

2023 Sustainable Nebraska Report



Table of Contents

Mission and Background.....	2
Director’s Message	3
Program 1: Transportation	4
Program 2: Buildings.....	4
Program 3: Waste Reduction	5
Program 4: Procurement.....	5

Mission and Background

Mission

Effective and efficient state government through environmental stewardship.

Background

Administrative Services provides shared services support to our peer agencies for the business processes that support State government. Through a strategic focus on sustainability, our department can improve the environmental impact of State government operations across the enterprise, while also saving money for taxpayers.

Director's Message

Building upon the groundwork of the first two years of our program, we made targeted impact in our third year. Sustainable practices are fully incorporated within daily operations, and we are achieving efficiencies for taxpayers and our agency customers. We've categorized the following areas of focus to advance best practices of environmental initiatives in our programming:

- Transportation
- State Buildings
- Waste Reduction
- Procurement

A focus on sustainability has allowed us to mitigate the inflationary budget impact to state government operations. We are proud of the outcomes you'll see reflected in this year's report.

Compatibility with the State's goal of creating opportunity through more effective, more efficient, and customer-focused State government is fundamental to advancing environmentally-conscience outcomes. We are pleased to have identified successful and enduring methods to duplicate across State government, and a track record of success we can continue to build upon.

Sincerely,



Jason Jackson, Director



Program 1: Transportation

Department of Administrative Services - Transportation Services Bureau will continue to leverage renewable fuels across the breadth of fleet operations.

- **GOAL** | 90% or more of the State vehicle fleet can run on E15 fuel.
- **RESULTS** | 100% of the State's vehicle fleet operates on E15 fuel, with E15 being the standard fuel for the State's vehicle fleet. The use of higher ethanol blends resulted in a 12.02% savings compared to regular gasoline usage.
- **GOAL** | Support Phase 2 of the E30 Fuel Demonstration Project.
- **RESULTS** | The Transportation Services Bureau (TSB) provided fundamental support for leading research by the State of Nebraska and the University of Nebraska-Lincoln (UNL) for E30 fuel usage in Phase 1 (2019) and now, Phase 2 of this study approved by the U.S. Environmental Protection Agency (EPA). In Phase 2, TSB identified vehicles for data metrics collection based on model years, make, type, engine, and geographics. TSB coordinated with the UNL Department of Engineering to determine viable data collection devices. Actual collection of the data will occur in 2024, followed by an assessment, and study results are expected in 2025. We are optimistic for an anticipated reduction in fuel costs and carbon footprint.

Program 2: State Buildings

Department of Administrative Services – State Building Division has adopted building and land use practices that minimize the use of natural resources and reduce energy consumption. The Task Force for Building Renewal (TFBR) will continue to focus on upgrading existing facility infrastructure with more efficient and sustainable systems.

- **GOAL** | Continue to seek opportunities for energy conservation in State building projects, including updates to systems and installation of LED lighting in State office buildings.
- **RESULTS** | The Heating, Ventilation, and Air Conditioning (HVAC) project at the Craft State Office Building in North Platte will both save energy and increase efficiency for State teammates. All HVAC systems in the office building were replaced with high efficiency heat pumps with variable refrigerant flow. These systems are expected to reduce energy consumption by 30-40% by circulating the minimum amount of refrigerant necessary for each individual zone and are able to simultaneously heat and cool different parts of the building. Their efficiency comes from being able to capture heat in one area of the building and deliver it to other spaces requiring heat. The systems are also ductless, so energy waste associated with duct loss is eliminated.

In addition to the HVAC project, more than 70 lights throughout the Craft State Office Building were replaced with LED lighting and funded by the Task Force for Building

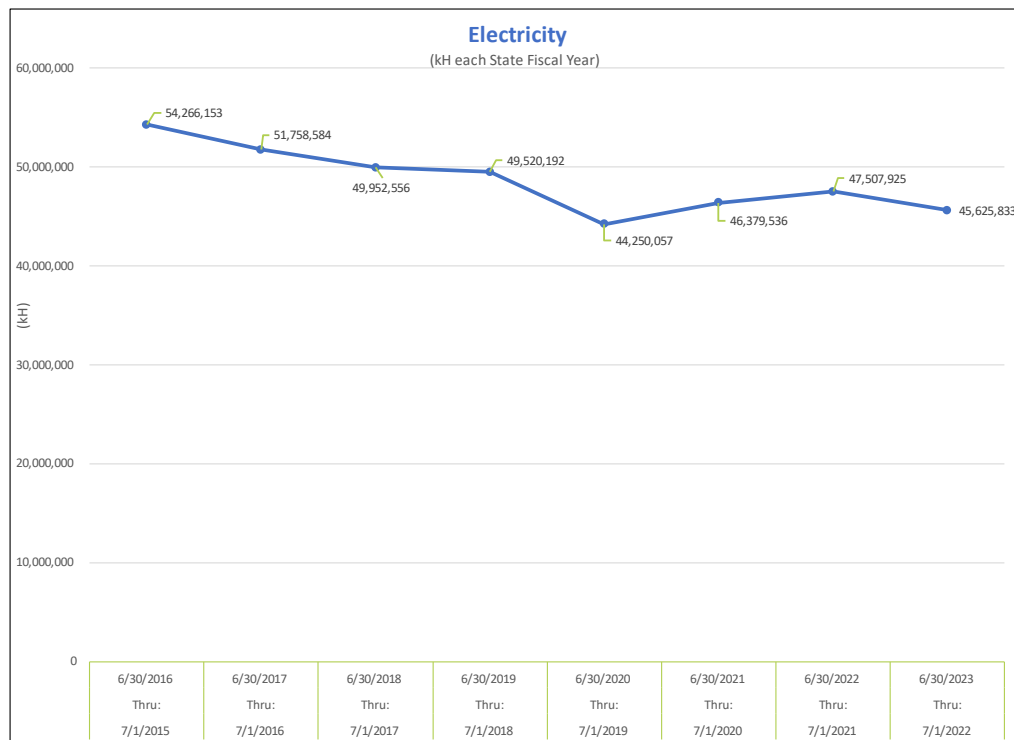
Renewal. LED lighting is estimated to last fifteen times longer and use 90% less energy. The Building Division’s continued efforts to replace lights across the state included projects in Kearney, North Platte, Lincoln and the parking garages in Lincoln and Omaha.

- **GOAL |** Net reduction in energy usage.

RESULTS | Over the past seven years, we have achieved a 15% reduction in energy use. Contributing to this reduction have been multiple demolition and energy efficiency projects at the Hastings Regional Center resulting in an average reduction of natural gas usage of 95%. More than 12 buildings on the campus were demolished, and the inefficient natural gas central steam plant was shut down. The entire campus has been transitioned to a new geothermal heat pump system. Geothermal heating and cooling equipment is expected to last over twice as long as typical steam heating equipment and can result in a 40-80% reduction in heating and cooling costs. The reduction in energy use is substantial, saving state taxpayers a significant amount, while also reducing the overall carbon footprint using the natural constant temperature of the earth to heat and cool the campus.

Building Division has streamlined data collection on energy usage to improve data tracking across the enterprise. As a result, there’s a more accurate measure of conservation, particularly to evaluate the impact of conservation initiatives and completed maintenance projects. The Task Force-funded project at the 501 Building is such achievement, of which thirty-year-old electrical and cooling systems were replaced with new, more energy efficient systems, resolving safety issues and conserving energy. Building Division’s tracking shows that this multi-year project resulted in a 17% drop in electrical use at this building from project initiation in 2019 to completion in 2023.

The chart below captures Building Division’s statewide tracking of electrical usage and the overall downward trend.



Program 3: Waste Reduction

Department of Administrative Services - Materiel Division's Recycling and Excess Property programs are both well positioned to contribute to reducing landfill waste. The State of Nebraska provides convenient opportunities to recycle and properly dispose of products, while educating on the benefits of creatively reusing and reducing the amount and type of products consumed. Whenever possible, waste is diverted from the landfill through recycling, reduction, and reuse.

- **GOAL** | Enhance and promote recycling and repurposing of small electronic devices to reduce waste.
- **RESULTS** | The Department of Administrative Services established a larger electronic recycling program in 2023, resulting in 754lbs of electronic waste recycled in just two and a half months.
- **PAST SUCCESSSES** | Excess electronic devices were reduced statewide as over 300 printers were retired, cutting electrical use by nearly 146,630 KW annually.

Program 4: Procurement

Department of Administrative Services - Materiel Division serves as procurement experts and the central point of contact for procurement operations. Procurement can help the State meet its sustainability goals by purchasing green products and leveraging domestic suppliers.

- **GOAL** | The State will purchase green products when the cost is the same or less than non-green products.
- **RESULTS** | The State is estimated to have purchased nearly 155,000 green products in FY 2022-23. Additionally, over 2,668 lots of merchandise containing thousands of items of surplus property were diverted from landfill by auction or reuse.