of partnership with Grid Alternatives to the community through case studies, social media, website content, etc. • Highlight opportunities for community members to get involved.
<p><i>Roles & Responsibilities</i></p> <ul style="list-style-type: none"> • Lead department or organization: Community Development (CED) • Partnering department(s): Communications, Workforce Center • Partnering organization(s): Grid Alternatives 	
<p><i>Resources Available</i></p> <p><i>Resources Needed</i></p> <ul style="list-style-type: none"> • Staff time to manage contracts 	

Strategy 3.5 Support residential energy-efficiency outreach and upgrades

Description

Provide education and outreach related to energy-efficiency resources. Explore ways to fund energy efficiency upgrades for residents, especially those who are income-qualified.

Impacts and Considerations

- No-to-low cost. Some support through Xcel Energy Partners in Energy. County could explore additional funding to support upgrades or additional rebates on top of utility rebates.
- Outreach campaigns can see uptick in community energy savings of about 1%.
- Can target funding to low-income households.

Timing

Near-Term (2022–2024)

Actions

- Determine feasibility of funding energy efficiency upgrades and potential qualification criteria. Examples of support or upgrades might include:
 - Home Energy Squad® (Xcel Energy program) buy-down campaign – provide free visits to residents by offsetting costs.
 - Provide financial support for upgrades in low-income homes via Minor Homes Repair program or alternative pathways.
- Develop education and outreach campaign to educate residents and raise awareness of available incentives and programs.
 - Provide information workshops.
 - Leverage online channels for distributing educational material.
- Deliver information via existing communications and CSWB channels to residents.
- Leverage Xcel Energy Partners in Energy program for implementation support.

Roles & Responsibilities

- **Lead department or organization:** Community Development (CED)
- **Partnering department(s):** Communications, Community Safety & Well-Being
- **Partnering organization(s):** Xcel Energy, United Power, CORE, MCREA, Colorado CPACE office, CEO

Resources Available

- Xcel Energy Partners in Energy
- Utility rebates
- [Colorado Renu Loan Program](#)

Resources Needed

- Staff time
- Funding requests to provide financial support for energy efficiency upgrades and outreach

Strategy 3.6 Support business energy-efficiency outreach and upgrades

Description

Provide education and outreach related to energy-efficiency and financing. Explore ways to fund energy efficiency upgrades for businesses.

Impacts and Considerations

- No-to-low cost. Some support through Partners in Energy. County could explore additional funding to support upgrades or additional rebates on top of utility rebates.
- Outreach campaigns can see uptick in community energy savings of about 1%.
- Can target funding to DBE businesses.

Timing

Near-Term (2022–2024)

Actions

- Determine feasibility of funding energy efficiency upgrades and potential qualification criteria. Examples of support or upgrades might include:
 - Business grants for additional rebates on top of utility rebates for energy efficiency projects.
- Develop outreach campaign to educate and raise awareness of available incentives and programs.
- Promote CPACE financing to new and existing businesses and developments.
- Conduct outreach via business walks, providing information about available rebates and programs related to energy efficiency, renewable energy, financing.
 - Combine with other business outreach strategies (Strategies 5.2, 9.3).
- Leverage Xcel Energy Partners in Energy program for implementation support.

Roles & Responsibilities

- **Lead department or organization:** Economic Development (CED)
- **Partnering department(s):** Communications
- **Partnering organization(s):** Xcel Energy, United Power, CORE, MCREA, Colorado CPACE office, CEO, AC-REP

Resources Available

- Xcel Energy Partners in Energy
- Utility rebates
- [Agricultural Energy Efficiency program \(CEO\)](#)
- [CPACE](#)

Resources Needed

- Staff time
- Funding requests to provide financial support for energy efficiency upgrades and outreach

Remaining Strategies

Strategy 3.7 Develop and fund energy services program

<i>Description</i> Develop and fund energy services program to support communities experiencing disproportionate environmental impacts. Energy services may include energy efficiency upgrades, renewable energy assistance, indoor air quality upgrades, and other services.	
<i>Timing</i> Mid-Term (2024–2026)	<i>First Steps</i> <ul style="list-style-type: none">• This strategy coordinates with Strategy 16.3 and existing Weatherization and Minor Homes Repairs programs.• Review best practices and regional/national examples of programs to determine scope for Adams County.• Determine potential funding options.
<i>Roles & Responsibilities</i> <ul style="list-style-type: none">• Lead department or organization: Environmental Programs (CED), Community Development (CED), Legislative Affairs (CMO)	

Strategy 3.8 Incentivize renewable energy project development

<i>Description</i> Incentivize renewable energy project development in Adams County, particularly those with innovative approaches to renewable energy projects (e.g. agri-voltaics, pollinator habitat focused solar development, co-location, or multi-use renewable energy projects).	
<i>Timing</i> Mid-Term (2024–2026)	<i>Actions</i> <ul style="list-style-type: none">• Identify barriers to renewable energy project development.• Review land use, zoning, and permit requirements for renewable energy projects to ensure renewable energy projects can be developed and installed across Adams County (including a range of sectors).• Determine potential financial incentives for attracting renewable energy project development.• Include in updated incentives policy.
<i>Roles & Responsibilities</i> Lead department or organization: CED - Economic Development, Development Services	



WASTE



Goal 4: Reduce waste in county operations through source reduction, sustainable diversion practices, and fostering a waste reduction culture.

Strategy 4.1 Train employees on waste diversion and ways to reduce consumption

<p><i>Description</i></p> <p>As part of employee training series on sustainability, provide formal and informal trainings to employees on proper waste diversion practices and ways to reduce consumption to generate less waste. Strategy has synergies with other employee education opportunities.</p>	
<p><i>Impacts and Considerations</i></p> <ul style="list-style-type: none"> No-to-low savings; may realize some savings through reduced purchasing and less waste generated. Benefits from reducing landfill waste, county can lead by example. Training employees will also have community impacts as they can implement practices at home. 	
<p><i>Timing</i></p> <p>Ongoing and Near-Term (2022–2024)</p>	<p><i>Actions</i></p> <ul style="list-style-type: none"> Develop list of training topics and resources. Consider topics and resources for employees generally and for those responsible for building operations. <ul style="list-style-type: none"> Potential resources: building signage, internal tips page, employee newsletter. Potential topics: sustainable procurement, benefits of recycling and composting. Develop schedule of training topics and delivery method. Determine who will provide training. Develop training modules. Coordinate training with other employee education strategies in other sustainability plan topics.
<p><i>Roles & Responsibilities</i></p> <ul style="list-style-type: none"> Lead department or organization: Facilities Partnering department(s): Green Team, People & Culture 	
<p><i>Resources Available</i></p> <ul style="list-style-type: none"> Leverage Green Team to promote trainings and waste reduction People & Culture to coordinate internal trainings, find resources to develop or deliver trainings <p><i>Resources Needed</i></p> <ul style="list-style-type: none"> Staff time to set up training schedule and topics Staff time to deliver trainings or find and coordinate with external resources 	

Strategy 4.2 Develop countywide sustainable procurement policies and provide employee training

<p><i>Description</i></p> <p>Procurement policies should consider all aspects of sustainability (not strictly related to waste) and consider life-cycle cost analysis (LCA) and sustainable return on investment (sROI) to incorporate environmental and social considerations.</p>	
<p><i>Impacts and Considerations</i></p> <ul style="list-style-type: none"> • May result in increased initial cost, but has possibility to reduce continued operating costs. • Savings may range from none to medium depending on purchase. Can lead to reduced maintenance and operating costs when incorporated into LCA. Other benefits include consideration for environmental and social impacts. 	
<p><i>Timing</i></p> <p>Near-Term (2022–2024)</p>	<p><i>Actions</i></p> <ul style="list-style-type: none"> • Review existing procurement policies and determine potential opportunities to include sustainability components. <ul style="list-style-type: none"> ◦ Develop opportunity register for consideration. • Review other local government procurement policies for examples to follow. • Establish criteria for LCA or sROI to be included in capital expenditures. <ul style="list-style-type: none"> ◦ This can especially apply to infrastructure projects, fleet purchases, new facilities, and other large purchases. • Draft procurement language to be incorporated into policies and shepherd through review and approval processes. • Create a training program for employees engaged in the procurement process to provide them specific ways they can write specifications and/or contracts to encourage sustainable purchasing. <ul style="list-style-type: none"> ◦ Examples: develop draft language for employees (project managers, etc.) to use. • Explore feasibility of product/packaging bans in county facilities (e.g. styrofoam).
<p><i>Roles & Responsibilities</i></p> <ul style="list-style-type: none"> • Lead department or organization: Finance, Facilities • Partnering department(s): Public Works 	
<p><i>Resources Available</i></p> <ul style="list-style-type: none"> • EPA Transforming Waste Tools - Example Procurement Policies (see strategies 7, 8, 9 in tool) • Contracting Best Practices: Purchasing Preferences (Green Vehicles & Products) <p><i>Resources Needed</i></p> <ul style="list-style-type: none"> • Identify finance lead • Staff time to determine opportunities to include • Staff time to develop draft policies and provide training 	

Strategy 4.3 Explore commercial scale options and implement potential end-uses for organic waste.

<p><i>Description</i></p> <p>Determine options, feasibility, and budget required for composting or other end-uses for organic waste (e.g. food) in county facilities with high food waste such as the county jail and the Government Center. Options beyond composting might include donating to farmers or other community partners</p>	
<p><i>Impacts and Considerations</i></p> <ul style="list-style-type: none"> • Reduces emissions from methane generation in landfills, which is a more potent GHG than carbon dioxide. Although composting requires electricity to operate facilities, the methane generation from landfills outweighs this. • Compost has positive impacts on soil health, can reduce the need for chemical fertilizers, retains more water than conventional soil, and can provide cost savings over purchasing conventional soils. 	
<p><i>Timing</i></p> <p>Near-Term (2022–2024) and Mid-Term (2024–2026)</p>	<p><i>Actions</i></p> <ul style="list-style-type: none"> • As part of RFP for waste service, include composting at specified locations (e.g. county jail, Government Center) to determine pricing either as part of bundled services with recycling and trash or as a separate service. <ul style="list-style-type: none"> ◦ If service is selected, update custodial contracts as necessary. • Work with community partners to explore options to donate organic waste to farmers, agricultural organizations, or other entities.
<p><i>Roles & Responsibilities</i></p> <ul style="list-style-type: none"> • Lead department or organization: Facilities • Partnering department(s): Procurement • Partnering organization(s): Colorado State University Extension 	
<p><i>Resources Available</i></p> <ul style="list-style-type: none"> • City of Boulder, Boulder County <p><i>Resources Needed</i></p> <ul style="list-style-type: none"> • Additional budget to cover incremental cost of services if selected. 	

Strategy 4.4 Develop low-waste event and meeting guidelines

<p><i>Description</i></p> <p>Develop sustainable event and meeting guidelines, including “toolkits” of reusable products and provide education on best practices.</p>	
<p><i>Impacts and Considerations</i></p> <ul style="list-style-type: none"> • Low cost to develop toolkits and buy compostable materials. • Without composting available in facilities, compostable materials will not have an impact. • May reduce materials purchased for events and meetings, reduce waste sent to landfill. 	
<p><i>Timing</i></p> <p>Near-Term (2022–2024)</p>	<p><i>Actions</i></p> <ul style="list-style-type: none"> • Develop event and meeting guidelines with considerations for printing, food/packaging, and disposal. • Publish guidelines and promote among employees. • Provide education (informal or formal) on guidelines and best practices. • Develop signage for large meeting rooms and kitchen areas. • Develop list of materials needed for “toolkits” of reusable products. • Collaborate with Green Team to provide education and potential composting end-uses. • Explore options for requiring vendors to provide compostable materials and end-use.
<p><i>Roles & Responsibilities</i></p> <ul style="list-style-type: none"> • Lead department or organization: Facilities • Partnering department(s): Green Team 	
<p><i>Resources Available</i></p> <ul style="list-style-type: none"> • Example guidelines: Oakland, CA, Boulder County, Olympia, WA <p><i>Resources Needed</i></p> <ul style="list-style-type: none"> • Small funding request to develop several “toolkits” of reusable products for departments, buildings, etc. 	

Strategy 4.5 Collect waste data for county facilities and operations

<p><i>Description</i></p> <p>Assess solid waste contracts and continue exploring ways to collect waste data for county facilities.</p>	
<p><i>Impacts and Considerations</i></p> <ul style="list-style-type: none"> • Will help establish baseline and potential for future diversion rate target. • Measurement of waste will help promote reduction when employees are made aware of how much waste is produced. • Savings may result from decreased waste generation. 	
<p><i>Timing</i></p> <p>Ongoing and Near-Term (2022–2024)</p>	<p><i>Actions</i></p> <ul style="list-style-type: none"> • Continue efforts to measure solid waste disposal through manual measurement done by employees. • Incorporate language into solid waste contracts to require measurement of waste to landfill and recycled materials. • Work with advocacy strategy in community waste to get state requirements.
<p><i>Roles & Responsibilities</i></p> <ul style="list-style-type: none"> • Lead department or organization: Facilities • Partnering department(s): Environmental Programs Division • Partnering organization(s): Solid waste contractors 	
<p><i>Resources Available</i></p> <ul style="list-style-type: none"> • The EPA transforming waste streams tools provide example contracting language for local governments, including reporting requirements among other clauses. <p><i>Resources Needed</i></p> <ul style="list-style-type: none"> • Staff time to review and negotiate contracts 	

Strategy 4.6 Continue shifting transactions online with considerations toward equity and accessibility

<p><i>Description</i></p> <p>Continue shifting transactions online with considerations toward equity and accessibility.</p>	
<p><i>Timing</i></p> <p>Ongoing</p>	<p><i>Actions</i></p> <ul style="list-style-type: none"> • Identify transactions that can be completed online by department. • Work with ITi to establish appropriate systems to move transactions online.
<p><i>Roles & Responsibilities</i></p> <ul style="list-style-type: none"> • Lead department or organization: Information Technology & Innovation • Partnering department(s): All using online transactions 	
<p><i>Resources Available</i></p> <ul style="list-style-type: none"> • Many existing transactions already occur online, providing a model for additional transitions. <p><i>Resources Needed</i></p> <ul style="list-style-type: none"> • Staff time 	

Strategy 4.7 Establish construction and demolition waste management policies for county facilities and projects

<p><i>Description</i></p> <p>Establish policies to guide waste management for C+D waste for county facilities and projects, including waste diversion targets by project size and menu options for sustainable development criteria.</p>	
<p><i>Impacts and Considerations</i></p> <ul style="list-style-type: none"> • Grant funding may be available. • Reduces landfill waste and potential to divert materials to local markets and promote circular economy. 	
<p><i>Timing</i></p> <p>Near-Term (2022–2024)</p>	<p><i>Actions</i></p> <ul style="list-style-type: none"> • Catalog types of projects that would be considered for guidelines. • Review existing policies for C&D waste management practices. • Review other local government C&D policies for examples to follow. • Establish priority criteria for C&D waste diversion. Examples might include: <ul style="list-style-type: none"> ○ Source separation requirements ○ Reuse guidance ○ Road construction requirements ○ Embodied carbon requirements ○ Organics or inert separation requirements • Draft policy and sustainable development criteria for review and shepherd through approval processes. • Work with contractors to establish C&D waste diversion targets for each project.
<p><i>Roles & Responsibilities</i></p> <ul style="list-style-type: none"> • Lead department or organization: Facilities • Partnering department(s): Public Works, Purchasing 	
<p><i>Resources Available</i></p> <ul style="list-style-type: none"> • EPA Managing Waste Streams Tool provides example policies: C&D Diversion Requirements (also see strategies: 10, 64-72, 77, 90, 96, 97). • CDPHE Grants and Support <p><i>Resources Needed</i></p> <ul style="list-style-type: none"> • Staff time to review policies, develop criteria 	



Goal 5: Ensure that all Adams County residents in unincorporated areas have access to recycling.

Strategy 5.1 Continue supporting hard-to-recycle waste events

<i>Description</i> Continue hosting and subsidizing hard-to-recycle waste events for county residents. Currently the county covers 97% of the costs for hard-to-recycle items for Adams County residents, promoting increased recycling that prevents illegal dumping and diverts hazardous items from landfills.	
<i>Impacts and Considerations</i> <ul style="list-style-type: none">• High diversion potential of hard-to-recycle items.• Promotes neighborhood cleanliness, reduces illegal dumping, and provides a needed community resource.	
<i>Timing</i> Ongoing	<i>Actions</i> <ul style="list-style-type: none">• Develop outreach campaign for hard-to-recycle waste events. Consider communications channels, collateral, and messaging in outreach plan.• Through county communications channels, promote hard-to-recycle waste events – include information about costs, location, time, how to, and benefits.• Promote events through neighborhood channels.• Develop reciprocity plan or intergovernmental agreement for other jurisdictions in Adams County receiving waste collection fees under state statute.
<i>Roles & Responsibilities</i> <ul style="list-style-type: none">• Lead department or organization: Environmental Programs (CED)• Partnering department(s): Community Safety & Well-Being, Communications• Partnering organization(s): City of Thornton, Veolia	
<i>Resources Available</i> <ul style="list-style-type: none">• CDPHE Grants <i>Resources Needed</i> <ul style="list-style-type: none">• Staff time	

Strategy 5.2 Adopt waste hauler licensing ordinance and regulations

<p><i>Description</i></p> <p>Adopt ordinance requiring haulers to provide recycling and composting in unincorporated Adams County to ensure all areas have access to services.</p>	
<p><i>Impacts and Considerations</i></p> <ul style="list-style-type: none"> High diversion potential, leading to GHG savings. 	
<p><i>Timing</i></p> <p>Near-Term (2022–2024)</p>	<p><i>Actions</i></p> <ul style="list-style-type: none"> Develop and administer baseline survey to gauge resident and business understanding, impressions of recycling, access to services, and needs (coordinate with Strategy 5.3). Engage with local waste haulers on current recycling and waste diversion practices (what works, what doesn't). Draft ordinance and shepherd through review and adoption process. Draft waste hauler regulations based on regional best practices to include tracking and reporting requirements. Source waste hauler reporting database to track quarterly and annual metrics (network regional online software systems). Conduct education and outreach with waste haulers explaining new requirements.
<p><i>Roles & Responsibilities</i></p> <ul style="list-style-type: none"> Lead department or organization: Environmental Programs (CED) Partnering department(s): County Attorney's Office 	
<p><i>Resources Available</i></p> <ul style="list-style-type: none"> CDPHE Grants Example ordinances: City and County of Denver, Boulder County, Broomfield County, Westminster, Larimer County, and City of Fort Collins <p><i>Resources Needed</i></p> <ul style="list-style-type: none"> Outreach/survey consultant to develop/administer resident and business community survey Funding for online waste reporting software system such as Re-TRAC Connect. Staff time for public and business outreach, develop ordinance, process through two BoCC hearings, tabulate annual reports, licensing enforcement. Estimated 1 FTE to cover many waste strategies – see Strategy 5.5. Staff time for community and business engagement, outreach for regulations, development and proposal of regulations, process through P&C and BoCC hearings, compliance monitoring. Staff time for processing waste hauler license applications, fees, license issuance 	

Strategy 5.3 Provide yard waste drop-off voucher program for unincorporated Adams County residents and businesses

<p><i>Description</i></p> <p>Explore yard waste drop-off pilot program that subsidizes and/or incentivizes yard waste recycling for households and business.</p>	
<p><i>Impact and Considerations</i></p> <ul style="list-style-type: none"> • Reduce organic waste in landfills, which has significant GHG impacts. • Savings to residents by subsidizing drop-off site rather than monthly fee for pick-up. 	
<p><i>Timing</i></p> <p>Near-Term (2022–2024)</p>	<p><i>Actions</i></p> <ul style="list-style-type: none"> • Develop yard-waste drop off voucher program that offsets costs of recycling and provides centralized drop-off location. • Determine potential drop-off locations. • Explore partnerships with organizations that manage compost (see partnering organizations). • Explore opportunities to partner with Public Works and Neighborhood Services on neighborhood cleanup events. • Explore cost coverage for events and voucher system.
<p><i>Roles & Responsibilities</i></p> <ul style="list-style-type: none"> • Lead department or organization: Environmental Programs (CED) • Partnering department(s): Community Safety & Well-Being • Partnering organization(s): A1 Organics, Wompost, SustainAbility 	
<p><i>Resources Available</i></p> <ul style="list-style-type: none"> • Example compostable drop-off programs <p><i>Resources Needed</i></p> <ul style="list-style-type: none"> • Funds to cover event subsidy and/or year-round voucher system 	

Strategy 5.4 Hire Integrated Waste Management Specialist

Description

An additional staff person to lead waste strategy program/policy development, implementation, and reporting strategies would ensure Adams County makes progress on its waste goals.

Impacts and Considerations

- Dedicated staff person to oversee waste strategies could significantly impact community, business, and county operations waste diversion.

Timing

Near-Term (2022–2024)

Roles & Responsibilities

- **Lead department or organization:** Environmental Programs (CED)
- **Partnering department(s):** Facilities; Parks, Open Space & Cultural Arts

Actions

- Obtain approval for additional FTE
- Write job description and scope of tasks:
 - Support all waste strategies from sustainability plan
 - Education and outreach
 - Ordinance and regulation development
 - Waste management facility oversight
 - Waste management plan review
 - Tracking reports and data
 - Managing data platforms
 - Expanding waste reduction and diversion events
 - Assist with procurement policies
 - Coordination with internal departments

Resources Available

Resources Needed

- Approval for additional FTE

Remaining Strategies

Strategy 5.5 Conduct waste diversion education and outreach campaign

<p><i>Description</i></p> <p>Conduct education and outreach campaign about waste diversion and reduction, including information about reducing, reusing, recycling, composting, and available resources.</p>	
<p><i>Impacts and Considerations</i></p> <ul style="list-style-type: none"> • An in-depth outreach campaign may require significant staff or volunteer effort to be impactful. • Low potential, may lead to neighborhood cleanliness also 	
<p><i>Timing</i></p> <p>Mid-Term (2022–2026)</p>	<p><i>Actions</i></p> <ul style="list-style-type: none"> • Utilize baseline survey results from waste hauler licensing ordinance, Strategy 5.2. • Develop outreach plan, including key messages, audiences, and communication channels. • Develop materials including social media posts, newsletter articles, interactive activities, available resources for residents and businesses, etc. • Develop webpage with resources for residents and businesses to learn about waste diversion and reduction. • Leverage neighborhood cleanups and tool shed program as education and outreach opportunity. • Collaborate with neighborhoods group to distribute information. • Consider leveraging volunteers through the Green Team or outside organizations to help deliver outreach in the community or at events. • Promote county recycling events.
<p><i>Roles & Responsibilities</i></p> <ul style="list-style-type: none"> • Lead department or organization: Environmental Programs (CED); Economic Development • Partnering department(s): Community Safety & Well-Being, Green Team, Communications, Public Works • Partnering organization(s): EcoCycle 	
<p><i>Resources Available</i></p> <ul style="list-style-type: none"> • CDPHE Grants • EcoCycle Guide to Zero Waste • CalRecycle Example Outreach Resources <p><i>Resources Needed</i></p> <ul style="list-style-type: none"> • Staff time to develop education and outreach campaign • Staff time to conduct campaign • Volunteers to support education and outreach • Outreach materials 	

Strategy 5.6 Provide neighborhood waste diversion opportunities

<p><i>Description</i></p> <p>Provide neighborhood waste diversion opportunities, such as recycling, household hazardous waste, yard waste, etc. by bringing resources, drop off-sites, etc. to neighborhoods versus communitywide events</p>	
<p><i>Timing</i></p> <p>Mid-Term (2024–2026)</p>	<p><i>First Steps</i></p> <ul style="list-style-type: none"> • This strategy coordinates with Strategy 5.3. • Coordinate across departments to organize events or to provide waste diversion as part of existing events. • Determine target neighborhoods for opportunities.
<p><i>Roles & Responsibilities</i></p> <ul style="list-style-type: none"> • Lead department or organization: Community Safety & Well-Being, Public Works • Partnering department(s): Environmental Programs (CED) 	

Strategy 5.7 Administer reporting system to track waste hauler annual recycling, composting, and landfilling metrics

<p><i>Description</i></p> <p>Manage online reporting system for licensed waste haulers and provided data to track progress toward waste diversion goals.</p>	
<p><i>Timing</i></p> <p>Mid-Term (2024–2026)</p>	<p><i>Actions</i></p> <ul style="list-style-type: none"> • Source online data reporting software, such as ReTrac, that can warehouse data and provide data analytics. • Provide secure access to each licensed waste hauler. • Evaluate quarterly analytics for compliance with waste hauler licensing ordinance and regulation requirements. • Annual report available to the community and elected leaders.
<p><i>Roles & Responsibilities</i></p> <p>Lead department or organization: Environmental Programs (CED)</p> <ul style="list-style-type: none"> • Partnering department(s): ITi, Communications • Partnering organization(s): TBD 	

Goal 6: Achieve 30% waste diversion at county-led events

Strategy 6.1: Establish procurement requirements for event vendors and develop incentives to meet requirements

<p><i>Description</i></p> <p>Establish procurement requirements for event vendors, including compostable and recyclable materials. Determine funding mechanism to incentivize or require vendors to provide eco-friendly materials.</p>	
<p><i>Impacts and Considerations</i></p> <ul style="list-style-type: none"> • Medium diversion potential • Low-to-medium cost to implement, depending on incentives offered 	
<p><i>Timing</i></p> <p>Near-Term (2022–2024)</p>	<p><i>Actions</i></p> <ul style="list-style-type: none"> • Research other local government or event company procurement requirements and incentives for zero waste to determine suitable options. • Develop and approve procurement requirements. • Educate event vendors on new procurement requirements. • Develop proposal for potential funding mechanisms. <ul style="list-style-type: none"> ◦ Refunds and rebates are common options (see resources available).
<p><i>Roles & Responsibilities</i></p> <ul style="list-style-type: none"> • Lead department or organization: Fair and Special Events (Parks, Open Space & Cultural Arts) • Partnering department(s): Green Team 	
<p><i>Resources Available</i></p> <ul style="list-style-type: none"> • Examples of funding mechanisms: Austin, TX Zero Waste Event Rebate, Boulder, CO Zero Waste Incentive Form <p><i>Resources Needed</i></p> <ul style="list-style-type: none"> • Staff time • Funding for incentives 	

Strategy 6.2: Develop zero waste guidelines for county events and facility rentals

<p><i>Description</i></p> <p>Develop zero waste guidelines for county events and facility rentals, including guidance on planning, materials, how to properly dispose of waste, necessary signage, etc.</p>	
<p><i>Impacts and Considerations</i></p> <ul style="list-style-type: none"> • Low-to-medium diversion potential; no cost impacts. • Opportunity for county to lead the way for community by establishing guidelines. 	
<p><i>Timing</i></p> <p>Near-Term (2022–2024)</p>	<p><i>Actions</i></p> <ul style="list-style-type: none"> • Research other local government guidelines for zero waste. • Develop guidelines. • Provide guidelines and education as part of event contracts. Post on website for easy access and information.
<p><i>Roles & Responsibilities</i></p> <ul style="list-style-type: none"> • Lead department or organization: Fair and Special Events (Parks, Open Space & Cultural Arts) • Partnering department(s): Green Team 	
<p><i>Resources Available</i></p> <ul style="list-style-type: none"> • Responsible Events: A Framework for Achievement provides resources for planning responsible, triple-bottom-line focused events. • The EPA Managing and Transforming Waste Streams Tool provides examples of zero waste event guidelines. • CDPHE Grants • EcoCycle Guide to Zero Waste <p><i>Resources Needed</i></p> <ul style="list-style-type: none"> • Staff time to develop guidelines and provide education to those renting facilities 	

Remaining Strategies

Strategy 6.3 Establish zero waste volunteer program for county-led events

<p><i>Description</i></p> <p>Develop volunteer program to staff events to manage waste stations and help attendees properly dispose of waste. Engage existing sustainability or environmental organizations, schools, neighborhood groups, and other volunteer organizations.</p>	
<p><i>Timing</i></p> <p>Mid-Term (2024–2026)</p>	<p><i>Actions</i></p> <ul style="list-style-type: none"> • Leverage Green Team to begin volunteer efforts. • Catalog existing volunteer organizations for potential outreach. • Advertise volunteer opportunity and expectations.
<p><i>Roles & Responsibilities</i></p> <ul style="list-style-type: none"> • Lead department or organization: Fair and Special Events (Parks, Open Space & Cultural Arts) 	

Strategy 6.4 Partner with Eco-Cycle for zero waste events

<p><i>Description</i></p> <p>Partner with Eco-Cycle for zero-waste events (Adams County Fair, others) where impactful and feasible. Eco-Cycle can help plan zero-waste events and provide resources, such as zero-waste bins, for events.</p>	
<p><i>Timing</i></p> <p>Mid-Term (2024–2026)</p>	<p><i>Actions</i></p> <ul style="list-style-type: none"> • Determine suitable events to pilot zero-waste strategies and budget for engaging with Eco-Cycle • Discuss opportunities and ways to implement zero-waste events with Eco-Cycle
<p><i>Roles & Responsibilities</i></p> <ul style="list-style-type: none"> • Lead department or organization: Fair and Special Events (Parks, Open Space & Cultural Arts) 	

Goal 7: Expand waste diversion and reduction practices in all new developments during construction.

Strategy 7.1 Advocate at state level for integrated waste management policies

<p><i>Description</i></p> <p>State requirements for integrated waste management and informing consumers about waste diversion, reduction, end uses, producer responsibility, and data could significantly improve diversion. Adams County will advocate at the state level for these requirements.</p>	
<p><i>Timing</i></p> <p>Ongoing</p>	<p><i>Actions</i></p> <ul style="list-style-type: none"> • Research benefits of waste policies to inform advocacy efforts. • Develop key messages. <ul style="list-style-type: none"> ◦ Consider messaging including points around overall waste reduction in addition to tracking. • Collaborate with other organizations on advocating for waste standards and requirements through existing channels. <ul style="list-style-type: none"> ◦ Align on common messages. • Work with Legislative Affairs office to advocate at state level.
<p><i>Roles & Responsibilities</i></p> <ul style="list-style-type: none"> • Lead department or organization: Legislative Affairs (CMO) • Partnering department(s): Environmental Programs (CED) • Partnering organization(s): CDPHE, CC4CA, Eco-Cycle, Colorado SWANA 	
<p><i>Resources Available</i></p> <ul style="list-style-type: none"> • Waste-Wise Cities: Advocacy Toolkit & Guide <p><i>Resources Needed</i></p> <ul style="list-style-type: none"> • Staff time 	

Strategy 7.2 Update development standards to encourage all development projects to include construction and demolition debris recycling, composting, and data tracking

<p><i>Description</i></p> <p>Update development standards to require all development projects to include construction and demolition debris recycling, composting, and data tracking.</p>	
<p><i>Impacts and Considerations</i></p> <ul style="list-style-type: none"> • Medium diversion potential • Role for Integrated Waste Management Specialist (Strategy 5.5) 	
<p><i>Timing</i></p> <p>Near-Term (2022–2024)</p>	<p><i>Actions</i></p> <ul style="list-style-type: none"> • Initiate development standards updates. • Draft and legal review of development standards updates • Provide education about new best practices. • Consider adaptive reuse as pathway. • Considerations for enforcement: waste management plan and quarterly reporting; include in inspections; code violation. • Requiring a waste-management plan, which will allow for staff to work on a project-specific level with developers.
<p><i>Roles & Responsibilities</i></p> <ul style="list-style-type: none"> • Lead department or organization: Development Services (CED) • Partnering department(s): Environmental Programs (CED), Economic Development, Building Inspectors, Neighborhood Services 	
<p><i>Resources Available</i></p> <p><i>Resources Needed</i></p> <ul style="list-style-type: none"> • Staff time or partial FTE 	

Remaining Strategies

Strategy 7.3 Incentivize circular economy, recycling, and other zero-waste markets

<p><i>Description</i></p> <p>Zero waste and recycling end markets may include recycling centers, retailer take-backs, encouraging use of recycled materials, new businesses, rural recycling options, reuse options. Providing financial incentives can help spur the creation and sustainability of end-markets.</p>	
<p><i>Timing</i></p> <p>Mid-Term (2024–2026)</p>	<p><i>First Steps</i></p> <ul style="list-style-type: none"> • Understand what businesses already exist in Adams County related to circular economy, recycling, and zero waste. • Review best practices and resources for local government role with circular economy (Resources: Ellen MacArthur Foundation, C40 Cities case studies). • Research what other local governments do to incentivize markets. • Include in updated incentives policy.
<p><i>Roles & Responsibilities</i></p> <ul style="list-style-type: none"> • Lead department or organization: Economic Development 	

WATER



Goal 8: Improve water use efficiency in county facilities and parks and promote the use of non-potable water supplies where available and feasible, including in public works operations.

Strategy 8.1 Analyze water use annually

<p><i>Description</i></p> <p>An annual water use analysis is informative to assessing water use trends, demonstrating progress toward goals, and identifying new opportunities for water conservation measures.</p>	
<p><i>Impacts and Considerations</i></p> <ul style="list-style-type: none"> • Low cost (staff time and/or consultant time) • No-to-low water savings (foundational activity, help identify apparent high and inefficient use) 	
<p><i>Timing</i></p> <p>Ongoing</p>	<p><i>Actions</i></p> <p>Each lead department should take the following actions:</p> <ul style="list-style-type: none"> • Use their knowledge of their water use plus the 2018-2020 water use analysis to prioritize sites to be assessed or audited. • Adapt the 2018-2020 water use analysis as a template to conduct annual water use assessments. Efficiency benchmarks and other inputs to the analysis can be adjusted as needed.
<p><i>Roles & Responsibilities</i></p> <ul style="list-style-type: none"> • Lead department or organization: Facilities, Parks, Open Space & Cultural Arts, and Public Works (Operations) • Partnering department(s): Data Science Team (P&C) • Partnering organization(s): Third-party service and product providers (e.g. EnergyCAP software vendor, audit providers) 	
<p><i>Resources Available</i></p> <ul style="list-style-type: none"> • None identified <p><i>Resources Needed</i></p> <ul style="list-style-type: none"> • None identified 	

Strategy 8.2 Implement new water conservation measures

<p><i>Description</i></p> <p>Implement the next round of water conservation measures to reduce overall water use, improve water use efficiency, and/or promote non-potable water use in county facilities, operations, and parks, using the findings from site water assessments, annual water use analysis, or other project identification methods.</p>	
<p><i>Impacts and Considerations</i></p> <ul style="list-style-type: none"> • None identified 	
<p><i>Timing</i></p> <p>Ongoing</p>	<p><i>Actions</i></p> <p>Each lead department should take the following action:</p> <ul style="list-style-type: none"> • Develop staffing and budget plans to implement water conservation measures.
<p><i>Roles & Responsibilities</i></p> <ul style="list-style-type: none"> • Lead department or organization: Facilities, Parks, Open Space & Cultural Arts, and Public Works (Operations) • Partnering department(s): People & Culture • Partnering organization(s): Water providers 	
<p><i>Resources Available</i></p> <ul style="list-style-type: none"> • Facilities staff have previously implemented water conservation measures. • Utility rebate programs for water conservation measures. <p><i>Resources Needed</i></p> <ul style="list-style-type: none"> • Budget and staff time will be needed to implement water conservation measures. 	

Strategy 8.3 Monitor local and state regulations and policies

<p><i>Description</i></p> <p>Adams County's ability to use water, especially in public works operations, is dependent upon the legal limitations that come from water rights, including the boundary where water may legally be used. Adams County staff and legislative affairs should monitor legislation for impactful changes that would affect water supplies, uses, and water sharing restrictions.</p>	
<p><i>Impacts and Considerations</i></p> <ul style="list-style-type: none"> • Paying more attention to the legislative cycle will help in all areas that touch county services and operations, not just water. 	
<p><i>Timing</i></p> <p>Ongoing</p>	<p><i>Actions</i></p> <p>Each lead department should take the following actions:</p> <ul style="list-style-type: none"> • Identify staff to participate in professional organizations that monitor legislative activity. • Encourage staff to share potential impacts of pending water legislation with the county's Legislative Affairs staff.
<p><i>Roles & Responsibilities</i></p> <ul style="list-style-type: none"> • Lead department or organization: Facilities, Parks, Open Space & Cultural Arts and Public Works (Operations) • Partnering department(s): Legislative Affairs (CMO), People & Culture (CMO) • Partnering organization(s): Water providers 	
<p><i>Resources Available</i></p> <ul style="list-style-type: none"> • None identified <p><i>Resources Needed</i></p> <ul style="list-style-type: none"> • Staff time. 	

Strategy 8.4 Train employees on water efficient practices

Description

Employee behaviors and practices are impactful to the county's water use, and trainings can provide new information about water conservation practices. Trainings also provide a forum for county staff to gather and discuss topics to build institutional knowledge and shared best practices.

Impacts and Considerations

- Education efforts are generally low cost but may require additional staff time or third-party trainings.
- Education is typically low savings (typically assumed to have a 1% water savings potential though targeted O&M trainings would yield higher benefits).
- Research shows that resource management programs save the organization energy/water and money; improve employee engagement, productivity, and innovation; and improve business results.

Timing

Near-Term (2022–2024)

Actions

Each lead department should take the following actions:

- Identify beneficial employee trainings and whether the Green Team or other internal training mechanism will suffice or if an external service provider is needed.

Roles & Responsibilities

- **Lead department or organization:** Facilities, Parks, Open Space & Cultural Arts and Public Works (Operations)
- **Partnering department(s):** Data Science team (P&C)
- **Partnering organization(s):** Third-party service providers, water providers

Resources Available

- The Green Team is already supporting employee trainings.

Resources Needed

- Funding will be needed to pay for outside trainings.

Strategy 8.5 Centralize water use data management

Description

Benchmarking programs that involve centralizing data management into a software solution and then benchmarking actual use against efficient use, have been shown to save 2-3% of resources being tracked.

Impacts and Considerations

- Low cost (staff time only, don't anticipate additional software licenses).
- Improved leak detection ability, improved ability to shift water use to period with off-peak billing rates (where applicable).

Timing

Near-Term (2022–2024)

Actions

Each lead department should take the following actions:

Roles & Responsibilities

- **Lead department or organization:** Facilities, Parks, Open Space & Cultural Arts and Public Works (Operations)
- **Partnering department(s):** Data Science Team (P&C)
- **Partnering organization(s):** Third-party service and product providers (e.g. EnergyCAP software vendor, audit providers)

- Identify an implementation lead for water conservation and water action team for knowledge sharing and planning within the county
- Develop a workflow for putting water use data into EnergyCAP or other suitable software solution
- Determine how to manually pull additional water data (e.g. raw water, wells, unmetered locations)

Resources Available

- Adams County is already using EnergyCAP for much of Facilities' water use data, but there are some gaps to fill, in addition to getting Parks and Public Works water use data entered.

Resources Needed

- Staff time

Strategy 8.6 Install water sub-metering and/or smart meters

Description

Sub-meters are used to better distinguish end uses such as indoor domestic, outdoor irrigation, operations, cooling use, etc. Smart meters provide high-resolution, real-time data and support leak detection.

Impacts and Considerations

- Medium cost (hardware + installation).
- No-to-low water savings (foundational activity, may help identify leaks, inefficient use, or opportunities to shift water use to off-peak billing periods).

Timing

Near-Term (2022–2024)

Roles & Responsibilities

- **Lead department or organization:** Facilities, Parks, Open Space & Cultural Arts and Public Works (Operations)
- **Partnering department(s):** Data Science Team (P&C)
- **Partnering organization(s):** Third-party service and product providers (e.g. EnergyCAP software vendor, audit providers)

Actions

Each lead department should take the following actions:

- Use their knowledge of their water use to identify locations that would benefit from sub-metering (and/or a smart meter). Submetering should be prioritized where it will improve understanding water use, identify potential leaks or facilitate making real-time operational changes.

Resources Available

- None identified.

Resources Needed

- Funding will be needed to support meter installation.

Strategy 8.7 Conduct on-site water assessments

Description

Identify the next round of water conservation measures to reduce overall water use and improve water use efficiency in county facilities, operations, and parks by conducting site water assessments to identify leaks, equipment changes, and operations changes at locations that use significant water and/or appear to be using water inefficiently.

Impacts and Considerations

- Medium cost (about \$2k/facility for an indoor audit, outdoor audit cost will be higher).
- Audits themselves have no-to-low water savings (foundational activity, help identify water conservation measures that need implementation).
- Opportunity to illuminate water-energy-climate nexus.

Timing

Near-Term (2022–2024)

Roles & Responsibilities

- **Lead department or organization:** Facilities, Parks, Open Space & Cultural Arts and Public Works (Operations)
- **Partnering department(s):** Data Science Team (P&C)
- **Partnering organization(s):** Third-party service and product providers (e.g. EnergyCAP software vendor, audit providers)

Actions

Each lead department should take the following actions:

- Through the annual water use analysis, knowledge of buildings and equipment, and any other available information, identify top priorities for indoor and outdoor water audits.
- Look at water provider conservation programs to determine whether free audits are available to the county.
- Where free audits are not available through utility programs, hire contractors to conduct indoor and outdoor water audits.

Resources Available

- Facilities staff have previously implemented water conservation measures.
- [Commercial, Industrial, and Institutional \(CII\) Water Assessment Tool and User's Guide](#) (free tool for County to use in indoor water assessments)
- Colorado WaterWise [Water Conservation Best Practices Guidebook](#) (available to members only)
- [Audubon Cooperative Sanctuary Program for Golf](#) promotes sustainability at golf courses

Resources Needed

- Funding will likely be needed to pay for audits.

Remaining Strategies

Strategy 8.8 Explore options to self-supply non-potable water

Description

Adams County's needs for non-potable water move and expand as new facilities require irrigation, new parks and open spaces require irrigation, and as public works operations projects move throughout the county. The county should monitor opportunities to purchase additional ditch shares and groundwater well rights to supply their non-potable water needs. Exploring non-potable self-supply options is low-water savings, would reduce potable water use and could increase financial savings. Indirect benefit—reducing potable water demand helps water providers with stretching their water supplies.

Timing

Mid-Term (2024–2026)

Roles & Responsibilities

- **Lead department or organization:** Facilities, Parks, Open Space & Cultural Arts and Public Works (Operations)
- **Partnering organization(s):** Water providers

First Steps

- Monitor ditch companies for share availability and pricing.
- Monitor opportunities to acquire new well rights.

Strategy 8.9 Monitor water provider surplus water programs

Description

In any given year, a municipal or special district water purveyor may assess they have surplus water availability above and beyond system demands. Some purveyors have surplus water programs that involve leasing or selling raw water when surplus water is available.

Timing

Mid-Term (2024–2026)

Roles & Responsibilities

- **Lead department or organization:** Facilities, Parks, Open Space & Cultural Arts and Public Works (Operations)
- **Partnering organization(s):** Water providers

First Steps

- Contact water purveyors to inquire about surplus water programs.



Goal 9: Promote water use efficiency for new and redeveloped residential and commercial properties in unincorporated Adams County.

Strategy 9.1 Conduct a water conservation and awareness campaign

<p><i>Description</i></p> <p>Educate residents on current water conditions, emphasizing flood and drought conditions when appropriate and conservation principles generally.</p>	
<p><i>Impacts and Considerations</i></p> <ul style="list-style-type: none"> • Low cost to implement (mostly staff time, educational events, and possibly giveaways). • Low water savings (education is typically assumed to have a 1% water savings potential. Direct install savings are readily calculable). • County would strengthen relationships in the water conservation community and could leverage interactions with residents and businesses for other purposes. 	
<p><i>Timing</i></p> <p>Ongoing</p>	<p><i>Actions</i></p> <ul style="list-style-type: none"> • New Development Services implementation planner to form a water committee that will formalize next steps on all water-related activities. The comprehensive and water master plans. • Identify a lead from the water committee to design the message, materials, and outreach for the water awareness campaign, leveraging partner organizations. • Leverage Board of County Commissioners appointment to the South Platte Basin Roundtable, Metro Roundtable, or other professional group to stay current on water conditions and community education and outreach opportunities.
<p><i>Roles & Responsibilities</i></p> <ul style="list-style-type: none"> • Lead department or organization: Communications, Development Services • Partnering department(s): Public Works • Partnering organization(s): Water providers, Colorado WaterWise, CSU Extension, Basin Roundtables 	
<p><i>Resources Available</i></p> <ul style="list-style-type: none"> • Water provider conservation websites (will share water restrictions and other relevant news) • State of Colorado drought status website (shares water restrictions for each water provider) • Colorado WaterWise Live Like You Love It Water Conservation Campaign Materials <p><i>Resources Needed</i></p> <ul style="list-style-type: none"> • Funding may be needed to join Colorado WaterWise to leverage the “Live Like You Love It” campaign materials (if desired). Costs range from \$250-\$1,500. 	

Strategy 9.2 Promote C-PACE and Performance Contract programs to incorporate water efficiency for development and redevelopment projects

<p><i>Description</i></p> <p>Give information to developers about opportunities to finance water and energy saving measures during meaningful point of interaction during development application and review processes.</p>	
<p><i>Impacts and Considerations</i></p> <ul style="list-style-type: none"> • Low costs to distribute information to developers. • Medium-high potential for energy and water savings as these mechanisms tend to finance large resource conservation packages. • Economic development benefits from these large development benefits as well as equity as financed projects could include multifamily and other affordable housing projects. 	
<p><i>Timing</i></p> <p>Ongoing</p>	<p><i>Actions</i></p> <ul style="list-style-type: none"> • Identify a lead from the water committee to organize lunch n’ learns with CO PACE and CEO for staff to learn about various financing programs. • Design materials for staff to use in educating businesses and developers on financing mechanisms. • Adjust workflows to include efficiency and financing recommendations in development review letters.
<p><i>Roles & Responsibilities</i></p> <ul style="list-style-type: none"> • Lead department or organization: Communications, CED – Economic Development • Partnering department(s): Development Services • Partnering organization(s): CO PACE, Colorado Energy Office 	
<p><i>Resources Available</i></p> <ul style="list-style-type: none"> • Water provider conservation websites (typically organized into general tips and audit/rebate program pages) • Colorado WaterWise Live Like You Love It Water Conservation Campaign Materials <p><i>Resources Needed</i></p> <ul style="list-style-type: none"> • Funding may be needed to join Colorado WaterWise to leverage the “Live Like You Love It” campaign materials (if desired). 	

Strategy 9.3 Develop a comprehensive Countywide Water Master Plan

Description

Use long-range planning to assess and improve water supply reliability to serve a growing population into the future. A countywide plan would place the county in a convener role of assessing water supplies against demands and assessing whether planned developments may be in conflict with available water supplies and system infrastructure.

Impacts and Considerations

- Medium cost (\$100-200k for consultant to develop countywide plan)
- Medium-High water savings potential through new development and re-development
- County would have opportunity to serve in a regional convener role and improve collaboration and working relationships with stakeholders.
- Potential equity/environmental justice benefits from supporting expansion of water provider service areas to connect residents who currently are self-supplied drinking water from wells.

Timing

Near-Term (2022–2024)

Roles & Responsibilities

- **Lead department or organization:** Development Services (CED)
- **Partnering department(s):** None
- **Partnering organization(s):** Water providers, member communities, service providers

Actions

- Develop a countywide water master plan that ideally will be adopted as a water element to the County Comprehensive Plan. Start by developing water provider inventories (potable and non-potable); an existing conditions report of water supplies, demands, and vulnerabilities; and goals that the county will work towards.
- Coordinate with municipal and special district water providers for plan development and potential water supply alliance.
- Evaluate models for centralizing potable water service in unincorporated Adams County through formation of a new water provider or expansion of existing District service boundaries.

Resources Available

- [El Paso County Water Master Plan](#)

Resources Needed

- Additional budget and additional staff time would be needed for the water master planning effort and regional coordination with multiple water districts.

Strategy 9.4 Develop a webpage to connect residents and businesses with water-saving resources

<p><i>Description</i></p> <p>Educate residents and business on opportunities to save water and defray costs of implementing water conserving measures by creating a webpage that directs them to their utility service providers' conservation programs and also provides general conservation tips.</p>	
<p><i>Impacts and Considerations</i></p> <ul style="list-style-type: none"> • Low cost to implement (mostly staff time) • Low water savings (education is typically assumed to have a 1% water savings potential. A website is passive so savings may be lower). • County will learn what resources they may qualify for, as county is customer to these same water providers. 	
<p><i>Timing</i></p> <p>Near-Term (2022–2024)</p>	<p><i>Actions</i></p> <ul style="list-style-type: none"> • New Development Services implementation planner to form a water committee that will formalize next steps on all water-related activities and connect to the Comprehensive Plan and Water Master Plan. • Identify staff members to collect information about conservation tips and utility programs and develop a public website.
<p><i>Roles & Responsibilities</i></p> <ul style="list-style-type: none"> • Lead department or organization: Communications • Partnering department(s): Development Services • Partnering organization(s): Water providers, CSU Extension 	
<p><i>Resources Available</i></p> <ul style="list-style-type: none"> • Water provider conservation websites (typically organized into general tips and audit/rebate program pages) <p><i>Resources Needed</i></p> <ul style="list-style-type: none"> • Staff time 	

Strategy 9.5 Develop and adopt water-wise appliance, fixture, landscaping, and irrigation standards into building, landscape, and development codes

<p><i>Description</i></p> <p>Use regulatory tools to encourage waterwise development, irrigation, and landscaping practices.</p>	
<p><i>Impacts and Considerations</i></p> <ul style="list-style-type: none"> • Implementation cost expected to be medium (staff and consultant time). • Medium-High water savings potential through new development and re-development. • Water conservation leads naturally to energy conservation and climate resiliency. 	
<p><i>Timing</i></p> <p>Near-Term (2022–2024)</p>	<p><i>Actions</i></p> <ul style="list-style-type: none"> • Conduct an audit of land use, development, landscape, and building codes to identify barriers to water conservation. • Conduct best practices and model code research to identify code updates that make sense for Adams County. • Investigate water reuse/graywater codes for adoption as water conservation measures. • Decide whether to implement code changes as mandatory or as part of a sustainability points system. • Adopt code amendments as appropriate.
<p><i>Roles & Responsibilities</i></p> <ul style="list-style-type: none"> • Lead department or organization: CED-Development Services and Building Safety Divisions • Partnering department(s): Community Safety & Well-Being-Neighborhood Services; CED-Licensing/Permits Division • Partnering organization(s): Developers, irrigation companies, and landscaping companies 	
<p><i>Resources Available</i></p> <ul style="list-style-type: none"> • Numerous resources exist to help develop water-efficient landscaping regulations in new developments (see Thornton’s proposed ordinance changes; South Metro Water Supply Authority Model Landscape/Irrigation Ordinance). • Water Research Foundation Project #4623, Integrating Land Use and Water Resources: Planning to Support Water Supply Diversification (research report and guidebook available with free user account) • Water Research Foundation Project #4684, Incentives for Green Infrastructure Implementation on Private Property (materials available with free user account) <p><i>Resources Needed</i></p> <ul style="list-style-type: none"> • New codes and certifications put higher review and enforcement requirements on county staff. 	

Remaining Strategies

Strategy 9.6 Develop financial incentive programs to promote water efficiency for residents and businesses

<i>Description</i> Use programs to improve likelihood that water supplies will reliably serve a growing population into the future by reviving past – or creating new – programs with financial incentives (e.g. promoting rain barrels, reducing development fees in exchange for denser developments or reduced turf area, or reduced stormwater fees in exchange for low impact development design).	
<i>Timing</i> Mid-Term (2024–2026)	<i>First Steps</i> <ul style="list-style-type: none">• Evaluate models for reducing development and stormwater fees in exchange for voluntary implementation of water conservation measures.• Adopt a voluntary fee-reduction program that makes sense for Adams County values and finances.
<i>Roles & Responsibilities</i> <ul style="list-style-type: none">• Lead department or organization: Development Services & Economic Development (CED)• Partnering department(s): Public Works• Partnering organization(s): Water service providers, member communities	



LAND

Goal 10: Acquire and conserve land that sustains the level of service of parks and open spaces for economic, social, and environmental benefits.

Strategy 10.1 Continue using the county Open Space Sales Tax dollars to acquire and conserve land

<p><i>Description</i></p> <p>The Open Space Sales Tax is collected and used to fund the acquisition of open space, for the purpose of conservation. The tax was originally passed by Adams County voters in 1999 as a 0.20% sales tax (20¢ on a \$100 purchase), set to expire in 2006. In 2004, Adams County voters renewed the sales tax through 2026 and increased it to the current level of 0.25%.</p>	
<p><i>Impacts and Considerations</i></p> <ul style="list-style-type: none"> • None considered 	
<p><i>Timing</i></p> <p>Ongoing Continuous activity 2022–2030</p>	<p><i>Actions</i></p> <ul style="list-style-type: none"> • Continue administering and collecting the Open Space Sales Tax. • Continue identifying and acquiring open space for conservation • Evaluate the extension of the sales tax beyond 2026, including an evaluation of whether tax should be increased.
<p><i>Roles & Responsibilities</i></p> <ul style="list-style-type: none"> • Lead department or organization: Parks, Open Space, and Cultural Arts 	
<p><i>Resources Available</i></p> <ul style="list-style-type: none"> • County Open Space Sales Tax dollars are dedicated to acquiring and conserving land. <p><i>Resources Needed</i></p> <ul style="list-style-type: none"> • None 	

Strategy 10.2 Support the implementation of the Adams County Parks, Open Space, and Trails Master Plan and the Riverdale Regional Park Master Plan

Description

Part of the Advancing Adams series, the Adams County Parks, Open Space, and Trails Master Plan is the long-range parks plan for unincorporated Adams County. The plan includes several goals and strategies that align with this Sustainability Plan, including improving environmental quality, enhancing mobility opportunities, and improving access to county services. Similarly, the Riverdale Regional Park Master Plan includes sustainability principals, such as sustainable water management, for one of Adams County’s largest properties. Leveraging and supporting the implementation of these two plans will go a long way to support the targets and goals of the Sustainability Plan.

Impacts and Considerations

- High cost of land/water rights acquisition, park development, and operational expenses (irrigation, maintenance, lighting, etc.)

Timing

Near-Term 2022-2024

Roles & Responsibilities

- **Lead department or organization:** Parks, Open Space, and Cultural Arts
- **Partnering department(s):** Public Works

Actions

- Identify points of overlap and synergy across all three plans.
- Align around roles and responsibilities and identify how Sustainability Plan champions can programmatically support the other plans.
- Establish coordination meetings as necessary to collaborate on relevant strategies and goals.
- Use commonly identified goals and strategies to garner support for investment in prioritized programs or infrastructure.

Resources Available

- The Adams County Parks, Open Space, and Trails Master Plan will guide the future of parks, open space, and trails in Adams County at the highest level. The Sustainability Plan is intended to guide more detailed implementation and can accomplish some of the discrete action items identified in the Master Plan.
- **Strategy 10.2 Continue using the county Open Space Sales Tax dollars to acquire and conserve land** will likely support several strategies, goals, and objectives across the three plans.
- Surface and Groundwater Environmental Policy Compliance at the Riverdale Regional Park provides best practice recommendations for water management.
- Water Research Foundation Project #4623, [Integrating Land Use and Water Resources: Planning to Support Water Supply Diversification](#) (research report and guidebook available with free user account) could help inform implementation of water-related parks strategies
- There are 26.2 miles of trails maintained by Adams County; others are operated and maintained by member communities.

Resources Needed

- Funds to support infrastructure projects (trails, green infrastructure, water management projects, etc.)



SUSTAINABLE INFRASTRUCTURE

Goal 11: Use sustainable infrastructure in Public Works projects to maximize economic, environmental, and social durability and minimize economic impacts from natural hazards.

Strategy 11.1 Incorporate Green Infrastructure (GI) and Low-Impact Development (LID) concepts into public works project designs

<i>Description</i> Use Adams County public works projects to advance and showcase green stormwater management approaches.	
<i>Impacts and Considerations</i> <ul style="list-style-type: none"> • High cost associated with capital projects. • Better stormwater management and aesthetic appeal over traditional gray infrastructure approaches. • Will slow runoff and minimize flooding damages. 	
<i>Timing</i> Ongoing	<i>Actions</i> <ul style="list-style-type: none"> • Add signage and educational components to all pilot projects (e.g. rain gardens, pervious pavers) that demonstrate GI/LID principles. • Support CED in identifying and addressing barriers to GI and LID in plans (e.g. transportation) and land use and development code updates.
<i>Roles & Responsibilities</i> <ul style="list-style-type: none"> • Lead department or organization: Public Works • Partnering department(s): CED-Development Services, Budget Office, Planning, Stormwater • Partnering organization(s): Mile High Flood District, member communities, EPA, USACE, Contractors 	
<i>Resources Available</i> <ul style="list-style-type: none"> • None identified 	
<i>Resources Needed</i> <ul style="list-style-type: none"> • None identified 	

Strategy 11.2 Implement master drainage studies

<p><i>Description</i></p> <p>Implement the long-range master drainage studies to continue improving stormwater management for reduced flood damages and improved water quality benefits.</p>	
<p><i>Impacts and Considerations</i></p> <ul style="list-style-type: none"> • High costs associated with capital projects. • Local and regional facilities reduce flood damages and improve stormwater quality entering receiving waters. 	
<p><i>Timing</i></p> <p>Ongoing</p>	<p><i>Actions</i></p> <ul style="list-style-type: none"> • Assist CED in improving CRS score by inspecting pumps, channels, etc. • Assess existing and new regional facilities and water quality facilities and whether they include water quality and/or detention/flood control benefits. • Regularly update the GIS database of existing and proposed storm sewer lines. • Work with member communities to coordinate and promote regional projects.
<p><i>Roles & Responsibilities</i></p> <ul style="list-style-type: none"> • Lead department or organization: Public Works • Partnering department(s): CED-Development Services, Building Department, Budget Office, Floodplain Regulations, Planning, Stormwater • Partnering organization(s): Mile High Flood District, member communities, FEMA 	
<p><i>Resources Available</i></p> <ul style="list-style-type: none"> • Existing GIS database of storm sewer lines <p><i>Resources Needed</i></p> <ul style="list-style-type: none"> • None identified 	

Strategy 11.3 Coordinate with utility and service provider partners to minimize future maintenance and infrastructure needs

<p><i>Description</i></p> <p>Improved coordination is intended to lead to multi-objective projects, minimizing the number of separate projects needed for a given location, reducing costs, and minimizing community disruption.</p>	
<p><i>Impacts and Considerations</i></p> <ul style="list-style-type: none"> • Associated cost is mostly staff time. • Coordination will be a multiplier for project complexity. 	
<p><i>Timing</i></p> <p>Ongoing</p>	<p><i>Actions</i></p> <ul style="list-style-type: none"> • Conduct a facilitated work session to do a SWOT (strengths, weaknesses, opportunities, threats) analysis of how interagency coordination is going, opportunities for improvement, and opportunities for improved regionalization.
<p><i>Roles & Responsibilities</i></p> <ul style="list-style-type: none"> • Lead department or organization: Public Works • Partnering department(s): Budget Office, Facilities, Procurement • Partnering organization(s): Design and construction contractors 	
<p><i>Resources Available</i></p> <ul style="list-style-type: none"> • None identified <p><i>Resources Needed</i></p> <ul style="list-style-type: none"> • None identified 	

Strategy 11.4 Plan community education events

<p><i>Description</i></p> <p>Use workshops and events to educate the public on sustainable infrastructure and its importance.</p>	
<p><i>Impacts and Considerations</i></p> <ul style="list-style-type: none"> • Associated costs would be primarily staff time. • County would strengthen relationships in the water community and could leverage interactions with residents and businesses for other purposes. 	
<p><i>Timing</i></p> <p>Ongoing</p>	<p><i>Actions</i></p> <ul style="list-style-type: none"> • Leverage all internal county (e.g. bring your child to work, county health fair) and external community events (e.g. water festivals, women in public works, mentoring, public meetings for capital projects) to educate about stormwater programs, green infrastructure, the benefits of trees, and other sustainable infrastructure concepts and benefits. • Allocate staff and implement workflows to ensure outfalls are inspected once every five years at a minimum to identify illicit discharges during dry weather. • Use ENVISION documentation requirements to measure community engagements on public works projects.
<p><i>Roles & Responsibilities</i></p> <ul style="list-style-type: none"> • Lead department or organization: Public Works • Partnering department(s): CED-Communications • Partnering organization(s): Member communities, water providers, school districts (Five Star Adams 12 and more), CSU Stormwater Center 	
<p><i>Resources Available</i></p> <ul style="list-style-type: none"> • Thornton Water Fair <p><i>Resources Needed</i></p> <ul style="list-style-type: none"> • None identified 	

Strategy 11.5 Expand the Tree Amenity Program

<p><i>Description</i></p> <p>Build on the new Tree Amenity Program to advance green stormwater management practices.</p>	
<p><i>Impacts and Considerations</i></p> <ul style="list-style-type: none"> • Medium cost associated with purchasing, planting, and maintaining trees. • Trees contribute to improved air quality, shade, and aesthetic appeal, as well as sequestering carbon. 	
<p><i>Timing</i></p> <p>Near-Term (2022-2024)</p>	<p><i>Actions</i></p> <ul style="list-style-type: none"> • Continue tracking tree removals and tree plantings for all public works projects. • Build the program size to increase tree plantings and increase replacement rate. • Expand the program to include additional amenities, such as rain barrels, rain gardens, or silva cells.
<p><i>Roles & Responsibilities</i></p> <ul style="list-style-type: none"> • Lead department or organization: Public Works • Partnering department(s): CED-Development Services, Budget Office, Planning, Stormwater • Partnering organization(s): Member communities, Contractors 	
<p><i>Resources Available</i></p> <ul style="list-style-type: none"> • None identified <p><i>Resources Needed</i></p> <ul style="list-style-type: none"> • Additional annual budget and staffing 	

Strategy 11.6 Develop and adopt resilient design performance standards for infrastructure, considering future impacts of climate change and adaptation ability

<p><i>Description</i></p> <p>Design and construct capital projects that are resilient and can withstand, or quickly rebound from, natural hazards.</p>	
<p><i>Impacts and Considerations</i></p> <ul style="list-style-type: none"> Public works has already adopted ENVISION as a preferred guidance system and has been actively training staff in the rating system 	
<p><i>Timing</i></p> <p>Near-Term (2022-2024)</p>	<p><i>Actions</i></p> <ul style="list-style-type: none"> Leverage ENVISION-certified staff to develop a policy for evaluating each project to select appropriate ENVISION credits that apply to the project. Form a cross-organizational working group for a shared vision, project review process, and supported level of sustainable design standards for both horizontal and vertical projects (e.g. facilities, parks, and public works).
<p><i>Roles & Responsibilities</i></p> <ul style="list-style-type: none"> Lead department or organization: Public Works Partnering department(s): Budget Office, Facilities, Procurement Partnering organization(s): Design and construction contractors 	
<p><i>Resources Available</i></p> <ul style="list-style-type: none"> Denver Executive Order 123 Sustainability Policy Salt Lake City Executive Order LEED Design Standards Salt Lake City Sustainable Infrastructure Executive Order Boulder County’s Resilient Design Performance Standard for Infrastructure and Dependent Facilities ENVISION sustainability rating system incorporates sustainability and resiliency into infrastructure projects. <p><i>Resources Needed</i></p> <ul style="list-style-type: none"> None identified 	

Remaining Strategies

Strategy 11.7 Execute a Public Works executive order that CIP projects be evaluated for ENVISION criteria as appropriate based on project function

<p><i>Description</i></p> <p>Use Adams County public works projects to advance and showcase sustainable infrastructure projects that meet ENVISION criteria.</p>	
<p><i>Timing</i></p> <p>Mid-Term (2022-2026)</p>	<p><i>First Steps</i></p> <ul style="list-style-type: none"> Conduct best practices research on an executive order. Design an order that suits Adams County that also meets ENVISION requirements to demonstrate a commitment by county leadership.
<p><i>Roles & Responsibilities</i></p> <ul style="list-style-type: none"> Lead department or organization: Public Works Partnering department(s): Budget Office, Facilities, Procurement Partnering organization(s): Design and construction contractors 	

Strategy 11.8 Including sustainability and resiliency considerations as part of procurement processes for infrastructure projects

<p><i>Description</i></p> <p>Develop procurement policies and processes so that sustainable and resilient design criteria are consistently represented in public works projects.</p>	
<p><i>Timing</i></p> <p>Mid-Term (2022-2026)</p>	<p><i>First Steps</i></p> <ul style="list-style-type: none"> • Work with procurement to implement ENVISION targets into project procurements.
<p><i>Roles & Responsibilities</i></p> <ul style="list-style-type: none"> • Lead department or organization: Public Works • Partnering department(s): Budget Office, Facilities, Procurement • Partnering organization(s): Design and construction contractors 	



TRANSPORTATION



Goal 12: Decrease county fleet emissions through vehicle and operational efficiency and fuel switching.

Strategy 12.1 Encourage virtual meetings as feasible

Description

The COVID-19 pandemic forced many businesses and organizations to restructure work flows to accommodate remote work. Virtual meetings allow employees to significantly reduce travel time and associated emissions. Where feasible and not detrimental to work flows, virtual meetings may continue to be utilized to perform coordination activities.

Impacts and Considerations

- Fuel savings for employees who commute.
- GHG and air pollutant savings from decreased commutes and trips.

Timing

Ongoing

Roles & Responsibilities

- **Lead department or organization:** County Managers Office
- **Partnering department(s):** All

Actions

- Conduct an organization-wide analysis of meetings, enumerating common meeting types (e.g. intradepartmental, interdepartmental, interorganizational, etc.) and evaluating the varied potential for continuing to host virtual meetings.
- Develop a policy to guide the continuation of virtual meetings, as is feasible. Collect feedback from impacted departments to guide the final policy document.
- Role out the policy across impacted departments and track meetings held virtually to assess the emissions impact of avoided travel.

Resources Available

- The county can continue to leverage virtual meeting tools used to transition to a remote work environment (e.g. Zoom).

Resources Needed

- None

Strategy 12.2 Develop and implement EV procurement plan

Description

Conduct an organization-wide evaluation of budgeting, accounting, capital project planning, and procurement policies and processes, to identify barriers to fleet electrification and to identify opportunities to restructure (e.g. incorporate fleet life-cycle cost considerations into procurement policies). Develop and implement a vehicle electrification plan, identifying electrification opportunities, brainstorming improved storage and maintenance opportunities, and working closely with end users to ensure best fit.

Impacts and Considerations

- The county owns and operates over 500 fleet vehicles, including passenger vehicles, off-road vehicles, heavy-duty trucks, buses, sweepers, and heavy equipment. The fleet continues to grow as county operations grow. Converting even a small percentage of these vehicles to electric could make a large emissions impact.
- Charging infrastructure will also be required to support fleet electrification.

Timing

Ongoing and Near-Term (2022–2024)

Roles & Responsibilities

- **Lead department or organization:** Fleet (FFM)
- **Partnering department(s):** Procurement services, finance
- **Partnering organization(s):** Drive Clean Colorado – a Clean Cities Coalition

Actions

- Coordinate with procurement services and finance to identify opportunities to include total cost of ownership (i.e. operation and maintenance) in procurement considerations.
- Coordinate with end users to garner shared information about EVs and identify win-win solutions (i.e. identify EV models that truly meet the needs of end users).
- Identify storage solutions to better protect EVs from elements and wildlife.
- Incorporate electrification into vehicle replacement plan. Including identification of vehicles to be replaced, ideal electric replacements, charging needs, and funding sources.

Resources Available

- [Drive Clean Colorado – a Clean Cities Coalition](#) can provide training and guidance to help identify barriers and recommend changes to procurement processes.
- [Steep Climb Ahead: How Fleet Managers Can Prepare for the Coming Wave of Electrified Vehicles](#) provides insight into procurement of electric vehicles and electric vehicle infrastructure.
- Charge Ahead Colorado offers grant funding for EVs and EV infrastructure.
- [EPA purchasing best practices for green vehicles](#) provides guidance on prioritizing vehicles with lower environmental impacts.
- Grant funding is available to support the electrification of medium- and heavy-duty fleet vehicles through [ALT Fuels Colorado](#).
- A report authored by Electrification Coalition offers case studies on [electric fleet leasing for municipal fleets](#).
- Alternative Fuels Data Center maintains a [database of laws and incentives](#) supportive of transportation electrification.

Resources Needed

- Funding sources to purchase EVs and EV infrastructure.

Strategy 12.3 Continue converting heavy-duty fleet vehicles to biofuels

<p><i>Description</i></p> <p>Continue working with fuel providers and fueling stations to expand biofuel options. The majority of Adams County graders are fueled by blade stations, which are candidates for biofuel stations. Adams County is pursuing B20 fuel, which provides an immediate 20% fuel reduction.</p>	
<p><i>Impacts and Considerations</i></p> <ul style="list-style-type: none"> • Dedicated fueling at vendors can require large upfront investment. • Biofuel is about \$0.13/gallon more (2021). • Maximum biofuel blend for conventional engines is 20%; does not completely offset emissions but does reduce. 	
<p><i>Timing</i></p> <p>Ongoing & Near-Term (2022–2024)</p>	<p><i>Actions</i></p> <ul style="list-style-type: none"> • Continue working with fueling stations and providers to explore and pursue opportunities to add biofuel capacity and capabilities. • As needed, explore fuel investment opportunities and develop plan (identify location of required fueling stations, funding sources to support fueling stations, etc.) to ensure adequate fueling opportunities. • Continue partnering with fuel providers to develop solutions to temperature-related fuel issues. • Explore opportunities to electrify medium- and heavy-duty vehicles (e.g. sweepers and loaders).
<p><i>Roles & Responsibilities</i></p> <ul style="list-style-type: none"> • Lead department or organization: Facilities and Fleet Management • Partnering department(s): Public Works 	
<p><i>Resources Available</i></p> <ul style="list-style-type: none"> • First Blade Station (Strasburg) was converted to biofuel in June, serving four graders and one tandem. • The Alternative Fuels Data Center includes basic information and data about biodiesel and maintains a list of laws and incentives related to biodiesel. • Cost is similar or cheaper than 2021 gasoline prices per gallon. <p><i>Resources Needed</i></p> <ul style="list-style-type: none"> • Funding to purchase heavy-duty biodiesel vehicles. • Additional funding to support increase in fuel cost. 	

Strategy 12.4 Develop and implement anti-idling policy

<p><i>Description</i></p> <p>Adopt and implement/enforce anti-idling policy. Initial step includes establishing a baseline for annual hours of idling.</p>	
<p><i>Impacts and Considerations</i></p> <ul style="list-style-type: none"> • Significant fuel and air pollutant reduction and emissions savings from reduced idling. 	
<p><i>Timing</i></p> <p>Near-Term (2022–2024)</p>	<p><i>Actions</i></p> <ul style="list-style-type: none"> • Create idling committee to lead anti-idling activities. • Ensure all appropriate vehicles have GPS devices and are operating correctly for the vehicle use. Continue educating end users regarding the importance and utility of GPS data. • Develop a baseline of idling activity using existing GPS data. • Develop countywide idling policy and lead through board adoption. • Identify incentives (e.g. financial bonus, department competition, etc.) and/or disincentives (e.g. charging departments for fuel wasted during idle events) to encourage compliance. • Develop education materials (e.g. training videos, flyers, or PowerPoints) to share with impacted departments. • Incorporate anti-idling procedures into employee on-boarding and training. • Leverage department leads to conduct training with impacted departments . • Work with vendor to confirm and better leverage software capabilities. • Report data to department heads on a monthly basis with daily support. • Ensure data accuracy and quality with vendor. • Track idling activity on an annual basis and use trends to inform future policy changes and education activities.
<p><i>Roles & Responsibilities</i></p> <ul style="list-style-type: none"> • Lead department or organization: Facilities and Fleet Management • Partnering department(s): Public Works, Sheriff, Community and Economic Development, Parks, Open Space & Cultural Arts 	
<p><i>Resources Available</i></p> <ul style="list-style-type: none"> • GPS devices installed in most non-sheriff county vehicles (including light-duty fleet, graders, tandems, tractors, and some heavy-duty equipment). • County uses PRECISE software to evaluate idling (county receives daily idle report for all incidents 20 minutes or greater). 	
<p><i>Resources Needed</i></p> <ul style="list-style-type: none"> • Confirm GPS analysis software to conduct analysis of time reduction, fuel savings 	

Strategy 12.5 Maximize efficiency of operational routes

<p><i>Description</i></p> <p>Leverage existing GPS software to evaluate operational route and identify opportunities to improve route efficiencies.</p>	
<p><i>Impacts and Considerations</i></p> <ul style="list-style-type: none"> • Route optimization can reduce transport costs by 10-30%. • Savings include lower fuel costs, increased productivity, reduced vehicle purchase, and maintenance costs. 	
<p><i>Timing</i></p> <p>Near-Term (2022–2024)</p>	<p><i>Actions</i></p> <ul style="list-style-type: none"> • Work with GPS software vendor to confirm and learn about route optimization capabilities. • Conduct an analysis of all operational routes and identify opportunities to improve efficiencies, encouraging consolidation of work trips whenever possible. • Work with partnering departments to roll out new routes. • Monitor new routes and identify any issues or concerns.
<p><i>Roles & Responsibilities</i></p> <ul style="list-style-type: none"> • Lead department or organization: Facilities & Fleet Management • Partnering department(s): Public Works 	
<p><i>Resources Available</i></p> <ul style="list-style-type: none"> • GPS devices installed in most non-sheriff county vehicles (including light-duty fleet, graders, tandems, tractors, and some heavy-duty equipment). • County uses PRECISE software to provide GPS analysis. <p><i>Resources Needed</i></p> <ul style="list-style-type: none"> • None 	



Goal 13: Support electric vehicle mobility and infrastructure across all of Adams County.

Strategy 13.1 Prioritize locations for electric vehicle charging stations

Description

Map publicly available charging stations and use map to identify gaps, prioritize investments, and pursue public-private partnerships. The county may choose to directly invest in EV infrastructure to support identified community need, or the county may serve as a convener to bring together municipal and private investors to invest in EV infrastructure.

Impacts and Considerations

- Foundational activity to support other EV strategies.
- Equity should be considered when identifying locations.

Timing

Near-Term (2022–2024)

Roles & Responsibilities

- **Lead department or organization:** Economic Development (CED)
- **Partnering department(s):** Information Technology and Innovation, Facilities, Parks, Open Space & Cultural Arts
- **Partnering organization(s):** Drive Clean Colorado, a Clean Cities Coalition, member communities, Xcel Energy, United Power

Actions

- Use PlugShare or Department of Energy data services to map publicly available charging stations. Consider mapping by “level” of charging (Level 1, Level 2, DC fast charging).
 - Delineate by county-owned versus privately owned
- Add key community characteristics to the map such as key transportation corridors, demographic information by census tract, and community resources (parks, libraries, recreation centers, grocery stores, multifamily housing, high dwell time, environmental justice communities).
- Compile prioritization requirements and use map to prioritize locations for EV charging, considering equity and environmental justice impacts.
- Identify key partnerships for community charging stations.

Resources Available

- Electric vehicle charging infrastructure data are available through [PlugShare](#) or the [U.S. Department of Energy](#).
- Geographic Information Systems (GIS) data and mapping files are available through the Information Technology and Innovation department.
- Additional demographic data is available through the [U.S. Census Bureau](#).
- [ReCharge Colorado](#) advances the adoption of EVs by providing coaching services related to EVs and infrastructure development.
- Xcel Energy offers [advising and resources](#) to guide investment in EV infrastructure.

Resources Needed

- Public-private partnerships can be a useful mechanism for providing EV charging where it’s needed most (grocery stores, fueling stations) .

Strategy 13.2 Leverage grant funding to implement prioritized investments in EV charging

Description

Funding opportunities, such as Charge Ahead Colorado, are available to support investment in EV charging infrastructure. Develop an annual procurement process to expand the EV charging network in Adams County.

Impacts and Considerations

- Charge Ahead Colorado grant funding occurs twice a year; different matching requirements based on type of charger.
- Monitoring and applying for grants may require staff time or consultant support.

Timing

Near-Term (2022–2024)

Roles & Responsibilities

- **Lead department or organization:** Economic Development (CED)
- **Partnering department(s):** Finance, Environmental Programs, County Manager’s Office
- **Partnering organization(s):** Xcel Energy, United Power, member communities, public private partnerships

Actions

- Using the findings from **Strategy 13.1 Prioritize locations for EV charging stations** to inform investment priority.
- Conduct demand analysis for charging station location.
- Maintain annual budget line-item to support the installation and maintenance of new community EV infrastructure in Adams County.
- Apply for Charge Ahead Colorado grant funding to offset the upfront cost of charging infrastructure procurement.
- Explore additional funding or partnering opportunities.
- Pursue additional funding opportunities to increase impact and reduce cost to the county as funding opportunities are identified.
- Identify ownership and cost structures.
- Identify potential public-private-partnerships (e.g. large employers, fueling stations, etc.).
- Determine potential for additional grant funding match.

Resources Available

- The Alternative Fuels Data Center (AFDC) maintains a [database of state laws and incentives](#) to support the adoption of alternative fuel technology.
- [Charge Ahead Colorado](#) provides grant funding to support investment in EV infrastructure.
- County installed six new charging stations, including four publicly available stations
- Xcel Energy offers [advising and resources](#) to guide investment in EV infrastructure.
- [SB21-260 sustainability of the Transportation System](#) was signed into law June 17, 2021, and supports vehicle electrification.
- Smart Commute Metro North could be a point of connection to businesses with large numbers of commuters. These businesses could be potential candidates for EV charging.

Resources Needed

- Dedicated funding source for the annual procurement and maintenance of EV Charging infrastructure.

Strategy 13.3 Develop and implement a countywide EV-readiness plan

<p><i>Description</i></p> <p>Develop and implement a countywide EV-readiness plan in collaboration with member communities.</p>	
<p><i>Impacts and Considerations</i></p> <ul style="list-style-type: none"> Many of the strategies identified in this plan provide a head start on an EV-readiness plan. 	
<p><i>Timing</i></p> <p>Near-Term (2022–2024)</p>	<p><i>Actions</i></p> <ul style="list-style-type: none"> Apply to participate in Xcel Energy Partners in Energy EV Planning cohort. Identify an EV planning team, including, as appropriate, representatives from member communities. Complete the EV planning process to develop a countywide EV-readiness plan, including a vision, goals, and strategies over 6-8 month period. Implement the EV readiness plan over 18 months, with support from Xcel Energy.
<p><i>Roles & Responsibilities</i></p> <ul style="list-style-type: none"> Lead department or organization: Economic Development Partnering organization(s): City of Westminster, City of Thornton, City of Northglenn, Commerce City 	
<p><i>Resources Available</i></p> <ul style="list-style-type: none"> Partners in Energy provides free planning and implementation resources to communities to develop and implement energy action plans. Partners in Energy provides limited funds to cover direct cost related to outreach and education but does not provide direct funding for infrastructure. Xcel Energy's EV website includes information about vehicles, incentives and rebates, and charging programs. Partners in Energy maintains a free EV Planning Toolkit for communities, to guide the identification of EV goals and selection of supporting strategies. Many Colorado communities have developed – or are in the process of developing – communitywide electric vehicle plans, including Westminster, Fort Collins, Denver, Centennial, Summit County, Estes Park, and Durango. 	
<p><i>Resources Needed</i></p> <ul style="list-style-type: none"> Participation in Partners in Energy requires a minimum of 15 hours of staff time per month. Depending on the strategies identified, additional funding may be required to support implementation efforts. 	

Strategy 13.4 Support EV-ready codes across Adams County

Description

Support EV-ready codes in Adams County development codes and encourage member communities adoption of EV codes by sharing learnings and best practices. EV-ready codes can support, encourage, or require EV infrastructure for new development (including requirements for off-street parking, on-street parking, and gas stations).

Impacts and Considerations

- Implementation cost expected to be low (staff time; support available through Partners in Energy or SWEEP).
- Many other communities in the Front Range are adopting EV-ready codes.
- Incorporating EV-ready infrastructure in new construction or retrofits is [significantly cheaper than adding later](#).
- The State of Colorado EV plan goals will [require ample charging infrastructure](#), much of which will need to be located in the Front Range.

Timing

Near-Term (2022–2024)

Roles & Responsibilities

- **Lead department or organization:**
Development Services (CED)
- **Partnering department(s):**
Public Works
- **Partnering organization(s):**
SWEEP

Actions

- Review best practices for EV-ready codes, such as requiring a certain percent of parking spaces be designated as EV-ready for new commercial or multifamily development, allowing EV charging as a land use (e.g. EV charging at gas stations), or EV charging in the Right of Way.
- Review development regulations (including zoning codes, subdivision regulations, site codes, building codes, and electric codes) to identify barriers to EV adoption or opportunities to bolster EV adoption. Consider how opportunities might vary by zone district or with various overlays (e.g. transportation oriented development (TOD) overlay zone).
- Include EV options in Sustainability Menu
- Connect with member municipalities to identify experiences and lessons learned in other communities.
- Adopt new EV-ready code standards as part of holistic code update following Advancing Adams efforts.

Resources Available

- Southwest Energy Efficiency Project (SWEEP) [EV Infrastructure Building Codes: Adoption Toolkit](#) includes basic information, justification, case studies, best practices, and model code.
- [Partners in Energy's EV toolkit](#) includes best practices resources and information related to EV policies.
- County Rights of Way are good opportunities to pilot and explore new EV code standards.

Resources Needed

- Staff time and/or consulting expertise to evaluate code and recommend amended code language.
- Funding or other incentives to support changes to the code (e.g. grant funding to support the installation of DC fast chargers at gas stations).

Strategy 13.5 Implement electric vehicle education events for the community

<p><i>Description</i></p> <p>Partner with Drive Clean Colorado to plan and implement community educational events.</p>	
<p><i>Impacts and Considerations</i></p> <ul style="list-style-type: none"> Education is one of the key tactics to overcome EV adoption in communities. 	
<p><i>Timing</i></p> <p>Near-Term (2022–2024)</p>	<p><i>Actions</i></p> <ul style="list-style-type: none"> Set up a coordination meeting with Drive Clean Colorado Identify education goals, county capacity to support outreach, and municipal partners. Schedule community events, such as community Ride-n-Drives to expose the public to electric vehicles. Share webinar and other educational opportunities – hosted by Drive Clean Colorado – through Adams County outreach channels (social media, utility bill inserts, website, etc.).
<p><i>Roles & Responsibilities</i></p> <ul style="list-style-type: none"> Lead department or organization: Communications, Community Safety & Well-Being Partnering department(s): CED Partnering organization(s): Drive Clean Colorado 	
<p><i>Resources Available</i></p> <ul style="list-style-type: none"> Drive Clean Colorado offers training, technical assistance, and event coordination and support. Regional Air Quality Council offers programs to support alternative fuel and electric vehicle adoption. <p><i>Resources Needed</i></p> <ul style="list-style-type: none"> Staff resources to coordinate, promote, and co-host educational events. 	

Remaining Strategies

Strategy 13.6 Partner with member communities to fund key fast-charging infrastructure

<p><i>Description</i></p> <p>Advance regional EV mobility by supporting and investing in fast-charging infrastructure throughout Adams County. Grant funding often requires matching funds to support the project – Adams County may consider providing a portion of matching funds to member municipalities pursuing grant funding for DC fast chargers.</p>	
<p><i>Timing</i></p> <p>Mid-Term (2022–2026)</p>	<p><i>First Steps</i></p> <ul style="list-style-type: none"> Use gap analysis conducted in Strategy 13.1 in coordination with analyses conducted by state and regional agencies to identify prime locations for fast charging. Identify municipal or private partners to support procurement and installation of DC fast chargers. Secure funding to purchase and install DC fast chargers. Install DC fast chargers.
<p><i>Roles & Responsibilities</i></p> <ul style="list-style-type: none"> Lead department or organization: Economic Development (CED) Partnering department(s): Municipalities, Finance, County Managers Office Partnering organization(s): Charge Ahead Colorado, Drive Clean Colorado 	
<p><i>Resources Available</i></p> <ul style="list-style-type: none"> The Alternative Fuels Data Center (AFDC) maintains a database of state laws and incentives to support the adoption of alternative fuel technology. Charge Ahead Colorado provides grant funding to support investment in EV infrastructure. The Colorado Energy Office maintains a map of fast charging corridors and stations in the state. <p><i>Resources Needed</i></p> <ul style="list-style-type: none"> Funding to support the procurement of DC fast chargers. 	

Goal 14: Support alternative modes of transportation and enhance mobility for all Adams County community members.

Strategy 14.1 Support quality of transportation infrastructure with a focus on safety and environmental health

<p><i>Description</i></p> <p>Support quality of transportation infrastructure with a focus on safety and environmental health (i.e. low-impact development and trees along transportation corridors that separate cyclists and pedestrians from road traffic). Safety continues to grow as a priority in the Denver region; in 2017 Denver launched their Vision Zero Action Plan.</p>	
<p><i>Impacts and Considerations</i></p> <ul style="list-style-type: none"> • Additional incremental costs for improved safety of bike lanes. • Can result in avoided health costs, insurance costs. • Aids in GHG mitigation. 	
<p><i>Timing</i></p> <p>Near-Term (2022–2024)</p>	<p><i>Actions</i></p> <ul style="list-style-type: none"> • Coordinate activities with relevant strategies under Goal 11. Sustainable Infrastructure (e.g. adopt resilient design performance standards, expand the Tree Amenity Program). • Research best practice resources and identify opportunities to update or adopt new guidelines, project scoring criteria, project checklist, etc. in a manner that prioritizes safety and environmental health. • Update or adopt guidelines, project scoring criteria, or project checklist. • Identify funding to support additional safety and environmental features, such as grade-separated bike paths or tree boulevards. • Identify and capitalize on opportunities to partner with RTD to improve safety of bikeways and address infrastructure gaps.
<p><i>Roles & Responsibilities</i></p> <ul style="list-style-type: none"> • Lead department or organization: Public Works • Partnering department(s): Parks, Open Space & Cultural Arts, Capital Improvement Project committee • Partnering organization(s): RTD 	
<p><i>Resources Available</i></p> <ul style="list-style-type: none"> • Smart Growth America shares resources related to complete streets, including guidance on how to adopt complete street policies and implement complete street policies. • Public Works has a large program to retroactively install amenities that weren't included when a project was originally built (e.g. sidewalks, stormwater facilities, etc.). • Community development block grants fund multimodal transportation projects in unincorporated county and member communities. • SB21-260 sustainability of the Transportation System was signed into law June 17, 2021, and supports projects oriented toward sustainable, safe, and healthy transportation. • The Biden administration passed a \$1 trillion infrastructure bill to fund road and bridges projects, and to focus on climate resilience initiatives. • Public Works is using the ENVISION® guidelines to inform capital projects. Applying these guidelines is likely to result in projects with greater environmental health and safety outcomes. • Adams County recently hired a deputy director. 	
<p><i>Resources Needed</i></p> <ul style="list-style-type: none"> • Funding to support additional safety and environmental features above and beyond current standards. • Staff time and capacity to research best practice resources, identify funding, and update existing or develop new standards, guidelines, and checklists. 	

Strategy 14.2 Leverage community partnerships to promote commuting programs

<p><i>Description</i></p> <p>Convene community partners municipal economic development departments and others to increase awareness of and participation in commuting programs to reduce vehicle miles traveled and transportation related emissions. Smart Commute Metro North, for example, provides community training and education, eBike programs, ride-sharing, and other programs to support non-single occupancy vehicle commuting.</p>	
<p><i>Impacts and Considerations</i></p> <ul style="list-style-type: none"> • Many free services exist to support commuting in the region; can lead to fuel and maintenance savings for those who participate. 	
<p><i>Timing</i></p> <p>Near-Term (2022–2024)</p>	<p><i>Actions</i></p> <ul style="list-style-type: none"> • Schedule a kick-off meeting with partnering organizations to discuss outreach objectives and audiences. <ul style="list-style-type: none"> ○ Identify ideal programs and resources to promote based on selected objectives and audiences. ○ Identify key information, messages, and communication channels. • Encourage partner organizations and member communities to promote community programs to employers and employees.
<p><i>Roles & Responsibilities</i></p> <ul style="list-style-type: none"> • Lead department or organization: Economic Development (CED) • Partnering department(s): Public Works • Partnering organization(s): Smart Commute Metro North, Member communities Economic Development departments, AC-REP, Chambers of Commerce, others 	
<p><i>Resources Available</i></p> <ul style="list-style-type: none"> • Smart Commute Metro North provides training and education. • County already encourages employees and community members to use MyWaytoGo – a vanpooling program – in partnership with DRCOG. • 13 miles of the RTD N-Line was completed in 2020, providing service from north Adams County to Denver’s Union Station. <p><i>Resources Needed</i></p> <ul style="list-style-type: none"> • Staff time to coordinate with partner organizations. • Partner organization and member communities staff time and commitment to co-create and co-host education and outreach campaigns. 	

Remaining Strategies

Strategy 14.3 Raise awareness of sustainable transportation options

<p><i>Description</i></p> <p>As such a large county, it is unsurprising that 79% of workers in Adams County drive alone to work, and this does not account for non-work trips (to school, for shopping, for recreation, etc.). Access to alternative modes of transportation is especially limited in rural portions of the county, but there are still many options available to residents. This strategy focuses on educating residents on existing transportation options, including biking, transit, and carpooling.</p>	
<p><i>Timing</i></p> <p>Mid-Term (2022–2026)</p>	<p><i>First Steps</i></p> <ul style="list-style-type: none"> • Identify county lead to spearhead education efforts. • Host kick-off meeting with Smart Commute Metro North to identify opportunities to collaborate.
<p><i>Roles & Responsibilities</i></p> <ul style="list-style-type: none"> • Lead department or organization: Community Economic Development • Partnering organization(s): Smart Commute Metro North 	
<p><i>Resources Available</i></p> <ul style="list-style-type: none"> • Smart Commute Metro North provides educational materials and opportunities related to alternative transportation options in the Denver Metro region. <p><i>Resources Needed</i></p> <ul style="list-style-type: none"> • Staff time to coordinate educational activities. 	

Strategy 14.4 Explore options to expand community transit programs and micro-mobility options to service first- and last-mile connections

<p><i>Description</i></p> <p>Adams County provides A-LIFT, a community transit program to residents 55 years of age or better, to support mobility within the region. Other micro-mobility options can include circulator routes for all ages, on-demand transportation services, or electric bikes.</p>	
<p><i>Timing</i></p> <p>Mid-Term (2022–2026)</p>	<p><i>First Steps</i></p> <ul style="list-style-type: none"> • Identify county lead to spearhead micro-mobility exploration efforts. • Identify mobility gaps (which portions of the county experience mobility challenges, how can those challenges be met with existing services, what new services may be needed).
<p><i>Roles & Responsibilities</i></p> <ul style="list-style-type: none"> • Lead department or organization: Community Safety & Well-being 	
<p><i>Resources Available</i></p> <ul style="list-style-type: none"> • Smart Commute Metro North provides educational materials and opportunities related to alternative transportation options in the Denver Metro region. <p><i>Resources Needed</i></p> <ul style="list-style-type: none"> • Funding may be needed to pursue county-owned or operated micromobility programs. 	

Strategy 14.5 Support policies in long-range plans that guide density necessary to enhance multimodal and first- and last-mile connections

<p><i>Description</i></p> <p>Density is a necessary condition to support viable transit and bicycle and pedestrian infrastructure. Continuing to support strategic density in the region will provide the greatest opportunities for multimodal options.</p>	
<p><i>Timing</i></p> <p>Mid-Term (2022–2026)</p>	<p><i>First Steps</i></p> <ul style="list-style-type: none"> Evaluate existing policies that guide development in the region and identify barriers to desired density. Assess opportunities to provide incentives to encourage better implementation of policies supportive of desired density.
<p><i>Roles & Responsibilities</i></p> <ul style="list-style-type: none"> Lead department or organization: Development Services Partnering department(s): Public Works Partnering organization(s): RTD 	
<p><i>Resources Available</i></p> <ul style="list-style-type: none"> Adams County Transportation Plan was updated through the Advancing Adams process – this plan bolsters the need for density in key location to support multimodal transportation options. Adams County’s development codes already include a Transit-Oriented Development (TOD) zoning category. <p><i>Resources Needed</i></p> <ul style="list-style-type: none"> Incentives for encouraging desired development in identified districts. 	

Strategy 14.6 Develop and share map of bike infrastructure

<p><i>Description</i></p> <p>Bike infrastructure includes everything from highway shoulders to multi-use trails, fully separated from the roadway. Bike infrastructure, along with roadway characteristics (how busy is the roadway, how fast are motorists allowed to travel on the roadway, etc.) can all play a part in the relative “comfort” of a bike route. Developing and maintaining a map of bike routes, organized by “comfort” can give bikers of all abilities more confidence to ride.</p>	
<p><i>Timing</i></p> <p>Mid-Term (2022–2026)</p>	<p><i>First Steps</i></p> <ul style="list-style-type: none"> Catalog all potential bike routes in Adams County. Create definitions for different comfort classes based on bike infrastructure, roadway speed, and traffic. Create a map of bike routes in Adams County organized by comfort level.
<p><i>Roles & Responsibilities</i></p> <ul style="list-style-type: none"> Lead department or organization: ITi Partnering department(s): Public Works Partnering organization(s): DRCOG 	
<p><i>Resources Available</i></p> <ul style="list-style-type: none"> Public Works and ITi maintain geospatial shapefiles of bicycle infrastructure. DRCOG maintains roadway data that can inform comfort classes (speed and traffic). <p><i>Resources Needed</i></p> <ul style="list-style-type: none"> Staff time to develop map. 	



HEALTHY AND RESILIENT NEIGHBORHOODS

Goal 15: Increase access to resources, opportunities, and services that support financial, mental, and physical well-being for all community members in Adams County.

Strategy 15.1 Expand and promote existing programs for community-led neighborhood improvements

Description

Build on existing programs that promote grass-roots code compliance, neighborhood improvements, health and wellness efforts, and social gatherings (e.g. community enrichment grants, resource events, community gardens, etc.).

Impacts and Considerations

- Avoided costs of public health, safety, and code violations.

Timing

Near-Term (2022–2024)

Roles & Responsibilities

- **Lead department or organization:** Community Safety & Well-Being
- **Partnering department(s):** Public Works (Stormwater), Parks, Open Space & Cultural Arts, Human Services, Sheriff’s Office, Fire Rescue, Community & Economic Development (multiple divisions)
- **Partnering organization(s)** Growing Home, Cultivando, Joyful Journeys, UNE, Adams County Resource Network, Early Childhood Partnership of Adams County (ECPAC)

Actions

- Convene a working group to guide program recommendations
- Compile list of existing programs that promote community-led neighborhood improvements. Enumerate each program’s scope, successes, and lessons learned.
- Identify redundancies, synergies, and gaps in services amongst available programs through an internal evaluation of programs and external (neighborhood) engagement to identify community needs.
- Brainstorm opportunities to reduce redundancies, enhance synergies, and remove gaps. Identify relevant barriers and resources. Identify program(s) best suited to grow to meet outstanding need.
- Use information collected in earlier steps to build out work plans for identified programs to meet community need, including services to be provided and staff time and funding required to provide those services.

Resources Available

- Existing neighborhood improvement programs, such as Community Enrichment Grants, Eye on Adams, and the Tool Shed program.
- Recently awarded a grant to pilot neighborhood mini-grants to provide additional capacity for grass-roots neighborhood-level activity.
- Adams County works with neighborhood leaders (approximately three per neighborhood group) to develop policy guides that identify neighborhood priorities and challenges. Policy guides are distributed to all county departments and can help identify and inform neighborhood-level analyses. Identified neighborhood leaders offer key points of contact for future communications and outreach.
- Adams County is planning to pilot community markets in 2022 – flea market-style events to promote social gatherings, provide opportunities to connect community members with county resources, and to encourage economic development.
- Adams County was awarded a grant through the Vista program, which will support the addition of three community outreach coordinators.
- Temporary Assistance for Needy Families (TANF) interns are available to support community outreach activities.
- Community & Economic Development Neighborhood Economic Development Strategies (NEDS).

Resources Needed

- Funding to support expansion of programs and services .

Strategy 15.2 Grow community partner networks to address resiliency gaps

Description

Identify partnerships with state and regional agencies and member communities to expand neighborhood resiliency needs (e.g. Internet service, cooling centers) especially to low-income and rural portions of the county.

Timing

Near-Term (2022–2024)

Roles & Responsibilities

- **Lead department or organization:** Community Safety & Well-Being
- **Partnering department(s):** Human Services, Community & Economic Development, ITi, Public Works
- **Partnering organization(s):** Growing Home, Senior Hub, Joyful Journeys, Utility Providers, DRCOG, VIA, RTD

Actions

- Identify resiliency gaps through data collection, mapping, and community outreach.
- Identify suitable programs and partners to fill gaps at state and regional level. Programs and partners could provide best practice recommendations, technical assistance, or support in developing critical infrastructure.
- Collaborate with partners to meet desired need (i.e. coordinate with a member community to build a cooling center in an area of identified need, or leverage grant funding from programs bringing Internet services to rural areas).
- Coordinate with Community Race Equity and Resiliency Coordinator to develop formal equity plan.

Resources Available

- Colorado’s Department of Local Affairs (DOLA) includes the [Colorado Resiliency Office](#), which offers planning and implementation resources, best practices, and funding opportunities to support local resiliency across a broad range of topics.
- Adams County approved the following positions:
 - Resiliency Coordinator, who will focus on outreach to historically impacted communities.
 - Community Race Equity position through economic recovery dollars.
 - Neighborhood services analyst to measure the outcomes and performances of community initiatives through an equity lens.
- Through Advancing Adams, CED is working on a spatial analysis to map resiliency gaps within Adams County.
- The [Tree Equity Score](#) maps tree cover to show where additional infrastructure may be needed to support resilience.
- Data collected through policy guide efforts (described in strategy 15.1) can be used to inform resiliency gaps.
- Adams County was awarded a grant through the Vista program, which will support the addition of three community outreach coordinators.
- Temporary Assistance for Needy Families (TANF) interns are available to support community outreach activities.

Resources Needed

- Funding to implement identified infrastructure projects.

Costs:

- Low-to-no overhead and ongoing operations, can be completed with existing staffing.

Benefits:

- Leverages outside resources to add capacity to existing staff.

Remaining Strategies

Strategy 15.3 Participate in Sustainable Neighborhoods Network

<p><i>Description</i></p> <p>Participate in Sustainable Neighborhoods Network (SNN) to promote sustainable neighborhoods by empowering residents to become active partners in the sustainability of their communities. SNN is a regional organization that supports neighborhoods in achieving sustainability goals.</p>	
<p><i>Timing</i></p> <p>Mid-Term (2022–2026)</p>	<p><i>First Steps</i></p> <ul style="list-style-type: none"> • Connect with participating communities to learn more about the program, including successes, lessons learned, and resources required. • Identify county staff to lead application and participation (requires approximately one FTE of dedicated staff time). • Identify community partners to support participation. • Connect with Sustainable Neighborhoods Program to indicate interest.
<p><i>Roles & Responsibilities</i></p> <ul style="list-style-type: none"> • Lead department or organization: Community Safety & Well-Being 	

Strategy 15.4 Design and launch neighborhood capacity-building education series

<p><i>Description</i></p> <p>Design and launch neighborhood capacity-building education series (can be trainings by experts for neighbors, by neighbors for neighbors, or by experts for neighborhood leaders). Education topics can include reskilling, financial training, nutrition education, preparedness, and emergency response. Leveraging remote opportunities. Develop comprehensive health curriculum in coordination with trusted community partners.</p>	
<p><i>Timing</i></p> <p>Mid-Term (2022–2026)</p>	<p><i>First Steps</i></p> <ul style="list-style-type: none"> • Identify staff and community partners to form working group. • Conduct working group meetings to identify scope, form, and function of education series. • Leverage neighborhood policy guides and additional community feedback to inform series topics. • Identify topic experts and community leaders to serve as educators.
<p><i>Roles & Responsibilities</i></p> <ul style="list-style-type: none"> • Lead department or organization: Community Safety & Well-Being • Partnering department(s): Public Works (Stormwater), Parks, Open Space & Cultural Arts, Human Services, Sheriff's Office, Fire Rescue, Community & Economic Development • Partnering organization(s): Growing Home, Cultivando, Joyful Journeys, UNE, Adams County Resource Network, ECPAC 	

Strategy 15.5 Cultivate culture of personal resilience and preparedness

Description

Leverage community services, such as emergency management and mass care trailers, to educate community members on preparedness and cultivate a culture of personal and neighborhood resilience in the face of unexpected shocks and stressors.

Timing

Revisit: Consider for future sustainability plan iterations.

Strategy 15.6 Cultivate community leaders

Description

Partnering with some leadership organizations to develop leadership capacity. Examples include: community leadership groups in Aurora through fatherhood groups and community health workers/promoters. Bring this into on-boarding and exit strategy for leadership programs at neighborhood-scale.

Timing

Revisit: Consider for future sustainability plan iterations.



AIR QUALITY

Goal 16: Reduce indoor and outdoor air quality impacts on disproportionately impacted communities through advocacy and mitigation practices.

Strategy 16.1 Continue advocacy for improved air pollution mitigation and monitoring at regional and state levels

Description

Continue existing advocacy efforts at the state level for improved air pollution mitigation and monitoring, including programs, funding, and other mechanisms to mitigate air quality impacts and increase monitoring.

Impacts and Considerations

- Air pollution is a regional issue and many large polluters and transportation considerations are made at the regional or state (not county) levels.

Timing

Ongoing

Actions

- Continue partnerships with Regional Air Quality Council, Tri-County Health Department, and other organizations to advocate for programs, permitting requirements, etc. to improve air quality.
- Collaborate with member communities on air quality strategies – including those related to alternative transportation, EV charging infrastructure, tree planting programs, and incentives for electric small engines.
- Advocate for stronger GHG emission reduction requirements.

Roles & Responsibilities

- **Lead department or organization:** Legislative Affairs (CMO)
- **Partnering department(s):** Environmental Programs (CED)
- **Partnering organization(s):** Tri-County Health Department-Air Quality Program Specialist, DRCOG

Resources Available

- Existing staff do advocacy work

Resources Needed

- Staff time for advocacy

Strategy 16.2 Explore options to expand tree plantings in areas with significant air quality impacts

Description

Coordinate across county departments and activities to identify neighborhoods impacted by air pollution and select appropriate tools to increase tree canopy in those neighborhoods. This might include tree plantings on county-owned lands, expansion of the Public Works department Tree Amenity Program, and removing barriers to tree plantings to encourage planting on private property.

Impacts and Considerations

- Costs can vary by types of trees - [some estimates show \\$7.74/capita](#).
- [Study of Western U.S. cities](#) shows benefits outweigh costs 1.37 to 3.09 times.
- Trees provide carbon sequestration benefits, cooling effects (and therefore energy savings), reduce impacts from ozone, nitrous oxide and particulate matter, provide improved community experience, and promote physical/mental well-being. Disproportionately impacted communities often have less trees in those neighborhoods to realize these benefits.

Timing

Near Term (2022–2024)

Actions

- Identify lead from CSWB to coordinate efforts across partnering departments and organizations.
- Leverage online tools and neighborhood policy guides collected through CWSB to identify neighborhoods that would be best candidates for additional tree plantings. This may include neighborhoods with particularly poor air quality, especially in combination with equity metrics such as income or race and ethnicity.
- Coordinate with Public Works to identify upcoming opportunities to leverage Tree Amenity Program in identified neighborhoods (i.e. are there upcoming projects in identified neighborhoods).
- Partner with Parks, Open Space & Cultural Arts and CSU Extension to develop outreach and education materials (e.g. ideal species list, planting and ongoing care guides, benefits, and resources).
- Share community outreach and education materials through various neighborhood channels and connection points, such as through CSWB's neighborhood groups.
- Identify grant funding or other funding resources that could be used to support tree planting on private property. Coordinate with CSU Extension to see how identified funding could be used to "buy-down" or subsidize tree purchases from annual spring sale for community members living in impacted neighborhoods.
- Explore feasibility of creating and implementing a county-led or volunteer-led community tree-planting program in partnership with Parks, Open Space & Cultural Arts. Consider what structure would be most effective and what resources are needed to support such a program.

Roles & Responsibilities

- **Lead department or organization:** Community Safety & Well-Being
- **Partnering department(s):** Public Works, Parks, Open Space & Cultural Arts
- **Partnering organization(s):** [Colorado State Forest Service](#), Adelante, CSU Extension

Resources Available

- The [Tree Equity Score](#) is a mapping tool combining tree canopy data with equity data to create maps that can be used to prioritize the need for additional tree canopy cover to improve health outcomes. Tree Equity Scores are only available for cities, though Adams County could still use the tool to recommend priority areas to member communities.
- The [EPA EJSCREEN mapping tool](#) maps environmental justice data at the census block group-level for environmental and equity indicators.
- [CDPHE Climate Equity Data Viewer](#) uses EJSCREEN data to create cumulative impact scores. The map can be used as a screening tool and sortable tables are available to download.
- [Urban Forestry Toolkit](#) shares best practices for cultivating urban forests, including considerations for funding.
- [Arbor Day TD Green Space Grant](#) provides funding to support green infrastructure development, tree planning, forestry stewardship, and community green space expansion.
- [ArbNet Grant Funding Opportunities](#) includes a repository of funding opportunities to support various conservation and tree canopy-related projects.
- [iTree Tools](#) is an online resource that can be used to conduct feasibility studies and evaluate the impact of tree plantings.

Resources Needed

- Funding to pay for additional trees (ongoing over time)
- Staff or volunteers to plant trees

Strategy 16.3 Increase measurement and reporting of air quality in Adams County

Description

Coordinate with Tri-County Health Department to measure and report air quality in communities across Adams County. Increasing reporting via county website, social media, and other channels will raise awareness and educate the community about the impacts.

Impacts and Considerations

- Mid-range cost for air monitors and sensors, web-based data platform, maintenance and repairs
- Increased awareness of air quality and associated impacts could help spur action in the community and increase advocacy.

Timing

Near-Term (2022–2024)

Roles & Responsibilities

- **Lead department or organization:** Environmental Programs (CED)
- **Partnering department(s):** Facilities and Fleet, Parks, Communications
- **Partnering organization(s):** Tri-County Health, CDPHE, member communities

Actions

- Incorporate air quality monitors into county facilities new construction projects.
- Participate in Tri-County Health Love My Air Program.
- Work with Tri-County Health to increase low-cost sensor air monitoring network throughout county.
- Connect network data via one integrated web-based platform (e.g. Purple Air).
- Develop county website resource with information about current air quality, types of pollutants, and impacts on public health.
- Connect residents to AQI communication websites (EPA AirNow, CDPHE) through county communication channels.
- Develop air quality alert day banner announcements for county media channels with actions community members can take.
- Explore feasibility of increased third-party monitoring options.
- Consider citizen science networks such as Purple Air, CSU CEAMS, etc.

Resources Available

- [Air Quality Awareness Week](#), sponsored by EPA the first week of May, can help raise awareness of air quality issues impacting the community.

Resources Needed

- Funding for additional monitoring stations
- Staff time or partial FTE for monitoring calibration, maintenance, and data quality control and analysis.

Strategy 16.4 Develop program to provide indoor air quality education, outreach, assessment, and resources to disproportionately impacted communities.

Description

Develop county-led program focused on indoor air quality education, assessments, and improvements in homes for disproportionately impacted communities. Improvements may include energy efficiency improvements, ventilation improvements, air monitoring and purification systems, and mitigation solutions. Air monitoring should include radon, particulate matter, VOCs, and mold. In addition to providing assessments and improvements, include education about the impacts of indoor air quality and best practices for improving indoor air quality.

Impacts and Considerations

- Medium cost to develop and implement program; ongoing operational costs to fund improvements.
- In Colorado, [negative health impacts of buildings were estimated](#) to lead to 181 early deaths and cost over \$2 billion in 2017.
- Estimated 23% reduction in poorly controlled asthma rates; 48% decline in "poor health" adults. Co-benefits savings up to [\\$900/household](#).

Timing

Near-Term (2022–2024)

Actions

- This strategy coordinates with Strategy 4.8 and existing Weatherization and Minor Home Repair programs.
- Research existing programs and best practices in the state and around the country for programs addressing indoor air quality and energy services in disproportionately impacted homes.
- Gather available data about indoor air quality in disproportionately impacted communities in Adams County.
- Conduct community engagement and outreach with disproportionately impacted communities to understand issues, needs, and desires.
- Determine key partners for implementation of program.
- Develop recommendations for program design.
- Determine funding sources for pilot and ongoing program.
- Pilot program.

Roles & Responsibilities

- **Lead department or organization:** Environmental Programs (CED)
- **Partnering department(s):** Community Safety & Well-Being
- **Partnering organization(s):** Tri-County Health Department, CDPHE, member communities

Resources Available

- [City of Fort Collins Healthy Homes Program](#)
- [EPA Environmental Justice Grants](#)
- [Partners for Places Grant Program](#)

Resources Needed

- Staff time to research and develop program
- Funding for pilot program and ongoing program

Strategy 16.5 Support transition to electric- and/or battery-powered small engines through education, awareness, funding, and advocacy

Description

Raise awareness and provide education about the impacts of small off-road, gas-powered equipment (e.g. leaf and snow blowers, lawn and garden equipment, generators, etc.) on air quality and options available for replacement. Identify funding sources to help residential and business community members transition to electric equipment.

Impacts and Considerations

- Switching to electric mowers reduces ozone causing pollution by the equivalent of driving a car 100 miles (<https://sustainability.wustl.edu/rethinking-lawn-equipment/>).
- Low-to-medium cost (potential funding needed). Current residential voucher program from RAQC covers \$150/lawnmower. Voucher program fills quickly. Average cost of electric mower is \$300-\$400.

Timing

Near-Term (2022–2024)

Actions

- Develop education and outreach campaign to address impacts of small off-road engines and available resources.
- Explore options to provide additional incentives to community members for transitioning to electric equipment.
- Explore options for county ordinances prohibiting use of gas-powered leaf blowers.
- Transition county small engine equipment to electric as feasible
 - Gather inventory of all small off-road, gas- and diesel-powered equipment.
 - Determine available market options for replacements.
 - Incorporate electric requirements or considerations into procurement policies for new equipment.
 - Identify and apply for grant funds to support equipment replacement.

Roles & Responsibilities

- **Lead department or organization:**
Communications, Parks, Open Space & Cultural Arts, Environmental Programs (CED)
- **Partnering department(s):**
Public Works
- **Partnering organization(s):**
RAQC, Clean Air Fleets

Resources Available

- [RAQC - Programs](#) (including Mow Down Pollution Residential & Commercial)

Resources Needed

- Staff time for education and outreach
- Staff time to scope and develop ordinance
- Funding for additional incentives

