Climate Action and Adaptation Plan Progress Highlights

Implementation of the Iowa City Climate Action and Adaptation Plan is underway. Here are progress highlights from the first sixteen months after adoption:

General Updates

- ▶ With the aid of oversight and guidance from the new Climate Action Commission, City staff is working to communicate annual progress on implementation of the Climate Action Plan. Updates will include an annual community-wide greenhouse gas inventory, progress on all thirty-five actions in the Plan, and materials will be generated for public awareness.
- ▶ The City awarded twelve new Community Climate Action Grants in 2019. Organizations and groups will be reimbursed up to \$5,000 for projects addressing a spectrum of Climate Plan objectives. This program, started in 2017, has been a positive way to engage the community, support climate work, and fund worthwhile projects in Iowa City that will reduce our emissions. Details about projects supporting specific Climate Action Plan objectives are below.
- ▶ Staff has been involved with event planning faculty and students at the University of Iowa, along with other stakeholders to plan for the City's first-ever Climate Festival, scheduled in September 2020.

Plan Progress



Buildings

Action 1 1

As of February 1, 2019, participants in the City's owner-occupied housing rehabilitation program receive an energy assessment by the City's affiliated Green Iowa AmeriCorps (GIA). Participant homes also receive weatherization to improve energy efficiency and lower energy. Between September 2019 and February 1, 2020, the City's partnership with GIA performed 91 energy assessments. There have been over 300 audits conducted since 2016.

The newly formed Johnson County Clean Energy District organization was awarded a 2019 City Climate Action Grant for launching the planning phase of an initiative to increase residential energy efficiency audits and retrofits in Iowa City over the next five years. This group has identified a pilot neighborhood for weatherization and basic energy efficiency improvements and is developing a website.

- 1.2 A Climate Action Grant was awarded to non-profit Old Brick for installation of digital, programable thermostats and installing solar lighting in the parking lot. The projects are expected to yield a 20% energy savings and be an example for commercial spaces.
- 1.3 A Climate Action Grant was awarded to lowa Valley Habitat for Humanity for providing high efficiency, low emissions air source heat pumps for three newly constructed homes. One house also received solar panels. This effort is a pilot to reduce emissions while improving energy efficiency affordability for low-income homeowners.
- 1.5 Resulting from the solar feasibility study and direction from Council, staff is pursuing two solar array projects. The Public Works facility, completed in late 2019, will have a rooftop solar installation installed in 2020, along with an installation at the Terry Trueblood Recreation Area. The projects are combined and sought proposals in February 2020.

On a related note, the City Manager's Office and Sustainability staff met with both MidAmerican Energy and Eastern Iowa Light and Power to talk about partnering on potential opportunities for solar or other energy saving projects. MidAmerican Energy and the City are working toward an agreement to install utility-scale solar in a portion of Waterworks Park, near the Iowa City Water Plant. To move forward with a project like this, zoning changes were needed in order to allow solar projects on one or more acres of publicly owned land. City Council approved these changes in fall 2019.

1.7 Improvements implemented in City facilities include a Building Automation System (BAS) at City Hall and the Robert A. Lee and Mercer Recreation Centers along with a new boiler system and HVAC work. A BAS, now in 11 City facilities, allows staff to monitor and optimally operate the building HVAC systems with the intent of lowering energy use and costs.

Approximately 2,400 bulbs at City facilities were converted to LED lights since September 2018. These projects include parking ramp stairwells and office areas, the Transit building, the household hazardous waste room at the Landfill, Cable TV offices, an IT server room, the MPO offices, and exterior lighting at City Hall, the Equipment shop, the Parks shop, the Napoleon baseball fields, and the Refuse building. Additional indoor pool and outdoor LED lighting conversion is planned at Mercer Recreation Center.

City staff have been tracking municipal natural gas and electricity utility data for the past 11 years, but a more effective software program was purchased in 2018 to analyze facility data with the intent of prioritizing energy efficiency improvements. The City actively monitors utility usage and prioritizes energy efficiency projects at City facilities.



Action 2.1

A community-wide Transportation study conducted by Nelson Nygaard is in progress. The study has already incorporated significant community engagement in determining possible routes, services, and other factors that could lead to greater use of the City's transit services. The consultant team and staff conducted several open houses and used digital platforms to collect feedback and present route and transit amenities. The study will be complete in summer 2020, and staff is planning for how to roll out improvements selected by the community.

2.2 The City vehicle fleet now has three electric utility vehicles, five electric passenger cars with a sixth arriving soon, and three hybrid vehicles, with two more on order. Free electric vehicle charging stations are available for public use at Capitol St, Dubuque St., Court St, Harrison St, and Chauncey Swan parking ramps. Further, Transportation Services spent 2019 researching and actively investigating options for electric buses and applied for a grant for the purchase of an electric bus.

lowa City is leading other communities and planning agencies in Eastern lowa in the implementation of a grant from The Iowa Economic Development Authority to create a local readiness plan for electric vehicles. The project includes the recommendation of practices cities can undertake to promote the integration of electric vehicles in our community, including policy and code changes and incentives. A request for consultant proposals was released in January 2020 and the project should commence in spring 2020.

2.3 Between 2018 and 2019, bike lanes were striped on 1st Ave (Bradford to Hwy 6), Dodge and Governor Streets (Burlington to Summit), Mormon Trek Blvd (Hwy 6 to Melrose), Clinton (Benton to Church), Dodge (Governor to Kirkwood), Foster Rd (Dubuque to Prairie Du Chien), and Camp Cardinal Blvd. McCollister Rd construction (Gilbert to Sycamore) will be started in 2020, with bicycle facilities installed at the completion of the project. The Southeast side of lowa City will see new bicycle facilities in 2020 on Keokuk, Southgate, Sandusky, and Taylor, and due to significant University of Iowa construction, Madison St. (Burlington to Market) is likely to be added in 2021. These new bicycle facilities continue to make safe pedestrian and bicycle connections throughout town, reducing necessary car trips.

Two Climate Action Grants issued in 2018 encouraged bicycling and bicycle education. Iowa City Bike Library and Neighborhood Centers of Johnson County partnered to offer 60 helmets, light safety equipment, and refurbished used bicycles to children who were enrolled in after-school bicycle safety programming with the Neighborhood Centers of Johnson County. Pedals for People was made possible through a partnership between United Nations Association of Johnson County, Refugee & Immigrant Association, Bicyclist of Iowa City, University of Iowa College of Public Health, and the Iowa City Bicycle Library. The project provided a bicycle, safety equipment, and basic bicycle maintenance and bike safety for participants sent from the Refugee & Immigrant Association.

Refuse and Engineering staff worked with the City's GIS platform to devise a revised plan for Refuse truck routing. Solid Waste, Recycling, and Organics pickup have had standard routes for years, adding streets to routes as neighborhoods were built out throughout lowa City. In early 2019, staff modified all routes to rebalance the number of stops, and reduce excess vehicle miles traveled, all while keeping resident pickups on the same day of the week. Staff is monitoring impacts of this change. Additionally, City staff implemented an idling reduction policy for non-emergency City fleet cars in summer 2019 and is monitoring fuel and carbon emissions savings.



Action 3.1

Code changes made in 2017 require that recycling must be available to multi-family residential buildings with 4 or more units. In some cases, groups of buildings may share nearby recycling and solid waste locations but all must have it available near the building. City staff is working on increasing proper use of these containers, and will be pursuing more clear signage and additional recycling education.

3.2 Large, 95-gallon recycling containers were distributed to all lowa City residential customers in late 2018 and early 2019. The bulk of the 95-gallon organics carts requested by residents followed after the recycling carts. Additional organics cart purchases were made during 2019 to keep up with high resident demand. In addition to increased communications with residents, the larger carts also inspired a larger volume of recyclables and yard waste/ organics for pick up.

City recycling collection experienced an impressive 45% increase in curbside recycling volumes between 2017 and 2019. Staff believes this surge in recycling is an outcome from the 2017 ban on landfilled cardboard and from increased use of the 95 gallon containers. Curbside organics collection saw even more growth with the use of larger containers,

resulting in an increase of 94.5% between 2017 and 2019. The diversion of these materials from the landfill maintains future available space in the landfill, reducing some long-term costs, and yard and food waste collection provides abundant fresh compost materials for use in the community, reducing the amount of landfill-sourced methane

3.3 City Climate Action Grants were awarded in 2019 to Houses into Homes and to Salvage Barn, for diversion of community-donated household items and donated housing construction materials from the landfill. These items either furnish homes of families and individuals in need and/or transitioning out of homelessness in Iowa City and nearby communities, or provide a valuable resource for community members to find vintage, historic, or useful home repair materials, rather than buying new. These grants supported storage and shelving space, as well as technology to help organize donations, deliveries, and inventory. In late 2019, Houses into Homes requested an additional \$25,000 directly from City Council and was granted funding to keep the organization in operation. A portion (\$10,000) of these funds will be paid from a state solid waste management grant, applied for by City Resource Management staff.

Two Climate Action Grants were awarded in 2018 for diversion of waste. One small grant went to a panelist addressing "fast fashion" for Flyover Fest attendees, and the other was issued to partners STEAM Fab Lab, NISAA African Family Services and Home Ec. for a sewing cooperative project that provided job skill training, childcare, transportation as participants learned to reuse materials for grocery bags, feminine hygiene products, and others.

- 3.4 Work on an education campaign for diversion of construction materials is in progress. Recycling and reuse workshops headed by the Resource Management Division were held throughout 2019.
- 3.5 Staff rolled out compost programs at five City facilities and the program is popular. Adding composting to additional facilities is in discussion.
- 3.6 Staff is engaged in a methane-capture study for the Landfill and Waste Water Treatment3.7 Facility. An RFP for consultant study on the Landfill and Waste Water Facility was awarded in fall 2019 with a completion goal by spring 2020. The study outcome will provide options for the City to mitigate, harness, or productively use methane emissions from these two facilities.



4.1 4.2

The Urban Sustainability Directors Network (USDN) awarded grant funding to hire a full-time fellow over summer 2019 to further equity and sustainability work and lowa City was one of seven communities nationally chosen to host an Equity and Diversity Fellow. The scope of work in lowa City is focused on outreach and getting a better sense of the needs of underserved and under-represented communities who may be disproportionally impacted by climate change. A final report is anticipated in spring 2020.

4.4 The City approved the adoption of the Johnson County Emergency Management Agency Hazard Mitigation Plan in May 2019. Staff provided information to the County and their consultant as the Plan was developed to ensure inclusion of climate-sensitive issues. The City will continue to cooperate with other agencies and communicate this through the planned climate communications plan.

4.5 A new Stormwater Technician position is being recruited in early 2020. This person will assist the Stormwater Engineer facilitate neighborhood stormwater projects and residential stormwater management assistant programs. Additionally, in 2019, the City added an Assistant Parks Superintendent to support management of natural areas maintenance. Cityowned natural areas, like Riverfront Crossings Park, sequester carbon, reduce runoff, and help control flooding. The City has made and will continue to make progress in maintaining these areas with help from the position changes.

A 2018 Climate Action Grant was issued to the lowa Institute of Hydraulic Research (IIHR) and University of Iowa College of Engineering for a comprehensive bathymetric survey of the Terry Trueblood Lake bed geometry. This data makes it possible for engineers and scientists to develop an adaptation plan that will enhance the lake as habitat for fish and other wildlife and improve water quality.

4.6 In addition to the 1,500 trees that have been planted in the past three years, approximately 75 trees will be planted in 2020 to buffer the railroad along 420th St. By expanding the public tree canopy, these trees will assist in eliminating CO2 from the air, reducing stormwater runoff, removing air pollutants and providing shade for years to come. Additional discussions with Project Green are underway, to establish programs to substantially increase public and private tree plantings.



Action

5.3

Backyard Abundance was awarded a Climate Action Grant to fund "garden gurus" at the Edible Classroom, Wetherby Park Edible Forest, and Chadek Green Community Garden. In summer 2019, gardening experts were available at regularly scheduled hours to assist gardeners and answer gardening questions while educating about the benefits of climate-friendly gardens.

In 2019, the City rented 221 community garden plots in varying sizes. In 2020, Creekside Park will add a community orchard of approximately 26 fruit-bearing plantings (6 trees; 20 bushes), Walden Pond will add 10-15 plots, and Chadek Green will be reconfigured to include varying garden sizes and additional pathways. In addition to increasing community gardens and gardening programs, the City issued a \$45,000 grant to Field to Family in support of starting a local food hub.

The City awarded 2019 Climate Action Grants to the Women, Food & Agriculture Network to match aspiring women farmers with seasoned farm mentors in the lowa City area, to the lowa Valley Resource Conservation and Development for a "Community Food Sovereignty Initiative". The projects support local farmers in the lowa City area and identify food preferences of immigrant and low-income community members finding it challenging to access familiar and affordable produce. The University of lowa Student Governments were also awarded a 2019 Climate Action Grant for a "Local Foods Passport" project, encouraging students and community members to try plant-rich menu items and get local produce at the lowa City Farmer's Market.

A 2018 Climate Action Grant was awarded to a partnership between lowa Interfaith Power & Light, First United Methodist, First Presbyterian and Wesley Student Center. This non-denominational educational and active-participant forum was held on a rotating basis at

faith-based community spaces. The series focused on programs to assist lowa City residents in reducing their contribution to climate change, including reducing energy use through commitment to a year-long program, examining how food choices can have an impact on climate, and learning about how our "stuff" contributes to climate change.

- Willowwind School has been awarded a Climate Action Grant for their "Children-to-Children Climate Actions: Composting, Gardening, Infiltrating, and Growing Healthy" project. The year-long program will further integrate environmental education. Kids at the school will have learning experiences in the classroom and also create materials, productions, and presentations to be shared with the public primarily other children in community spaces.
- 5.6 City staff has been developing a voluntary "Climate Action at Work" recognition and energy benchmarking program for businesses and organizations in Iowa City. Efforts to pilot energy tracking have started with several local organizations. These examples from a variety of business and building types will provide support for further rollout of this important program.
- 5.7 In 2019, the City staff-led Climate Action Committee began development of an internal sustainable operations guide. Ultimately, this guide will be available as a template for use by outside organizations that want to establish their own sustainable operations plan.