







Vision 2000

established

Multicultural Family Center opens

Mayors' support of Kyoto Protocol

First Green Vision School award

First curbside food scrap collection program in Iowa

City hires first Sustainability Coordinator in 1st Annual Project HOPE Growing Sustainable launched Communities Conference Historic Millwork Dubuque District participates in Master Plan AIA Sustainable

Mayor Buol founding member of Climate Communities

Design Assessment Team process

Named All-America City

Every Child I Every Promise created





World magazine



Table of Contents

Building on Partnerships	į
The Beginning	(
Building a Replicable Model for Sustainable Communities	6
Dubuque is a 4-STAR Certified Community	7
Our Vision - Dubuque's 12 Sustainability Principles	8
A Resilient and Equitable Community of Choice	10
An Integrated Model	12
Economic Prosperity	14
Environmental Integrity	16
Social/Cultural Vibrancy	18
Building a Smarter City	20
Partners In Sustainability	22

Linseed Oil Building and

Novelty Iron Works building rehabilitation projects in

Millwork District completed

2013 2010 2011 2012 2014 2015 2016 2017 2009 2018 IBM & Dubuque Council adopts Catfish Creek Greater Dubuque Grants to Green **Alliant Energy** Unified Named Resilient Dubuque 50% by 2030 installs 6 MW partner to create Development supports energy Development Watershed White House Community County Energy the first Smarter **GHG** reduction hires Director efficiency in of utility solar Management Advisory Code provides Climate Action District City in North target Authority created of Sustainable non-profits Commission standards for Champion launched America Innovation established sustainable Named development Bee Branch Green & Healthy All-America City Named STAR Dubuque Named Watershed Sustainability Homes Initiative All-America City Communities **HUD National** County Food Innovation All-America City Project receives launched Disaster Resiliency 4-STAR Rating Policy Council Petal Project Adopted Consortium Iowa Flood Competition formed launched City hires first **Imagine** Mitigation launched awards \$31.5 Community Community **Dubuque County** Community Dubuque 20 year Board funding million to **Smart Planning** Engagement Health & **Equity Profile** Comprehensive Water & Bee Branch Northeast Iowa Dubuque 2.0 Safety added released Plan based on Resource Consortium Coordinator Community Watershed Flood facilitates to Sustainable formed in Iowa Sustainability Recovery Center Mitigation Project College community Dubuque principles generates fuel Mayor Buol leads launches Green dialogue around framework from excess **Jobs Training** University of Iowa Schmid a delegation of sustainability methane mayors from Program Iowa Initiative Innovation City Council Mississippi River for Sustainable Center building City hires Smarter adopts communities at rehabilitation in Communities Sustainable community goal the Paris Climate Mayor Buol partnership Millwork District Dubuque recognized as a of 50% reduction Conference launched completed Coordinator in greenhouse Top 10 Innovator gas by 2030 by Connected

Inclusive Dubuque

launched



BUILDING ON

between residents, businesses, schools and non-profits,



PARTNERSHIPS

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.

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 citizens 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 are working to create 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; it is our recognizable logo; and it is our future.





ROY D. BUOL Mayor of Dubuque



TOM WAGNER
Chairperson of the Board, Dubuque
Area Chamber of Commerce



MIKE DONAHUE Chairperson, Greater Dubuque Development Corporation

We invite you to join us in creating a more Sustainable Dubuque for today's generation and tomorrow's.



CHAD CHANDLEE
Chairperson, Board of Directors,
Community Foundation of
Greater Dubuque



KELLEY DEUTMEYER Executive Director, East Central Intergovernmental Association

DUBUQUE IS PROUD TO HAVE BEEN NAMED AN ALL-AMERICA CITY FOUR TIMES IN JUST 10 YEARS! The All-America City Award is considered the Nobel Prize of local government. The projects and initiatives that Dubuque was recognized for, 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.







'We're developing processes where people can make good decisions that will save them money and that will be sustainable beyond this generation. We call it making sustainability sustainable."

-Roy D. Buol, Mayor of Dubuque

> The Beginning

Engaging citizens as partners.

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 citizens as partners," and what he heard from thousands of citizens 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 citizen-led initiative whose story officially began in 2006. A City Council priority each year since, 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.

> Building a replicable model for sustainable communities

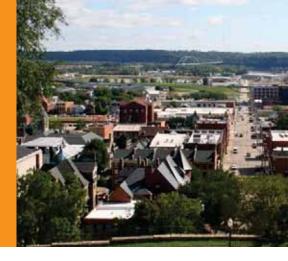
In 2006, Mayor Roy D. Buol signed on to the U.S. Conference of Mayors' Climate Protection Agreement in support of the Kyoto Protocol.

Since then, Dubuque has strived to create a replicable sustainability model for all communities, particularly those with populations under 200,000 where over 40% of the United States lives. 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 citizen 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 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.

DUBUQUE IS A 4-STAR CERTIFIED COMMUNITY!

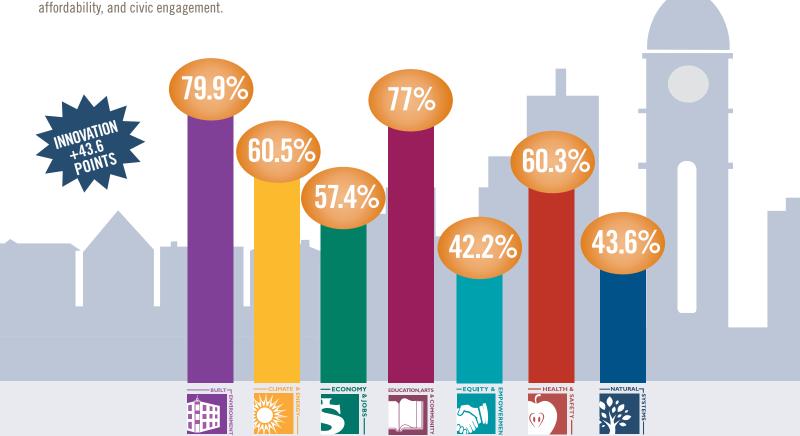


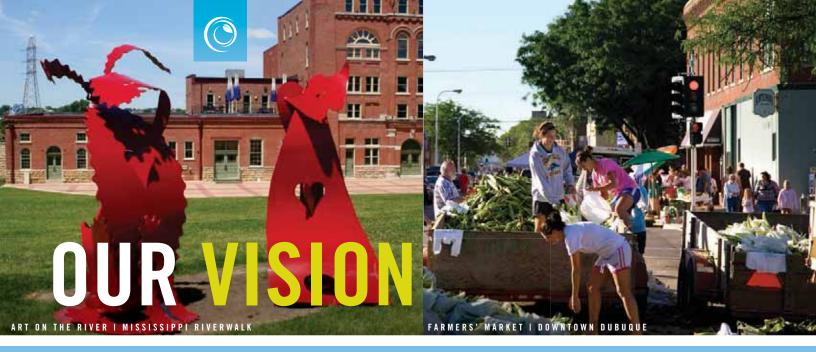
Dubuque has achieved a 4-STAR rating under the STAR Community Rating System (STAR), a national certification measuring a community's environmental, economic, and social efforts to achieve sustainability.

How did Dubuque become a 4-STAR Community?

In 2014, over 30 Sustainable Dubuque partners collected data to measure our progress towards national sustainability standards. **Dubuque earned 468 of 720 points, a significant achievement.**

sustainability standards. **Dubuque earned 468 of 720 points, a significant achievement.**The STAR framework is comprehensive, including everything from how safe our residents feel, how successful our schools are, and how fast our emergency response times are, to things like workforce readiness, housing













> Dubuque is a community that values...

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.

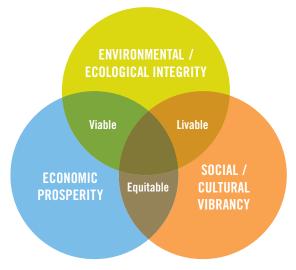


Native Plants & Animals >

Biodiversity through the preservation, restoration and connection of nature and people.



After identifying sustainability as a top priority, the Dubuque City Council moved immediately to create a city-wide citizen 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."





COMMUNITY OF CHOICE

engage

Community Engagement is Occurring Across a Broad Spectrum

When the Sustainable Dubuque Task Force brought its final recommendation to the City Council in 2008, it came with the support of the 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 & Partnerships.** And when it comes to partnerships, individuals and organizations prescribe 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 efforts to create a more welcoming community or the 3rd grade reading initiative, the City and its partners are creating relevant entrance points in order to engage residents in transparent, meaningful ways.

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.



Green Vision Education

The **Green Vision Education** program, organized by the **Dubuque Metropolitan Area Solid Waste Agency**, recognizes and encourages area schools for their sustainability efforts. Staff, students and parents assess Energy Efficiency, Resource Management, Pollution Prevention, Sustainable Purchasing, and Eco-Literacy in their built environment and collaborate to incorporate these areas into their curriculum. Community partners meet regularly with school green teams to identify opportunities for sustainability improvements. Pre-kindergarten through high school students compost the food scraps from their lunches, create walking school buses, enforce no-idling policies, plant school gardens during their school day, learn about the culture of their communities, and serve as educators for the larger Dubuque community.

50% by 2030

The 50% by 2030 Community Climate Action and Resiliency Plan is a grassroots-created target to achieve community-wide greenhouse gas reduction 50% below 2003 levels by the year 2030, adopted by the City Council in 2011. The target was brought to them by the Dubuque Community Greenhouse Gas Reduction Task Force, a partnership of local environmental nonprofits, faith based organizations, private sector green business, and individual activists, with strong input from local business partners.

plan

partner

Inclusive Dubuque

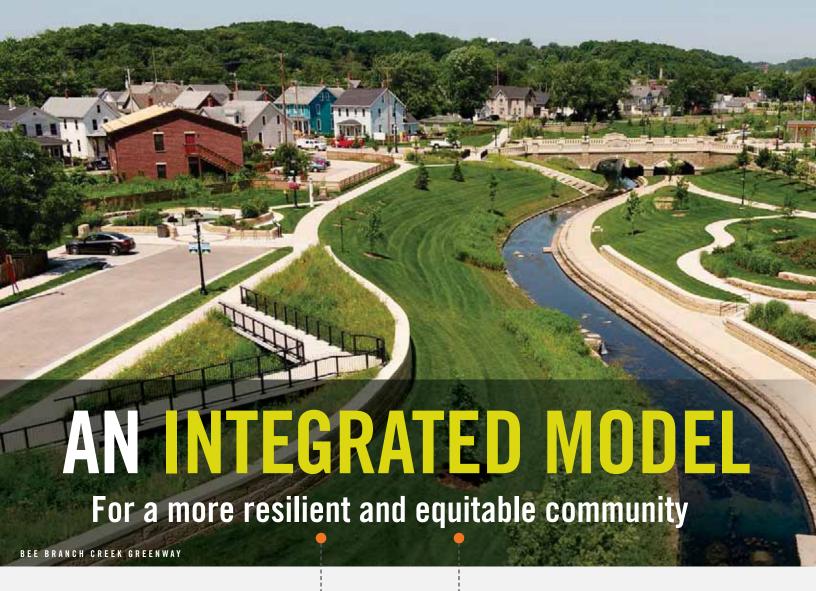
Inclusive Dubuque is a local network of leaders from faith, labor, education, business, nonprofit and government dedicated to advancing justice and social equity in the local community. Its mission is to advance equity and inclusion to meet the economic and cultural needs of a diverse community. Over 60 network partners gather monthly to support and learn from each other regarding diversity, equity and inclusion. Inclusive Dubuque acts as a hub for data and communication, facilitator of connections and partnerships, and accelerator of learning and progress. In 2015, Inclusive Dubuque collected data and host community dialogues to produce Dubuque's first Community Equity Profile, which will use quantitative data and community feedback to measure how diverse groups are affected by various systems such as economic wellbeing, safe neighborhoods, education, health and more.

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. This program eliminates financial barriers to participants, including the unemployed and underemployed, high school students, those interested in handson learning, and dislocated workers, by providing scholarships. Local employers are engaged in designing the training/curriculum and support orientation, training, and interview.

Progress:

- 655 students have been accepted and placed into the program
- 527 have graduated in advanced manufacturing, information technology, healthcare, construction, transportation, and others, and 23 in training or scheduled for training.
- 446 of the graduates (96%) are employed or continuing education 6 months after completion
- 30+ employers participating



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.

BEE BRANCH WATERESHED FLOOD MITIGATION PROJECT

The Bee Branch Watershed, where more than 50 percent 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 resulted in 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 multiphased 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. Over five years, approximately 270 single-unit and multi-family housing units will be made more resilient. The \$226 million flood mitigation project will protect 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.



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.

HOME ADVOCATE

The City's 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.

FOSTERING INNOVATION

Maker spaces and innovation labs at the Key City Creative Center, Creative Adventure Lab, Carnegie-Stout Public Library, and National Mississippi River Museum & Aquarium are creating unique spaces to welcome young entrepreneurs and creative individuals to Dubuque. These engaging spaces strengthen our community's capacity for innovation, attract and develop young entrepreneurs, build the skillsets necessary for tomorrow's workforce, and intentionally create interactions that are helping us solve our community's most challenging problems.

RE-ENGAGE DUBUQUE

Re-engage Dubuque is a partnership to connect young people age 16 to 21 who did not complete high school to alternative education options and post-secondary education/training.

Re-engagement coaches work with these young people to develop personalized plans for completing a high school diploma or a High School Equivalency Diploma (HSED) and exploring options for further study.

Since August 2012, the initiative's coaches have connected with over 430 dropouts and enrolling them in online courses, alternative and traditional high schools and adult education programs. As of Fall 2016, 126 individuals have completed the program.

IMAGINE DUBUQUE

The comprehensive plan serves as a guide for the community's physical, social, and economic development. Through a robust community engagement process, the 2017 Imagine Dubuque comprehensive plan, a Call to Action, was created. A year of community outreach produced over 12,500 ideas from all sectors of Dubuque, and an intentional focus on equity and inclusion ensured that the demographics of participants reflected the demographics of the community. The Plan's ten chapters closely mirror the three pillars of the Sustainable Dubuque model, and define a roadmap for the community to follow for the next twenty years. The STAR Community rating system provides the backbone for measuring progress towards the comprehensive plan goals.

DUBUQUE'S TRUE NORTH

Greater Dubuque Development Corporation focuses on six pillars of its mission: business retention and expansion, workforce solutions, national marketing, sustainable innovations, StartUp Dubuque, and Dubuque's True North. Announced in July 2017 as part of the Greater Dubuque 2022 Campaign Goals, Finding Dubuque's True North was added by Greater Dubuque to bring transformative change, in partnership with the Dubuque's True North Corporation, to Dubuque's vibrant, historic neighborhoods on the city's North End. It will be a collaborative partnership of public and private entities that will continue to bring new energy to the area. The program goals include removal of slum and blight, fostering of single-family home ownership, redevelopment of Central Avenue, and brownfields redevelopment for new businesses.



UNIFIED THERAPY SERVICES GREEN RIBBON-CUTTING CEREMONY

DUBUQUE INDUSTRIAL CENTER WES

ECONOMIC PROSPERITY

Creating green jobs. Expanding markets. Saving money.

MULTI-GENERATIONAL BUSINESSES and start-ups are creating cutting-edge technology participating in the Sustainable Innovation committee. Supported by Greater Dubuque Development Corporation, they meet on a regular basis to explore opportunities to collaborate in sustainable economic development and opportunities for product expansion, financial incentives and job creation.

The **Petal Project** is a green business certification program created by the East Central Intergovernmental Association that provides a framework for businesses and organizations dedicated to reducing their natural resource use to benefit the environment and their bottom line. The program helps businesses achieve sustainability in five categories: waste reduction, energy conservation, pollution prevention, staff education and water conservation.

DubuqueWorks 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 & evaluation. While 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.

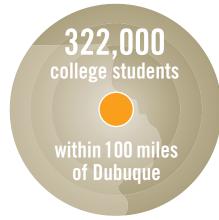
In 2015, the **Downtown Farmers' Market** partnered with various non-profits to increase access to healthy local foods for all residents. Customers use SNAP benefits to pay for produce through EBT transactions, receive free rides on The Jule public transit when traveling to and from market, and can participate in market tours and cooking demonstrations to learn about healthy lifestyle choices. In 2016, partners launched **Double Up Food Bucks**, an initiative to provide a dollar for dollar match for EBT/SNAP recipients.

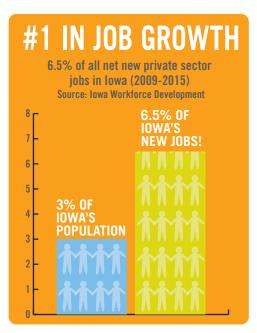
Project HOPE (Helping Our People Excel) is an employment initiative created in partnership by the Community Foundation of Greater Dubuque and DubuqueWorks designed to dissolve barriers and help service providers, education and training providers, employers and job seekers build bridges to establish equitable,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

Dubuque was ranked one of the **ten best American cities to work in technology** by SmartAsset.com (August 2014.) Ranking based on pay for tech workers, percentage of tech workers in the workforce (representing high levels of opportunity in the field), and low cost of living indices. Tech workers in Dubuque make **1.86 times more** than the city average, the highest ratio on this top 10 list.

OUTCOMES

how are we doing?







DOWNTOWN REVITALIZATION

IMPROVEMENT	1985 - DEC. 2017	% SINCE 2000
New Construction	\$246 million	92%
Building Rehabilitation	\$379 million	90%
Real Estate Sales	\$177 million	74%
Public Improvements	\$128 million	94%
Net New Jobs	+ 4,222	69%
Total Improvements	\$754 million	92%

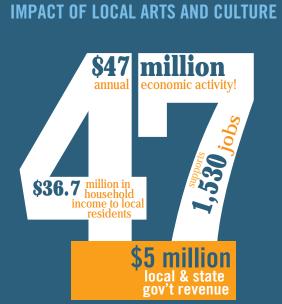
Total Improvements Since 1985:

\$754 million

Net New Jobs Since 1985:

+ 4,222

MEDIAN HOUSEHOLD INCOME



THE ARTS MEAN BUSINESS!



IN 2000, DUBUQUE COUNTY'S MEDIAN HOUSEHOLD INCOME (MHI) WAS 5.7% BELOW THE NATIONAL MHI. IN 2015, DUBUQUE'S MHI WAS 1.3% ABOVE THE NATIONAL MHI.

Dubuque MHI

60%

INCREASE IN DUBUQUE COUNTY EMPLOYMENT FROM 1983-2018

ENVIRONMENTAL INTEGRITY

Reducing emissions. Clean air and water. Healthy living.

OVER ONE MILLION SQUARE FEET of historic warehouse space is being redeveloped in the **Historic Millwork District**. While private building owners are committed to renovating the warehouses using sustainable best practices, the public sector is creating complete streets that are accessible for all. The \$200 million mixed-use, livable neighborhood will be 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.

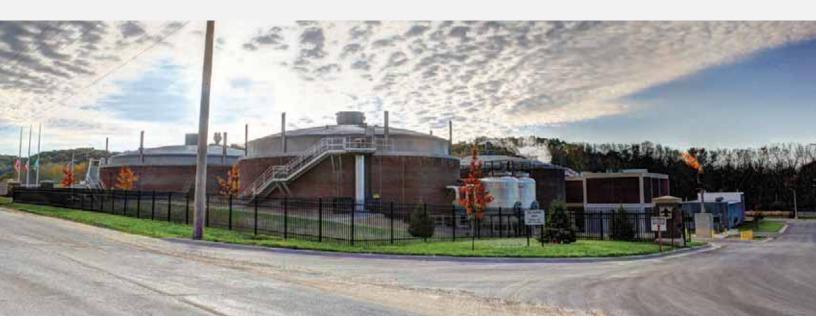
Dubuque's **Water & Resource Recovery Center**, the City's wastewater treatment plant, underwent a nearly \$70 million facility upgrade in 2013. The facility uses anaerobic digestion to convert wastewater sludge to 12.5 tons of fertilizer per day. During the digestion process, methane gas is produced, 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 operations.

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

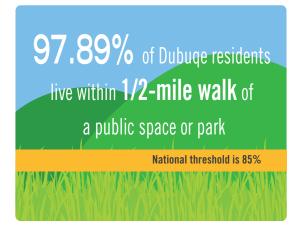
like Hormel 60% on their disposal costs, and generating revenue for the City. In 2016, the City Council approved a partnership with BioResource Development and Black Hills Energy to inject excess biogas into the natural gas pipeline, creating additional environmental benefits and an income source for the City.

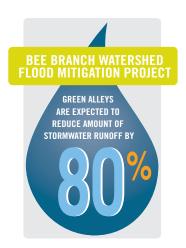
The **Catfish Creek Watershed Management Authority** was created in partnership with Dubuque County and neighboring communities in 2012 to educate watershed residents about the resource and the impact their actions have on that resource, specifically reduction of nutrient loading and runoff, and to complete projects that improve the quality of the diverse 57 square-mile watershed.

The Jule public transit system has undergone a complete transformation of routes and vehicles. While right-sizing the fleet, the Jule expanded programs and services to reach new audiences. The Rack & Ride program allows passengers to use bicycle racks free of charge with the purchase of a regular bus fare ticket. Project Concern, The Jule and Project Concern collaborated to address the issue of transportation for low-income and homeless individuals through creation of Project Pass, which provides transit passes to empower them to become more self-sufficient. Project Pass provided over 5,800 to help residents seek employment, get to work, and reach medical appointments.



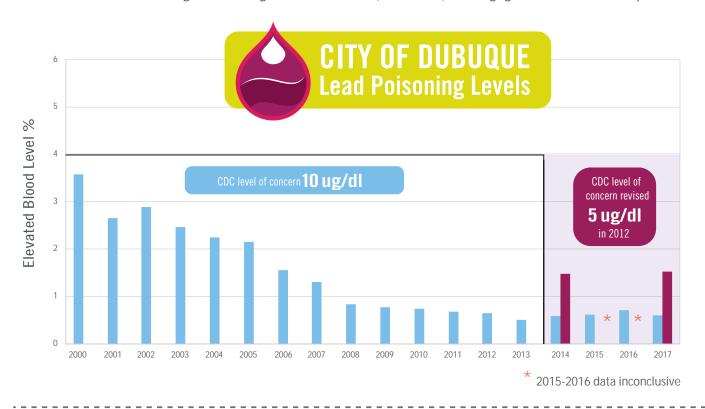
OUTCOMES how are we doing?







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.





2003 1,266,234 mt CO2e (metric tons of CO2 equivalent)

2015 1,109,916 - a 10.6% reduction

2030 goal: 633,117 = a 50% reduction

SOCIAL/CULTURAL VIBRANCY

Preserving people. Livable neighborhoods.

In October 2014, Mayor Buol accepted the White House My Brother's Keeper Community Challenge. The Challenge encourages communities across the nation to connect within their communities, identify local disparities, look to research based practices, and leverage existing assets in order to address six education, safety, employment, and physical, mental and social health milestones in the lives of young people in their community. 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 insure that Dubuque continues to deliver on upward mobility for all of 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. The **St. Luke's** wading pool garden program creates small urban gardens on properties with little or no green space, and a partnership with St. Stephen's Food Bank delivers excess produce to those in need.

The Four Mounds Foundation **HEART** program has provided over 6,300 youth with meaningful education through service learning, skill building for green jobs, and connections to post-secondary education and employment while rehabilitating dilapidated, existing properties, helping to reuse embodied energy of existing buildings and revitalize traditional, urban, walkable neighborhoods that have suffered disinvestment and blight.

Established in 2004 through a partnership of the Dubuque Community School District and City, the **Multicultural Family Center** empowers all families and community members to reach their potential and build unity out of diversity. The Center offers over 30 programs per month and partners with over 75 organizations to welcome new residents to Dubuque and connect people of many cultures.

Through a strategic alliance with the Community Foundation of Greater Dubuque, **Every Child | Every Promise** engages our community to promote collaboration among youth-serving agencies, eliminate duplication of services, gather effective data, and create a more efficient system to deliver the Five Promises to youth: Caring Adults, Safe Places, A Healthy Start, An Effective Education, and Opportunities to Serve. Most recently, partners have been working together to implement their All-America City award-winning Third Grade Reading plan.

The **CHANGE** (Comprehensive Housing Activities for Neighborhood Growth and Enrichment) Initiative is a campaign of neighborhood revitalization and an extension of sustainability to specifically address marginal properties, affordable housing and home ownership. Targeted outcomes of the program include increased flood protection, increased home ownership, reduction of households in poverty, greater landlord and tenant responsibility, and stabilization and increase of property values. From 2016-2022, \$22.1 million will leverage tens of millions of dollars in private investments to improve 725 housing units.

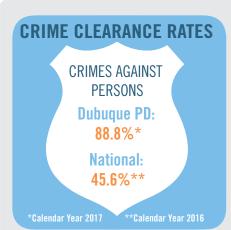


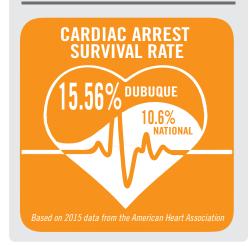




TASTE OF THE WORLD, MULTICULTURAL FAMILY CENTER

OUTCOMEShow are we doing?





Upward Mobility

In Dubuque, children born to parents in the nation's lowest income category* had a **17.9 percent** chance of being in the **highest** income category before reaching age 30. The national average is **10.6 percent**.

Dubuque ranks in the top 8 percent of the 741 areas examined, and 1st out of 58 among similar-sized areas!

*category = quintile or 20%

Source: The Equality Opportunity Project, 2013



PRIOR TO 2000, NO RESIDENTS LIVED WITHIN A MILE OF A BIKE/HIKE TRAIL NETWORK. AS OF 2015, 81 PERCENT OF DUBUQUE RESIDENTS LIVES WITHIN A MILE OF A BIKE/HIKE TRAIL.

DUBUQUE PACIFIC ISLANDER HEALTH PROJECT

Assisting and supporting the Pacific Islander people in obtaining appropriate healthcare services.



Pacific Islanders in Dubuque



Pacific Islander patients



Pacific Islander
population of
focus working
with a case manager.



79% of focus has diabetes

33% of those patients diabetes is considered to be poorly controlled.



93% of focus has hypertension

74% of those patients hypertension is considered to be controlled.



28% of qualifying population has participated in colorectal screening



33% of qualifying population has participated in cervical cancer screening

Pacific Islander 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 Crescent staff.



BUILDING A

SMARTER SUSTAINABLE DUBUQUE

Giving people what they need (reliable information specific to them) so they can do what they want (save money and resources, improve the environment and local economy, improve health.)

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.

It is the development of new "smarter" technologies coupled with community outreach and implementation strategies to create a replicable, international model of sustainability for communities of 200,000 and under, where over 40 percent of the U.S. population resides. The model will integrate community engagement and education, more energy-efficient ways of operating municipal services and buildings, decreased carbon emissions, new job creation, increased financial savings, resource conservation and a higher quality of life for the entire community. It will also document the competitive opportunities that come through "smarter" resource utilization.





SMARTER CITY.

How is Dubuque Getting Smarter?

With the support of public and private partners, Dubuque is exploring and using new "smarter" technologies and strategies to deliver or better utilize vital services such as water, energy, and transportation to its citizens while reducing the community's impact on the environment. These new technologies digitize and connect city systems, sense, analyze and integrate data, and allow Dubuque to respond intelligently to the needs of citizens. 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.

Pilot results show consumers can generally be divided into three groups:







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 dashboard displayed water usage in gallons, cost, or by carbon footprint. The portal also provided leak detection and notification, and comparative data.

The Pilot Results:

- 6.6% decrease in water utilization
- 8-fold increase in leak detection and response
- 61% of participants made a change in the way they used water

Smarter Electricity >

Dubuque's private electrical utility provider, Alliant Energy, partnered to installed 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 Results:

- IBM Research determined that roughly 26% of average household use in Dubuque is "phantom power" (electricity which is being consumed by appliances when not in use.)
- Usage reduction among pilot study participants ranged from 3% to 11%.
- 45% said they found specific ways to reduce based on their individual use.

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.

In addition to helping volunteers make smarter decisions about how they travel, the aggregate 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 citizens.

Smarter Health & Wellness >

This study was designed to explore how a combination of new technology and community engagement assists participants in achieving wellness goals as well as exploring the link 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. This research will be used to integrate health and wellness outcomes into implementation of additional pilot programs.

Smarter Discards >

More than 300 households volunteered in this project by allowing their weekly trash, recycling, and food scraps/yard debris setout weights to be collected in anonymized form. A personalized portal provided diversion tips for beneficial use, household goal challenges, insights into household discard patterns, and analytics that compare discard generation with other households with similar profiles. Volunteers increased diversion by 5% and reported changed consumption habits. Results will drive future public education efforts and program design.

Smarter Data >

The newest undertaking. Creating an ecosystem of solutions, services, data/application marketplaces and collaborative environments, which would allow public authorities, organizations, and citizens 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).



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.nemw.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 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)

lowa Department of Transportation (www.iowadot.gov)

Iowa Department of Natural Resources (www.iowadnr.gov)

Iowa Department of Cultural Affairs (www.iowaculture.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.mfcdbg.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.dbg.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)

U.S. Department of Housing & Urban Development (www.hud.gov)

...and the participating individuals, businesses and organizations that make up these coalitions.







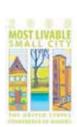












AWARDS & RECOGNITIONS:

Among other distinctions, public-private partnerships have earned Dubuque the following recognitions:

- > 2006, 2017, 2018 Iowa Great Place
- > 2007, 2008, 2010, 2011, 2012 100 Best Communities for Young People, America's Promise Alliance
- > 2007, 2012, 2013, 2017 National Civic League All-America City
- > 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





More information? Please contact:

Gina Bell, Sustainable Community Coordinator

City of Dubuque 50 West 13th Street Dubuque, Iowa 52001 563-589-4110