



Sustainability Plan
July 2018



THRIVE
TODAY AND
TOMORROW

CREATING A SUSTAINABLE LONGMONT

Acknowledgments

Many thanks to the contributions to everyone who was involved in the development of this Sustainability Plan. Also, thanks to Boulder County for providing continued support for Longmont's sustainability efforts in the form of matching grant funding that made this plan and other efforts possible in recent years.

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- Boulder County Public Health
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- Eco-Cycle
- El Comité
- Front Range Community College
- Front Range Community College Student Government
- Intercambio
- Latino Coalition
- LiveWell Longmont
- Longmont Coalition for People and Pollinators
- Longmont Conservation District
- Longmont Economic Development Partnership
- Longmont Housing Authority
- Longmont Meals on Wheels
- Longmont United Hospital
- Neighborhood Group Leaders Association
- Ollin Farms
- Parks and Recreation Advisory Board
- People and Pollinators Action Network
- Senior Citizens Advisory Board
- Sierra Club, Rocky Mountain Chapter
- Sustainable Resilient Longmont
- Transportation Advisory Board
- Water Board
- Youth Council



2018 Plan Update

Dear Longmont Community,

It is with great pleasure that I introduce the first official update to the Longmont Sustainability Plan. In 2016, the City of Longmont developed an updated Sustainability Plan in coordination with the Envision Longmont Effort. In just a few years, our community is already starting to make significant progress on achieving our sustainability objectives, targets, and strategies. We have a lot of work remaining, but I'm happy to report that we have already achieved some of our targets and strategies, and we have many new and impactful sustainability opportunities on the horizon.

Details of all plan updates are documented in Appendix C. A few important themes and milestones that influenced the 2018 plan update include the following:

Commitment to 100% Renewable Energy Goal

In January 2018, City Council members approved a resolution to strive to have 50 percent of residents' and businesses' electricity generated from carbon-free energy sources by 2020, and 100 percent by 2030. Carbon-free energy sources of electricity include wind, solar, and hydro. The targets and strategies in the Longmont Sustainability Plan have been updated to reflect these new commitments.

Completion of a Community Greenhouse Gas Inventory

In March 2018, the City of Longmont's Greenhouse Gas Reduction Modeling report established a 2016 greenhouse gas (GHG) emissions inventory, and explored the GHG emission reduction potential of various sustainability strategies. The results from the inventory show that the City emitted 1.08 million metric tons of carbon dioxide equivalent (MTCO_{2e}) in 2016. Analysis of twelve sustainability strategies revealed that Longmont could reduce its core GHG emissions by approximately 66 percent in 2030 and 69 percent in 2050 if all twelve strategies are fully implemented. The strategies included activities such as building efficiency improvements, electric grid modifications, renewable energy expansion, transportation shifts, and oil and gas activities. Many of these strategies were already included in the Longmont Sustainability Plan, but some have been added or refined to align with the outcomes of this analysis.

Development of Indicators and Metrics

The City of Longmont continues to define and refine indicators and metrics for ongoing monitoring and reporting. It is expected that the indicator and metric monitoring and reporting activities will be publicly available in the fall of 2018.

Community engagement in the development and implementation of the Sustainability Plan remains a high priority for the City of Longmont. If you have any questions about the process or if you would like to share your ideas for the work ahead, please feel free to contact me at (303) 651-8403 or Lisa.Knoblauch@longmontcolorado.gov.

Your partner in sustainability,



Lisa Knoblauch
City of Longmont Sustainability Coordinator

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SHARE YOUR COMMUNITY IN ACTION STORY!

This plan includes “Community In Action” highlights to showcase many of the community organizations and groups working to create a more sustainable Longmont -- note that it is not a comprehensive list. Please share what your organization is doing to enhance sustainability in Longmont and you may see those efforts reflected in future website and/or Sustainability Plan updates! Email the sustainability office at Sustainability@longmontcolorado.gov to share your story.



THRIVE TODAY AND TOMORROW

EXECUTIVE SUMMARY

CREATING A SUSTAINABLE LONGMONT

In 2016, the City of Longmont updated its Sustainability Plan to focus on actions that can be implemented within the next five to ten years to help promote environmental stewardship, social equity, and economic vitality for all residents and businesses of Longmont. The Plan includes actions that will be led by internal City departments to enhance sustainability, but also emphasizes involvement of other partner organizations, the business community, and Longmont residents in creating and maintaining a thriving, sustainable community.

The purpose of this Sustainability Plan is to clearly articulate Longmont's sustainability vision and objectives, establish meaningful targets, and define actionable strategies to support achievement of the vision. It is intended to serve as a tool for City of Longmont leaders and departments to guide decision-making as it relates to prioritizing projects, implementing programs, and communicating and interacting with the public. This Sustainability Plan is also intended to be used by the Longmont community as a guide for how to take action to enhance sustainability at all levels – individual, household, business, neighborhood, and community.

The development of the Sustainability Plan centered on stakeholder participation and opportunities for engagement. Approaches to connect with and hear from stakeholders were multi-faceted and major activities are summarized in the graphic at right.

The sustainability vision for Longmont sets the stage for future decision-making and actions. In addition to an engaged community, the underlying dimensions of this vision include environmental stewardship, social equity, and economic vitality (the "triple bottom line"). Each of these dimensions are connected and inter-related. All dimensions support one another in creating a sustainable community.

The following pages summarize the Sustainability Plan topics, objectives, targets, and strategies that support achievement of this vision. The contents of this Plan support the guiding principles of Envision Longmont (Longmont's Multimodal and Comprehensive Plan), and aim to further clarify, reinforce, and prioritize Longmont's future sustainability actions.



LONGMONT'S SUSTAINABILITY VISION

An engaged community that promotes environmental stewardship, economic vitality, and social equity to create a sustainable and thriving future for all.

LONGMONT'S SUSTAINABILITY TOPICS, OBJECTIVES AND TARGETS

Air Quality AQ	Improve air quality to protect public and environmental health.
	<ul style="list-style-type: none"> <input type="checkbox"/> Reduce the number of days out of ozone compliance <input type="checkbox"/> Increase local oversight of emissions from oil and gas operations <input type="checkbox"/> Increase public access to local air quality information and information on actions the public can take to improve air quality <input type="checkbox"/> Reduce oil and gas methane emission leaks 60% by 2027

Buildings & Infrastructure BI	Adopt policies, programs, and design guidelines for resilient and efficient buildings and community infrastructure to enhance quality of life, reduce costs and complement the natural environment.
	<ul style="list-style-type: none"> <input type="checkbox"/> Increase resident awareness of potential indoor air quality problems and solutions to the problems <input type="checkbox"/> Increase the number of environmentally certified buildings in Longmont <input type="checkbox"/> Increase equitable access to foundational community assets for all segments of the community <input type="checkbox"/> Revise City Design Standards and Construction Specifications to incorporate sustainability-related principles by the end of 2018 <input type="checkbox"/> All City departments are using life cycle cost and sustainability evaluations for public projects by 2018 <input type="checkbox"/> Increase access to housing efficiency, improvement, and assistance opportunities through a one-touch program approach

Community Cohesion & Resilience C	A vibrant community where all residents have equitable access to the opportunities needed to thrive, while preserving and enhancing natural, cultural and financial resources.
	<ul style="list-style-type: none"> <input type="checkbox"/> Increase neighborhood-based sustainability initiatives <input type="checkbox"/> Increase diversity of members in community leadership roles at the neighborhood, local, and/or regional level

Economic Vitality EV	Support a diverse economy that is aligned with social and environmental goals of providing local jobs, livable wages, and encouraging innovative and green businesses and business practices.
	<ul style="list-style-type: none"> <input type="checkbox"/> Increase cost savings and resource efficiency for businesses through pollution prevention and other sustainable practices <input type="checkbox"/> Increase number of green/clean tech industries (baseline to be defined) <input type="checkbox"/> Increase number of recognized sustainable businesses beyond the eight Longmont businesses certified through Boulder County's Partners for A Clean Environment program <input type="checkbox"/> Adopt an internal City sustainable purchasing policy by 2018 <input type="checkbox"/> Expand business opportunities for minority-owned and disadvantaged businesses (baseline to be defined)

Energy E	Increase energy efficiency and expand the use of renewable energy technologies to improve environmental quality, provide a resilient energy supply, and realize related economic benefits.
	<ul style="list-style-type: none"> <input type="checkbox"/> Reduce core GHG emissions 66% from the 2016 baseline by 2030 <input type="checkbox"/> Decrease the utility cost burden for low-income households through energy efficiency measures <input type="checkbox"/> Increase electric energy savings to 1% annually through energy efficiency measures by 2020 <input type="checkbox"/> Increase renewable energy to 100% of Longmont's energy mix by 2030

Food System FS	Support a locally-based, environmentally responsible and healthy food system that is available to all residents.
	<input type="checkbox"/> Increase access to healthy foods through a variety of initiatives such as the Double Up Food Bucks and other programs

Natural Environment NE	Minimize the negative effects of development and human activities on natural systems by identifying, protecting, enhancing, and restoring critical environmental resources at all scales.
	<input type="checkbox"/> Increase public knowledge of regenerative land management practices <input type="checkbox"/> Increase tree canopy to 18% or more of the Longmont Planning Area covered by regionally appropriate tree canopy or vegetation <input type="checkbox"/> Increase the community's contribution to meeting its demands for managing costs and maintaining and improving parks and open space

Transportation T	Invest in an efficient transportation system that enhances mobility, equitably supports multiple modes of transportation, reduces environmental impacts, and supports a healthier community.
	<input type="checkbox"/> Increase equitable access to transportation infrastructure for all segments of the community <input type="checkbox"/> Improve air quality related to transportation systems (baseline to be defined) <input type="checkbox"/> Reduce transportation fuel consumption by 33% by 2050

Waste WA	Increase opportunities for waste diversion, education, and reuse to reduce environmental impacts.
	<input type="checkbox"/> Decrease household trash landfilled to less than 2 pounds per capita per day by 2018 (from approximately 2.2 pounds per capita per day in 2015) <input type="checkbox"/> Increase residential waste diversion to 50% by 2025 <input type="checkbox"/> Increase internal waste diversion for all City operations (baseline to be defined) <input type="checkbox"/> Increase commercial waste diversion (baseline and target number TBD based on 2018 data collection)

Water W	Preserve the natural environment in our watershed and provide a reliable, high quality water supply that protects public health.
	<input type="checkbox"/> Reduce customer and City raw water demands by 10% by community buildout (estimated at 3,500 acre-feet by 2048) through water conservation efforts <input type="checkbox"/> Decrease the utility cost burden for low-income households through conservation measures <input type="checkbox"/> Ensure safe drinking water for all households in Longmont's water service areas by developing a plan addressing consecutive systems <input type="checkbox"/> Maintain or increase watershed health

LONGMONT'S IMMEDIATE STRATEGIES (2017-2019)

AQ-1: Increase inspections of emissions from oil and gas sites

BI-1: Expand indoor air quality testing program

C-1: Expand existing neighborhood programs to enhance sustainability, resiliency, and quality of life

C-2: Develop an inclusive standard of equitable access and opportunity for all residents that enhances capacity and is implemented uniformly across all city departments, policies, programs, and outcomes

EV-1: Create a Longmont sustainable business recognition program

E-1: Review energy efficiency improvement and renewable energy generation opportunities for municipal facilities

E-2: Continue collaboration with Energy Outreach Colorado to expand energy services for low-income households

NE-1: Update the Open Space Master Plan

NE-2: Update the Wildlife Management Plan

WA-1: Build support for participation in the curbside composting program

WA-2: Provide waste diversion opportunities and education for St. Vrain Valley School District

LONGMONT'S ONGOING STRATEGIES

BI-7: Adopt and enforce updated building code

C-4: Incorporate the City of Longmont's community engagement model into all City plans and projects

E-7: Continue to provide energy efficiency outreach and incentives for all energy users

E-8: Monitor and reduce greenhouse gas emissions

E-9: Expand awareness and partnership opportunities for solar installations and renewable subscriptions

FS-6: Encourage and support agricultural research in Boulder County

NE-6: Continue and increase participation in existing volunteer programs

T-7: Explore alternative funding streams to continue the Ride Free transit program

IMPLEMENTATION

This Sustainability Plan was developed to be iterative and dynamic in nature. To keep the implementation of the Plan on track, routine implementation check-ins and periodic adjustments are recommended. Furthermore, ongoing monitoring, measurement, and evaluation of the Plan's achievements are recommended. This Plan recommends some sustainability targets to be monitored over time, and this list will likely expand and be updated as more stakeholders participate and become involved in future monitoring and evaluation activities.

Fundamental to the success of this Plan is continued funding of a full-time Sustainability Coordinator for the City of Longmont. Not only will the Sustainability Coordinator be directly responsible for leading implementation of many of the strategies within this Plan, but he/she will also help coordinate a monitoring and evaluation process, and lead sustainability reporting and communications for Longmont.

Sustainability Plan Overview

In 2016, the City of Longmont updated its Sustainability Plan to focus on actions that can be implemented within the next five to ten years to help promote environmental stewardship, social equity, and economic vitality for all residents and businesses of Longmont. The Plan includes actions that will be led by internal City departments to enhance sustainability, but also emphasizes involvement of other partner organizations, the business community, and Longmont residents in creating and maintaining a thriving, sustainable community.

Sustainability has many different applications and meanings for the City of Longmont. Being sustainable means meeting all our current needs in a manner that does not prevent future generations from meeting all their needs. On a more functional level, sustainable actions are those that protect and enhance our economic, environmental, and social resources so that future generations will enjoy a quality of life equal to or greater than our own. Sustainability requires that the balance and synergy between environmental, economic, and social factors be considered when making decisions and acting on those decisions. The consideration of these factors when evaluating sustainability is known as the “triple bottom line” (TBL).



Achieving a sustainable future for any community, organization, or culture entails comprehensive and long-term approaches to achieving the triple bottom line. It means creating and maintaining economic conditions that support high employment and economic opportunities for all demographic groups. It also means using renewable and alternative energy sources or recycling and reusing more so that we can reduce our impact on the environment. Within a social system, sustainability means ensuring all members of the community (including youth, seniors, various household types, and ethnic groups) are able to have their basic needs met, have access to a wide variety of opportunities and resources, and the availability of learning and cultural activities. In short, sustainable solutions help create healthy people and a healthy economy on a healthy planet.

The purpose of this Sustainability Plan is to clearly articulate Longmont’s sustainability vision and objectives, establish meaningful targets, and define actionable strategies to support achievement of the vision. As a living document, the Plan is to be monitored and updated to guide future decisions about investment for both the City of Longmont and its residents. It is intended to serve as a tool for City of Longmont leaders and departments to guide decision-making as it relates to prioritizing projects, implementing programs, and communicating and interacting with the public. This Sustainability Plan is also intended to be used by the Longmont community as a guide for how to take action to enhance sustainability at all levels – individual, household, business, neighborhood, and community.

PLAN DEVELOPMENT PROCESS

Development of this Sustainability Plan was an iterative and interactive process. It consisted of four major phases, as follows:

- 1. Project Kickoff** – this first step focused on establishing the project team and Sustainability Advisory Committee, outlining goals and expectations for the plan development process, and using the City of Longmont Sustainability Evaluation System to explore and identify potential topics for the Sustainability Plan to address.
- 2. Baseline Snapshot** – this phase included interviews with City of Longmont staff members, coordination with Envision Longmont efforts, and review of myriad plans and background documents to develop an understanding of current conditions and opportunities to be addressed in the Sustainability Plan.
- 3. Vision and Framework** – this phase focused on defining the vision and objectives for the Plan’s topic areas, and also included development of the structural framework of the Plan, including organization of targets and strategies, and alignment with Envision Longmont efforts.
- 4. Targets and Strategies** – to develop the Sustainability Plan’s targets and strategies, the Sustainability Advisory Committee first held a brainstorming work session to identify potential ideas. These ideas were reviewed against current plans and policies, and were vetted through numerous one-on-one and small group conversations with members of the public, representatives from various community organizations and City of Longmont departments, and also at public workshops and community events.

The products and results from each phase blend together to form this Sustainability Plan.

Sustainability Engagement

The development of the Sustainability Plan centered on stakeholder participation and opportunities for engagement. Approaches to connect with and hear from stakeholders were multi-faceted, and included:

- Public workshops
- Information and questionnaires at community events
- Presentations and discussions with various boards, commissions, and community groups
- Online surveys (in both English and Spanish)
- Direct communications with interested community members
- Interviews and focus groups with City of Longmont and service provider staff members
- Extensive review of Envision Longmont public participation materials
- Sustainability Advisory Committee meetings
- Work sessions with the Board of Environmental Affairs
- Periodic updates to City Council



Sustainability Advisory Committee

Representatives from numerous City of Longmont departments, community organizations, and sustainability groups were invited to participate on the Sustainability Advisory Committee to serve as project ambassadors, lending their perspectives and expertise to the development of the Sustainability Plan. This group met three times during the planning process to review draft documents, provide technical expertise, and connect the Plan concepts and planning team with other community efforts.

LONGMONT'S SUSTAINABILITY VISION

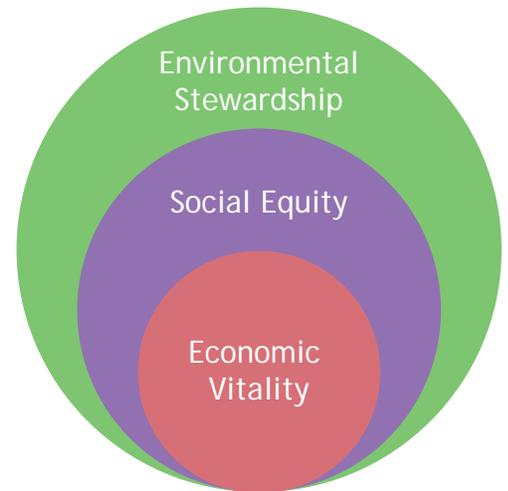
The sustainability vision for Longmont reflects the contributions of the many community members and other stakeholders engaged in the planning process and sets the stage for future decision-making and actions. The vision for a sustainable Longmont is:

An engaged community that promotes environmental stewardship, economic vitality, and social equity to create a sustainable and thriving future for all.

In addition to an engaged community, the underlying dimensions of this vision include environmental stewardship, social equity, and economic vitality (the “triple bottom line”). Each of these dimensions are further described in the following sections, but it is important to note that they are all connected and inter-related. All dimensions support one another in creating a sustainable community.

Environmental Stewardship

The environmental stewardship dimension of sustainability includes responsible management and use of the natural systems and resources that support life. These include, but are not limited to air, water, ecosystems, and energy. The St. Vrain River; the community’s extensive parks, open space, and trails system; its agricultural land; and wildlife corridors help to create the high quality of life Longmont residents enjoy and attract others to the community. Valuing, caring for, and protecting these systems and resources as individuals and as a community serves as the foundation for providing clean air, water, and land to sustain a healthy, resilient community and vibrant local economy. Longmont cannot safeguard human health without safeguarding the health of the planet, which is shaped by its food, transportation, industrial, energy, and waste systems.



Social Equity

The social equity dimension of sustainability focuses on satisfying basic human needs, and cohabitation of culturally and socially diverse groups. It seeks improvements in the quality of life for all segments of the population, including: fair distribution of benefits and burdens of actions for current and future stakeholders; access to resources that is not reliant on position or group; and ways for all stakeholders to be included in the process of shaping strategies and policies. Furthermore, it involves working with the natural world to sustain human activities to care for and restore the environment and live healthy, abundant lives. The same determinants that negatively impact environmental health often exacerbate health inequities.

Economic Vitality

The economic vitality dimension of sustainability focuses on creating an economic system that: supports the ability of individuals to meet basic economic needs such as affordable housing, transportation, and healthy food through living wages and educational opportunities; fosters a diverse network of businesses and industries that grow and thrive in ways that are complementary and restorative to the natural environment and community culture; and promotes resiliency through diversity, the efficient use of local resources, and the internalization of costs. This system seeks to maximize direct savings and indirect economic benefits to the community by emphasizing local job growth and investment, which in turn stimulates and circulates around the Longmont economy.

PLAN ORGANIZATION

This Sustainability Plan is organized around ten inter-related sustainability topics that form the main chapters of this document. The primary areas of emphasis that are addressed within each topic chapter are summarized below. Other major chapters of the Sustainability Plan include the following:

- **Implementation:** Details about how the Plan will be implemented, monitored and managed over time
- **Appendix A:** Related Plans (i.e., other City of Longmont plans, policies and strategies that relate to the Sustainability Plan)
- **Appendix B:** 2016 State of Sustainability (i.e., summary snapshot of current conditions and trends)
- **Appendix C:** 2018 Plan Update Summary of Revisions

<i>Sustainability Topics</i>	<i>Areas of Emphasis</i>
 Air Quality (AQ)	<ul style="list-style-type: none"> • Ozone and particulate matter • Access to air quality information and understanding of the causes of and solutions to air pollution
 Buildings and Infrastructure (BI)	<ul style="list-style-type: none"> • Resilient and sustainable design • Linkages to human health and well being • Building retrofits and reuse
 Community Cohesion and Resilience (C)	<ul style="list-style-type: none"> • Equitable access to resources and programs • Community inclusion and engagement • Neighborhood-based, resident-driven action
 Economic Vitality (EV)	<ul style="list-style-type: none"> • Sustainable business practices • Economic security • Diversified economy
 Energy (E)	<ul style="list-style-type: none"> • Energy efficiency • Renewable energy • Waste to energy
 Food System (FS)	<ul style="list-style-type: none"> • Land stewardship through agriculture • Food security and resiliency • Food economy
 Natural Environment (NE)	<ul style="list-style-type: none"> • Sustainable land management/stewardship • Connection with nature • Ecosystem health
 Transportation (T)	<ul style="list-style-type: none"> • Air quality linkages • Transportation affordability and accessibility • Active transportation
 Waste (WA)	<ul style="list-style-type: none"> • Waste management planning • Waste diversion and reduction
 Water (W)	<ul style="list-style-type: none"> • Water supply and management • Watershed quality and preservation

Chapter Organization

Each sustainability topic addressed in this Plan includes the same basic structure and components, as follows.

Sustainability Topics	Major sustainability categories and Sustainability Plan chapters.
Overview	Introduction to the sustainability topic, including the “areas of emphasis” or subtopics that emerged through the planning process as major priorities to be addressed by the Plan’s targets and strategies.
Linking to Envision Longmont	Guiding principles and goals from Envision Longmont that relate to the topic.
Related Topics	Other sustainability topics that are highly linked or related to the particular topic; note that the size of the icons represent the relative strength of the connections.
Objective	The overall intent and purpose of addressing the topic.
Be Part of the Solution	A call to action that includes tips and suggestions about how you can be part of the solution.
Target(s)	The desired future conditions and achievements resulting from implementation of this Plan (note that targets describe future conditions overall, not status of each detailed strategy); baseline conditions are provided where possible, but in some cases baseline conditions for Longmont need to be defined.
Strategies	Actions to achieve the targets and objectives, including the following subcomponents:
Description	What the strategy is, why it is important, and current conditions (as available).
How	Major steps to complete the strategy.
Who	Responsible parties for the strategy including who leads and who supports.
Timing	When the strategy should be initiated. Time horizons are defined as: <ul style="list-style-type: none"> • Immediate – 2017 to 2019 • Near term – 2019-2022 • Mid term – 2022-2026 and beyond • Ongoing – Currently underway but need continued focus
Resources	An estimate of the resources necessary to implement the strategy including staffing needs represented as Full Time Equivalent (FTE) approximations.
Future Areas of Emphasis	Subtopics that emerged through the planning process that were not addressed during this plan update but that should be revisited and considered during the annual review process and future Plan updates.

A group of children are riding bicycles in a race on a paved path. They are wearing colorful helmets and numbered bibs. Spectators are visible on the right side of the path, watching the race. The background shows trees and a bright sky.

CITY IN ACTION

Within each chapter, these boxes highlight recent and current City of Longmont projects, initiatives, and efforts.

RELATED PLANS / OTHER INFORMATION

Additional information about related plans, projects, and topics are summarized throughout each chapter.

COMMUNITY IN ACTION

Various groups working on sustainability issues in Longmont are highlighted. Share your story (see the Table of Contents page for details).

PLAN STRATEGIES AND TRIPLE BOTTOM LINE IMPACTS

The strategies contained within this Plan are all highly interconnected and impact outcomes across the three dimensions of the triple bottom line (TBL). The table on the following pages illustrate these cross-cutting impacts. Each strategy is evaluated against TBL line priorities that are critical for creating a sustainable Longmont. Darker shades in the table represent high benefits and/or degrees of connection and lighter shades represent lower benefits and/or degrees of connection. Colorless areas represent limited benefits. These strategies are in order of how they appear in this Plan and do not reflect order of importance.

Strategy and Triple Bottom Line Impacts



- AQ-1: Increase inspections of emissions from oil and gas sites
- AQ-2: Expand air quality information and monitoring
- AQ-3: Develop an ozone reduction incentive and enforcement program
- AQ-4: Adopt and enforce leak detection and repair associated with oil and gas operations



- BI-1: Expand indoor air quality testing program
- BI-2: Preserve, improve, and rehabilitate existing affordable homes
- BI-3: Develop and implement a process to incorporate social equity into prioritizing infrastructure improvements
- BI-4: Adopt a policy to require life cycle cost and sustainability analyses for all City of Longmont projects and programs
- BI-5: Revise and update the City of Longmont Design Standards and Construction Specifications to include sustainability
- BI-6: Develop 'beyond' building code
- BI-7: Adopt and enforce updated building code



- C-1: Expand existing neighborhood programs to enhance sustainability, resiliency, and quality of life
- C-2: Develop an inclusive standard of equitable access and opportunity for all residents that enhances capacity and is implemented uniformly across all city departments, policies, programs, and outcomes
- C-3: Collaborate with St. Vrain Valley School District on a preparedness and resilience site
- C-4: Incorporate the City of Longmont's Community Engagement model into all City plans and projects



- EV-1: Create a Longmont Sustainable Business Recognition program
- EV-2: Work with local economic development organizations to support local businesses and attract and expand green industry/clean tech jobs
- EV-3: Reinstate the Pollution Prevention Program
- EV-4: Establish and promote a City of Longmont internal sustainable purchasing policy
- EV-5: Identify needs, barriers and opportunities to establish equitable access for underutilized, under-represented, and/or multi-cultural businesses and support through expanded programming
- EV-6: Partner with local educational institutions to connect sustainability knowledge and workforce needs



- E-1: Review energy efficiency improvement and renewable energy generation opportunities for municipal facilities
- E-2: Continue collaboration with Energy Outreach Colorado to expand energy services for low-income households
- E-3: Improve commercial building efficiency
- E-4: Develop a comprehensive 100% renewable electricity plan for Longmont's just transition to a clean energy economy
- E-5: Report and benchmark energy use
- E-6: Monitor advanced metering infrastructure implementation
- E-7: Continue to provide energy efficiency outreach and incentives for all energy users
- E-8: Monitor and reduce greenhouse gas emissions
- E-9: Expand awareness and partnership opportunities for solar installations and renewable subscriptions

Strategy and Triple Bottom Line Connections



- FS-1: Identify barriers and opportunities for local food production
- FS-2: Encourage and support the Boulder County Resource Conservation Board in pursuing carbon sequestration studies
- FS-3: Expand connections between local food producers and areas/populations in need
- FS-4: Support and expand Garden to Cafeteria program opportunities
- FS-5: Support the establishment of community food processing and storage facilities in partnership with Boulder County
- FS-6: Encourage and support agricultural research in Boulder County



- NE-1: Update the Open Space Master Plan
- NE-2: Update the Wildlife Management Plan
- NE-3: Work with community partners to promote education and awareness about regenerative land management practices on private properties
- NE-4: Update the Tree Canopy Management and Replacement Plan
- NE-5: Create and implement a plan to restore and remediate damaged ecologically sensitive areas and critical corridors and habitat areas
- NE-6: Continue and increase participation in existing volunteer programs



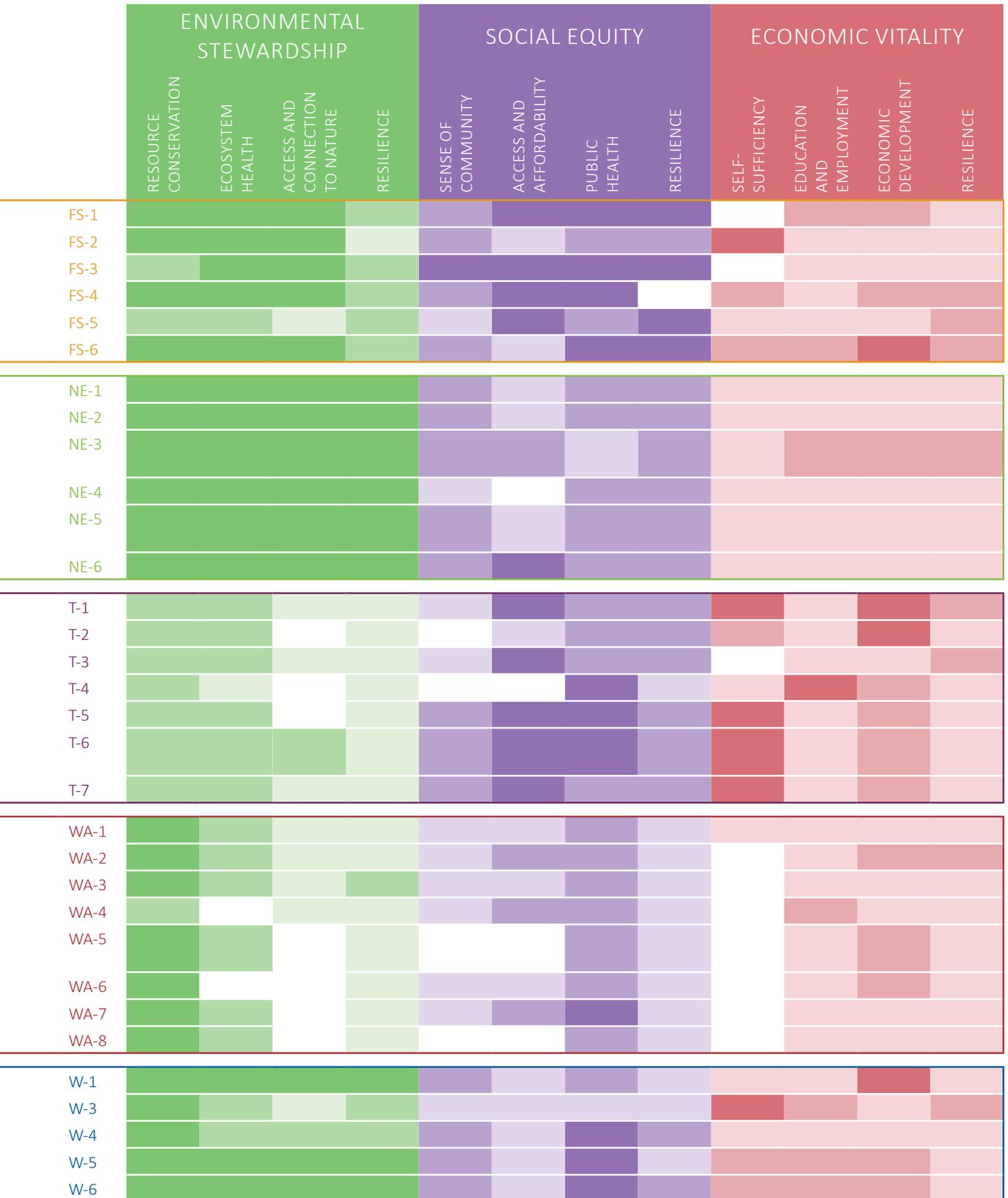
- T-1: Coordinate with RTD to expand service and hours to key community locations
- T-2: Develop a fleet efficiency and alternative fuels plan
- T-3: Coordinate with regional partners on publicizing car/van pooling
- T-4: Increase electric vehicles through vehicle incentives and improved infrastructure
- T-5: Audit all transit stops to evaluate accommodation needs of all residents and prioritize improvements
- T-6: Support growth in active transportation and transit ridership through implementation of the Multimodal Transportation Plan
- T-7: Explore alternative funding streams to continue the Ride Free transit program



- WA-1: Build support for participation in the curbside composting program
- WA-2: Provide waste diversion opportunities and education for St. Vrain Valley School District
- WA-3: Develop a strategic waste management plan with regional partners
- WA-4: Increase public education and awareness about waste reduction and diversion opportunities
- WA-5: Incorporate diversion target for City construction projects and Longmont Urban Renewal Authority (LURA) projects into standard contract language
- WA-6: Adopt a commercial recycling ordinance that includes multi-family units
- WA-7: Increase hazardous/ e-waste/ materials drop-off opportunities
- WA-8: Establish a construction demolition waste incentive program



- W-1: Implement identified strategies within the Water Efficiency Master Plan
- W-2: Complete an analysis of water loss and recommend strategies for subsequent actions
- W-3: Develop a strategic water quality improvement and enforcement plan for consecutive systems
- W-4: Coordinate with Boulder County Public Health on model greywater (water reuse) ordinance
- W-5: Create an active watershed management program



RELATIONSHIP TO ENVISION LONGMONT AND OTHER PLANS

Envision Longmont, the coordinated effort to update the Longmont Area Comprehensive Plan and the Longmont Multimodal Transportation Plan, defines the **long-term vision, guiding principles, policy direction, and growth framework** for the Longmont community. It is supported by numerous functional plans that provide additional detail and direction for various topic areas.

Envision Longmont defines six guiding principles that are intended to promote a more sustainable and resilient Longmont. It describes a sustainable Longmont as a community that takes care of the needs of the present generations without compromising the ability to meet the needs of future generations. A resilient Longmont is described as increasing the capability of the City and its partners to anticipate risk, limit impact, and bounce forward rapidly by adapting and learning in the face of disruptive shocks and stresses. Longmont’s sustainability vision established in this Sustainability Plan reinforces these Envision Longmont concepts and guiding principles.



This Sustainability Plan supports the guiding principles of Envision Longmont, and aims to **further clarify, reinforce, and prioritize Longmont’s future sustainability actions**. The Sustainability Plan establishes more detailed objectives, targets, and strategies across the triple bottom line, including concepts and goals from other efforts such as Advance Longmont; the Parks, Recreation and Trails Master Plan; the Water Conservation Master Plan; the Boulder County Environmental Sustainability Plan; and Age Well Boulder County. See a more comprehensive list of related plans in Appendix A. In its role as a **strategic, implementation-focused guide**, the Sustainability Plan will continue to evolve and be updated in coordination with other City of Longmont plans, policies, and initiatives, including but not limited to Envision Longmont.

OVERARCHING STRATEGIES

An overarching strategy that is fundamental to the success of this Plan is broad education about and awareness of sustainability opportunities and practices. This includes education and awareness within the City of Longmont organization so that all employees understand, practice, and can share the benefits and to demonstrate the City’s commitment to leadership by example through its sustainability practices and strategies. It also includes education and outreach to the greater community to encourage everyone to help create a more sustainable Longmont. This Plan assumes ongoing investment in sustainability programming, staffing, and training, and recognizes that the cumulative impacts of this investment will continue to expand and grow.

Lastly, the exploration and establishment of public-private partnerships is another overarching strategy that is will support successful implementation of this Plan. Limited government resources can be greatly enhanced, extended, and amplified through such partnerships, further boosting sustainability communications and achievements across the Longmont community.



SUSTAINABILITY EVALUATION SYSTEM (SES)

For any proposed project or program activity, there will usually be several alternatives with differing levels of meeting sustainability criteria or sustainability goals. Evaluating these alternatives can be difficult without a method that allows for more objective and consistent interpretation of sustainability factors. A Sustainability Evaluation System (SES) tool has been developed by the Public Works and Natural Resources department that provides a structured way to use sustainability and triple bottom line principles when evaluating alternatives. The SES helps City staff and other stakeholders apply inter-disciplinary thinking across topic areas and to ask and consider important questions about a project, program, or plan that might otherwise be overlooked. In addition, it promotes transparency in decision-making by providing a way to consistently evaluate and document the benefits and tradeoffs of decisions. The SES can be used to assess sustainability at different decision points in a project and can help rank projects for capital planning purposes.

The sustainability topics in the SES, in conjunction with the goals, policies and guiding principles in Envision Longmont, helped define the topics for the Sustainability Plan. Moving forward, the SES can also be used by stakeholders to evaluate Sustainability Plan strategies, as well as other City of Longmont plans, projects, and programs.

As resilience is a vital component of sustainability, the SES incorporates risk and resilience into the evaluation of best practices in order to enhance the sustainability of plans, projects and programs. The SES will reference the Resilient Design Performance Standards currently being developed through the Boulder County Collaborative once those standards are finalized. The Resilient Design Performance Standards are based on achieving time-to-recovery goals. The standards provide a systematic approach to adapting and preparing infrastructure and organizations to better respond to natural disasters and other significant stressors that are expected to affect communities in the future. This approach provides guidance for increasing the consideration of resilience and sustainability in project design for infrastructure repair and improvements.



Air Quality



OVERVIEW

Air quality impacts quality of life in myriad ways. Poor air quality, both outdoors and indoors, can result in health problems, especially for vulnerable populations, in addition to causing lowered visibility, and stress on our ecosystem services to filter and react to pollutants. Outdoor air pollution includes particulates generated by fires, construction, and street maintenance, as well as chemical pollutants generated by vehicles, oil and gas operations, and even spilling gas at the fueling station. Indoor air pollution is linked to poor ventilation and air treatment and can result in elevated levels of radon, carbon dioxide, molds, and other pollutants. The City of Longmont and regional agencies such as Boulder County, the Colorado Department of Public Health and Environment, and the Regional Air Quality Council are monitoring air quality and taking steps to address both indoor and outdoor air pollution.

According to the World Health Organization, there were an estimated 3.7 million deaths worldwide in 2012 from outdoor air pollution as a result of our current energy, transportation, waste management, and industrial systems. Implementing healthier strategies not only has the potential to avert premature deaths related to air quality pollution, but will also be more economical in the long term due to health-care cost savings as well as climate and environmental gains.

In this Sustainability Plan, strategies for sustainable air quality include improved monitoring and public awareness of air pollution, which can enable the reduction or elimination of sources of air pollution by making more informed choices about transportation, plantings, energy generation, and any other activities that might pollute the air. While related to this section, strategies addressing indoor air quality are covered in the Buildings and Infrastructure section.

The following air quality-related priorities were identified to be addressed in the Sustainability Plan:

- Ozone and particulate matter
- Access to air quality information and understanding of the causes of and solutions to air pollution



Linking to Envision Longmont

Guiding Principle		Goals	
GP2	A complete, balanced, and connected transportation system	2.1	Integrate land use and transportation planning to enhance the overall quality of life in the City.
GP5	Responsible stewardship of our resources	5.1	Protect and conserve Longmont’s natural resources and environment.

Related Topics



BE PART OF THE SOLUTION

Air quality is a resource that is shared by many that can be impacted by a few. To improve air quality:

- Walk, bike, and ride more
- Drive smarter by not idling
- Invest in a more fuel-efficient or alternative fuel technology vehicle
- Swap your lawn care equipment for electric options
- Fuel up in the evenings
- Purchase household products that display the Environmental Protection Agency’s Safer Choice logo
- Limit open fires and don’t burn on poor air quality days
- Plant trees and cultivate indoor plants



CITY IN ACTION

The City of Longmont Longmont’s Public Works & Natural Resources Department has made several Safety Siren™ **Radon Gas Detectors** available to library patrons so that they can easily test the levels of radon gas in their homes and workplaces.

In 2012, residents **voted to ban fracking** within Longmont City limits. In 2016, the Colorado Supreme Court struck down this citizen initiated Charter amendment, saying that it conflicts with state law. Despite this ruling, Longmont still has important protections in place for the community including no drilling in residential neighborhoods, mandatory groundwater monitoring, setbacks from riparian areas, and other important regulations that will protect the health and safety of residents. The City is also exploring strategies for mineral extraction on City-owned properties, including noise abatement, visual mitigation, and encouraging oil and gas operators to tap directly into pipelines to avoid transfer and storage issues, thereby reducing truck traffic and associated fugitive emissions.

Objective: *Improve air quality to protect public and environmental health.*



Targets

<input type="checkbox"/>	Reduce the number of days out of ozone compliance
<input type="checkbox"/>	Increase local oversight of emissions from oil and gas operations
<input type="checkbox"/>	Increase public access to local air quality information and information on actions the public can take to improve air quality
<input type="checkbox"/>	Reduce oil and gas methane emission leaks 60% by 2027

Strategies

Immediate

AQ-1: INCREASE INSPECTIONS OF EMISSIONS FROM OIL AND GAS SITES

While Longmont's recent efforts to gain local control over oil and gas activities within City limits were unsuccessful, this strategy focuses on increasing monitoring and inspections of emissions from oil and gas extraction sites within Longmont to monitor air quality impacts. Currently inspections are handled by the State of Colorado.

How

- Review state regulations and current inspection frequency for all Longmont extraction sites
- Identify any necessary equipment (e.g., infrared cameras) and/or staffing to increase frequency of inspections
- Establish a new inspection schedule and ensure adequate notification to site operator
- Develop a means to share results with members of the public (e.g., online database)
- Research and identify additional monitoring mechanisms

Who

Lead: Public Works and Natural Resources (Engineering Services)

Support:

- Boulder County
- Public Works and Natural Resources (Environmental Services)

Resources

Needs funding:

- Staff time for additional inspections (estimated at 0.1 FTE)
- Additional equipment if necessary

REGIONAL AIR QUALITY COUNCIL

The Regional Air Quality Council works to develop and propose effective and cost-efficient air quality planning initiatives with input from local government agencies, the private sector, stakeholder groups, and residents of the Denver metropolitan area and the Denver Metro/North Front Range Ozone Non-Attainment Area. They plan and implement a variety of public outreach and education efforts. RAQC assists with regional public/private initiatives to reduce emissions from the transportation sector, mobile sources, and other sources.

COMMUNITY IN ACTION

Boulder County Clean Air Challenge

The Clean Air Challenge encourages County residents to leave their cars at home one or more days per week during the high ozone months of July and August. Participants track their alternative commuting trips using an online tool and are eligible to win prizes such as an iPad Air, REI Gift Cards, and other smaller prizes just for participating.

Near-term

AQ-2: EXPAND AIR QUALITY INFORMATION AND MONITORING

Some air quality information is available for Longmont but is not currently shared in ways that most Longmont residents encounter on a daily basis (e.g., local radio, community websites). Expanded air quality information and enhanced monitoring of air pollution and emissions will help track local conditions and can be used to create a local call to action for residents or businesses.

How

- Pull information from AirNow.gov or CDPHE Front Range Air Quality detail onto the City of Longmont website
- Place widget from CDPHE on Longmont website that provides air quality information
- Share air quality information and how residents can help improve air quality on Channel 8 daily
- Provide air quality information and tips on City Line
- Research and install an ozone monitor in Longmont and ozone formation monitors
- Explore wearable air pollution monitors to track air quality throughout the community
- Set up a subscription-based air quality alert system (phone/email/text) to notify residents of any air quality alerts and recommended actions

Who

Lead: Public Works and Natural Resources (Environmental Services)

Support:

- Community Services
- IT/Communications and Channel 8
- RAQC or other potential funding source
- Public Works and Natural Resources (Business Services)

Resources

Needs funding: Ozone monitor

Likely accomplished with existing resources: Staffing for monitoring and communication

AQ-3: DEVELOP AN OZONE REDUCTION INCENTIVE AND ENFORCEMENT PROGRAM

Many communities across the Front Range provide programs and incentives to encourage reductions in ozone emissions. Ozone levels are calculated using a rolling three-year averages of the fourth highest daily 8-hour concentrations. The region is currently designated as a nonattainment area based on ozone pollution levels. A local program for Longmont would leverage regional resources to incentivize reductions and would also include enforcement of existing policies to reduce Longmont's contributions to regional ozone levels.

How

- Partner with the Regional Air Quality Council to leverage funding and program offerings (e.g., the Mow Down Pollution program)
- Develop educational materials and incentives for landscaping and maintenance equipment purchases, exchanges, and recycling for residents and businesses
- Enforce existing anti-idling policies

Who

Lead: Public Works and Natural Resources (Environmental Services)

Support: Regional Air Quality Council

Resources

Needs funding:

- Educational materials and incentives
- Staffing for program administration and enforcement (estimated at 0.1FTE)



AQ-4: ADOPT AND ENFORCE LEAK DETECTION AND REPAIR ASSOCIATED WITH OIL AND GAS OPERATIONS

The City of Longmont can help reduce the impacts from and emissions of oil and gas operations by improving monitoring and enforcement of oil and gas activities. Monitoring and enforcement activities include increasing methane leak detection and repair (LDAR) and minimizing leaks in the transmission and distribution system.

How

- Assign responsibility to Oil and Gas Coordinator
- Develop and adopt leak detection and repair requirements
- Obtain and test oil and gas monitoring equipment
- Develop a monitoring game plan and schedule
- Determine enforcement protocols and
- Distribute information about process and requirements to oil and gas operators
- Begin monitoring and enforcement

Who

Lead: Public Works and Natural Resources (Engineering)

Support:

- Public Works and Natural Resources (Business Services, Environmental Services)
- City Attorney
- Colorado State University Energy Institute

Resources

Needs funding: Additional monitoring equipment and training

Likely accomplished with existing resources: Oil and Gas Coordinator position and monitoring equipment

Future Areas of Emphasis

- Construction sites and impacts on air quality
- Wood burning alternatives to improve air quality
- Vapor recovery to limit release of vapors into the atmosphere





Buildings & Infrastructure



OVERVIEW

Buildings and infrastructure are the human-made structures and places in which we live, work, and play. Buildings include offices, homes, schools, and retail establishments. Infrastructure is the framework of a city that provides essential services to residents. Infrastructure includes electric, water, sewer and storm drainage utilities, bridges, streets and sidewalks, and communication facilities. Parks are also part of urban infrastructure, although they have a connection to the natural environment and are discussed further in the Natural Environment section of the Sustainability Plan. Longmont has emerged as leader in infrastructure development with its fiber optic broadband network, clean water distribution, and flood responsive conveyance. With projected growth in the coming decades, Longmont will continue to seek a leadership role by redefining its buildings and infrastructure to promote a sustainable and thriving future for all. cityarn.com

“Sustainable and resilient buildings and infrastructure” means structures and systems designed to minimize environmental impacts, to connect people and the environment, use less energy to operate and maintain, and are resilient to natural and human-caused hazards. Buildings and infrastructure that reflect sustainable design principles provide quality of life and health benefits, complement the surrounding natural environment, and reduce operation and maintenance costs. Incorporating green infrastructure provides an ecological framework for improving social, economic, and environmental health. Practices such as rain gardens and green roofs serve to mitigate the heat island effect, increase biodiversity in urban settings, sustainably manage stormwater, improve air and water quality, and enhance social connectivity by creating inviting places for people to gather and recreate.

In addition to environmental, social, operations, and maintenance benefits of sustainable and resilient buildings and infrastructure, investment in building rehabilitation and retrofits can provide tremendous economic value to a community. For example, according to the Economic Power of Heritage and Place Report prepared for the Colorado Historical Foundation, approximately 32 new jobs are generated for every \$1 million spent on the preservation of historic buildings.

The following building and infrastructure priorities were identified to address in the Sustainability Plan:

- Resilient and sustainable design
- Linkages to human health and well-being
- Building retrofits and reuse





Linking to Envision Longmont

Guiding Principle		Goals
GP1	Livable centers, corridors, and neighborhoods	1.2 Promote a sustainable mix of land uses. 1.4 Focus on infill and redevelopment in centers, corridors and other areas of change. 1.8 Create an integrated and quality parks, recreation, greenway, and open space system.
GP3	Housing services, amenities, and opportunities for all	3.1 Ensure there are affordable and accessible housing options that meet the needs of residents of all ages, abilities, and income levels.
GP6	Job growth and economic vitality through innovation and collaboration.	6.2 Promote and increase opportunities for collaboration, innovation, and entrepreneurship.

Related Topics



CITY IN ACTION

The City of Longmont offers **building renovation and retrofit programs** to enhance the energy efficiency and performance of existing buildings. These programs include the Efficiency Works Building Tune Up, Efficiency Works Residential Services, Residential Appliance Rebates, and various Housing Rehabilitation programs.

Longmont adopted the **2015 International Building Code** for commercial and residential properties in early 2016.

BE PART OF THE SOLUTION

Many resources, incentives, and rebates are available to help you retrofit your home or business with sustainable and resource efficient measures. Businesses might consider the following:

- Sign up for an Efficiency Works building assessment and take advantage of rebates
- Check out if you are eligible to participate in the Boulder County Longs Peak Energy Conservation (LPEC) Weatherization Program
- Take advantage of historic preservation tax credits
- Explore use of commercial PACE financing for energy efficiency and/or renewable energy investments

Some actions for households to consider include:

- Sign up for an Efficiency Works home energy audit
- Replace inefficient appliances, fixtures, and buildings systems and take advantage of rebates
- Recycle your old refrigerator through the refrigerator recycling program
- Apply for assistance through the residential general rehabilitation assistance program, residential accessibility program, or mobile home repair program

ENVISION LONGMONT PROMOTES SUSTAINABLE AND RESILIENT BUILDINGS AND INFRASTRUCTURE

Envision Longmont focuses on promoting a more sustainable and resilient built environment, where:

- A compact growth pattern is maintained through a focus on infill and redevelopment, and reinvestment in the City's historic, vacant, or underutilized buildings – ensuring land and available infrastructure are used efficiently.
- Community livability is enhanced through expanded housing options, investments in local and regional transportation, and ease of access to employment, health and human services, recreational facilities, and other amenities.
- The impacts of future growth on the City's natural environment are minimized through the use of sustainable site planning and development practices.
- Risks and effects associated with future flood events or other disasters are minimized by focusing growth out of flood or disaster prone areas, and designing critical infrastructure to withstand severe stresses.
- Future housing, employment, and services are aligned with investments in the City's multimodal transportation system to increase their accessibility and help reduce the combined cost of transportation and housing for residents.



Objective: *Adopt policies, programs, and design guidelines for resilient and efficient buildings and community infrastructure to enhance quality of life, reduce costs, and complement the natural environment.*

Targets

<input type="checkbox"/>	Increase resident awareness of potential indoor air quality problems and solutions to the problems
<input type="checkbox"/>	Increase the number of environmentally certified buildings in Longmont
<input type="checkbox"/>	Increase equitable access to foundational community assets for all segments of the community
<input type="checkbox"/>	Revise City Design Standards and Construction Specifications to incorporate sustainability-related principles by the end of 2018
<input type="checkbox"/>	All City departments are using life cycle cost and sustainability evaluations for public projects by 2018
<input type="checkbox"/>	Increase access to housing efficiency, improvement, and assistance opportunities through a one-touch program approach

COMMUNITY IN ACTION

Longmont Housing Authority (LHA)

LHA is a valuable community asset in providing affordable housing and support for self-sufficiency. It also demonstrates a strong commitment to resource efficiency measures. Highlights of this commitment include:

- Installing new energy/water appliance packages and faucets and fixtures in every unit
- Practicing appliance donation, recycling, and responsible disposal
- Hiring only licensed contractors to do all work
- Increasing energy efficiency programs through improvements such as weatherization, lighting retrofits, and solar thermal hot water
- Developing in compliance with the Enterprise Green Communities criteria

Strategies

Immediate

BI-1: EXPAND INDOOR AIR QUALITY TESTING PROGRAM

Indoor carbon dioxide levels can help illustrate indoor air quality and proper ventilation. Currently residents can check out a radon testing device at the library and this strategy expands the lending library to include carbon dioxide monitors and information about testing indoor air quality.

How

- Pursue funding to expand radon monitoring program to include additional monitors and educational programming around indoor air quality
- Purchase carbon dioxide monitors and add to lending library (to measure air ventilation or “staleness” often associated with poor air quality issues)
- Outreach to/with community to identify buildings to test
- Launch internally to test city facilities
- Incorporate into Sustainable Business Program
- Provide testing guidance and assistance where needed
- Provide results and recommendations to participating building owners/tenants
- Re-test buildings once remediation measures are complete

Who

Lead: Public Works and Natural Resources (Environmental Services)

Support:

- Library
- Community Services
- Community members
- Boulder County Public Health

Resources

Needs funding:

- Monitoring devices
- Staffing for educational program and testing (estimated at 0.1 FTE)
- Development of educational program materials

EMBODIED ENERGY OF BUILDINGS

Every building is a unique combination of many different processed materials, each of which contributes to a building’s total embodied energy. Embodied energy is the total energy consumed by the extraction, processing, manufacture, and delivery associated with the production of a building measured as the quantity of non-renewable energy per unit of building material, component, or system. Unlike a life cycle assessment, embodied energy only considers the front end aspect of the impact of building material and energy, and does not include the operation and disposal of the materials (see the Waste section for waste material diversion and reduction topics).

It was previously thought that embodied energy content of a building was small when compared to the operational energy of a building over its life. However, recent research shows that the total embodied energy may account for 15% of the building’s energy use. Therefore, reducing embodied energy can greatly reduce the overall environmental impact of the building. Ways to reduce embodied energy in new construction include increasing the recycled content of materials used such as concrete and steel as well as selecting materials that are created with less energy when given the option. As Longmont continues to grow, reducing the embodied energy within buildings represents a significant opportunity to build more sustainably.



Near-term

BI-2: PRESERVE, IMPROVE, AND REHABILITATE EXISTING AFFORDABLE HOMES

This strategy seeks to maintain and improve the community's affordable housing stock to provide a stable and sustainable Longmont that meets the needs of our workforce, our businesses, and our residents now and into the future. This includes the rehabilitation and preservation of existing housing, providing safe, code compliant, and energy efficient rental and owner-occupied homes. These homes that are smaller, older, and deed-restricted as affordable will help the City meet its goal to have 10% of our housing stock be deed-restricted as permanently affordable.

How

- Seek public and private partnerships to preserve, redevelop and/or rehabilitate existing affordable housing
- Support and enhance programs to preserve existing affordable housing
- Find permanent dedicated funding source(s) for the Affordable Housing Fund
- Promote and grow the Housing Rehabilitation Program
- Coordinate with efforts to increase energy efficiency of homes and the lower utility cost burden through conservation measures and other assistance programs

Who

Lead: Community Services (Housing and Community Investment)

Support:

- Planning and Development Services
- Public Works and Natural Resources
- Longmont Power and Communications

Resources

Needs funding:

- Affordable Housing Fund to support preserving/improving existing affordable housing
- Expanded owner-occupied Housing Rehabilitation Program to improve efficiency, safety, and longevity

Likely accomplished with existing resources:

- Design of program to preserve affordable rental housing (e.g., land trusts, easements, deed restrictions, etc.)
- Continuation, adaptation, and growth of the Housing Rehabilitation Programs for both owner and renter housing

BI-3: DEVELOP AND IMPLEMENT A PROCESS TO INCORPORATE SOCIAL EQUITY INTO PRIORITIZING INFRASTRUCTURE IMPROVEMENTS

Infrastructure improvements, such as bicycle and pedestrian facilities, are needed to enhance connectivity to community amenities such as parks, open space, transit facilities, and service providers. This strategy focuses on developing a process to incorporate social equity into the identification of gaps and the prioritization and completion of infrastructure improvements in order to provide linkages to connect under-served areas with community amenities.

How

- Engage under-served areas and groups in conversations about priority connections and needs
- Review Capital Improvement Plan (CIP) and identify priority connections and improvements
- Update the CIP as necessary to address priority connections
- Ensure safety and convenience measures such as adequate street lighting, ADA accessibility, adequate bike parking, restrooms, benches, and bus shelters are included

Who

Lead: Public Works and Natural Resources (Engineering Services, Community Services)

Support:

- Public Works and Natural Resources (Environmental Services, Natural Resources)
- Planning and Development Services
- Redevelopment Service

Resources

Needs funding:

- Priority projects not included within the CIP
- Community Asset Mapping

Likely accomplished with existing resources:

- Staffing for outreach and prioritization process
- Projects identified with the CIP

BI-4: ADOPT A POLICY TO REQUIRE LIFE CYCLE COST AND SUSTAINABILITY ANALYSES FOR ALL CITY OF LONGMONT PROJECTS AND PROGRAMS

Standardization of the process and the tools used to analyze the impacts and costs of all City projects and programs will help ensure consistency across departments and will help further sustainability objectives. The recently developed Sustainability Evaluation System for Public Works and Natural Resources is being used for that department, but could be employed City-wide for this purpose.

How

- Conduct staff training on the use of the Sustainability Evaluation System (SES)
- Research and provide examples for life cycle cost analysis for projects and programs
- Adopt a policy requiring the use of life cycle cost analysis and the SES for all major projects and programs
- Include SES and life cycle cost analysis results in all project summary materials

Who

Lead: Public Works and Natural Resources (Environmental Services)

Support: All City Departments

Resources

Likely accomplished with existing resources: Staffing for cost and sustainability analyses



BI-5: REVISE AND UPDATE THE CITY OF LONGMONT DESIGN STANDARDS AND CONSTRUCTION SPECIFICATIONS TO INCLUDE SUSTAINABILITY

Design guidelines need to be prepared to distribute for different segments of the development community to encourage sustainable and resilient design. This strategy focuses on revising and updating design and construction requirements to address sustainability and resiliency by including standards, specifications and guidelines for subjects including, but not limited to, Low Impact Development (LID), green infrastructure, complete streets, native landscaping and xeriscape and waste reduction and recycling.

How

- Coordinate with Boulder County Collaborative on the Resilient Design Performance Standards development
- Review current design and construction requirements and identify potential gaps and revisions
- Revise requirements to align with Resilient Design Performance Standards
- Develop and distribute guidance documents for sustainable and resilient design

Who

Lead: Public Works and Natural Resources (Environmental Services) and Planning and Development Services

Support:

- Boulder County
- Boulder County Collaborative

Resources

Likely accomplished with existing resources: Staffing to support standard development

BI-6: DEVELOP ‘BEYOND’ BUILDING CODE

This strategy focuses on developing a net zero building code for residential and commercial construction to accelerate and incentivize energy efficiency and renewable energy in new construction. The code would provide opportunity, pathways, and incentives, for net zero construction ahead of forecasted code requirements.

How

- Use resources and best practices from other communities to design the detailed language that will need to be included in beyond code provisions (e.g., New Building Institute’s 20% Stretch Code Provision)
- Identify incentives for beyond code use
- Conduct outreach, trainings, and case studies about beyond code opportunities

Who

Lead: Building Inspection

Support:

- | | |
|---|-------------------------|
| • Planning and Development Services | • Construction Industry |
| • Public Works and Natural Resources (Environmental Services) | • Development community |

Resources

Needs funding:

- Staffing or outside resources for code and incentive development
- Staffing for training and outreach after adoption
- Potential incentives (based on strategy development)

Likely accomplished with existing resources: Staffing for code review and inspections

BI-7: ADOPT AND ENFORCE UPDATED BUILDING CODE

The International Code Council (ICC) develops model codes and standards for communities to adopt to guide construction of construct safe, sustainable, affordable, and resilient structures. The suite of codes include building, electrical, mechanical, plumbing, and more. This strategy focuses on routine adoption and enforcement of updated building codes, with focus on the International Energy Conservation Code to address the design of energy-efficient building envelopes and installation of energy-efficient mechanical, lighting, and power systems.

How

- Monitor the timelines for release of new building and energy codes (typically every three years)
- Begin the process of local amendments and adoption after the release of each code
- Ensuring that any proposed local amendments are evaluated for energy efficiency and sustainability best practice
- Conduct outreach and trainings when new codes are released
- Continually enforce building codes through inspections processes

Who

Lead: Building Inspection

Support:

- Planning and Development Services
- Construction Industry

Resources

Needs funding:

- Staffing for increased level of development review and more robust inspection and enforcement
- Staffing for contractor training

Likely accomplished with existing resources: Code updates and amendments

Future Areas of Emphasis

- Enhancing sustainability and resiliency through development practices and site design
- Policies and regulations addressing tiny homes
- Create energy performance guidelines for new development and remodels based on best practices and newly adopted energy codes
- Shared housing and associated support services

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Community Cohesion & Resilience



OVERVIEW

Community cohesion and resilience are important components of a sustainable community – one in which people have an ability to engage in civic and community matters, feel connected to one another, live and/or work, and come together to respond to community challenges and opportunities. In Longmont there are many different City departments, neighborhood groups, and community organizations working together to empower individuals and strengthen bonds of mutual respect to support community cohesion and resiliency.

However, as our community grows and becomes increasingly diverse (e.g., more older residents, greater number of languages spoken at home), ongoing commitment to ensuring equitable access to resources and programs for all residents, and working together to create a community in which all residents feel engaged, represented, or included in their neighborhoods or the community at-large will be critical to achieving our vision of a sustainable Longmont. For example, according to a 2010 survey via AgeWell Boulder County, 37% of Longmont seniors respondents reported that having enough money to meet daily expenses was at least a minor problem. Continued focus on solutions to address challenges like these facing seniors will be critical in improving community cohesion and resiliency.

The following community cohesion and resilience priorities were identified to address in the Sustainability Plan:

- Equitable access to resources and programs
- Community inclusion and engagement
- Neighborhood-based, resident-driven action



Linking to Envision Longmont

Guiding Principle	Goals
GP1 Livable centers, corridors, and neighborhoods	1.7 Reinforce Longmont’s unique identity and sense of community. 1.8 Create an integrated and quality parks, recreation, greenway, and open space system.
GP3 Housing services, amenities, and opportunities for all	3.1 Ensure there are affordable and accessible housing options that meet the needs of residents of all ages, abilities, and income levels. Provide residents in all parts of the City with access to a range of 3.2 community amenities, including parks, open spaces and recreational opportunities. 3.3 Ensure social, health, and human services are accessible to and contribute to the well-being of all residents. 3.4 Ensure all Longmont residents have access to arts, cultural, and learning opportunities they need to thrive and prosper. Protect civil liberties and ensure that all residents have equitable access 3.5 to resources and opportunities to participate in the community and enjoy life. 3.6 Recognize and celebrate the cultural diversity of Longmont’s residents.
GP4 A safe, healthy, and adaptable community.	4.1 Support healthy and active lifestyles among residents of all ages. 4.2 Support increased access to affordable, healthy food. 4.3 Ensure residents have access to health and human services. 4.4 Partner with our community to ensure the best level of proactive, reactive, and coactive public safety services are available.

Related Topics



BE PART OF THE SOLUTION

Do your part in enhancing community cohesion and resiliency:

- Get to know your neighbors by organizing and/or participating in neighborhood events and projects.
- Join the Neighborhood Group Leaders Association.
- Work with your neighborhood to apply for a Neighborhood Improvement Program grant.
- Volunteer with a community group or organization that interests you.
- Engage others in conversations about Longmont’s future and your roles in achieving your visions for it.
- Identify ways to help and be helped by neighbors in emergencies.
- Start a neighborhood tool sharing program.

BUILDING A STRONG COMMUNITY TOGETHER

Longmont is home to an incredible number of local organizations and agencies that work to build community cohesion, resilience and cultural understanding for example:

The **Longmont Multicultural Action Committee (LMAC)** is a partnership between the City and the Longmont community to take individual and collective action to promote cultural understanding, inclusion, and involvement, and create a community where everyone belongs. LMAC sponsors and/or supports culturally inclusive community gatherings and events, supports community conversations around important topics and works to enhance the representation of people in community leadership to ensure that a diversity of voices and ideas are considered in the development of policies and programs. Each year the Committee recognizes a local individual for the Unity in the Community award as part of the annual **Inclusive Communities Celebration**.

Out Boulder educates, advocates, and provides services, programs, and support to Boulder County's LGBTQ communities. Out Boulder recently opened a local office in Longmont on Main Street.

Barrio É is a unique community organization that works to foster cultural diversity in the arts in Boulder County communities and beyond.

BoCo Strong is an organization dedicated to building a culture of resilience across Boulder County. It formed in the wake of the 2013 flood, and focuses on building social capital, increasing connections, and fostering cooperation around existing social networks.

Objective: *A vibrant community where all residents have equitable access to the opportunities needed to thrive, while preserving and enhancing natural, cultural and financial resources.*



Targets

- Increase neighborhood-based sustainability initiatives
- Increase diversity of members in community leadership roles at the neighborhood, local, and/or regional level

CITY IN ACTION

The **Longmont Youth Council** was established to encourage greater youth participation in the City's government, providing thoughtful recommendations on issues concerning youth and assisting City staff in considering youth perspectives in its planning efforts. The Youth Council has been engaged in the development of the Sustainability Plan, highlighting the importance of: maintaining our air and water quality; ensuring that the ways we build and design our community are complementary with the natural environment; community inclusion in decision-making; and opportunities for higher education to further sustainability efforts.

NEIGHBORHOOD GROUP LEADERS ASSOCIATION

The **Neighborhood Group Leaders Association (NGLA)** was established to build a communication link between the City and neighborhood groups to address needs and concerns of residents, as well as forming a partnership to improve the quality of life in Longmont as a community. Group leaders receive information from City departments and attend monthly meetings to keep abreast of current community issues.

Grant opportunities include the Neighborhood Improvement Program (NIP) for large physical improvements and the Neighborhood Activity Fund (NAF) for events and community building activities.

Strategies

Immediate

C-1: EXPAND EXISTING NEIGHBORHOOD PROGRAMS TO ENHANCE SUSTAINABILITY, RESILIENCY, AND QUALITY OF LIFE

This strategy builds on the longstanding work of the various neighborhood programs within Longmont and focuses on expanding these programs to support residents working together to enhance sustainability, resiliency, and quality of life in their neighborhoods. Expansion of programs could be developed in partnership with or modeled after the Lakewood and Denver Sustainable Neighborhoods Programs.

How

- Review current neighborhood program offerings and any gaps or “wish list” items
- Research potential program models and enhancements
- Design program structure and define funding and staffing needs
- Increase funding for neighborhood-, resident-, and community-driven actions
- Identify and address barriers to participation in underrepresented neighborhoods
- Adapt the Sustainability Evaluation System through online platform to support sustainable neighborhood solutions program

Who

Lead: Community Services

Support:

- Neighborhood Group Leaders Association and neighborhood/community groups
- LiveWell Longmont
- Boulder County
- Business community
- Public Works and Natural Resources (Environmental Services)
- Planning and Development Services

Resources

Needs funding:

- Staffing for program design and administration (estimated at 0.5 FTE)
- Sustainability Evaluation System adaptation

Likely accomplished with existing resources:

- Staffing for current coordination and communications activities

CITY IN ACTION

There are **numerous City of Longmont volunteer opportunities available** to the Longmont community with Public Safety, Recreation, Library, Museum, Senior Services, Children Youth and Families, Neighborhood Resources, and City Advisory Boards.

In a unique partnership between Public Safety, Community Services, and other local partners, in Spring of 2016, the City of Longmont launched a series of **Community Conversations on mental health** to raise awareness and engage in dialogue around mental health issues in our community. The Public Safety and Community Services Departments provide invaluable resources and services to help promote safe and connected neighborhoods, building a sense of belonging and community.



C-2: DEVELOP AN INCLUSIVE STANDARD OF EQUITABLE ACCESS AND OPPORTUNITY FOR ALL RESIDENTS THAT ENHANCES CAPACITY AND IS IMPLEMENTED UNIFORMLY ACROSS ALL CITY DEPARTMENTS, POLICIES, PROGRAMS, AND OUTCOMES

This strategy will ensure that residents share collective burdens equally and have equitable opportunity to fulfill their needs, advance their well-being, and participate in the generation of knowledge, decision making, and implementation of outcomes that affect them. Institutional policies and processes must be always be transparent, respectful, and accountable without requiring undue extra effort of vulnerable populations.

How

- Assess and identify vulnerable or disenfranchised, populations that lack equitable access to city resources and opportunities and/or bare a greater share of burdens, especially through communication barriers (language)
- Conduct an equity analysis of existing gaps and barriers within policies and all city departments' approach to communication, outreach, and resource delivery, identifying solutions.
- Develop outreach and education programs that bridge existing gaps to vulnerable populations and develop relationships, trust and connections
- Value the unique contribution of local knowledge and diverse experiences by specifically incorporating vulnerable populations in this process of evaluation and solutions, informed by the lessons of the Resiliency for All (Resiliencia para Todos) study.
- Establish an organization wide equitable access, accommodation, and anti-discrimination policy applying to all internal and external policy and functions including race, color, ethnic/national origin, sex, disability, age, marital status, religion, gender identification, or familial status. Including expectations that partnering institutions recognize the same standard.
- Tie into the just transition plan for the energy transition

Who

Lead: PWNR (Environmental Services) and Community Services (Community and Neighborhood Resources)

Support:

- City Leadership-Council and directors
- All city departments
- Longmont Multicultural Action Committee
- External Sustainability Partners
- Cultural brokers

Resources

Needs funding:

- Analysis and outreach for evaluation
- Implementation strategies and action
- Ongoing adaptation of resources and materials to meet new standards

Likely accomplished with existing resources:

- Evaluation management
- New policy adoption

Mid-term

C-3: COLLABORATE WITH ST. VRAIN VALLEY SCHOOL DISTRICT ON A PREPAREDNESS AND RESILIENCE SITE

This strategy focuses on working with Saint Vrain Valley School District to identify an appropriate site to create a resilient, disaster assistance and recovery center in the event of a disaster that threatens the community at large, and integrate into school curriculum to support knowledge and awareness of sustainability and resilience. Building characteristics should include solar power generation, a battery system, energy efficient and daylighting designs, and adequate backup generation capacity for a self-sufficient, healthy, and safe site.

How

- Establish a working group of St. Vrain Valley School District, City of Longmont, and Platte River Power Authority representatives to site options
- Identify candidate site(s)
- Research funding partners and financing options
- Develop a implementation plan and schedule
- Develop goals and evaluate costs and benefits

Who

Lead: Public Works and Natural Resources (Environmental Services)

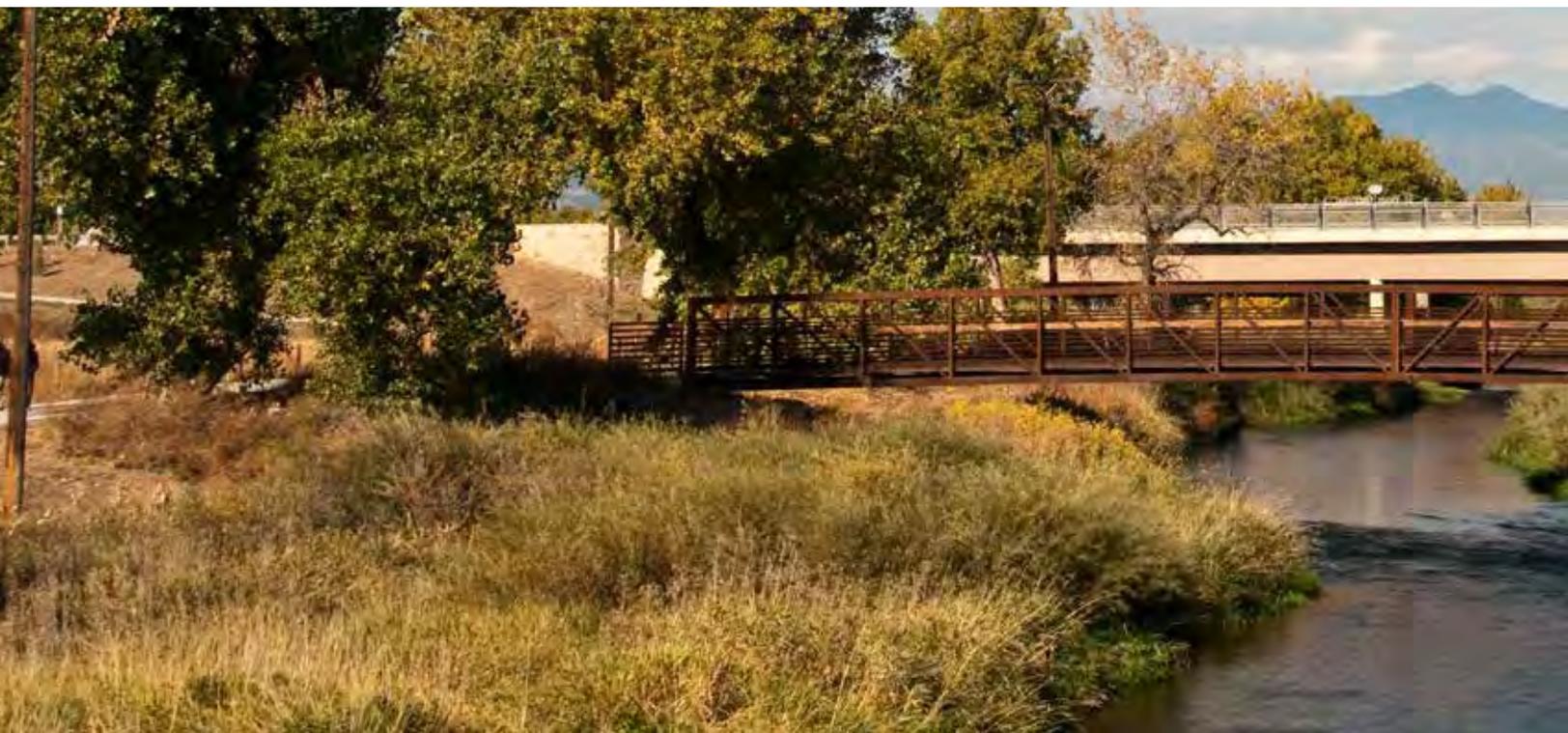
Support:

- St. Vrain Valley School District
- Longmont Power & Communications
- Office of Emergency Management and Community Services
- Platte River Power Authority

Resources

Needs funding: School district site improvements

Likely accomplished with existing resources: Staffing for coordination efforts



Ongoing

C-4: INCORPORATE THE CITY OF LONGMONT'S COMMUNITY ENGAGEMENT MODEL INTO ALL CITY PLANS AND PROJECTS

This strategy focuses on developing a process to apply the City's Community Engagement Model more consistently across departments and establishing community involvement liaisons to ensure meaningful public participation in City planning processes.

How

- Continue to train staff on the City's Community Engagement Model and extend training to all resident boards and commissions
- Identify Community Involvement Team members who will consult with project teams on how to effectively identify and implement engagement strategies
- Identify and engage community leaders to serve as community involvement liaisons through entities such as the Neighborhood Group Leaders Association, Multicultural Action Committee, resident boards and commissions, and other community groups

Who

Lead: City Manager's Office

Support:

- Community Services
- Community groups, boards and commissions

Resources

Likely accomplished with existing resources: Staffing for communications support

Future Areas of Emphasis

- Continued community conversations and action regarding diversity, equity, inclusion and cultural competency that supports a community where all feel valued, safe and a part of the community
- Neighborhood leadership and homeowner association (HOA) resiliency





Economic Vitality

ZIGGISCOFF



OVERVIEW

An economically sustainable community is one that has an economy that is able to: adapt to changes in economic conditions; provide living wage job opportunities for all age groups that support economic security for residents; minimize negative impacts on the environment; and meet the diverse needs of the community now and into the future. Economic sustainability includes taking a long term view and developing educational opportunities, looking at ways for all citizens to add value, and making decisions that take into account social and environmental factors. In support of business and economic sustainability, Longmont needs to continue to focus on entrepreneurship, innovation, and attracting a variety of businesses that provide local employment and reflect environmental values.

Many businesses and potential employees alike now look to locate in communities that support sustainability principles. Longmont can use its existing assets, such as its water supply, reliable electric service, and high-speed fiber optic network, to attract businesses that support sustainability goals and also spur economic growth. Target businesses and industries could include technology research and development, bioscience, creative and culinary arts, professional services and information technology. As the Front Range continues to develop, Longmont is uniquely positioned to be a competitive draw in the region, while placing sustainability principles at the forefront.

Longmont's vision for economic vitality includes supporting employment that provides living wages, offering opportunities for businesses to locate, grow and expand, and keeping a mix of businesses that have the financial resources to support the community's priorities and needs. It also includes helping locally-owned businesses thrive and flourish. Various studies have shown that money spent on locally owned businesses circulates within the local economy at a much higher rate, typically 50-80% of each dollar spent as compared with approximately 30% of dollars spent at national chains.

The following economic vitality priorities were identified to address in the Sustainability Plan:

- Sustainable business practices
- Economic security
- Diversified economy



Linking to Envision Longmont

Guiding Principle	Goals
GP1 Livable centers, corridors, and neighborhoods	1.4 Focus on infill and redevelopment in centers, corridors, and other areas of change.
	1.5 Support the continued revitalization of Downtown as a community and regional destination.
	1.6 Provide, maintain, and enhance public infrastructure, facilities, and services to meet the changing needs of the community.
GP3 Housing, services, amenities, and opportunities for all	3.1 Ensure the needs of affordable and accessible housing options that meet the needs of residents of all ages, abilities, and income levels.
	3.4 Ensure all Longmont residents have access to arts, cultural, and learning opportunities they need to thrive and prosper.
GP6 Job growth and economic vitality through innovation and collaboration.	6.1 Recruit, support, incentivize, and retain quality businesses to provide a comprehensive range of job opportunities and promote economic diversity.
	6.2 Promote and increase opportunities for collaboration, innovation, and entrepreneurship.
	6.3 Address building space, infrastructure needs, and other considerations of target industries and the workforce.
	6.5 Ensure Longmont is a desirable place to live, work, play, learn, and start a business.

Related Topics



BE PART OF THE SOLUTION

You can help enhance economic vitality in Longmont in the following ways:

- Shop at and support local businesses
- Start or grow your own business
- Become a Boulder County Partners for a Clean Environment certified business
- Volunteer your time with community organizations
- Encourage businesses that you like to grow and locate in Longmont
- Take advantage of the “sharing economy”

CITY IN ACTION

The City of Longmont has adopted a **purchasing policy** that awards extra preference for small and/or local businesses. The City also implements many **green purchasing practices**, including purchase of low volatile organic compound (VOC) paint, eco-certified cleaning products, and alternative fuel and fuel efficient fleet vehicles.

ADVANCE LONGMONT

Completed in 2014 and covering the time period up to 2019, Advance Longmont is a targeted economic development strategic plan. Comprehensively, the plan aims to help Longmont successfully direct growth and redevelopment, capitalize on opportunities and market trends, and establish a roadmap for doing so.

Some of the key recommendations from a sustainability perspective include focusing on improving the overall quality of life, looking to redevelopment of existing properties, targeting creative and innovative industries, and encouraging access to continuing education.

The targets and strategies in this Sustainability Plan are intended to complement and build upon the Advance Longmont efforts.

LONGMONT ECONOMIC DEVELOPMENT PARTNERSHIP (LEDP)

LEDP is a broad-based organization focused on strengthening the economic health of our community. LEDP provides numerous resources to help finance business development in Longmont, some of which can be utilized to support sustainable business practices such as energy efficiency measures, renewable energy projects, and vacant building rehabilitation.

ROAD TO INDEPENDENCE, SECURITY AND EMPOWERMENT (RISE)

The **Road to Independence, Security and Empowerment Program**, is a partnership between the City of Longmont and the Longmont Housing Authority that works to provide opportunities for families living in poverty to achieve self-sufficiency through life-changing socio-economic growth.

Objective: *Support a diverse economy that is aligned with social and environmental goals of providing local jobs, livable wages, and encouraging innovative and green businesses and business practices.*



Targets

<input type="checkbox"/>	Increase cost savings and resource efficiency for businesses through pollution prevention and other sustainable practices
<input type="checkbox"/>	Increase number of green/clean tech industries (baseline to be defined)
<input type="checkbox"/>	Increase number of recognized sustainable businesses beyond the eight Longmont businesses certified through Boulder County's Partners for A Clean Environment program
<input type="checkbox"/>	Adopt an internal City sustainable purchasing policy by 2018
<input type="checkbox"/>	Expand business opportunities for minority-owned and disadvantaged businesses (baseline to be defined)

CITY IN ACTION

The City has a financial policy that allocates a **percentage of its ongoing tax revenues to support human service needs** in the community. Community Services conducts a needs assessment every three to five years that identifies some of the most critical needs in the community, guiding how the City allocates these funds to numerous agencies, which provide services that address these targeted human service needs. Current funding priorities include: training, education and support for living wage jobs; independent living skills; housing assistance; and other resources to sustain self-sufficiency and meet basic needs. The City is in the process of updating the needs assessment in preparation for its 2018 human service agency funding process.

COMMUNITY IN ACTION

Community-based organizations that provide invaluable services to support self-sufficiency in Longmont include: OUR Center, El Comité, HOPE, Intercambio, and Via Mobility Services, among many others.

Strategies

Immediate

EV-1: CREATE A LONGMONT SUSTAINABLE BUSINESS PROGRAM

A new sustainable program for Longmont would build upon Boulder County Partners for A Clean Environment (PACE) programs and focus on encouraging and celebrating sustainable business practices, achievements, and/or facilities in Longmont. There are currently eight Longmont businesses certified through Boulder County Partners for A Clean Environment.

How

- Work with Boulder County Partners for A Clean Environment and other partners to develop a Longmont specific recognition program
- Plan annual recognition events and regular publicity
- Facilitate business to business connections and information-sharing opportunities
- Explore regional partnership opportunities with Fort Collins Climate Wise program

Who

Lead: Public Works and Natural Resources (Environmental Services)

Support:

- City Manger's Office (Shared Services)
- Longmont Economic Development Partnership
- Boulder County Partners for A Clean Environment
- Chamber of Commerce and Business Organizations
- Longmont Power & Communications

Resources

Needs funding:

- Annual recognition event and materials
- Staffing for program design and administration (estimated at 0.25 FTE)

Likely accomplished with existing resources:

- Coordination with Boulder County Partners for A Clean Environment efforts

LIVING WAGES AND FISCAL CLIFF EFFECT

A living wage is defined as a wage that is high enough for the earner to afford adequate shelter, food, and other life necessities. As Longmont continues to be a more desirable place to live, housing costs are rising faster than incomes and creating significant cost burdens for lower wage-earning households. When the minimum wage is significantly lower than what would be considered a living wage, the threat of homelessness, health impacts, and poverty rise. Complicating matters further is what is known as the fiscal cliff effect, which can squeeze incomes from multiple directions. On the one hand, this can refer to high poverty households who have qualified for government help but as they start to earn more income are stripped of that assistance before they have reached a living wage. On the other hand, as the amount required to meet a living wage increases, those individuals or families that had been just getting by are unable to do so yet fail to qualify for any assistance.

Longmont is seeing the effects of these concepts in a number of ways throughout the community. Increased demand for hunger reduction programs, more homelessness, and increased requests for services are all trends that the City is tracking. Developing and proposing solutions as a community will help ensure that people are not left behind as Longmont continues to thrive.



Near-term

EV-2: WORK WITH LOCAL ECONOMIC DEVELOPMENT ORGANIZATIONS TO SUPPORT LOCAL BUSINESSES AND ATTRACT AND EXPAND GREEN INDUSTRY/CLEAN TECH JOBS

Advance Longmont’s goals to include attracting innovative businesses to Longmont, and many existing efforts are already underway to grow employment opportunities in Longmont. This strategy focuses on partnering with Longmont Economic Development Partnership (LEDP) to provide additional focus on the attraction and expansion of green industry and clean technology jobs, and encouraging and supporting local businesses to support sustainability objectives.

How

- Establish criteria and/or a definition of “green industry” and “clean tech” employment in a Longmont context
- Develop a list of existing, desired, and potential companies and organizations to target
- Develop targeted marketing materials and an outreach strategy that adds a layer of information about sustainability benefits and opportunities for businesses to the Advance Longmont efforts

Who

Lead: Public Works and Natural Resources (Environmental Services) and LEDP

Resources

Needs funding:

- Marketing materials and outreach strategy development
- Staffing for coordination (estimated at 0.1 FTE)

EV-3: REINSTATE THE POLLUTION PREVENTION PROGRAM

In the past, the City of Longmont offered a program to help businesses reduce pollution and waste products. This strategy reinstates the Pollution Prevention program as a voluntary option for businesses looking for support reducing pollution and waste products.

How

- Assess potential to incorporate the Pollution Prevention Program into the Sustainable Business Program
- Revive Pollution Prevention business audit efforts and identification of money saving ways to reduce pollution
- Facilitate business to business connections for utilization of waste products as resources
- Plan annual recognition events and regular publicity in conjunction with the Sustainable Business Recognition Program

Who

Lead: Public Works and Natural Resources (Environmental Services)

Support:

- Longmont Economic Development Partnership
- Chamber of Commerce and Business Organizations

Resources

Needs funding:

- Development of program materials
- Staffing for program design and administration (estimated at 0.25 FTE)

Likely accomplished with existing resources:

- Coordination with Boulder County Partners for a Clean Environment efforts

EV-4: ESTABLISH AND PROMOTE A CITY OF LONGMONT INTERNAL SUSTAINABLE PURCHASING POLICY

Sustainable purchasing refers to practices that incorporate the triple bottom line (environmental, social, and economic) into purchasing decisions, such as the reduction of packaging, supply-chain considerations, and preference for women, veteran, and other minority-owned and disadvantaged businesses. While purchasing practices for the City of Longmont are decentralized, a sustainable purchasing policy will help ensure that sustainable practices are implemented across departments.

How

- Investigate best practices for sustainable purchasing policies
- Solicit feedback and suggestions from vendors
- Institute sustainable purchasing requirements for City purchasing
- Highlight case studies
- Share policy through City communications channels, through the Sustainable Business Program, and with existing and potential vendors
- Establish criteria and process for approved vendors list in collaboration with the Small Business Development Center

Who

Lead: City Manager's Office (Purchasing)

Support: Public Works and Natural Resources (Environmental Services)

Resources

Likely accomplished with existing resources:

- Staffing for research and policy development
- Communication to the broader community

EV-5: IDENTIFY NEEDS, BARRIERS AND OPPORTUNITIES TO ESTABLISH EQUITABLE ACCESS FOR UNDERUTILIZED, UNDER-REPRESENTED, AND/OR MULTI-CULTURAL BUSINESSES AND SUPPORT THROUGH EXPANDED PROGRAMMING

This strategy builds upon the goals and strategies within Advance Longmont and Envision Longmont to enhance support for local businesses, particularly those that are considered disadvantaged, under-represented, and/or multi-cultural in order to overcome barriers to economic development in disadvantaged populations.

How

- Clarify and define underutilized and under-represented businesses in order to direct efforts
- Work with neighborhood groups, Latino Chamber, and others to identify local businesses and entrepreneurs with needs not addressed by existing programs
- Coordinate with regional economic incubator and business start-up efforts
- Provide business resources that are multilingual and multicultural

Who

Lead: Public Works and Natural Resources (Environmental Services)

Support:

- Community Services
- Chamber of Commerce
- Latino Chamber
- Longmont Economic Development Partnership
- Neighborhood Groups
- Boulder County Workforce Development
- Front Range Community College



Resources

Needs funding:

- Development of communications materials and assistance resources
- Staffing for program design and administration (estimated at 0.1 FTE)

EV-6: PARTNER WITH LOCAL EDUCATIONAL INSTITUTIONS TO CONNECT SUSTAINABILITY KNOWLEDGE AND WORKFORCE NEEDS

Linking local students to Longmont businesses and sustainability programs will help ensure that the next generation of employees and business leaders in the community can help advance Longmont's sustainability vision. This strategy focuses on establishing new partnerships and connections between educational institutions, City departments, and local businesses to provide students and others looking to grow job skills with new opportunities to create and attain jobs that promote sustainability.

How

- Facilitate the development of a resource list of sustainability-focused businesses contacts, research and volunteer opportunities, and programs offered by local and regional educational institutions
- Work with partners to develop new opportunities

Who

Lead: Public Works and Natural Resources (Environmental Services)

Support:

- Front Range Community College
- Saint Vrain Valley School District
- Other local educational institutions
- Longmont Economic Development Partnership
- Boulder County Partners for a Clean Environment
- Workforce Boulder County
- Chamber of Commerce and Business Organizations

Resources

Needs funding: Staffing for program design and administration (estimated at 0.1 FTE)

Likely accomplished with existing resources: Coordination with business community

Future Areas of Emphasis

- Expanding green products and services in Longmont
- Opportunities and challenges of the sharing economy
- Addressing the needs of disadvantaged economic groups
- Branding Longmont as a "green city"
- Expanding higher education opportunities
- Support community partnerships to facilitate and expand comprehensive adult education

ENVISION LONGMONT AND ECONOMIC VITALITY

Economic vitality and security are key elements of a sustainable community. Envision Longmont addresses these elements with goals and policies that support: increased diversity in the employment sectors represented and range of jobs available within the City; reduced commute times and associated strains on the transportation system; reduced combined housing/transportation cost burdens on residents; targeted investment in infrastructure and services in employment areas and mixed-use centers within the City; collaboration with economic and educational partners; and strengthening of local resources and partnerships to respond to future hazards.



Energy



OVERVIEW

Energy plays an essential role in all aspects of a community, whether its the gas and electricity we consume directly in offices and homes or that which we consume indirectly in the air conditioning systems in shops and the streetlights that illuminate our paths at night. Choices about how and when to use energy are ways that individual community members can impact total energy use.

On the supply side, dependable, sustainable, and resilient energy sources support a community's economic vitality, ensure reliable operation of its infrastructure, and maintain overall quality of life. Developing a reliable and resilient energy supply for the future will require more use of renewable energy sources. A growing number of communities, regions, and entire countries are committing to a transition to 100% renewable energy in order to both maintain a resilient energy supply and mitigate the effects of climate change.

For over a century, Longmont's publicly owned utility, Longmont Power & Communications (LPC) has provided affordable and reliable electric service. In efforts to provide responsible stewardship of our resources and environment, LPC has committed to conserving energy through energy efficiency measures and shifting to renewable sources. Longmont is reducing the social and economic impacts of the utility cost burden for all community members through energy rebates and energy efficiency programs.

One example of the potential economic impact of energy efficiency efforts is the Longmont Humane Society. With the help of Longmont Power and Communications and Boulder County EnergySmart, the Longmont Humane Society implemented a Building Tune Up that saves \$10,077 per year at no cost to them.

For Longmont, sustainable energy means reliable service, adoption of new technologies, decoupling of the community's growth trends and its energy usage, and a transition to cleaner energy sources to reduce greenhouse gas emissions.

The following energy priorities were identified to address in the Sustainability Plan:

- Energy efficiency
- Renewable energy
- Waste to energy



Linking to Envision Longmont

Guiding Principle	Goals
GP3 Housing, services, amenities, and opportunities for all	3.1 Ensure there are affordable and accessible housing options that meet the needs of residents of all ages, abilities, and income levels.
GP5 Responsible stewardship of our resources	5.1 Protect and conserve Longmont’s natural resources and environment.
GP6 Job growth and economic vitality through innovation and collaboration	6.3 Address building space, infrastructure needs, and other considerations of target industries and the workforce.

Related Topics



BE PART OF THE SOLUTION

You can reduce your energy impacts and support renewable energy in the following ways:

- Request a home or business energy assessment through Efficiency Works
- Replace old, inefficient appliances
- Install power strips for electronic devices
- Turn off lights off in unoccupied spaces
- Adjust your thermostat to reduce heating and cooling when you’re away
- Upgrade to more efficient lights
- Invest in renewable energy technology or subscriptions
- Encourage others to implement energy efficient practices and renewable energy technologies

CITY IN ACTION

The City of Longmont was recognized with the COSEIA **Solar Friendly Community Award** in December, 2015. Longmont is one of only 18 communities in the state to receive this designation. With this designation, Longmont residents get a \$500 discount from solar contractors that participate in the Solar Friendly Communities program. Since the award, solar photo-voltaic (PV) installations in 2016 have already far surpassed 2015. The current total of PV customers is 106, with residential capacity at 452 kW and commercial capacity at 107 kW. We are well on our way to 2016 being a banner year for solar PV installations in Longmont!

Beyond these efforts, the City is also currently exploring options for a **methane recovery and reuse system** at the wastewater treatment plant, including using the methane for vehicle fuel, generating power for the wastewater treatment plant, and supplying methane to natural gas providers.

ENERGY AND GREENHOUSE GAS EMISSIONS

Different fuels emit different amounts of carbon dioxide in relation to the energy they produce when burned. There is a rough equivalence to the amount of carbon in a fuel source and the amount of carbon released when it is burned, correlating to greater greenhouse emissions from carbon dense fuels.

Across common fuels, coal is the largest emitter of carbon dioxide while renewable energy sources typically emit the least. Greenhouse gas emissions, the lower cost of natural gas, and rapidly developing renewable energy technologies are, together, pushing utilities towards less carbon intensive fuel mixes, and Longmont is certainly no exception.

SOCIAL COST OF CARBON

Many organizations use the social cost of carbon as an estimate of the economic damages associated with increases in carbon dioxide emissions and the potential social benefits of reducing emissions. The social cost of carbon is meant to be a comprehensive estimate of climate change damages and includes changes in net agricultural productivity, human health, property damages from increased flood risk, and changes in energy system costs. The Environmental Protection Agency's 2015 estimate for the social cost of carbon pollution is estimated to be between \$11 and \$104 per ton; other sources estimate approximately \$40 per ton.



Objective: *Increase energy efficiency and expand the use of renewable energy technologies to improve environmental quality, provide a resilient energy supply, and realize related economic benefits.*

Targets

<input type="checkbox"/>	Reduce core GHG emissions 66% from the 2016 baseline by 2030
<input type="checkbox"/>	Decrease the utility cost burden for low-income households through energy efficiency measures
<input type="checkbox"/>	Increase electric energy savings to 1% annually through energy efficiency measures by 2020
<input type="checkbox"/>	Increase renewable energy to 100% of Longmont's energy mix by 2030

CITY IN ACTION

The City of Longmont has entered into two **Energy Performance Contracts** (EPCs) to reduce energy use at City facilities, and leverage savings from low-cost facility improvement measures (FIMs) in order to provide financing for unfunded capital replacement and higher cost projects while incorporating some renewable energy measures. Some examples of completed projects include lighting upgrades at the Civic Center, Library, Quail Recreation Center, Safety and Justice Building, Centennial Pool, and Development Services, and the replacement of the skylight section at the Civic Center with a demonstration building integrated solar photovoltaic (BIPV) energy system.

The Energy Performance Contract was financed for a period of twelve years under a tax-exempt municipal lease purchase and the ongoing savings associated with the referenced efficiency measures are being utilized to repay the lease purchase. Guaranteed savings in the first year were \$173,000 for Phase 1 efforts (2.5 gigawatt hours and 95,000 therms) and \$69,000 for Phase 2 (854,000 kilowatt hours and 28,000 therms) .

Strategies

Immediate

E-1: REVIEW ENERGY EFFICIENCY IMPROVEMENT AND RENEWABLE ENERGY GENERATION OPPORTUNITIES FOR MUNICIPAL FACILITIES

Regular review of energy use at City of Longmont facilities will help identify opportunities for additional energy efficiency improvements, peak load management, and renewable energy technologies to help the City reduce energy use and associated expenses at City facilities.

How

- Implement a methane reuse system at the wastewater treatment plant
- Review energy use and intensity by facility, identify opportunities for upgrades, and develop a prioritized list of improvements
- Explore opportunities to use additional renewable energy technologies at City facilities (e.g., solar photo-voltaic on-site or community solar through Platte River Power Authority)
- Continue to implement LED streetlighting upgrades
- Track and share results with the Longmont community

Who

Lead: Public Works and Natural Resources (Environmental Services)

Support:

- Longmont Power & Communications
- Platte River Power Authority
- Public Works and Natural Resources (Facilities)

Resources

Needs funding: Facility improvements (ongoing)

Likely accomplished with existing resources: Sharing information with the public

EFFICIENCY WORKS

Efficiency Works™ is an energy efficiency improvement program provided to Longmont residents and businesses by Longmont Power & Communications in partnership with Platte River Power Authority. The other PRPA cities that participate in Efficiency Works™ include Estes Park, Fort Collins and Loveland. In 2015, 324 Longmont businesses participated in Efficiency Works™ programs for total energy savings of 2,317 megawatt hours per year.

In 2015, participation in residential energy efficiency programs included 102 home audits, 19,842 energy efficient lights, and 500 clothes washer and refrigerator rebates for total energy savings of 445 megawatt hours per year. Services include:

- Free energy advising and assessments
- Home energy audits for \$60
- Assistance with contractors
- Assistance in identifying energy-saving opportunities for businesses
- Rebates for numerous efficiency upgrades



E-2: CONTINUE COLLABORATION WITH ENERGY OUTREACH COLORADO TO EXPAND ENERGY SERVICES FOR LOW INCOME HOUSEHOLDS

Energy Outreach Colorado's affordable energy programs help vulnerable Coloradans stay warm and safe at home. This strategy focuses on continued and enhanced coordination among Energy Outreach Colorado, Longmont Power & Communications, Efficiency Works™ through PRPA, and Xcel Energy to expand energy-related services for low-income households.

How

- Review results of the 2017 pilot program that served 10 low income households and 1 multi-family unit
- Modify the pilot program based on outcomes and new opportunities
- Expand pilot program

Who

Lead:

- Longmont Power & Communications
- Energy Outreach Colorado

Support:

- Public Works and Natural Resources (Environmental Services)
- Community Services
- Colorado Energy Office
- Platte River Power Authority
- Xcel Energy
- Southwest Energy Efficiency Project

Resources

Needs funding:

- Additional incentives/support
- Program implementation

Likely accomplished with existing resources: Staffing for coordination and collaboration

COMMUNITY IN ACTION

Saint Vrain Valley School District

St. Vrain Valley School District has been taking a leadership position, not only in providing excellent education to Longmont children but also in their approaches to resource use, especially energy. The district has installed real-time electricity monitoring devices at every site enabling green teams and staff to collaboratively identify energy waste and develop solutions. This allows the District to re-direct funds that would have been spent on utility bills towards better educational purposes. The Energy & Sustainability Department actively integrates sustainability into education efforts, reducing waste streams, increasing recycling, and slowly integrating composting through Eco-Cycle's Green Star School program. The District ensures new facilities encompass sustainable design features and energy efficiency upgrades are identified and implemented at all sites. The Energy & Sustainability Department continuously partners with internal and external stakeholders to advance opportunities and develop programs to conserve resources.

E-3: IMPROVE COMMERCIAL BUILDING EFFICIENCY

Commercial building energy efficiency may be improved through a variety of equipment retrofits or operational changes. In many cases, these improvements can also enhance comfort in a facility's work environment and extend the service life of equipment.

Through Efficiency Works (managed by Platte River Power Authority in partnership with Longmont Power & Communications,) City commercial customers can receive a free efficiency assessment, free efficiency advising, and rebates to support retrofits and operational changes intended to improve building efficiency.

One path to identify and implement operational changes is the "Building Tune-Up" (BTU) program. The BTU program provides funding for a qualified service provider to perform a retro-commissioning study, which provides recommendations for low and no-cost improvements to building energy systems; usually with a simple payback of under 2 years.

How

- Expand marketing and communications about the Efficiency Works programs to customers, local trades and contractors
- Continue to provide and increase participation in a contractor energy efficiency training program in partnership with Platte River Power Authority
- Work with Platte River to develop new program strategies and/or customize the Efficiency Works programs to meet Longmont's specific needs, if needed.
- Use resources and best practices from other communities to design new code language to require all commercial and industrial buildings owners perform retro-commissioning in buildings greater than 20,000 square feet

Who

Lead:

- Longmont Power & Communications
- Planning and Development Services (code related tasks)

Support:

- Platte River Power Authority (Efficiency Works team)
- Building Inspection
- Public Works and Natural Resources (Environmental Services)

Resources

Needs funding:

- Additional staff may be needed to expand marketing of the program to City customers
- Additional staffing and incentives for PRPA may be needed to accommodate increases in program participation

Likely accomplished with existing resources: Most of the effort can be accomplished using existing resources provided by Efficiency Works



E-4: DEVELOP A COMPREHENSIVE 100% RENEWABLE ELECTRICITY PLAN FOR LONGMONT'S JUST TRANSITION TO A CLEAN ENERGY ECONOMY

In January 2018, Longmont city council approved a resolution committing the community to transition toward 100% renewable electricity by 2030. Nearly all of Longmont's electricity is provided by Platte River Power Authority (PRPA), though the City operates a hydropower plant and some rooftop solar systems have been installed within the community. This strategy focuses on defining the path to achieving the 100% renewable electricity commitment, and exploring the other community impacts and opportunities associated with the transition.

How

- Develop a Just Transition Plan that addresses economic, equity, and environmental considerations in shifting to renewable electricity sources.
- Coordinate with PRPA on its update to its Integrated Resource Plan (IRP) to develop a technical plan that details the specific strategies and timelines for the transition.

Who

Lead: Public Works and Natural Resources (Environmental Services)

Support:

- Longmont Power & Communications
- Platte River Power Authority
- Community Services

Resources

Needs funding: Plan development and implementation

Likely accomplished with existing resources: PRPA has retained consulting services to perform renewable energy modeling and is adding significant new wind and solar resources over the next few years. Resource acquisition beyond 2020/2021 may require additional resources. These will be identified in future electric resource plans.



E-5: REPORT AND BENCHMARK ENERGY USE

This strategy would apply the well-tested concept that you can't manage what you don't measure. Benchmarking can help the City identify and prioritize opportunities for managing energy use in various sectors. By comparing existing performance metrics with "best in class" (proven results), gaps can be identified and prioritized. One priority area for benchmarking and reporting is commercial and public buildings and facilities. An approach for benchmarking and reporting can be developed for this area and then expanded to other key areas over time.

How

- Research best practices from other communities and utilities about building benchmarking tools (e.g., Energy Star Portfolio Manager, requirements, phasing, participation, enforcement, reporting, and other lessons learned (including potential benchmarking efforts in other PRPA communities)
- Amend local building and development codes to require facilities of a certain type and size (e.g., commercial and institutional buildings larger than 20,000 square feet) to rate their building's energy use and report energy metrics such as usage per square foot
- Adopt practices and techniques to target high energy use facilities with information and/or strategies to implement energy efficiency measures
- Expand lessons learned from the commercial and institutional facilities to other key areas of energy use (e.g., industrial).

Who

Lead:

- Planning and Development Services
- Public Works and Natural Resources (Environmental Services)

Support:

- Longmont Power & Communications
- Building Inspection

Resources

Needs funding:

- Staffing for benchmarking program development and implementation (0.5 FTE or greater)
- Staffing, consulting resources, or technology investments for aggregating and sharing energy data and sharing with customers (0.5 FTE or greater)

Likely accomplished with existing resources: Preliminary estimates can be gathered from similar efforts in regional communities (e.g., Fort Collins)

C-PACE

Colorado Commercial Property Assessed Clean Energy Program, better known as C-PACE, allows owners of eligible commercial and industrial buildings to finance energy efficiency, renewable energy, and water conservation improvements in new and existing buildings. Boulder County was the first county in the state to opt into this program, so all Longmont commercial properties are eligible to use this program.



Mid-term

E-6: MONITOR ADVANCED METERING INFRASTRUCTURE IMPLEMENTATION

Advanced metering infrastructure (AMI) includes installing new meter infrastructure that allows two-way communication between the customer and Longmont Power & Communications. AMI provides more detailed data on customer usage patterns to support energy efficiency, demand response, and renewable energy opportunities. It provides users with more granular information on how much electricity they use during shorter time intervals. More information allows residents to conserve energy and to choose not to use energy at certain times of day when demand is high. From a utility perspective, more detailed data provides better information on solar loading and coincidence, as well as providing more accurate cost information for designing appropriate renewable energy rates. These benefits can lead to a less carbon-intensive electricity supply for utility customers. AMI can also enhance outage response and increase electric resiliency.

AMI was reviewed by a consultant and was not considered cost-effective until after a new Customer Information System is installed. A few utilities in Colorado have installed AMI and are gaining experience regarding how best to leverage their investment; particularly Fort Collins Utilities and Xcel Energy.

How

- Work with the Joint Technical Advisory Committee (JTAC)/ Distributed Energy Resources subcommittee, led by Platte River Power Authority, to monitor the positive impacts of AMI in other communities and shape a cost-effective implementation path
- In collaboration with other utilities, identify pilot projects for possible implementation in Longmont
- Continue to explore additional smart grid programs and projects

Who

Lead: Longmont Power & Communications

Support: Platte River Power Authority

Resources

Likely accomplished with existing resources: Monitor potential for advancing this strategy through JTAC and/or regional collaboration



Ongoing

E-7: CONTINUE TO PROVIDE ENERGY EFFICIENCY OUTREACH AND INCENTIVES FOR ALL ENERGY USERS

All electric energy users in the City have an efficiency program that works for their needs, whether residential, small commercial or large accounts. Demand for these programs and associated improvements has surged in recent years across the Front Range. In 2015, 324 businesses participated in Efficiency Works programs, and 102 home audits were completed. This strategy focuses on making sure that the Efficiency Works program and associated incentives are available at desired levels in future years. Participation in these programs can help customers reduce energy use and costs and reduce and shift peak loads.

How

- Explore funding needs and scenarios with PRPA and other potential partners
- Consider collaboration with existing low-income energy program managers, such as the Colorado Energy Office
- Determine preferred funding scenario and present to City Council through annual budget process
- Explore grant opportunities to leverage City funds
- Connect participants with other programs such as the Housing Rehabilitation Program

Who

Lead: Longmont Power & Communications

Support:

- Platte River Power Authority
- Xcel Energy (for natural gas customers)
- Public Works and Natural Resources (Environmental Services)
- Other PRPA communities
- Boulder County Partners for a Clean Environment

Resources

Needs funding: Continued energy efficiency incentives

Likely accomplished with existing resources: Staffing for research and scenario development



E-8: MONITOR AND REDUCE GREENHOUSE GAS EMISSIONS

A greenhouse gas (GHG) inventory for the City of Longmont was completed in 2017 and established emissions for 2016. It was accompanied by a study that examined Longmont's GHG emission reduction potential by 2030 and 2050. A comprehensive update of the inventory every three years will help determine overall emissions and progress towards reduction targets. On an annual basis, review of electric and natural gas consumption will help inform overall emissions trends (together these two emission sources comprised more than 68% of emissions in 2018).

How

- Obtain total community electricity and natural gas consumption data annually
- Monitor annual consumption levels, as well as per-capita trends
- Every three years (e.g., 2020, 2023, 2026, 2029, conduct a comprehensive GHG inventory including all emissions sources and updated emissions factors
- During the annual review, cross-check the recommendations from the Emissions Reduction Study to determine alignment with Sustainability Plan strategies and opportunities to advance any of the emissions reduction studies

Who

Lead: Public Works and Natural Resources (Environmental Services)

Support:

- Longmont Power & Communications
- Platte River Power Authority
- Xcel Energy

Resources

Needs funding: Staffing or outside resources for comprehensive GHG inventories

Likely accomplished with existing resources: Annual monitoring of energy consumption



E-9: EXPAND AWARENESS AND PARTNERSHIP OPPORTUNITIES FOR SOLAR INSTALLATIONS AND RENEWABLE SUBSCRIPTIONS

In 2015, Longmont had more than 77 solar installations, and 530 Longmont Power & Communications customers purchased 4.4 million kilowatt hours of renewable energy. This strategy builds on current energy efficiency programs and incentives, and focuses on connecting customers with information about renewable energy system installation and requirements, incentives, subscription options, and partnership opportunities.

How

- Catalog existing programs and incentives
- Evaluate costs, benefits, and relevant utility rate structures and conduct focus groups to explore barriers, potential incentives, and partnership opportunities (including solar opportunities for low income households, renewable installations on schools, etc.)
- Explore the viability of a community solar garden with PRPA
- Increase outreach to promote existing renewable subscription programs and to gather interest in new ones
- Explore financing options such as on-bill financing
- Explore additional outreach channels including social media and neighborhood groups
- Track installations, capacity, location, and subscriptions

Who

Lead: Longmont Power & Communications

Support:

- Public Works and Natural Resources (Environmental Services)
- Platte River Power Authority
- Neighborhood Group Leaders Association
- Renewable energy companies

Resources

Likely accomplished with existing resources: Staffing for communications, research, tracking and pilot efforts

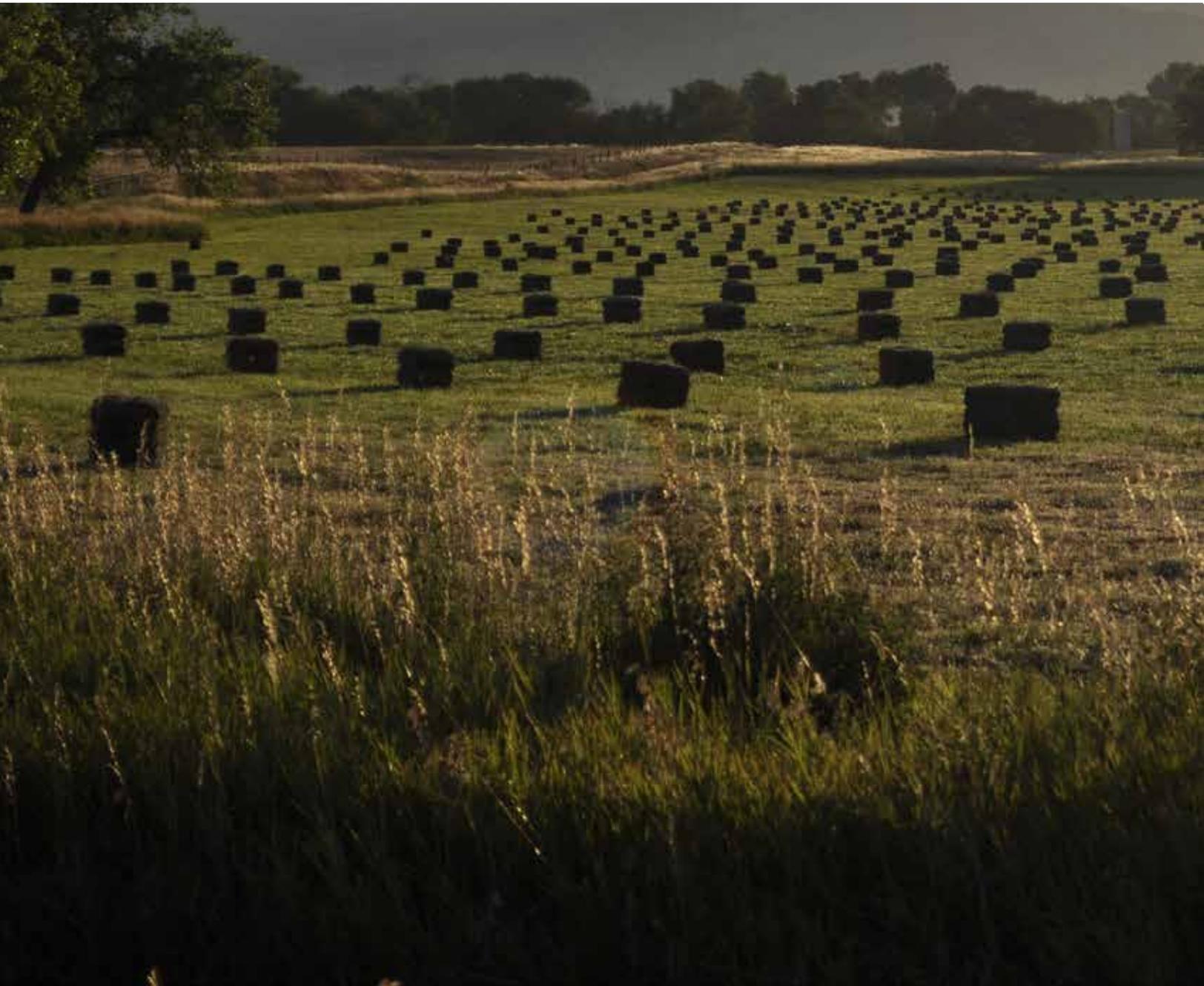
Future Areas of Emphasis

- Micro solar gardens on vacant lots that are too difficult to utilize for development
- Promote upcoming Consumer Products Program





Food System



OVERVIEW

The food system covers how food is grown, processed and distributed, and carries through to how food waste is managed. All areas of the food system have local and global impacts on the economy and environment, including energy and water usage, pollutants generated by energy and chemical use, soil quality, and carbon dioxide emissions. Concerns about health, environmental impacts and costs are driving a growing interest in equitable access to affordable, healthy, and local food options.

Food and nutrition is an issue that hits close to home for many Longmont families. According to a 2010 Report issued by Livewell Longmont, approximately 30% of surveyed Longmont residents reported on compromising on healthy food items because of budget concerns more than half of the time.

Food production is also a major element of the Longmont community. Longmont has a long history in food production and agriculture with many families stewarding the land for several generations. With over three hundred farms in Boulder County, the growing local food and agritourism movements, regional food planning efforts, and emerging trends to support getting more local produce to low-income residents, Longmont has unique opportunities to expand and enhance the local food system.

A sustainable food system is a vital component of a thriving community as it provides healthy food for community residents, viable jobs for producers, and utilizes agricultural techniques that protect and restore our natural resources. By supporting local food suppliers, Longmont can build additional resiliency into the food system, and taking a holistic view will allow for efficiencies to be realized throughout the system.

The following food system priorities were identified to address in the Sustainability Plan:

- Land stewardship through agriculture
- Food security and resiliency
- Food economy



Linking to Envision Longmont

Guiding Principle	Goals
GP4 Support a safe, healthy, and adaptable community	4.2 Support increased access to affordable, healthy food.
GP5 Responsible stewardship of our resources	5.1 Protect and conserve Longmont’s natural resources and environment.
	5.4 Preserve Longmont’s agricultural resources.
	5.5 Recognize and enhance the ecological function of the City’s system of parks, open space, greenways, waterways, and urban forest.

Related Topics



BE PART OF THE SOLUTION

The food system is not just about what you eat and where you buy your food. You can help increase sustainability of the local food system in the following ways:

- Grow your own food
- Support local food producers and retailers
- Cook for or share a meal with a friend or community member in need
- Connect with local food recovery efforts
- Reduce use of harmful pesticides in order to support soil health, water quality, and protect pollinators
- Share excess food with neighbors and community organizations

Elements of a sustainable local food system are illustrated at right. It includes the production of food, harvesting and processing activities, transportation and distribution through various access channels, consumption activities, as well as recovery of food products



CITY IN ACTION

In 2015, Longmont’s Open Space program managed eight **agricultural leases** on 900 acres, generating \$60,000. Agricultural yields on City owned land totaled more than 11,000 tons from crops including alfalfa hay, winter wheat, corn silage, barley, grass hay, and corn. These leases help to support local producers who help to steward our public lands.

ENVISION LONGMONT & FOOD SYSTEMS

A key element of a sustainable and resilient community is food. Envision Longmont approaches food systemically, interweaving food systems trends and topics throughout its goals and strategies defined under the six guiding principles. The health and wellness of a community is valued and improved in part through expanded access to affordable, healthy food choices. Food security and economic vitality are enhanced through preservation of agricultural lands and increased support for local and regional food production, sales, and processing. Diverse policies identified to support these goals include public and private food access and nutrition partnerships, education opportunities, food production (i.e., community gardens, CSA's, etc.), sustainable agricultural practices, sales, edible landscapes, local and regional food system partnerships, and water rights to support agricultural uses and local food production.



Objective: *Support a locally-based, environmentally responsible and healthy food system that is available to all residents.*

Targets*

- Increase access to healthy foods through a variety of initiatives such as the Double Up Food Bucks and other programs

* *Additional targets will be set based on results of agricultural research being conducted in Boulder County.*

COMMUNITY IN ACTION

Ollin Farms

Ollin Farms is a family run, community driven farm in Longmont that practices the principle of sustainable agriculture to produce top quality farm products with minimum impact on the surrounding environment. They promote farmworker rights and equity issues, sustainable farming techniques, community education and celebration, and provision of food via a community supported agriculture program. In August of 2016, Ollin Farms hosted a Carbon Sequestration Festival to explore how regenerative agriculture builds healthy ecosystems, promotes ecological diversity, and mitigates the effects of climate change.

Casa de la Esperanza

Casa de la Esperanza is a 32-unit residential community dedicated to helping agricultural workers. For over twenty years, the program has been responsive to the unique needs of the dozens of farm workers' families of the Casa de la Esperanza community. The community is owned and operated by the Boulder County Housing Authority in the City of Longmont. This center provides educational and recreational services to Casa residents, including an on-site "after-school" program and academic center.

Schlagel Farms

Schlagel Farms is a family-owned and operated farm that has been cultivating corn, sugar beets, alfalfa and barley for over 100 years in the Longmont community. Through the use of climate smart agriculture techniques such as pivot irrigation and strip tillage, Schlagel Farms helps to conserve water, mitigate erosion, and reduce the need for herbicides and insecticides in their operations. The Schlagel family is committed to maintaining land in agricultural production through conservation easements in order to preserve the agricultural heritage of our community.

Strategies

Near-term

FS-1: IDENTIFY BARRIERS AND OPPORTUNITIES FOR LOCAL FOOD PRODUCTION

Longmont has a number of active Community Supported Agriculture programs, farmers' markets, and community gardens, and according to a 2010 survey conducted by LiveWell Longmont, 90% of respondents reported wanting to include more local foods in their diet. This strategy focuses on identifying and reducing barriers to and increasing opportunities for local food production in neighborhoods through community gardens, edible landscaping, small scale market gardens and school gardens.

How

- Work with neighborhood groups to identify barriers to and opportunities for community gardens and edible landscaping
- Explore areas for land preservation for food production purposes through zoning, acquisition and/or easements
- Develop and share tips and guidelines for edible landscaping and community gardens
- Work with CSU extension, LiveWell Longmont, and others to train and support community members in gardening, cooking, and nutrition education
- Identify and leverage local and regional partnerships such as the Denver Metro Area Food Plan

Who

Lead: Public Works and Natural Resources (Environmental Services)

Support:

- Community Services
- Planning and Development Services
- Neighborhood Group Leaders Association
- CSU Extension
- LiveWell Longmont
- Saint Vrain Valley School District
- Growing Gardens

Resources

Needs funding: Staffing for coordination (estimated at 0.1 FTE)





FS-2: ENCOURAGE AND SUPPORT THE BOULDER COUNTY RESOURCE CONSERVATION ADVISORY BOARD IN PURSUING CARBON SEQUESTRATION STUDIES

Local agricultural lands and soils provide carbon sequestration benefits but the extent of those benefits is currently unknown for Longmont and the region. This strategy focuses on encouraging and supporting Boulder County and/or other regional partners in conducting a carbon sequestration study and full cycle cost analysis to better understand the techniques that are compatible with and restorative of our local ecosystems and both the economic and carbon implications of actions.

How

- Participate in Boulder County Resource Conservation Advisory Board meetings to discuss study goals and objectives
- Work with Boulder County Resource Conservation Advisory Board to identify possible pilot sites within Longmont
- Coordinate with partners to apply relevant findings to Longmont

Who

Lead: Boulder County Resource Conservation Advisory Board

Support:

- Public Works and Natural Resources (Environmental Services, Natural Resources, Sanitation)
- Agricultural community
- Regional municipalities and educational institutions

Resources

Needs funding:

- Study sponsorship
- Staffing for coordination (estimated at 0.1 FTE)

DOUBLE UP HARVEST BUCKS

Participants of the Women, Infants & Children (WIC) Program and recipients of food assistance (SNAP) can get special benefits at Boulder County Farmers Markets. The Double Up Harvest Bucks program matches what participants spend dollar-for-dollar, up to \$20 each visit, for use at the same time or later to buy additional fresh produce. Boulder County, in partnership with other counties was recently awarded a U.S. Department of Agriculture (USDA) Food Insecurity Nutrition Incentive (FINI) grant that will support the Harvest Bucks program.

FS-3: EXPAND CONNECTIONS BETWEEN LOCAL FOOD PRODUCERS AND AREAS/ POPULATIONS IN NEED

According to the 2014 American Community Survey, nearly 10% of households and 20% of children received supplemental nutrition assistance program (SNAP) benefits in the past twelve months. Furthermore, most consumers (90% according to a survey by LiveWell Longmont) travel by car to purchase fruit and vegetables. This strategy focuses on continuing to expand access to local foods, especially areas and populations in need through enhanced connections and partnerships with local organizations and food producers.

How

- Utilize existing research to determine areas and populations in need
- Partner with local food producers and community-based organizations to determine effective food access strategies such as a mobile food produce truck and incentives for Healthy Food Retailers
- Support and leverage Harvest Bucks program
- Explore opportunities to leverage Colorado Housing and Finance Authority's Fresh Food Financing Fund

Who

Lead: Community Services and Public Works and Natural Resources (Environmental Services)

Support:

- LiveWell Longmont
- Community-based organizations
- Boulder Food Rescue or similar organization to be identified
- Food retailers
- Agricultural community
- Boulder County Public Health

Resources

Needs funding: Staffing for coordination efforts (estimated at 0.1 FTE)





Mid-term

FS-4: SUPPORT AND EXPAND GARDEN TO CAFETERIA PROGRAM OPPORTUNITIES

St. Vrain Valley School District has a comprehensive wellness policy that encourages use of food from school gardens (when applicable and approved by the Nutrition Services Director) and local farmers based on availability. This strategy focuses on continued collaboration with the St. Vrain Valley School District and other partners to support and expand Garden to Cafeteria opportunities to provide District schools with hands-on learning around food systems, health, and wellness while bringing local fruits and vegetables to student meals.

How

- Work with the District to review current programming and locations
- Evaluate ways to further support and expand opportunities

Who

Lead: Community Services and Public Works and Natural Resources (Environmental Services)

Support:

- Saint Vrain Valley School District
- LiveWell Longmont
- CSU Extension
- Slow Food
- Boulder County Public Health
- Growing Gardens

Resources

Needs funding: Staffing for coordination efforts (estimated at 0.1 FTE)

S-5: SUPPORT THE ESTABLISHMENT OF COMMUNITY FOOD PROCESSING AND STORAGE FACILITIES IN PARTNERSHIP WITH BOULDER COUNTY

This strategy focuses on supporting the establishment of a community facility that can be used for: enhancing cold and dry storage for local producers, St. Vrain Valley School District, and others; vegetable/fruit/grain processing for business to business markets; production of value-added goods for local institutions and residents; culinary, nutrition, gardening, and healthy shopping education; and commercial kitchens for rent and large-scale production. It supports growth in the creative and culinary arts target industry that is recommended in Advance Longmont.

How

- Convene local food producers to understand needs
- Identify partner organization to lead operations
- Identify property to house facility
- Work with partner organization to secure funding

Who

Lead: Community Services and Public Works and Natural Resources (Environmental Services)

Support:

- | | |
|-------------------------------------|---|
| • Planning and Development Services | • Longmont Economic Development Partnership |
| • LiveWell Longmont | • Boulder County |
| • Agricultural community | • Saint Vrain Valley School District |

Resources

Needs funding: Staffing for coordination efforts (estimated at 0.1 FTE)

FS-6: ENCOURAGE AND SUPPORT AGRICULTURAL RESEARCH IN BOULDER COUNTY

This strategy focuses on Longmont’s participation in agricultural research efforts in partnership with Colorado State University, Boulder County, and local producers. Agricultural practices that reduce negative ecosystem impacts and when possible, serve as a solution to ecosystem problems, are desired. Local research is needed to best understand environmental and economic outcomes of practices in Boulder County. These include but are not limited to: climate smart agriculture, weed and insect control, soil health, water conservation, and energy use.

How

- Convene local partners to identify agriculture research priorities and determine roles and responsibilities of partner organizations
- Conduct cost benefit analysis to evaluate opportunities and understand potential economic, environmental and social impacts
- Apply findings within the local community

Who

Lead: Public Works and Natural Resources (Natural Resources)

Support:

- Public Works and Natural Resources (Environmental Services)
- CSU Extension
- Boulder County
- Regional municipalities and educational institutions
- Agricultural community

Resources

Needs funding: Staffing for coordination (estimated at 0.1 FTE)

Future Areas of Emphasis

- Supporting and growing the natural food industry
- Opportunities for cottage food and beverage production
- Engaging large businesses to connect employees with community supported agriculture (CSA) programs
- Land preservation for agriculture
- Agri-tourism industry development
- Offering agriculture education programs
- Small scale food production on City Open Space
- Encouraging farmers’ markets and transportation to farmers’ markets

COMMUNITY IN ACTION

OUR Center

OUR Center's emergency grocery program provides food assistance to over 1,500 families each month. In 2014, OUR Center distributed 934,700 pounds of emergency groceries to 16,392 households (40,365 individuals).

As part of its Basic Needs Program, the Hospitality Center provides a free breakfast (weekdays) and hot lunch (seven days a week) for individuals and families who are going through difficult transitions and who need fellowship as well as food.

The OUR Center accepts and distributes items donated by the community to those in need in the Longmont area including food, grocery, and personal care items.

Longmont Conservation District

The Longmont Conservation District serves portions of Boulder, Larimer, and Weld County. Priority goals of the District include water quality and quantity, education on good neighbor policies for production agriculture, conservation education, and Integrated Pest Management. The District offers a variety of education programs and workshops, including the From Our Lands to Your Hands agriculture expo for fourth grade students.

CARBON SEQUESTRATION – THE IMPORTANCE OF SOIL



Carbon sequestration is the process, natural or artificial, by which carbon dioxide is captured from the atmosphere and stored long-term to mitigate the effects of climate change. This process primarily occurs when atmospheric carbon dioxide is absorbed by trees and other flora through photosynthesis where the carbon is stored in biomass (i.e., trunks, branches, foliage, and roots) and in the soil beneath our feet. This sink of sequestered carbon helps to offset the sources of carbon emitted into the atmosphere from our power plants, our cars, and even our breath.

Historically, the soil has been our largest sink of carbon, but as we have continued to cultivate and develop grasslands, forests and other lands in our prairie ecosystems more intensively we have released a good deal of that carbon. Worldwide, scientists estimate we have lost 50% to 70% of the carbon stored in the soil on our cultivated lands. The good news is that by following less intensive agricultural practices such as cover cropping, crop rotations, and actively managing carbon content in soil we will not only sequester additional carbon, but reap the other benefits of healthy soils with less need for chemical fertilizers, better water retention, and reduced erosion, to name a few.

The field of carbon sequestration in soil is a hot topic in scientific circles today for good reason. Less intensive and more traditional farming techniques may end up being one of the better ways to help mitigate any negative effects of climate change. This same mitigation may lead to historic economic opportunities as farming becomes a key component in carbon trading and offsets.



Natural Environment



OVERVIEW

Cities interact with and influence the natural environment in and around them. Residents of Longmont enjoy an incredible system of parks, open space, and trails that provide numerous opportunities to walk, bike, hike, play, fish, view wildlife, and simply appreciate the beautiful Colorado outdoors.

People value and desire a connection to the natural world, but pressures from increasing population and land uses that diminish natural features like wildlife corridors and waterways have resulted in environmental degradation and loss of biodiversity and wildlife habitat. Like many cities, Longmont is part of an ecosystem that incorporates the natural and built environment and strives to balance those with community livability. As Longmont continues to grow, it will be critical to incorporate a strong land ethic that recognizes the natural environment as a valuable asset to be preserved, protected, and restored in order to sustain both community livability and the vital ecosystem services we rely upon for clean air, water, and soil.

Longmont residents have already demonstrated their commitment to protection of the natural environment by voting for a 0.2-cent Open Space sales and use tax (2¢ on every \$10 purchase) in 2000. In 2007, Longmont voters approved an extension of the tax until 2034. The revenue generated from this tax is used for acquisitions, improvements and maintenance of Open Space properties, as well as trail development like the St. Vrain Greenway and Lake McIntosh trail, in and around Longmont.

A sustainable Longmont needs to prioritize and practice stewardship of the natural environment. Sustainability means protecting natural resources that cannot be replaced such as critical wildlife habitat, enhancing biodiversity, restoring degraded natural areas and features, protecting wildlife and wildlife corridors, using natural resources conservatively and wisely, and strengthening and connecting environmental systems when opportunities arise.

The following natural environment priorities were identified to address in the Sustainability Plan:

- Sustainable land management/stewardship
- Connection with nature
- Ecosystem health



Linking to Envision Longmont

Guiding Principle		Goals
GP1	Create livable centers, corridors, and neighborhoods	1.1 Support increased access to affordable, healthy food. 1.2 Promote a sustainable mix of land uses. 1.3 Focus on infill and redevelopment in centers, corridors and other areas of change. 1.8 Create an integrated and quality parks, recreation, greenway and open space system.
GP3	Housing, services, amenities, and opportunities for all	3.2 Provide residents in all parts of the City with access to a range of community amenities, including parks, open spaces and recreational opportunities.
GP2	A complete, balanced and connected transportation system	2.1 Integrate land use and transportation planning to enhance to overall quality of life in the City.
GP5	Responsible stewards of our resources	5.1 Protect and conserve Longmont’s natural resources and environment. 5.4 Preserve Longmont’s agricultural resources. Recognize and enhance the ecological function of the City’s system of parks, open space, greenways, waterways, and urban forest. 5.5

Related Topics



BE PART OF THE SOLUTION

Being a good steward of the environment is rewarding and can be achieved in a number of ways:

- Volunteer with the City of Longmont or other conservation organizations
- Minimize or eliminate toxic pesticide use
- Pick up pet waste
- Stay on trails when hiking
- Respect wildlife by keeping a safe distance
- Plant native species and remove invasive species
- Plant landscaping that supports local insects and wildlife
- Contact Environmental Services at 303.651.8376 if you have questions

CITY IN ACTION

In 2015 a grant funded **volunteer coordinator for Parks, Open Space, and Trails** was able to accumulate 2670.75 hours of volunteer time or the equivalent of \$62,923. This work included restoration crew, raptor monitoring, re-vegetation, prairie dog barrier construction, trail maintenance, and clean-up activities.

PARKS, RECREATION, AND TRAILS MASTER PLAN

Completed in 2014, the Parks, Recreation, and Trails Master Plan is the result of a multi-year planning effort to develop a comprehensive system plan and guiding vision for Longmont's parks, trails, and open space lands. This plan is phase one of a three phase integrated planning process for Parks and Recreation within Longmont reflecting a renewed pledge to the vital role that recreation, fitness, and the outdoors play in a livable city. The plan identifies triggers for maintenance and expansion, ensures accessibility for all residents, supports efficient use of natural and human resources, and strives to fill gaps in service and trail connections over time.

WILDLIFE MANAGEMENT PLAN

The Wildlife Management Plan is an outgrowth of the Open Space Master Plan, and is intended to be applied to other City-owned or City-managed lands and, in some cases, to wildlife and habitat management on private lands within the City. The plan addresses management policies and information for four categories of wildlife (federally listed threatened or endangered species, other "regulatory" species, biodiversity species, and "problem" wildlife); provides a methodology for classifying Open Space lands into "management zones" (preservation, restoration, recreation, maintenance); and provides a methodology for prioritizing future acquisition of lands for addition to the Open Space system. This plan is scheduled to be updated in 2018.

Objective: *Minimize the negative effects of development and human activities on natural systems by identifying, protecting, enhancing, and restoring critical environmental resources at all scales.*



Targets

<input type="checkbox"/>	Increase knowledge of regenerative land management practices
<input type="checkbox"/>	Increase tree canopy to 18% or more of the Longmont Planning Area covered by regionally appropriate tree canopy or vegetation
<input type="checkbox"/>	Increase the community's contribution to meeting its demands for managing costs and maintaining and improving parks and open space

** Additional targets will be set following development of Open Space Master Plan, Wildlife Management Plan, and Ecological Restoration and Remediation Plan*

CITY IN ACTION

The City of Longmont adheres to **strict standards for land management close to waterways** established by the Colorado Department of Public Health and Environment. These include but are not limited to standards for pesticide use near waterways, discharges from construction activities, and discharges from commercial and industrial activities.

The City of Longmont promotes, **Garden in a Box**, a program run by the Center For Resource Conservation. The program offers a \$25 discount on professionally designed Xeric gardens. These do it yourself garden kits come with 15 to 30 starter plants, a comprehensive Plant and Care Guide, and plant by number maps. Regardless of expertise, participants can save water, provide forage for pollinators, and beautify their landscape with these affordable gardens.

What are Ecosystem Services?

The benefits humans receive from nature that sustain and enhance human life.

Provisioning Services

Outputs from the ecosystem that benefit people.

- Food
- Medicine
- Fuel

Regulating Services

Processes that moderate natural conditions.

- Waste decomposition
- Water and air purification
- Pollination

Ecosystem Services

Cultural Services

Nonmaterial benefits that contribute to the cultural advancement of people.

- Beauty
- Recreational experiences
- Education

Supporting Services

Processes that sustain ecosystems.

- Productive soils
- Biological Diversity
- Habitat

ECOSYSTEM SERVICES

Fundamentally, an ecosystem is comprised of the dynamic relationships between organisms and their physical and biological environments. Humans are a component of these ecosystems and rely on the healthy functioning of the ecosystem to sustain life. The ecosystem services, defined by the Millennium Ecosystem Assessment (MEA) as “the benefits that people receive from ecosystems.” Four categories encompass the services that ecosystems provide: provisioning services such as food and fresh water; regulating services such as flood and disease control; cultural services such as spiritual and recreational benefits; and supporting services, such as nutrient cycling or habitats for species.

Land use changes and pollution, among other factors, are threatening our ecosystems and the services that they provide that are essential for human life. A thriving community, now and for generations to come, is therefore, reliant on the sustainability and vitality of its ecosystem services.

COMMUNITY IN ACTION

Protecting Pollinators Together

Pollinators, such as bees, bats, birds, and butterflies, are essential to the majority of the flowering plants in our environment and to the production of over 130 different food crops. Pollinators are negatively impacted by many factors including habitat loss, disease, and improper use of pesticides.

Many local organizations such as Longmont Coalition for People and Pollinators, Saint Vrain Creek Coalition, Center for Resource Conservation, Colorado Native Plant Society, and others are working to educate residents about actions they can take to protect pollinators.



NE-1: UPDATE THE OPEN SPACE MASTER PLAN

The Open Space Master Plan is now more than 14 years old and is due for an update in 2017. An updated plan should address acquisition and management issues, as well as new trends and opportunities such as food production on open space and ecosystem services.

How

- Engage a consulting firm to assist in completion of update, modifications and approval by the Parks and Recreation Advisory Board (PRAB) and City Council
- Allocate adequate resources to review support strategies identified in the plan and identify any additional strategies to include:
 - Acquisition priorities
 - Allocation strategies (e.g., percent acquisition, percent development)
 - Review how operating dollars are being spent
 - Incorporating wildlife management
 - Other Open Space criteria, such as historic preservation, resource protection and enforcement, maintaining and enhancing biodiversity
 - Ongoing funding options

Who

Lead: Public Works and Natural Resources (Open Space)

Support:

- Boulder County/Weld County
- Regional and state wildlife and conservation organizations
- Other City of Longmont department and divisions

Resources

Needs funding: Technical/consulting support for plan review, development, and recommendations via public process

OPEN SPACE MASTER PLAN

The 2002 Longmont Open Space Master Plan establishes the goals, and acquisition and management recommendations for Longmont's Open Space Program. The plan's goals include the preservation of natural and cultural resources, and the provision of linkages and connections, low-impact recreation compatible with resource protection goals, and urban shaping buffers and buffer zones. The plan recommends criteria for open space parcel acquisition, and also contains recommendations for trail acquisition and development. It also addresses management issues and policies, such as staffing, administration, signage, naming, memorials, low-impact recreation, dog management, wildlife, gravel mining, long range management and maintenance costs, and area management plans.

NE-2: UPDATE THE WILDLIFE MANAGEMENT PLAN

The Wildlife Management Plan is scheduled to be updated in 2018. The update should address wildlife and habitat management on public, and to the extent possible, private lands within the City.

How

- Engage a consulting firm to assist in completion of update, modifications and recommendations for approval by variety of Boards and City Council
- Allocate adequate resources to support strategies identified in the plan
- Include focus on the following topic areas:
 - Development impacts on wildlife
 - Capital development process impact on wildlife
 - Habitat restoration and conservation priorities
 - Species recommendations
 - Land Use recommendation for public properties/private properties
 - Wildlife corridors

Who

Lead: Public Works and Natural Resources (Open Space)

Support:

- Boulder County/Weld County
- Regional and state wildlife and conservation organizations
- Other City of Longmont department and divisions
- Public Works and Natural Resources (Environmental Services)

Resources

Needs funding: Technical/consulting support for plan review, development and recommendations via public process as well as policy implementation

RESILIENT SAINT VRAIN

The catastrophic floods in 2013 severely damaged Longmont's parks, trails, roads and bridges along with portions of City's water supply system. From the disaster comes the opportunity to protect the community by restoring the St. Vrain Creek's channel, which also will increase its resilience to future flooding. Project work will also restore the valuable community asset of the St. Vrain Greenway.

One of the goals of Resilient St. Vrain is to complete the project work in an environmentally responsible manner. This includes:

- Maintaining or improving natural habitat and corridors for wildlife and fish.
- Creating wetland areas to help clean water that makes its way into the creek after storms or by runoff from more developed areas.
- Maintaining or improving the natural riparian setting enjoyed by the community.

Resilient St. Vrain design plans will incorporate natural channel design techniques, such as:

- Respecting the creek's natural tendencies to curve and meander over time, and allowing space for this to happen.
- Using natural materials (such as tree root wads, rocks and vegetation) to create habitat, stabilize creek banks, and create necessary drop structures to stabilize the creek bottom.



Near-term

NE-3: WORK WITH COMMUNITY PARTNERS TO PROMOTE EDUCATION AND AWARENESS ABOUT REGENERATIVE LAND MANAGEMENT PRACTICES ON PRIVATE PROPERTIES

Regenerative land management practices include techniques that restore natural ecosystem functions such as soil health, water cycles, and biodiversity. In Longmont, this includes but is not limited to activities such as water-conserving landscaping, integrated pest management practices, application of organic compost and soil amendments, and weed management practices. This strategy focuses on sharing information with private landowners so that everyone can do their part in enhancing the natural environment across Longmont.

How

- Develop educational resources about regenerative land management techniques for private landowners
- Work with neighborhood groups and conservation organizations to host training seminars about current best practices

Who

Lead: Public Works and Natural Resources (Environmental Services, Parks and Open Space)

Support:

- Community Services
- Conservation groups
- CSU Extension
- Neighborhood Group Leaders Association

Resources

Needs funding: Educational resources and training program development

Likely accomplished with existing resources: Staffing for communications and outreach

NE-4: UPDATE THE TREE CANOPY MANAGEMENT AND REPLACEMENT PLAN

The City of Longmont maintains more than 21,000 trees on public property, and the community's tree canopy covers approximately 1,461 acres (9% of the Longmont Planning Area, which includes current City limits and projected growth areas). An updated Tree Canopy Management and Replacement Plan will address ideal species diversity, density, canopy cover, and replacement strategies to continue to maintain and enhance the Longmont tree canopy.

How

- Work with stakeholders to develop regionally appropriate tree canopy coverage, species lists for different applications, and guidelines to increase the multi-functionality of trees and vegetation on public lands
- Revise Forestry Specifications and Standards
- Incorporate Emerald Ash Borer remediation/replacement plan
- Plant new trees on public lands and encourage private landowners to follow guidelines for tree management and replacement on private properties
- Explore new technologies to support ongoing monitoring of tree canopy

Who

Lead: Public Works and Natural Resources (Forestry)

Support:

- Streets
- Public Works and Natural Resources (Environmental Services)
- CSU Extension

Resources

Likely accomplished with existing resources: Staffing for plan update and communications

Mid-term

NE-5: CREATE AND IMPLEMENT A PLAN TO RESTORE AND REMEDIATE DAMAGED ECOLOGICALLY SENSITIVE AREAS AND CRITICAL CORRIDORS AND HABITAT AREAS

While much work has already been done to restore areas of the community impacted by flooding, there are ecologically sensitive areas and critical wildlife corridors and habitat areas that are degraded and would benefit from remediation. A plan is necessary to prioritize improvements and areas of greatest restoration need.

How

- Identify brownfields, areas with noxious and invasive species, and land with high habitat value (potential or actual)
- Determine priority areas for restoration and remediation

Who

Lead: Public Works and Natural Resources (Open Space)

Support:

- Public Works and Natural Resources (Environmental Services)
- Planning and Development Services
- Local educational institutions
- Regional and state wildlife and conservation organizations

Resources

Needs funding:

- Technical/consulting support for plan development
- Restoration and remediation projects

Likely accomplished with existing resources:

- Staffing for plan development support
- Volunteer program administration

Ongoing

NE-6: CONTINUE AND INCREASE PARTICIPATION IN EXISTING VOLUNTEER PROGRAMS

Volunteers are the lifeblood of many environmental stewardship efforts, including maintenance, restoration, information, and monitoring of the community's many environmental assets. Continued and increased volunteer participation is needed as the parks, open space, and trails systems expand.

How

- Increase awareness of volunteer programs through community-based organizations and partners

Who

Lead: Public Works and Natural Resources (Open Space)

Support:

- Community-based organizations
- Saint Vrain Valley School District
- Regional and state wildlife and conservation organizations

Resources

Likely accomplished with existing resources: Volunteer recruitment and oversight

Needs funding: Staffing for program coordination (0.5 FTE)

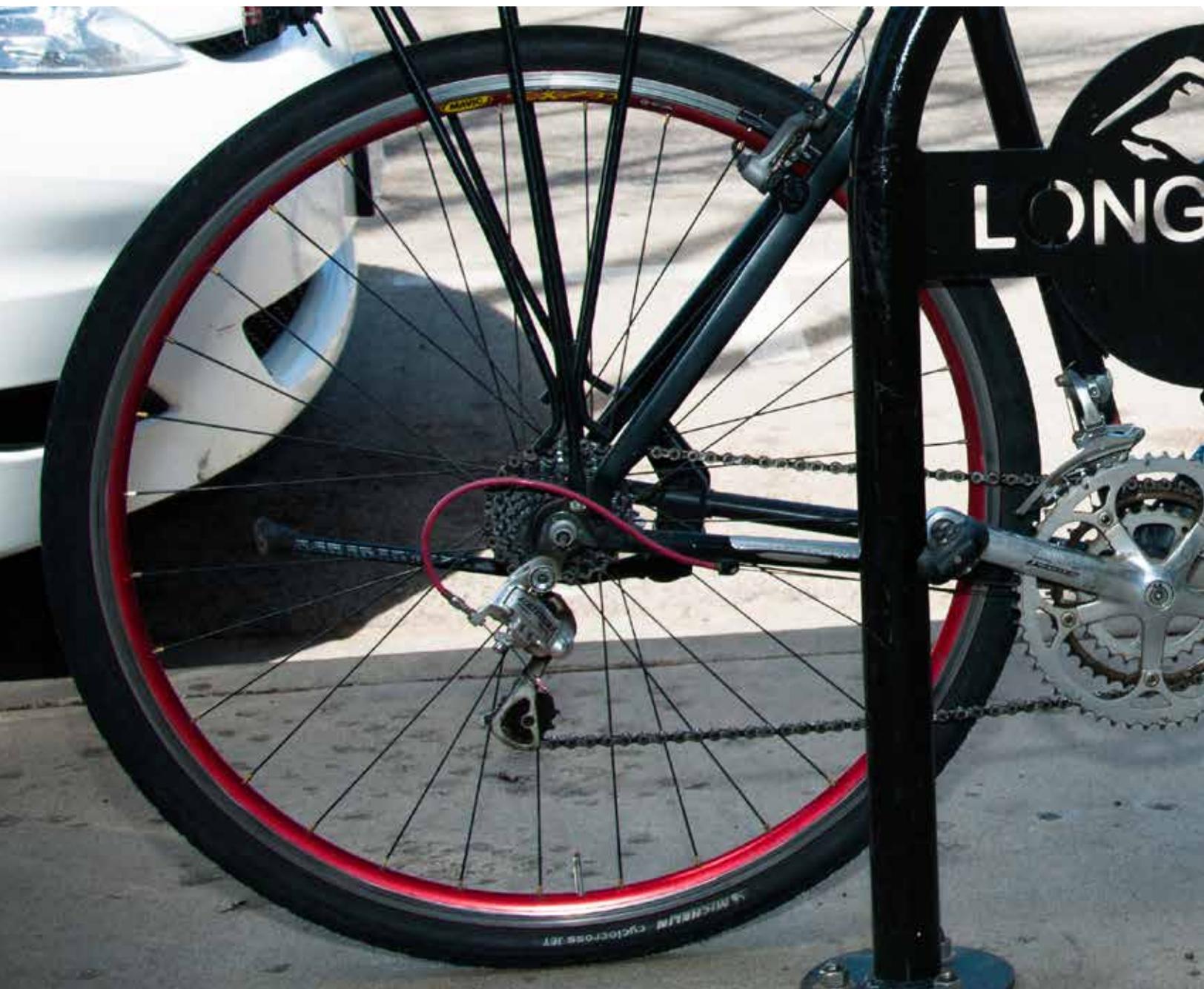
Future Areas of Emphasis

- Standardize and employ consistent use of Integrated Pest Management Plans





Transportation



OVERVIEW

Transportation is the connector of a city, moving goods and people from one place to another. A sustainable transportation system is one that is accessible to all residents, reduces energy and resource use, and minimizes environmental impacts. In cities, transportation systems are becoming more integrated and multimodal to provide travel choices between bicycles, cars, pedestrian, rail and buses. This allows residents of all ages, abilities, and incomes to access services, shops, programs, leisure activities, and other daily needs.

When making transportation choices, active modes such as biking and walking where possible can have the greatest benefits for individual as well as community health. Furthermore, a sustainable transportation system supports community resiliency by providing options for mobility including alternative routes and options to get around during hazard events.

The economic implications of transportation are significant in Longmont. According to the Center for Neighborhood Technology Housing and Transportation Fact Sheet (H+T Fact Sheet), transportation accounted for 19% of a Longmont household's income in 2015 and average annual transportation cost per household was \$12,813. The U.S. Department of Housing and Urban Development (HUD) recommends that no more than 15% of an individual or household's income be spent on transportation.

Longmont's plan for transportation systems includes a mix of transportation modes to enhance mobility and health benefits and also provides for affordable, accessible options while minimizing negative impacts on air quality, greenhouse gas and other transportation-related environmental impacts.

The following transportation priorities were identified to address in the Sustainability Plan:

- Air quality linkages
- Transportation affordability and accessibility
- Active transportation



Linking to Envision Longmont

Guiding Principle		Goals
GP2	A complete, balanced and connected transportation system	2.1 Integrate land use and transportation planning to enhance to overall quality of life in the City.
		2.2 Provide a transportation system that offers safe, healthy, and reliable mobility for people of all ages, income levels, and abilities. Enhance the transportation system in a manner that improves the economic vitality of the City, while being responsible stewards of limited resources.
		2.3
GP4	Support a safe, healthy, and adaptable community	4.1 Support healthy and active lifestyles among residents of all ages.
		4.3 Ensure residents have access to health and human services.
		4.5 Minimize risks to property, infrastructure, and lives due to natural disasters and other natural or man-made hazards.

Related Topics



BE PART OF THE SOLUTION

Sustainable transportation solutions are generally better for your health as well as the environment. Some ways to take action include:

- Walk, bike, skate, or scoot instead of driving
- Take the bus or carpool when possible
- Consider mix modes for travel such as walking or biking to a Park-n-Ride to take public transit
- Organize car trips around things located close to each other
- Purchase an electric or alternative fuel vehicle
- Offer rides to friends and neighbors, especially those who can't drive
- Advocate for increased transportation options

CITY IN ACTION

The City of Longmont has installed four publicly available **electric vehicle charging stations** including one fast charging station at the Longmont Museum. The City purchases and services a **variety of compressed natural gas (CNG) and all electric fleet cars and service vehicles** (including trash trucks, bucket trucks, and passenger vehicles). Many private businesses across Longmont have also installed electric vehicle charging stations.

The **Ride Free program** is jointly sponsored by the City of Longmont and Boulder County, and allows Longmont residents to access local bus routes operated by the Regional Transportation District (RTD) without payment or passes. This program has been well utilized, especially by low income residents, students, and elders in the Longmont community, and provides a means for people to access services, employment, and basic needs without having to find additional money to do so.

ENVISION LONGMONT MULTIMODAL AND COMPREHENSIVE PLAN

The Envision Longmont Multimodal and Comprehensive Plan, was developed to accommodate future growth and provide an integrated transportation system that offers residents, employees and visitors multiple means of efficient travel. Bicycle, pedestrian, transit, and automobile modes of travel are addressed, as well as travel demand management programs to reduce traffic congestion and support alternative modes.

Increasingly, attention is moving away from building new streets and looking at the full realm of transportation options as well as land use decisions to enable a better overall transportation system for mobility and accessibility.

REGIONAL TRAIL PLANNING AND CONNECTIONS

Work and progress continues to be made towards developing Longmont's trails and greenways as part of regional trail systems. The completion of the St. Vrain Greenway and the Spring Gulch #2 Greenway are the highest priority greenway projects in the Parks, Recreation and Trails Master Plan, as are numerous off-street trail connections. LoBo Regional Trail is a 12-mile partially constructed trail that will connect the trail systems in Gunbarrel, Niwot, City of Boulder Open Space, and County Open Space Properties connecting the City of Boulder with the City of Longmont. Longer term, the LoBo trail and the St. Vrain River Trail would connect to a larger effort to create a Colorado Front Range Trail connecting the New Mexico border to Wyoming.

Objective: *Invest in an efficient transportation system that enhances mobility, equitably supports multiple modes of transportation, reduces environmental impacts, and supports a healthier community.*



Targets

<input type="checkbox"/>	Increase equitable access to transportation infrastructure for all segments of the community
<input type="checkbox"/>	Improve air quality related to transportation systems (baseline to be defined)
<input type="checkbox"/>	Reduce transportation fuel consumption by 33% by 2050

CITY IN ACTION

In 2012, the City of Longmont launched an **employee bike share program** as part of the City's wellness program to promote active transportation options to employees during the work day. There are currently 13 bikes stationed at six of the City's campuses. Each bike is equipped with a helmet, basket, lock, bell, light, and odometer. The City is also exploring a community bike share program.

The City of Longmont, in coordination with regional partners, is currently studying **bus rapid transit service** along the Diagonal Highway (SH-119) from Boulder to Longmont, and along the US-287 corridor.

COMMUNITY IN ACTION

Saint Vrain Safe Routes to School

St. Vrain Safe Routes to School is made available with the support and collaboration of LiveWell Longmont, the City of Longmont, Colorado Department of Transportation, Boulder County and the Safe Routes to School National Partnership.

St. Vrain Safe Routes to School programs have a presence in most elementary schools in Longmont. The program encourages and enables children to walk or bike to school each and every day, introducing healthy habits, and bringing a greater number of smiles to classrooms throughout the community.

Strategies

Near-term

T-1: COORDINATE WITH RTD TO EXPAND SERVICE AND HOURS TO KEY COMMUNITY LOCATIONS

Community members routinely suggest improvements to expand or refine transit service in Longmont, such as extended hours to certain destinations (e.g., evening service to Front Range Community College), new routes to serve high-demand areas, and commuter rail. While Longmont is not the transit service provider, this strategy focuses on coordination with the Regional Transportation District (RTD) to better understand needs and prioritize service improvements.

How

- Survey the community about priority schedule/service expansion needs
- Review existing service schedules and routes and develop a prioritized list of changes for RTD consideration
- Work with RTD to review priority list and determine next steps

Who

Lead: Planning and Development Services

Support:

- Community Services
- Regional Transportation District (RTD)
- Public Works and Natural Resources

Resources

Likely accomplished with existing resources:

- Community surveying and prioritization
- Coordination with RTD

AGE WELL BOULDER COUNTY

Completed in 2010, Age Well Boulder County encourages and enables all to age well in Boulder County. Transportation is one goal identified in the plan to improve, specifically in the areas of: affordability, accessibility, flexibility, reliability, safety, and ease to arrange.

Several recommendations are made to achieve this goal including programs to improve safe driving; providing an interconnected, countywide system of transportation services; customer-friendly scheduling; and a comprehensive review of all transportation resources and needs.

These recommendations related to transportation improvements, however, are not unique to Longmont's older adult demographic. Many residents in Longmont would greatly benefit from transportation improvements, particularly in the area of accessibility and affordability. Each of the recommendations represent a challenge and opportunity for creating and sustaining a vibrant, healthy community for all.



T-2: DEVELOP A FLEET EFFICIENCY AND ALTERNATIVE FUELS PLAN

This strategy is for the City of Longmont to continue to incorporate more efficient and alternative fuel vehicles into its fleet, develop supporting infrastructure, and model the way for other large institutions and the public to transition to these vehicles over time.

How

- Partner with Clean Cities Coalition to develop a plan to support increased use of electric and alternative fuel vehicles throughout the community including City fleet vehicles and other large vehicle fleets (e.g., school district)
- Review fleet purchasing practices and vehicle replacement plan to ensure continued integration of electric/compressed natural gas (CNG) or other alternative fuel vehicles
- Install a CNG fueling station as an opportunity to use a waste stream and switch to a cleaner source of fuel for sanitation and other fleet vehicles
- Coordinate with other organizations with large fleets to review purchasing practices and vehicle replacement plans to increase adoption of electric and alternative fuel vehicles

Who

Lead: Public Works and Natural Resources (Environmental Services) and Fleet

Support:

- Shared Services
- Clean Cities Coalition
- Saint Vrain Valley School District
- Regional Transportation District
- Regional Air Quality Council

Resources

Likely accomplished with existing resources: Staffing for plan development

T-3: COORDINATE WITH REGIONAL PARTNERS ON PUBLICIZING CAR/VAN POOLING

According to the 2014 American Community Survey, only 13% of Longmont workers carpool to work and 73% drive alone. Across the region, car and van pooling and shared vehicle service options continue to grow, and this strategy focuses on sharing latest options and information with commuters to continue to increase participation in these activities.

How

- Research how other cities and transportation authorities are partnering together on car and van pooling programs and communications
- Develop informational resources to publicize latest options

Who

Lead: Planning and Development Services

Support:

- Regional Transportation District
- Regional Air Quality Council
- Major employers
- Denver Regional Council of Governments (DRCOG)
- Public Works and Natural Resources (Environmental Services)

Resources

Needs funding: Staffing for coordination and communications (estimated at 0.1 FTE)

T-4: INCREASE ELECTRIC VEHICLES THROUGH VEHICLE INCENTIVES AND IMPROVED INFRASTRUCTURE

This strategy focuses on increasing the rate of electric vehicle adoption until most vehicles are powered by clean electricity. Electric vehicle (EV) charging infrastructure is crucial to encouraging EV adoption and sustaining local growth of the EV market. Incentives and mechanisms such as public EV charging sites, utility rates, development codes, fleet policies, and events and promotion activities can all help increase EV adoption.

How

- Research best practices for promoting electric vehicle adoption
- Conduct a study to identify appropriate locations for charging stations and explore ways to encourage and incentivize private EV infrastructure development
- Explore code changes and incentives to encourage new residential and commercial development projects to install EV charging stations; with an emphasis on multi-family complexes
- Conduct education and outreach highlighting the benefits of electric vehicles, such as ride and drive events
- Explore bulk purchase programs in coordination with local dealers
- Provide information about tax incentives for EVs

Who

Lead: Public Works and Natural Resources (Environmental Services)

Support:

- Planning and Development Services (Transportation)
- Longmont Power & Communications
- Platte River Power Authority
- Local automotive dealers
- Boulder County

Resources

Needs funding: Program development and implementation

Likely accomplished with existing resources: Staffing for coordination and communications





Mid-term

T-5: AUDIT ALL TRANSIT STOPS TO EVALUATE ACCOMMODATION NEEDS OF ALL RESIDENTS AND PRIORITIZE IMPROVEMENTS

Building on the first and last mile connections and complete streets that are specified in the Envision Longmont Multimodal and Comprehensive Plan, this strategy focuses on identifying gaps and enhancing the accommodations at transit stops to support transit use, with particular focus on prioritizing improvements for under-served areas and populations.

How

- Work with neighborhood groups to complete a detailed inventory of all transit stops and assessment of accommodation needs (e.g., lighting, benches, shelters, signage, ADA accessibility, and restrooms when possible)
- Based on the inventory and assessment, categorize the transit stops into classifications of good, fair, poor (or similar ranking system)
- Integrate the findings of the audit and priority improvements into future Transit Improvement Plan updates

Who

Lead: Planning and Development Services

Support:

- Community Services
- Neighborhood Group Leaders Association
- Public Works and Natural Resources (Environmental Services)
- RTD

Resources

Needs funding: Staffing to support audit documentation and assessment (estimated at 0.25 FTE)

Likely accomplished with existing resources:

- Neighborhood group engagement and training
- Staffing for coordination with the Transit Improvement Plan



T-6: SUPPORT GROWTH IN ACTIVE TRANSPORTATION AND TRANSIT RIDERSHIP THROUGH IMPLEMENTATION OF THE MULTIMODAL TRANSPORTATION PLAN

According to the 2014 American Community Survey, only 2% of Longmont workers walk to work, and less than 1% bike to work. This strategy focuses on continuing to expand options for and infrastructure to support active transportation modes and transit ridership as identified in the Multimodal Transportation Plan. Longmont's Greenhouse Gas Reduction Report identified two actions in particular that will actively reduce greenhouse gas emissions: bicycle and pedestrian improvements and addressing first/last mile connections. It includes improving existing facilities, identifying and filling gaps in the existing bike and pedestrian systems, promotion of programs such as Safe Routes to School, Bike to Work, and following safety best management practices, and expanding amenities for active transportation users such as storage and shower facilities. Promoting active transportation has profound public health impacts through increased physical activity, as well as reducing air pollution and greenhouse gas emissions.

How

- Coordinate with existing groups and efforts to review priority needs and program expansion plans
- Connect with the Sustainable Business Program to develop informational resources and encourage employers to provide supporting facilities (e.g., showers and bike storage)

Who

Lead: Planning and Development Services

Support:

- Public Works and Natural Resources (Environmental Services)
- Safe Routes to School
- Local bicycle groups
- Major employers
- St. Vrain Valley School District

Resources

Needs funding:

- Infrastructure improvements on public property
- Staffing for expanded program offerings and/or materials (estimated at 0.25 FTE)

Likely accomplished with existing resources:

- Staffing for coordination and communications

ACTIVE TRANSPORTATION

Active transportation includes walking, bicycling, and other human-powered modes of travel (e.g., skateboarding, scooters, etc.). According to the Partnership for Active Transportation, communities that prioritize active transportation tend to be healthier by enabling residents to be more physically active in their daily routines and by having cleaner air to breathe. Active transportation systems also foster economic health by creating dynamic, connected communities with a high quality of life that catalyzes small business development, increases property values, sparks tourism, and encourages corporate investment that attracts a talented, highly educated workforce.



Ongoing

T-7: EXPLORE ALTERNATIVE FUNDING STREAMS TO CONTINUE THE RIDE FREE TRANSIT PROGRAM

This strategy focuses on identifying funding options to continue the Ride Free bus transit program to help reduce annual transportation costs for Longmont households.

How

- Explore additional funding streams (e.g., grants, advertising, sponsorships, partnerships) to support continuation of the program
- Secure funding for at least two more years of operation of the current program
- Expand services and include free options or alternative ride sharing if Ride Free is unavailable

Who

Lead: Planning and Development Services

Support:

- Public Works and Natural Resources
- Community Services
- Finance

Resources

Needs funding: Ride Free transit program funding

Future Areas of Emphasis

- Car sharing options and program expansion
- Ride-share information consolidation
- Providing a local transit system or circulator
- Bicycle share programs
- Northern region bus transit system
- Expanded network of snow routes for bikes
- Other power-driven mobility devices (OPDMDs)





Waste

SINGLE-STREAM RECYCLABLES

PAPER & CARDBOARD

- NEWSPAPERS
- DIRTY MAGAZINES
- DIRTY CARDBOARD
- DIRTY CORRUGATED
- DIRTY FOLDERS
- DIRTY MAILERS
- DIRTY BOXES
- DIRTY ENVELOPES

CONTAINERS (EMPTY & RINSE)

- CONDENSED MILK
- CONDENSED SOUP
- CONDENSED SAUCE
- CONDENSED JUICE
- CONDENSED BOTTLES
- CONDENSED JARS
- CONDENSED CANS
- CONDENSED TUBS
- CONDENSED BOTTLES
- CONDENSED JARS
- CONDENSED CANS
- CONDENSED TUBS

PLASTIC BOTTLES, TUBS, JUGS & JARS (EMPTY & RINSE)

- WATER BOTTLES
- BEVERAGE BOTTLES
- LAUNDRY DETERGENT
- WASHING MACHINE LIQUID
- WASHING MACHINE POWDER
- WASHING MACHINE TABLETS
- WASHING MACHINE LIQUID
- WASHING MACHINE POWDER
- WASHING MACHINE TABLETS

PLEASE RECYCLE THE FOLLOWING LISTED ABOVE. Items not listed will not be accepted. SEE US FOR A FULL LIST OF ACCEPTABLE ITEMS. CONTACT US AT 800.368.3688

KEEP 'EM OUT!
¡MANTÉNGALOS AFUERA!

- NO Plastic Bags | NO Mirrors or Plastic Bags**
- NO Liquids in Containers** | **NO Flammable Plastic, Metal or Paper Milk/Juice/Carbon Containers**
- NO Unwashed Paper** | **NO Lids or Caps on Glass Bottles or Jars**
- NO Plastic other than those specified**
- NO Other Items**

SINGLE-STREAM RECYCLABLES

PAPER & CARDBOARD

- NEWSPAPERS
- DIRTY MAGAZINES
- DIRTY CARDBOARD
- DIRTY CORRUGATED
- DIRTY FOLDERS
- DIRTY MAILERS
- DIRTY BOXES
- DIRTY ENVELOPES

CONTAINERS (EMPTY & RINSE)

- CONDENSED MILK
- CONDENSED SOUP
- CONDENSED SAUCE
- CONDENSED JUICE
- CONDENSED BOTTLES
- CONDENSED JARS
- CONDENSED CANS
- CONDENSED TUBS
- CONDENSED BOTTLES
- CONDENSED JARS
- CONDENSED CANS
- CONDENSED TUBS

PLASTIC BOTTLES, TUBS, JUGS & JARS (EMPTY & RINSE)

- WATER BOTTLES
- BEVERAGE BOTTLES
- LAUNDRY DETERGENT
- WASHING MACHINE LIQUID
- WASHING MACHINE POWDER
- WASHING MACHINE TABLETS
- WASHING MACHINE LIQUID
- WASHING MACHINE POWDER
- WASHING MACHINE TABLETS

PLEASE RECYCLE THE FOLLOWING LISTED ABOVE. Items not listed will not be accepted. SEE US FOR A FULL LIST OF ACCEPTABLE ITEMS. CONTACT US AT 800.368.3688

NO DUMPING ON GROUND. TRASH PROHIBITED

OVERVIEW

Waste materials are byproducts of our daily activities and are made up of different materials from many sources. Although most waste materials end up in a landfill, there are many alternatives for managing waste in a more environmentally responsible way, including prevention, minimization, reuse, recycling, and energy recovery. Reducing use of materials that generate waste and reusing or recycling waste materials are typically the most effective ways for the community to conserve resources, protect the environment, reduce greenhouse gas emissions, and save money.

Longmont's sustainability vision calls for the stewardship of environmental resources. From a waste perspective, this means generating less waste, diverting as much waste as possible from landfills, responsibly planning for managing waste, and adopting new technologies and practices to save money and reduce impacts on the natural environment and the community. Consistent with this vision, Longmont's Zero Waste resolution, adopted in 2008, sets the City's ambition to pursue zero waste as a long-term goal.

The following waste priorities were identified to address in the Sustainability Plan:

- Waste management planning
- Waste diversion and reduction





Linking to Envision Longmont

Guiding Principle		Goals	
GP5	Responsible stewardship of our resources	5.1	Protect and conserve Longmont’s natural resources and environment.
GP6	Job growth and economic vitality through innovation and collaboration	6.3	Address building space, infrastructure needs, and other considerations of target industries and the workforce.

Related Topics



BE PART OF THE SOLUTION

Cutting waste starts with what you buy (and don't buy) and finishes with appropriate disposal, ideally for another use. Steps to take include:

- Look for products with less packaging
- Buy more durable products
- Use refillable, rechargeable, reusable, etc. when possible
- Compost your food scraps
- Keep your yard waste separate and take it to the Waste Diversion Center and/or wait for a yard waste collection event
- Sign up for the City composting program in Spring 2017
- Sign up for smaller waste containers
- Stay current on recycling guidelines
- Don't put hazardous materials in the trash, take to appropriate facilities

CITY IN ACTION

In 2016, the City of Longmont adopted an optional, fee for service **curbside composting ordinance** that will launch service in 2017. The City has also adopted a **Pay-As-You-Throw rate structure** that will allow residents to pay less if they waste less. These measures will allow people to compost things that can't be composted in home compost systems such as bones and compostable cups, as well as move away from a one size fits all approach to waste management to one where residents can make informed choices that suit their lifestyles.

ECONOMIC IMPACTS OF RECYCLING IN COLORADO

A 2014 study, conducted for the State of Colorado Department of Public Health and Environment was completed to identify the economic impacts the recycling, remanufacturing, and reuse (RRR) industry on the State economy, with particular focus on how RRR affects both urban and rural areas of the state.

Significant results of the analysis include the following conclusions:

- Given a total Gross State Product (GSP, or the state counterpart of GDP) of \$279.6 billion in 2012, RRR activities account for 3.1% of GSP in direct impacts, and 5.3% of GSP when considering the total impact from these sectors.
- The RRR industry impacts total nearly 86,000 jobs in the state representing 2.7% of overall employment in Colorado.
- Urban jobs in the RRR industry account for 80,394, or 2.9% of all urban employment.

Objective: *Increase opportunities for waste diversion, education, and reuse to reduce environmental impacts.*



Targets

<input type="checkbox"/>	Decrease household trash landfilled to less than 2 pounds per capita per day by 2018 (from approximately 2.2 pounds per capita per day in 2015)
<input type="checkbox"/>	Increase residential waste diversion to 50% by 2025
<input type="checkbox"/>	Increase internal waste diversion for all City operations (baseline to be defined)
<input type="checkbox"/>	Increase commercial waste diversion (baseline and target number TBD based on 2018 data collection)

COMMUNITY IN ACTION

Longmont Meals on Wheels

Longmont Meals on Wheels (LMOW) along with the Longmont Senior Center started a composting program numerous years ago that would go along with the zero waste resolution the City had adopted. LMOW prepares and serves over 450 meals a day to seniors and people with disabilities, at the senior center and in their homes. The program has very little waste, due to composting all leftover products, and using compostable paper products. Clients also receive their meals in compostable trays. Composting has not come without its challenges, LMOW has purchased compostable trash bags to help with bugs and to lessen the smell on hot days. The bags also signify to others that the items in the compost container should not be consumed. Many other Meals on Wheels programs who were not sure how to start a composting program on their own have started composting through a new program developed by The National Foundation to End Senior Hunger (NFESH) called What A Waste. The project teaches participating programs how to separate, measure and catalogue food waste. In addition, What A Waste helps programs improve their operations and includes a gardening component that engages seniors in moderate physical activity and produces fresh vegetables that can be incorporated into nutrition program menus. LMOW has not adopted the What A Waste program, but they continue to work with the City to improve their composting program.

Strategies

Immediate

WA-1: BUILD SUPPORT FOR PARTICIPATION IN THE CURBSIDE COMPOSTING PROGRAM

The curbside composting program will begin service in spring 2017. Eco-Cycle is partnering with the City of Longmont to help promote the curbside composting program. This strategy focuses on building interest and participation in the program for sustained success.

How

- Continue to develop materials (in English and Spanish) and develop/implement outreach tactics such as social media, mailings, and videos to encourage program enrollment and share information about composting best practices
- Explore barriers to participation such as physical challenges, access, and awareness, and identify potential mitigation strategies to address them
- Explore development of a system for businesses, organizations and individuals to sponsor a low-income household to participate in the program for a designated time period
- Develop an application process and eligibility criteria for interested households to be sponsored
- Review applications and match sponsors with eligible households
- Monitor participation rates and participant feedback from sponsored households

Who

Lead: Public Works and Natural Resources (Sanitation, Environmental Services)

Support:

- Community Services
- Finance/Utility Billing
- Longmont Economic Development Partnership
- Business Groups
- Senior Center
- Neighborhood Group Leaders Association

Resources

Needs funding:

- Sponsors for program participation

Likely accomplished with existing resources:

- Staffing for sponsorship process and coordination



WA-2: PROVIDE WASTE DIVERSION OPPORTUNITIES AND EDUCATION FOR ST. VRAIN VALLEY SCHOOL DISTRICT

This strategy focuses on exploring ways to increase waste diversion at Longmont schools through possible enhancements to waste management services, infrastructure, and education.

How

- Review current waste management practices and diversion rates
- Identify potential improvements in service and/or waste infrastructure
- Develop informational and educational resources to be used in schools

Who

Lead: Public Works and Natural Resources (Sanitation, Environmental Services)

Support:

- Saint Vrain Valley School District
- Waste service providers
- Public Works and Natural Resources (Business Services)

Resources

Needs funding:

- Waste management service and/or infrastructure enhancements
- Education and outreach materials
- Outreach and education contractor

Likely accomplished with existing resources:

- Staffing for coordination
- Support developing informational and educational materials

Near-term

WA-3: DEVELOP A STRATEGIC WASTE MANAGEMENT PLAN WITH REGIONAL PARTNERS

A coordinated waste management plan with regional partners is needed to address the long-term needs and opportunities surrounding waste management, diversion, facilities, and programming.

How

- Allocate resources for plan creation
- Assess baseline conditions, opportunities, and constraints
- Include efforts to educate residents and address equity concerns
- Work with regional partners to share responsibilities, costs and benefits
- Develop and implement plan

Who

Lead: Public Works and Natural Resources (Sanitation, Environmental Services, Business Services)

Support:

- Regional municipalities
- Waste service providers
- Boulder County
- Resource Conservation Advisory Board (RCAB)

Resources

Needs funding: Technical/consulting services for leading plan development

Likely accomplished with existing resources: Staffing for plan development support

WA-4: INCREASE PUBLIC EDUCATION AND AWARENESS ABOUT WASTE REDUCTION AND DIVERSION OPPORTUNITIES

The City of Longmont has partnered with Eco-Cycle to help publicize waste reduction options in Longmont. This strategy focuses on ensuring that the City of Longmont is a model for waste reduction and diversion activities.

How

- Review and update signage and information at City waste receptacles
- Maintain an inventory of ways that residents, businesses, and multi-family housing units can reduce and divert waste
- Develop an informational campaign to share tips and resources for waste reduction and diversion opportunities
- Explore adoption of a zero waste event policy for the City of Longmont
- Monitor and track waste from City operations and identify ways to increase diversion
- Work with waste providers and other partners to hold zero-waste events
- Make waste consumption and diversion data available to the public
- Promote through the Sustainable Business Program

Who

Lead: Public Works and Natural Resources (Sanitation, Environmental Services, Business Services)

Support:

- Purchasing
- Planning and Development Services
- Waste service providers
- Boulder County

Resources

Needs funding:

- Signage and outreach materials
- Potential contract services

Likely accomplished with existing resources:

- Staffing for communication and outreach materials

COMMUNITY IN ACTION

Bizzy B's

Bizzy B's is a scrap metal recycler in Longmont that has embraced the community to assist with a variety of programs, including the volume scrap metal recycling business that it started over 12 years ago. Bizzy B's has partnered with the City of Longmont on a refrigerator recycling program, supported Environmental Protection Agency contractors during the flood recovery efforts, and has relationships with other community businesses including Longmont United Hospital and the St. Vrain Valley School District. In addition, Bizzy B's partners with local organizations to offer fund-raising drives centered around metal recycling.



WA-5: INCORPORATE DIVERSION TARGET FOR CITY CONSTRUCTION PROJECTS AND LONGMONT URBAN RENEWAL AUTHORITY (LURA) PROJECTS INTO STANDARD CONTRACT LANGUAGE

To reduce the amount of waste landfilled from City and LURA construction projects, this strategy aims to establish a waste diversion target for all contractors to commit to achieving to be awarded the project.

How

- Research potential diversion targets for construction projects
- Identify resources for contractors ahead of instituting diversion requirements
- Revise procurement process and contract requirements
- Provide information and support to contractors during the construction process
- Partner with Northern Colorado communities
- Develop a process and infrastructure for gradual ramp up to accommodate waste diversion

Who

Lead: Purchasing

Support:

- Public Works and Natural Resources (Sanitation, Environmental Services, Engineering)
- Planning and Development Services
- Waste service providers
- Resource Conservation Advisory Board

Resources

Likely accomplished with existing resources:

- Requirement research and process development
- Staffing for communicating and upholding requirements



Mid-term

WA-6: ADOPT A COMMERCIAL RECYCLING ORDINANCE THAT INCLUDES MULTI-FAMILY UNITS

The City curbside recycling service in Longmont is currently focused on residential households. This strategy focuses on addressing commercial recycling needs and requirements, which includes multi-family complexes with 8 units or more. In 2016, waste service provider Western Disposal noted a participation rate of approximately 30% of commercial customers in voluntary recycling services.

How

- Identify barriers and solutions, including options for compliance, for a commercial recycling ordinance that would include multifamily buildings; if viable proceed to adoption
- Proactively work with business community and waste haulers to prepare for potential ordinance adoption
- Draft ordinance and present to Council

Who

Lead: Public Works and Natural Resources (Sanitation, Environmental Services)

Support:

- Planning and Development Services
- Waste service providers
- Chamber of Commerce and business organizations
- Boulder County Partners for a Clean Environment

Resources

Likely accomplished with existing resources:

- Staffing for ordinance research and development
- Staffing for communications and outreach

WA-7: INCREASE HAZARDOUS/ E-WASTE/ MATERIALS DROP-OFF OPPORTUNITIES

This strategy focuses on increasing opportunities for Longmont community members to drop-off and/or recycle hazardous and electronic waste materials.

How

- Work with regional partners to identify needed services
- Work locally to identify areas of the City that would most likely utilize additional material pick-ups
- Organize logistics for staffing and collection/disposal methods
- Advertise collection events and collection programs
- Host collection/drop-off events

Who

Lead: Public Works and Natural Resources (Sanitation, Environmental Services)

Support:

- Waste service providers
- Boulder County

Resources

Needs funding:

- Waste collection events and disposal
- Staffing for collection/pick-up organization and implementation (estimated at 0.1 FTE)

Likely accomplished with existing resources:

- Staffing for coordination with regional partners



WA-8: ESTABLISH A CONSTRUCTION DEMOLITION WASTE INCENTIVE PROGRAM

In order to incentivize building reuse and reduce the amount of waste from demolition ending up in landfills, a waste incentive program for construction demolition materials and/or activities is the focus of this strategy.

How

- Explore capabilities for managing construction waste and opportunities for incentive funding
- Explore thresholds and mechanisms to incentivize/encourage building and materials reuse/recycle
- Develop incentive structures and program requirements
- Develop and share communications materials about incentive program
- Explore effective tracking mechanisms for C&D waste

Who

Lead: Planning and Development Services

Support:

- Public Works and Natural Resources (Sanitation, Environmental Services)
- Waste Service Providers

Resources

Needs funding: Technical/consulting support on incentive levels, legal requirements, etc.

Likely accomplished with existing resources: Staffing for research and development

Future Areas of Emphasis

- Weekly recycling collection
- Clarify services for mixed use development
- Opportunities to participate in a regional construction and demolition disposal site for residential and commercial customers
- Waste stream audit to review for potential revenue sources
- Commercial composting



Water



OVERVIEW

Water in a semi-arid climate is an especially valuable resource that supports life, provides habitat, and serves basic community needs. A sustainable water supply for a community is one that is reliable, clean, sufficient for current and future needs, and responsibly managed to reduce negative environmental impacts. Longmont, like other communities along the Front Range, will see increased water demands in the future and has been planning for and developing a sustainable water supply for years. Several plans have been developed to inform and guide responsible water management, including the Raw Water Master Plan, Water Supply and Drought Management Plan, Water Conservation Master Plan, Future Water Demand Evaluation and Riparian Area Protection Plan. Protection of the watershed, floodplains, and riparian corridors is also a key component of Longmont's planning for responsible management of our water resources.

Water is intricately linked to many other sustainability topics, including energy use, food and agriculture, economic vitality, and the natural environment. For example, tree planting greatly influences stormwater volumes and costs associated with water treatment and conveyance. According to a recent Tree Canopy Study conducted for the City of Longmont, the economic value of a 2008 baseline of 8% tree canopy coverage was \$8 million in avoided water costs, and increasing the canopy to 25% could result in over \$20 million in avoided water treatment and conveyance costs.

Stewardship of Longmont's water supply and water quality is critical to achieving the City's vision for sustainability. The community, the natural environment, agriculture and economy are all linked to and dependent upon clean water availability and a healthy watershed.

The following water priorities were identified to be addressed in the Sustainability Plan:

- Water supply and management
- Watershed quality and preservation



Linking to Envision Longmont

Guiding Principle		Goals
GP5	Responsible stewardship of our resources	5.1 Protect and conserve Longmont’s natural resources and environment.
		5.2 Maintain a quality renewable water supply to meet the long-term needs of the community.
		5.5 Recognize and enhance the ecological functions of the City’s system of parks, open space, greenways, waterways, and urban forest.
GP6	Job growth and economic vitality through innovation and collaboration	6.3 Address building space, infrastructure needs, and other considerations of target industries and the workforce.

Related Topics



BE PART OF THE SOLUTION

It’s easy to conserve and protect water both indoors and outdoors. For example:

- Upgrade faucets and fixtures to low-flow or high efficiency ones or install aerators
- Take shorter showers
- Run your dishwasher and washing machine only when full
- Reduce car washing
- Adjust your outdoor sprinkler system
- Sweep your sidewalk instead of spraying it
- Direct downspouts to landscaped areas
- Keep toxic liquids out of the gutter

CITY IN ACTION

The City of Longmont conducts **regular monitoring of water quality and aquatic life conditions** throughout the watershed, including monitoring of water levels, chemicals, nutrients, and sediment. Through the Keep It Clean Partnership the City provides ongoing **public education** to reduce contaminants in stormwater runoff.

The City of Longmont’s **water conservation programs** include voluntary lawn watering schedule programs, free sprinkler inspections, Water-Wise landscaping seminars, free indoor water audits, and water-saving fixture and appliance rebates.

The City of Longmont has recently implemented myriad efficiency and capacity-enhancing projects at its water and wastewater treatment facilities including a centrifuge, and new aeration and clarification tanks. Furthermore, improvements to the raw water irrigation system in parks saved 70 million gallons of potable water in 2015.

WATER SUPPLY AND DROUGHT MANAGEMENT PLAN

Updated annually, the Water Supply and Drought Management Plan manages the City's Water Supply and aims to anticipate, identify and respond to drought in the Saint Vrain Creek watershed area. With the mission of "conserving our water to preserve our quality of life", this plan evaluates the impact on raw water availability for Longmont and formalizes planning for future droughts. The plan is managed by the Water Resources & Environmental Services Division of the Public Works & Natural Resources Department whom monitor the indicators of drought and recommended responses to the current water supply and demand forecast.

WATER CONSERVATION MASTER PLAN

Developed in 1996 and revised in 2008, the Water Conservation Master Plan supports Longmont's ongoing water conservation, public education, and residential customer rebate programs. The purpose of the plan is to profile the current raw water supply and treatment capacity and assess the City's current and future water use. This information frames the City's conservation programs with respect to current and future water supply needs and water demand management. In light of developing trends and technology, Longmont is committed to the continued responsible and efficient use of this precious resource to maintain a high quality of life in a sustainable manner. The Water Conservation Master Plan is set to be updated beginning in 2016, with completion in 2017.

Objective: *Preserve the natural environment in our watershed and provide a reliable, high quality water supply that protects public health.*



Targets

<input type="checkbox"/>	Reduce customer and City raw water demands by 10% by community buildout (estimated at 3,500 acre-feet by 2048) through water conservation efforts
<input type="checkbox"/>	Decrease the utility cost burden for low-income households through conservation measures
<input type="checkbox"/>	Ensure safe drinking water for all households in Longmont's water service areas by developing a plan addressing consecutive systems
<input type="checkbox"/>	Maintain or increase watershed health

WATER-ENERGY NEXUS

The water-energy nexus refers to the interconnected relationship between the use of water and the use of energy. The production of energy requires a significant amount of water; likewise, the extraction, treatment, distribution, and use of water followed by the collection and treatment of wastewater requires a tremendous amount of energy. Therefore, conserving water saves energy and vice versa.

Treating water is one of the most energy intensive stages in the water cycle. Much of this energy intensive treated water is lost via system leaks (estimated to be as much as 10-15%!) as well as being used for end uses that may not require potable water such as irrigation and flushing toilets. The most common form of energy used in a water and wastewater treatment plant is electric energy. Approximately 4% of the nation's electricity is used for treating and distributing potable water and treating wastewater.

Along the Front Range, Longmont is fortunate to have access to a surplus amount of high quality drinking water for the current population, much of which uses gravity rather than pumps for distribution. However, with such fortunate circumstances comes the opportunity to maintain and steward this resource for future generations as well as the natural ecosystems that rely on clean water to thrive.

Strategies

Near-term

W-1: IMPLEMENT IDENTIFIED STRATEGIES WITHIN THE WATER EFFICIENCY MASTER PLAN

This strategy focuses on implementing the strategies within the recently adopted Water Efficiency Plan. The plan identifies a mix of indoor, outdoor, water audit, and education and outreach water efficiency programs for implementation.

How

- Implement indoor water conservation measures identified in the Water Efficiency Master Plan and evaluate annually for impact on conservation goals
- Implement outdoor water conservation measures identified in the Water Efficiency Master Plan and evaluate annually for impact on conservation goals
- Align the program offerings to available resources annually
- Tie into Sustainable Business Program

Who

Lead: Public Works and Natural Resources (Environmental Services, Water Resources)

Support:

- Boulder County Public Health
- Community Services
- Planning and Development Services

Resources

Needs funding:

- Staffing for implementation of water conservation strategies (0.5 FTE)
- Annual Water Efficiency Program funding
- Evaluation and data analysis

COMMUNITY IN ACTION

Front Range Community College Student Government

The Front Range Community College Student Government has prioritized and advocated for a number of sustainability initiatives on campus, including the installation of two water bottle filling stations. To date, these water bottle filling stations have saved more than 13,000 water bottles!



W-2: COMPLETE AN ANALYSIS OF WATER LOSS AND RECOMMEND STRATEGIES FOR SUBSEQUENT ACTIONS

A better understanding of the factors that affect water loss in the City's treated water distribution system is needed to develop actionable recommendations for how to maintain system integrity and/or reduce losses in the system. An engineering analysis will provide basis for future strategies related to leak detection, aging infrastructure and associated replacements needs (asset management).

How

- Perform an evaluation with current information and Complete an engineering analysis of water loss that includes:
 - A detailed water balance to identify water losses
 - An assessment of current water system infrastructure/pipe conditions, replacement needs and current asset management methods
 - Development of a leak detection program
 - A review of current water audit methods compared to AWWA or other relevant standards
- Recommendations for future actions based on the above analyses that can be implemented as strategies in updates to the Sustainability Plan, the Water Efficiency Master Plan, and other related City planning documents

Who

Lead: Public Works and Natural Resources (Environmental Services, Water Resources)

Support:

- Public Works and Natural Resources Operations and Maintenance
- Public Works and Natural Resources Business Services
- Public Works and Natural Resources Water Resources
- Shared Services

Resources

Needs funding: Technical/consulting support for study and plan development

RAW WATER MASTER PLAN

Updated in 2003 from the original 1990 plan, Longmont's Raw Water Master Plan serves as a guide for the development of raw water resources through the buildout of the Longmont Planning Area (LPA). Since 1990 a period of significant growth and change has occurred with the completion of a pipeline to deliver Colorado-Big Thompson (C-BT) water directly to Longmont year-round, completion of the Windy Gap Project, and changes in water rights for Longmont's use. In response to the positive impacts of these changes, the updated plan analyzes alternative projects and provides guidelines for continued evaluation of those alternative projects with respect to attaining Longmont's goals for its water supply system. Twelve guiding principle goals, developed by City Staff and the Water Board, continue to guide Longmont's water supply system planning.

W-3: DEVELOP A STRATEGIC WATER QUALITY IMPROVEMENT AND ENFORCEMENT PLAN FOR CONSECUTIVE SYSTEMS

A consecutive system is a public water system that receives, through purchase or other means, treated water from another system and distributes that water through a distribution system it owns. Consecutive systems are found in several Longmont mobile home and multi-family communities. This strategy focuses on addressing water quality and adequate monitoring of these systems to ensure all Longmont residents have access to quality drinking water.

How

- Work with Boulder County Public Health to identify means to test and improve water quality in areas with consecutive water systems
- Develop enforcement protocol of federal drinking water standards in conjunction with local partners
- Provide funding for consecutive system rehabilitation
- Evaluate conversion of consecutive systems to public system
- Review and revise City ordinances as necessary to support safety of consecutive systems
- Identify existing consecutive systems

Who

Lead: Public Works and Natural Resources

Support:

- Boulder County Public Health
- Community Services
- Planning and Development Services (Building Inspection)

Resources

Needs funding:

- Technical/consulting support for plan development and expanded testing
- Staffing for enforcement (estimated at 0.1 FTE)

Likely accomplished with existing resources:

- Coordination with Boulder County Public Health

W-4: COORDINATE WITH BOULDER COUNTY PUBLIC HEALTH ON MODEL GREYWATER (WATER REUSE) ORDINANCE

Greywater is the water that is produced from household activities (with the exception of wastewater from the toilet). Greywater systems allow for the reuse of this water, but must meet minimum design and construction standards. Boulder County will be developing a model ordinance for greywater activities. This strategy emphasizes coordination with Boulder County on the development of this ordinance and local control oversight programs.

How

- Work with Boulder County to develop and review a model ordinance
- Adopt a local greywater ordinance that mirrors the Boulder County ordinance

Who

Lead: Boulder County Public Health

Support:

- Public Works and Natural Resources
- Planning and Development Services

Resources

Likely accomplished with existing resources: Coordination with Boulder County Public Health



W-5: CREATE AN ACTIVE WATERSHED MANAGEMENT PROGRAM

This strategy focuses on leveraging existing efforts focused on watershed planning and recovery and launching a more coordinated and centralized program to enhance and expand watershed monitoring and management.

How

- Increase and enhance existing water quality monitoring and information sharing throughout the watershed
- Inventory standard and emerging contaminants
- Establish a comprehensive baseline of water quality conditions by 2020
- Incorporate watershed protection into the next update of the Button Rock Forest Stewardship Plan

Who

Lead: Public Works and Natural Resources (Environmental Services)

Support:

- Regional communities
- Saint Vrain Creek Coalition
- Boulder County Public Health
- Keep it Clean Partnership
- US Forest Service

Resources

Needs funding: staffing for program administration

Future Areas of Emphasis

- Water-energy nexus

Implementation

MONITORING AND MANAGEMENT

This Sustainability Plan was developed to be iterative and dynamic in nature as opposed to a plan developed for a point in time and put on the shelf. As such, it is intended to be strategic and focused on realistic actions that can be implemented immediately and in the near and mid-term to help Longmont achieve its sustainability vision.

A commitment to routine implementation check-ins and periodic adjustments will help the Sustainability Plan stay on course and remain relevant to changing needs and priorities. At least twice a year, the Sustainability Advisory Committee, in coordination with City staff, the Envision Longmont implementation team, and other interested stakeholders and/or City leaders, will review each of the strategies in this Plan, and will note the implementation status as complete, in progress, upcoming, on hold, and/or removed. During this process, participants will also discuss changing needs or priorities, lessons learned, and possible recognition opportunities.

This regular monitoring of progress will help keep implementation of the Plan on track and on-schedule. Furthermore, it can help identify when corrective action may be needed to get implementation back on track, when an update to the implementation time line is needed, or when Plan needs or priorities have shifted and Plan updates are needed.

The following table summarizes the strategies detailed in earlier sections of this Plan and organizes them by anticipated completion time. In order to keep the implementation activities on-task and on-schedule, it is important to ensure that adequate staffing and resources are in place to lead and support these efforts.

Estimated additional City resources needed (e.g., staffing, funding sources, capital investments, etc.) to implement each strategy are also identified in this summary table and throughout the document for reference. Note that these are preliminary estimates only to help illustrate potential level of effort and resource needs or gaps. It is assumed that a Full Time Equivalent (FTE) position is based on a 40-hour work week (i.e., an 0.1 FTE estimate indicates that implementation of the strategy might require an estimated 4 hours per week). However, each FTE estimate is not necessarily a new position – instead, it is likely that in many cases these resource needs could be accommodated by shifting workloads and/or priorities among current City of Longmont staff positions. Furthermore, it should be noted that funding levels, sources, staffing decisions, and capital investments to support implementation of the Sustainability Plan are to be determined by City Council, not by this Plan.

Role of the Sustainability Coordinator

Fundamental to the success of this Plan is continued funding of a full-time Sustainability Coordinator for the City of Longmont. Not only will the Sustainability Coordinator be directly responsible for leading implementation of many of the strategies within this Plan, but he/she will also help coordinate a monitoring and evaluation process, and lead sustainability reporting and communications for Longmont (see the following pages for more details on these implementation efforts).

Immediate (2017-2019)

Strategies	Estimated Additional Resources Needed
AQ-1: Increase inspections of emissions from oil and gas sites	<ul style="list-style-type: none"> • Staff time for additional inspections (estimated at 0.1 FTE) • Additional equipment if necessary
BI-1: Expand indoor air quality testing program	<ul style="list-style-type: none"> • Monitoring devices • Staffing for educational program and testing (estimated at 0.1 FTE) • Development of educational program materials
C-1: Expand existing neighborhood programs to enhance sustainability, resiliency, and quality of life	<ul style="list-style-type: none"> • Staffing for program design and administration (estimated at 0.5 FTE) • Sustainability Evaluation System adaptation
C-2: Develop an inclusive standard of equitable access and opportunity for all residents that enhances capacity and is implemented uniformly across all city departments, policies, programs, and outcomes	<ul style="list-style-type: none"> • Analysis and outreach for evaluation • Implementation strategies and action • Ongoing adaptation of resources and materials to meet new standards
EV-1: Create a Longmont sustainable business recognition program	<ul style="list-style-type: none"> • Annual recognition event and materials • Staffing for program design and administration (estimated at 0.25 FTE)
E-1: Review energy efficiency improvement and renewable energy generation opportunities for municipal facilities	<ul style="list-style-type: none"> • Facility improvements (ongoing)
E-2: Continue collaboration with Energy Outreach Colorado to expand energy services for low-income households	<ul style="list-style-type: none"> • Additional incentives/support • Program implementation
NE-1: Update the Open Space Master Plan	<ul style="list-style-type: none"> • Technical/consulting support for plan review, development, and recommendations via public process
NE-2: Update the Wildlife Management Plan	<ul style="list-style-type: none"> • Technical/consulting support for plan review, development and recommendations via public process as well as policy implementation
WA-1: Build support for participation in the curbside composting program	<ul style="list-style-type: none"> • Sponsors for program participation
WA-2: Provide waste diversion opportunities and education for St. Vrain Valley School District	<ul style="list-style-type: none"> • Waste management service and/or infrastructure enhancements • Education and outreach materials • Outreach and education contractor

Near-Term (2019-2022)

Strategies	Estimated Additional Resources Needed
AQ-2: Expand air quality information and monitoring	<ul style="list-style-type: none"> Ozone monitor Staffing for monitoring and communication
AQ-3: Develop an ozone reduction incentive and enforcement program	<ul style="list-style-type: none"> Educational materials and incentives Staffing for program administration and enforcement (estimated at 0.1 FTE)
AQ-4: Adopt and enforce leak detection and repair associated with oil and gas operations	<ul style="list-style-type: none"> Additional monitoring equipment and training Oil and Gas Coordinator position and monitoring equipment
BI-2: Preserve, improve, and rehabilitate existing affordable homes	<ul style="list-style-type: none"> Affordable Housing Fund to support preserving/improving existing affordable housing Expanded owner-occupied Housing Rehabilitation Program to improve efficiency, safety, and longevity
BI-3: Develop and implement a process to incorporate social equity into prioritizing infrastructure improvements	<ul style="list-style-type: none"> Priority projects not included within the CIP Community Asset Mapping
BI-4: Adopt a policy to require life cycle cost and sustainability analyses for all City of Longmont projects and programs	<ul style="list-style-type: none"> Staffing for cost and sustainability analyses
BI-5: Revise and update the City of Longmont Design Standards and Construction Specifications to include sustainability	<ul style="list-style-type: none"> Staffing to support standard development
BI-6: Develop 'beyond' building code	<ul style="list-style-type: none"> Staffing or outside resources for code and incentive development Staffing for training and outreach after adoption Potential incentives (based on strategy development)
EV-2: Work with local economic development organizations to support local businesses and attract and expand green industry/clean tech jobs	<ul style="list-style-type: none"> Marketing materials and outreach strategy development Staffing for coordination (estimated at 0.1 FTE)
EV-3: Reinstate the Pollution Prevention Program	<ul style="list-style-type: none"> Development of program materials Staffing for program design and administration (estimated at 0.25 FTE)
EV-4: Establish and promote a City of Longmont internal sustainable purchasing policy	
EV-5: Identify needs, barriers and opportunities to establish equitable access for underutilized, under-represented, and/or multi-cultural businesses and support through expanded programming	<ul style="list-style-type: none"> Development of communications materials and assistance resources Staffing for program design and administration (estimated at 0.1 FTE)
EV-6: Partner with local educational institutions to connect sustainability knowledge and workforce needs	<ul style="list-style-type: none"> Staffing for program design and administration (estimated at 0.1 FTE)

E-3: Improve Commercial Building Efficiency	<ul style="list-style-type: none"> • Additional staff may be needed to expand marketing of the program to City customers • Additional staffing and incentives for PRPA may be needed to accommodate increases in program participation
E-4: Develop a comprehensive 100% renewable electricity plan for Longmont’s just transition to a clean energy economy	<ul style="list-style-type: none"> • Plan development and implementation
E-5: Report and benchmark energy use	<ul style="list-style-type: none"> • Staffing for benchmarking program development and implementation (estimated at 0.5 FTE or greater) • Staffing, consulting resources, or technology investments for aggregating and sharing energy data and sharing with customers (estimated at 0.5 FTE or greater)
FS-1: Identify barriers and opportunities for local food production	<ul style="list-style-type: none"> • Staffing for coordination (estimated at 0.1 FTE)
FS-2: Encourage and support the Boulder County Resource Conservation Board in pursuing carbon sequestration studies	<ul style="list-style-type: none"> • Study sponsorship • Staffing for coordination (estimated at 0.1 FTE)
FS-3: Expand connections between local food producers and areas/populations in need	<ul style="list-style-type: none"> • Staffing for coordination efforts (estimated at 0.1 FTE)
NE-3: Work with community partners to promote education and awareness about regenerative land management practices on private properties	<ul style="list-style-type: none"> • Educational resources and training program development
NE-4: Update the Tree Canopy Management and Replacement Plan	
T-1: Coordinate with RTD to expand service and hours to key community locations	
T-2: Develop a fleet efficiency and alternative fuels plan	
T-3: Coordinate with regional partners on publicizing car/van pooling	<ul style="list-style-type: none"> • Staffing for coordination and communications (estimated at 0.1 FTE)
T-4: Increase electric vehicles through vehicle incentives and improved infrastructure	<ul style="list-style-type: none"> • Program development and implementation
T-5: Audit all transit stops to evaluate accommodation needs of all residents and prioritize improvements	<ul style="list-style-type: none"> • Staffing to support audit documentation and assessment (estimated at 0.25 FTE)
WA-3: Develop a strategic waste management plan with regional partners	<ul style="list-style-type: none"> • Technical/consulting services for leading plan development
WA-4: Increase public education and awareness about waste reduction and diversion opportunities	<ul style="list-style-type: none"> • Signage and outreach materials • Potential contract services
WA-5: Incorporate diversion target for City construction projects and Longmont Urban Renewal Authority (LURA) projects into standard contract language	

W-1: Implement identified strategies within the Water Efficiency Master Plan

- Staffing for implementation of water conservation strategies (0.5 FTE)
- Annual Water Efficiency Program funding
- Evaluation and data analysis

Mid-Term (2022-2026)

Strategies	Estimated Additional Resources Needed
C-3: Collaborate with St. Vrain Valley School District on a preparedness and resilience site	<ul style="list-style-type: none"> • School district site improvements
E-6: Monitor advanced metering infrastructure implementation	
FS-4: Support and expand Garden to Cafeteria program opportunities	<ul style="list-style-type: none"> • Staffing for coordination efforts (estimated at 0.1 FTE)
FS-5: Support the establishment of community food processing and storage facilities in partnership with Boulder County	<ul style="list-style-type: none"> • Staffing for coordination efforts (estimated at 0.1 FTE)
NE-5: Create and implement a plan to restore and remediate damaged ecologically sensitive areas and critical corridors and habitat areas	<ul style="list-style-type: none"> • Technical/consulting support for plan development • Restoration and remediation projects
T-6: Support growth in active transportation and transit ridership through implementation of the Multimodal Transportation Plan	<ul style="list-style-type: none"> • Infrastructure improvements on public property • Staffing for expanded program offerings and/or materials (estimated at 0.25 FTE)
WA-6: Adopt a commercial recycling ordinance that includes multi-family units	
WA-7: Increase hazardous/ e-waste/ materials drop-off opportunities	<ul style="list-style-type: none"> • Waste collection events and disposal • Staffing for collection/pick-up organization and implementation (estimated at 0.1 FTE)
WA-8: Establish a construction demolition waste incentive program	<ul style="list-style-type: none"> • Technical/consulting support on incentive levels, legal requirements, etc.
W-2: Complete an analysis of water loss and recommend strategies for subsequent actions	<ul style="list-style-type: none"> • Technical/consulting support for study and plan development
W-3: Develop a strategic water quality improvement and enforcement plan for consecutive systems	<ul style="list-style-type: none"> • Technical/consulting support for plan development and expanded testing • Staffing for enforcement (estimated at 0.1 FTE)
W-4: Coordinate with Boulder County Public Health on model greywater (water reuse) ordinance	<ul style="list-style-type: none"> • Coordination with Boulder County Public Health
W-5: Create an active watershed management program	<ul style="list-style-type: none"> • Staffing for program administration

Ongoing (Underway with continued focus)

Strategies	Estimated Additional Resources Needed
BI-7: Adopt and Enforce Updated Building Code	<ul style="list-style-type: none"> Staffing for more robust inspection and enforcement Staffing for contractor training
C-4: Incorporate the City of Longmont’s community engagement model into all City plans and projects	
E-7: Continue to provide energy efficiency outreach and incentives for all energy users	<ul style="list-style-type: none"> Continued energy efficiency incentives
E-8: Continue to provide and increase participation in a contractor energy efficiency training program in partnership with Platte River Power Authority	<ul style="list-style-type: none"> Participation incentives
E-9: Monitor and Reduce Greenhouse Gas Emissions	<ul style="list-style-type: none"> Staffing or outside resources for comprehensive GHG inventories
E-10: Expand awareness and partnership opportunities for solar installations and renewable subscriptions	
FS-6: Encourage and support agricultural research in Boulder County	<ul style="list-style-type: none"> Staffing for coordination (estimated at 0.1 FTE)
NE-6: Continue and increase participation in existing volunteer programs	<ul style="list-style-type: none"> Volunteer recruitment and oversight
T-7: Explore alternative funding streams to continue the Ride Free transit program	<ul style="list-style-type: none"> Ride Free transit program funding

MEASUREMENT AND EVALUATION

As the Sustainability Plan is implemented, it will be critical to monitor, measure, and evaluate the progress towards achieving the targets identified in this Plan (as compared to the baseline conditions). 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. Although this plan focuses specifically on the monitoring and evaluation of sustainability strategies, the implementation of a Monitoring and Evaluation Specialist to track, record, and coordinate information from projects and programs across departments could help create greater efficiencies in the use of resources over time.

The following table summarizes the sustainability targets in this Plan to be monitored over time. This list will likely expand and be updated as are more stakeholders participate and become involved in monitoring and evaluation activities, and as the Envision Longmont indicator evaluation efforts get underway. Additionally, exploration and determination of baseline conditions for many of these targets is a necessary step before ongoing measurement and evaluation can be completed.



Reduce the number of days out of ozone compliance
 Increase local oversight of emissions from oil and gas operations
 Increase public access to local air quality information and information on actions the public can take to improve air quality
 Reduce oil and gas methane emission leaks 60% by 2027



Increase resident awareness of potential indoor air quality problems and solutions to the problems
 Increase the number of environmentally certified buildings in Longmont
 Increase equitable access to foundational community assets for all segments of the community
 Revise City Design Standards and Construction Specifications to incorporate sustainability-related principles by the end of 2018
 All City departments are using life cycle cost and sustainability evaluations for public projects by 2018
 Increase access to housing efficiency, improvement, and assistance opportunities through a one-touch program approach



Increase neighborhood-based sustainability initiatives
 Increase diversity of members in community leadership roles at the neighborhood, local, and/or regional level



Increase cost savings and resource efficiency for businesses through pollution prevention and other sustainable practices
 Increase number of green/clean tech industries (baseline to be defined)
 Increase number of recognized sustainable businesses beyond the eight Longmont businesses certified through Boulder County's Partners for A Clean Environment program
 Adopt an internal City sustainable purchasing policy by 2018
 Expand business opportunities for minority-owned and disadvantaged businesses (baseline to be defined)



Reduce core GHG emissions 66% from the 2016 baseline by 2030
Decrease the utility cost burden for low-income households through energy efficiency measures
Increase electric energy savings to 1% annually through energy efficiency measures by 2020
Increase renewable energy to 100% of Longmont's energy mix by 2030



Increase access to healthy foods through a variety of initiatives such as the Double Up Food Bucks and other programs



Increase public knowledge of regenerative land management practices
Increase tree canopy to 18% or more of the Longmont Planning Area covered by regionally appropriate tree canopy or vegetation
Increase the community's contribution to meeting its demands for managing costs and maintaining and improving parks and open space



Increase equitable access to transportation infrastructure for all segments of the community
Improve air quality related to transportation systems (baseline to be defined)
Reduce transportation fuel consumption by 33% by 2050



Decrease household trash landfilled to less than 2 pounds per capita per day by 2018 (from approximately 2.2 pounds per capita per day in 2015)
Increase residential waste diversion to 50% by 2025
Increase internal waste diversion for all City operations (baseline to be defined)
Increase commercial waste diversion (baseline and target number TBD based on 2018 data collection)



Reduce customer and City raw water demands by 10% by community buildout (estimated at 3,500 acre-feet by 2048) through water conservation efforts
Decrease the utility cost burden for low-income households through conservation measures
Ensure safe drinking water for all households in Longmont's water service areas by developing a plan addressing consecutive systems
Maintain or increase watershed health

Participatory Monitoring and Evaluation

The City of Longmont encourages and welcomes its residents to be involved in all aspects of local government. There are many ways for community members to be involved, from simply staying informed to expressing opinions to volunteering to help the City deliver many of its excellent services. The City of Longmont has developed a framework of varying levels for involving the community, and they range from simply distributing information to listening to residents' ideas for and opinions on specific projects to forming partnerships with individuals and organizations in order to deliver a needed service. The City's community involvement resource manual, *Engaging Citizens*, is a guide to how and when the City might use these different community involvement processes.

Participatory Monitoring and Evaluation (PME) is a process through which stakeholders at various levels engage in monitoring or evaluating a particular project, program or policy, share control over the content, the process and the results and engage in taking actions. PME is an integral component of an overarching Monitoring and Evaluation (M&E) program that serves to actively engage primary stakeholders – those who are impacted by the actions – in the monitoring and evaluation of projects and programs. PME is not formally used by the City of Longmont at this time, but it shares many similar elements as the City’s community involvement philosophy around ranging levels of and options for involvement. The intent of the Sustainability Plan and its implementation is to move towards integrating a relevant PME component into the Plan’s overall M&E operations, wherein stakeholders are more directly involved in the monitoring and evaluation of sustainability achievements, and rely on their experiences and insight to help guide future sustainability-related strategies and actions.

SUSTAINABILITY REPORTING AND COMMUNICATIONS

While community engagement was pivotal to the development of the Sustainability Plan, ongoing reporting and communication about and engagement in the City’s sustainability efforts will be critical to successfully implement and achieve the objectives, strategies, and targets described in the Plan. Elements of the City’s sustainability engagement and communications strategy will include, but are not limited to the following techniques.

Developing an Annual Sustainability Report

In order to capture and communicate the spectrum of sustainability achievements over time, an annual sustainability status report will be prepared to address the following:

- Monitoring and management (strategies completed, in-progress, upcoming, and delayed/removed)
- Measurement and evaluation (targets achieved, target trends, new targets identified)
- Other emerging sustainability topics and priorities in the community and City operations, including review of the future areas of emphasis identified within this Sustainability Plan

The City of Longmont has many avenues to communicate both internally and externally about its sustainability efforts (detailed in following sections), and the status report will be shared in these ways. Additionally, the City will engage community members in the status report process, with techniques such as encouraging and facilitating a community assessment of sustainability conditions, including additional questions on the annual City of Longmont Customer Satisfaction Survey, or enlisting new stakeholders to participate on the Sustainability Advisory Committee.

Building Connections with Neighborhood Groups, Community-Based Organizations and Community Leaders

Longmont’s sustainability communications strategy will 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, and will help guide future sustainability strategies and Plan updates.

The Neighborhood Group Leaders Association (NGLA) is one established vehicle for connecting with the community on a neighborhood level wherein Group Leaders serve as important conduits for communication and information sharing between residents and City and community leaders. There are also many community-based organizations working to provide connections between residents, neighborhoods, employers, services, the City organization and other resources.

Convening of a Sustainability Coalition

To support continued community involvement, it will be beneficial to have a dedicated group focused on the Sustainability Plan's implementation and progress and leading coordination with community members and other City of Longmont boards (e.g., the Board of Environmental Affairs). The exact composition and role of this committee will be defined during the early stages of Plan implementation, in coordination with Envision Longmont implementation efforts. However, it is currently envisioned that this group will involve participants from the Sustainability Advisory Committee that was convened to guide the Plan development process, and will likely to be expanded to include other members of the community.

Hosting a Sustainability Summit

During the planning process, the concept of an annual Sustainability Summit emerged as an approach to connect residents and businesses with sustainability opportunities, recognize sustainability champions and partners, gather community feedback, and share information on Sustainability Plan progress. Such event would be hosted by the Sustainability Advisory Committee but would include other community sustainability partners.

Sharing of Information via City's Communication Outlets

The City has a number of well-established outlets for sharing information including the City's website, social media, a monthly newsletter, a public access television channel, news releases, and topic-based e-notifications. All of these outlets will be included in future sustainability communications, and will be coordinated to reflect the Longmont Sustainability branding.

Development of a Sustainability Engagement Toolkit

A final, overarching strategy that touches all aspects of this Plan is sustainability education, both within the City organization, and with the community at large. The ongoing development and maintenance of a sustainability engagement toolkit will support these educational efforts. This toolkit will be a continually growing collection of resources for City of Longmont staff with the intent of providing tips and tools to effectively share information with and engage various groups in sustainability discussions. Components of this toolkit will develop over time and will include sustainability posters and fliers (in English, Spanish, and possibly other languages), document templates, sample engagement activities/methods, an event calendar, and reference tips (e.g., lessons learned from previous event experiences).

SUSTAINABILITY PLAN MAINTENANCE

Along with ongoing implementation and performance monitoring and annual status reports, the Sustainability Plan itself will need periodic review and updates in order to make sure it reflects community priorities and resources. A formal update to the Plan document (including objectives, targets and strategies) is recommended at least every 5 years so that it remains a guiding document that drives action and sustainability progress. On an annual basis, in coordination with the annual report process, the list of future areas of emphasis, targets, and strategies will be reviewed, supplemented, and prioritized (to the extent possible) to streamline the more formal Plan update process.

APPENDIX A: RELATED PLANS

Advance Longmont Economic Development Strategy (2014-2019)
Age Well Boulder County Strategic Plan (2015)
Boulder County Environmental Sustainability Plan (2012)
Boulder County Regional Trails Plan Update (2006)
Boulder County Sustainable Energy Plan (2008)
Boulder County Transportation Master Plan (2012)
Boulder County Zero Waste Action Plan (2010)
Envision Longmont Multimodal and Comprehensive Plan (2016)
City of Longmont Forestry Standards and Specifications (2014)
City of Longmont Multicultural Plan (2001)
City of Longmont Parks, Recreation and Trails Master Plan (2014)
City of Longmont Raw Water Master Plan Update – Executive Summary (2003)
City of Longmont Riparian Protection Plan (2011)
City of Longmont Water Conservation Master Plan (2008)
City of Longmont Water Demand Evaluation (2012)
City of Longmont Water Supply & Drought Management Plan (2015/2016)
City of Longmont Wildlife Management Plan (2005)
Colorado Annual Air Quality Data Reports
Colorado Climate Plan (2015)
Colorado’s Water Plan (2015)
LiveWell Longmont Survey & Community Listening: Report of Findings (2011)
Longmont Power & Communications – NextLight™ Report to the Community (2015)
Longmont Urban Renewal Authority Annual Report (2015)
Longmont Urban Tree Canopy & CITYgreen Analysis Project Report (2008)
Open Space and Trails Master Plan (2002)
Platte River Power Authority Integrated Resource Plan (2012)
Revised Carbon Monoxide Maintenance Plan for the Longmont Attainment/ Maintenance Area (2007)
Saint Vrain Basin 319 Plan: Boulder Creek, Saint Vrain Creek and Tributaries (2015)

APPENDIX B: 2016 STATE OF SUSTAINABILITY

This appendix provides a summary snapshot of current conditions and trends related to sustainability in the Longmont community, provided a common foundation of knowledge to inform the Sustainability Plan update. Note that this information is intended to highlight major trends and current conditions in the Longmont community and is not intended to be an exhaustive or fully inclusive synopsis of all available sources or data points. As applicable, baseline conditions related to each target and/or strategy are also included in the main portions of the Plan document.



AIR QUALITY

Ozone and particulate matter

To support the improvement of air quality in Longmont and along the Denver Metro and Front Range regions, Longmont is a member of the Regional Air Quality Council (RAQC) and monetarily supports its efforts. Air Quality information for Longmont is currently available on the CDPHE website (www.colorado.gov/cdphe).

The most common air pollutants, also known as “criteria pollutants,” include ground-level ozone, carbon monoxide, particulate matter, sulfur oxides, nitrogen oxides, and lead. Ozone pollution, in particular, has re-emerged as a significant air quality problem along the Front Range. Under the 2008 federal eight-hour ozone standards, Longmont is part of the Denver Metro/Front Range designated non-attainment area. This non-attainment designation means that ozone levels exceed 75 parts per billion (ppb), and the more stringent threshold of 70 ppb revised in 2015 in the Ozone National Ambient Air Quality Standards (NAAQS) Memorandum. While the state does not maintain ozone monitoring devices in Longmont, there are five monitoring stations along the Front Range that have indicated levels that exceed allowable limits. Since ozone can migrate relatively freely, Longmont is both impacted by and directly impacts ozone levels in adjacent communities. Additionally, as part of the Carbon Monoxide Maintenance Plan with the Colorado Department of Public Health and Environment (CDPHE), Longmont has committed to maintaining carbon monoxide 1 hour maximums under 35 parts per million (ppm) and 8 hour maximums under 9 ppm.

Exposure to elevated particle pollution concentrations can harm public health and the environment. For example, particulate matter less than 10 micrometers (i.e., PM10 and PM2.5) in diameter pose serious problems because they can be inhaled, getting deep into the lungs or bloodstream. Vulnerable populations including the elderly, young children, and those with pre-existing heart or respiratory diseases are at highest risk. The air quality monitoring station in Longmont (located at the Longmont municipal site) measures particulate matter (PM10 and PM2.5). The most recent exceedance for PM2.5 levels at this site was in 2012.



BUILDINGS AND INFRASTRUCTURE

Resilient and sustainable design

Longmont adopted the 2015 International Building Code for commercial and residential properties in early 2016. The International Building Code adoption cycle is on track to support net zero energy construction by 2030. Updates to zoning districts, development and design standards, development review practices, and floodplain boundaries are identified as near-term strategies to be implemented consistent with Envision Longmont recommendations.

There are at least five LEED Certified projects in Longmont, including three businesses and two residences. In the Longmont planning area, there is the potential to build 1.6 million square-feet of commercial space and 2.8 million square-feet of industrial space. This presents a substantial opportunity to integrate resilient and sustainable principles in the design and development of future growth.

Linkages to human health and well-being

Buildings and infrastructure play important roles in supporting overall health and well-being. Buildings that provide access to natural light, proper ventilation, low-emitting materials, and access to green spaces support occupant productivity and wellness. To support healthy buildings, the City of Longmont has adopted radon resistant new construction standards to ensure that all new buildings constructed do not put occupants at risk for exposure to radon gas.

Similarly, quality infrastructure, such as water and sewer systems, parks, and trails help support basic health needs, and also provide opportunities to lead active lifestyles.

Building retrofits and reuse

According to the 2015 American Community Survey, approximately 44% of Longmont’s housing was built before 1980, meaning that a large proportion of Longmont’s housing is aging with an opportunity for home retrofits to increase energy efficiency and resource conservation, and reduce utilities cost to home owners through efficiency measures. Various residential rehabilitation programs are available for eligible properties through Longmont’s Housing and Community Investment Divisions, including a general repair program, accessibility program, mobile home repair program, and emergency repair program. In 2015, six households participated in the architectural barrier removal program, three households participated in the general repair program, and sixteen households participated in the mobile home repair program.



COMMUNITY COHESION AND RESILIENCE

Access to resources and programs

The increase in area incomes and home prices continues to displace and impact lower income residents, widening the equity gap and applying additional stresses to vulnerable populations. This results in greater demand on programs that help residents meet basic needs such as affordable housing, utilities, transportation, and healthy food.

Over the next decade, older adults in Boulder County are expected to account for approximately 25% of the total county population. This trend is evident and in Longmont. As of 2015, 23.7% of the population was over the age of 55. By 2025, the percentage of residents in Longmont over the age of 55 is expected to double, accounting for nearly 50% of the total population. As this segment of the population increases, so will demand for community services and resources to support older residents.

Community cohesion, inclusion, engagement and leadership development

Cultural diversity in Longmont is increasing. According to the 2014 American Community Survey, almost a quarter of the population speaks a language other than English at home. Cultural diversity is increasingly being recognized as a strength to build on with dedicated resources addressing immigrant communities, minority communities, and groups that have increasing or significant cultural representation. To support Longmont’s cultural diversity, the Longmont Multicultural Action Committee has developed a multicultural action plan and is actively supporting opportunities to celebrate and increase diversity in Longmont. The Multicultural Action Committee also supports leadership development to help address the issue of equitable representation as well as cultural competency. The City’s Community and Neighborhood Resources division serves as a cultural broker

for neighborhoods (registered and unregistered), cultural groups, low-income, and vulnerable populations

Additionally, the Resiliency Leadership Program in partnership with Boulder County is helping to identify areas to improve and help support vulnerable populations in responding to severe events.

Neighborhood-based, resident-driven action

The number of registered neighborhood groups using City of Longmont activity funds increased from 34 in 2014 to 60 groups in 2016. The City also offers the Community Cultural Event Grant annually to support events with ethnic/cultural content and/ or engage underrepresented sectors. These funds are used to improve quality of life and help residents form a stronger “sense of community” with the neighbors that live on their block. All residents are eligible to apply and funds can be applied to a variety of neighborhood projects and activities such as block parties, potluck or picnics, neighborhood garden planting, outdoor movie nights, and block cleanup.

As a part of the ongoing flood recovery efforts, the City has financial assistance available for income-qualified households whose housing was damaged or destroyed in the 2013 floods. The Community Services department and Community and Neighborhood Resources division support and offer the following assistance programs: Homeowner Housing Repair Program, Boulder County Down Payment Assistance, and Temporary Rental Assistance.

Neighborhood Resources also offers Neighborhood Improvement Program Grants for registered neighborhoods to partner in large physical improvements within their neighborhoods. Small grants like Discover Neighbors are open to all neighbors to support neighbors getting to know each other. Leadership and capacity building training is offered to Neighborhood Group Leaders. Leadership and management training is also available to all homeowners associations (HOAs).



ECONOMIC VITALITY

Sustainable business practices

As of summer 2016, Longmont has eight businesses certified through Boulder County’s Partners for a Clean Environment (PACE) program and 310 businesses have made sustainability improvements in their operations to-date.

Economic security

In 2014, Longmont’s median household income was \$60,218 and per capita income was \$29,884. Approximately 16.6% of the population was living below the federal poverty line in 2015 (27.2% were children). The traditional measure of affordability recommends that housing cost no more than 30% of household income. According to the 2014 American Community Survey, 26.3% of Longmont residents with a mortgage spend 30% or more of their monthly income on housing, while 54.4% of renter households spend 30% or more of their monthly income on housing.

Diversified economy

Recent employment growth has been driven by a gain in the primary industries of professional, scientific and technical services, healthcare, education, and retail trade. Together these four industries comprise 54% of the workforce. However, the majority of recent employment growth has occurred in industries that pay less than average annual wage.



ENERGY

Energy Efficiency

While the number of Longmont Power & Communications (LPC) customers has increased about 8% over the last 10 years, Longmont’s 2015 energy consumption was 2.6% less than in 2006. In that same period, maximum demand (the highest amount of electricity required to meet customer needs during a one-hour period) decreased nearly 1%.

Longmont recently launched a 5-year program to convert all of the City’s streetlights to LED fixtures that will reduce electricity usage, costs and carbon emissions, as well as improve illumination and public safety.

The Efficiency Works™ program is offered by Longmont Power & Communications in partnership with Platte River Power Authority (PRPA) to support energy efficiency for businesses and homes. In 2015, 324 businesses participated in Efficiency Works™ programs (including 105 assessments, 218 commercial rebates, and 1 building tune-up) for total energy savings of 2,317 megawatt hours per year. In 2015 participation in residential energy efficiency programs included 102 home audits, 19,842 energy efficient lights, and 500 clothes washer and refrigerator rebates for total energy savings of 445 megawatt hours per year. As of 2016, four businesses were also certified in energy through Boulder County’s Partners for a Clean Environment (PACE) program.

Renewable Energy Generation

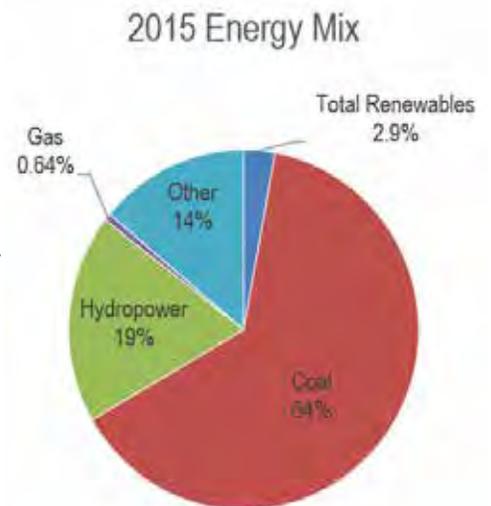
In 2015, the City of Longmont was one of 18 communities in Colorado recognized as a “Solar Friendly Community” by the Colorado Solar Energy Industries Association. The designation allows LPC customers to receive a \$500 discount on solar panel installation for the designated Longmont solar provider. As of 2015, Longmont had 77 solar installations amounting to 381 kW total.

Between August 2015 and June 2016, 28 Longmont residents purchased electric vehicles and 50 kW of solar was installed on homes through the Solar Benefits Boulder County/Colorado bulk purchasing program, which was available to residents throughout Boulder County.

In addition to these sources, 530 customers purchased nearly 4.4 million KWh of renewable energy on a voluntary basis through the Renewable Power Purchase Program, a Green-e Energy Certified program. Electricity purchased in the voluntary program is 100% renewable, using wind as well as renewable energy certificates from wind.

Platte River Power Authority (PRPA), owned by the cities of Longmont, Loveland, Fort Collins, and Estes Park, provides the Longmont community with electricity. Between 2013 and 2015, PRPA tripled the amount of wind energy on its system, and now has 78 megawatts (MW) of wind power. PRPA is also building a new 30 MW solar facility at its Rawhide generating station that will come on line in late 2016.

Combined with 90 MW of existing hydro-power, about one-third of PRPA’s municipal energy supply will come from renewable or non-emitting hydro resources in 2017.



Waste to energy

As of 2016, the City of Longmont is exploring options for a methane recovery and reuse system at the wastewater treatment plant, including the methane for vehicle fuel, generating power for the wastewater treatment plant, and supplying methane to natural gas providers.



FOOD SYSTEM

Land stewardship through agriculture

Longmont has a rich agricultural heritage stemming from its founding in 1871 with the purchase of 60,000 acres of land by the Chicago-Colorado colony for the establishment of an agricultural community. Agriculture has in the century since been a source of economic vitality and growth. In 2015, Longmont's Open Space program managed eight agricultural leases on 900 acres that generated \$60,000. Agricultural products on City-owned lands included corn silage, alfalfa hay, shelled corn, winter wheat, grass hay, and barley. There are about 324 total farms in Boulder County, and the median size of these farms or ranches is 30 acres.

Food security and resiliency

According to a 2010 survey conducted by LiveWell Longmont, many Longmont residents face a variety of food security challenges. Approximately 90% of respondents reported wanting to include more local foods in their diet like from farmers' markets. However, 30% reported compromising on healthy food items due to budget concerns. As of 2015, approximately 20% of children in Longmont are living in households receiving Supplemental Security Income (SSI), cash public assistance income, or Food Stamp/SNAP benefits. Another challenge for consumers is food access and transportation. Most consumers (90% of respondents) travel by car to purchase fruit and vegetables, with only 8% by alternative transportation (bike, walk, bus). This is despite nearly half of respondents (42%) living within 3 miles of their food and vegetable source and one quarter within a mile. The Harvest Bucks program, administered by Boulder County, increased participation at the Longmont Farmers' Market by 94% from 2014 to 2015.

Food economy

Longmont has a number of active Community Supported Agriculture programs (CSAs), a Saturday farmers' market, and has experimented with a Wednesday farmers' market. The Second Start Community Garden was founded in 1996 and remains a vibrant communal organic garden. The garden has 53 plots that can be rented by individuals or groups for a fee. Participating gardeners put in 10 hours of community work-share per season, plant by May 1st, and use organic gardening techniques and water conservation practices.

Longmont is home to a majority of the commercial kitchens used in Boulder County for the production of value-added products measuring in the hundreds of millions of dollars of economic activity. Two recent transactions include the sale of Justin's Nut Butters for \$250 million and Noosa Yogurt for an undisclosed sum estimated to be over \$100 million. Both popular brands started at the local farmers' market.



NATURAL ENVIRONMENT

Sustainable land management/stewardship

In 2000, residents approved a 0.2% Open Space sales tax which was extended by voters until 2034. Since 2000, the City of Longmont has protected nearly 2,500 acres of open space which it manages. Additionally, the City holds 788 acres in conservation easements with Boulder County and manages the 358 acres of Lake McIntosh. The City has more than 1,660 acres of developed parks that serve a variety of functions. In 2015, 465 acres of City land was treated to manage weeds. Longmont's top five weeds include kochia, cheat grass, Canada thistle, hoary cress, and perennial pepper weed.

The Emerald Ash Borer (EAB) is a non-native, wood-boring beetle that can attack all ash tree species. On June 6, 2016, the first sighting of the EAB was reported in Longmont. Longmont is estimated to have an ash tree population of approximately 43,000 trees and the City is now working to protect 900 of the approximately 2,800 City-owned ash trees in Longmont.

Vegetation

Vegetation in urban areas play an important role in supporting healthy air quality and ecosystem function. As of 2015, Longmont's tree canopy covers 1,461 acres. Forestry, a division of Public Works and Natural Resources, maintains 21,274 trees on public property, and planted an additional 386 trees in 2015.

According to the 2008 Urban Tree Canopy Analysis Project, Longmont's urban forest stores 62,873 tons of carbon and captures an additional 490 tons of carbon dioxide equivalent emissions (CO₂e) per year – the equivalent of taking 104 passenger vehicles off the road each year. The combined value of carbon sequestration is substantial with an estimated \$8.4 million value in savings, which includes stormwater and water quality benefits.

Street tree planting is regulated by the City's tree planting ordinance and the Forestry Standards and Specifications. The City does not have formal tree selection criteria, but does have preferred species and partners with certified arborists for tree maintenance efforts.

Connection with nature

Parks and open space lands alone occupy approximately 6,790 acres within the Longmont area. Additionally, there are over 93 miles of off-street trails in Longmont's trail system. Greenways account for 32 miles of trails.

In 2015, a grant funded volunteer coordinator for the Parks, Open Space, and Trails Department was able to accumulate 2671 hours of volunteer time, or \$62,923 equivalents, according to Independent Sector – a coalition of charities, foundations, corporations, and individuals that publishes research important to the nonprofit sector. This work included hosting a variety of clean-up events, restoration crews, kids' clinics, and maintenance efforts by volunteers of all ages.

Ecosystem health

The City conducts weed mapping, habitat mapping, species inventories and raptor monitoring help measure and maintain the health of the ecosystem within Longmont and along the Front Range. To improve ecosystem health, the City is making efforts to remove non-native species and re-introduce native species to the area, along with re-introducing controlled burns to improve grassland and forest health.



TRANSPORTATION

Air quality linkages

In 2013, 333.5 million total vehicle miles traveled (VMT) were logged on the City's arterial and collector roadways. Annual greenhouse gas emissions per household from automobile use is approximately 9 tons of carbon dioxide equivalent (CO₂e). According to the 2014 American Community Survey, approximately 73% of Longmont residents are single occupancy commuters, 3.3% take public transportation to work, 2.2% walk to work, and less than 1% bicycle to work.

In 2014, four publicly available electric vehicle charging stations were installed in Longmont (one level 3 and three level 2), in partnership with the Regional Air Quality District and Efacec USA.

Accessibility and affordability

In 2015 there were 199 miles of trails and greenways in Longmont, and 337 miles of City-maintained centerline roadway in Longmont. According to the Center for Neighborhood Technology Housing and Transportation Fact Sheet (H+T Fact Sheet), transportation accounted for 19% of a Longmont household's income in 2015 and average annual transportation cost per household was \$12,813. The U.S. Department of Housing and Urban Development (HUD) recommends that no more than 15% of an individual or household's income be spent on transportation. The H+T Fact Sheet also ranks Longmont's transit access as car-dependent with limited access to public transportation coinciding with an index score of 2.1 (on a scale of 1 to 10 with 10 representing greatest accessibility).

In 2013, 1.2 million trips were made on local RTD transit. Approximately 72% of residents commute to work outside the community each day and only 13% of Longmont workers carpool.



WASTE

Waste management planning

The City of Longmont adopted a Zero Waste resolution in 2008. Recent adoption of a modern pricing structure that is based on trash container size is commonly referred to as pay-as-you-through (PAYT). Additionally, optional municipal compost collection service is scheduled to begin in spring 2017 for customers who wish to subscribe. Trash is hauled to the Front Range Landfill for disposal, and recyclables are processed through the Boulder County Recycling center. The City of Longmont has partnered with Eco-Cycle to help publicize waste reduction options in Longmont.

Waste diversion and reduction

Weekly trash collection and disposal services are provided to all single-family and many multi-family homes. Curbside recycling collections occur every other week for residential customers, and yard waste is accepted free of charge at the Waste Diversion Center. Business customers are responsible for arranging their own solid waste services. In 2016, approximately 30% of Western Disposals commercial customers in Longmont voluntarily subscribed to recycling services.

In 2015, 29,232 Longmont households were served, collecting 29,300 tons of trash and 11,800 tons of recyclable materials, for a total landfill diversion rate of 31%. The average quantity of trash landfilled in 2015 was approximately 2.2 pounds per capita per day. As of summer 2016, Longmont has two businesses certified in Zero Waste through Boulder County's PACE program with diversions rates over 70%.



WATER

Water supply and management

In 2015, 5.2 billion gallons of water were consumed in Longmont through residential, commercial, and industrial uses, which equates to approximately 56,000 gallons per person. The water system includes 13 reservoirs, 35 ditches, and 4 storage tanks. The City has two raw water treatment facilities that produced 4.7 billion gallons of water and treated 2.5 billion gallons of wastewater in 2015. Based on current growth projections, in 2024, water supply is estimated to be 31,000 acre feet and projected treated water demand is estimated to be 25,000 acre feet.

The City maintains 450 miles of water distribution line, 333 miles of sewer line, and 360 miles of storm drainage system. In 2015, no drinking water violations were reported and 9,685 drinking water tests were conducted. Furthermore, improvements made in 2015 to the raw water irrigation system in parks allowed for the use of raw instead of treated water, saving 70 million gallons of potable water annually and reducing energy use associated with water treatment processes.

In 2015, 288 Longmont households took advantage of high-efficiency toilet rebates through the City's Public Works and Natural Resources Department. In addition, starting in early 2016 the Center for ReSource Conservation (CRC) launched the fourth year of the High-Efficiency Toilet Upgrade Program. In 2016, Longmont residents installed a total of 93 high efficiency toilets through this program with an estimated impact of saving 28 million gallons of water over the 30-year expected lifetime of these fixture replacements. The City also partners with CRC on Garden-In-A-Box, Slow the Flow, Water-Wise Seminars, and the Pre-Rinse Spray Valve (PRSV) Install program. As of summer 2016, Longmont has three businesses certified in Water through Boulder County's Partners for a Clean Environment (PACE) program.

Watershed quality and preservation

The City of Longmont partners with Northern Colorado Water Conservancy District (NCWCD) on annual sampling and testing of the upper watershed to check for emerging (trace) contaminants in Longmont's water supply. There have been no contaminants of concern identified by this sampling. There are opportunities to expand monitoring across the watershed.

APPENDIX C: 2018 PLAN UPDATE SUMMARY OF REVISIONS

This appendix provides an overview of the additions and revisions to the Longmont Sustainability Plan. Sustainability staff reviewed the Sustainability Plan and proposed revisions and additions with the internal sustainability implementation team, as well as with the Board of Environmental Affairs and the newly formed Sustainability Coalition.

Given that the City of Longmont is only one year into implementation of the plan, revisions and additions to the Sustainability Plan are minimal, mostly encompassing minor language changes to create consistency and clarity. However, the revision of the renewable energy target to include Longmont's commitment to 100% renewable energy by 2030 and the addition of greenhouse gas reduction targets and associated strategies are notable.

Overarching revisions to the Sustainability Plan included adjustments to the strategy timeframes as follows:

- Updated immediate timeframe to 2017-2019
- Updated near-term timeframe to 2019-2022
- Updated mid-term timeframe to 2022-2026
- Added an ongoing timeframe for strategies that are underway but need continued focus

A summary of the target and strategy revisions in each section is provided below.

AIR QUALITY

Targets

Revised Target #1: Monitor and reduce average annual fourth-highest daily maximum ozone emissions to less than 70 parts per billion

- New Language: Reduce the number of days out of ozone compliance
- Rationale: Language consistency

Revised Target #2: Provide more local oversight of emissions from oil and gas operations

- New Language: Increase local oversight of emissions from oil and gas operations
- Rationale: Language consistency

Strategies

Added GHG Strategy: ADOPT AND ENFORCE LEAK DETECTION AND REPAIR ASSOCIATED WITH OIL AND GAS OPERATIONS

BUILDINGS AND INFRASTRUCTURE

Targets

Revised Target #2: Increase the number of environmental certified buildings in Longmont

- New Language: Increase the number of environmentally certified buildings in Longmont
- Rationale: Grammar correction

Revised Target #6: Increase the number of participants in the owner-occupied Housing Rehabilitation Program

- New Language: Increase access to housing efficiency, improvement, and assistance opportunities through a one-touch program approach.

Removed Target #7: Increase the amount of dedicated funding to the Affordable Housing Fund to \$1 million per year

- Rationale: Already achieved

Revised Target #3: Achieve more equitable access to transportation infrastructure for all segments of the community

- New Language: Increase equitable access to foundational community assets for all segments of the community
- Rationale: Overlap with transportation target #1 sustainable principles in the design and development of future growth.

Strategies

Revised BI-3: PRIORITIZE INFRASTRUCTURE IMPROVEMENTS TO ENSURE CONNECTIVITY BETWEEN UNDER-SERVED AREAS AND COMMUNITY AMENITIES

- New Language: DEVELOP AND IMPLEMENT A PROCESS TO INCORPORATE SOCIAL EQUITY INTO PRIORITIZING INFRASTRUCTURE IMPROVEMENTS
- Rationale: Clarify that this strategy is focused more on developing a process to incorporate social equity than identifying infrastructure projects

Added New Buildings Strategy: DEVELOP 'BEYOND' BUILDING CODE

Added New Buildings Strategy: ADOPT AND ENFORCE UPDATED BUILDING CODE

COMMUNITY COHESION AND RESILIENCE

Targets

Revised Target #1: Expand existing neighborhood programs to address neighborhood sustainability by 2017

- New Language: Increase neighborhood-based sustainability initiatives
- Rationale: Language consistency

Revised Target #2: Engage more diverse members in community leadership roles at the neighborhood, local, and/or regional level

- New Language: Increase diversity of members in community leadership roles at the neighborhood, local, and/or regional level
- Rationale: Language consistency

Strategies

Added New Strategy: DEVELOP AN INCLUSIVE STANDARD OF EQUITABLE ACCESS AND OPPORTUNITY FOR ALL RESIDENTS THAT ENHANCES CAPACITY AND IS IMPLEMENTED UNIFORMLY ACROSS ALL CITY DEPARTMENTS, POLICIES, PROGRAMS, AND OUTCOMES

ECONOMIC VITALITY

Targets

Revised Target #1: Help businesses reduce operating costs through pollution prevention, energy efficiency, or other sustainability related activities

- New Language: Help businesses increase cost savings and resource efficiency through pollution prevention and other sustainable practices
- Rationale: Language consistency

Strategies

Revised EV-5: IDENTIFY NEEDS, BARRIERS FOR UNDERUTILIZED, UNDER-REPRESENTED, AND/OR MULTI-CULTURAL BUSINESSES AND SUPPORT THROUGH EXPANDED PROGRAMMING

- New Language: EV-5: IDENTIFY NEEDS, BARRIERS AND OPPORTUNITIES TO ESTABLISH EQUITABLE

ACCESS FOR UNDERUTILIZED, UNDER-REPRESENTED, AND/OR MULTI-CULTURAL BUSINESSES AND SUPPORT THROUGH EXPANDED PROGRAMMING

- Rationale: Include equity language

ENERGY

Targets

Revised Target #1: Create baseline information for GHG emissions by 2018 and maintain ongoing reporting

- New Language: By 2030, reduce GHG emissions 66% from the 2016 baseline.
- Rationale: Update to reflect greenhouse gas inventory findings

Revised Target #3: Achieve electric energy savings of 1% annually through energy efficiency measures by 2020

- New Language: Increase electric energy savings to 1% annually through energy efficiency measures by 2020
- Rationale: Language consistency

Removed Target #4: Explore viability of a community solar garden with PRPA by 2020

- Rationale: This makes more sense as an activity under strategy E-6 to support the renewable energy target

Revised Target #5: Increase participation in renewable energy options

- New Language: Increase renewable energy to 100% of Longmont's energy mix by 2030
- Rationale: Reflect new commitment

Strategies

Revised E-4: EXPLORE COLLABORATION WITH THE COLORADO ENERGY OFFICE TO EXPAND ENERGY SERVICES FOR LOW-INCOME HOUSEHOLDS

- New Language: CONTINUE COLLABORATION WITH ENERGY OUTREACH COLORADO TO EXPAND ENERGY SERVICES FOR LOW-INCOME HOUSEHOLDS
- Rationale: Revised to reflect current work through 2017 pilot program

Removed E-5: PREPARE A LOCAL GREENHOUSE GAS EMISSIONS BASELINE INVENTORY AND FORECAST

- Rationale: Replace with new greenhouse gas reduction strategies related to energy

Revised E-6: EXPAND AWARENESS AND PARTNERSHIP OPPORTUNITIES FOR SOLAR INSTALLATIONS AND RENEWABLE SUBSCRIPTIONS

- New Language: Add activity to explore viability of a community solar garden with PRPA
- Rationale: Community solar garden removed from list of targets and incorporated here instead

Added GHG Strategy: PERFORM COMMERCIAL RETRO-COMMISSIONING

Added GHG Strategy: DEVELOP A COMPREHENSIVE 100% RENEWABLE ELECTRICITY PLAN FOR LONGMONT'S JUST TRANSITION TO A CLEAN ENERGY ECONOMY

Added GHG Strategy: REPORT AND BENCHMARK ENERGY USE

Added GHG Strategy: ACCELERATE AND IMPLEMENT SMART GRID PROJECTS

FOOD SYSTEM

Targets

Removed Target #2: Establish a local food storage and processing facility by 2018

- Rationale: More of a strategy, already captured under FS-6

NATURAL ENVIRONMENT

Targets

Revised Target #1: Distribute information on water-wise landscaping and integrated pest management practices to all neighborhood groups by 2017

- New Language: Distribute information on regenerative land management practices to the public
- Rationale: Clarified language

Revised Target #2: Increase tree canopy to 18% or more of the Longmont Planning Area covered by, regionally appropriate, tree canopy or vegetation by 2025

- New Language: Increase tree canopy to 18% or more of the Longmont Planning Area covered by regionally appropriate tree canopy or vegetation.
- Rationale: Too much uncertainty at this time due to Emerald Ash Borer

Revised Target #4: Open space targets TBD based on projects/priorities in update of Open Space Master Plan in 2017

- New Language: Open space targets TBD based on projects/priorities in update of Open Space Master Plan in 2018
- Rationale: Revised date

Revised Target #5: Wildlife management targets TBD based on projects/priorities in update of Wildlife Management Plan in 2018

- New Language: Wildlife management targets TBD based on projects/priorities in update of Wildlife Management Plan in 2019
- Rationale: Revised date

Strategies

Revised NE-1: WORK WITH COMMUNITY PARTNERS TO PROMOTE EDUCATION AND AWARENESS ABOUT WATER-WISE LANDSCAPING AND INTEGRATED PEST MANAGEMENT PRACTICES ON PRIVATE PROPERTIES

- New Language: WORK WITH COMMUNITY PARTNERS TO PROMOTE EDUCATION AND AWARENESS ABOUT REGENERATIVE LAND MANAGEMENT PRACTICES ON PRIVATE PROPERTIES
- Rationale: Alignment with revised Target #1

TRANSPORTATION

Targets

Revised Target #1: Address service and infrastructure gaps to increase transit and active transportation options, with a focus on underserved communities

- New Language: Increase equitable access to transportation infrastructure for all segments of the community
- Rationale: Language consistency

Revised Target #3: Reduce transportation-related greenhouse gas emissions

- New Language: Reduce transportation fuel consumption by 33% by 2050.
- Rationale: Improved clarity

Strategies

Added GHG Strategy: INCREASE ELECTRIC VEHICLES THROUGH VEHICLES INCENTIVES AND IMPROVED INFRASTRUCTURE

WASTE

Targets

Revised Target #2: Increase community-wide waste diversion to 50% by 2025

- New Language: Increase residential waste diversion to 50% by 2025

Added Target #4: Increase commercial waste diversion – baseline and target number TBD based on 2018 data collection

WATER

Targets

Removed Target #2: Establish a comprehensive baseline of water quality conditions by 2020

- Rationale: Moved this to be a task under new strategy to “Create an active Watershed Management Program by 2020.”

Added Target: Increase/maintain watershed health.

Removed Target #3: Create an active Watershed Management Program by 2020

- Rationale: Move this to be a task under new strategy to “Create an active Watershed Management Program by 2020.”

Strategies

Revise W-1: COMPLETE A WATER CONSERVATION MASTER PLAN UPDATE AND IMPLEMENT IDENTIFIED STRATEGIES

- New Language: IMPLEMENT IDENTIFIED STRATEGIES WITHIN THE WATER EFFICIENCY MASTER PLAN
- Rationale: The plan is complete – final acceptance pending state approval

Added New Strategy: COMPLETE AN ANALYSIS OF WATER LOSS AND RECOMMEND STRATEGIES FOR SUBSEQUENT ACTIONS

Revised W-5: INCREASE AND ENHANCE EXISTING WATER QUALITY MONITORING AND INFORMATION SHARING THROUGHOUT THE WATERSHED

- New Language: W-6: CREATE AN ACTIVE WATERSHED MANAGEMENT PROGRAM

