Data-driven Sustainability Planning



MERIT AWARD

Data-driven Sustainability Planning

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How would a 2% reduction per year in energy-use impact our greenhouse gas emissions? What about a 5% reduction in vehicle-miles-traveled? Is this realistic? What percent of our population makes a living wage? Is it more important to decrease emissions or increase social equity? Can one strategy accomplish both? Lakewood's first communitywide Sustainability Plan is a data-driven, metric-based plan designed to help local leaders prioritize decisions that improve the quality of life in Lakewood both today and tomorrow.



To create a plan that reflected the complexity of a sustainable city, yet was tailored to Lakewood's unique characteristics and values, the City collaborated with sustainability professionals, business leaders, and residents. The engagement process began by collecting public input through open houses with guest speakers and an online forum for stakeholders to describe their vision of a sustainable Lakewood. Using the collected ideas and feedback, a series of six interdisciplinary work groups comprised of residents, businesses, organizations, topical experts, and City staff met three to five times to address specific topics. Participants set to work defining specific objectives, developing step-by-step strategies, and identifying partners necessary to achieving the overarching community vision. This level of commitment resulted in dedicated and dynamic groups that featured the passion of residents, science of experts, and logistical knowledge of staff. The output from each group provided the content that would become its own chapter in the Sustainability Plan.

The Sustainability Plan was developed concurrently with the update of the Lakewood Comprehensive Plan, avoiding duplication and allowing the Sustainability Plan to act as an implementation tool for the Comprehensive Plan by expanding on broad sustainability goals through 36 numeric targets, 95 indicators, and 63 detailed strategies that were assessed for their environmental, economic, and social benefits.

The principal goal of the Sustainability Plan, to reduce GHG emissions, required establishing an achievable reduction target. Custom calculators were built to model the reduction potential of each plan strategy. The calculators were designed with Lakewood-specific inputs (e.g. demographics, emission factors) and can be adjusted to reflect future conditions. For example, if 2.5% of Lakewood's most resource-intensive buildings participated in programs each year to reduce their energy use by 30%, Lakewood would reduce nearly 3% of the city's total emissions by 2025. Using the calculators' outputs, Lakewood established a realistic and data-supported 20% target reduction in greenhouse gas emissions by 2025. Moving forward, the calculators will be used to model scenarios to aid in project design and policy development as the plan is implemented.

In the years since its adoption, the plan continues to be taken off the shelf and used to measure progress and shape the direction of City operations and community initiatives.