SUSTAINABLE DUBUQUE

viable • livable • equitable
IT’S MORE THAN JUST THE ENVIRONMENT.
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City Council adopts 50% by 2030 GHG reduction target
Greater Dubuque Development hires Director of Sustainable Innovation
City Council adopts 50% by 2030 Community Climate Action and Resiliency Plan
Namned White House Climate Action Champion
STAR Communities 4-STAR Rating
Community Equity Profile released
Mayor Buol leads a delegation of mayors from Mississippi River Cities & Towns Initiative at the Paris Climate Conference
Linseed Oil Building and Novelty Iron Works building rehabilitation projects in Millwork District completed
Alliant Energy installs 6 MW of utility solar
Named All-America City
Adopted Imagine Dubuque 20-year Comprehensive Plan based on Sustainability principles
Dubuque County Energy District launched
Dubuque Metropolitan Area Solid Waste Agency Renewable Natural Gas Project begins

2011
- Catfish Creek Watershed Management Authority created
- Named All-America City
- City hires first Community Engagement Coordinator in Iowa
- Schmid Innovation Center building rehabilitation in Millwork District completed
- Grants to Green supports energy efficiency in non-profits
- Bee Branch Watershed Project receives Iowa Flood Mitigation Board funding
- Inclusive Dubuque launched

2012
- Resilient Community Advisory Commission established
- HUD National Disaster Resiliency Competition awards $31.5 million to Bee Branch Watershed Flood Mitigation Project
- Dubuque County Energy District launched
- Dubuque County Food Policy Council formed
- Water & Resource Recovery Center generates fuel from excess methane
- 50% by 2030 Community Climate Action and Resiliency Plan updated to include adaptation and equity
- Improved Carbon Disclosure Project score
- Adapted to COVID-19
- Teen Resiliency Corps formed

2013
- Dubuque County Smart Planning Consortium formed
- University of Iowa Iowa Initiative for Sustainable Communities partnership launched

2014
- City Council adopts 50% by 2030 Community Climate Action and Resiliency Plan
- Greater Dubuque Development hires Director of Sustainable Innovation
- Named All-America City
- Community Health & Safety added to Sustainable Dubuque framework

2015
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- Named White House Climate Action Champion
- STAR Communities 4-STAR Rating
- Community Equity Profile released
- Mayor Buol leads a delegation of mayors from Mississippi River Cities & Towns Initiative at the Paris Climate Conference
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2021
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BUILDING ON
PARTNERSHIPS

between residents, businesses, schools, and non-profits, Dubuque is achieving its sustainability vision.

> **DUBUQUE’S SUSTAINABILITY VISION** is grassroots and community-driven. Beginning in the 1980s when Dubuque led the country in unemployment and had lost its connection to the Mississippi River, residents and business owners found a way to change Dubuque, making it a new kind of national leader for the 21st century.

**DUBUQUE, IA** is one of the oldest cities on the Mississippi River and the oldest community in Iowa. The people of the Midwest are descendants of individuals who valued rich farmland and abundant water, and who left a legacy of sustainability for us to build upon. It is also important to acknowledge and honor the original peoples of this land—the Očeti Šakówiŋ (Sioux), Sauk and Meskwaki, Iowa, and Kiikaapoi (Kickapoo) people on whose ancestral homelands and traditional territories Dubuque resides. We strive to build our solidarity and kinship with Native peoples. We also acknowledge that this country would not exist if it wasn’t for the unpaid, enslaved labor of Black people. We honor the legacy of the African diaspora and Black life, knowledge and skills stolen due to violence and white supremacy. While the movement for justice and liberation is building and we are witnessing the power of the people, many are still being met with violence and even being killed. Collectively, our community is saying this ends now. Black Lives Matter.

> **WE INVITE YOU TO JOIN US IN CREATING A**
SUSTAINABLE DUBUQUE IS THE CITY’S BRAND
Dubuque has established itself as a regional and national leader in its ability to collaboratively partner to achieve community goals. What Dubuque is achieving collectively today through its Sustainable Dubuque model is the direct result of the knowledge and understanding that sustainability is a balanced approach to long-term life quality. It is a rare approach to life quality where no one in the community is excluded...everyone who wants to do so can participate and contribute. It is about providing residents and businesses with information so they can save money, save resources, and reduce their carbon footprint. That is what is unique in Dubuque’s ability to continue to innovate and transform. The City of Dubuque and its partners have created a replicable model of sustainability for cities under 200,000, where over 40 percent of the US population lives. Sustainable Dubuque is who and what we are; it is our brand; and it is our future.

DUBUQUE IS PROUD TO BE A FIVE-TIME WINNER OF THE ALL-AMERICA CITY AWARD
The All-America City Award is considered the Nobel Prize of local government. The projects and initiatives for which Dubuque was recognized, including the Campaign for Grade-Level Reading, America’s River Project, Historic Millwork District revitalization, workforce development programs, and Crescent Community Health Center, are all shining examples of public and private partners collaborating to create a more Sustainable Dubuque.
IN 2006, Mayor Roy D. Buol signed on to the U.S. Conference of Mayors’ Climate Protection Agreement in support of the Kyoto Protocol. Since then, Dubuque has strived to create a replicable sustainability model for all communities, particularly those with smaller populations. Ours is a model that includes building on existing assets, community visioning, setting aggressive targets, strong partnerships, and performance management.

TODAY, we are creating that model with resident and business leadership and in collaboration with regional partners. Setting Dubuque apart from many other communities, ours is a model that is embraced by the business community as we use sustainability as a tool to retain and support existing employers, attract new opportunities, and support workforce development. It is a model that is based on equity and data collection so that we can track our progress as a community and set informed targets using those indicators. And, finally, it is a model that includes our regional partners, as we realize that so many of the issues that are part of our sustainability model, like water quality and strong transportation systems, are not issues that stop at political boundaries.

AFTER SERVING 10 YEARS ON THE CITY COUNCIL, ROY D. BUOL ran for the office of mayor in 2005. His platform was based upon “engaging residents as partners,” and what he heard from thousands of residents was a consistent theme surrounding water quality, recycling, green space, public transit, cultural vitality, accessibility and downtown revitalization. During the 2006 City Council goal-setting process, Mayor Buol proposed and received full support from his council colleagues to focus on sustainability as a City top priority, stating “cities that get out in front on sustainability will have competitive economic advantages in the future.” What soon became known as Sustainable Dubuque is a City Council adopted, community-created, and a resident-led initiative whose story officially began in 2006. Now a part of the City’s mission, vision, and goals, we are continually working to expand awareness, create partnerships, and encourage initiatives involving all sectors of our community. Dubuque became an early leader on the sustainability front.

AFTER IDENTIFYING SUSTAINABILITY AS A TOP PRIORITY, the Dubuque City Council moved immediately to create a city-wide resident task force, supported by City staff, to develop a comprehensive definition of what sustainability meant to our community. Aptly named the “Sustainable Dubuque Task Force,” the representation included individuals who brought diverse backgrounds and interests to the process, including local government, schools, utility companies, religious organizations, neighborhood associations, youth organizations, non-profits, environmental organizations, and business stakeholders.

The group met over the next two years, collecting community-wide input through meetings and surveys to develop a vision. The results of these efforts were used to develop the Sustainable Dubuque vision and model which focuses on a balanced approach to life quality and includes “economic prosperity, environmental integrity, and social/cultural vibrancy.”
BUILDING A SMARTER CITY

SMARTER SUSTAINABLE DUBUQUE is the research function of the Sustainable Dubuque initiative, a unique public/private partnership between the City of Dubuque, IBM Watson Research Center’s Global “Smarter Planet” Initiative and other key partners. The project was initiated in September 2009 when the City of Dubuque and IBM announced their intentions to make Dubuque one of the first “smarter” sustainable cities in the U.S. The first $30,000 in “seed” money was provided by the Greater Dubuque Development Corporation. It has grown into a collaboration that includes over two dozen industries and eight state and federal agencies.

With the support of public and private partners, Dubuque continues to explore and use new “smarter” technologies and strategies to deliver or better utilize vital services such as water, energy, and transportation to its residents while reducing the community’s impact on the environment. These technologies digitize and connect city systems, sense, analyze and integrate data, and allow Dubuque to respond intelligently to the needs of residents. It also provides consumers and businesses the information specific to their households or businesses that they need to make informed decisions about how they can reduce consumption and improve their economic bottom lines. Collecting and analyzing this information is giving consumers and city policymakers new insights on how to conserve Dubuque’s resources, become more sustainable, and improve their opportunities in an increasingly competitive world economy.

SMARTER WATER

Dubuque’s Smarter Water Pilot Study was conducted during the City’s community-wide water meter replacement project. More than 300 Dubuque households participated in this 12-month pilot study and had access to a dashboard that provided near real-time, personalized information about their consumption habits. The pilot results showed a 6.6% decrease in water utilization, 8-fold increase in leak detection and response, and 61% of participants made a change in the way they used water.

SMARTER ELECTRICITY

Dubuque’s private electrical utility provider, Alliant Energy, partnered to install nearly 1,000 Advanced Metering Infrastructure (AMI) meters in volunteer homes. The user dashboard allowed participants to compare their use to their own history or other households most “like them.” set goals for use reduction, and compete in community challenges. The IBM research determined that roughly 26% of average household use in Dubuque is “phantom power” — electricity being consumed by appliances when not in use. Usage reduction among pilot study participants ranged from 3% to 11% and 45% reported finding specific ways to reduce usage based on their individual reports.

SMARTER TRAVEL

By recruiting 1,000 Dubuque volunteers to install a Smarter Travel app on their smartphones and another 500 public transit users to carry radio frequency identification (RFID) tags, this study collected anonymous data on how, when, and where volunteer participants traveled within the community and identified opportunities to reduce vehicle miles traveled. The data collected is used by the City and its partners to implement policies, build infrastructure, and shape public transit routes that incorporate lower-impact options sought by residents.

SMARTER HEALTH + WELLNESS

This study was designed to explore how a combination of new technology and community engagement assisted participants in achieving wellness goals. It explored the links between conserving resources, reducing one’s carbon footprint, improving the individual and local economy, and health. Two smartphone applications sensed activity and movement while providing data on goals and comparative “how am I doing?” feedback.

SMARTER DISCARDS

Weekly trash, recycling, and food scraps/yard debris setout weights were collected from more than 300 volunteer households. A personalized portal provided diversion tips, goal challenges, insights into discard patterns, and comparative data to other households with similar profiles. Volunteers increased diversion by 5% and reported changed consumption habits. The results informed public education efforts and program design.

SMARTER DATA

An ongoing effort, Smarter Data is the creation of an ecosystem of solutions, services, data/application marketplaces and collaborative environments, which allows public authorities, organizations, and residents to interact and work together in an “open data landscape” and accelerate the creation of economic value. The vision is the “democratization of data” through integrated systems of engagement (SoE), systems of insight (SoI) and systems of record (SoR).
Community Design ➞
The built environment of the past, present, and future which contributes to its identity, heritage and sense of place.

Smart Energy Use ➞
Energy conservation and expanded use of renewable energy as a means to save money and protect the environment.

Resource Management ➞
The benefits of reducing, reusing, and recycling resources.

Regional Economy ➞
A diversified regional economy with opportunities for new and green markets, jobs, products, and services.

Green Buildings ➞
A productive and healthy built environment.

Community Knowledge ➞
Education, empowerment, and engagement to achieve economic prosperity, environmental integrity, and social/cultural vibrancy.

Healthy Local Foods ➞
The benefits of wholesome food from local producers, distributors, farms, gardens, and hunters.

Community Health and Safety ➞
Systems, policies, and engagement to ensure that all residents have access to healthy and safe lifestyle choices.

Reasonable Mobility ➞
Safe, reasonable, and equitable choices to access live, work, and play opportunities.

Healthy Air ➞
Fresh, clean air, reduced greenhouse gas emissions, and minimized health risks.

Clean Water ➞
Water as the source of life, seeks to preserve and manage it in all forms.

Native Plants & Animals ➞
Biodiversity through the preservation, restoration, and connection of nature and people.
The City of Dubuque strives to find the middle — the sweet spot where the environmental impacts, the social and cultural impacts, and the economic impacts of a plan, idea or project meet. The model serves as our guide as we continue to create a place for everyone. Our model involves a three-part approach that addresses: economic prosperity, environmental integrity, and social/cultural vibrancy.

Economic growth is a critical component of sustainable development. Sustainable Dubuque has four principles that support our community’s economic prosperity. These principles are Community Design, Smart Energy Use, Resource Management, and Regional Economy.

Protecting the planet and holding our city accountable for our actions is priority for Sustainable Dubuque. In order to ensure a future with a safe environment for our next generation, Sustainable Dubuque focuses on four principles of environmental integrity: Healthy Air, Clean Water, Native Plants & Animals, and Reasonable Mobility.

Social Equity is essential in democracy. Each person should have access to the resources needed to have a healthy life and the ability to influence the decisions of their government. The four principles that support our community’s social/cultural vibrancy goals include: Green Building, Community Health and Safety, Healthy Local Food, and Community Knowledge. This model is our holistic approach to long-term quality of life.

Dubuque is a viable, livable, and equitable community. We embrace economic prosperity, environmental integrity, and social/cultural vibrancy to create a sustainable legacy for generations to come.
A RESILIENT AND EQUITABLE

ENGAGE

Community Engagement
Sustainable Dubuque was built on community engagement, and it continues outreach to engage private, non-profit, and public sectors. The Sustainable Dubuque framework has become the prism through which City operations are developed and analyzed. Much of Dubuque’s story can be attributed to a motto of “People, Planning, and Partnerships.” When it comes to partnerships, individuals and organizations subscribe to the concept of collective impact, the idea that broad-based, cross-sector collaboration is imperative to affect community change, rather than the siloed efforts of individual organizations.

In current initiatives like linking daily struggles of residents with low-incomes to climate action, the City and partners are creating relevant engagement opportunities and connections to resources and programs in a transparent and meaningful way.

PREPARE

Resilient Community Advisory Commission
The Resilient Community Advisory Commission was created in 2016. Through a robust community engagement process, residents provided input to define resiliency as “the ability of individuals and systems to prevent, prepare for, and recover from adverse vulnerabilities while adapting to long-term changes.” The Commission reviews research and data, engages the public, and provides recommendations to the City Council in order to create a more resilient community that is able to prevent, prepare for, and recover from potential economic, environmental, and social/cultural vulnerabilities.

TEACH

Green Vision Education
The Green Vision Education program, organized by the Dubuque Metropolitan Area Solid Waste Agency, works with area schools on their sustainability efforts. Areas include Energy Efficiency, Resource Management, Pollution Prevention, Sustainable Purchasing, and Eco-Literacy in their built environment along with incorporating these areas into their curriculum. The agency works with community partners to identify opportunities for sustainability improvements. Projects have included composting the food scraps from their lunches, enforcing no-idling policies, planting school gardens during their school day, learning about the culture of their communities, and serving as educators for the larger Dubuque community.
COMMUNITY OF CHOICE

PARTNER

Inclusive Dubuque
Hosted by the Community Foundation of Greater Dubuque, Inclusive Dubuque leverages relationships with nonprofits, government entities, businesses, and generous community members to realize a shared vision for Dubuque: A vibrant and inclusive region with resources and opportunities for all. Since 2012, Inclusive Dubuque’s diverse group of partners has worked together to drive transformational change in Dubuque by reimagining systems, fostering a culture of inclusion, and advancing justice and social equity in all areas of community life. They are conveners and collaborators, facilitating important conversations and developing systemic solutions to equity issues, such as preparing minority and first-generation college students for careers, improving access to health and wellness resources like brain health services, bridging language and cultural barriers so immigrants can fully participate in the community, and preparing, attracting, and retaining a diverse workforce.

PLAN

Equitable Poverty Prevention and Reduction Plan
In the spirit of gaining a deeper understanding of poverty in our community, how people are experiencing it, and our ways of addressing it, the City engaged a year-long process to develop an Equitable Poverty Reduction & Prevention Plan. The result is a plan that describes the state of poverty in Dubuque, analyzes its causes and impact, identifies the actions we’ve taken as a community to address it, and presents promising practices to enhance and refine what we have been doing. It calls for employing innovative strategies to collectively reverse the impact of poverty among our neighbors.

GROW

Opportunity Dubuque
Opportunity Dubuque is a collaborative job-training effort developed in response to local employers’ identification of the greatest barrier to future growth: a skilled workforce. Through this initiative, individuals are able to complete a short-term certification program to upgrade their skills with 100% of their costs paid. This program creates non-credit to credit career pathways and ultimately fills employers’ demand for talent in high-wage, high-demand careers. By providing scholarships this program eliminates financial barriers to participants, including the unemployed and underemployed, high school students, those interested in hands-on learning, and dislocated workers. Local employers are engaged in designing the training/curriculum and support orientation, training, and interview.

OPPORTUNITY DUBUQUE PROGRESS

1,049 students have been accepted and placed into the program
729 have graduated in advanced manufacturing, information technology, healthcare, construction, transportation, and others.
685 of the graduates (94%) are employed or continuing education 6 months after completion
30+ employers participating
AN INTEGRATED MODEL

Bee Branch Watershed Flood Mitigation Project

The Bee Branch Watershed, where more than half of Dubuque’s residents either live or work, is the area hit hardest during rain events. Six Presidential Disaster Declarations were issued between 1999 and 2011 because of flash flooding that caused an estimated $70 million in damages. The Bee Branch Watershed Flood Mitigation Project is a multi-faceted approach to addressing the severe and frequent flash flooding experienced in the watershed.

The Bee Branch Creek Restoration is the key component of this multi-phased project. It involved replacing almost one-mile of storm sewer with a creek and floodplain that resembles the one that traversed the area more than 100 years ago. Now called the Bee Branch Creek Greenway, the restored creek carries large volumes of stormwater downstream to the Mississippi without flooding adjacent properties. It also serves as a linear park with a multi-use trail, scenic overlooks, playground, amphitheater, educational areas, benches, lighting, and more than 4,000 plantings.

To reduce the amount of stormwater runoff, approximately 240 alleys in the watershed will be converted to permeable green alleys. Green alleys allow water to pass through the surface and filter into the soil below. They reduce runoff, replenish ground water, and improve water quality. To date, 82 alleys have been converted. In addition, storm sewers in flood prone areas are being expanded up to ten times their current capacity. This will help prevent localized street flooding and basement flooding as witnessed in the past.

The Bee Branch Healthy Homes Resiliency Program assists low- to moderate-income residents make repairs and implement on-site stormwater management principles to decrease environmental health and safety issues from flooding. From 2016 to 2021, approximately 280 owner-occupied homes, single-unit rentals, and multi-family units have been made more resilient.

The Bee Branch Healthy Homes (BBHH) and Lead Hazard Control programs utilize an innovative home advocacy approach to improve housing conditions. In the homes where structural work is being completed, advocates meet with the families to assess their general needs. The advocate then helps the family develop a personal resilience plan and works one-on-one with residents to improve their ability to overcome challenges. Successful outcomes are measured by determining, through follow up visits with each family, a better comprehension or utilization of available resources or a better circumstance from the initial assessment.

The home advocates have built a strategic network of partners that meet quarterly to identify resource gaps in our community and build holistic programmatic solutions. As a result, they are able to connect families with the health, economic, education, social, and built environment resources they need to create a more resilient neighborhood and community. This multi-faceted approach creates a stronger link between the resident’s health and the home environment where they reside.
As sustainability is a holistic approach to creating a better quality of life for all, Dubuque is working with local, state, and federal partners to break down administrative and funding “silos” in order to create a replicable, integrated model for resiliency.

**RESILIENCY** is the ability of individuals and systems to prevent, prepare for, and recover from adverse vulnerabilities while adapting to long-term changes.

**AN EQUITABLE COMMUNITY** is welcoming, fair, and just with the opportunity for people to have the realistic hope of achieving their goals.

In July 2017, the City of Dubuque installed 14 floating islands of various sizes in the Lower Bee Branch Creek as a natural way to target excess nutrients in the water and increase biodiversity. The buoyant raft structures, made from 100% recycled BPA-free PET (polyethylene terephthalate) plastic, are planted with aquatic vegetation such as Sedges, Wild Rye, Blue Flag Iris, New England Aster, Marsh Marigold, Swamp Milkweed, and Cardinal Flowers. The plastic raft material and suspended root systems create an ideal growing surface for bio-film and microbes to break down pollutants such as phosphorus and nitrogen that cause odor and algae issues.

The $250 million Bee Branch Watershed Flood Mitigation Project protects nearly 1,400 homes and businesses that are prone to flooding and prevent an estimated $582 million in damages over its 100-year design life.

**CREATIVE FUNDING**

The secret to many successful projects in Dubuque can be attributed to a creative approach to funding. For example, we didn’t just think “culverts” for the Bee Branch Project. We thought about all the aspects and amenities a flood mitigation project could encompass and then identified specific opportunities for federal, state, local, and private funding. Our flood mitigation project became a trails project, a park project, an economic development project, a brownfields project, and a disaster recovery project. Looking at projects from all angles maximizes funding creating a multiplier effect that benefits the City and residents well beyond a ribbon-cutting.

**CENTRAL AVE. REDEVELOPMENT**

Through public engagement with neighbors and key stakeholders and partners, the City and its consultant have developed a streetscape plan for this heavily-traveled corridor. The plan, once implemented, will address both safety concerns and aesthetics to improve the pedestrian experience. Several focus areas of the plan are the “greening” of the corridor with trees and planters, the creation of safer circulation for all modes of transportation, the addition of desired amenities of the neighborhood, preservation of the historic architecture, and economic vitality through the rehabilitation of the existing mixed-use buildings. Achieving these goals requires strong public/private partnerships, which are already underway.
FROM MULTI-GENERATIONAL BUSINESSES TO START-UPS, Dubuque businesses continue to use innovation and technology to explore opportunities and collaborate with a focus on sustainable economic development. Dubuque’s comprehensive Broadband Expansion Initiative has produced dramatic results, creating a five-fold increase in internet carriers, redundant high-speed access to all commercial corridors, and launching a four-year project to bring fiber to every home and business. In 2020, the International Economic Development Council (IEDC) awarded Dubuque’s Broadband Expansion initiative with the Excellence in Economic Development Gold Award. The initiative has now embarked on a digital equity project to create affordable access to all low-income households through a combination of free public WiFi and income-based subsidies for high-speed connectivity.

Dubuque Works is a regional partnership bringing employers, funding partners, workforce experts, and educators together to meet the workforce needs of local employers. Under the umbrella, partners focus on three goals: 1) human capital, 2) skill development, and 3) collaboration and evaluation. With each focusing on their respective strengths, partners work together to identify and address recruitment, retention, and relocation needs, build workforce capacity through a variety of employer-defined training programs, and utilize best practices and analytics to ensure they are improving outcomes for local employers.

Since 2015, the Downtown Farmers’ Market has committed to increase access to healthy local foods for all residents through partnerships with a variety of non-profits. Customers use SNAP benefits to pay for produce through EBT transactions, receive free rides on The Jule public transit when traveling to and from market, and can participate in market tours and cooking demonstrations to learn about healthy lifestyle choices. Since 2016, the Farmers Market has offered Double-Up Food Bucks, a dollar-for-dollar match for SNAP participants up to $10 each week.

Project HOPE (Helping Our People Excel) is an employment initiative created in partnership by the Community Foundation of Greater Dubuque and Dubuque Works designed to dissolve barriers and help service providers, education and training providers, employers, and job seekers build bridges to establish equitable, long-term employment opportunities for all, including the unemployed and under employed.

Over one million square feet of historic warehouse space has been redeveloped in the Historic Millwork District. While private building owners are committed to renovating the warehouses using sustainable best practices, the public sector built complete streets that are accessible for all. The $200 million mixed-use, livable neighborhood is home to diverse housing options, entrepreneurial businesses, a thriving arts and culture scene, open spaces, and the marriage of historic preservation and energy-efficient technologies.
DOWNTOWN REVITALIZATION

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<th>IMPROVEMENT</th>
<th>1985 - DEC. 2020</th>
<th>% SINCE 2000</th>
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<tr>
<td>New Construction</td>
<td>$261 million</td>
<td>92%</td>
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<tr>
<td>Building Rehabilitation</td>
<td>$412 million</td>
<td>91%</td>
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<tr>
<td>Real Estate Sales</td>
<td>$193 million</td>
<td>76%</td>
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<tr>
<td>Public Improvements</td>
<td>$152 million</td>
<td>95%</td>
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<tr>
<td>Net New Jobs</td>
<td>+ 3,701</td>
<td>65%</td>
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<tr>
<td>Total Improvements</td>
<td>$825 million</td>
<td>92%</td>
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FROM 2003 TO 2018

> Dubuque cut GHG emissions by **27%**
> while growing its economy by **78%**
> and adding **12%** more jobs.

THE ARTS MEAN BUSINESS

Annual Impact of Local Arts and Culture Nonprofits

$47 million in **annual economic activity**
$36.7 million in household income to local residents
$5 million in local and state government revenues supports **1,530 jobs**

Source: Americans for the Arts’ Arts and Economic Prosperity IV, 2012

In 2000, Dubuque County’s Median Household Income (MHI) was 5.7% below the national MHI. In 2019, Dubuque’s MHI was 0.3% ABOVE the national MHI.

MEDIAN HOUSEHOLD INCOME

<table>
<thead>
<tr>
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<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2019</th>
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<tr>
<td>Annual Income</td>
<td>$54,605</td>
<td>$56,154</td>
<td>$59,150</td>
<td>$63,031</td>
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Dubuque MHI
Dubuque’s Water & Resource Recovery Center, the City’s wastewater treatment plant, underwent a nearly $70 million facility upgrade in 2013. The facility uses anaerobic digestion to convert wastewater sludge to 12.5 tons of fertilizer per day. During the digestion process, methane gas is produced, which is captured, cleaned, and burned to power turbines that generate electricity for the facility. Through operational efficiencies and the conversion of waste to electricity and heat, the plant saved $606,000 in operating costs in its first full year of operation.

The plant also contributes significant environmental benefits, removing 10 tons of oxygen demand per day, which previously went into the Mississippi River, and using 400 kilowatts less per year, which results in 4,715 metric tons of carbon dioxide equivalent not going into our atmosphere. It also processes high-strength waste from local businesses, saving companies like Hormel 60% on their disposal costs and generating revenue for the City. In 2016, the City Council approved a partnership with BioResource Development and Black Hills Energy to inject excess biogas into the natural gas pipeline, creating additional environmental benefits and an income source for the City.

Dubuque County Watersheds was created under a 28e agreement between the City of Dubuque, Dubuque County, and Dubuque Soil and Water Conservation District. The agreement provides funding aimed at erosion-control, watershed protection, and flood prevention activities, and promotes cooperation to implement and fund water quality and quantity projects throughout Dubuque County. The agreement also provides for effective and efficient approaches to watershed activities involving coordination and implementation of Municipal Separate Storm Sewer System (MS4) duties and administration of county-wide erosion control and stormwater responsibilities.

The City of Dubuque has formed an expansive, collaborative approach with both Dubuque County and the Dubuque Soil and Water Conservation District that is working towards increasing conservation measures and profitability on farms, as well as improving ecosystem habitat by partnering with both rural and urban landowners. By forming this partnership, the City is has significantly strengthened the current MS4 program and is now including upstream watershed projects in conjunction with MS4 activities.

The City of Dubuque was also the first city in the state of Iowa to sign an MOU on Nutrient Reduction Exchange. By having this watershed agreement and team in place, watershed projects in Dubuque County can now be registered under a federal database for nutrient reduction accountability and reduction.

The Dubuque Solar Project is a combination of two sites, the West Dubuque Solar Garden and the Downtown Dubuque Solar Garden. This project earned the Envision Platinum rating for sustainable infrastructure – the highest Envision award level and the first solar project to receive the recognition.
The West Dubuque Solar Garden is a 3.9-megawatt site that uses more than 15,000 panels. The annual output of this 21-acre solar garden is equal to the annual usage of about 727 average Iowa homes. The Downtown Dubuque Solar Garden is located on a former industrial site located between downtown Dubuque and the Mississippi River. This is a 901-kilowatt AC solar garden, and its annual output is equal to the annual usage of about 126 average Iowa homes. It features an educational display and information to teach visitors about advancements in clean energy technology. Both solar gardens are the result of innovative partnership with the City of Dubuque and the Greater Dubuque Development Corporation.

The City of Dubuque has committed to accelerate the adoption of electric vehicles in an effort to reduce the City’s greenhouse gas emissions, combat climate change, and save money. With City Council support of integrating the cost of carbon into vehicle purchasing calculations, the City is moving forward with electrification of its light-duty fleet and transit vehicles. In partnership with the Iowa Department of Transportation, Greater Dubuque Development Corporation, Alliant Energy, and the Diamond Jo Casino, the area’s first DC Level 3 fast charger will be installed using funding from Iowa’s Volkswagen Settlement Environmental Mitigation Trust. The City continues to explore electric vehicle infrastructure options to meet our 50% by 2030 greenhouse gas reduction goal.

The City of Dubuque Heat Source & Water Heater Replacement Program provides reimbursements of up to $3,500 for heat sources and $1,500 for water heaters to help income-eligible homeowners and tenants replace outdated and inefficient units using Community Development Block Grant funding. The Dubuque Green Iowa AmeriCorps Energy and Community Team performs home energy audits and weatherization to help residents feel more comfortable in their homes while saving money and reducing energy usage.

**Outcomes - How Are We Doing?**

**PUBLIC SPACES + PARKS**

97.89% of Dubuque residents live within a 1/2-MILE WALK of a public space or park

**PESTICIDE-FREE PARKS** and counting!

**STORMWATER**

Bee Branch Watershed Flood Mitigation Project

Once completed, Dubuque’s 240 green alleys are expected to reduce stormwater runoff from alleys within the Bee Branch Watershed by up to 80%

**LEAD POISON PREVENTION**

Since 1997, Dubuque’s Childhood Lead Poisoning Prevention Program has addressed lead poisoning as a result of old housing stock through lead remediation, education, and engagement of health care providers.

**COMMUNITY GOAL:**

50% REDUCTION IN GREENHOUSE GAS BY 2030

<table>
<thead>
<tr>
<th>Year</th>
<th>CO2e (metric tons of CO2 equivalent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>1,122,597</td>
</tr>
<tr>
<td>2015</td>
<td>1,109,916 - a 10.6% reduction</td>
</tr>
<tr>
<td>2018</td>
<td>819,406 - a 27% reduction</td>
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<tr>
<td>2030 goal: 633,117 = a 50% reduction</td>
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</tbody>
</table>
EQUITY IS AT THE HEART of Dubuque’s sustainability work. When we take care of our most vulnerable and climate-impacted residents, we are all better off. Instead of asking “What are our critical assets and how are they impacted by climate/natural disasters?,” we now offer a human-centered approach: “Who will be impacted first and worst? What do they need from us? How do we prioritize our actions to protect our community?”

The Community Foundation of Greater Dubuque facilitated a community needs assessment specific to mental health services. Based on community feedback, five key recommendations were put forth. The Brain Health Task Force, a 34-member stakeholder group, was formed to address the recommendations. The task force had representation from the United Way, Hillcrest Family Services, Mercy Medical Center, SASC, Amerigroup, National Alliance on Mental Illness (NAMI), Dubuque Community YMCA/YWCA, and the City of Dubuque, including law enforcement and public health, along with several individuals personally affected by mental health.

My Brother’s Keeper, a national community challenge from President Obama, was accepted by the City of Dubuque in 2014. Since then, the City has worked to build partnerships, identify local disparities, implement research-based practices, and leverage existing assets in order to address six milestones affecting the lives of young people in our community: education, safety, employment, and physical, mental, and social health. National and local statistics indicate that low-income youth and youth of color often fall behind in many areas. In Dubuque, the My Brother’s Keeper network consists of partners across sectors who are focused on identifying and acting to remove gaps faced by boys and young men of color from cradle to college to career, in order to ensure that Dubuque continues to deliver on upward mobility for all our children.

Community Gardens are growing throughout the city. The Dubuque Rescue Mission, Dr. John Viner, and Washington Neighborhood gardens offer healthy produce to homeless and at-risk populations. Convivium Urban Farmstead has garden beds onsite and in front yards throughout the North End Neighborhood inviting everyone to pick something to eat! Passionate South End neighbors came together when they saw an opportunity to create the Valentine Park Community Garden. Through their own initiative and sweat equity, with support from the City’s Park Division, they created a 7,500 sq. ft. fenced garden with onsite water in their local park.

The Multicultural Family Center (MFC) was established in 2004 and empowers all community members to reach their potential and strives to form a solid foundation of understanding and collaboration across racial, ethnic, age, and socioeconomic groups. The center offers over 30 programs per month and partners with over 75 organizations to welcome new residents to Dubuque, support youth, and connect people of many cultures. In 2020, the Teen Resiliency Corps (TRC), comprised of teens who participated in MFC programs, canvassed their neighborhoods to gather input and begin building block-by-block resiliency. The teens connected with neighbors, many of whom were experiencing social isolation due to the COVID-19 pandemic, and responded to their needs. For example, TRC
partnered with Project Rooted, a local non-profit, to provide food boxes to those experiencing food insecurity. This project not only provided job experience, most importantly, it allowed the teens to build relationships with their neighbors and learn about City services. This lived experience creates a culture of community leaders and lasting social outcomes. Today, the TRC is continuing resiliency work by focusing on an energy efficiency scorecard for Dubuque’s housing stock.

What does it mean to be viable, livable, and equitable? It will mean something different for everyone, but there will be some common threads. A viable community is balanced, successful, and resilient with active and engaged residents and businesses. A livable community is healthy and safe with social, cultural, and economic opportunities. An equitable community is welcoming, fair, and just with the opportunity for people to have the realistic hope of achieving their goals. A viable, livable, and equitable community is a place where residents feel they can stay and lead meaningful lives.

Two local non-profit organizations help make Dubuque a viable, livable, and equitable community. The Fountain of Youth centers their work on changing the mindsets that contribute to generational poverty through community collaboration, resource sharing, mindfulness, and education. The Dubuque Dream Center is a community outreach center committed to mobilizing youth and families to build on Dr. King’s dream of transforming communities by embracing, empowering, and unifying those who live there. They strive to inspire vision and purpose through: impacting youth, strengthening families, and building community.

THE DUBUQUE PACIFIC ISLANDER HEALTH PROJECT

Assists and supports the Pacific Islander people in obtaining appropriate healthcare services. Patients are actively contacting Crescent Community Health Center when they encounter barriers to community resources because they are engaged and have a more trusting relationship with the staff.

YTD STATS: JANUARY 1 - JUNE 30, 2021

| APPROX. 800 Pacific Islanders in Dubuque | 247 Pacific Islanders Patients |
| 77% of Dubuque residents live within 1 mile of a recreational trail | 63.6 miles of off-street and on-street trails in Dubuque |

 CRIME CLEARANCE RATES

CRIMES AGAINST PERSONS

Dubuque PD: 92%*
National: 46%**

* 2020 ** 2019

CARDIAC ARREST SURVIVAL RATE

15.56% DUBUQUE 10.8%* NATIONAL

*Based on 2018 data from the American Heart Association

THE DUBUQUE PACIFIC ISLANDER HEALTH PROJECT

YTD STATS: JANUARY 1 - JUNE 30, 2021

69% are diagnosed with diabetes or predictables
45% have an A1C less than 9%

26% of qualifying population has participated in colorectal screening

40% are diagnosed with hypertension
70% of those patients hypertension is controlled

31% of qualifying population has participated in cervical cancer screening in the past 3 years

RECREATIONAL TRAILS

77% of Dubuque residents live within 1 mile of a recreational trail

There are 63.6 miles of off-street and on-street trails in Dubuque
A commitment to CLIMATE

**Dubuque has made an active commitment** to ambitious climate action, solidifying its part of a historic and powerful response by the world’s cities to address the climate crisis. Dubuque’s commitment to the Global Covenant of Mayors connects our city with the broadest global alliance committed to city climate leadership, building on the pledges of over 10,000 cities and local governments from six continents representing more than 800 million citizens worldwide. Dubuque has committed to advance climate action in three key areas:

1. reducing greenhouse gas emissions
2. identifying — and adapting to — the risks associated with climate change, and
3. increasing access to clean and affordable energy.

Climate change is the defining issue of our time, both nationally and internationally. **Dubuque’s 50% by 2030 Community Climate Action and Resiliency Plan** was updated in 2020 after extensive community engagement and a focus on human-centered, equitable climate action. The 50% by 2030 Plan lays out the foundation for the city’s efforts to reduce its greenhouse gas (GHG) emissions and improve its resilience to future impacts of climate change on its environment, infrastructure, and people. It offers a community approach with actions City Council, City staff, residents, and businesses can take to do their part to reach the 50% reduction of 2003 greenhouse gas emissions by 2030. The plan is broken into sectors — each with its own set of actions and goals, including Buildings and Energy, Transportation and Land Use, Solid Waste, Water, Wastewater and Flooding, Climate Health and

**Bee Branch Creek Greenway**
Safety, Food, Greenspace and Tree Canopy, Climate Economy, and Climate Action Capacity. Working toward implementation of the recommendations will lead to a more resilient community, improved health, economic prosperity, and improved quality of life.

Climate change is a global phenomenon that creates local impacts. It presents one of the most profound challenges of our time. A broad international consensus exists among atmospheric scientists that the Earth’s climate system is being destabilized in response to elevated levels of greenhouse gas emissions in the atmosphere. Two changes to Iowa’s climate are occurring already: shorter winters with fewer cold extremes, and more heavy and extreme precipitation. Increases in the global surface temperature and changes in precipitation levels and patterns are expected to continue and intensify for decades. In turn, these changes in climate have impacts on the economy and health of local communities.

**How Do We Get There?**

<table>
<thead>
<tr>
<th>REDUCTIONS BY 2030</th>
<th>CLIMATE ACTION PLAN BY SECTOR</th>
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</thead>
<tbody>
<tr>
<td>BUILDINGS + ENERGY</td>
<td>50%</td>
</tr>
<tr>
<td>TRANSPORTATION + LAND USE</td>
<td>45.1%</td>
</tr>
<tr>
<td>WASTE + RECYCLING</td>
<td>60.4%</td>
</tr>
</tbody>
</table>

**CUMULATIVE POTENTIAL COST SAVINGS OF 50% BY 2030 PLAN:**

$451,939,000

Implementing many of the measures in this plan, such as reduction of energy consumption or single-occupancy auto use, and avoided cost of carbon, can save money for the community.

**OUR VISION**

To be the first climate resilient community in Iowa, leading in the social and economic transitions necessary to prevent, prepare for, recover from, and adapt to the long-term impacts of climate change.
REALIZING THE IMPACT OF LOCAL ACTIONS

on the global climate, Dubuque is engaged in state, regional, and national organizations and initiatives in order to create a more sustainable future. These collaborations offer Dubuque and other communities the chance to share best practices, learn from each other, and support regional and national initiatives and programs.

Dubuque leadership is actively engaged in the following national organizations:

• Climate Communities (www.climatecommunities.us)
• ICLEI – Local Governments for Sustainability (www.icleiusa.org)
• Urban Sustainability Directors Network (www.usdn.org)
• The Funders Network for Smart Growth and Livable Communities (www.fundersnetwork.org)
• International City/County Management Association Sustainability Committee (www.icma.org)
• Mississippi River Network – 1 Mississippi (www.1mississippi.org)
• America's Great Watershed Initiative (www.agwi.org)
• Mississippi River Cities & Towns Initiative (www.mrcti.org)
Local & National Partners

Alliant Energy (www.alliantenergy.com)
Black Hills Energy (www.blackhillsenergy.com)
Catfish Creek Watershed Management Authority (www.catfishcreekwatershed.org)
City of Dubuque (www.cityofdubuque.org)
Clarke University (www.clarke.edu)
Climate Communities (www.climatecommunities.us)
Community Foundation of Greater Dubuque (www.dbqfoundation.org)
Creative Adventure Lab (www.creativeadventurelab.org)
Dubuque Area Chamber of Commerce (www.dubuquechamber.com)
Dubuque Community School District (www.dbqschools.org)
Dubuque County (www.dubuquecounty.org)
Dubuque County Energy District (dubuquecounty.energydistrict.org)
Dubuque Initiatives (www.cityofdubuque.org/dubuqueinitiatives)
Dubuque Main Street (www.dubuquemainstreet.org)
Dubuque Metropolitan Area Solid Waste Agency (www.dmaswa.org)
East Central Intergovernmental Association (www.ecia.org)
Four Mounds, HEART Program (www.fourmounds.org)
Green Dubuque (www.greendubuque.org)
Greater Dubuque Development Corporation (www.greaterdubuque.org)
Holy Family Schools (www.holyfamilydbq.org)
ICLEI (Local Governments for Sustainability) (www.icleiusa.org)
Iowa Economic Development Authority (www.iowaeconomicdevelopment.com)
Iowa Department of Transportation (www.iowadot.gov)
Iowa Department of Natural Resources (www.iowadnr.gov)
Iowa Department of Cultural Affairs (www.iowacity.gov)
Iowa Environmental Council (www.iaenvironment.org)
IBM (www.ibm.com)
Inclusive Dubuque (www.inclusivedbq.org)
Iowa State University Extension (www.extension.iastate.edu)
Loras College (www.loras.edu)
Multicultural Family Center (www.mfcdbq.com)
National Endowment for the Arts (www.nea.gov)
National Trust for Historic Preservation (www.preservationnation.org)
National Mississippi River Museum & Aquarium (www.rivermuseum.com)
Northeast Iowa Community College (www.nicc.edu)
Operation New View (www.operationnewview.org)
Petal Project (www.petal-project.com)
University of Dubuque (www.dbq.edu)
U.S. Economic Development Administration (www.eda.gov)
U.S. Environmental Protection Agency (www.epa.gov)
U.S. Department of Energy (www.energy.gov)
U.S. Department of Transportation (www.dot.gov)

... and the participating individuals, businesses and organizations that make up these coalitions.
AWARDS & RECOGNITIONS:
Among other distinctions, public-private partnerships have earned Dubuque the following recognitions:

- 2006, 2017, 2018 Iowa Great Place
- 2008 Most Livable Small City in the United States, U.S. Conference of Mayors
- 2008, 2010 Natural Resources Defense Council Smarter City
- 2009 EDA Excellence in Economic Development Award for Excellence in Historic Preservation-led Strategies
- 2009 Best Business Retention & Expansion Program Award
- 2010 Governor’s Award for Environmental Excellence
- 2010 Connected World Magazine Top 20 Most Connected Locale in the US
- 2010 Forbes Best Small City to Raise a Family
- 2010 Fast Company 10 Smartest Cities on Planet
- 2010, 2011 Iowa League of Cities All-Star Community Sustainability Award
- 2011 3rd Place, International Livable Community Awards
- 2012 International Economic Development Council Excellence in Economic Development Award
- 2012 Iowa Rivers Revival River City of the Year Award
- 2013 Kiplinger Personal Finance’s list of 10 Great Places to Live
- 2013 Forbes 14th Best Small Place for Business and Careers
- 2013 27th fastest-growing economy in the nation, US Bureau of Economic Analysis
- 2013 EPA National Award for Smart Growth Achievement
- 2014 One of the 10 Best American Cities to Work in Technology, SmartAsset
- 2014 White House Climate Action Champion
- 2015 4-STAR Community Rating
- 2015 World’s “Smart 21 Communities” Intelligent Community Forum
- 2016 National League of Cities City Cultural Diversity Award
- 2017 U.S. Conference of Mayors Outstanding Achievement Award
- 2018 U.S. Department of Education Green Ribbon School - St. Columbkille’s Elementary
- 2018 Leading Environmentalism and Forwarding Sustainability (LEAFS) Award
- 2018 Score of 100 on 2018 Municipal Equality Index
- 2018 Dubuque named a LEED-Certified City

MORE INFORMATION
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www.sustainabledubuque.org
www.cityofdubuque.org/sustainability