

SUSTAINABILITY PLAN ANNUAL REPORT

2017-2018

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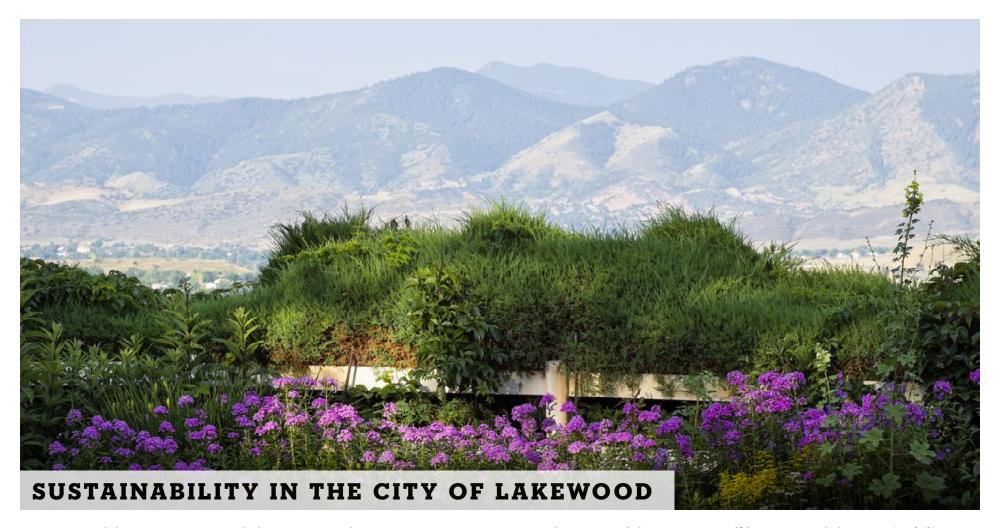
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Sustainability means creating balance among the environment, the economy, and society to ensure that practices and decisions do not compromise the quality of life for future generations. Sustainability is not an end goal, but an approach that recognizes the interplay between natural, economic, and social interests.

The City of Lakewood's first communitywide Sustainability Plan was adopted in May 2015. As part of the adoption process, Sustainability Division staff committed to providing the community and City Council with annual updates on implementation progress along with an overview of emerging challenges and opportunities. The Sustainability Division staff has prepared the **Sustainability** Plan Annual Report 2017-2018 to highlight the key implementation efforts undertaken this year and to report on progress made toward achieving the community's sustainability goals. Additionally, this report includes a comprehensive compilation of data in support of the Sustainability Plan's 35 measurable targets and 90 sustainability indicators and a progress report on the status of the plan's primary implementation strategies.

WE'D LIKE TO SAY THANKS.

Each of the accomplishments highlighted in this report are the result of collaboration and teamwork within the City organization and across the community and region. Realizing our community's vision for a sustainable and vibrant city can only be achieved through strong partnerships among Lakewood's government, its utility providers, business community, civic organizations, and neighborhood residents.

We'd like to say thank you to all the partners who have and continue to contribute to sustainability in Lakewood.

- Lakewood Sustainability Staff



2017-2018 MIGHLIGHTS



01

EXPANDED SUSTAINABLE NEIGHBORHOODS PROGRAM

Three new neighborhoods were added, creating a total of eight sustainable neighborhoods who engaged 2,700 residents and completed 96 projects in the past year.

02

BUILDING CODE UPDATE

Lakewood's building code update will increase building energy efficiency by approximately 20 percent and includes amendments advancing sustainability, such as solar and electric vehicle charging readiness.

RECYCLE! IT'S GOOD FOR LAKEWOOD

The Sustainability Division launched a recycling education campaign in the spring of 2018 to promote the community benefits of recycling and advance the community's zero waste goals.

03





04

MORE ENERGY EFFICIENT CITY FACILITIES

From Utility Tracking Software to Energy Performance Contracting, the City is working toward making municipal buildings energy efficient while also exploring opportunities to increase the amount of renewable energy powering City facilities.



ZERO WASTE CITY FACILITIES

The City's zero waste efforts continued to grow with zero waste events increased, recycling bins added to parks and recreation centers, and compost collection expanded to two Head Start classrooms.

05

CLIMATE CHANGE AND ADAPTATION

GOALS

 Minimize Lakewood's communitywide greenhouse gas emissions and prepare and adapt to ongoing climate change impacts.

TARGETS

- Reduce communitywide greenhouse gas emissions by 20 percent below 2007 levels by 2025.
- Reduce communitywide greenhouse gas emissions by 50 percent below 2007 levels by 2050.
- Reduce municipal greenhouse gas emissions annually through 2025.



CLIMATE CHANGE & ADAPTATION



- Climate Leadership and Commitments Lakewood continued to participate in global, national and regional networks that support action to combat climate change and move to a low-emission, resilient society. The Sustainability Division reported the City's greenhouse gas emission inventory results and climate action to the Carbon Disclosure Project (CDP), an international reporting agency. PAGE 7
- Green Mountain Climate Change Workshop Sustainable Green Mountain organized a discussion on climate change for residents to learn, ask questions, and discover how they can make a difference. PAGE 8
- High Impact Emissions Reduction Projects Lakewood took actions within municipal operations and communitywide that significantly reduce greenhouse gas emissions and move Lakewood closer to its goals. PAGE 9



climate leadership and commitments





Lakewood reported its climate activities to CDP in order to continue its commitment to the Global Covenant of Mayors for Climate & Energy, an international alliance of more than 7,500 cities and local governments, whose purpose is to support and accelerate progress against climate change.



In 2017, Lakewood staff focused their participation in the **Urban Sustainability Director's Network** on emission reduction and climate action by co-leading and participating in learning groups related to greenhouse gas emissions analysis, climate resilience, and decarbonization.



In 2017, Mayor Adam Paul joined others in the **Climate Mayors** network in a pledge to adopt, honor, and uphold the Paris Agreement goals in their cities. In 2018, Mayor Adam Paul signed on with more than 200 other mayors to address the Clean Power Plan and proposed reduction in vehicle emission standards.



Lakewood staff joined more than 400 climate, energy, and sustainability professionals from around the globe at the 2018 **Climate Leadership Conference** to address climate change through collaboration.

green mountain climate change workshop

Neighbors in Sustainable Green Mountain organized a climate change workshop featuring the facilities director for the Renewable Energy Materials Research Science and Engineering Center at the Colorado School of Mines. The goal of the workshop was to facilitate a community discussion about the current state of the environment and the impacts of climate change. More than 40 residents, including three elected officials, attended and discussed key pieces of scientific data to understand the temperature and recent chemical and climatic observations in our ever-changing world. The speaker presented both sides of the climate change issue to allow attendees to decide for themselves what may be the cause. For example: Is it caused by humans or something else? And isn't climate change normal? Residents left the workshop with actions they can take to improve the environment and slow climate change.





high impact emission reduction projects

MUNICIPAL OPERATIONS

Energy Management initiatives are helping to reduce energy consumption (one of our largest sources of GHG emissions) in Lakewood's municipal facilities. This year staff implemented a new utility tracking system to help identify opportunities for efficiency improvements and initiated an energy performance contract, which will result in improvements in seven facilities that will collectively save approximately 900 metric tons of CO₂ each year.

Zero Waste practices and infrastructure in municipal buildings and at events resulted in the recycling or composting of more than 17,000 pounds of materials every month from City facilities, avoiding 23 metric tons of CO₂ by keeping material out of landfills that produce powerful GHG emissions and reducing the need for resource extraction and the associated emissions.

Lakewood's new **Employee Commuter Rewards Program** incentivizes City employees to choose sustainable ways to get to work, including biking, walking, carpooling or using transit. In the program's first two months, participating employees kept more than 1,500 metric tons of CO₂ out of the atmosphere.

COMMUNITYWIDE

Updated **Building Codes** will make new buildings in Lakewood approximately 20 percent more efficient than they would have been under the previous code. As one of the largest contributors to our communitywide emissions, emissions from building energy use will be significantly reduced in newly constructed buildings.

The **Xcel Colorado Energy Plan**, as proposed by the Public Service Company of Colorado, would transition the company's energy mix toward cleaner sources of energy while also retiring coal-fired power plans, resulting in a 60 percent carbon emission reduction from 2005 levels. Because this transition would contribute to Lakewood's own GHG goals, the City of Lakewood provided written support and expert testimony to the Public Utilities Commission in support of the plan and its impact on Colorado's and Lakewood's climate goals.

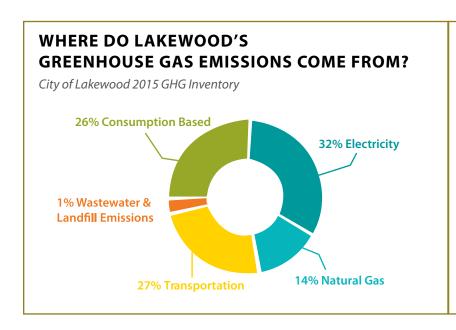
Multimodal Transportation planning and projects help the community address emissions from transportation, our second largest source of GHG emissions. 2017 and 2018 initiatives included new bicycle infrastructure, regional collaboration around transit and wayfinding, the adoption of an updated bicycle master plan, and community outreach programs, like Save the 'Zone, which has a goal to reduce 400 pounds of CO₂ each day.

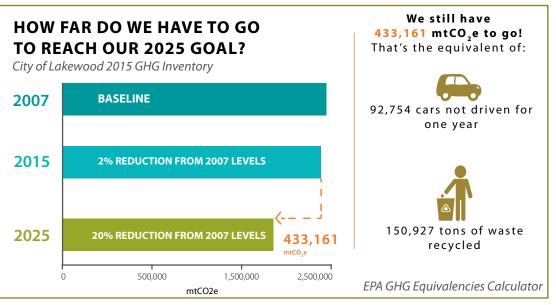
CLIMATE CHANGE & ADAPTATION

2017-2018 PROGRESS SNAPSHOT

A full list of metrics can be found in Appendix A.

2025 TARGET	BASELINE	MOST CURRENT	CHANGE	NOTES	STATUS
Reduce communitywide greenhouse gas emissions by 20% below 2007 levels	2,447,746 mtCO2e	2,391,358 mtCO2e	-2%	Metric: metric tons of carbon dioxide equivalent (mtCO2e); Methodology: Global Protocol for Community-scale Greenhouse Gas Emission Inventories (GPC); The 2050 goal is a 50% reduction from the 2007 baseline.	TBD*
Reduce communitywide greenhouse gas emissions by 50% below 2007 levels	2,447,746 mtCO2e	2,391,358 mtCO2e	-2%	Metric: metric tons of carbon dioxide equivalent (mtCO2e); Methodology: Global Protocol for Community-scale Greenhouse Gas Emission Inventories (GPC); The 2050 goal is a 50% reduction from the 2007 baseline.	×





ENERGY, WATER, AND THE BUILT ENVIRONMENT

GOALS

- Ensure affordable energy for Lakewood while transitioning to renewable energy sources.
- Significantly enhance resource efficiency in Lakewood buildings.
- Encourage development in Lakewood that values the natural environment and supports public health and community cohesion.

TARGETS

- Generate 45 percent of municipal, residential, commercial, and industrial energy from renewable sources by 2025.
- Reduce municipal building and facility energy use intensity by 30 percent by 2025.
- Reduce citywide building energy use intensity by 20 percent by 2025.
- Reduce citywide water use by 20 percent by 2025.
- Increase the percentage of certified green buildings each year from 2015 to 2025.



ENERGY, WATER, & THE BUILT ENVIRONMENT



Building Code Update - Lakewood City Council adopted a new Building Code that includes a 20 percent energy efficiency increase and solar rooftop and electric vehicle readiness requirements.

PAGE 13

Energy Management - Staff implemented a utility management system and initiated an Energy Performance Contract to finance significant energy improvements. PAGE 14

Sustainable Water Systems - Staff collaborated with Denver Water to develop water efficient code language, served on the advisory board for Denver Water's conservation plan update and continued to be a regional leader in sustainable water management in parks and public spaces. PAGE 15

Lake Lochwood Energy Education - The Lake Lochwood Sustainable Neighborhood hosted a meet and greet to welcome new neighbors while learning about water conservation and educating one another on home energy improvements.



Mayor's Challenge for Water Conservation -Mayor Paul joined cities around the nation in a pledge to conserve water and bring awareness of how much water we use on a daily basis.

IN PROGRESS



Lakewood Development Dialogue - The Lakewood Planning Department is currently engaging with the community, Planning Commission, and City Council to develop land use policy related to growth and quality of life. One recommendation being considered is an "Enhanced Development Menu," which would require large developments to add sustainable and community elements such as water-wise landscaping and renewable energy generation.



100% Renewable Electricity for Municipal **Facilities** - The City took its first step toward 100 percent by subscribing to 293 kW of solar energy through Xcel Energy's Renewable*Connect community solar program. The City will pursue a combination of subscription and on-site solar with the goal of generating as close to 100 percent of our electricity needs as possible from renewable sources.



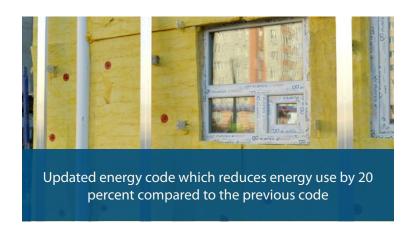
Energy Future Collaborative - The City and Xcel Energy formed a new partnership focused on moving towards Lakewood's energy goals. PAGE 16

ENERGY, WATER, & THE BUILT ENVIRONMENT



building code update

In June 2018, Lakewood City Council adopted the updated International Building Codes with local amendments, which include several measures to help Lakewood achieve its sustainability goals:









SUSTAINABILITY PLAN: PAGES 37, 45, 89

energy management

UTILITY TRACKING SOFTWARE

Staff from the City's Facilities, Purchasing, and Sustainability divisions implemented a new software system to collect and track energy use data for City facilities to identify opportunities for energy and cost savings.

ENERGY PERFORMANCE CONTRACTING

Throughout 2017 and 2018, the City of Lakewood continued its Energy Performance Contracting (EPC) program to finance energy improvements in four City facilities. Improvements include HVAC control optimization, employee education, lighting retrofits, water conservation measures, and replacements for energy recovery ventilation and pool boilers.



	Electricity Savings (kWh/year)	Gas Savings (Therms/year)		GHG Savings (Tons CO ₂ /year)	
Projected savings from EPC Facility Improvements	1,082,718	51,211	1,389,000	906	\$131,100



sustainable water systems

WATER PLANNING

After achieving its 2007 water conservation goals for the overall system, Denver Water shifted its focus to water efficiency and tactics to help customers reach specific benchmarks. Lakewood Sustainability staff participated in the working group to help develop these strategies that will in turn help Lakewood achieve its water targets.

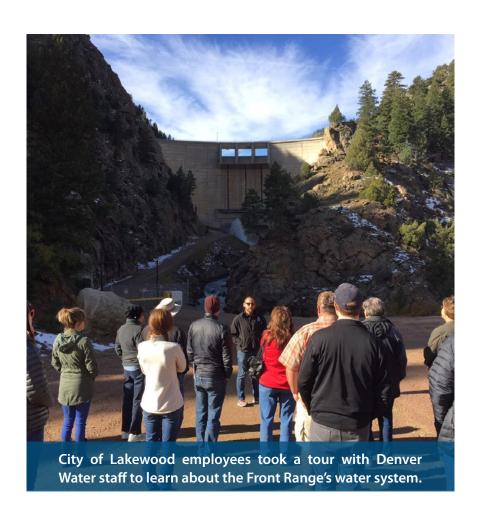
WATER-WISE PARKS

Lakewood's Parks Division is a model for water conservation in the metro area. Public spaces, including parks, school, and civic buildings account for about 9 percent of Denver Water's total annual water consumption,

providing lots of opportunities for efficiency improvements.

Lakewood Parks has cut outdoor water use by 30 percent since 2008 — an annual savings of approximately 28 million gallons.

Parks staff have taken on this challenge from multiple angles, including a computerized central irrigation system to track its water consumption in realtime, matching irrigation to seasonal needs, matching the right plant for the right use, and irrigating at night.



ENERGY, WATER, & THE BUILT ENVIRONMENT

energy future collaborative







This year the City of Lakewood and Xcel Energy formed a partnership, "The Energy Future Collaborative," focused on finding ways to advance Lakewood's energy goals. The partnership is being formalized through a three step process that includes a Memorandum of Understanding, a list of focus areas and example projects, and an annual work plan prioritizing project implementation.

STEP 1: Memorandum of Understanding

The City of Lakewood and Xcel signed a Memorandum of Understanding (MOU) to state both parties' goals and intentions to work together toward Lakewood's community goals.

STEP 2: Focus Areas

As an attachment to the MOU, a list of focus areas and project examples were developed based on the Lakewood Sustainability Plan.

STEP 3: 2018/2019 WORK PLAN

The final step is to identify specific projects that the City and Xcel should collaborate on in 2018 and 2019.



COMMUNITY SUPPORT AND EXPERTISE

Community volunteer members of the Lakewood Sustainability Cooperative (SCOOP), providing guidance to staff by meeting several times to review the MOU document, brainstorm project focus areas, and to help prioritize the work plan.

ENERGY, WATER, & THE BUILT ENVIRONMENT

2017-2018 PROGRESS SNAPSHOT

A full list of metrics can be found in Appendix A.

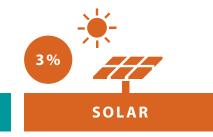
2025 TARGET	BASELINE	MOST CURRENT	CHANGE	NOTES	STATUS
Generate 45% of municipal energy from renewable sources	12%	28%	+16 points	Systemwide service data for Public Service Co. of Colorado	x *
Generate 45% of residential energy from renewable sources	12%	28%	+16 points	ts Systemwide service data for Public Service Co. of Colorado	
Generate 45% of commercial and industrial energy from renewable sources	12%	28%	+16 points	ints Systemwide service data for Public Service Co. of Colorado	
Reduce municipal building and facility energy use intensity by 30%	58 kbtu/ft²	66 kbtu/ft²	+14%	Data normalized for weather based on 2012-2014 benchmark	
Reduce citywide building energy use intensity by 20%	2,832,699 MWh	2,850,347 MWh	-<1%*	Includes both electric and gas energy consumption; *data is not normalized for weather	X ***
Reduce citywide water use by 20%	8,762,211 kgal	8,897,017 kgal	-2%	Adjusted for weather	×
Increase the percentage of certified green buildings (new construction and renovations) each year	6 buildings	20 buildings	+233%	Does not include number of sites in progress	√
√ The target is on track					











^{*} On track to achieve this target for electricity generation, however, energy use also includes natural gas and vehicle fuel.

^{**} New utility management software will enable better tracking going forward.

^{***} New building codes will help us achieve this target only for new construction and significant remodels.



GOALS

- Cultivate a sustainable, prosperous, and self-reliant local economy.
- Foster self-sufficiency and upward mobility of Lakewood households.

TARGETS

- Increase local food assets annually through 2025.
- Achieve participation from 20 local businesses in the first three years of implementing a green business certification program.
- Increase the percentage of households in CDBG qualified neighborhoods spending less than 45 percent of income on housing and transportation costs to 60 percent by 2025.
- Increase number of households above Living Wage Standard by 15 percent by 2025.
- Increase number of housing units within a designated
 Complete Neighborhood by 25 percent by 2025.







Sustainable Neighborhoods and Local Businesses -All eight of the Lakewood Sustainable Neighborhoods built

partnerships with organizations and businesses in and near their communities this year. PAGE 21



Transit-Oriented Development - In 2017, 335 units of housing were added in zone districts designed to facilitate transit-oriented development that supports complete, walkable neighborhoods. PAGE 22



Self-Sufficiency Education - Lakewood's Family Services Division offered educational opportunities to families to help increase self-sufficiency and enable upward mobility. PAGE 23

IN PROGRESS



Lakewood Development Dialogue - The Lakewood Planning Department is currently engaging with the community, Planning Commission, and City Council to develop land use policy related to growth and quality of life. Resulting sustainability recommendations could include a proposal to begin a Complete Neighborhood Plan for the Union Boulevard neighborhood to achieve a mix of uses, reduce transportation costs, build community cohesion, increase housing values, and provide other household and community benefits.



sustainable neighborhoods and local businesses

The Sustainable Neighborhoods Program builds community cohesion between neighbors and between residents and local businesses. All eight of the Lakewood Sustainable Neighborhoods built partnerships with organizations and businesses in and near their communities this year. By supporting local businesses, residents are helping to create a sustainable economy for small businesses and organizations. In return, these organizations offer their services, products, and facilities, helping the neighborhoods with their sustainability efforts.



















































transit-oriented development



The shape our cities take through development, infrastructure, and transportation has a powerful effect on greenhouse gas emissions. Providing compact and walkable neighborhoods with access to public transportation can play a substantial part in reducing greenhouse gas emissions. In 2017 335 units of housing were added in zone districts designed to facilitate this type of transit-oriented development.

40 percent of new units added in Lakewood in 2017 were built in transit-oriented zone districts



self-sufficiency education

In the past year, families with children in the Head Start, Early Head Start and Early Childhood Education programs participated in educational opportunities that increase self-sufficiency and enable upward mobility.

17 people participated in financial literacy classes to learn about budgeting, saving for college, and saving for your first home.

13 completed job training including certificates in culinary, nursing assistant, early childhood education, banking and cosmetology.



6 received certificates of completion for ESL classes.

6 obtained associates or bachelor's degrees, including one mom who completed her bachelor's and has been accepted into a master's program.

Parents met together to learn about car-seat safety, nutrition, budgeting, managing stress, housing options, public library services, and parenting tips.

These opportunities were provided in partnership with Foothills Credit Union, Learning Source, Metro State University, Colorado State University, Emily Griffith School of Opportunity, Red Rocks Community College, Jefferson County Public Libraries, Jeffco Public Schools Family Literacy, Pima Medical Institute, and Jefferson County Public Health Department.



Cooking Matters Class impacted their lives, one participant said:

"Tremendously! I have changed some very bad habits for me and my children. We are making new moves that give energy and allow us to work and learn together."

2017-2018 PROGRESS SNAPSHOT

A full list of metrics can be found in Appendix A.

2025 TARGET	BASELINE	MOST CURRENT	CHANGE	NOTES	STATUS
Increase local food assets annually.	37	43	+16%	Includes community gardens, farms, Community Supported Agriculture sites, and farmers markets	✓
Increase the percentage of households in CDBG qualified neighborhoods spending less than 45% of income on housing and transportation costs to 60%	24,399 households (92%)	8,798 households (37%)	-64%	Will be updated as CDBG qualified neighborhood boundaries change	×
Increase number of households above Living Wage Standard by 15%	32,843 (53% of hh)	32,680 (49% of hh)	+<1%	Methodology sourced from STAR Community Rating System Technical Guide	x
✓ The target is on track	not on track				



ZERO WASTE

GOALS

- Create a culture of zero waste in Lakewood through education, municipal operations, infrastructure, and services.
- Foster sustainable household waste management.
- Foster sustainable commercial waste management.

TARGETS

- Achieve a 60 percent communitywide diversion rate by 2025
- Achieve an 80 percent diversion rate at the Civic Center by 2025.
- Achieve increased diversion rates for specific municipal facilities.
- Achieve a 90 percent diversion rate at City of Lakewood Earth Day and Cider Days events.
- Achieve a 60 percent residential and construction and demolition diversion rate by 2025.
- Achieve a 60–90 percent diversion rate for priority waste streams.



ZERO WASTE





Recycling Education Campaign - Lakewood launched the Recycle! Its Good for Lakewood campaign to promote the community benefits of recycling and increase recycling rates in Lakewood. PAGE 27



Recycling Plastics Challenge - The Employees Committee for a Sustainable Lakewood worked with King Soopers and Trex to recycle 700 pounds of plastic bags. **PAGE 28**



Zero Waste City Activities - Staff from across the City continued to lead and improve zero waste efforts in City facilities and events, resulting in the diversion of more than 17,000 pounds of waste from area landfills each month. PAGE 29



Sustainable Neighborhoods Zero Waste -Neighbors organized a paint recycling event that raised over \$1000 for Lakewood High School's Music Program and expanded leaf collection and compost efforts. PAGE 30

IN PROGRESS



Residential Trash Collection Outreach - In June 2018, the Lakewood Sustainability Division launched the Residential Trash Round Table as an invitation to residents to share their thoughts on residential trash collection. Lakewood currently has an open subscription system, which means homeowners must contract with haulers individually. Residents can share their opinions and ideas in a number of ways, including an interactive website at LakewoodTogether.org, at kiosks located at community centers, and in person as the Sustainability team travels to Lakewood parks, softball games, concerts, markets, and more! The City will use the feedback gathered all summer to inform potential policy and program changes in response to residents' concerns and ideas.



Classroom Compost Expansion - After successfully launching compost collection at two Head Start classrooms in 2017, Lakewood's Family Services Program plans to expand the program to two additional sites in the upcoming school year.



recycling education campaign

In the spring of 2018, Lakewood launched the *Recycle! Its Good for Lakewood* campaign to promote the community benefits of recycling and increase the amount of materials recycled by residents. The campaign reached **148,135** people on social media, **2,817** people through <u>Lakewood.org/WeRecycle</u>, made **7,325,538** impressions through advertising; gave away **800** recycling buttons and decals; and recognized **11** Zero Waste Champions!





recycling plastics challenge





zero waste city activities





More than 100 smart recycling bins were added in Lakewood parks. These "Bigbelly" bins run on solar power and send a notification when they are full, saving staff time and tracking how much Lakewood is recycling.



City employees worked together to create the Healthy & Sustainable Food Providers list to help employees choose food providers that offer zero waste, healthy, and other sustainable food options for meetings and events.

ZERO WASTE



Lakewood Associate Planner Greg Colucci dives into the trash to "rescue" a compostable cup. Members of the Employees' Committee for a Sustainable Lakewood volunteered to ensure a zero waste Employee Picnic by working with food truck vendors and helping other employees sort their trash.



Lakewood Recreation Programmer Renee Jones championed zero waste at Older Adult events, which reach more than 1,200 individuals each year.



Lakewood Heritage Center staff continued to be zero waste leaders at the Sounds Exciting Concert, Cider Days and Earth Day events.

In addition, due to the enthusiasm and determination of zero waste employee champions, big and small changes were made at other City facilities:

- · Additional recycling bins added to recreation centers
- New dishwasher in Wilbur Rogers Center to encourage the use of reusable dishes
- Reusable coffee cups continue to be used at the Clements Center



sustainable neighborhoods zero waste

MORSE PARK RECYCLING EVENT

The Morse Park Sustainable Neighborhood organized a paint recycling event as a way for neighbors to safely recycle their paint. Through the new statewide paint recycling program, PaintCare, neighbors recycled 14,499 pounds of latex paint and 1,805 pounds of oil-based paint.

Neighbors also collected \$1,055 in donations during the event for the Lakewood High School Instrumental Music program. The popularity of the event has motivated the neighborhood to make this an annual event, and other neighborhoods are hoping to replicate this success. Find locations to recycle your paint at PaintCare.org.







LEAF COLLECTION AND COMPOSTING

Southern Gables and Green Mountain Sustainable Neighborhoods both held leaf collection and compost days to provide a convenient, affordable way for residents to get rid of their leaves. Sustainable Southern Gables and the Southern Gables Neighborhood Association held this event for the fourth year in a row with 90 volunteers to rake leaves and run the leaf collection center, collecting 769 bags of leaves from 84 households.

Sustainable Green Mountain held their first leaf collection and compost day and collected 254 bags of leaves weighing almost 5,000 pounds.



2017-2018 PROGRESS SNAPSHOT

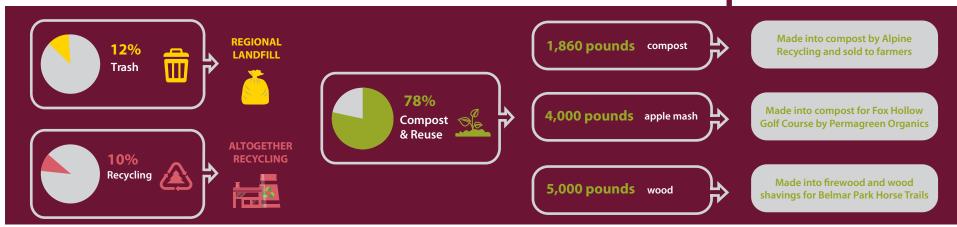
A full list of metrics can be found in Appendix A.

2025 TARGET	BASELINE	MOST CURRENT	CHANGE	NOTES	STATUS
Achieve a 60% communitywide diversion rate	9%	12%	+3 points	Based on statewide diversion total	×
Achieve an 80% diversion rate at the Civic Center	65%	86,316 lbs. recycled and composted	-	2015 data was likely overestimated; Unable to determine 2017 diversion rate because trash tonnages are unavailable from provider	√
Achieve increased diversion rates for specific municipal facilities.	2017	11th Ave - 6192 lbs Patterson - 7392 lbs	-	Patterson and 11th Avenue Head Start Classrooms were selected to be tracked separately due to their recent zero waste program launch and youth impact	√
Achieve a 90% diversion rate at City of Lakewood Earth Day and Cider Days events	Cider Days: 87% Earth Day: 80%	Cider Days: 88% Earth Day: 82%	Cider Days: +1 point Earth Day: +2 points		√
Achieve a 60% residential diversion rate	9%	12%	+3 points	Based on statewide diversion total	×
Achieve a 60% construction and demolition (C&D) diversion rate	-	-	-		√ *

✓ The target is on track X The target is not on track

CIDER DAYS 2017:

ALMOST ZERO WASTE



COMMUNITY COHESION AND PUBLIC HEALTH

GOALS

- Strengthen community cohesion, increase civic participation, and celebrate diversity.
- Promote physical well-being through healthy eating and active living
- Promote social equity and provide strong supportive services

TARGETS

- Increase the percentage of residents reporting "good" or "very good" satisfaction ratings for Lakewood's efforts at welcoming citizen involvement as reported in the City of Lakewood Citizen Survey to 60 percent by 2025.
- Increase resident subscriptions to City communication tools each year through 2025.
- Certify 12 neighborhoods as "Outstanding Sustainable Neighborhoods" in the Sustainable Neighborhoods Program by 2025.
- Increase recreation program participation each year through 2025.
- Fliminate USDA-defined food deserts in Lakewood.
- Achieve community affordable housing targets.
- Increase the percentage of residents reporting "good" or "very good" satisfaction ratings for Lakewood programs for people with special needs, older adults, low-income persons, and homeless people to above Front Range benchmarks.



COMMUNITY COHESION & PUBLIC HEALTH





- Sustainable Neighborhoods Three neighborhoods joined the program and were certified as Outstanding Sustainable Neighborhoods. Together, all eight sustainable neighborhoods engaged 2,700 residents. PAGE 36
- Cycling Without Age This new community organization builds relationships across generations by volunteer cyclists taking seniors on bike rides. PAGE 37
- **40 West ArtLine** The interactive, four-mile walking and biking arts experience launched in June 2018, adding 70 new public art installations by more than 24 artists. PAGE 38



Housing and Homelessness - Lakewood conducted a housing study to understand current supply and demand and continued regional efforts to address the challenges of homelessness. PAGE 39

IN PROGRESS



Collaboration with Local Schools - The City continues to expand its relationships with local schools through Sustainable Neighborhood projects, guest lectures by Sustainability Division staff, and curriculum development aimed and college classrooms this fall.



Lakewood Development Dialogue - The Lakewood Planning Department is currently engaging with the community, Planning Commission, and City Council to develop land use policy related to growth and quality of life. Resulting sustainability recommendations could include the "Enhanced Development Menu," which requires certain developments to add sustainable and community elements, such as public art and local food.



sustainability cooperative (SCOOP)

The City of Lakewood is full of passionate residents who are eager to share their passion and expertise with City staff. In order to channel this enthusiasm and volunteerism, the Sustainability Division formed the Lakewood Sustainability Cooperative or "SCOOP," a voluntary network of residents, businesses, academics and advocates, who contribute their knowledge and time to help advance projects and develop creative solutions. These community members tell us about their background and interests so that we can match them with appropriate sustainability project opportunities.



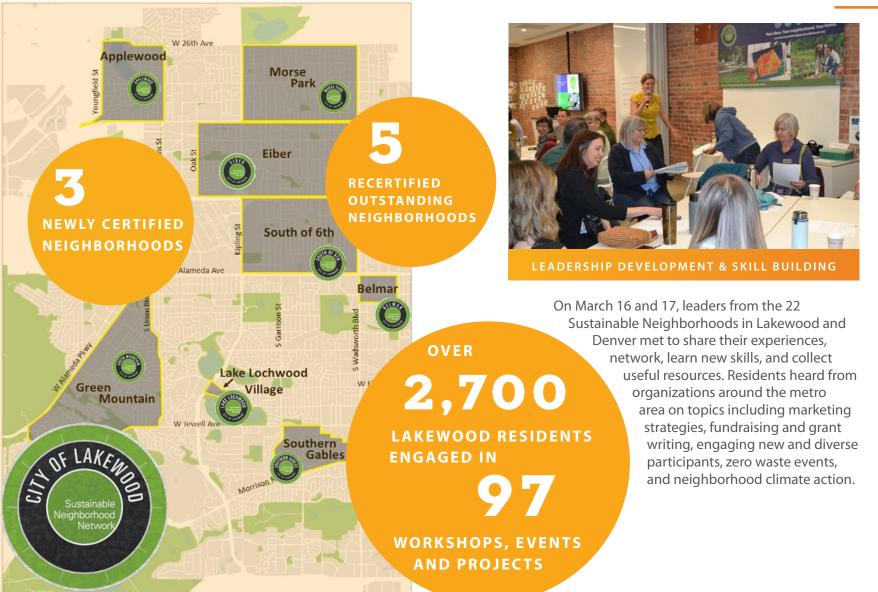
Now in its second year, the SCOOP has grown to include 59 volunteer members with expertise in film, anthropology, engineering, ministry, and more. SCOOP members contributed to 10 different projects including in depth workshops on topics like energy and recycling. The outputs of these projects have accelerated implementation of sustainability strategies and has fostered community building among participants, leading to collaboration beyond the SCOOP project settings.



Join the SCOOP at Lakewood.org/SCOOP.

2017/2018 by the NUMBERS

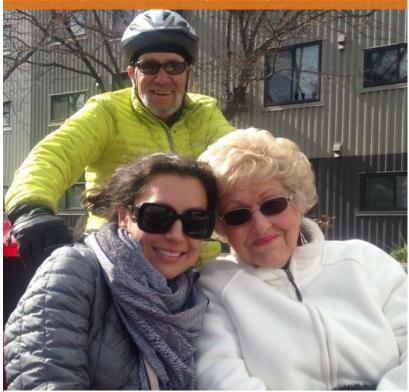
sustainable neighborhoods





cycling without age

The Cycling Without Age program recently brought to Lakewood by Eaton Senior Communities and the Lakewood Bicycle Advisory Team offers trishaw rides to seniors through the pedal power of volunteer cyclists or "pilots."





The trishaws have a comfortable chair on the front of the bicycle, allowing for riders to enjoy a smooth, slow ride while sharing conversation. Between September 2017 and May 2018, 133 rides have been given to riders up to 101 years old!

Find out how you can become a pilot at CyclingWithoutAge.com/Lakewood.

SUSTAINABILITY PLAN: PAGE 101, 114, 153

40 west artline



The interactive, four-mile walking and biking ArtLine experience through the state-certified 40 West Arts Creative District launched in June 2018. The route, a literal vibrant green painted path on the ground, winds its way through historic neighborhoods along West Colfax Avenue and connects residents and visitors to parks, transit, and other area amenities. Seventy new public artworks have been installed along this free outdoor gallery experience, which includes dinosaur-inspired park art sculptures, ground and game murals, community-painted kaleidoscope crossing murals, interactive sculptures that encourage discovery, unexpected surprises along the route, unique fence art, and more! Visit 40WestArtLine.org for details on the public art installations, project background, an e-newsletter sign up, Facebook page, and more.



ArtLine by (some of) the Numbers

- · 4 mile green line route
- 63 ArtLine wayfinding signs
- 70 new art installations by more than 24 artists
- 50 meetings and community events
- 100+ ArtLine committee members and volunteers
- 3,000+ attendees at the ArtLine Launch Block Party



Benefits of the ArtLine

- West Colfax Avenue revitalization
- Increased sense of place and neighborhood beautification
- · Economic benefits for artists and local businesses
- Opportunities for residents to improve public health by walking and biking in their neighborhood, and increased social connections within the community on the ArtLine and at events
- Enhanced free access to parks and the arts in a lower-income community traditionally underserved in these areas

SUSTAINABILITY PLAN: PAGES 102. 153



housing and homelessness

Housing Study

In August 2017, the City of Lakewood enlisted the help of a consultant to determine how well Lakewood's housing supply is meeting demand. The study looks at physical structures, neighborhood setting, transportation infrastructure, and overall community context as the key elements that collectively act as drivers for workforce availability, productivity, and overall quality of life. The study lists 19 findings that can be used to inform future City policies and investments and can be found online at Lakewood.org/HousingStudy.



Addressing the Challenges of Homelessness

Jeffco Heading Home: Along with its neighbors, Lakewood continues to participate in the Jeffco Heading Home initiative in order to end homelessness in Jefferson County. Participating cities meet regularly to address homelessness and work toward solutions.

Community Action Team: In addition to regional collaboration, Lakewood added a sergeant and four police agent positions to work directly on addressing homelessness in the broader community. The team partners with community service providers and other agencies and conducts proactive contacts with Lakewood's known homeless population to better understand the needs of this group.

Rental Assistance Program: Federal Community Development Block Grant funds are used to provide limited rental assistance along with case management and supportive services to formerly homeless Lakewood families. The Salvation Army manages this six month transitional program that provides families rental assistance while working closely with case managers who help them access stable employment, health services, transportation, financial planning, and childcare services. The program's goal is to help families receive the assistance necessary to leave the program with a realistic plan for sustainable employment and housing.

COMMUNITY COHESION & PUBLIC HEALTH

2017-2018 PROGRESS SNAPSHOT

A full list of metrics can be found in Appendix A.

2025 TARGET	BASELINE	MOST CURRENT	CHANGE	NOTES
Increase the percentage of residents reporting "good" or "very good" satisfaction ratings for Lakewood's efforts in welcoming citizen involvement as reported in the City of Lakewood Citizen Survey to 60%	57%	41%	-16 points	City of Lakewood Citizen Survey
Increase resident subscriptions to the City communication tools each year	31,251	55,148	+76%	Residents may subscribe to more than one newsletter and thus be double counted; some subscribers may not be Lakewood residents.
Certify 12 neighborhoods as Outstanding Sustainable Neighborhoods in the Sustainable Neighborhoods Program	2	8	+6	The program began in 2012; the baseline reflects the program's first full year.
Increase recreation program participation each year	352,000	462,100*	+31%	Includes program participation at City recreation centers, pools and, as of 2017, the Clements Center.
Eliminate USDA-defined food deserts in Lakewood	6	3	-50%	-
Increase the percentage of residents reporting "good" or "very good" satisfaction ratings for Lakewood programs for people with special needs, older adults, low-income persons, and homeless people to above Front Range benchmarks	Older Adults: Similar (60%) Special Needs: N/A Low-income: N/A Homeless: N/A	Older Adults: Lower (53%) Special Needs: N/A (46%) Low-income: much lower (34%) Homeless: N/A (21%)	-	City of Lakewood Citizen Survey; in 2010, only the older adults category was surveyed; benchmark comparisons in 2016 were only available for the older adults and low-income categories.
The target is on track X The target is n	ot on track	1		1

INCREASING RECREATION



131% increase in use of recreation centers, 2010-2017



X

X

√ *



new pieces of public art installed through the 40W Artline

GOALS

- Mitigate the negative effects of the built environment and human behavior on Lakewood's natural systems to ensure biodiversity and enhance ecosystem services.
- Enhance Lakewood's resilience to the impacts of climate change using green infrastructure and ecosystem-based adaptation.

TARGETS

- Increase the acreage of functional and healthy natura ecosystems.
- Ensure that all waters within Lakewood meet or exceed the Colorado Department of Public Health and Environment's Water Quality Standards for the uses assigned.
- Achieve tree canopy coverage of 30 percent by 2025.





Earth Day Celebration - Lakewood's annual Earth Day Celebration featured music, art, education, fitness, electric vehicles, bicycles, compost workshops, and so much more. PAGE 43

Lakewood Wildlife Project - Lakewood youth leaders organized an effort to educate the community about how to safely coexist with wildlife. PAGE 46

Environmental Stewardship - City staff showed leadership across City property. The City's golf courses were recognized with an Environmental Leaders in Golf Award, and Lakewood Parks staff saved water, reduced air pollution and beautified city streets through median renovations. PAGE 44

Taylor Property Acquisition - In March 2018, the City of Lakewood purchased 60 acres to be preserved as park and open space.

Sustainable Neighborhoods Stewardship -From tree plantings in Morse Park to the Bee Safe initiative in Eiberhood, Lakewood's sustainable neighborhoods are leaders in environmental stewardship. PAGE 45



earth day celebration

Despite the snowy weather, Lakewood's 2018 Earth Day Celebration was an outstanding success. More than 1,000 people attended the free community event and enjoyed live music, food, a beer garden, interactive art, electric vehicle displays and more than 50 vendors.

















environmental stewardship

AWARD-WINNING GOLF COURSES

Mark Krick, superintendent for Fox Hollow and Homestead golf courses, received an award recognizing overall course management excellence and best management practices in the areas of water conservation, water quality management, energy conservation, pollution prevention, waste management, wildlife and habitat conservation, communication and outreach, and leadership.



WATER-WISE MEDIANS

Parks staff are saving water, reducing air pollution, and beautifying city streets through the renovation of several street medians to reduce maintenance and water usage:

- Removing turf to reduce irrigation and mowing
- Changing turf type to reduce mowing cycles
- Retrofitting irrigation nozzles to increase efficiency
- Using drought-tolerant plants
- · Amending soil to improve nutrient levels, drainage, and reduce compaction



sustainable neighborhoods stewardship



MORSE PARK DIGS TREES

The Morse Park Sustainable Neighborhood embarked on a project to replenish the neighborhood tree canopy. Volunteers planted 30 trees throughout the neighborhood in the last year. By improving the neighborhood tree canopy, the project aims to beautify the neighborhood, purify the air, and provide shade and windbreaks that help decrease neighborhood energy use.

BEE SAFE IN EIBER

The Sustainable Eiber Neighborhood continues to grow its Bee Safe Initiative, which has now expanded beyond the neighborhood boundaries. The initiative promotes gardening without the use of chemicals, known as neonicotinoids, that are harmful to pollinators. By eliminating the use of these products on flower and vegetable gardens, residents are helping to restore our pollinator populations that are crucial to a successful food production system.

Neighbors in Eiber have developed a list of nurseries and businesses in Lakewood that refuse to carry these harmful products or any plants that have been treated with them. Neighbors have also been encouraged to have constructive conversations with businesses still carrying these products, in order to get them to understand what customers value. Learn more about the program at <u>Eiberhood.org/Bee-Safe</u>.



SUSTAINABILITY PLAN: PAGES 127, 102

lakewood wildlife project



How can we encourage safe coexistence between wildlife and people in our community? The Green Mountain Area Homeschoolers took on this challenge and received a 2018 Lakewood Sustainability Award for their efforts.

The students focused their efforts on educating the younger generation, with hopes of having a more lasting impact. Interactive art displays were set up at the Lakewood Earth Day Celebration and the Belmar Library; the students also led small group presentations at a number of youth programs and designed more than 200 masks of local wildlife. All of the materials were produced in English and Spanish to reach an even wider audience.

Learn more at Lakewood.org/SustainabilityAwards.



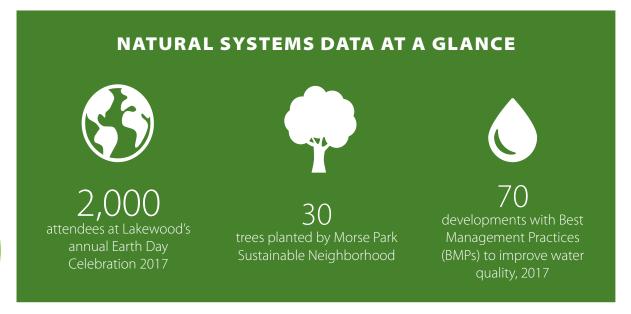


2017-2018 PROGRESS SNAPSHOT

A full list of metrics can be found in Appendix A.

2025 TARGET	BASELINE	MOST CURRENT	CHANGE	NOTES	STATUS
Ensure that all waters within Lakewood meet or exceed the CDPHE's Water Quality Standards for the uses assigned	1 body of water impaired	1 body of water impaired	0%	Bear Creek Reservoir is regularly monitored for phosphorus (P) and chlorophyll a (Chl-a) levels that might exceed the existing TMDL requirements. All designated reservoir uses are currently being met. The known nutrient impairment will continue to be managed by Lakewood staff and the BCWA.	√ *
Achieve 30% tree canopy coverage	7.8%	-	-	i-Tree uses NLCD land cover, tree canopy, and impervious surface data; this calculation is for Lakewood land cover as a whole, not just the urban tree canopy.	×

Lakewood Parks 2017 9,908 participants 122 educational programs





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GOALS

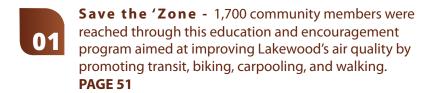
- Develop, maintain, and operate sustainable transportation systems and infrastructure.
- Foster sustainable transportation choices in Lakewood.

TARGETS

- Convert all streetlights to LED or other high efficiency lighting technologies by 2025.
- Reduce Lakewood's daily per capita vehicle-miles-traveled by 10 percent by 2025.
- Reduce the percent of trips to work by single-occupancy vehicles from 75 percent to 65 percent by 2025.
- Reduce petroleum-based fuel consumption of the City fleet by 10 percent by 2025.







- Employee Commuter Rewards Program City employees can now receive monetary incentives for commuting by transit, bike, carpool, or walking. And it's working! In two months, employees have logged 12,000 miles. PAGE 52
- Bike Plan Update The City Council updated the Bicycle System Master Plan to create a more bicyclefriendly community through education, encouragement, and engineering. **PAGE 53**
- Street Debris Diversion City staff diverted 80 percent of street sweeping material over a six month period and repurposed it for dirt at the Thunder Valley motocross park. PAGE 54

IN PROGRESS



Lakewood Development Dialogue - The Planning Department is currently engaging with the community, Planning Commission and City Council to develop land use policy related to growth and quality of life. As a result, several sustainable transportation options recommendations have been proposed, including electric vehicle parking requirements and improved bicycle parking requirements.



TMA - The West Line Corridor Collaborative, a partnership with the City of Lakewood, the City and County of Denver, Metro West Housing Solutions, and the Denver Housing Authority was awarded funding to develop the West Corridor Transportation Management Association (TMA) to promote convenient transportation options along the W Line corridor that will enhance mobility, foster economic prosperity, and reduce traffic congestion and air pollution. This process will begin in late 2018.



save the 'zone

This year, 1,700 Lakewood community members discovered how they can reduce vehicle emissions through *Save the 'Zone*. In 2017, Bicycle Colorado, the City of Lakewood, and the Regional Air Quality Council partnered together to create the *Save the 'Zone* initiative, an education and encouragement program aimed at improving Lakewood's air quality by reducing single occupancy vehicle (SOV) trips, thereby reducing air pollution including ground-level ozone.

Learn more at BicycleColorado.org/Initiatives/Save-the-Zone.



Free education programs were offered at Lakewood Recreation Centers, including Learn to Ride lessons, maintenance and commuting workshops, group rides.



Bicycle Colorado educators worked with six Lakewood schools to share tips and tricks for biking, walking and taking transit.

employee commuter rewards program



City of Lakewood employees who leave their car at home are finding out what an extra \$3 a day can buy. The new Employee Commuter Rewards Program provides a financial incentive designed to encourage employees to commute to work by transit, bike, carpool or walking. By reducing the number of single occupancy vehicle trips made by City staff, the organization is helping reduce air pollution while encouraging community building and active living. Since the program's launch in May 2018, 50 employees have logged nearly 12,000 miles between work and home using sustainable transportation options, reducing emissions by more than 1,500 mtCO₂e.

Along with this new program, Lakewood is shifting the way its employees travel through the bike share program, free bike tuning, Bike to Work Day, and the GoTober annual commuter challenge.





SUSTAINABILITY PLAN: PAGES 153. 155



bike plan update

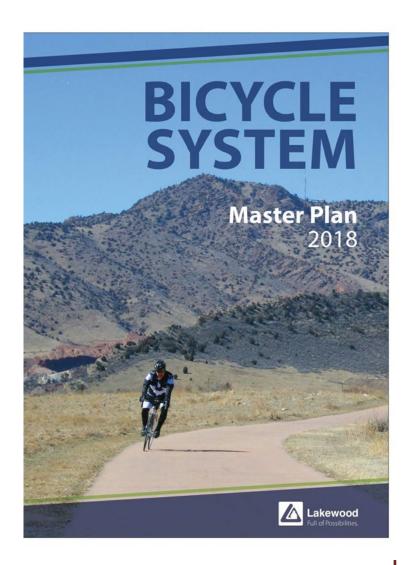
The Bicycle System Master Plan was updated in April 2018 to create a more bicycle-friendly community through education, encouragement and engineering. Bicycling is also encouraged by sponsoring programs such as Bike to Work Day and Safe Routes to School.

Partnerships with the Lakewood Bicycle Advisory Team and Bicycle Colorado provide additional educational opportunities, including Bicycle Friendly Drivers Certification classes offered through Lakewood Recreation Centers. Community events like the West Side Brewery Bike Loop and Lakewood Caffeine Cruise are also great ways to get novice bicyclists comfortable with taking on bicycling as a mode of transportation.

Read the plan at <u>Lakewood.org/BicyclePlan</u>.







SUSTAINABILITY PLAN: PAGES 153, 155

street debris diversion



HOW WAS THE MATERIAL RECYCLED?

A direct beneficiary of this program is Lakewood's Thunder Valley, a nationally recognized motocross park that brings local revenue and tourism to Lakewood. The local business operator utilizes the clean material by mixing it with the dirt. Street sweepers in Lakewood collect a lot of debris. In the past the City disposed of this material by hauling it to a landfill. This is not only expensive, but it's a waste of a lot of reclaimable material. Street sweeping crews are out all through the year, and in winter months crews are out after every storm picking up salt and sand. During the rest of the year, all the streets throughout Lakewood are swept on a scheduled basis. Very little of the collected material is actually trash.

Street maintenance staff collected the material for six months. and then screened the material to separate out trash from clean recyclable material. After completing the screening process, 600 cubic yards of the 750 total collected was found to be clean and recyclable material.

In total, 80 percent of the material was repurposed, saving \$12,900 in dump fees and additional savings in fuel and equipment costs. The total cost savings to the City from the project was approximately \$17,930 in six months' time.



2017-2018 PROGRESS SNAPSHOT

A full list of metrics can be found in Appendix A.

2025 TARGET	BASELINE	MOST CURRENT	CHANGE	NOTES	STATUS
Convert all streetlights to LED or other high efficiency lighting technologies	94	225	+139%	All city-owned streetlights are now LED, this does not account for Xcel-owned lights.	x *
Reduce Lakewood's daily per capita VMT by 10%	18.6	17.2	-8%	Denver Regional Council of Governments (DRCOG) Travel Models	√
Decrease petroleum-based fuel consumption of the City fleet by 10%	330,505 gallons	321,046 gallons	-3%	Data not normalized for weather	TBD

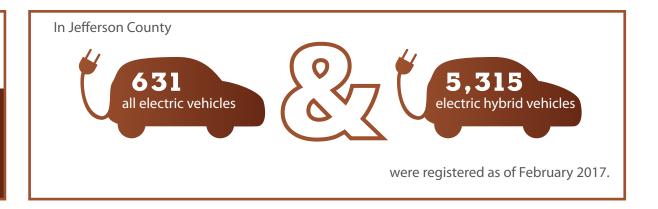
✓ The target is on track

X The target is not on track

ECTRIC /EHICLES

The Colorado electric vehicle market has grown rapidly over the past few years

148% increase in electric vehicle sales, 2016-2017



TARGETS AND INDICATORS

	METRIC	BASELINE YEAR	BASELINE	MOST CURRENT YEAR	MOST CURRENT	CHANGE	SOURCE	NOTES				
NO	TARGET: Reduce communitywide greenhouse gas emissions by 20% below 2007 levels by 2025.											
E & ADAPTATI	Greenhouse Gas Emissions	2007	2,447,746 mtCO2e	2015	2,391,358 mtCO2e	-2%	City of Lakewood Greenhouse Gas Inventory	Metric: metric tons of carbon dioxide equivalent (mtCO2e); Methodology: Global Protocol for Community-scale Greenhouse Gas Emission Inventories (GPC)				
ANG	TARGET: Reduce communitywide greenhouse gas emissions by 50% below 2007 levels by 2050.											
CLIMATE CH	Greenhouse Gas Emissions	2007	2,447,746 mtCO2e	2015	2,391,358 mtCO2e	-2%	City of Lakewood Greenhouse Gas Inventory	Metric: metric tons of carbon dioxide equivalent (mtCO2e); Methodology: Global Protocol for Community-scale Greenhouse Gas Emission Inventories (GPC)				
	TARGET: Reduce municipal gre	TARGET: Reduce municipal greenhouse gas emissions annually through 2025.										
	Municipal Greenhouse Gas Emissions	-	-	-	-	-	-	Data not available				

	METRIC	BASELINE YEAR	BASELINE	MOST CURRENT YEAR	MOST CURRENT	CHANGE	SOURCE	NOTES					
F	TARGET: Generate 45% of mun	icipal energy fro	m renewable so	urces by 2025.									
BUILT ENVIRONMENT	Percent of municipal energy from renewable sources	2010	12%	2017	28%	+16 points	Lakewood Annual Community Energy Report by Xcel Energy	Systemwide service data for Public Service Co. of Colorado					
ENVI	TARGET: Generate 45% of resid	dential energy fro	om renewable so	ources by 2025.									
BUILT	Percent of residential energy from renewable sources	2010	12%	2017	28%	+16 points	Lakewood Annual Community Energy Report by Xcel Energy	Systemwide service data for Public Service Co. of Colorado					
& THE	TARGET: Generate 45% of commercial and industrial energy from renewable sources by 2025.												
ENERGY, WATER, 8	Percent of commercial and industrial energy from renewable sources	2010	12%	2017	28%	+16 points	Lakewood Annual Community Energy Report by Xcel Energy	Systemwide service data for Public Service Co. of Colorado					
RGY,	TARGET: Reduce municipal bui	TARGET: Reduce municipal building and facility energy use intensity by 30% by 2025.											
ENE	Municipal energy use intensity in thousand British thermal units (kBtu)	2010	58	2015	66	+14%	City of Lakewood Community Resources Department	Data normalized for weather based on 2012- 2014 benchmark; data to be updated upon implementation of utility tracking software					
	TARGET: Reduce citywide build	ding energy use i	intensity by 20%	by 2025.									
	Citywide energy use in megawatt hours (MWh)	2012	2,832,699	2017	2,850,347	+<1%	Lakewood Annual Community Energy Report by Xcel Energy	Includes both electric and gas energy consumption; data is not normalized for weather					
	TARGET: Reduce citywide water use by 20% by 2025.												
	Citywide water use in gallons	2010	8,762,211	2017	8,897,017	-2%	Denver Water	Adjusted for weather					
	TARGET: Increase the percenta	ge of certified g	reen buildings (n	ew construction	and renovations	receiving occupa	ancy permits) each year from 2015-202	5.					
	Percentage of certified green buildings within citywide building stock	2010	6	2017	20	+233%	Green Globes, USGBC LEED, and Living Building Challenge online project directories	Does not include number of sites in progress					
	METRIC	BASELINE YEAR	BASELINE	MOST CURRENT YEAR	MOST CURRENT	CHANGE	SOURCE	NOTES					
	Indicator: Kilowatts of on- site solar energy installed	2010	1,023	2017	1,714	+68%	City of Lakewood Public Works Department	Although the total number of alternative energy building permits issued was greater than in 2010, the total kW amount was less					
	Indicator: Number of residential subscribers to community solar projects and wind source	2014	Windsource 2,267 Solar Garden -	2017	Windsource 2,775 Solar Garden 23	Windsource +22% Solar Garden -	Lakewood Annual Community Energy Report by Xcel Energy	-					

	METRIC	BASELINE YEAR	BASELINE	MOST CURRENT YEAR	MOST CURRENT	CHANGE	SOURCE	NOTES
ENERGY, WATER, & THE BUILT ENVIRONMENT	Indicator: Annual energy resource mix as reported by Xcel Energy	2010	Coal: 61% Natural Gas: 27% Wind: 10% Hydro: 1% Other (includes solar): 1%	2017	Coal: 44% Natural Gas: 28% Wind: 23% Hydro: 2% Solar: 2% Other: 0%	Coal: -17 Natural Gas: +1 Wind: +13 Hydro: +1 Solar: +1 Other: -1	Lakewood Annual Community Energy Report by Xcel Energy	Systemwide service data for Public Service Co. of Colorado
THE BUILT!	Indicator: Residential electricity and gas costs	2015	Electricity \$0.12/kWh Natural Gas \$0.78/therm	2017	Electricity \$0.11/kWh Natural Gas \$0.76/therm	Electricity -2% Natural Gas -2%	Lakewood Annual Community Energy Report by Xcel Energy	-
⟨GY, WATER, &	Indicator: Number of business subscribers to community solar projects and wind source	2015	Windsource 16 Solar Garden 5	2017	Windsource 19 Solar Garden 8	Windsource +19% Solar Garden +60%	Lakewood Annual Community Energy Report by Xcel Energy	-
ENER	Indicator: Commercial electricity and gas costs	2015	Electricity \$0.09/kWh Natural Gas \$0.48/therm	2017	Electricity \$0.09/kWh Natural Gas \$0.46/therm	Electricity 0% Natural Gas -4%	Lakewood Annual Community Energy Report by Xcel Energy	-
	Indicator: Kilowatts of energy generated from on-site renewable energy systems for municipal buildings	2010	0	2017	0	0%	City of Lakewood Community Resources Department	No on-site renewable energy systems for municipal buildings exist
	Indicator: Kilowatts of energy purchased from off-site renewable energy systems	2014	274	2017	274	0%	Clean Energy Collective Community Solar Garden	The City purchased 274 kW in 2014
	Indicator: Energy use intensity by sector	-	-	-	-	-	-	Data not available
	Indicator: Municipal energy use intensity	2010	58	2015	66	14%	City of Lakewood Community Resources Department	Data normalized for weather based on 2012- 2014 benchmark; data to be updated upon implementation of utility tracking software
	Indicator: Water use by sector	-	-	-	-	-	-	Data not available
	Indicator: Municipal water use	-	-	-	-	-	City of Lakewood Community Resources Department	Data to be collected upon implementation of utility tracking software

METRIC	BASELINE YEAR	BASELINE	MOST CURRENT YEAR	MOST CURRENT	CHANGE	SOURCE	NOTES
Indicator: Number of certified green building projects	2010	6	2017	20	233%	Green Globes, USGBC LEED, and Living Building Challenge online project directories	Data does not include number of sites in progress
Indicator: Number of indoor air quality investigations and/or complaints filed with Jefferson County Public Health	-	-	-	-	-	-	Data not available
Indicator: Number of certified sites through the Sustainable Sites Initiative	2010	0	2017	0	0%	Sustainable Sites Initiative	-

	METRIC	BASELINE YEAR	BASELINE	MOST CURRENT YEAR	MOST CURRENT	CHANGE	SOURCE	NOTES				
≥	TARGET: Increase local food ass	sets annually thr	ough 2025.									
SUSTAINABLE ECONOMY	Number of local food assets	2015	37	2017	43	+16%	City of Lakewood Planning Department	Includes community gardens, farms, Community Supported Agriculture sites, and farmers markets				
ABLE	TARGET: Achieve participation from 20 local businesses in the first three years of implementing a green business certification program.											
USTAIN	Number of certified green businesses	-	-	-	-	-	-	City of Lakewood green business certification program to be established				
S	TARGET: Increase the percentage of households in CDBG qualified neighborhoods spending less than 45 percent of income on housing and transportation costs to 60% by 2025.											
	Number of CDBG qualified neighborhoods spending less than 45% of income on housing and transportation costs	2013	24,399 households (92%)	2017	8,798 households (37%)	-64%	Center for Neighborhood Technology (CNT) H + T Affordability index and City of Lakewood Planning Department	Will be updated as CDBG qualified neighbor- hood boundaries change. Current data uses 2006-2010 CDBG HH data.				
	TARGET: Increase number of ho	ouseholds above	Living Wage Sta	ndard by 15% by	2025.							
	Number of households above the Living Wage Standard	2010	32,843 (53% of hh)	2017	32,680 (49% of hh)	-<1%	US Census American Fact Finder, H12: Average Household Size of Occupied Housing Units by Tenure, and B19001- Household Income for the Past 12 Months	Methodology sourced from STAR Community Rating System Technical Guide; 2017 data had not been released by the publication date				
	TARGET: Increase number of ho	ousing units with	nin a designated	Complete Neighb	oorhood by 25%	by 2025.						
	Number of housing units within a designated Complete Neighborhood	-	-	-	-	-	-	Criteria to be established after the completion of Sustainability Plan Strategy SE2-B, p. 65				
	METRIC	BASELINE YEAR	BASELINE	MOST CURRENT YEAR	MOST CURRENT	% CHANGE	SOURCE	NOTES				
	Indicator: Location quotients of specifically identified sectors	-	-	-	-	-	-	Data not available				
	Indicator: Urban agriculture permits issued	2014	93	2017	68	-27%	City of Lakewood Planning Department	"Urban agriculture permits" are small animal permits; permits not required for zone districts R-1-9, R-1-12, R-1-18, and R-1-43				
	Indicator: Acreage of community gardens and urban farms	2015	50+	-	-	-	City of Lakewood HEAL Cities & Towns Food Access Assessment Report	Data based on a single year report; only accounts for 7 of the 22 total community gardens and urban farms; 2017 data had not been released by the publication date				

	METRIC	BASELINE YEAR	BASELINE	MOST CURRENT YEAR	MOST CURRENT	CHANGE	SOURCE	NOTES
ECONOMY	Indicator: Funds deposited into locally owned and managed financial institutions	-	-	-	-	-	-	Data not available
SUSTAINABLE ECONOMY	Indicator: Unemployment level	2010	Avg rate: 10% Avg no.: 7,956	2017	Avg rate: 2.6% Avg no.: 2,234	Avg rate: -7 points Avg no.: -72%	Bureau of Labor Statistics Data Finder	-
SI	Indicator: Jobs to labor force ratio	-	-	-	-	-	-	Data not available
	Indicator: Average "click rate" for the City Economic Development electronic newsletter	2015	3.5%	2017	4%	<1 points	Mailchimp.com	-
	Indicator: Median household income	2010	\$56,786	2016	\$58,227	3%	U.S. Census American Fact Finder	2010 data adjusted for 2016 inflation
	Indicator: Percentage of households that meet or exceed the living wage standard	2010	53%	2017	49%	-4 points	U.S. Census American Fact Finder	Methodology pulled from STAR Community Rating System Technical Guide.
	Indicator: Percentage of households that spend more than 45% of income on housing and transportation costs	2013	45%	2017	45%	1 point	Center for Neighborhood Technology (CNT) H + T Affordability index	-
	Indicator: Number of residents on waiting lists for subsidized units at MWHS properties	2015	200	2017	-	-	Metro West Housing Solutions	In 2017 pre-application list was not opened due to a budget shortfall.
	Indicator: Number of households in areas within a designated Complete Neighborhood	-	-	-	-	-	-	Criteria to be established after the completion of Sustainability Plan Strategy SE2-B, p. 65
	Indicator: Jefferson County Schools postsecondary and workforce readiness score	2012-2013	Exceeds: 3 Meets: 0 Approaching: 4 Does not meet: 2	2016-2017	Exceeds: 1 Meets: 3 Approaching: 1 Does not meet: 4	-	Colorado Department of Education	Number for each category represents number of high schools that meet each set of criteria

	METRIC	BASELINE YEAR	BASELINE	MOST CURRENT YEAR	MOST CURRENT	CHANGE	SOURCE	NOTES
LE ECONOMY	Indicator: High school graduation rates and postsecondary educational attainment	2010	High School Grad & Higher: 90% Bach. Degree and higher: 36%	2016	High School Grad & Higher: 92% Bach. Degree and higher: 37%	High School Grad & Higher: 2 points Bach. Degree and higher: 3 points	U.S. Census American Fact Finder	2017 data had not been released by the publication date
SUSTAINAB	Indicator: Participation in workforce development programs and skills training	2015	2,258 participants	-	-	-	American Job Center	Data not available

	METRIC	BASELINE YEAR	BASELINE	MOST CURRENT YEAR	MOST CURRENT	CHANGE	SOURCE	NOTES
쁜	TARGET: Achieve a 60% comm	unitywide divers	ion rate by 2025.					
ZERO WASTE	Diversion rate	2010	9%	2017	12%	3 points	Colorado Department of Health and Environment	Based on statewide diversion total
ZER	TARGET: Achieve an 80% diver							
	Diversion rate/Pounds recycled and composted	2015	65%	2017	86,316 lbs.	-	City of Lakewood Hauler Reports	2015 data was likely overestimated; Unable to deter- mine 2017 diversion rate because trash tonnages are unavailable from provider
	TARGET: Achieve increased div	version rates for s	pecific municipa	l facilities.				
	Pounds recycled and composted	2017	11th Ave - 6192 lbs Patterson - 7392 lbs	2017	11th Ave - 6192 lbs Patterson - 7392 lbs	-	City of Lakewood Hauler Reports	Patterson and 11th Avenue Head Start Classrooms were selected to be tracked separately due to their recent zero waste program launch and youth impact
	TARGET: Achieve a 90% divers	ion rate at City o	f Lakewood Earth	Day and Cider D	ays events.			
	Diversion rate	2014	Cider Days: 87% Earth Day: 80%	2018	Cider Days: 88% Earth Day: 82%	Cider Days: 1 point Earth Day: 2 points	City of Lakewood Community Resources and Planning Departments	-
	TARGET: Achieve a 60% reside	ntial diversion ra	te by 2025.					
	Diversion rate	2010	9%	2017	12%	3 points	Colorado Department of Health and Environment	Based on statewide diversion total
	TARGET: Achieve a 60% constr	uction and demo	olition diversion i	rate by 2025.				
	Diversion rate	-	-	-	-	-	-	Data not available
	TARGET: Achieve a 60-90% div	ersion rate for p	iority waste strea	ams.				
	Diversion rate	-	-	-	-	-	-	Priority waste streams to be established after the completion of Sustainability Plan Strategy ZW3-A, p. 89
	METRIC	BASELINE YEAR	BASELINE	MOST CURRENT YEAR	MOST CURRENT	% CHANGE	SOURCE	NOTES
	Indicator: Number of residents engaged through zero waste outreach and education campaigns	2015	6 campaigns	2017	7 campaigns	+17%	City of Lakewood	Includes community events and other outlets providing zero waste education; 2017 included Cider Days, Sounds Exciting, Older Adult Wellness Fair, Sustainability Newsletter, Sustainable Neighborhoods, Earth Day Celebration, and SCOOP workshop for the 2018 recycling campaign

	METRIC	BASELINE YEAR	BASELINE	MOST CURRENT YEAR	MOST CURRENT	CHANGE	SOURCE	NOTES
ZERO WASTE	Indicator: Number of City facilities that offer recycling and composting collection	2015	Composting: 2 Recycling: 19	2017	Composting: 6 Recycling: 22	Composting: 200% Recycling: 16%	City of Lakewood Sustainability Division	Does not include recycling containers at park sites
ZERC	Indicator: Participation at special collection events	2015	Participation: 3,373 Pounds: 39,259 Gallons: 112	2017	Participation: 3,324 Pounds: 350,086 Gallons: 150	Participation: -1% Pounds: +790% Gallons: +34%	City of Lakewood Public Works, Police Department, and Community Resources Departments	Participation: the number of vehicles at the CDBG Neighborhood cleanups, yard waste collection event, Shred Day (in 2017), and Cleanup Days Pounds: prescription drug take-back, holiday lights, and Earth Day E-cycle (2017) Gallons: cooking oil
	Indicator: Volume of material collected at Quail Street Recycling Center	2012	1,200 tons	2017	1,558 tons	30%	City of Lakewood Public Works Department	-
	Indicator: Volume of hazardous material collected at Rooney Road Recycling Center	2004	131	2017	294 tons	224%	City of Lakewood Public Works Department	Rooney Road Recycling Center Authority Management Committee member jurisdiction
	Indicator: Residential diversion rate (eight units or fewer)	2010	9%	2017	12%	3 points	Colorado Department of Public Health	Based on statewide diversion total
	Indicator: Percentage of residents with recycling/composting services	-	-	2016	Recycling: 66%	-	City of Lakewood Trash and Recycling Survey	This survey was targeted toward single-family residences
	Indicator: Percentage of residents who compost at home	-	-	2016	22%	-	City of Lakewood Trash and Recycling Survey	This survey was targeted toward single-family residences
	Indicator: Residential diversion rate (more than eight units)	2010	9%	2017	12%	3 points	Colorado Department of Public Health	Based on statewide diversion total
	Indicator: Percentage of multifamily residences with recycling/composting services	-	-	-	-	-	-	Data not available
	Indicator: Commercial landfill diversion rates	2010	9%	2017	12%	3 points	Colorado Department of Public Health	Based on statewide diversion total

	METRIC	BASELINE YEAR	BASELINE	MOST CURRENT YEAR	MOST CURRENT	CHANGE	SOURCE	NOTES
ZERO WASTE	Indicator: Number of restaurants and grocery stores participating in food composting program	-	-	-	-	-	-	Data not available
IZ	Indicator: Number of individuals employed at reuse and resource recovery businesses	2015	34 businesses	-	-	-	City of Lakewood Finance Department	Data from City generated list of "Used Merchandise Stores" then filtered to include only reuse and resource recovery businesses; number of employees to be de- termined; 2017 data collection in process
	Indicator: C&D landfill diversion rates	-	-	-	-	-	-	Data not available

	METRIC	BASELINE YEAR	BASELINE	MOST CURRENT YEAR	MOST CURRENT	CHANGE	SOURCE	NOTES				
АГТН	TARGET: Increase the percentage of residents reporting "good" or "very good" satisfaction ratings for Lakewood's efforts in welcoming citizen involvement as reported in the City of Lakewood Citizen Survey to 60% by 2025.											
COMMUNITY COHESION & PUBLIC HEALTH	Percentage of residents reporting "good", or "very good" reporting satisfaction of welcoming citizen involvement in the Citizen Survey	2010	57%	2016	41%	-16 points	City of Lakewood Citizen Survey	-				
ОНЕ	TARGET: Increase resident subs	scriptions to the	City communica	tion tools each ye	ear through 2025							
MMUNITY C	Number of resident subscriptions to City e-newsletters	2015	31,251	2017	55,148	43%	Mailchimp.com	Residents may subscribed to more than one e-newsletter and thus be double counted; some subscribers may not be Lakewood residents				
8	TARGET: Certify 12 neighborho	oods as "Outstan	ding Sustainable	Neighborhoods'	" in the Sustainal	ole Neighborhoo	ds Program by 2025.					
	Number of Outstanding Sustainable Neighborhoods	2013	2	2018	8	+6	City of Lakewood Sustainability Division	The program began in 2012; the baseline reflects the program's first full year				
	TARGET: Increase recreation pr	ogram participa	tion each year th	rough 2025.		^						
	Number of participants in City recreation programs	2010	352,000	2017	462,100*	31%	City of Lakewood Community Resources Department	*Includes program participation at City recreation centers, pools, and, as of 2017, the Clements Center.				
	TARGET: Eliminate USDA-defined food deserts in Lakewood.											
	Number of USDA-defined food desert within the City boundary	2015	6	2016	3	-50%	U.S. Department of Agriculture Food Access Research Atlas	-				
	TARGET: Achieve community a	ffordable housir	ng targets.				·					
	TBD	-	-	-	-	-	-	Criteria to be established after the completion of Sustainability Plan Strategy CC3-A, p.113				
	TARGET: Increase the percenta homeless people to above Fron	~		or "very good" sa	atisfaction rating	s for Lakewood p	programs for people with special needs,	older adults, low-income persons, and				
	Front Range benchmark comparison of the percentage of residents reporting "good", or "very good" satisfaction of programs for people with special needs, older adults, low-income persons, and homeless people	2010	Older Adults: Similar (60%) Special Needs: N/A Low-income: N/A Homeless: N/A	2016	Older Adults: Lower (53%) Special Needs: N/A (46%) Low-income: much lower (34%) Homeless: N/A (21%)	-	City of Lakewood Citizen Survey	In 2010, only the older adults category was surveyed; benchmark comparisons in 2016 were only available for the older adults and low-income categories				

	METRIC	BASELINE YEAR	BASELINE	MOST CURRENT YEAR	MOST CURRENT	CHANGE	SOURCE	NOTES
ЕАСТН	Indicator: Voter turnout in regular municipal elections	2010	71%	2017	30%	-56 points	City of Lakewood City Clerk's Office	-
PUBLIC HEALTH	Indicator: Enrollment in citizen academies	2013	Planning Academy: 19 Police Academy: 24	2017	Planning Academy: 22 Police Academy: 24	Planning Academy: 15% Police Academy: 0%	City of Lakewood Planning and Police Departments	-
HESION &	Indicator: Number of applications for citizen boards and commissions	2014	24	2017	53	120%	City of Lakewood City Clerk's Office	Number varies on how many board or commission openings occur that year
COMMUNITY COHESION &	Indicator: Number of volunteers participating in City programs and activities	2014	47,955 hours	2017	44,898 hours	-6%	City of Lakewood Community Resources Department	-
COM	Indicator: Total page views on Lakewood.org	2015	4,546,627	2017	4,234,663	-6%	Google Analytics	-
	Indicator: Number of followers of Lakewood social media channels	2015	20,773	2017	48,402	133%	City of Lakewood City Manager's Office	-
	Indicator: Number of Google Translate requests for Lakewood.org Web pages	-	-	-	-	-	-	Data not available
	Indicator: Minority resident satisfaction with the job Lakewood government does at welcoming citizen involvement	2010	52%	2016	36%	-16 points	City of Lakewood Citizen Survey	Percent responding "good" or "very good"
	Indicator: Resident satisfaction with overall quality of life	2010	90%	2016	93%	3 points	City of Lakewood Citizen Survey	Percent responding "good" or "very good"
	Indicator: Number of participants in the Sustainable Neighborhoods Program	2013	763	2017	2,504	228%	City of Lakewood Sustainability Division	The program began in 2012; the baseline reflects the program's first full year
	Indicator: Number of registered neighborhood organizations	2015	129	2017	137	6%	City of Lakewood Planning Department	-

	METRIC	BASELINE YEAR	BASELINE	MOST CURRENT YEAR	MOST CURRENT	CHANGE	SOURCE	NOTES
COMMUNITY COHESION & PUBLIC HEALTH	Indicator: Number of neighborhoods, households, and people registered on NextDoor.com	2015	102 neighborhoods	2017	121 neighborhoods	18%	City of Lakewood	-
ION & PUB	Indicator: Participation in Lakewood's Inspire Arts Week	2013	2,500	2017	4,600	84%	City of Lakewood Community Resources	-
NITY COHES	Indicator: Attendance at City Cultural and Heritage programs	2010	85,606	2017	200,514	-	City of Lakewood Community Resources	Annual HCA audit of paid and free attendance
OMMUN	Indicator: Annual number of public art installations	-	-	2017	12	-	City of Lakewood Community Resources	Includes temporary, rotating, and permanent
U	Indicator: Acreage of community gardens and urban farms	2015	50+	-	-	-	City of Lakewood HEAL Cities & Towns Food Access Assessment Report	Data based on a single year report; only accounts for 7 of the 22 total community gardens and urban farms
	Indicator: Number of households in identified food deserts	2015	11,018	2016	6,071	-45%	United States Department of Agriculture Food Access Research Atlas	-
	Indicator: Resident's satisfaction with recreation programs and facilities	2010	Programs: 78% Facilities: 81%	2016	Programs: 75% Facilities: 79%	Programs: -3 points Facilities: -2 points	City of Lakewood Citizen Survey	-
	Indicator: Number of unique visits to City recreation facilities	-	-	-	-	-	City of Lakewood Community Resources Department	Data not available
	Indicator: Bicycle traffic counts	2014	595 total bike counts	2017	Bear Creek Trail (Bear Creek Trail (We: Garrison St Bike Lar	k Usage along: East of Estes): 7/hr st of Wadsworth): 8/hr ie (Northbound): 6/hr ie (Southbound): 8/hr	City of Lakewood Public Works Department	2017 bicycle counts at Bear Creek Trail were conducted in August 2017, at Garrison Street in October 2017; 2014 bike counts were conducted at different locations
	Indicator: Level of Bicycle or Walk Friendly Community certification	2014	Bronze	2017	Bronze	-	The League of American Bicyclists Bicycle Friendly Community Report Card	-
	Indicator: Jefferson County public health selected health conditions and causes of death	2011	Leading Causes of Death: Cardiovascular Diseases: 24% Cancer: 21% Unintentional Injuries 7%	2016	Leading Causes of Death: Cancer: 28% Cardiovascular Diseases: 27% Unintentional Injuries 11%	Leading Causes of Death: Cancer: 7 Cardiovascular Diseases: 3 Unintentional Injuries: 4	Jefferson County Public Health Community Health Assessment	Data reported for Jefferson County as a whole

	METRIC	BASELINE YEAR	BASELINE	MOST CURRENT YEAR	MOST CURRENT	CHANGE	SOURCE	NOTES
Y COHESION & PUBLIC HEALTH	Indicator: Number of residents on waiting lists for subsidized units at Metro West Housing Solutions properties	2015	200	2017	-	-	Metro West Housing Solutions	In 2017 pre-application list was not opened due to a budget shortfall.
	Indicator: Percentage of households that spend more than 45% of income on housing and transportation costs	2013	45%	2017	44%	1 point	Center for Neighborhood Technology (CNT) H + T Affordability index	-
COMMUNITY	Indicator: Participation in City of Lakewood Family Services programs	2015	56,167	2017	64,783	15%	City of Lakewood Community Resources Department	-
	Indicator: Number of people served through the Action Center	-	-	2017	Over 20,000	-	The Action Center	-
	Indicator: Resident's feelings of safety	2013	In your neighborhood during the day: 96% Walking alone in your neighborhood after dark: 72%	2016	In your neighborhood during the day: 95% Walking alone in your neighborhood after dark: 76%	In your neighbor- hood during the day: -1 points Walking alone in your neighbor- hood after dark: 4 points	City of Lakewood Citizen Survey	Feelings of safety were not surveyed prior to 2013

	METRIC	BASELINE YEAR	BASELINE	MOST CURRENT YEAR	MOST CURRENT	CHANGE	SOURCE	NOTES				
S	TARGET: Increase the acreage of	TARGET: Increase the acreage of functional and healthy natural ecosystems.										
NATURAL SYSTEMS	Acreage of functional and healthy natural systems	-	-	-	-	-	-	Criteria to be established after the completion of Sustainability Plan Strategy NS1-C, p. 128				
RAL:	TARGET: Ensure that all waters within Lakewood meet or exceed the CDPHE's Water Quality Standards for the uses assigned.											
NATU	Number of waters in Lakewood that meet or exceed the CDPHE's Water Quality Standards	2015	1 body of water impaired	2017	1 body of water impaired	0%	Colorado Department of Health and Environment, Water Quality Control Commission, Colorado's Section 303(D) List of Impaired Waters and Monitoring and Evaluation List	Bear Creek Reservoir is regularly monitored for phosphorus (P) and chlorophyll a (Chl-a) levels that might exceed the existing TMDL requirements. All designated reservoir uses are currently being met. The known nutrient impairment will continue to be managed by Lakewood staff and the BCWA.				
	TARGET: Achieve 30% tree can	opy coverage by	2025.									
	Percent coverage	2011	7.8%	-	-	-	i-Tree Landscape Tool	i-Tree uses NLCD land cover, tree canopy, and impervious surface data; this calculation is for Lakewood land cover as a whole, not just the urban tree canopy; 2017 data had not been released by the publication date				
	METRIC	BASELINE YEAR	BASELINE	MOST CURRENT YEAR	MOST CURRENT	CHANGE	SOURCE	NOTES				
	Indicator: Acreage of land cover by habitat type	2011	Developed: 20,904.2 acres Forest: 195 acres Wetland: 927.5 acres Water: 642.9 acres Other: 5,529.1 acres Cultivated: N/A	-	-	-	i-Tree Landscape Tool	i-Tree uses NLCD land cover, tree canopy, and impervious surface data; "other" in- cludes shrub/scrub, grassland/herbaceous, and barren land; 2017 data had not been released by the publication date				
	Indicator: Acres of Colorado List A noxious weed species on city owned property	2015	30	2017	25	-17%	City of Lakewood Community Resources Department	List A noxious weed species currently/ formerly seen and controlled: purple loose- strife, orange hawkweed, myrtle spurge, cypress spurge				
	Indicator: Population counts of key indicator species	-	-	-	-	-	City of Lakewood Community Resources Department	No official inventory or identification process has been established; species most likely include native pollinators, bats, and some amphibians				
	Indicator: Number of developments that have installed or retrofitted BMP's to improve water quality	2015	57	2017	70	22%	City of Lakewood Public Works Department	-				

	METRIC	BASELINE YEAR	BASELINE	MOST CURRENT YEAR	MOST CURRENT	CHANGE	SOURCE	NOTES
SYSTEMS	Indicator: Number of environmental education programs and outreach events	2013	108	2017	122	13%	City of Lakewood Community Resources Department	-
NATURAL S	Indicator: Attendance at Lakewood's annual Earth Day Celebration	2012	500	2018	1,266	153%	City of Lakewood Sustainability Division	2017 attendance was 2,000; 2018 attendance was affected by poor weather
2	Indicator: Percentage of permeable land	2011	68%	2017	61%	-7 points	i-Tree Landscape Tool	i-Tree uses NLCD land cover, tree canopy, and impervious surface data; 2017 data had not been released by the publication date
	Indicator: Percentage of 100-year flood plain w/ vegetative coverage	-	-	-	-	-	-	Data not available

	METRIC	BASELINE YEAR	BASELINE	MOST CURRENT YEAR	MOST CURRENT	CHANGE	SOURCE	NOTES		
Z	TARGET: Convert all streetlight	s to LED or other	high efficiency	lighting technolo	gies by 2025.					
TRANSPORTATION	Number of LED streetlights	2015	94	2017	225	139%	City of Lakewood Public Works Department	All city-owned streetlights are now LED. This does not account for Xcel-owned lights.		
ISPO	TARGET: Reduce Lakewood's d	TARGET: Reduce Lakewood's daily per capita VMT by 10% by 2025.								
TRAN	Vehicle miles traveled (VMT)	2010	18.6	2015	17.2	-8%	Denver Regional Council of Governments (DRCOG) Travel Models	Data is collected every 5 years, 2015 is the most recent baseline year.		
	TARGET: Reduce the percent of	f trips to work by	single-occupan	cy vehicles from 7	75% to 65% by 20	025.				
	Number of single-occupancy trips	2010	53,175	2016	66,622	25%	United States Census Bureau American Fact Finder	2017 data had not been released by the publication date		
	Percent of trips to work that are single-occupancy	2010	79%	2016	78%	-1 point	United States Census Bureau American Fact Finder	2017 data had not been released by the publication date		
	TARGET: Decrease petroleum-based fuel consumption of the City fleet by 10% by 2025.									
	Gallons of petroleum-based fuel consumed	2010	330,505	2014	321,046	-3%	City of Lakewood Public Works Department	Data not normalized for weather		
	METRIC	BASELINE YEAR	BASELINE	MOST CURRENT YEAR	MOST CURRENT	CHANGE	SOURCE	NOTES		
	Indicator: Annual vehicles miles traveled in street maintenance operations	2010	156,865	2017	239,695	53%	City of Lakewood Public Works Department	Data not normalized for weather		
	Indicator: Concentration of criteria air pollutants	-	-	-	-	-	-	Data not available		
	Indicator: Street construction waste diversion rates	-	-	-	-	-	City of Lakewood Public Works Department	Per City regulations, no waste is generated. All materials for street construction programs (concrete and overlay) are recycled or reused.		
	Indicator: Percentage of recycled materials used in street maintenance and construction	-	-	-	-	-	City of Lakewood Public Works Department	Materials being recycled are asphalt binder and aggregates; per City, no more than 20% recycled asphalt pavement (RAP) may be used on collector and arterial streets overlay; no more than 30% RAP on patching, minor collectors and residential streets.		
	Indicator: Street and signal lighting energy use	2013	7,024,646 kWh	2015	6,4167,99 kWh	-9%	City of Lakewood Public Works Department	Data includes metered, non-metered, flasher, and flat rate usage; 2017 data collection in process		

	METRIC	BASELINE YEAR	BASELINE	MOST CURRENT YEAR	MOST CURRENT	CHANGE	SOURCE	NOTES
TRANSPORTATION	Indicator: Commuter mode split	2010	Drove alone: 79% Carpooled: 9% Transit: 4% Walked: 2% Other: 6%	2016	Drove alone: 78% Carpooled: 8% Transit: 5% Walked: 2% Other: 7%	Drove alone: -1 point Carpooled: -1 point Transit: 1 point Walked: 0 point Other: 1 point	United States Census Bureau American Fact Finder	2017 data had not been released by the publication date
TRA	Indicator: Transit ridership	2010	3,959.935	2015	5,115,176	29%	Regional Transportation District, Service Development Department	Data derived from RTD reports; data reflects the average annual ridership based on average total daily passengers at each bus and light rail stop in Lakewood; 2017 data not collected due to resource availability
	Indicator: Percentage of household income spent on transportation	2013	19%	2017	19%	0%	Center for Neighborhood Technology (CNT) H + T Affordability index	-
	Indicator: Bicycle level of service	-	-	-	-	-	-	Methodology undetermined
	Indicator: Number of miles of bike trails and routes and number and length of missing segments	2015	170.3 mi. of trails and routes; 93 mi. of missing segments	2017	174.9 mi. of trails and routes	3% for trails and routes	City of Lakewood Community Resources and Public Works Departments	Includes hard, soft, and signed facility type trails and routes
	Indicator: Bicycle traffic counts	2014	595 total bike counts	2017	Bear Creek Trail (Bear Creek Trail (We Garrison St Bike Lar	k Usage along: (East of Estes): 7/hr st of Wadsworth): 8/hr ne (Northbound): 6/hr ne (Southbound): 8/hr	City of Lakewood Public Works Department	2017 bicycle counts at Bear Creek Trail were conducted in August 2017, at Garrison Street in October 2017; 2014 bike counts were conducted at different locations
	Indicator: Number of alternative fuel vehicles in Lakewood	2015	Jeffco: Total: 5259 Electric: 275 Lakewood: Total: 1595 Electric: 87	2016	Jeffco: Total: 5946 Electric: 631 Lakewood: N/A	Jeffco: Total: +13% Electric: +130% Lakewood: N/A	Colorado Department of Revenue, Division of Motor Vehicles	Alternative fuel vehicles total includes all electric and electric hybrid vehicles
	Indicator: Number of alternative fuel vehicles in the City's fleet	2015	5	2017	5	0%	City of Lakewood Public Works Department	First Generation Prius Hybrid, and Chevy Volts
	Indicator: Number of alternative fuel stations in Lakewood	2015	7	2017	12	71%	US Department of Energy	-
	Indicator: Average miles per gallon of vehicles in Lakewood	-	-	-	-	-	Colorado Department of Revenue, Division of Motor Vehicles	Data not available

APPENDIX B

STATUS OF IMPLEMENTATION STRATEGIES

The rating system used in this report places implementation strategies into four categories:

The strategy implementation is complete .
Significant progress has been made on implementing this strategy.
Implementation is underway.
Implementation has not started .

	PROGRESS	STRATEGY	NOTES
CLIMATE CHANGE & ADAPTATION		Greenhouse Gas Data Collection, Tracking and Reporting. Regularly monitor Lakewood's greenhouse gas emissions.	Municipal GHG inventory has not been completed
		Greenhouse Gas Reduction Strategies. Utilize emission reduction assessments to prioritize and implement greenhouse gas reduction strategies.	Some assessments are being used. Need to identify additional strategies for implementing GHG impacts into organizational-wide decision making.
		CCA1-C Climate Change Vulnerability Study Conduct a climate change vulnerability assessment, recognizing that future conditions and threats will be different from current or historical conditions.	Currently, staff is utilizing regional vulnerability assessments for Colorado and front range communities.
		CCA1-D Climate Preparedness Plan Based on the climate change vulnerability study, develop a climate preparedness plan to prepare for multiple climate futures.	









	PROGRESS	STRATEGY	NOTES
ONMENT		Renewable Energy Transmission and Generation Expand renewable energy generation and access while ensuring necessary transmission infrastructure.	Opportunity to prioritize as part of the current Energy Futures Collaborative with Xcel Energy.
ENERGY, WATER, & THE BUILT ENVIRONMENT		District-Scale Sustainability Establish unique districts within Lakewood where community sustainability goals are achieved through customizable guidelines.	Federal Center property was originally identified as a potential site for this strategy. No alternative site has been identified.
		Sustainable Energy and Water Resource Center Establish a resource center to provide information and consulting services to residents and businesses related to energy and water conservation and renewable energy generation.	Implementation will be ongoing to ensure up-to-date resources.
ENERGY,		Municipal Renewable Energy Generation Develop a municipal renewable energy generation strategy to increase the percentage of municipal energy and fuel generated from renewable sources such as wind, solar, advanced biofuels, and other alternatives to fossil fuels.	This is a prioritized strategy for implementation. Staff has identified several pathways that could facilitate 100% renewable electricity for municipal buildings.
		Efficiency in Resource Intensive Buildings Target resource intensive buildings for efficiency improvements.	
		Reporting & Benchmarking Energy and Water Use Develop a campaign to encourage voluntary benchmarking of energy and water consumption at the building or site scale through the use of utility data tracking software.	
		Resource Efficient Municipal Facilities Effectively manage and reduce municipal energy and water use.	Newly implemented utility management software and energy performance contracts.
		Resource Efficient Building Codes Conduct a review of the newest edition of building and energy codes on a regular basis to ensure the best fit for protecting life and safety, economic climate, and support of City sustainability goals.	New codes adopted. Updates should occur approximately every three years.









Implementation Underway



PROGRESS	STRATEGY	NOTES
	LEED Standards for Municipal Buildings Adopt an ordinance requiring that all newly constructed municipal buildings with year-round occupancy meet at least LEED Silver standards from the USGBC.	
	Green Building Construction and Retrofits Target significant developments for green building and sustainable site design support, including minimizing hazardous materials, creating healthy indoor spaces, resource efficiency, and using locally and sustainably sourced materials.	
	Sustainable Site Planning and Development Integrate key elements of the Sustainable Sites Initiative (SSI) to integrate into the City's site planning standards.	Various elements proposed as part of the Lakewood Development Dialogue zoning code update process.











	PROGRESS	STRATEGY	NOTES
CONOMY		SE1-A Local and Healthy Food Develop a comprehensive strategy in order to increase production, availability, and consumption of locally grown, affordable, and healthy food.	Several assessments completed along with various projects. No city-wide comprehensive strategy developed.
SUSTAINABLE ECONOMY		Local Products and Services Develop a comprehensive strategy in order to increase the production, availability, and consumption of local products and services.	
S		Live Local and Hire Local Campaign Develop a brand and marketing campaign that promotes use of local goods and services along with a hire local Lakewood campaign to encourage businesses to hire local talent.	
		SE1-D Local Investment Facilitate investment and entrepreneurship in the local economy.	Existing programs are available through partner agencies and organizations.
		SE1-E Sustainable Business Hub and Certification Program Form a dynamic community to foster a self-reliant local economy, increase adoption of sustainable business practices, and set a standard for business sustainability by connecting businesses to local producers, potential employees, the education community, technical resources, existing sustainability and economic development programs, and funding opportunities.	Assessment of certification programs available through Hometown Colorado project. Participation in Best for Colorado program through B Lab.
		Self-Sufficiency Education Host events and provide information for residents to encourage self-sufficient household practices.	Programs are available from the City through Family Services division. Other programs available from partner agencies and organizations.
		Complete Neighborhood Index Develop an index for assessing the completeness of neighborhoods in order to reduce transportation costs, build community cohesion, increase housing values, and provide other household and community benefits.	Implementation of a pilot program is being considered through the Lakewood Development Dialogue zoning code update process.













	PROGRESS	STRATEGY	NOTES
ZERO WASTE		ZW1-A Zero Waste Outreach and Education Campaign Develop sector-specific outreach materials and educational campaigns to promote zero waste concepts and resources.	Building on previous efforts, Recycle! It's Good for Lakewood Campaign was launched in 2018.
ZER		Municipal Facility Zero Waste Programs Develop customized zero waste strategies for new and existing municipal facilities based on the type of use and users, waste characteristics, and unique constraints.	Recent expansion of compost and recycling services to municipal facilities includes the 11th Avenue and Patterson two Head Start facilities. Additional expansions planned for 2018/19.
		Green Procurement Program Expand the City's green procurement program for the preferential purchase of green products and services and provide guidance for implementation.	Previous efforts include staff trainings, group purchasing of sustainable products, and preferred vendor lists for sustainable and healthy caterers.
		Municipal Zero Waste Tools Develop resources and tools for City employees and facility users to support zero waste events, meetings, and operations.	Ongoing expansion of toolkits, resources, and trainings.
		Reuse and Resource Recovery Facilities Assess existing resource recovery facilities and infrastructure for capacity and material limitations in order to expand opportunities for landfill diversion.	Some assessments completed in support of related projects including identifying outlets for organic waste, household hazardous waste, micro-recycling, and construction and demolition waste. Resources are available on the sustainability website.
		ZW1-F Yard Waste Collection Site and Services Establish a collection site and provide supportive services to divert yard waste from landfills and generate revenue for expanded recycling and sustainability services.	Ongoing internal efforts to identify sites and program options. Periodic community collection events provided by City. Several neighborhood-initiated leaf collections through the Sustainable Neighborhoods Program.
		Residential Curbside Recycling and Waste Diversion As an immediate priority, present City Council with potential programs and policies for residential waste haulers that address the inclusion of recycling services in collection contracts, minimize impacts to neighborhoods from traffic and noise, and explore the use of variable rate collection systems where the cost of service is based on the volume of trash generated.	Staff has completed extensive research, a statistically significant citywide survey and has initiated a robust community outreach effort.
		Residential Organic Waste Provide opportunities for residents to divert organic waste from landfills.	Several neighborhood-initiated leaf collections through the Sustainable Neighborhoods Program. City classes on backyard composting. Workshops on composting through Sustainable Neighborhoods.



Complete



Significant Progress



Implementation Underway



	PROGRESS	STRATEGY	NOTES
O WASTE		ZW2-C Multifamily Recycling and Composting Assist multifamily developers, owners, managers, and homeowner associations in implementing recycling and composting programs in residential developments.	
ZERO		Commercial Waste Assessment and Prioritization Assess commercial waste systems to identify gaps in resource recovery facilities and prioritize the development of programs and policies.	
		ZW3-B Commercial Waste Diversion Programs and Policies Develop commercial waste diversion programs and policies that support responsible disposal choices, enhance efficiency, minimize environmental impacts, and convert waste into valuable products.	
		Construction and Demolition Waste Adopt construction and demolition (C&D) waste diversion requirements and provide supportive materials for businesses.	Updated building code requires C&D waste diversion. Staff is underway developing supporting resources.











	PROGRESS	STRATEGY	NOTES
: НЕАГТН		Diversity in Civic Participation and Leadership Build capacity for residents of all ages, abilities, and backgrounds to participate in civic life and assume leadership roles in order to ensure accurate representation of the city's diverse population.	New online engagement tools include LakewoodTogether.org and LakewoodSpeaks.org .
ON & PUBLIC		Open and Honest Communication Support the City's core community value of open and honest communication.	Expanded multilingual resources provided by City Manager's Office, employee intercultural awareness trainings provided by Employee Relations.
COMMUNITY COHESION & PUBLIC HEALTH		CC1-C Social Resilience and Personal Networks Strengthen and expand community social networks to foster collaboration, communication and cooperation.	Ongoing development and support of variety of programs and networks.
СОММО		Sustainable Neighborhoods Program Expand the Sustainable Neighborhoods Program and the Sustainable Neighborhood Network in order to encourage direct citizen action, assist citizens in enhancing neighborhood sustainability and reduce the environmental footprint of residents.	Three additional neighborhoods added. Continued expansion will require additional resources (staff and funding).
		Arts, Culture, and Events Recognize arts, culture, and community events as important components of sustainability.	Significant expansion of creative industries, and ongoing integration of art and sustainability projects and programs.
		Regional Health Efforts and Organizations Collaborate with regional partners in order to identify critical issues, develop programs and policies, and track effectiveness.	Ongoing participation by City staff in county efforts and programs.
		CC2-B Local and Healthy Food Develop a comprehensive strategy in order to increase production, availability, and consumption of locally grown, affordable, and healthy food.	Several assessments completed along with various projects. No city-wide comprehensive strategy developed.
		CC2-C Community Physical Wellness Programs Promote healthy eating and active living programs in businesses, schools, and other community organizations.	Several ongoing programs with local schools through Sustainable Neighborhoods Program. Overlaps with CC2-A.
		Access to Physical Activity Facilities and Programs Increase use of physical activity facilities and participation in recreation classes and programs.	Variety of projects/services including Lakewood Possibilities Fund, development of Carmody Universal Playground.



Complete



Significant Progress



Implementation Underway



	PROGRESS	STRATEGY	NOTES
с неастн		CC2-E Design for Active Living Integrate key elements of the Center for Active Design's Active Design Guidelines into the City's development guidelines.	
ION & PUBLIC		CC3-A Affordable Housing Create and periodically update a locally-adopted comprehensive housing strategy in collaboration with other jurisdictions and organizations in the region.	Housing study underway.
COMMUNITY COHESION		CC3-B Community Happiness Catalyze happiness by designing spaces and supporting services that support mental wellness.	
		Aging In Place Develop and support programs, policies, and resources that allow residents to age in place.	Handful of programs/efforts underway related to this strategy including the housing study, Sustainable Neighborhood Program projects, recreation programs, etc.
		Access to Human and Family Services Support programs and services that enable residents to meet their fundamental needs.	Variety of programs offered by the City and community organizations.













	PROGRESS	STRATEGY	NOTES
SYSTEMS		NS1-A Culture of Ecological Stewardship Facilitate communitywide stewardship of Lakewood's natural heritage by advancing understanding of the importance of biological diversity and the value of ecosystem services.	Assorted programs and outreach efforts.
NATURAL SY		NS1-B Landscape and Agricultural Stewardship Reduce the impacts to ecosystem health, air and water quality resulting from landscaping and agricultural practices in Lakewood.	Significant number of workshops and projects through the Sustainable Neighborhoods Program including the Bee Safe initiative.
		Biodiversity Inventory, Classification, and Best Management Practices Identify natural habitat types in the City and establish management areas based on land use context.	Inventory methodology and process was outlined in 2016 but staff was unable to secure grant funding to proceed. No additional progress at this time.
		Green Infrastructure Network Establish a Green Infrastructure Network (GIN) to strategically facilitate habitat protection, restoration, and connectivity across the urban landscape.	
		NS1-E Sustainable Business Hub and Certification Program Manage municipal natural areas, parks, right-of-ways, and other properties to maximize ecological health and biological diversity.	Assorted programs supporting water quality, nontoxic pest and noxious weed management.
		Stormwater Management and Flood Control Increase the capacity of Lakewood's landscape to manage stormwater and protect water quality.	Various stormwater management projects and programs implemented by Public Works department.
		Cooling and Carbon Sequestration Adapt to increased temperatures and reduce carbon in the atmosphere through healthy vegetation, tree canopy coverage, and use of low-reflective materials.	









Implementation Underway



	PROGRESS	STRATEGY	NOTES
STATION		T1-A Environmentally Friendly and Efficient Street Maintenance Operations Protect the environment, reduce air and water pollution, and improve vehicle efficiency while maintaining a high level of service in street maintenance operations.	Newly implemented street sweeping material screening and recycling program.
TRANSPORTATION		Roadside Vegetation Increase the viability and extent of roadside landscaping and vegetation through coordinated planning efforts to assess infrastructure, design, plant selection, and street maintenance operations.	Various streetscape and median planting programs completed or underway.
		Street and Signal Lights Convert street and signal lights to LEDs or other high efficiency technologies.	All City-owned lights use high efficiency lighting. Major roadblock to successful implementation is Xcel ownership and tariff rates for existing streetlights.
		Sustainable Street Repair and Construction Ensure sustainable street repair and construction.	Street operations continue to utilize recyclable materials and to recycle street construction waste.
		T2-A Bicycle and Pedestrian Planning and Outreach Remove barriers to bicycle and pedestrian transportation through a comprehensive strategy.	Completed update to Bicycle Master Plan and bicycle facilities added to the system.
		Transportation Management Services Collaborate with west metro agencies to develop an approach, or several, to provide sustainable transportation management services.	Formation of Lakewood's first Transportation Management Association being finalized.
		Way To Go Utilize and promote the suite of transportation management tools available through Denver Regional Council of Governments' Way to Go program.	Implementation will be ongoing.
		City Fleet Develop a strategic plan to increase fuel efficiency and incorporate alternative fuel vehicles into the City vehicle fleet.	









Implementation Underway



STAY INFORMED

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