Longmont Sustainability Plan Indicators and Metrics

AIR QUALITY: Improve air quality to protect public and environmental health					
Targets	**Indicators/ Metrics**	**Source**	**Baseline**	**2017 Data**	**Related Indicators**
Reduce the number of days out of ozone compliance	*Ground-level Ozone 1) # days out of compliance with national air quality standards	CDPHE	2016: 1) Boulder Reservoir: 1 day out of compliance after 8/16/2016 (no data prior); Rocky Flats North: 13 days out of compliance	1) Boulder Reservoir (5 days no data): 10 days out of compliance; Rocky Flats North: 21 days out of compliance	Link to transportation fuel consumption
Increase local oversight of emissions from oil and gas operations	*Oil and Gas Monitoring 1) TBD	COL	TBD: Need to determine baseline and process for tracking this metric	TBD: Need to determine baseline and process for tracking this metric	
Reduce oil and gas methane emission leaks 60% by 2027	*Methane leaks from oil and gas development 1) # mtCO2e in leakage from oil and gas development	COL	2016: 1) Estimated 190.31 mt CO2e from 8 wells	1) Estimated 214.10 CO2e from 9 wells	
Increase public access to local air quality information and information on actions the public can take to improve air quality	*Air Quality 1) Compliance with national air quality standards	CDPHE	2016: 1) Denver Metro / North Front Range Region in compliance with all National Ambient Air Quality Standards, except for ozone	1) Denver Metro / North Front Range Region in compliance with all National Ambient Air Quality Standards, except for ozone	
	*Public awareness 1) #information outlets	COL	2016: 1) # info outlets: 1	1) # info outlets: 1	Link to transportation fuel consumption
BUILDINGS & INFRASTRUCTURE: Adopt policies, programs, and design guidelines for resilient and efficient buildings and community infrastructure to enhance quality of life, reduce costs, and complement the natural environment					
Increase public awareness of potential indoor air quality problems and solutions to the problems	*Public awareness 1) # people checking out radon, carbon dioxide monitors	COL	2016: 1) Carbon dioxide: not yet available; Radon: 136	1) Carbon dioxide: not yet available; Radon: 162	

Revise City Design Standards and Construction Specifications to incorporate sustainability-related principles by the end of 2018	N/A - once this is completed, the outcomes will be tracked through other targets and indicators (greenhouse gas, waste diversion, etc.)	COL	N/A		
Increase the number of environmentally certified buildings in Longmont	*Sustainable building 1) # environmentally certified buildings	USGBC, NGBS, Passivehouse, Living Building Challenge, DOE, GCBI WELL, EnergyStar	2016: 1) 8 commercial, 154 residential	1) 12 commercial, 178 residential	Link to greenhouse gas, energy savings, waste diversion, water consumption
Increase access to housing efficiency and improvement opportunities through a one-touch program approach	*Housing efficiency and improvements 1) # participants by program	COL	TBD: Need to determine baseline and process for tracking this metric	TBD: Need to determine baseline and process for tracking this metric	Link to utility cost burden (energy, water); Envision (affordable housing, housing cost burden)
Increase equitable access to foundational community assets for all segments of the community	*Equitable Access & Proximity to Foundational Community Assets 1) TBD based on asset mapping	COL	TBD: Need to determine baseline and process for tracking this metric	TBD: Need to determine baseline and process for tracking this metric	Link to transit access, walkability/ bikeability; Envision (Parks/Rec ops, greenways/ trails/bikeways, connectivity)
All City departments are using life cycle cost and sustainability evaluations for public projects	*Sustainability of public projects 1) # departments actively using the Sustainability Evaluation System	COL	2016: 1) 1 - PWNR	1) 2 - PWNR, PDS	Link to greenhouse gas, energy savings, waste diversion, water consumption
COMMUNITY COHESION AND RESILIENCE: A vibrant community where all residents have equitable access to the opportunities needed to thrive, while preserving and enhancing natural, cultural and financial resources.					

Increase neighborhood-based sustainability initiatives	*Sustainability Education & Awareness 1) # neighborhood sustainability projects implemented through neighborhood programs	COL	1) Baseline TBD	1) Baseline TBD	Link to greenhouse gas, energy savings, waste diversion, water consumption
Increase diversity of members in community leadership roles at the neighborhood, local, and/or regional level	*Diversity in leadership roles 1) Demographics of City staff 2) Demographics of board/commission members	COL	1) Baseline TBD 2) Baseline TBD	1) Baseline TBD 2) Baseline TBD	Link to Envision (City staff language skills)
ECONOMIC VITALITY: Support a diverse economy that is aligned with social and environmental goals of providing local jobs, livable wages, and encouraging innovative and green businesses and business practices.					
Increase number of green/clean tech industries	*Green/clean tech industries 1) # green/clean tech industries (primary employers)	LEDP	2016: 1) 17 Clean tech Primary Employers	1) 19 Clean Tech Primary Employers	
Increase cost savings and resource efficiency for businesses through pollution prevention and other sustainable practices	*Pollution prevention and associated cost savings 1) Trash avoided or diverted (tons) 2) Water conserved (gallons) 3) Energy savings (kWh) 4) Cost savings ($)	PACE; Future tracking through ReTRAC and Longmont Sustainable Business Program	2016: 1) Trash: No data available 2) Water: 93,732 gallons 3) Energy: 91,482 kWh 4) Cost Savings from Energy (PACE does not track water savings): $8,060	1) Trash: 1.7 Tons 2) Water: 1,33,148 gallons 3) Energy: 58,451 kWh 4) Cost Savings from Energy (PACE does not track water savings): $5,275	Link to greenhouse gas, energy savings, waste diversion, water consumption
Expand business opportunities for minority-owned and disadvantaged businesses (baseline to be defined)	*Underutilized, under-represented, multi-cultural businesses 1) # Underutilized, under-represented, multi-cultural businesses	COL	TBD: Need to determine baseline and process for tracking this metric	TBD: Need to determine baseline and process for tracking this metric	

Supporting data:	1) # of programs & resources available	COL, Economic Development organizations	1) TBD	1) TBD	
Increase number of recognized sustainable businesses	*Sustainable businesses 1) # recognized sustainable businesses	PACE; Future tracking through Longmont Sustainable Business Program	2016: 1) 7 PACE-certified businesses	1) 8 PACE-certified businesses	Link to cost/resource savings for businesses, greenhouse gas, energy savings, waste diversion, water consumption
Adopt an internal City sustainable purchasing policy by 2018	N/A - once this is completed, the outcomes will be tracked through other targets and indicators (greenhouse gas, waste diversion, etc.)				
ENERGY: Continuously improve the community's energy efficiency and collaborate with regional partners to increase use of renewable energy and decrease emissions, while balancing social, environmental, and economic impacts of energy resources decisions.					
Decrease the utility cost burden for low-income households through energy efficiency measures	*Energy utility cost burden 1) % households spending more of their income than average utility cost burden	DOE	2015: 1) 33.4% households; average energy utility cost burden currently 3.5%	Data not yet available	
	*Energy savings for low-income households 1) Annual energy and cost savings through for low-income energy efficiency program (MWh)	COL	1) Baseline TBD - pilot year 2017	1) Baseline TBD - pilot year 2017	
Increase electric energy savings to 1% annually through energy efficiency measures by 2020	*Energy savings 1) % Annual energy savings 2) Annual energy savings through Efficiency Works (MWh)	COL	2016: 1) .5% Energy savings 2) Commercial: 5027 MWh; Residential: 480 MWh; Total: 5507 MWh	1) .7% Energy savings 2) Commercial: 5401 MWh; Residential: 301 MWh; Total: 5702 MWh	Link to greenhouse gas indicator/metric

Supporting data:	*Energy consumption 1) Energy consumption by sector (MWh)	COL	2016: 1) Residential: 295,270 MWh Commercial: 347,426 MWh Industrial: 117,865 MWh Street lighting: 7,075 MWh	1) Residential: 303,492 MWh Commercial: 362,303 MWh Industrial: 118,393 MWh Street lighting: 7,012 MWh	Link to greenhouse gas indicator/metric
Increase renewable energy to 100% of Longmont's energy mix by 2030	*Renewable energy 1) Renewable energy generation (kW) 2) # Renewable installations, generation capacity (kW) 3) # Renewable subscriptions and KWh	COL	2016: 1) 138 residential solar installations, 694 KW; 5 commercial installations, 172 KW 2) 516 residential GreenE Subscriptions, 2,641,00 kWh; 26 commercial GreenE Subscriptions; 2,046,000 kWh	1) 70 residential solar installations, 397 KW; 0 commercial installations, 0 KW 2) 535 residential GreenE Subscriptions, 2,699,032 kWh; 28 commercial GreenE Subscriptions, 2,093,363 kWh	Link to Envision energy portfolio mix
Reduce Longmont's core greenhouse gas emissions by 66% from the 2016 baseline by 2030, and 69% by 2050	*Greenhouse gas emissions 1) Total MTCO2E Core Greenhouse gas Emissions 2) % greenhouse gas emissions by sector	COL	2016: 1) 1,081,173 mt CO2e 2) Commercial & Industrial: 37.7% Residential: 30.7% Oil Wells: 0.2% Transportation: 29.2% Industrial Processess and Product Use: 0.1% Waste: 1.9% Wastewater Treatment: 0.1% Agriculture: 0.1%	N/A - data collected every 3 years	
FOOD SYSTEM: A vibrant local food system that provides healthy food to all residents, creates economic opportunities, and contributes to the health of the environment.					

Increase access to healthy foods through a variety of initiatives such as the Double up Food Bucks and other programs	*SNAP participation in local food 1) SNAP + Double up Food Bucks spent at Longmont farmers market	Boulder County Farmers Market	2016: 1) $22,421	1) $11,036	Link to Envision (food access)
Supporting data:	*Local food production within the LPA 1) # School/community gardens 2) # Longmont open space ag leases 3) Crop yields on open space (tons)	SVVSD, COL, USDA	2016: 1) School gardens: 12; community gardens: 4; urban farms: 1 (Food Farm Project) 2) Ag Leases: 9 3) Crop yields: 15,892 tons	2) School gardens: 8, community gardens: 5, urban farms: 1 (Food Farm Project) 2) Ag Leases: Data not yet available 3) Crop yields: Data not yet available	Link to Envision (acres of land irrigated for agriculture in St. Vrain Valley Planning Area)
Ag research Targets TBD based	*Indicator/metric TBD				
Carbon sequestration Targets	*Indicator/metric TBD				
NATURAL ENVIRONMENT: Minimize the negative effects of development and human activities on natural systems by identifying, protecting, enhancing, and restoring critical environmental resources at all scales.					
Increase public knowledge of regenerative land management practices	*Knowledge of regenerative land management 1) # residents reached 2) CRC program participation #s	COL, CRC	2016: 1) Baseline TBD 2) Garden in a Box - 120 gardens sold (single family residential); Water Wise Seminars - 113 participants (residential); Slow the Flow Irrigation Audits - 62 (residential, commercial); PRSV Program - 15 (commercial)	1) Baseline TBD 2) Garden in a Box - 175 gardens sold (single family residential); Water Wise Seminars - 104 participants (residential); Slow the Flow Irrigation Audits - 80 (residential, commercial); PRSV Program - 5 (commercial)	Link to water conservation, watershed quality
Increase tree canopy to 18% or more of the Longmont	*Tree canopy 1) % tree canopy coverage	COL	2008: 1) 8%	1) N/A - Not tracked annually	

Increase the community's contribution to meeting its demands for managing costs and maintaining and improving parks and open space	*Volunteer participation 1) # volunteers, annually 2) # volunteer hours and $ equivalent, annually	COL	2016: 1) 1817 2) Baseline TBD - Will be tracked through new volunteer coordinator hired in 2018	1) 1779 2) Baseline TBD - Will be tracked through new volunteer coordinator hired in 2018	
Open space targets TBD based	*Indicator/metric TBD				
Wildlife management targets	*Indicator/metric TBD				
Ecological restoration and	*Indicator/metric TBD				
TRANSPORTATION: Invest in an efficienttransportation system that enhances mobility, equitably supports multiple modes of transportation, reduces environmental impacts, and supports a healthier community.					
Increase equitable access to transportation infrastructure for all segments of the community	*Transit access 1) % of households within 1/4 mile transit stop 3) Transit Score	COL, Walkscore	2016: 1) 53% 2) TBD	1) Data not yet available 2) TBD	Link to Envision (mode split, congestion, ridership, greenway/trails/bikeways, connectivity, VMT)
	*Walkability/ Bikeability 1) Walk Score 2) % arterial road miles with marked bike lanes 3) % population living within ¼ miles of a bike lane/trail 4) Sidewalk coverage - % of roads with sidewalk or miles of sidewalk	Walkscore, COL	2016: 1) 39.21 2) Baseline TBD 3) Baseline TBD 4) Baseline TBD	1) 39.20 2) Baseline TBD 3) Baseline TBD 4) Baseline TBD	
Reduce transportation fuel consumption by 33% by 2020	*Transportation fuel consumption 1) # gallons of transportation fuel by vehicle type	COL	2016: 1) Gasoline: 14,757,864 Diesel: 3,315,708 Ethanol: 1,639,763 Public Transit (Diesel): 112,181 Public Transit (Gasoline): TBD	1) Data not yet available	Link to Air Quality indicator/metric
WASTE: Increase opportunities for waste diversion, education, and reuse to reduce environmental impacts.					

Increase internal waste diversion for all City operations	*Internal waste diversion 1) % waste diverted from municipal operations annually	COL	TBD: Need to determine baseline and process for tracking this metric	TBD: Need to determine baseline and process for tracking this metric	
Decrease household trash landfilled to less than 2 pounds/capita/day by 2018	*Household trash 1) Pounds of household trash landfilled/ capita/ day	COL	2016: 1) 2.2 pounds/capita/day	1) 2 pounds/capita/day	
Increase residential waste diversion to 50% by 2025	*Residential Waste diversion 1) % residential waste diverted annually	COL	2016: 1) 35%	1) 38%	
Increase commercial waste diversion - baseline TBD	*Waste diversion 1) % commercial waste diverted annually	Boulder County	1) Baseline TBD	1) Baseline TBD	
WATER: Preserve the natural environment in our watershed and provide a reliable, high quality water supply that protects public health.					
Reduce customer and City raw water demands by 10% by community buildout (estimated at 3,500 acre-feet by 2048) through water conservation efforts	*Raw water demand 1) Total metered water use, and by customer class (acre-feet)	COL	2016: 1) Total: 14,312 acre-feet; Residential: 7614, Multi-Family: 1613, Small Commercial: 2591, Mixed Use: 20, Large Commercial: 0, Irrigation: 1238, Lyons: 304, Hydrants: 90, City: 928	1) Total: 13,670 acre-feet; Residential: 7097, Multi-Family: 2410, Small Commercial: 2507, Mixed Use: 19, Large Commercial: 0, Irrigation: 1185, Lyons: 378, Hydrants: 102, City: 957	Link to Envision (water) Link to Water Quality Report
	*Outdoor irrigation 1) # gallons used for outdoor irrigation	COL	1) Baseline TBD	1) Baseline TBD	
	*Water Balance (leakage rate) 1) Water loss out of total water delivered (%)	COL	1) Data available mid-2018	1) Data available mid-2018	

Decrease the utility cost burden for low-income households through conservation measures	*Water utility cost burden 1) Number of minimum wage hours needed to afford average monthly water utility bill for essential water usage for a single family home	COL	2016: 1) 5.4 hours	1) 5.2 hours	
Increase/maintain watershed health	*Water quality of watershed 1) Meeting all state water quality standards 2) Others TBD once watershed program is in place	COL	2016: 1) Standard needs to be developed 2) TBD	1) Standard needs to be developed 2) TBD	
Continue to ensure safe drinking water for all households in Longmont's water service areas by developing a plan addressing consecutive systems	*Drinking water quality 1) Number consecutive systems within city limits tied to City system 2) Meet all safe drinking water standards	COL	2016: 1) TBD: Need to determine baseline and process for tracking 2) Met all safe drinking water standards	1) TBD: Need to determine baseline and process for tracking 2) Met all safe drinking water standards	