
Resiliency Dialogue

Community Committee Meeting

June 25, 2020

PLAN FORWARD 2050
Lincoln-Lancaster County Planning Department



Resiliency

Introduction

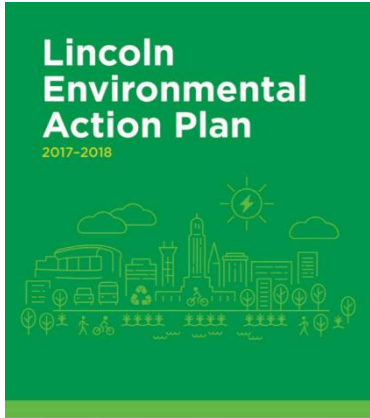
Over the next several months the Planning Department will be coordinating presentations with topic experts and discussions on various topics for the Community Committee meetings. This will be one of the key ways the Community Committee will have an opportunity to provide input on these topics. The discussion topic for the Community Committee meeting on June 25th will focus on resiliency. This document is being provided to you as a resource in advance of the June 25th meeting.

Resiliency Policies in LPlan 2040

The current City-County Comprehensive Plan, LPlan 2040, contains resiliency strategies and goals. All of these strategies and goals are found throughout the chapters in the [City-County Comprehensive Plan](#). These strategies and goals lay a good foundation for development of PlanForward 2050. Some of these goals have been accomplished over the last 10 years whereas others may be removed or carried forward in the new Comprehensive Plan. A sample of resiliency strategies and goals is provided below. These will continue to be discussed and examined as PlanForward 2050 is developed.

Raise public awareness of the impacts of global issues on the local environment and economy.
Identify points of vulnerability based on different impact scenarios.
Facilitate policies that support various means to make Lincoln and Lancaster County more resilient in the face of natural or man-made disruptions.
Develop sustainable practices such as those for building and site design to maximize the preservation of our nonrenewable resources, including land and fossil fuels.
Promote sustainability and resource conservation by preserving and improving housing in existing neighborhoods.
Develop and utilize a measurement tool to evaluate proposed projects and assess existing and proposed neighborhoods in terms of how well they achieve the Plan's goals for design and sustainability.
Use Stormwater Quality Best Management Practices to improve stormwater runoff from new or substantially improved buildings.
Educate the public on the benefits of energy efficient buildings and development.
Improve the City's ability to measure energy use and conservation efforts.
Reduced energy consumption is encouraged in new building construction and in retrofitting existing buildings.
Re-use, recycling, and conservation of natural resources and man-made materials are encouraged.
Promote adequate facilities and services to assure the health, safety and welfare of all citizens.
Land uses with vulnerable populations such as occupied residential structures, childcares, retirement facilities, schools, or hospitals are not recommended to be located within pipeline planning areas. For large high pressure natural gas pipelines, pipeline planning areas are established based upon a formula that takes into consideration the pressure and diameter of the natural gas pipeline. Other uses such as residential garages, commercial and industrial uses, parking lots, open spaces or roads are acceptable uses within pipeline planning areas.
As the community grows, fire and rescue services must be able to respond to changing needs in order to provide public safety services.
As the community grows, law enforcement must be able to respond to changing needs in order to provide public safety services.

Discourage residential development in areas of environmental resources such as endangered species, saline wetlands, native prairies, and in floodplain corridors.
Minimize impacts on flood storage when vacant land in the floodplain is developed.
Continue the cooperative efforts of the City of Lincoln, Lancaster County, Nebraska Game and Parks Commission, and the Lower Platte South Natural Resources District on various efforts including land assembly, maintenance, flood control, wildlife and habitat preservation, recreation, and game management.
In new growth areas, the City of Lincoln and Lancaster County have a policy of No Adverse Impact, with a goal of ensuring that the action of one property owner does not adversely impact the flooding risk for other properties.
Urban development in new growth areas will be outside of the floodplain and floodway.
Designate areas for future urban development outside of floodplain and floodway to avoid introducing new development to flood risks and to preserve the important functions of the floodplain.
Develop project approaches which view stormwater as an asset, by working with the natural topography and using wetlands, floodplains, and natural drainage corridors as natural ways to manage flood flows and stormwater runoff.
Develop and implement a floodplain buyout program for the City and County to restore floodplain functions while being sensitive to the need to minimize impacts on neighborhoods and historic districts.
Continue to develop a comprehensive, watershed approach to floodplain mapping and to improve the accuracy by making it a priority to which specific resources are dedicated. Retain City or County property in the floodplain in public ownership, and consider the purchase of easements or land when right-of-way is vacated or other publicly-owned property in the floodplain is proposed for surplus. Retain conservation easements to protect floodplain functions where unusual circumstances merit the consideration of surplus floodplain property.
Promote renewable energy sources.
Promote the conservation and efficient use of energy in all areas.
Development proposals should ensure that there is adequate quantity and quality of water available to serve their project without impacting other customers.
Development actions should not impact Wellhead Protection areas or the municipal water wells serving towns.
Water improvements must be in accordance with the Lincoln Water System Facilities Master Plan and LPlan 2040. The Lincoln Water System Facilities Master Plan will guide future actions and serve as the basis for facilities planning and improvements.
The community encourages site designs that are compatible with the natural characteristics of the site, conservation design for new subdivisions, clustering development, minimizing grading and impervious surfaces, and preserving site hydrology to the maximum extent possible. Naturalized or bioengineered solutions to drainage issues should be used wherever possible.
No out-of-county waste is accepted for landfill disposal. This policy reserves landfill capacity for city and county residents and allows administration of programs under existing authorities.
Continue to encourage and expand wind and solar access to buildings and other land uses.
Incorporate the use of alternative fuels when feasible.
Consider prioritizing infrastructure investment based on projects that can show net energy reduction.
Use landscaping to provide shade to reduce heating and cooling demands and to act as windbreaks.
Reduce and reuse construction and demolition waste.



Lincoln Environmental Action Plan

The [Lincoln Environmental Action Plan](#) (LEAP) is Lincoln's community blueprint for the actions needed to sustain a healthy environment. The LEAP includes strategies under the categories of Energy, Land Use, Transportation, Waste and Water that are being implemented to ensure that Lincoln is protecting our environmental future.

ENERGY
Convert to LED street lights.
Improve energy efficiency in City of Lincoln municipal buildings.
Reduce non-renewable fuel usage in the City fleet operations by 50% by 2030.
Improve energy efficiency of Lincoln’s new homes and buildings.
Expand Lincoln’s potential for solar energy growth.
LAND USE
Replace ash trees destroyed by the Emerald Ash Borer.
Increase urban agriculture opportunities.
Continue to conserve natural lands to support habitat development.
TRANSPORTATION
Develop electric vehicle infrastructure.
Implement the “Green Light Lincoln” program for more environmentally friendly traffic flow.
Reduce vehicle traffic by increasing access to alternate transportation.
WASTE
Increase the recycling rate to 50% by 2030 with a comprehensive residential and commercial recycling program.
Increase waste and recycling diversion in City of Lincoln buildings to help meet the community goal of increasing the recycling rate to 50% by 2030.
Develop a construction and demolition waste recycling strategy for publicly supported construction projects.
WATER
Conserve Lincoln’s water, and plan for future need.
Develop a consistent watershed funding source to prevent flooding, and improve the quality of storm water runoff.

Staff Discussions

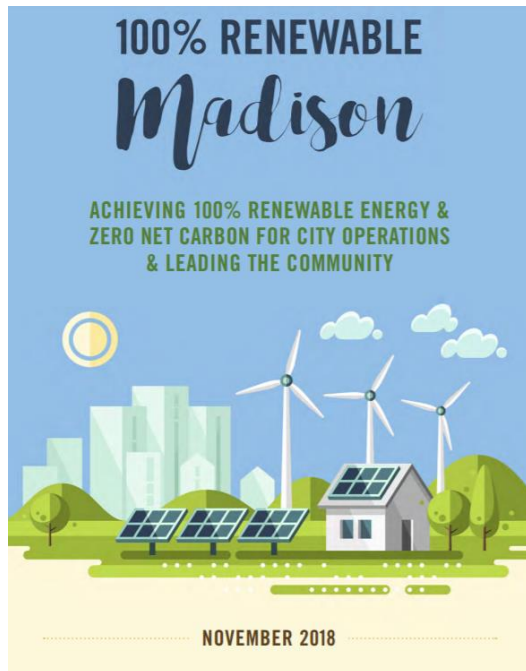
Planning Department staff began engaging with various City and County Departments in 2019 to discuss the upcoming Comprehensive Plan Update. Below is a summary of staff comments that relate to resiliency.

A second source of water will likely be needed by 2050.
LES generation stations should be included in resiliency planning.
Lincoln’s Community Rating System is 5 which provides a 25% discount to those who have flood insurance.
Chapter 2 of LPlan 2040 shows a lot of bridge crossings over floodplains. Less crossings would be beneficial for the floodplain but would reduce connectivity in neighborhoods.
Watershed is working on a Salt Creek Resiliency Study.
One Water Concept – don’t put water, wastewater and watershed in their own silos but look at all water utilities and issues as a whole. This is a holistic view of the system including downstream impacts. All water has value.
PlanForward should discuss water quality with infill projects.
PlanForward should enhance the sustainability and resiliency sections.
Downzone areas where there are conflicts between residential and industrial uses.
Once in a lifetime storms are becoming more common. Emphasize how climate change impacts health.
Health equity and environmental equity should be discussed more. Low income households are associated with poor health outcomes.
Develop metrics that will evaluate neighborhoods based on livability and identify projects that will increase livability.
A new hazard mitigation plan will be completed in June 2020.
Dam failure inundation maps should be taken into consideration with future growth and development.
We expect StarTran’s fleet to be 50% electric in 10 years.
Consider policies to enhance food security – local food production and urban gardens.
There is expected to be a dramatic shift in transportation over the next 30-40 years, i.e. electric and autonomous vehicles.
Salt Creek may have a significant project in the future to reduce the floodplain.
Hazard mitigation projects are underway at the wellfields in Ashland.
Digital divide between those who can afford broadband and those who cannot.
UNL has reinvigorated a sustainability commission.
Social capital has a big impact on a community’s ability to rebound after a disaster.
Water restrictions have economic development implications.
Lincoln could see climate refugees coming from other countries.

Other Cities' Resiliency Efforts

Various resiliency planning efforts are occurring in other cities across the county. Some sample goals and priorities from other cities' plans are listed below. You can also view the full documents by clicking on the links that are provided.

100% Renewable Madison – Madison, WI

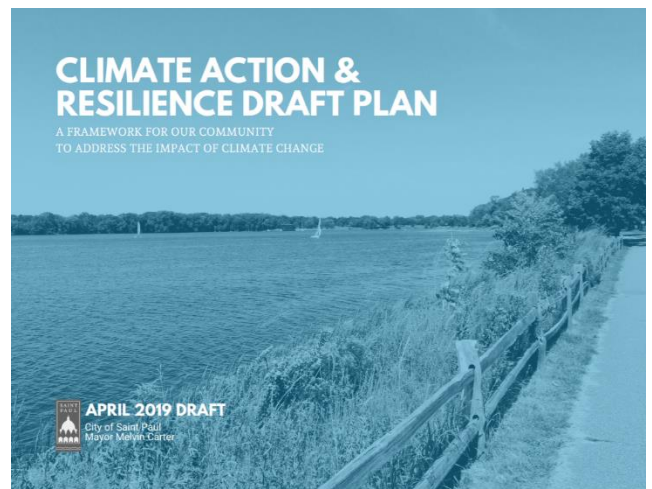


“In joining other cities around the US and the world, the City of Madison is demonstrating its commitment to using low carbon strategies to meet community-wide economic, environmental, and social challenges. Powering city operations with 100% renewable energy will enable city officials to accomplish multiple city policy objectives including job creation and economic development, cost savings to city taxpayers, promoting racial equity and social justice, contributing to long-term public health and vitality through improved air and water quality, and resilience in the face of more extreme weather events. Recent extreme weather events underscore the need for city officials to take bold climate action now.” This plan analyzes three scenarios with strategies and policies for the City of Madison to achieve its goal of 100% RENEWABLE ENERGY AND ZERO NET CARBON EMISSIONS for municipal operations while providing leadership for the greater community. Three principles from the report are included below, and you can also view the [100% Renewable Madison report online](#).

Reducing energy demand from local government operations through energy efficiency and behavioral measures.
Supplying electricity through renewable energy and to the extent possible, generating renewable energy locally.
Supplying remaining energy needs from Renewable Energy Credits (REC) and carbon offsets as a bridge strategy, while Madison continues to invest in efficient transportation, energy efficiency, and renewable energy as opportunities arise.

Climate Action & Resilience Draft Plan – St. Paul, MN

“Saint Paul is taking ambitious action to eliminate our contribution to global climate change by adopting a goal of carbon neutrality by 2050 and reducing emissions 50% by 2030 from business as usual. The city understands that the impact of climate change is already here, and it is necessary to prepare for anticipated disruptions. This plan includes both initiatives to mitigate greenhouse gas emissions and strategies to reduce vulnerabilities for a more equitable and resilient Saint Paul.” The plan prioritized efforts that offered the highest likelihood of early success, laid the necessary



foundational groundwork for later stage strategies, and addressed issues that needed significant lead times. The priorities are listed below, and the full [draft plan](#) is available for review online.

Residential: The highest impact actions will be 1) prevent emissions with the adoption of stricter building energy codes for new development, 2) deep energy retrofits that include building envelope improvement, and 3) electrification of natural gas appliances.

Commercial and Industrial: The high impact actions will be 1) Green building standards for new buildings, 2) efficient operation of existing buildings, and 3) building energy retrofits.

Transportation: Transportation today has surpassed the electricity generation sector as the largest source of carbon emissions and is growing. Eliminating transportation emissions is critical to achieving the goal of carbon neutrality by 2050. Transportation emissions are influenced by three main factors:

1) Land use and urban form, 2) Mode of transportation, and 3) the types of fuels that are used.

Waste and Water: The City of Saint Paul, through Resolution 14-519, established goals of diverting 40% of waste from landfills by 2020 and 80% by 2030. Water priorities emphasize preservation of safe, quality drinking water and promotion of a culture of water conservation and stewardship.

2018 Green Cincinnati Plan – Cincinnati, OH



2018 Green Cincinnati Plan
Adopted May 2018
CINCINNATI

“The 2018 Green Cincinnati Plan includes 80 recommendations to achieve 80% reduction in carbon emissions by 2050, and quantitative metrics to measure the City’s progress. Each of the chapters outlines measurable goals and specific recommendations to improve the economy, quality of life, and environment in Cincinnati. Some recommendations have detailed descriptions and clear next steps, while others are aspirational and exact steps for implementation will require further development.” The full [Green Cincinnati Plan](#) is available online for review.

One of the recommendations of the Green Cincinnati Plan is to create Sustainability Districts. “A sustainability district, or 2030 district, is a collection of buildings or neighborhoods that commit to three goals: reducing their building energy usage, water consumption, and transportation emissions by 50% by 2030. Sustainability districts are becoming more popular across major cities in the U.S. with peer cities such as Pittsburgh and Cleveland having active districts.”

Examples of Sustainability Districts:

Cleveland, OH 2030 District

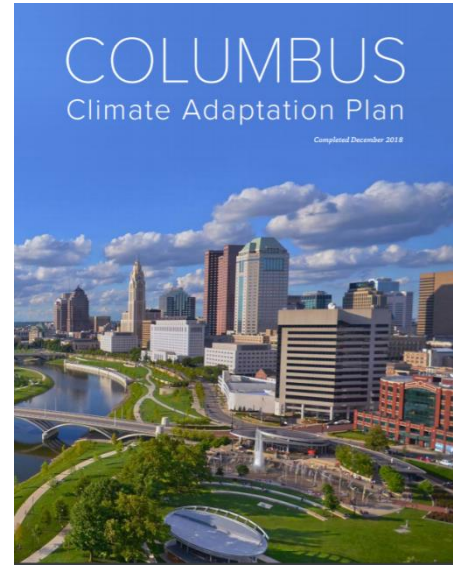
Cleveland is encouraging the building of highly efficient buildings ▪ The district in Cleveland stresses the importance of not only reducing the environmental impact of the building and the construction process, but also 2018 Green Cincinnati Plan 49 increase the owner's return on investment and making the business environment more competitive ▪ <http://www.2030districts.org/cleveland>

Pittsburgh, PA ▪ Pittsburgh is creating small, highly efficient building pockets throughout the city ▪ These pockets strive to reduce transportation emissions and water consumption by densifying the area and building more efficient buildings ▪ <http://www.2030districts.org/pittsburgh>

Columbus Climate Adaptation Plan – Columbus, OH

“The purpose of the Columbus Climate Adaptation Plan (CCAP) is to provide specific, prioritized actions that the City of Columbus, along with its residents, non-profit organizations, and local businesses, can take to make Columbus a more climate-resilient community.”

Recommended climate adaptations are organized under the following categories: Extreme Heat, Air Quality & Energy, Flooding, Water Quality, Water Use, Ecosystems, Emergency Preparedness and Vulnerable Populations. The full [CCAP](#) is available online for additional review.



Climate Action Plan

In summer of 2019, Mayor Gaylor Baird announced a new initiative to create a Climate Action Plan for Lincoln. The Climate Action Plan builds on the work of the existing Lincoln Environmental Action Plan (LEAP) to create common sense strategies that make our community more environmentally sustainable and more resilient to the impacts of climate change. The initiative is being led by Verdis Group, a sustainability consulting firm. The project lead is Kim Morrow, Director of Climate Planning and Resilience.

The process to develop the Climate Action Plan has included the involvement of a Mayor-appointed Climate Resiliency Task Force, a Sustainability Working Group of City staff, the Mayor's Environmental Task Force and the public to develop relevant and actionable strategies that will make our city a regional leader in climate preparedness and sustainability.

The draft plan will be available for public review and comment in September.

Salt Creek Floodplain Resiliency Study

This study is analyzing the Salt Creek Floodplain and will recommend a mix of structural and non-structural measures to reduce the flooding impacts to properties in the floodplain. The project team includes Olsson, a local engineering and design firm, and Michael Baker International, a nationally recognized firm for their work in floodplain management and policy. Additional information can be found on the project website at:

<https://www.saltcreekstudy.com/>

The draft plan will be available for public review and comment this fall.