Comprehensive Planning Lakewood 2025: Moving Forward Together



What is the Comprehensive Plan?

It is our city's vision for the future

(Comprehensive Plans are required by Colorado state law and City Charter, Article IX)

The Plan Should...

- Reflect community values and aspirations
- Address Current needs
- Anticipate need/opportunities of the future



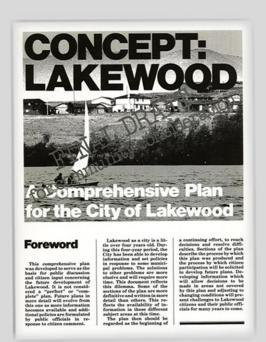
How is the Comprehensive Plan used?

- Prioritize budget and resource decisions
- Guidance for adjusting regulations (zoning codes, building codes, public safety)
- Criteria for decision making by City leadership
- Guide for public support/opposition to City actions

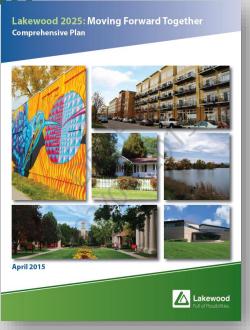


Adopted Comprehensive Plans:

- 1975 Concept Lakewood
- 1987 Comprehensive Plan
- 2003 Comprehensive Plan
- 2015 Lakewood 2025: Moving Forward Together



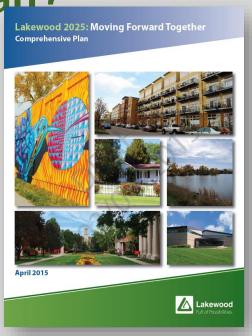




LAKEWOOD LIVES

Neighborhoods - Housing - Family Services
Historic Preservation - Arts and Culture - Parks, Trails, and
Recreation - Schools and Libraries - Public Services

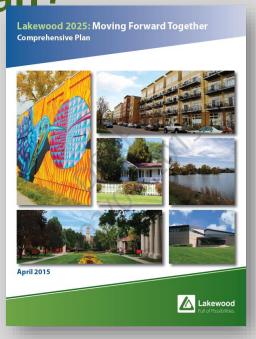




LAKEWOOD INNOVATES

Citywide Economic Development Strategies
Growth Areas - Community Activity Areas
Neighborhood Activity Areas
Future Activity Areas - Industrial Areas

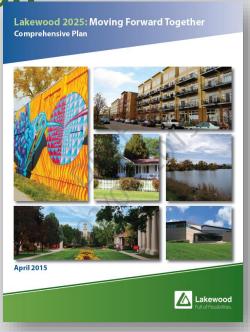




LAKEWOOD MOVES

Multi-Modal Transportation System - Future Transportation Improvements - Complete Streets - Way-finding and Informational Sign Opportunities



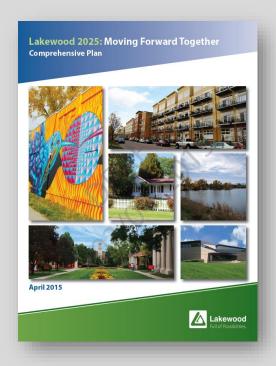


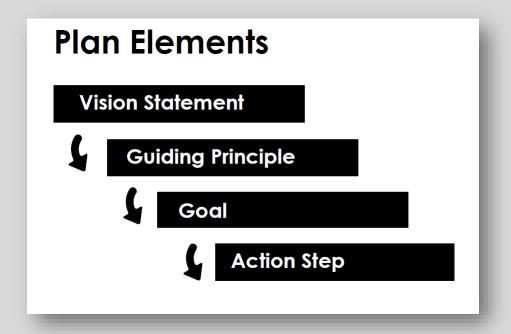
LAKEWOOD SUSTAINS

City Leadership and Role - Air Quality and Climate - Water Biodiversity, Natural Resources and Ecosystem Services Energy in Built Environments - Waste



How is the Comprehensive Plan Organized?







What if the community needs to address something more specific, nuanced, or complicated?



Special Plans get created for:

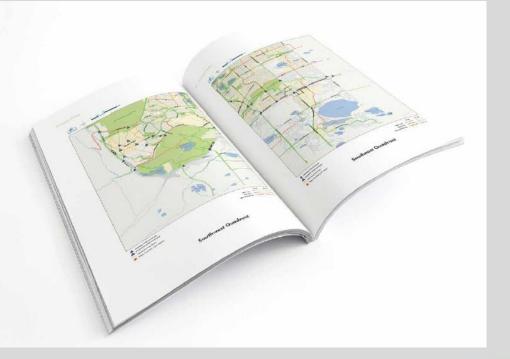
- Neighborhoods, corridors, and special districts
- City systems like parks or transportation
- Complex topics like sustainability & climate adaptation



Special Plans created & adopted as elements of the Comp Plan

PLANNING FOR PEDALING

 Updating the Lakewood Bicycle System Master Plan





Other important questions...

Once a plan is in place, how does it get implemented?

How do we measure successful implementation?

Who decides that a plan is no longer relevant?



Tonight's Examples

- Lamar Station Planning, 40 West Arts District & ArtLine Alexis Moore, Principal Planner
- City of Lakewood Sustainability Plan Jonathan Wachtel, Sustainability Manager





Planning for Sustainability

City of Lakewood
Citizen's Planning Academy
August 39, 2019

www.Lakewood.org/Sustainability



Community sustainability:

The process of 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



What do you think about when you hear the term sustainability?

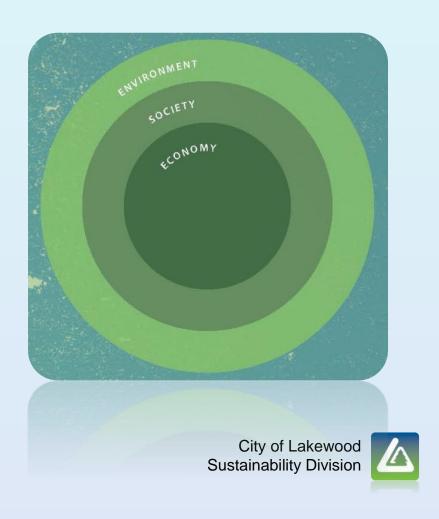


Community sustainability -

The process of 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



The concept of sustainability recognizes the interplay between natural, economic and social interests."



Triple-bottom-line

Look for the action/solution that benefits our economic, social, and environmental well-being.



Can you think of some examples in your dayto-day life where you use the triple-bottom-line to make your decisions?



How do you apply this approach to an organization?

How about an entire city?



Quiz & Brainstorming Session

There's usually a good reason why we do things.

But that doesn't mean there aren't impacts.

Let's look at some topics through the triple-bottom-line sustainability lens



What is the average number of miles driven by per car in Lakewood each day?





What is the average number of miles driven by per car in Lakewood each day?

17.2 miles per day





78% trips to work by SOV







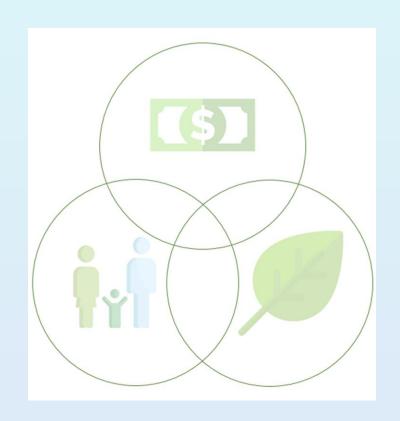
Why are we driving all of these miles?

What are the benefits of the automobile?

What are the impacts?

Solutions?

What is the cost of inaction?





How would those "solutions" impact the existing benefits?

What are the impacts of not taking an action?



How many pounds of waste does the average household (2.33 persons) in Lakewood generate in a year?





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~ 3,700 lbs. of trash





How many pounds of waste does the average household (2.33 persons) in Lakewood generate in a year?

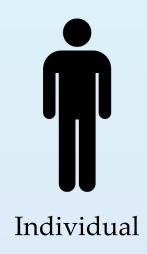
3,700 lbs. of trash

About 1,122 lbs. of that is probably packaging waste and another 550 lbs. is food waste

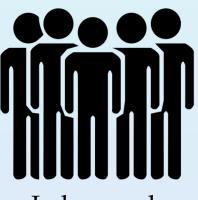


How many pounds of waste does the average household (2.33 persons) in Lakewood generate in a year?

4.4 pounds per day =



660,000 pounds per day



Lakewood

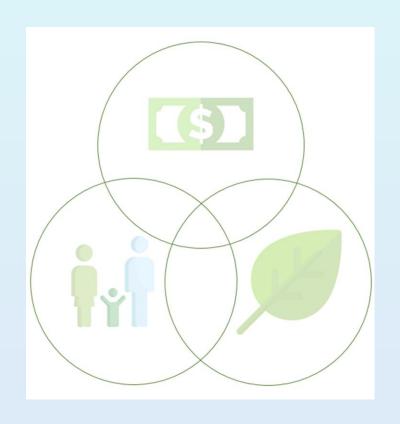
Where does the waste come from?

What are the benefits of the system producing this waste?

What are the impacts?

Solutions?

What is the cost of inaction?





How many gallons of water does an average household in Lakewood use in a year? (Indoor and Outdoor)





78,000 gallons



Household Indoor and outdoor water use



How much water do we consume in Lakewood?

78,000 gallons

Enough water to:

Take a 520 hour shower

To flush an older model toilet 22,172 times
Or
a *Watersense* toilet 60,628 times



How much water do we use in Lakewood?

6,950,051,390 gallons

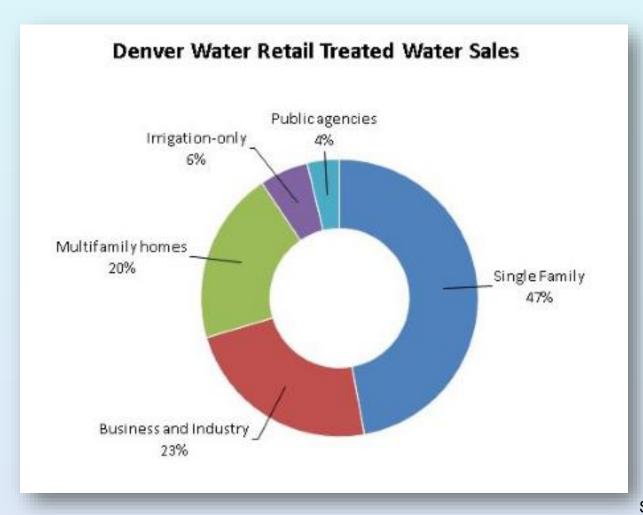
2015 Citywide

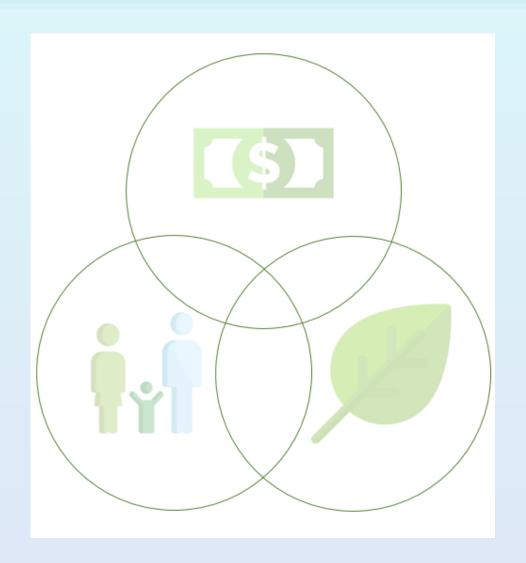
10,523

Olympic-size swimming pools









What solutions would help us be more sustainable?

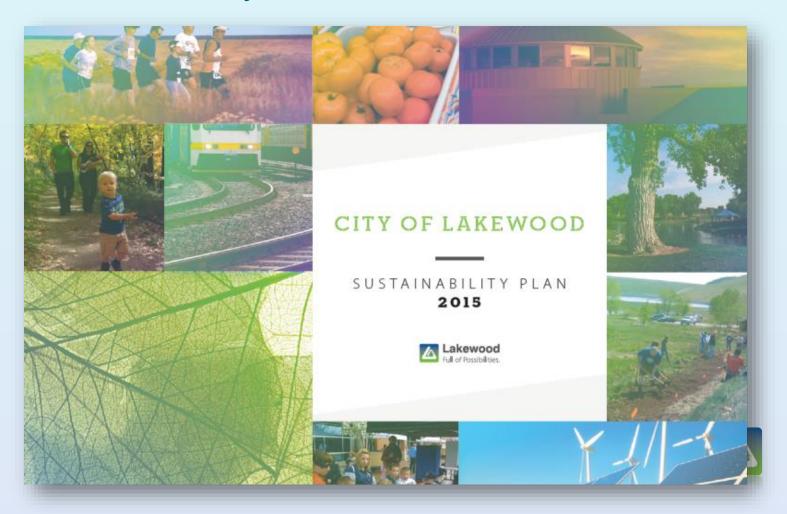


Is it really possible to be sustainable?

How are we going to try to solve these challenges?

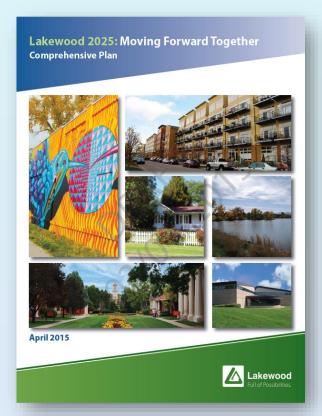


What is a Sustainability Plan?



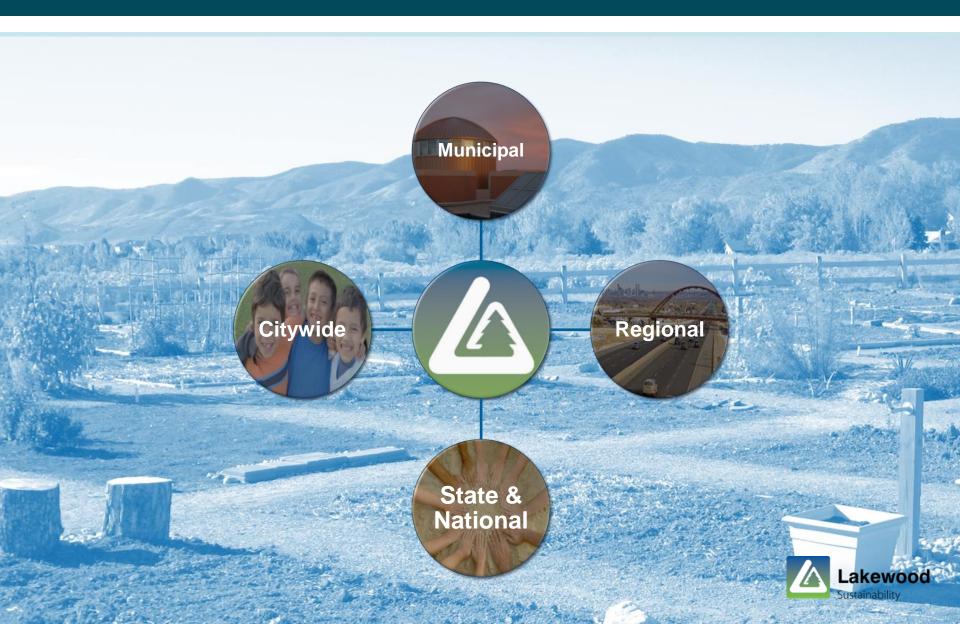
How does the plan relate to the Comprehensive Plan?

- Complements and expands upon recommendations
- Establishes measurable goals (targets) and methods of measuring progress and trends (indicators)
- Intended to be adaptable and responsive to changing conditions





Sustainability Plan: Strategic Shift



Plan Organization – Each chapter includes...

Value Statement / Goals / Targets



ENERGY, WATER, AND THE BUILT ENVIRONMENT

THE CITY OF LAKEWOOD and its residents recognize the role of energy, water, and the built environment in fostering a vibrant and sustainable community. Lakewood's residents envision a collective future where low impact development,
renewable energy sources, and resource efficient buildings protect local ecosystems, enhance water quality, reduce man-made
greenhouse gas emissions, and ensure energy availability and affordability.

GOALS

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

TARGETS

- Generate 45% of municipal energy from renewable sources by 2025.
- Generate 45% of residential energy from renewable sources by 2025.
- Generate 45% of commercial and industrial energy from renewable sources by 2025.
- Reduce municipal building and facility energy use intensity by 30% by 2025*.
- Reduce citywide building** energy use intensity by 20% by 2025†.
- Reduce citywide water use by 20% by 20251
- Increase the percentage of certified†† green buildings (new construction and renovations receiving occupancy permits) each year from 2015 to 2025.

^{*}Baseline: 2006–2010 normalized data

^{**}Includes resource use for the entire site

^{**} Certifications systems include Green Globes, USGBC LEED, and Living Building Challenge

Implementation

Primary Strategies

Supporting Strategies

IMPLEMENTATION STRATEGIES

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. Specifically:

- Continue to provide environmental education programs for residents of all backgrounds and ages;
- Identify opportunities for interpretive signage and on-site messaging in Lakewood's parks, natural areas, and other appropriate public spaces;
- Integrate environmental education into community events like Earth Day, Cider Days, and the annual Community Resources Plant Sale:
- Develop resources and tools that enable residents to share ecological stewardship concepts and programs with neighbors, employers, and co-workers; and
- Recognize efforts of residents, businesses, and organizations demonstrating stewardship of Lakewood's natural systems.

NS1-B LANDSCAPE AND AGRICULTURAL STEWARDSHIP

| SUPPORTING STRATEGIES | | | |
|------------------------|--|--|--|
| COLLABORATION | Work with schools to support existing and new Safe Routes to Schools programs. Work with schools and youth organizations to support opportunities for a variety of youth sports and physical activities year-round. Work with nutrition experts to educate residents, schools, and businesses about the importance of healthy eating. Work with LiveWell Colorado to support school-based nutrition education program and efforts to establish a statewide farm-to-school programs. | | |
| EDUCATION & PROMOTION | Continue to market Lakewood's range of recreation and wellness programs and facilities. Market Lakewood as Healthy Eating and Active Living (HEAL) community. Promote the 9News Health Fair and opportunities for residents to regularly track their critical health numbers. | | |
| TOOLS & TECHNOLOGY | Promote mobile technologies and apps that track personal wellness goals and activities. | | |
| RESEARCH & TRACKING | Track fitness trends and activities. Track diversity of physical activity facilities and recreation programs participants. Track private recreation center business trends. | | |



Strategies we use...

- Education & outreach
- Plans
- Policy or code adjustments
- Partnerships & collaboration
- Operational improvements
- Inventory, assessment, survey
- Enforcement or incentives
- Programs and services
- Physical infrastructure improvements



Strategy Benefits Tables

| TABLE BE1-1: STRATEGY BENEFITS | | | | | | |
|--|----------------------------|---------------------|-------------------|-----------------------|------------------------|---------------|
| STRATEGY | ENVIRONMENTAL BENEFITS | | ECONOMIC BENEFITS | | SOCIAL BENEFITS | |
| | GHG REDUCTION POTENTIAL | ECOSYSTEM HEALTH | SELF-RELIANCE | HOUSEHOLD BENEFITS | COMMUNITY COHESION | PUBLIC HEALTH |
| BE1-A: Renewable Energy Transmission and Generation | ****** | • | | | 0 | • |
| BE1-B: District-Scale Sustainability | 22 | | | | | |
| BE1-C: Sustainable Energy and Water Resource Center | 2222 | | | | 0 | - |
| BE1-D: Municipal Renewable Energy Generation | Ø | | | 0 | 0 | - |
| ▼ <5,000 MtCO ₂ e Greenhouse Gas Emissions # ~10,000 MtCO ₃ e Greenhouse Gas Emissions # Does Not Ap | | | | | ■ Low ⊘ Does Not Apply | |



Strategy Feasibility Tables

| STRATEGY | CITY OF LAKEWOOD | | | COMMUNITY | | |
|--|------------------|---------------|------------------------------|------------------------------------|-------------------------------------|--|
| | UPFRONT COSTS | ONGOING COSTS | PAYBACK/REVENUE POTENTIAL | FINANCIAL BENEFIT FOR RESIDENTS | FINANCIAL BENEFIT FOR BUSINESSES | |
| BE1-A: Renewable Energy Transmission and Generation | \$\$ | _ | ✓ | ✓ | ✓ | |
| BE1-B: District-Scale Sustainability | \$\$\$\$ | - | ~ | ✓ | ✓ | |
| BE1-C: Sustainable Energy and Water Resource Center | \$ | ~ | - | ✓ | ~ | |
| BE1-D: Municipal Renewable Energy Generation | \$\$\$\$ | ✓ | ✓ | - | _ | |

\$ < 50,000 \$\$ = 50,000-100,000 \$\$\$ = 100,000-1,000,000 \$\$\$\$ > 1,000,000

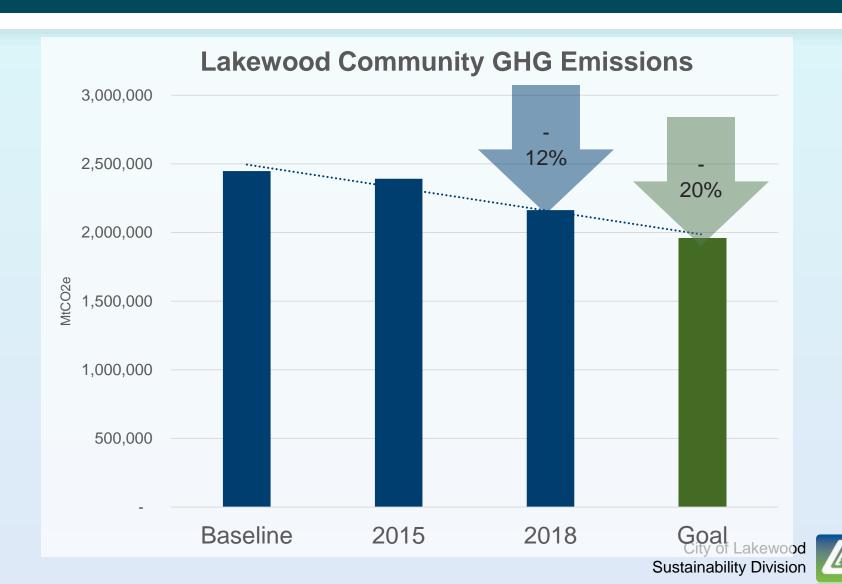


CLIMATE CHANGE AND ADAPTATION 02 **ENERGY, WATER, AND** THE BUILT ENVIRONMENT 12 03 SUSTAINABLE ECONOMY 20 **ZERO WASTE** 26 **COMMUNITY COHESION** AND PUBLIC HEALTH 32 **NATURAL SYSTEMS** 38 **TRANSPORTATION** 46

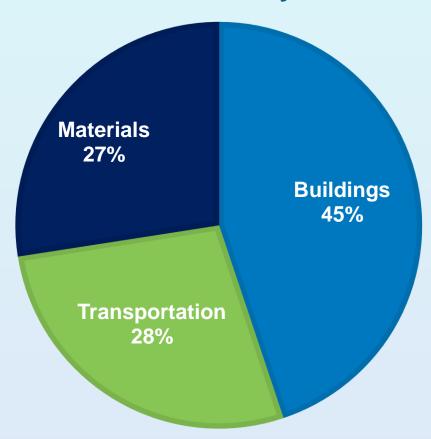
Read the full report:

Lakewood.org/SustainabilityPlan

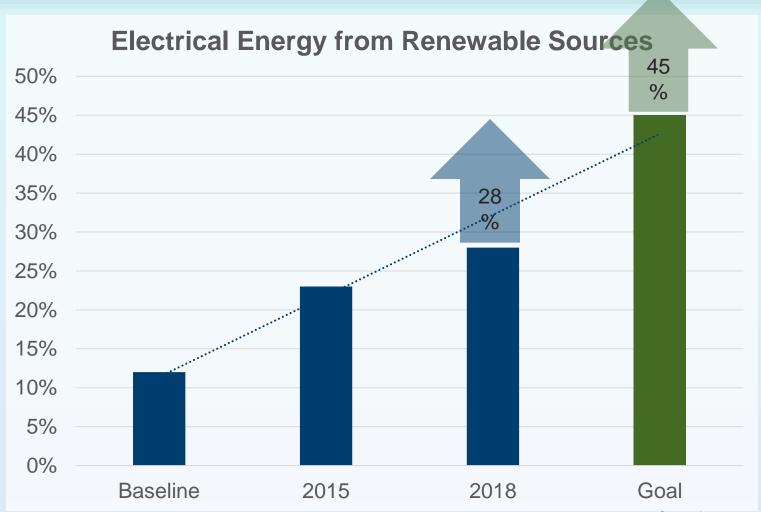




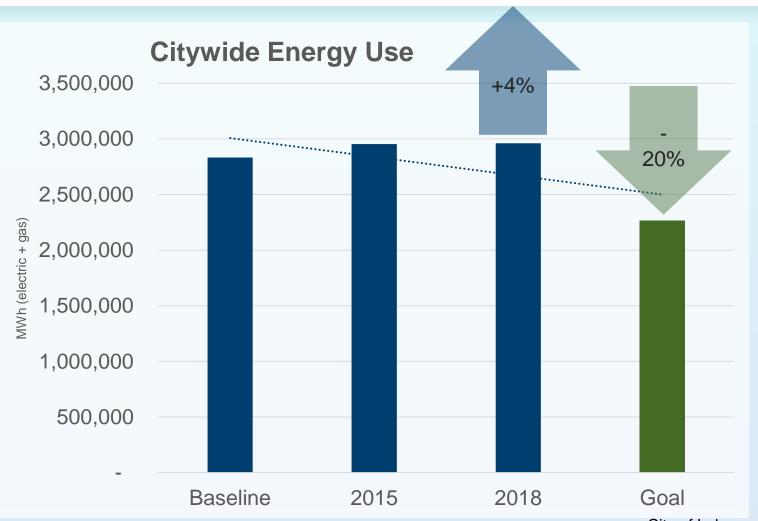
2018 Lakewood Community GHG Emissions



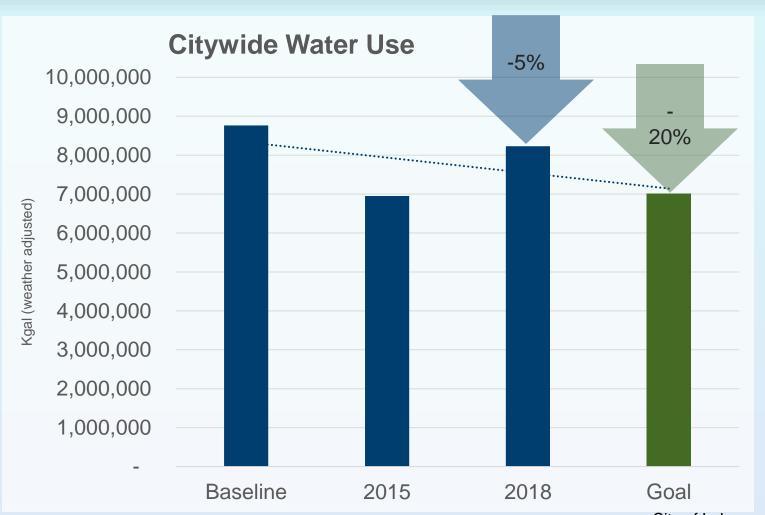




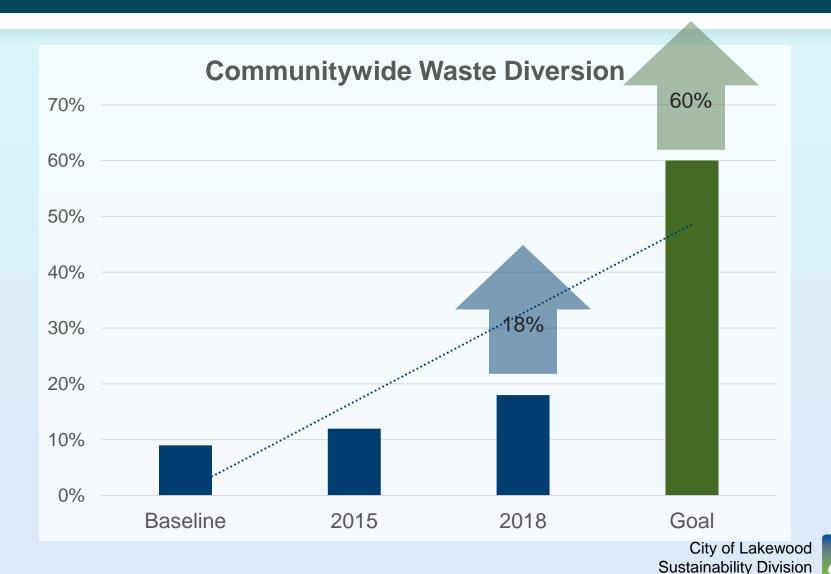












Status of Implementation Strategies



Complete: 4



Significant Progress:



Underway: 31





| On Track Targets | Not On Track Targets | To Be Determined Targets | | |
|---|---|--|--|--|
| Community GHG emissions (2) Renewable electric energy (3) Green building certifications Local food Municipal waste diversion Earth Day/Cider Days waste diversion Resident subscriptions to city communication tools Outstanding Sustainable Neighborhoods certifications Recreation program participation Eliminating food deserts Water Quality Standards | Municipal facility energy use Citywide energy Citywide water use LED streetlights Housing and transportation costs for CDBG households Households above Living Wage Standard Community waste diversion Tree canopy coverage SOV trips to work Resident satisfaction for citizen involvement Resident satisfaction for programs for people with special needs, older adults, low-income persons, homeless people | Data not available: Civic Center waste diversion Construction waste diversion Residential waste diversion Vehicle miles traveled City fleet fuel consumption Strategy has not been implemented: Municipal GHG emissions Green business certifications Complete Neighborhoods Priority waste streams diversion Community affordable housing Acreage of healthy ecosystems | | |

Integrating Sustainability into your site planning exercise...

- Look for opportunities to support the goals and targets from each chapter of the plan...
- Then, ask yourself how to maximize the design using a systems approach to achieving triple-bottom-line benefits



Integrating Sustainability into your site planning exercise...

- Look for opportunities to support the goals and targets from each chapter of the plan...
 - Is the project energy and water resource efficient? Could renewable sources of generation be included?
 - Does the design include features that enhance water quality?
 - Does the landscaping contribute to ecological health?
 - Does the project accommodate multiple modes of transportation?
 - Is there recycling and zero waste infrastructure...
- Then ,ask yourself how to maximize the design using a systems approach to achieving triple-bottom-line benefits



Our Sustainable Future...

Check out our programs:

www.Lakewood.org/Sustainability

Stay up-to-date:

www.Lakewood.org/SustainabilityNews

Get involved:

www.Lakewood.org/SCOOP

