IOWA CITY

Sustainability Assessment 2013

CITY OF IOWA CITY

Sustainabiity is the ability to meet the needs of the present without compromising the ability of future generations to meet their needs.

Bruntland Report, 1987

EXECUTIVE SUMMARY

The City began its efforts towards sustainability many years before the term became as commonly used as it is today. Iowa City was a pioneer in energy conservation in the 1980s, implementing numerous energy conservation programs and using a portion of the energy savings to fund additional projects. More recently, from 1999–2005, LED lighting was installed in City traffic signals, cutting electrical usage for signals in half. In 2001, Sycamore Greenspace was constructed. This green infrastructure contains 55 acres of wetland which serves to manage stormwater and which also provides the City with a mulit-use greenspace containing native plants, trails, public art and wildlife habitat. The City owned landfill began capturing and flaring landfill gas in 2001, which has decreased greenhouse emissions from the landfill by 69%. Iowa City's mayor signed the Mayors Climate Protection agreement in 2007 and in 2009 was the first City in Iowa to complete a community-wide greenhouse gas inventory and emissions baseline data. In the last several years, many City departments have begun partnering in sustainability projects with the University of Iowa, enhancing the ability to broaden the work on sustainability within the community.

This assessment identifies specific indicators that coordinate with the vision and broad set of goals set forth in IC2030, Iowa City's most recent Comprehensive Plan and the City's Strategic Plan. The indicators will act as a source of information for the next step of this process: the development of sustainability goals and targets. In the process of sustainability goal setting, the City should also consider sustainability goals set forth in the University of Iowa's 2020 Plan so that aligned efforts of local government, business, non-profits, residents and the University will combine to foster greater community progress.

Data for nearly 60 sustainability indicators in nine focus areas were compiled and analyzed for this assessment. These indicators focus on the economic, environmental and resource management, and social/cultural categories of sustainability.

The nine focus areas included in the report are:

- Economic
- Community Design and Transportation
- Energy
- Water
- Waste Reduction
- Natural Ecosystem
- Housing
- Community Wellness
- Arts and Culture

The assessment conveys meaningful and measurable information about the current status of the Iowa City community with respect to sustainability. Data from 2007 serves as the baseline from which indicators in the following four years are assessed. Comparisons between Iowa City, the state of Iowa, and national totals are provided for each indicator wherever data is available and applicable. A simplified rating system measures the status of each indicator in the community and allows us to assess whether Iowa City is within or exceeding the acceptable level, below the desired level or unclassifiable due to complexity or other factors such as limited data.

Economic, environmental, and social/cultural conditions are healthy and balanced in a vibrant and livable community. This report evaluates these three categories of the Iowa City community in order to establish baseline conditions for the creation of an effective and coordinated community-driven sustainability roadmap.

The evaluation highlights improvement and provides a starting point for leveraging our strengths and improving upon our deficiencies. The indicator rating system shows that 34 indicators are within or exceeding acceptable limits, 13 indicators are not at desired level and 12 indicators are unclassified due to insufficient comparison data. The indicators show that the City's sustainability can be quantified, and that our level of sustainability is high.

Of the nine focus areas, these areas had the strongest positive indicators:

- Economic
- Community Design and Transportation,
- Water (municipal treatment and protection)
- Natural Ecosystems (acreage of natural areas)
- Community Wellness
- Arts and Culture

Although Iowa City is doing very well in many sustainability indicators the challenge we face is how to maintain these desirable characteristics while overcoming deficiencies as the city grows in the coming years.

In these focus areas, work is underway and continued improvement is needed:

- Energy
- Water (river water quality and stream bank erosion)
- Waste reduction
- Natural Ecosystems (invasive species)
- Housing (rental housing issues)

Recognizing that there is room for improvement in these areas will allow the community to see the need for more focus on energy reduction, greenhouse gas targets, river and stream water quality improvements, waste reduction opportunities, plant species awareness and housing issues.

This report is the first step in commitment towards strategies that will foster a more livable, viable and equitable community and solidify our future success. Sustainable advancement in Iowa City requires setting quantifiable targets, assessing progress and reevaluating goals to establish a basis for an overarching sustainability strategy. Sustainability for a city means shifting to more whole systems approach of functioning as a community, looking at all parts of the environment, economic and social interconnectedness. In providing sustainability goals and targets, Iowa City can use this overarching theme to ensure that the city can continue to thrive and improve in the future.

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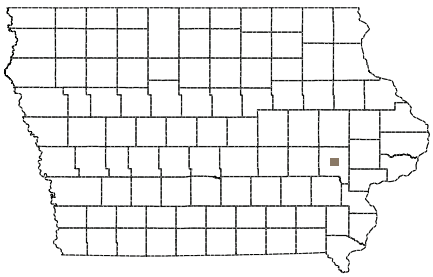
▶ This aerial map shows the layout of Iowa City, which is bisected by the Iowa River. Just southeast of the intersection of Interstate 80 and Highway 218, Iowa City encompasses 25 square miles of Johnson County, Iowa.

▼ Location in Iowa.



INTRODUCTION: **DEMOGRAPHICS**

Historical Background

The State of Iowa's name is derived from the Native American word for "Beautiful Land," and Iowa City, a culturally dynamic and engaging community, exemplifies this definition. Founded in 1839, Iowa City joined Johnson County and served as the state's capital from 1842-1857. Located in the east central part of Iowa, Iowa City lies alongside the Iowa River and boasts a rich heritage. Iowa City is home to over 67,000 residents, with attractive neighborhoods and downtown venues ranging from restaurants providing original culinary creations to galleries promoting local artists. The city is home to the University of Iowa, founded in 1847, which is a part of the Big Ten Athletic Association, includes the UI Hospital and Clinic, and enrolls over 30,000 students a year. Iowa City's notable landmarks and institutions include the Old Capital building, reminiscent of the City's time as the state capital, and myriad museums, parks, public venues, and the UI Hospitals and Clinics. Iowa City was named the world's third city of literature by UNESCO in 2008, and the University of Iowa is home to the world-renowned Writer's Workshop. Most importantly, Iowa City is a community of hard-working and resilient people.

The Iowa City community has banded together to rebuild after setbacks in the past, most recently a tornado in 2006 and devastating floods in 1993 and 2008. Serving as a home to professionals, families, and students alike, Iowa City has experienced significant population growth over the past few years. This Sustainability Indicators Assessment will help the local government and community evaluate the current state of the city and plan for the future, in order to ensure that Iowa City remains a vibrant and unique place for its residents. This assessment is accomplished by defining indicators that play a role in guiding sustainability in Iowa City.

Demographic Profile

Iowa City's population has grown 9.1% in the last decade, outpacing the state average.

The population of Iowa City grew from 62,220 people in 2000 to 67,862 people in 2010 (an increase of 5,642 people or 9.1% of the city population). The State of Iowa's population increased by 4.1% during this decade. The national population has increased at slightly faster rate than Iowa City, increasing by 9.7% between 2000 and 2010.

POPULATION AND HOUSEHOLDS

	IOWA CITY			IOWA			UNITED STATES		
	Count 2000	Count 2010	% Change	Count 2000	Count 2010	% Change	Count 2000	Count 2010	% Change
Population	62,220	67,862	9.1%	2,926,324	3,046,355	4.1%	281,421,906	308,745,538	9.7%
Households	25,202	27,657	9.7%	1,149,276	1,221,576	6.3%	105,480,101	116,716,292	10.7%
Persons per household	2.23	2.2	-0.5%	2.46	2.41	-2.0%	2.59	2.58	-0.4%

Source: 2010 Census and 2000 Census, U.S. Census Bureau

Over the past ten years, Iowa City has become more ethnically and racially diverse, with the Hispanic and black populations growing the fastest.

Though white residents comprise nearly 80% of the total population, over the past ten years, the Hispanic population has nearly doubled, and the black population has grown by two-thirds.

PERCENT CHANGE IN RACE AND ETHNICITY, 2000-2010

		Count 2000	% 2000	Count 2010	% 2010	% Change
All Hispanic		1,833	2.9%	3,627	5.3%	97.9%
NON-HISPANIC	Asian	3,492	5.6%	4,655	6.9%	33.3%
	Black	2,272	3.7%	3,805	5.6%	67.5%
	Other; two or more	1,218	2.0%	1,672	2.5%	37.3%
	White	53,405	85.8%	54,103	79.7%	1.3%
Total		**62,220***	**100%**	**67,862**	**100%**	**9.1%**

Source: 2010 and 2000 Census, U.S. Census Bureau

*Though the original population total was revised, the U.S. Census Bureau did not revise the race subtotals.

Iowa City's median age is significantly younger than that of the state and the nation.

Due in part to the University of Iowa and downtown attractions, Iowa City draws an incredibly large number of young adults (41.1% of the population is between 20–34 years old, which is more than twice the average for this age group for both the state and national averages). This profile has shifted the median age down to 25.6, highlighting a cultural distinction within the city, while the state and national median ages are 38.1 and 37.2, respectively. Though this population largely fluctuates with enrollment and graduation, the profile suggests that direct appeals to this younger demographic may generate and support progress for the community.

AGE COHORTS

	IOWA CITY				IOWA	U.S.
	Count 2000	% 2000	Count 2010	% 2010	% 2010	% 2010
Younger than 19 years	15,619	25.1%	16,107	23.7%	26.9%	27.0%
20–34	25,090	40.3%	27,894	41.1%	19.6%	20.3%
35–44	7,270	11.7%	6,287	9.3%	12.0%	13.3%
45–54	6,619	10.6%	6,161	9.1%	14.4%	14.6%
55–64	3,247	5.2%	5,878	8.7%	12.2%	11.8%
65–74	2,204	3.5%	2,790	4.1%	7.4%	7.0%
75 or older	2,171	3.5%	2,745	4.0%	7.5%	6.0%
Total	**62,220**	**100.0%**	**67,862**	**100.0%**	**100.0%**	**100.0%**
Median age	**25.4**		**25.6**		**38.1**	**37.2**

Source: 2010 Census, U.S. Census Bureau

The 21–34 and 55+ age groups expanded between 2000 and 2010, while the 34–54 age groups declined.

Due to the University, bustling downtown area, and the numerous and diverse artistic and cultural events, Iowa City is often cited as a destination for young people. While these observations and characterizations are certainly accurate, the 55+ demographic has expanded from 12.2% in 2000 to 16.8% in 2010, suggesting that Iowa City is also appealing to these older age groups.

The number of students from various racial and ethnic backgrounds trended upwards in the last few school years, producing larger and more diverse groups of students in community schools.

Every demographic examined in local schools expanded overall throughout the 2007–2012 period—except the Asian group dropped around 5% over the last five years. Local schools enrolled nearly 7% more students during the 2011 school year than the 2007 school year. White and black students increased roughly 1.5%, while Native American and Hispanic percentages grew by 37% and 51%, respectively. Pacific Islander and Multi-Race groups were added to the assessment as populations grew and they now represent more than 2% of enrolled students.

STUDENT DEMOGRAPHICS IN IOWA CITY COMMUNITY SCHOOLS

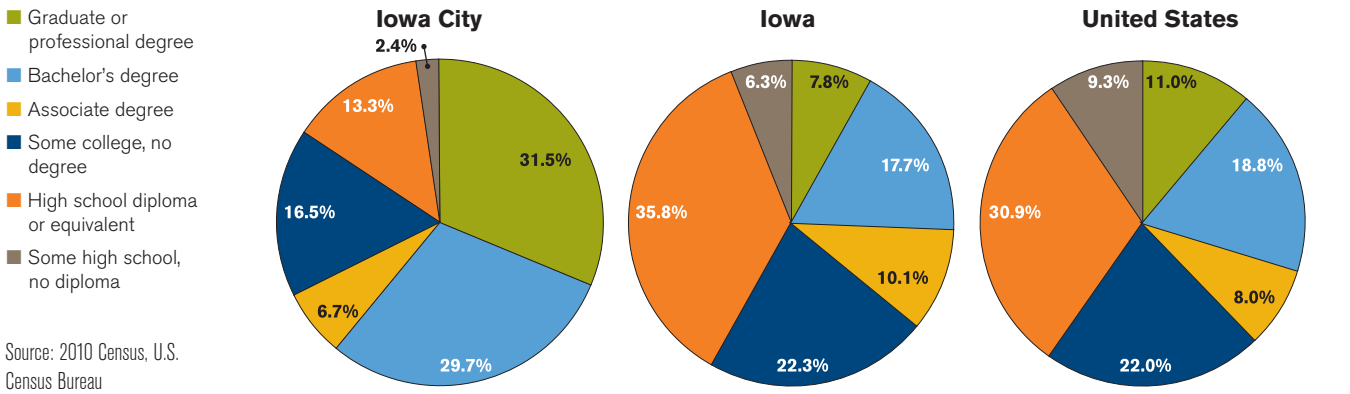
Year	White	Black	Asian	Hispanic	Native American	Pacific Islander	Multi-Race
2007–2008	8,013	1,921	829	814	38	ND	ND
2008–2009	7,884	1,814	840	885	26	ND	ND
2009–2010	8,002	1,906	847	994	32	0	34
2010–1201	8,013	1,933	853	1,068	44	5	9
2011–2012	8,127	1,951	785	1,232	52	7	251

Source: Data & Statistics (2012), Iowa Department of Education

Iowa City has a highly educated population, due in part to the University, with 60% of residents receiving a bachelor's, graduate, or professional degree. In fact, more Iowa City residents have received a graduate or professional degree than any other attainment level.

The largest attainment group by percentage in Iowa City is "Graduate or professional degree," while the largest group in the state and national averages is "High school diploma or equivalent." The University of Iowa is a major contributor to the highly educated residents thereby making Iowa City one of the country's most educated cities per capita.

EDUCATIONAL ATTAINMENT



Source: 2010 Census, U.S. Census Bureau

Reading achievement has been cited as a strong indication of high school graduation rate. Iowa City's reading achievement has consistently been above the average national percentile rank.

Reading is a fundamentally important skill for further education, as well as day-to-day living, employment, and recreation. Reading ability is linked with educational emphasis which leads to a strong correlation with high school graduation. The average percentile rank for Iowa City Community School District students consistently is above the national average. As the chart above indicates, in all grades levels for reading, ICCSD students perform above the 50th percentile rank, the national average. Over time, student achievement as compared to the nation increases. Graduation rates have remained similar to the state average in recent years and both high schools were named by two of the best public high schools in Iowa by Newsweek. West High is ranked as the number 1 and City High as the number 6 high best high schools in Iowa.

THIRD-GRADE READING PROFICIENCY

Year	Iowa City	Iowa
2007	71.7%	76.3%
2008	72.7%	74.6%
2009	73.1%	76.1%
2010	69.3%	75.5%
2011	71.6%	77.3%

Source: APR State Student Achievement Data (2011), Iowa Department of Education

GRADUATION RATES

Year	Iowa City	Iowa
2009	91.8%	87.2%
2010	85.2%	88.8%
2011	88.1%	88.3%

Source: Data & Statistics (2012), Iowa Department of Education

2011–2012 ACT TEST SCORES (COMPOSITE)

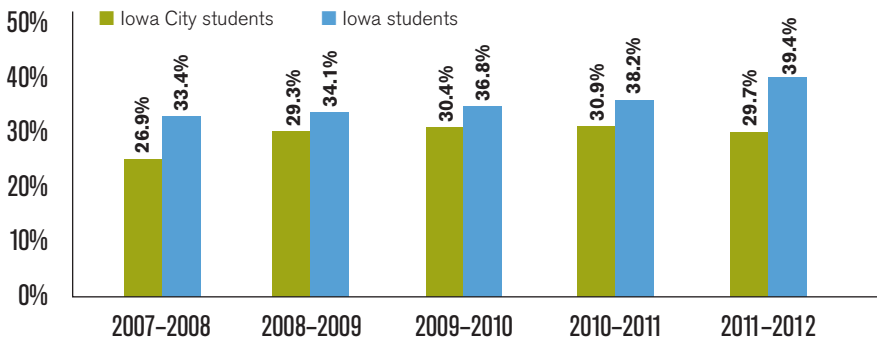
Iowa City	Iowa	U.S.
25.4	22.1	21.1

Source: ICCSD Achievement Data

The percentage of students receiving assistance for school lunches grew slightly each school year from 2007 to 2010, but it has been consistently lower than the state average for the last five years.

Although the percentage of students receiving free or reduced price school lunches increased slightly during the 2007–2008 school years, the percentage has remained fairly steady for the last four years.

STUDENTS RECEIVING ASSISTANCE FOR SCHOOL LUNCHES



Source: Iowa Department of Education

In recent years, aggravated assaults, destruction/damage/vandalism, PAULA charges, and robberies have declined steadily while burglaries, drug/narcotic and equipment violations, and shoplifting have increased.

In 2009, the Police Department received a grant focused on reducing violent crimes, which allowed officers to work overtime to locate instances of violent behavior. Arrests began to rise and instances of assault began to decline noticeably. The use of this grant also freed up officers on regular duty, allowing them to address other issues in the city. Drug/Narcotic and equipment violations have climbed rapidly in the last couple of years, but like the total number of crimes, tends to fluctuate and shift regularly. PAULA (Possession of Alcohol Under the Legal Age) charges fell nearly 50% since 2007, suggesting that underage drinking may be diminishing (due in part to the 21-only ordinance for downtown bars after 10 P.M.). For more than 12 years, the Police Department has worked with the University and Rape Victim Advocacy Program to raise awareness and provide helpful information about safety and rape prevention. Given the constant influx of new students each year, this is a valued continued partnership. The state of Iowa uses the Universal Crime Reporting (UCR) system, and most states use the National Incident Based Reporting System (NIBRS) making national comparisons difficult. Having a large student population makes Iowa City unique compared to most Iowa communities, so state comparisons are complex as well.

ALCOHOL-RELATED VIOLATIONS

	OWI Arrests	PAULA Charges
2007	486	1002
2008	424	879
2009	419	852
2010	319	529
2011	452	538

Source: Arrest Statistics, City of Iowa City

CRIME

	2007	2008	2009	2010	2011
Aggravated assault	145	134	147	101	121
Burglary/breaking & entering	274	343	306	299	356
Destruction/damage/vandalism	846	709	784	622	598
Drug/narcotic violations	332	310	333	453	626
Drug equipment violation	172	178	170	209	268
Murder/non-negligent manslaughter	0	3	1	0	0
Rape (Non-Statuatory)	42	29	29	48	35
Robbery	49	58	60	40	25
Shoplifting	208	191	329	276	348
Annual Total Crimes	**4,196**	**3,993**	**4,386**	**4,109**	**4,416**

Source: Police 2011 Annual Report, City of Iowa City


Red & Yellow
$2.50/lb.

SUSTAINABILITY ASSESSMENT

ECONOMIC AND COMMUNITY DESIGN

Sustainable economic growth is essential for a thriving community. Smart, planned growth can increase the level of high quality employment opportunities, bring a larger income to the community, and provide a better quality of life while maximizing resources. To pursue economic growth, the City has implemented a Strategic Plan that aims to diversify Iowa City's economy while enhancing the established infrastructure and increasing financial stability. Iowa City's locally-owned businesses are supported through various local purchasing programs that strive to balance smaller, independent businesses with larger commercial centers. Since Iowa City has also maintained low unemployment rates in recent years, the economy has remained prosperous and has continued to attract new residents and build a robust community.

Community design is an essential tool for shaping the community and directing progress by using methods such as mixed land use, compact building design, urban density, walkable neighborhoods, and a range of housing choices that provide distinct, attractive neighborhoods. This creates a strong "sense of place" — the way that land is developed can strengthen a neighborhood and instill a feeling of belonging by connecting residents. Iowa City's dense downtown development efficiently utilizes land space and encourages infilling. The City's partnership with the EPA has resulted in the Riverfront Crossings Master Plan which provides an outline for sustainably developing a walkable neighborhood in the center of the City and reclaiming the riverfront as park land that will be the catalyst for future development and a means to manage flooding along the Iowa River.

ECONOMIC AND COMMUNITY DESIGN: **ECONOMIC**

A stable economy maintains the standard of living and ensures the financial well-being of the city residents.

Iowa City has remained resilient, especially amid economic downturns and our unemployment rate has remained low compared to the state and national averages since around 2008. Sustainable economic development requires the establishment and maintenance of a diverse business sector and the fulfillment of public demand for local attractions to provide opportunities and destinations. Locally-owned businesses also keep more funds within the community; strengthen bonds within the city and support diverse markets. With this in mind, Iowa City has programs that encourage local purchases. Also, the low gender wage gap for Iowa City reflects our commitment to equality. Recent research has shown that Iowa City has a "hidden income," since average household income collected by the census does not adequately reflect U of I students. Many students

SUSTAINABILITY INDICATORS: ECONOMIC AND COMMUNITY DESIGN: ECONOMIC

Unemployment Rate	●	Percent change in unemployment rate
Sector Diversity	●	Diversity of the economy
Poverty	●	Average household income (includes hidden economy of student population)
Gender Wage Gap	●	Female median wage as a percentage of male median wage
Bond Rating	●	Bond rating from Moody's Investor Service
Gross Domestic Product	●	Annual GDP growth rate
Local Purchases	U	Programs supporting local purchases and the local economy

● = within or exceeding acceptable level
○ = below desired level
U = unclassified

come from high-income households but can report zero or little income in the census.

The City's 2011 Strategic Plan ties into sustainable economic growth; three of the top five goals are economic:

- **Economic and Community Development:**
  The city strives to expand and diversify the economic base of the community, particularly in existing planned commercial and industrial areas that have supporting infrastructure established.

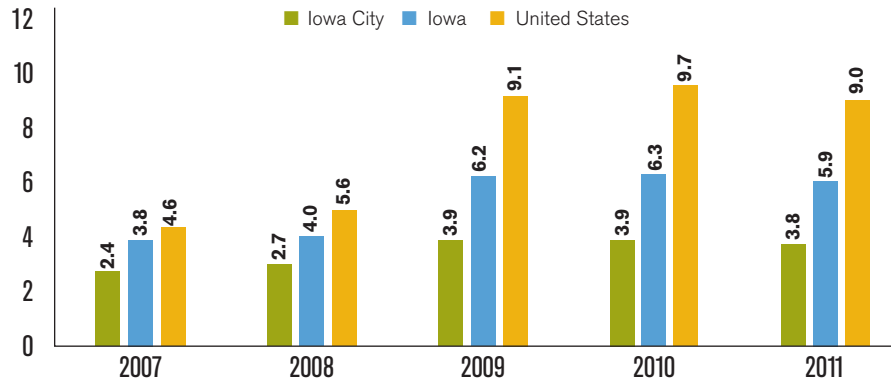
- **Development and Planning of the Downtown and Near Downtown Areas:**
  It is the city's goal to promote growth of the downtown and near downtown areas in a manner that builds upon the existing vibrancy of the region, serves persons of all ages and backgrounds, and compliments the surrounding neighborhoods and University community.

- **A Strong and Sustainable Financial Foundation:**
  The City aims to create a strong and sustainable financial foundation that will provide needed stability and flexibility while utilizing taxpayer dollars in the most efficient and responsible manner.

Iowa City has experienced an increased rate of unemployment, though the rate is still significantly less than that of the state and national average.

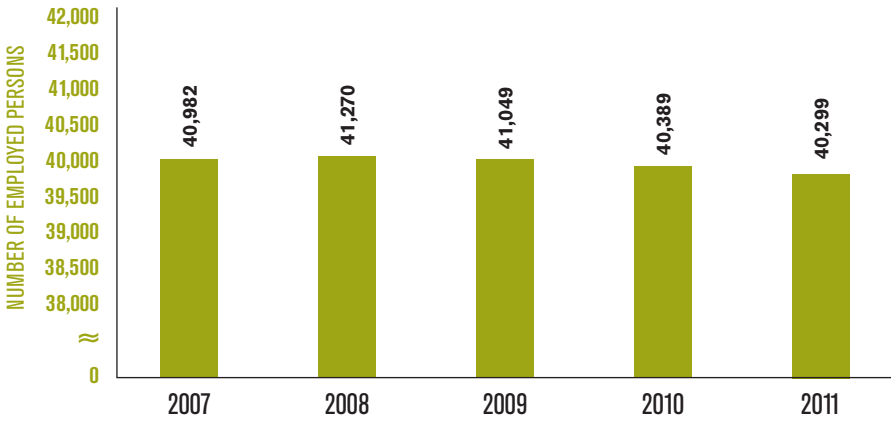
The global recession has hit most economies and increased employment across the world; however, Iowa City has shown a much lower rate of unemployment compared to the state and national unemployment rates (Iowa City's unemployment rate is ~2/3 and ~2/5 of state and national average, respectively). Unemployment increased after 2008; regardless, Iowa City is experiencing smaller impacts from the worldwide economic downturn compared to state and national statistics.

UNEMPLOYMENT RATE COMPARISON



Source: Local Area Unemployment Statistics (2012) and Labor Force Statistics (2012), U.S. Bureau of Labor Statistics

ANNUAL EMPLOYMENT IN IOWA CITY



Source: Local Area Unemployment Statistics (2012), U.S. Bureau of Labor Statistics

Sector diversity has remained relatively constant just above 89%—while stable and positive, efforts to increase diversity could establish an even more robust economic sector.

Sector diversity, which is data gathered from Quarterly Census of Employment and Wages (2012), U.S. Bureau of Labor Statistics, refers to the various types of businesses that make up the local economy—a more diverse economy is able to absorb market fluctuations more easily and remain prosperous for the community. Sector diversity has remained consistent above 89%, but the expansion of smaller industries could increase diversity, produce greater job growth, and strengthen the economy.

However, this source does not include data from the University of Iowa. The University of Iowa alone employs more than 20,000 people. UI Hospital and Clinic employs almost another 7,000, making it the top employer of the City after the University. Note that many of those employed in Iowa City live in surrounding areas.

TOP 15 EMPLOYERS IN IOWA CITY

	Number of Employees	Percentage (of top 15 employers)
University of Iowa	20,588	51.2%
University of Iowa Hospital and Clinics	6,807	16.9%
Iowa City Community School District	1,700	4.2%
Veterans Health Administration	1,562	3.9%
ACT, Inc.	1,243	3.1%
Mercy Iowa City	1,208	3.0%
Pearson Educational Measurement	1,200	3.0%
Hy-Vee (includes Coralville)	1,166	2.9%
City of Iowa City	1,049	2.6%
Systems Unlimited	890	2.2%
International Automotive Components	785	2.0%
Procter & Gamble	700	1.7%
Johnson County Administration	500	1.2%
Oral B Laboratories	462	1.1%
Alpla of Iowa	360	0.9%

Source: Leading Employers Survey, Iowa City Area Development Group; Planning and Community Development Department, City of Iowa City

While household income may appear low due to the large college student population, Iowa City is actually a quite affluent community.

Household income calculations are based on population and income reported from Census data. For Iowa City this is a complicated issue due to the large student population. Student's may report no or little income, but have financial resources from their parents or financial aid. While the Median Household Income numbers for Iowa City are lower than both the state and national averages. This "hidden economy" that can exist in college town was discovered when a study was done in 2011 to research the community's spending power for economic development. An estimated 11,000 students filled out the 2010 census in Iowa City, dramatically lowering the average household income. When students are factored out in this report, the AHHI doubled to $92,000 which is much higher than both state and national averages.

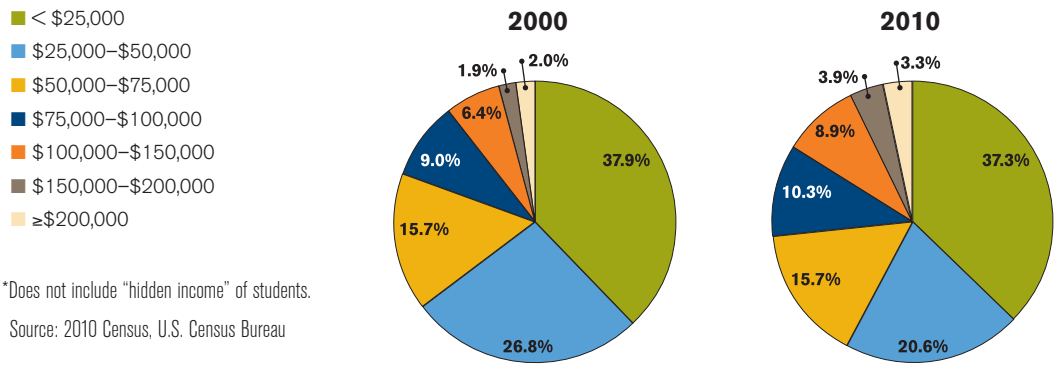
HOUSEHOLD INCOME (NOMINAL DOLLARS)*

	IOWA CITY	IOWA	U.S.
Household Income	Percent 2010	Percent 2010	Percent 2010
< $25,000	37.3%	23.8%	23.5%
$25,000–$50,000	20.6%	27.4%	24.6%
$50,000–$75,000	15.7%	20.7%	18.6%
$75,000–$100,000	10.3%	12.9%	12.3%
$100,000–$150,000	8.9%	10.3%	12.3%
$150,000–$200,000	3.9%	2.7%	4.4%
≥ $200,000	3.3%	230.0%	4.2%
Median Household Income	**$40,716**	**$48,872**	**$51,914**

Source: 2010 and 2000 Census, U.S. Census Bureau

*Averaged from annual data from 2008–2010, with a margin of error of +/–2.0

HOUSEHOLD INCOME IN IOWA CITY*



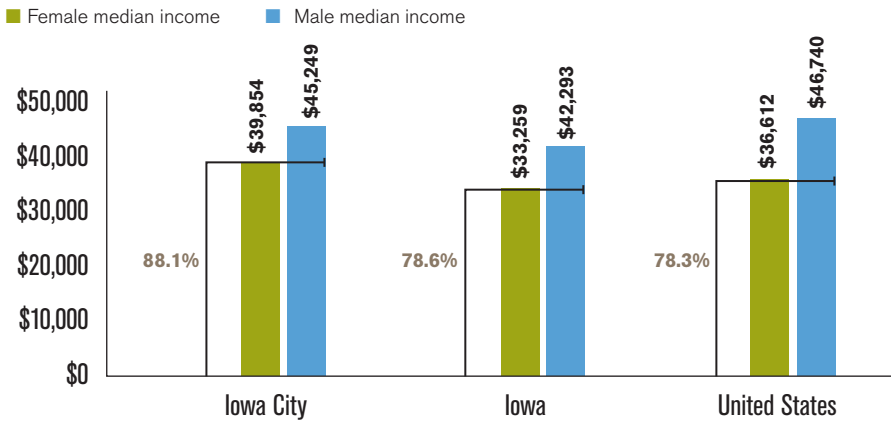
*Does not include "hidden income" of students.

Source: 2010 Census, U.S. Census Bureau

The gender wage gap is much smaller than the state and national average. The female median wage in Iowa City is 88.1% of the male median wage, while in the state and nation, the ratio is 78.6% and 78.3% respectively.

The gender wage gap is a ratio of median female earnings to median male earnings for full-time, year-round workers in the area. The GWG values in this case is unadjusted, meaning they do not take into account the level of education/skill, number of children, time off for maternity leave, occupation, etc. influencing income disparity between males and females. However, direct discrimination through societal/cultural attitudes and bias on gender, as well as the level of value placed on the work performed, also factor into the wage gap. Iowa City holds a reduced gender wage gap compared to the state and national average, indicating the maintenance of economic prosperity and the prioritization of wage equity. This reduced gap is a reflection of policies and practices that promote fairness and equity, which makes Iowa City's economy more attractive to prospective residents and employees.

GENDER WAGE GAP (2008–2010)



Source: 2010 Census, U.S. Census Bureau

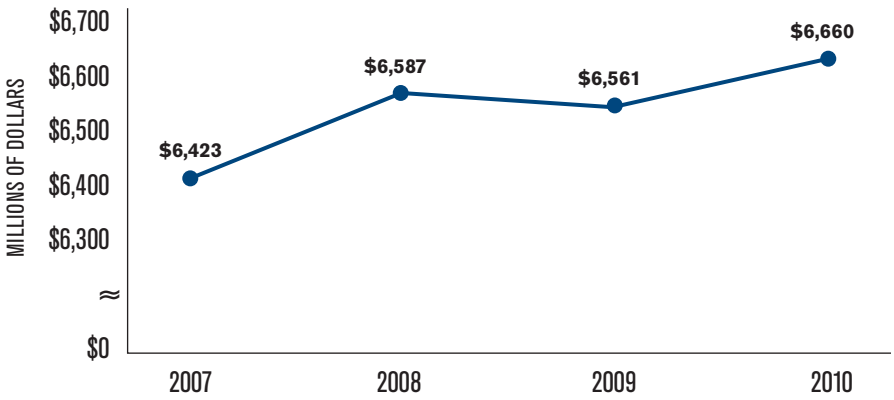
Iowa City has received the highest general obligation bond rating, Aaa, from Moody's Investor Service for over 35 years.

As one of only four cities in Iowa that has achieved this rating, Iowa City receives the lowest borrowing cost and can thus provide more services at a lower cost to taxpayers. This high rating reflects the City's strong capacity to meet payment obligations, meaning that banks are also more confident about investing. By borrowing responsibly and repaying obligations, Iowa City can sustainably provide community services. Iowa City maintains this responsible pattern of repayment to ensure that future investments can be made and the City can continue to grow without higher costs from borrowed funds.

The real Gross Domestic Product (GDP) has trended upwards in recent years, increasing by $237 million from 2007–2010.

Real GDP and chained dollars are corrected for inflation/deflation, so they provide a comparative index for the quantity of total output. Increasing values coincide with greater production, increasing the funds available to the community. Iowa City's real GDP shows that economic output has increased over the last few years despite global downturns. The percent change in per capita GDP is nearly twice that of the state average from 2005–2010. The greatest boost to real GDP in 2010 came from durable-goods manufacturing (0.75%), followed by professional and business services (0.29%).

REAL GDP IN IOWA CITY (MILLIONS OF CHAINED [2005] DOLLARS)



Source: News Release (2011), Bureau of Economic Analysis, U.S. Department of Commerce

Several programs promoting local purchases have been implemented for the Iowa City community.

"Buy Local" has been an Iowa City policy since 2012 to help ensure that businesses located in Johnson County that submit a cost-competitive bid will be given first consideration for contract awards. Specifically, local businesses or vendors that submit a quote or bid that is 5% or less above the low bid submitted by a non-local vendor will have the chance to match or beat the price for the contract.

"Buy Here" is a local economic development initiative of the Iowa City Area Chamber of Commerce that began in 2007. The goal of this program is to boost the local economy through increased business-to-business purchasing. During its inaugural year, the "Buy Here" campaign shifted more than $6 million into Johnson County. Membership has grown from 125 to more than 200 businesses, non-profits, and local governments that have now pledged to shift 5% of their non-local spending back to Johnson County to help strengthen the community. Annual data for "Buy Here" community dollars and membership numbers are not currently available.

"Buy Fresh, Buy Local" is a nationwide network with a chapter in our county that promotes locally grown food. This program helps citizens locate nearby farmers markets, vendors, restaurants, and community-supported agriculture and local food events. Come to the Table is a local food summit which occurs every year with the goal of fostering relationships between farmers and buyers in the Iowa Corridor Region. Johnson County also has a Food Policy Council to give advice on food and agriculture policies and programs.

By recirculating money in the community we become more self-sufficient, improve health, provide new jobs and create new business opportunities. Local purchases can also strengthen the ties between citizens and create a greater sense of community.

ECONOMIC AND COMMUNITY DESIGN: **COMMUNITY DESIGN AND TRANS**

Access to open space encourages recreation, enhances mental well-being, and provides a connection to nature for all citizens.

Iowa City has strategically located open areas in close proximity to the vast majority of households throughout the community, providing nearly all residents with convenient access to these locations. The IC2030 Comprehensive Plan outlines the City's direction for growth, including preservation of historic buildings, compatible infill development, creating a diverse housing stock, and neighborhood commercial areas. The Plan also defines goals and strategies to guide development of sustainable land use patterns.

SUSTAINABILITY INDICATORS: **ECONOMIC AND COMMUNITY DESIGN: COMMUNITY DESIGN AND TRANSPORTATION**

Walkable Neighborhoods	●	Iowa City's walk score rating
Urban Density	U	Ratio of residents per acre
Access to Open Space	●	Percent of households within ½ mile of open space (including parks, schoolyards, and natural areas)
Public Transit Ridership	●	Number of public transit passenger trips per 1,000 residents
Vehicle Miles Traveled	●	Average vehicle miles traveled per capita
Safe Travel Network	●	Total number of traffic collisions, injuries and deaths

● = within or exceeding acceptable level
○ = below desired level
U = unclassified

PORTATION

The variety of transportation choices in our community includes a municipally owned transit service that connects with the University and Coralville transit services through a program called BONGO (Bus on the Go). As of 2010, almost 19,000 people in Iowa City regularly utilize alternative transportation for their daily commute. Iowa City is also a Silver Level Bicycle Friendly Community with 48 miles of paved trails. The Iowa City Bike Library opened in 2004 with the mission of getting more people on bikes by taking donated bicycles and refurbishing them. The checkout period is six months and they provide 200–300 bikes for checkout annually. City Hall also has bikes available for staff to use during work hours. The walkability of the downtown area is high, with students and citizens able to live close to work, school, and entertainment destinations.

The Walk Score rating system indicates that most parts of Iowa City are highly walkable. There are several alternative methods of transportation supported by the City and many citizens can live comfortably here without a motor vehicle. As a result of the number of options, the number of vehicle miles travelled is lower than state and national averages. Iowa City has also adopted a Complete Streets policy which is designed to enable safe access for pedestrians, bicyclists, motorists and transit riders of all ages and abilities.

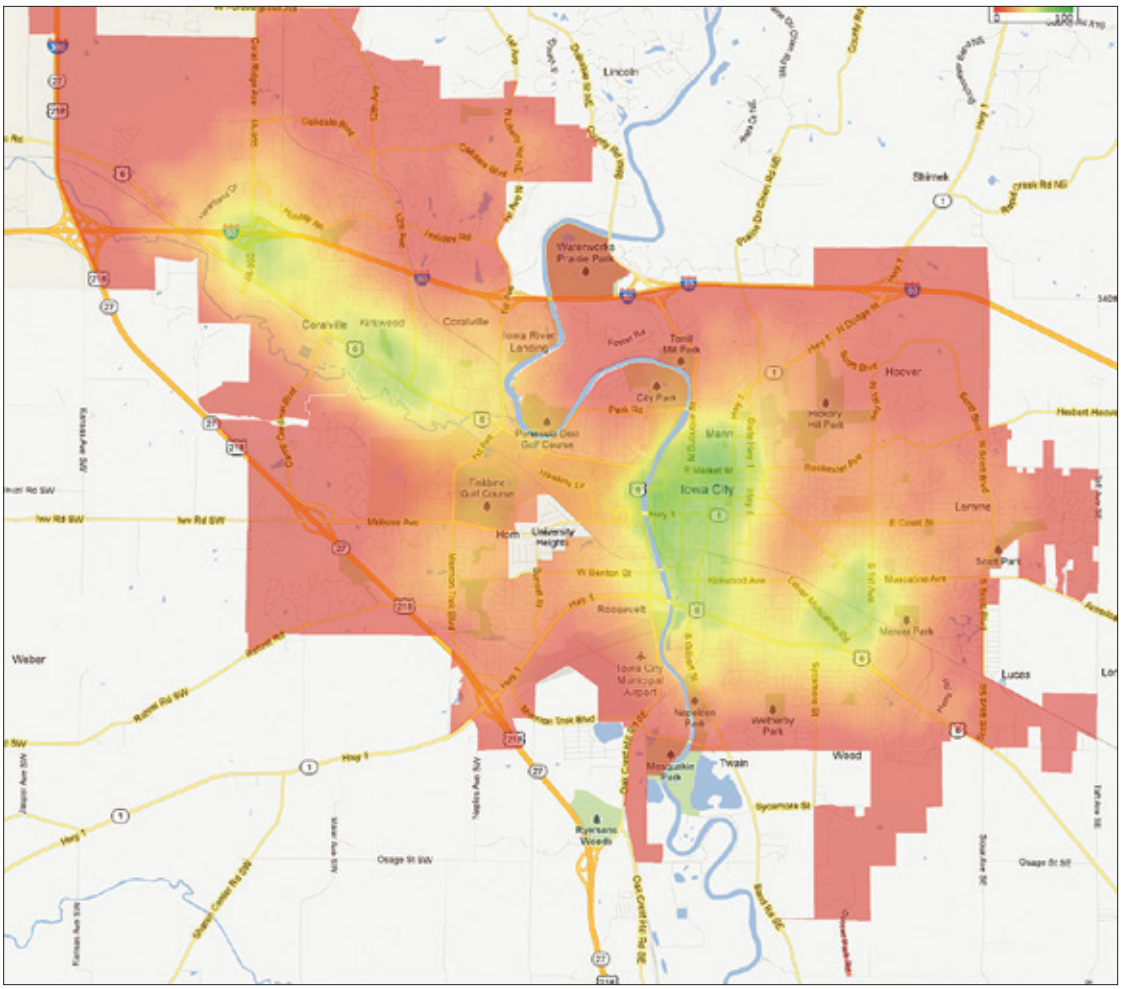
With a Walk Score of 53, Iowa City is the most walkable city in Iowa, due to the densely packed and diverse downtown integration of living, working, and shopping establishments.

Neighborhoods that are more walkable provide opportunities for individuals to access more facilities and services throughout the community, regardless of socioeconomic status. They also allow citizens to utilize alternate means of transportation, such as walking, biking, and public transit more frequently, reducing the amount emissions from automobiles, as well as relieving traffic congestion and collisions. Cleaner air promotes better health, as does the physical activity that is often associated with alternate transportation, but walkable neighborhoods also increase social engagement and economic growth due to easy access to local businesses and attractions.

SOMEWHAT WALKABLE: IOWA CITY'S WALKABLE NEIGHBORHOODS WALK SCORE IS 53

▶ A walk score of 50–69 means that some amenities are within walking distance.

Source: Walk Score, www.walkscore.com

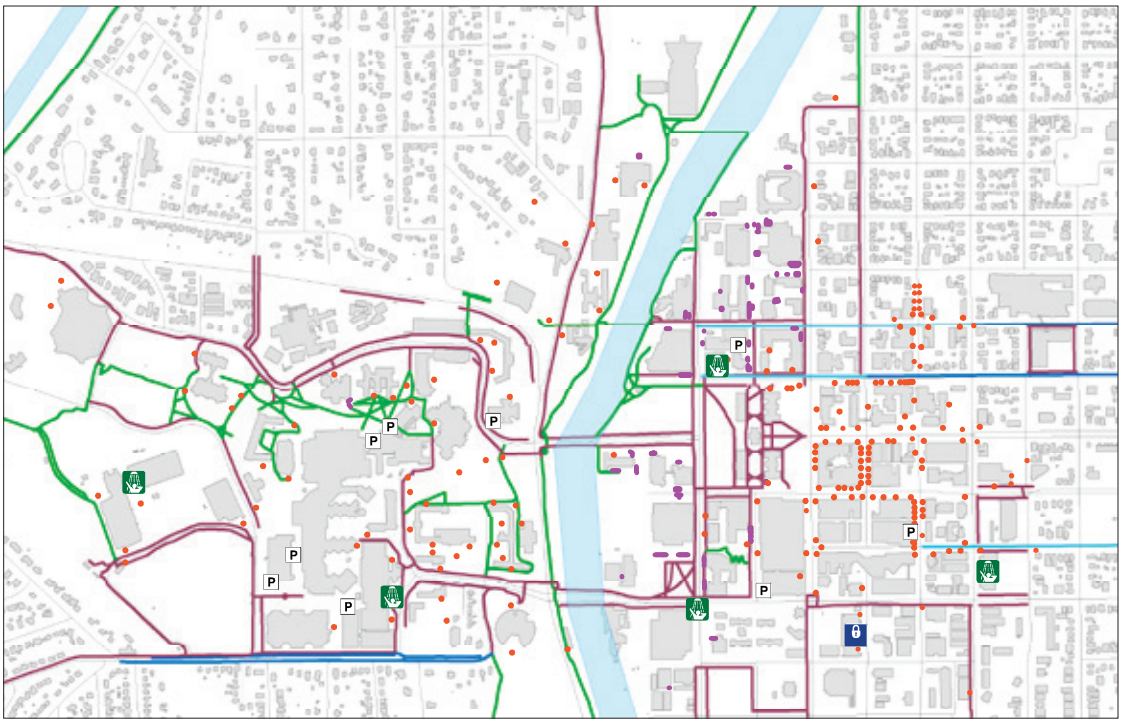


Iowa City's population density is 2,713.8 people per square mile compared to the population density of 52.7 people per square mile for the state of Iowa, which is largely agricultural. It is the fifth-largest city in the state of Iowa.

Higher density cities are considered more efficient and sustainable than lower density, sprawled cities as they have a smaller environmental imprint while integrating living, working, and shopping establishments for easier access and lower transportation costs. While optimal density is difficult to determine, it is important to provide integrated zoning opportunities and establish transportation networks throughout the city that connect residents to their local community. As Iowa City's population continues to grow, the downtown area's expansion must include the development of residential housing to maintain and increase urban density. Benefits of higher density urban areas include lower transportation expenses, reduced pollution and greater economic vitality, among many others.

LOCATIONS OF BICYCLE COMMUTER FACILITIES

▶ The location of wide sidewalks, bike lanes, trails, and bike racks, as well as other convenient features for cyclists in the downtown area. These facilities assist bicycle commuters by providing safe routes, storage, and recreational areas—they also reflect the City's commitment to the enhancement of alternative means of transportation.

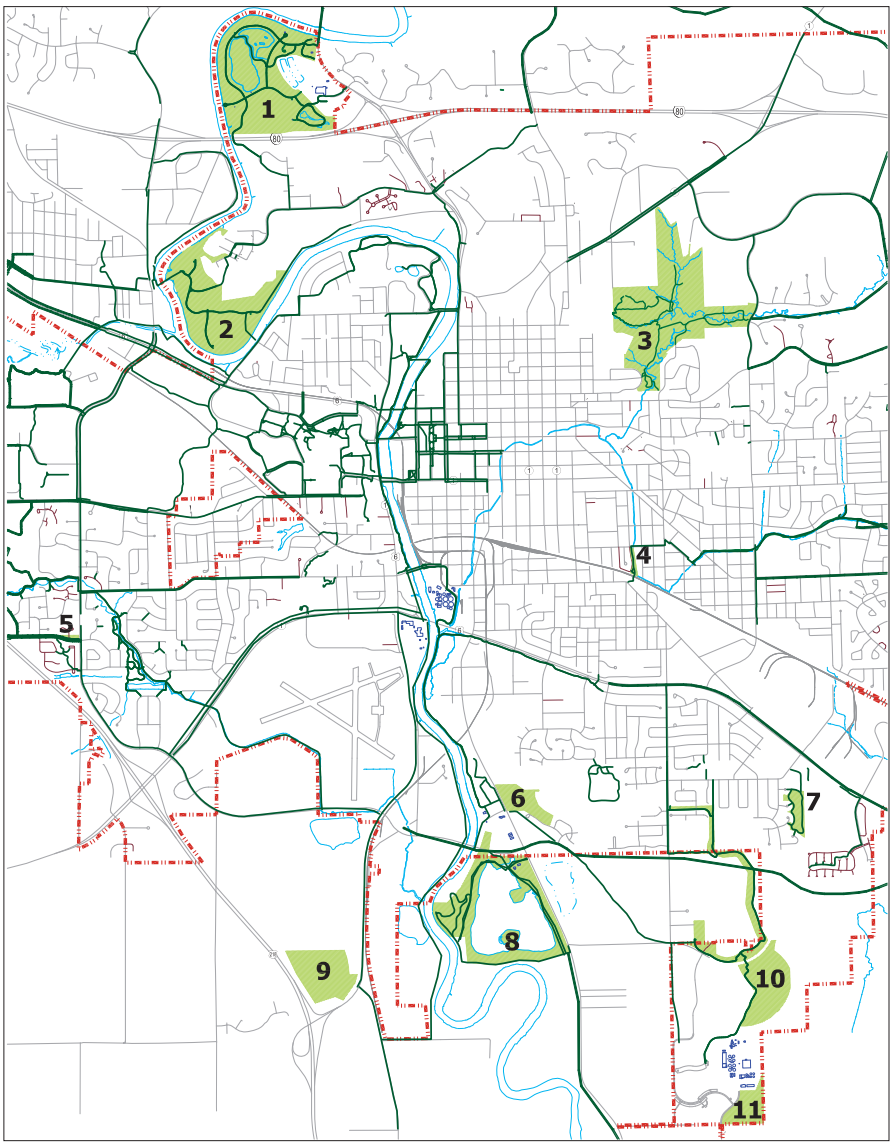


Almost 100% (99.4%) of Iowa City residents live within ½ of a mile of open space areas, including the City's parks, schoolyards or natural areas.

Access to open space is important for providing equitable recreational opportunities to all residents and maintaining environmental connections in the urban setting. These open, natural areas also help manage flooding, filter pollutants, and provide refuge for wildlife. Open space areas also serve as a template upon which residents are free to project their own desired forms of entertainment—from lounging, reading, and art, to walking, playing, and sports. Iowa City has many natural areas and parks within short distances to residences, providing nearly all of the city's inhabitants with easy access to these recreational opportunities. A location map of Iowa City's parks can be found on the City of Iowa City's website.

PUBLIC NATURAL AREAS

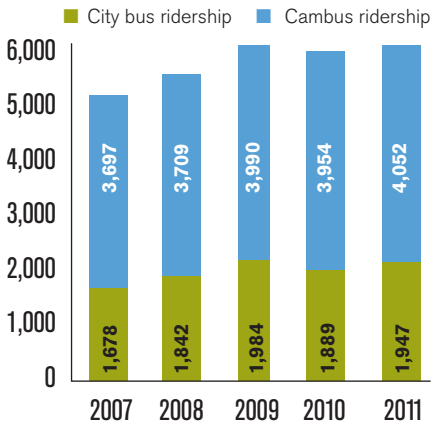
▶ Legend:
1. Waterworks Park
2. Peninsula Parkland
3. Hickory Hill Park
4. Longfellow Prairie
5. Rohret Road Prairie
6. Sand Prairie
7. Whispering Meadows Wetland Park
8. Terry Trueblood Recreation Area
9. Ryerson Woods
10. Sycamore Greenspace
11. Oxeye Prairie



Public transit ridership increased by more than 600,000 passengers in the last 5 years. City transit ridership has consistently made up 1/3 of public bus ridership, while the University Cambus system comprises 2/3 of all public transit ridership in Iowa City.

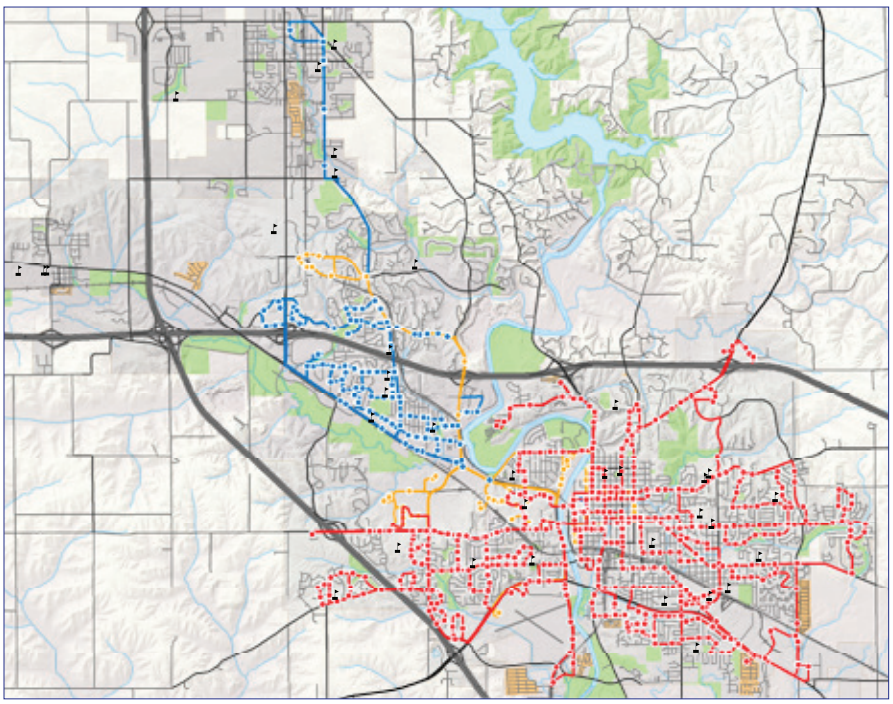
Public transportation provides essential services for many who cannot afford personal vehicles and would otherwise be restricted to their local neighborhoods. These public transit systems also alleviate fuel usage and greenhouse gas emissions due to the consolidation of various vehicle trips into a single, regular route utilized by thousands of residents. Public transit fights urban sprawl by reconnecting communities and providing an affordable and more resource-efficient means of transportation. Iowa City has seen a rise in its public transit ridership over the last 5 years, suggesting that the growing population continues to rely upon this effective and inexpensive transportation system. All vehicles are ADA lift-equipped to promote an accessible community for those with disabilities; they also contain bike racks to transport bicycles in the event of multi-modal transportation. Users can also access www.ebongo.org to receive real-time bus location information for easier scheduling. Students in particular heavily utilize the Cambus network that provides free transportation throughout the campus and dormitories. There are now Zipcars available in two areas downtown and three locations on campus where citizens and students can reserve and have access to cars without owning them.

NUMBER OF PUBLIC TRANSIT RIDERS (THOUSANDS)



Source: Iowa City Transportation Services

TRANSIT ROUTES AND STOPS



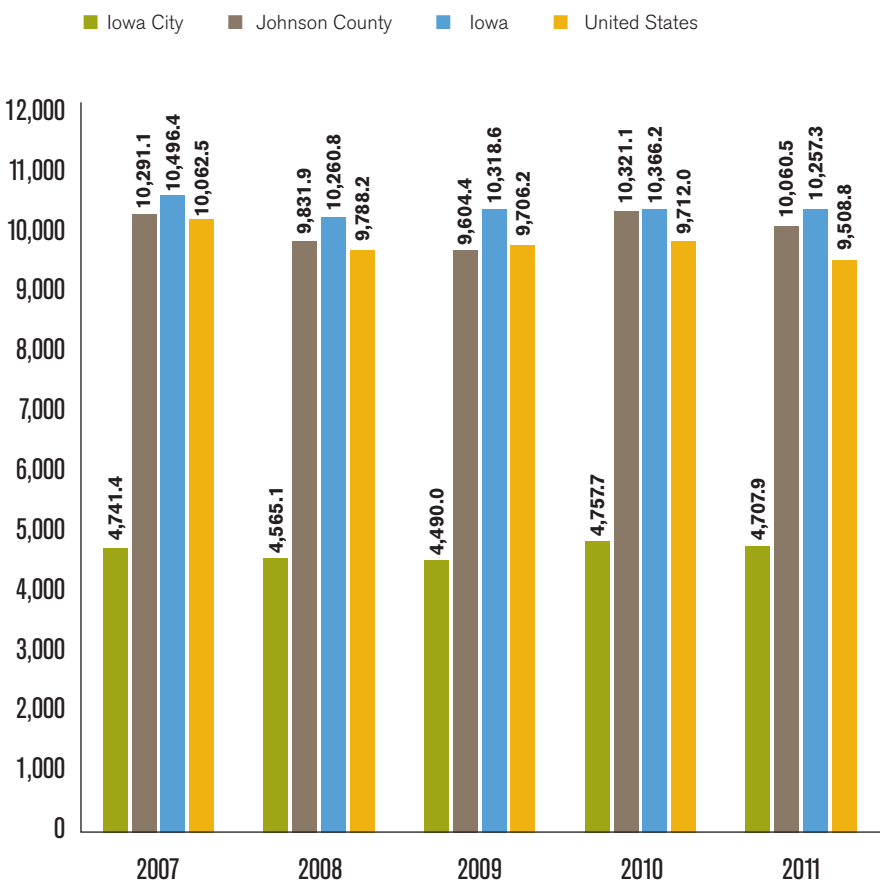
▲ The interconnected bus routes that enable swift, affordable transportation all across the city. Iowa City's website contains a full list of bus routes and schedules for riders to coordinate their transit needs, while www.ebongo.org provides a GPS-based, real-time passenger information system that allows riders to pinpoint bus locations.

BONGO stops are indicated on this map by the boxes with flags; blue routes indicate Coralville transit; red routes indicate Iowa City transit; orange routes indicate University of Iowa Cambus.

While the county, state and national vehicle miles travelled per capita are consistently averaging near 10,000 miles per year, residents of Iowa City average less than 5,000 vehicle miles travelled each year.

Iowa City's development emphasizes design for people rather than vehicles, allowing for more walkable mixed-use communities. Due to this structure, a variety of transportation options are available, especially for students that may not own motor vehicles. Downtown Iowa City is located adjacent to the University campus, facilitating greater walkability for students and non-students alike. By planning for integrated areas that allow residents to have homes, employment, and entertainment in close proximity to one another, there is a reduced need for driving. Lower vehicle miles travelled per capita results in lower greenhouse gas emissions, improved air quality, and healthier citizens.

VEHICLE MILES TRAVELLED PER CAPITA



National source: Travel Monitoring and Traffic Volume, Federal Highway Administration, U.S. Department of Transportation.

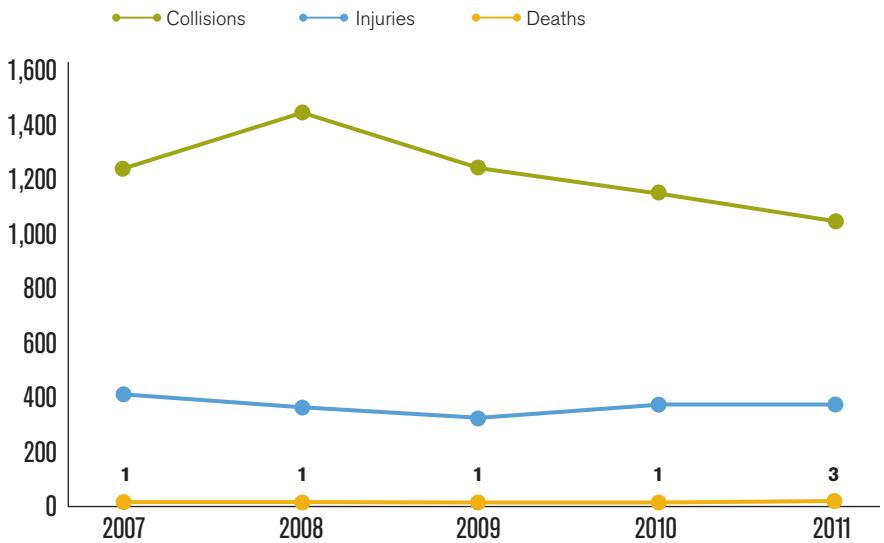
State, county and city source: Vehicle Miles of Travel, Iowa Department of Transportation

Population estimates, U.S. Census Bureau

Vehicle collisions and injuries have fallen steadily, while vehicle-related deaths have remained consistently low.

This steady decline in vehicle collisions and deaths may be a reflection of reduced numbers of vehicles on the road during work commutes. Estimates show nearly a 10% reduction in usage of cars, trucks, and vans for commuting to work over the last 5 years, as well as a 67% increase in public transportation, 52% increase in bicycling, and 9% increase in walking. As more residents utilize alternate means of transportation to work, there are fewer opportunities for collisions or other accidents to occur. Thorough road planning is necessary to ensure safe routes and intersections for all modes of transportation. Growing cities require adaptive responses to facilitate easier, safer transportation and reduced congestion to prevent unsafe situations. With Iowa City's growing population and dense downtown area, it is essential to maintain effective corridors for all modes of transportation to provide efficient, safe access throughout the city.

VEHICLE COLLISIONS, INJURIES, AND DEATHS



Source: Major Case Report, Iowa Department of Transportation


CITY OF IOWA CITY
SANITARY
SEWER
PUBLIC WORKS DEPARTMENT

SUSTAINABILITY ASSESSMENT

ENVIRONMENTAL AND RESOURCE MANAGEMENT

Iowa City has had a longstanding commitment to energy efficiency, with an energy program dating as far back as the 1980's. Ongoing work such as the installation of efficient LED traffic lights from 2001–2005 has continued up to our recent replacement of parking ramp lights with LED fixtures. Also, the City assessed baseline CO_2e emission data for 2000 and subsequently established a number of energy reduction programs that have helped reduce annual per-capita emissions in recent years. Municipal energy use has been significantly reduced in recent years due to efficiency measures implemented because of increased awareness. The 3 most recent buildings constructed by the City have been built and certified to LEED standards. Efficiency is just one benefit associated with coordinated economic growth and environmental protection. A clean and healthy water supply, reduced waste, and natural areas also provide benefits to citizens and help sustain natural ecosystems. Having recently experienced a large flood event in 2008, the City has reexamined its relationship with the Iowa River and has partnered with the US EPA to help restore the ecosystem and to increase the stability, safety, and beauty of the riverfront. Iowa City is also committed to the preservation of natural areas and provides incentives for clustered, contiguous development to efficiently manage land use. Similarly, a Sensitive Areas Ordinance is in place to protect natural areas and maintain native populations of plants and animals. Numerous recycling and waste management efforts, such as the Food Scrap Program, are in place to divert waste products, including household hazardous waste and pharmaceutical drugs, from our landfill. All of these efforts have helped to synchronize our environmental management efforts with further economic growth and community enhancement, providing a foundation for a sustainable city that both protects and efficiently utilizes resources for greater benefit.

ENVIRONMENTAL AND RESOURCE MANAGEMENT: **ENERGY**

The City of Iowa City has been actively involved in reducing municipal and community energy use.

In 2007 Iowa City's mayor signed the U.S. Mayors Climate Protection Agreement, and in 2008 the City Council signed a resolution to reduce greenhouse gas emissions and increase energy efficiency. Completion of a greenhouse gas emissions inventory in 2009 (http://www.icgov.org/site/CMSv2/file/solidWaste/Greenhouse_gas_Emission_inventory.pdf), made Iowa City the first city in Iowa with baseline data for energy usage and emissions for both the community and municipal operations. Shortly thereafter Iowa City received a U.S. Department of Energy Efficiency and Conservation Block Grant (EECBG). This funding was used to track municipal energy use, provide building efficiency reports for City facilities, and install energy efficient lighting, motors and other equipment in municipal facilities. These actions have

SUSTAINABILITY INDICATORS: ENVIRONMENTAL AND RESOURCE MANAGEMENT: ENERGY

Building Standards	U	Number of commercial, industrial, and municipal buildings that meet LEED Standards
Renewable Energy Use	○	Amount of municipal energy use derived from renewable sources
Renewable Energy Use by Local Utility	●	Percentage of renewable energy on local utility grid
Community-wide CO_2e Emissions	○	Annual carbon dioxide equivalent emissions for the community in metric tonnes
CO_2e Emissions Per Capita	○	Annual carbon dioxide equivalent emissions per capita in metric tonnes
Municipal CO_2e Emissions	○	Annual carbon dioxide equivalent emissions for municipal operations

● = within or exceeding acceptable level
○ = below desired level
U = unclassified

resulted in increased awareness of energy efficiency, decreased municipal energy use and have saved the City energy costs. The City actively enforces the state energy code by inspecting new buildings and Iowa City is also actively pursuing sustainable waste-to-energy options for the landfill, which is owned and operated by the City and serves the residents of Johnson County. In addition, this Sustainability Assessment was made possible through Energy Efficiency and Conservation Block Grant funding.

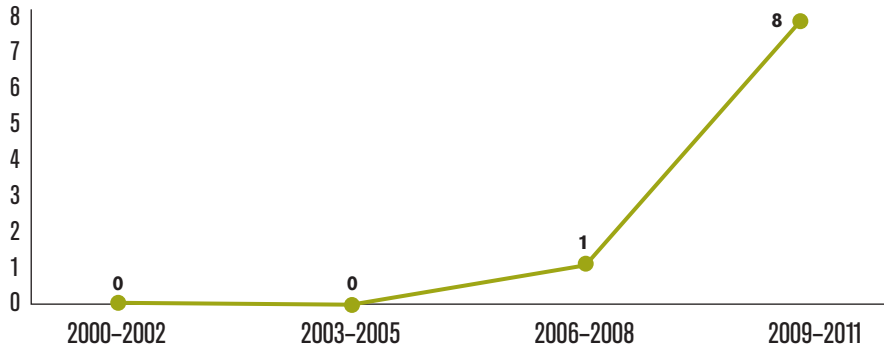
Iowa City's utilities are largely provided by MidAmerican Energy Company, the country's number one wind energy producer. Thirty percent of MidAmerican's energy is obtained from alternative, non-fossil fuel derived resources, primarily wind. MidAmerican provides energy rebates to residents and commercial and industrial clients to help fund energy efficiency projects. Eastern Iowa Light and Power Cooperative provides energy to a small area within the city limits. They offer customers an option to purchase some wind-generated energy and offer rebates for alternative energy projects. Iowa is first in the nation in wind-energy use, which comprises nearly 24.5% of the state's electricity generation.

Because fossil fuels are a limited resource, prices will continue to increase as production costs rise and the natural supply declines. Electricity prices have remained stable in this area for many years, but are expected to increase over the next few years. Energy is a necessity and therefore increased use of alternative energy sources, efficiency measures, emissions reductions are areas that Iowa City can continue to improve upon. Iowa City continues to track energy use and greenhouse gas emissions and works closely with the University of Iowa, which operates a power plant within the City limits.

The 2006–2011 time period experienced growth in the number of LEED-certified buildings in Iowa City. These buildings are built with the intention of increased energy efficiency, utilization of alternative energy, reduced waste in construction, and efficient design.

This recent expansion of LEED buildings in Iowa City signifies a commitment to energy efficiency, alternative energy and environmental conservation. These certifications require fulfillment of various criteria throughout the planning and construction phases, as well as for the operations and maintenance procedures, to establish sustainable practices throughout the life of the building. It is important to note that certification takes months to attain, and there are currently a number of buildings in Iowa City awaiting LEED certification. These numbers do not include homes that are LEED certified.

NUMBER OF LEED BUILDINGS CERTIFIED

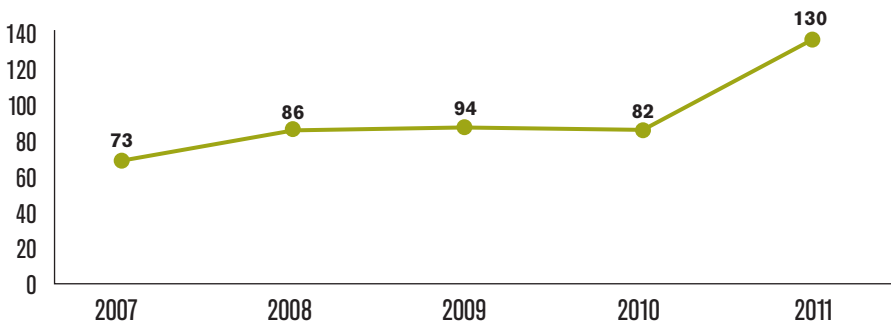


Source: LEED Projects, U.S. Green Building Council

Biogas usage at the wastewater treatment plant offsets the use of natural gas.

Biogas (methane) is a by-product of wastewater digestion. Heat is used to kill pathogens in the biosolids so they can be applied in place of fertilizers. The biogas is captured then burned in the digester boilers to continue the biosolid production process. The biogas is a form of renewable energy cycling through the system that reduces the need for natural gas and provides an efficient means for heating biosolids. Excess biogas is flared on-site, especially during the summer when not as much heat is required in the process. Flaring is done because biogas is a strong greenhouse gas and burning it reduces the gas to CO_2, which is less potent greenhouse gas. This situation provides a unique opportunity for use of renewable energy use in the city.

BIOGAS USE IN THERMS (THOUSANDS)

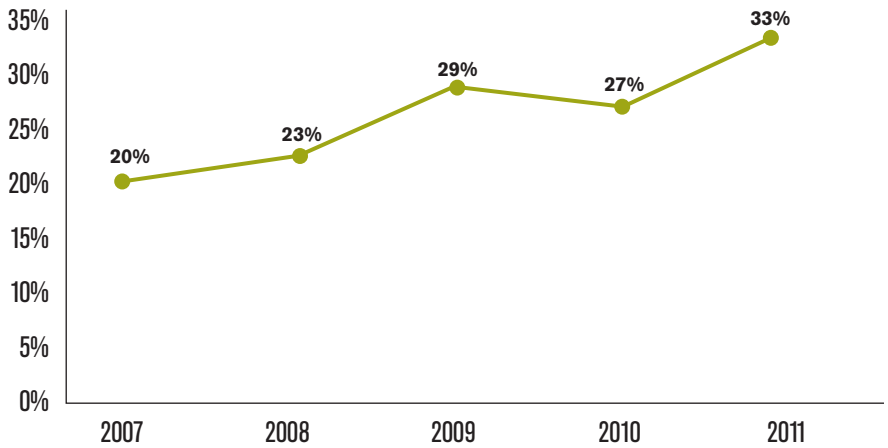


Source: Wastewater Treatment Reports, Iowa City Wastewater Division

MidAmerican Energy's renewable fuel component has gone up 13% in the last five years, largely due to increased harvesting of wind power. Now, 1/3 of their energy comes from renewable sources.

MidAmerican Energy is the largest energy provider for Iowa City, so our community energy usage closely reflects what they generate. In 2007, wind energy represented less than 10% of MidAmerican's energy generation, but it has now grown to 26%. Leading the nation in ownership of wind-powered electric generation among rate-regulated utilities, MidAmerican awards annual payments to landowners who have utility-installed turbines on their land. They also assess adverse environmental impacts of potential wind farm sites before construction to ensure viability. Thanks to voluntary customer contributions to the MidAmerican Energy Renewable Advantage program, the company constructed a 0.5 megawatt wind turbine in 2007, and various solar installations in 2011 and 2012, in Iowa. While many have questioned the feasibility of renewable energy on a large scale, MidAmerican is helping to prove that these solutions are not only possible, but they are essential to fulfilling consumer demands and increasing profits while paving the way to a more sustainable future.

RENEWABLE ENERGY USE BY MIDAMERICAN ENERGY (% OF TOTAL ENERGY USE)

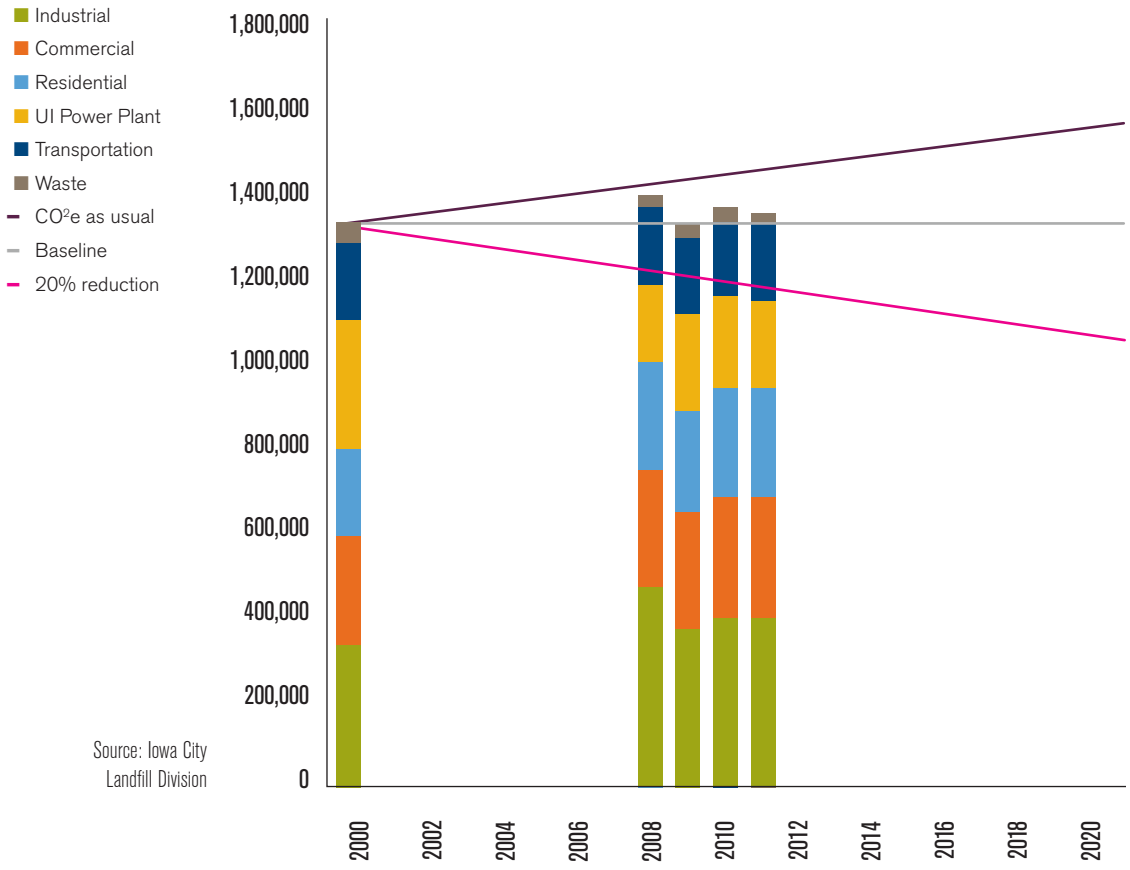


Source: MidAmerican Energy

Total community-wide emissions have not been reduced since baseline levels were calculated in 2000, but they have not reached the forecasted increase.

A baseline inventory was conducted for community-wide CO_2e emissions in 2000. Calculations were made to forecast emissions for business-as-usual (based on predicted population increases), as well as a 20% overall reduction by 2020. Though data was not gathered from 2001–2007, subsequent years have been assessed and it is recommended that the community greenhouse gas emissions inventory be updated annually. Our total emissions have not reduced annually, but our reduction efforts have prevented significant increases in emissions despite the population growth of 9.1% from 2000 to 2010. The establishment of reduction goals could help lower annual emission rates.

IOWA CITY COMMUNITY CO_2E TOTALS BY SECTOR (METRIC TONNES)

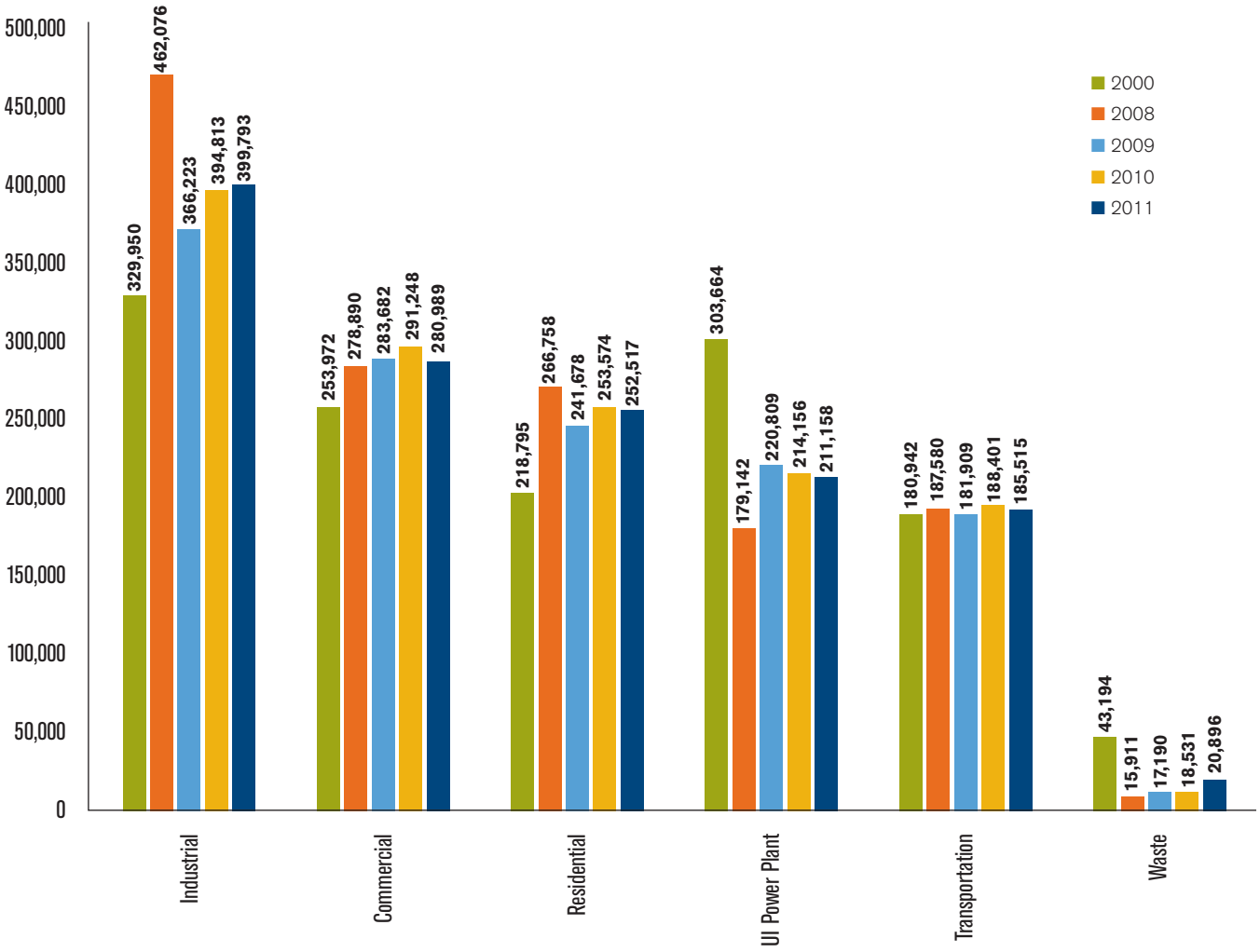


Source: Iowa City Landfill Division

Each sector of the Iowa City community shows unique shifts in CO_2e annual totals due to diverse policies, actions, and events that shape our community. While annual emissions have tended to increase slightly, some reductions have been made due to effective targeting of mitigative actions.

Community CO_2 emissions have varied over the five years calculated, especially during 2008 when the City flooded. During this period, the University of Iowa Power Plant was offline for 16 weeks due to flood damage. The University of Iowa has committed to the reduction of coal usage in their power plant by substituting alternative fuel types, such as oat hulls and biomass, which has decreased their plant emissions over this time period. The implementation of the methane capture and flaring process has reduced landfill emissions since 2000, lowering the rate of waste emissions by more than 50%. Emissions from waste have continued to increase since 2008 and the City is looking into new waste-to-energy options that would reduce total emission levels.

IOWA CITY COMMUNITY CO_2E TOTALS BY SECTOR (METRIC TONNES)

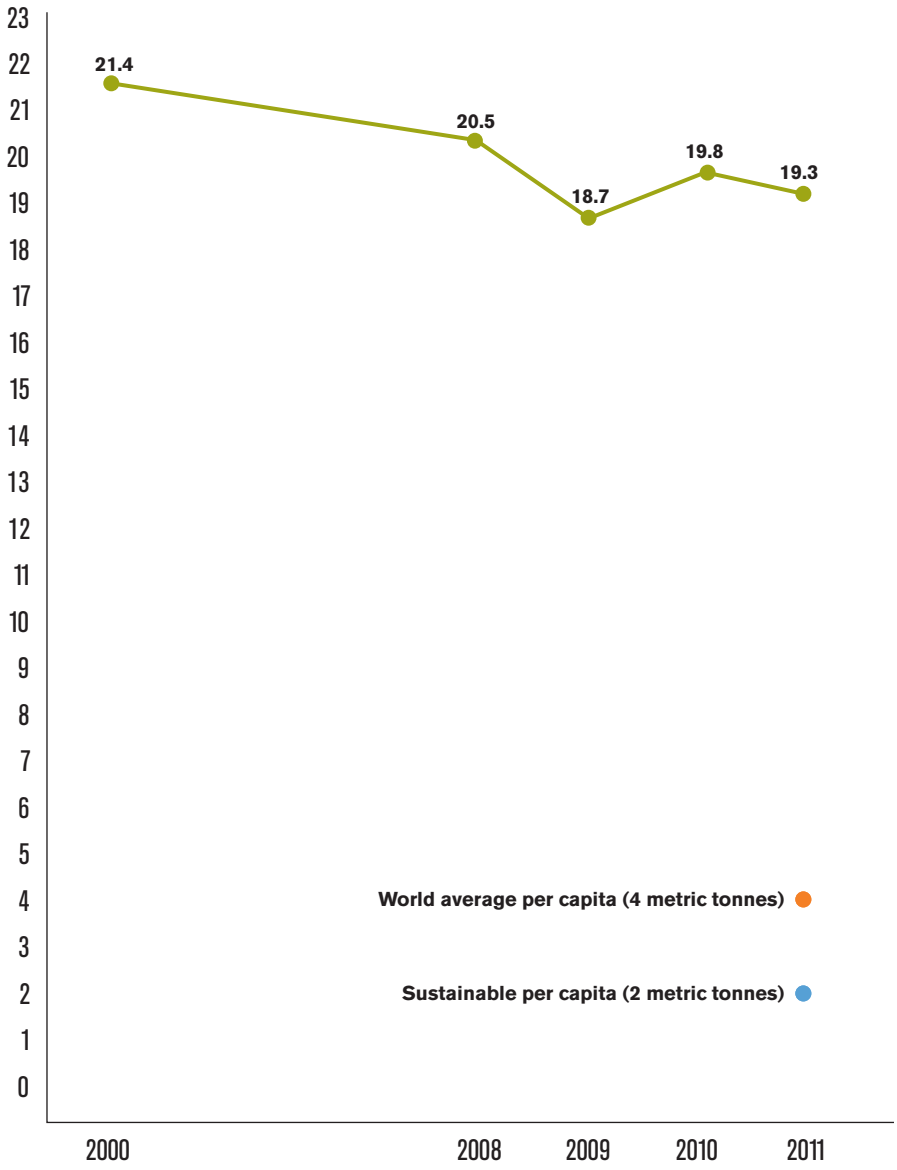


Source: Iowa City Landfill Division

Although our per capita emissions are nearly equal to annual national averages, world averages are 4 metric tonnes per capita, and sustainable emissions are estimated to be only 2 metric tonnes per capita.

High CO_2e emissions per capita and high consumption of fossil fuels are a significant environmental, economic, and social issue throughout the developed world. Reduction steps should be taken since utility costs will continue to increase as non-renewable fossil fuels are depleted. Initiating gradual reductions is the only strategic way to produce the necessary CO_2 levels required to mitigate climate change. A community-wide reduction goal could assist in raising awareness and help bring Iowa City closer to sustainable emission levels.

CO_2E EMISSIONS PER CAPITA IN IOWA CITY (METRIC TONNES)

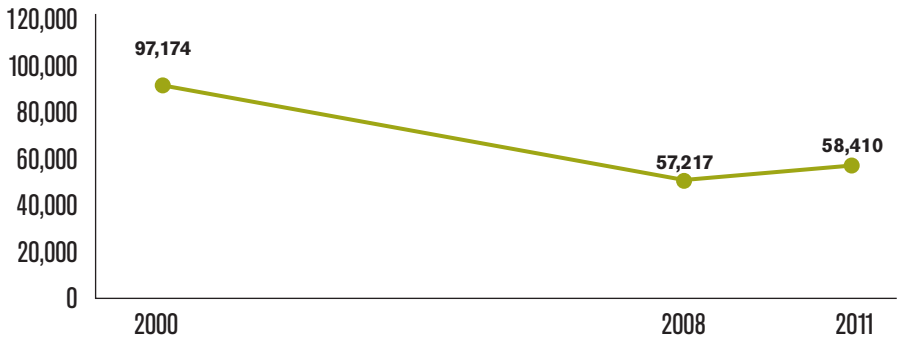


Source: Iowa City Landfill Division

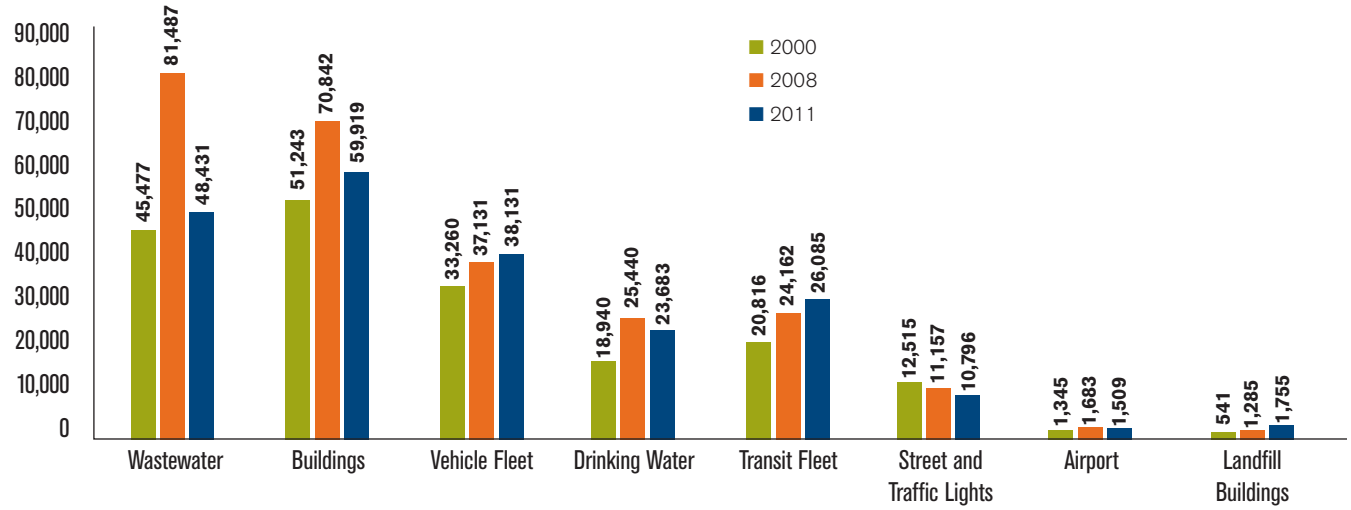
Iowa City has been actively working on reducing municipal greenhouse gas emissions and although emissions increased slightly between 2008 and 2011, energy usage has declined in several areas.

The City tracks energy usage for all utility accounts and facilities. With grant funds provided by the ARRA, energy efficiency projects were installed in municipal buildings. Energy reports were provided to facility managers that took a leading role in changing operations to manage more efficiently and cost effectively. Energy reduction projects have targeted the wastewater and water plants, parking ramps, street lights and buildings. Energy reductions were observed in all targeted areas while non-targeted areas showed varying levels of increased energy usage (including vehicle fleet, transit fleet and or landfill buildings). The City has also added three new LEED certified buildings and plans to build to LEED standards whenever possible.

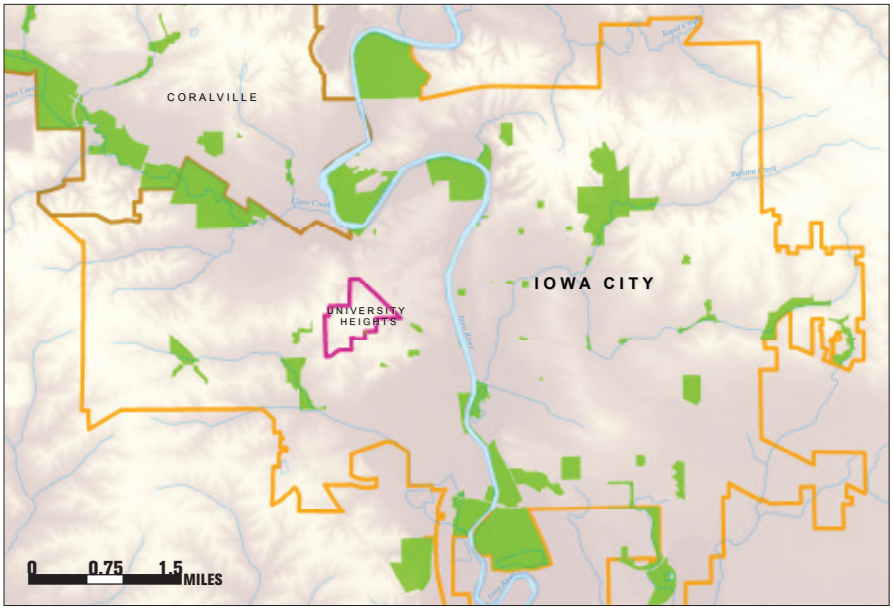
MUNICIPAL CO_2E TOTALS (METRIC TONNES)



MUNICIPAL ENERGY USAGE (MMBTUs)



IOWA CITY RIVER AND STREAMS



▶ This map displays the Iowa River and its tributaries at work that flow through Iowa City. It also shows the city parks and natural areas, which help to absorb and filter precipitation to reduce run-off and promote healthier ecosystems. The thick blue line indicates the Iowa River; thin blue lines indicate streams and other rivers; green areas indicate parks.

ENVIRONMENTAL AND RESOURCE MANAGEMENT: **WATER**

The Iowa City Public Works Department oversees the water supply, wastewater, and stormwater management systems for the city.

More than 300 miles of underground piping for each the wastewater and drinking water supply transports water through the City. The Water Division provides clean, safe water for Iowa City, providing an average of 5.5 million gallons per day. Six groundwater wells and four alluvial wells combined with water drawn from the Iowa River and a manmade pond provide water for the City. The City owned dam at Peninsula Park was refurbished to ensure consistent water levels for all alluvial well sources. The 200-acre Water Works Park and 90-acre Peninsula Park offer woodland, wetlands and a reconstructed prairie that serve as wellhead protection. They also provide recreational trails for citizens and natural habitat for plants and animals.

SUSTAINABILITY INDICATORS: ENVIRONMENTAL AND RESOURCE MANAGEMENT: WATER

Total Water Consumption	●	Total water consumption per capita, measured in gallons
Drinking Water Quality	●	Annual percent of drinking water quality testing meeting EPA standards
Gallons of Treated Municipal Water	U	Annual gallons of municipal water treated annually
Wastewater Quality	●	Annual percent of wastewater BOD, TSS, and Ammonia nitrogen meeting NPDES standards
Biosolids	●	Tons of Class A biosolids produced and land applied
Sanitary Sewer Overflows	●	Annual number of sanitary sewer overflows
Green Roofs	○	Number and area of green roofs
Urban Stream Bank Conditions	U	Percent of assessed urban stream miles with stable stream bank rating
Iowa River Water Quality	○	A section of the Iowa River within Iowa City is on DNR's Impaired Waters List
Local Stream Water	●	Average levels of nitrates and phosphorus under Level of Concern using IOWATER sampling methods
Floodplain Management	●	Recognized by F.E.M.A. as Class 8 CRS Community

● = within or exceeding acceptable level
○ = below desired level
U = unclassified

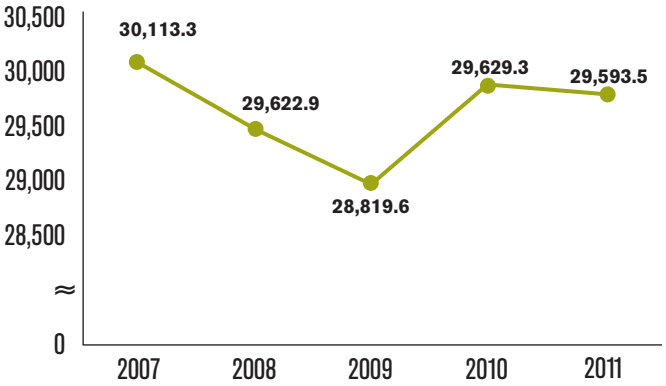
The Wastewater Division maintains two treatment plants, 17 lift stations, and over 300 miles of sanitary sewer piping, while processing an average of nine million gallons of wastewater each day (this includes wastewater from UI). Staff members measure and report 120 different tests each month to the Iowa Department of Natural Resources for both influent waste and treated effluent. The north plant, built in the 1930's, will be decommissioned soon, while construction is currently underway that will expand the City's treatment capacity at the south plant. The south wastewater treatment plant will also switch to ultraviolet disinfection, which is safer, requires less contact time than chlorine disinfection. The wastewater plant also produces Class A Biosolids, which undergo heating over 140°F to remove pathogens. Biosolids can then be land applied in place of fertilizer because they are nutrient-rich, organic materials containing nitrogen, potassium, and phosphorus that benefit soils and plants.

The Engineering Division developed a Stormwater Management Program that protects waterways from pollutants that are harmful to downstream cities and ecosystems. As stormwater flows off roofs, streets, and land surfaces, it picks up oil, chemicals, pesticides, debris, and soil, which enter drainage systems and pollute waterways. The Stormwater Utility uses strategic monitoring, planning, and management programs to protect waterways and informs developers, contractors, residents and businesses of Best Management Practices to reduce stormwater runoff (such as construction site, stream management, rain gardens, and pervious pavers). They also promote and coordinate volunteer efforts for stream cleanup projects and ensure compliance with federal regulations for sediment control. These efforts reduce the amount of pollutants flowing into waterways and help preserve water quality and stream habitat.

Though the population has grown, consumption patterns have remained low. Water consumption per capita has declined slightly overall during the 2007–2011 period.

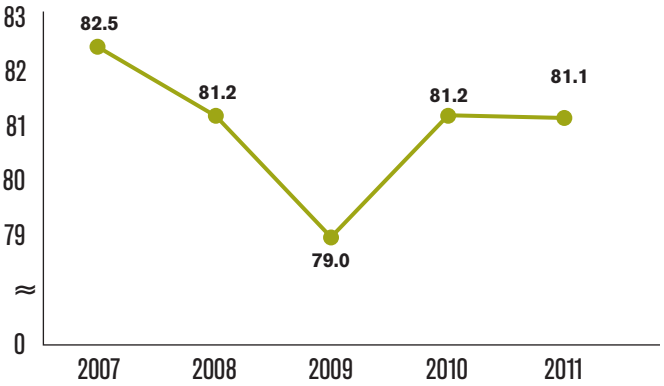
Daily water consumption per capita in the United States is estimated to be more than 80–100 gallons (U.S. Geological Survey); therefore water usage is on the lower end of average for consumption in the United States. Iowa City's water plant and wastewater treatment plant combined use one-third of the energy needed for municipal operations so conservation of water can also conserve energy. Water conservation is a growing concern as our county's population continues to grow.

ANNUAL WATER CONSUMPTION PER CAPITA (GALLONS)



Source: Iowa City Water Division, Consumer Confidence Reports

DAILY WATER CONSUMPTION PER CAPITA



Source: Iowa City Water Division, Consumer Confidence Reports

The Iowa City Water Division has had no health-based drinking water violations in the last 5 years. More than 67,000 residents of Iowa City are served by the Iowa City Water Plant.

Safe and healthy drinking water is important for maintaining a healthy population, but it also serves as an indicator of environmental quality. With roughly 2 billion gallons of treated water pumped to Iowa City residences and businesses each year, efficient and dependable management and treatment practices are essential. The EPA ensures healthy water quality by thorough monitoring in addition to establishing limits, called maximum contaminant levels, which define the absolute extent of allowable concentrations of contaminants in the water supply. Failure to meet these guidelines can produce waters with high levels of chemicals and bacteria, which can result in adverse health effects. The Iowa City Water Division's thorough monitoring and treatment strategies have consistently produced clean, safe, and healthy drinking water for the city.

ANNUAL TREATED MUNICIPAL DRINKING WATER (BILLIONS OF GALLONS)

Source: 2008-2012 Consumer Confidence Reports, Iowa City Water Division

2007	2008	2009	2010	2011
2.01	2.00	1.99	2.01	2.01

Removal of carbonaceous biochemical oxygen demand (CBODs), total suspended solids, and ammonia nitrogen has met, or greatly exceeded the requirements of the EPA's National Pollutant Discharge Elimination System.

Iowa City's north and south wastewater treatment plants ensure that wastewater is tested and treated to remove pollutants and contaminants, as required by federal regulations, before discharging water to the Iowa River. Regulations require a reduction of CBOD and total suspended solids by more than 85%, but Iowa City's wastewater plants have consistently removed more than 96% of each for the last 5 years. Ammonia nitrogen regulations fluctuate in acceptable concentration limits throughout the year, but there have been no violations during this period and reductions have been greater than 92%. These results show that the wastewater plants have been effectively treating water, ensuring that natural ecosystems and other downstream water users have continued access to safe, healthy water.

WASTEWATER QUALITY: POLLUTANT REMOVAL

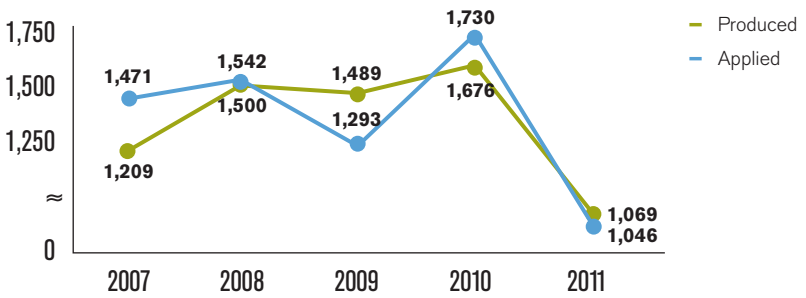
	Carbonaceous Biochemical Oxygen Demand	Total Suspended Solids	Ammonia Nitrogen
2007	97.4%	97.4%	95.9%
2008	97.6%	96.9%	95.2%
2009	97.3%	97.1%	94.4%
2010	97.2%	96.9%	95.2%
2011	97.6%	97.0%	92.0%

Source: Wastewater Treatment Reports, Iowa City Wastewater Division

Though the production of biosolids has declined in 2011, the volume has continually supplied farmers with amounts to be land applied.

Biosolids are the pathogen-free residuals from treated wastewater and they often end up incinerated or buried in landfills for disposal. However, as a nutrient-rich product, they can be put to use as a fertilizer, saving money and providing a beneficial function for the product. In Iowa City, production of biosolids has slowed in 2011, but still provide farmers with an amount of biosolids that can be land applied. Continued application will ensure high levels of nutrients in soils and plants, increasing potential for growth and offsetting the use of manufactured fertilizer use.

TONS OF BIOSOLIDS PRODUCED AND APPLIED



Source: Wastewater Treatment Plant, Iowa City Wastewater Division

Sanitary sewer overflows that the city is responsible for declined dramatically during the 2007–2009 period, and have remained low ever since. As a result, expenditures have fallen dramatically, reducing costs since 2007.

When sanitary sewer overflows occur due to clogs in pipes that do not reside on personal property, the city must act to correct the damage. Preventative measures include jetting—blasting high pressure water through the sewer to clean pipe sides and flush residue through the system, as well as televised sewer lines which allow diagnosis of problems and implementation of appropriate solutions. There are more than 300 miles of sanitary sewer pipeline ranging from 6"-96" in diameter in Iowa City. This length, combined with the low frequency of overflows under the City's responsibility, indicates the effectiveness of preventative measures in maintaining functional sanitary sewer systems.

SANITARY SEWER OVERFLOWS

	Calls		City
	Total	City Responsibility	Expenditures Due to SSO's
2007	52	23	$67,304
2008	53	17	$17,872
2009	43	7	$26,135
2010	47	7	$7,310
2011	47	7	$11,831

Source: Iowa City Wastewater Division

Iowa City has two green roofs that cover more than 1,000 ft² total. The Willowwind green roof was constructed in 2007, while the city owned ESRC green roof was finished in 2011.

Green roofs are vegetation-covered roofs of buildings that absorb rainwater, provide insulation, maintain habitat for wildlife, and lower urban air temperatures, and absorb carbon dioxide, among their many benefits. Iowa City has the opportunity to increase the number of green roofs by encouraging developers to explore these unique, aesthetically-pleasing, practical, and beneficial roof environments throughout the design and construction process, increase biodiversity, and provide educational opportunities. As new buildings are built and more land is developed, green building practices can incorporate these environmental practices.

GREEN ROOFS

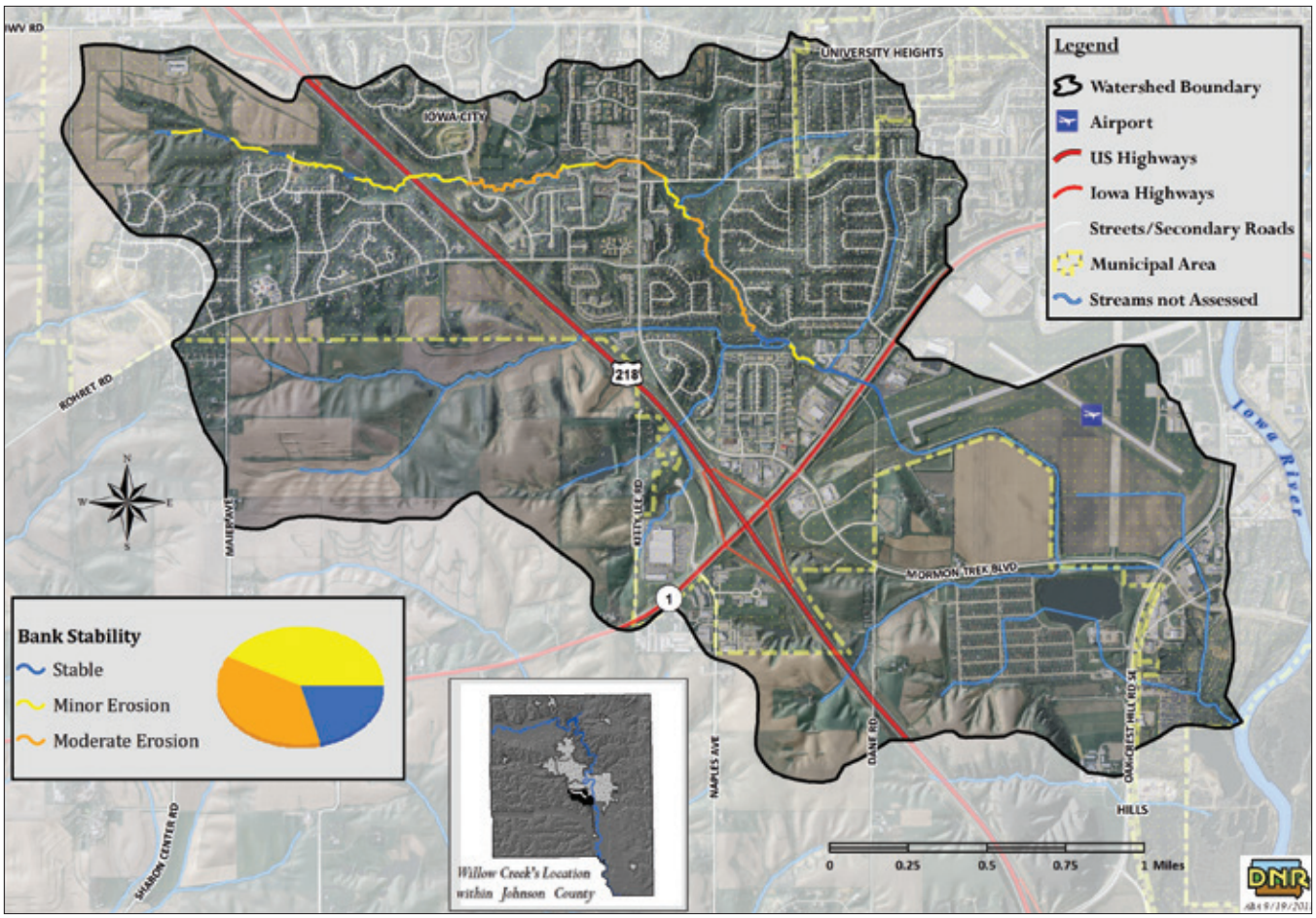
Location	Area	Installation Date
East Side Recycling Center	700 sq.ft.	06/01/2011
Willowwind School	416 sq.ft.	10/31/2007
Total	**1,116 sq.ft.**	

Source: RoofTop Seedums, LLC

Willow Creek was assessed from 2010-2012 using RASCAL (Rapid Assessment of Stream Conditions along Length), an assessment tool which analyzes 14 data variables to determine the physical conditions of a stream. Assessment of Ralston Creek is scheduled for completion in 2013.

Urban streams can be seen as an amenity within a community by providing habit, aesthetic beauty and recreational opportunities. They can also be polluted and will flood or erode land if the stream is not managed. Iowa City has three streams within the city limits: Ralston, Willow and Snyder Creek. Stream bank erosion can affect water quality, destabilizing purchased land and increasing sediment to the stream. All three streams flow into the Iowa River, carrying sediment and decreasing water quality. A greater number of roads, parking lots, roofs and impermeable surfaces have increased stormwater runoff and accelerated erosion. Assessment of the physical conditions of the stream banks for erosion allows the City to be aware of structures, such as storm drains, sewer lines, or buildings that have been or will be compromised. All three creeks in the City will need to be assessed for this indicator to be analyzed and for effective management to be implemented.

BANK STABILITY: WILLOW CREEK WATERSHED, JOHNSON COUNTY, IOWA



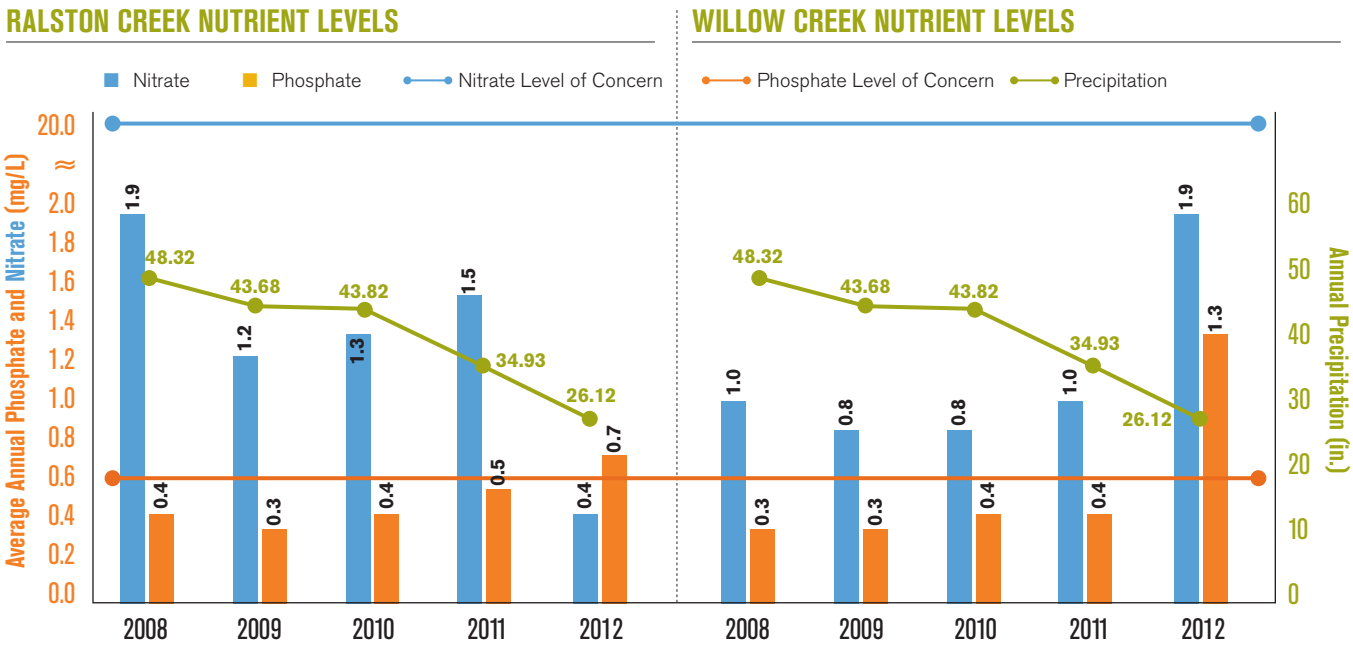
Source: University of Iowa and Iowa Department of Natural Resources

Rivers and streams that pass through Iowa City include the Iowa River, Ralston Creek, Willow Creek, and Snyder Creek. The quality of these bodies of water should continue to be monitored and improved.

Iowa City is dissected by the Iowa River. A portion of the river is on the Iowa Department of Natural Resources 303D List due to high levels of bacteria. While Iowa City is not responsible for upstream pollution, we are accountable for the City's contribution. Point source pollution bacteria can enter streams when sewer lines break, from transient encampments or even improper disposal of dog waste. Nonpoint sources from Iowa City's streams also add sediment loads via flow and bank erosion carrying such contaminants as nitrogen and phosphorous from lawns. Stabilization and restoration projects are planned as funding is available. The City and the University of Iowa are exploring recreational uses on the Iowa River increasing efforts to evaluate and to improve water quality.

The City of Iowa City has sampled two of the three streams within the city limits for the last five years. Weekly samples taken from May through November for chemical analysis show that stream nutrients are under the "Level of Concern" for nitrate and phosphorus with the exception for 2012.

Within the city limits there are three creek watersheds. Ralston Creek has a 5,850 acre watershed which falls within the City limit. This creek has historic significance for the City but also has issues with flooding in residential and downtown areas. Willow Creek has a watershed of 3,347 acres, runs through the City's Willow Creek Park and has recently undergone a stream bank assessment and bank stabilization project. Snyder Creek's watershed is the largest at 16,400 acres, but most of the watershed includes agricultural land to the east of the city limits. Snyder Creek's watershed within the city limits falls in an industrial area and is starting to be evaluated for stream bank issues. From the data over the last five years, our streams in Iowa City appear healthy.



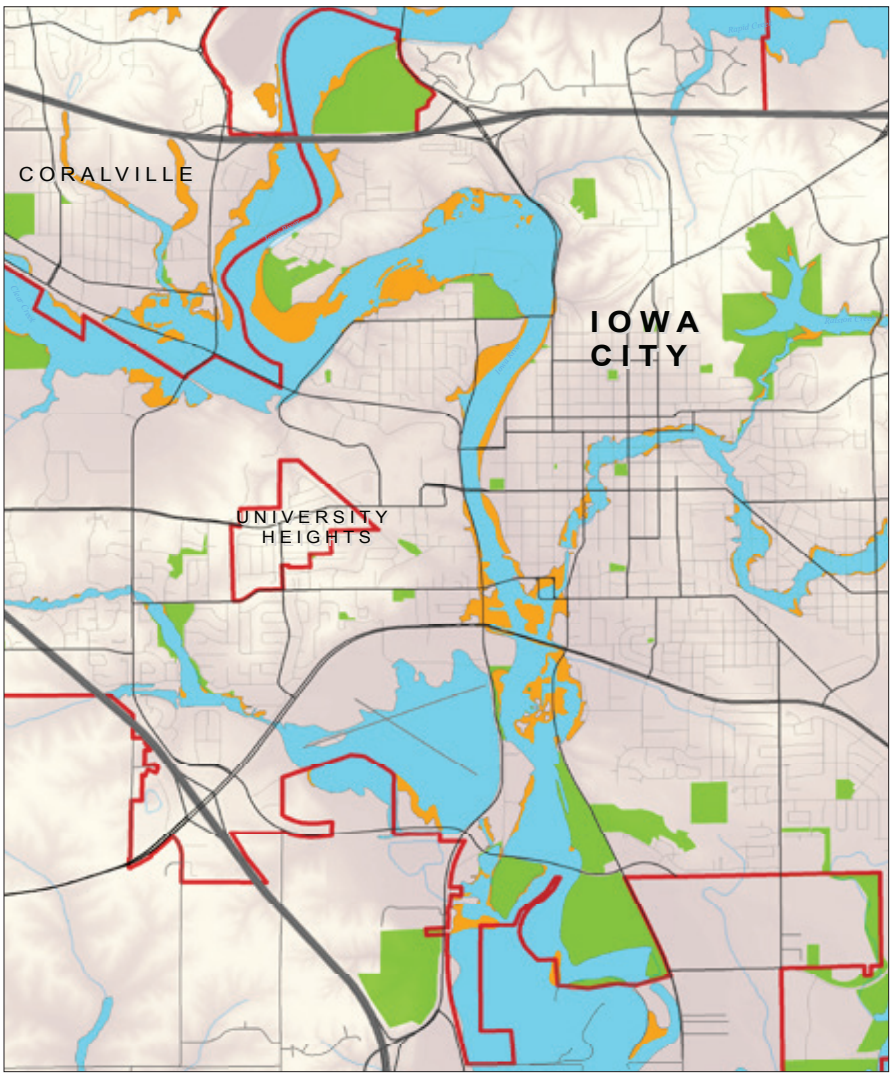
Sources: IOWATER for all of the stream data, and the National Weather Service Weather Forecast Office for precipitation averages (http://www.crh.noaa.gov/dvn/?n=climatelocal)

With approximately 2,716 acres of development in Iowa City's floodplain, it is important to protect the many homes and businesses in the area in order to minimize flood impacts to secure other areas against develoment.

Iowa City consists of 27.9 square miles of diverse and rolling topography of which about 15% lies within the 100 and 500 year floodplains. Most of the floodplain through the core of the community is a part of the University of Iowa Campus. Iowa City has been a leader in floodplain management and developed its first floodplain maps over 50 years ago. Over the years, Iowa City has actively worked to purchase floodplain property and convert it to parkland and other flood resistant uses. Today, Iowa City's floodplain management ordinance provides the highest level of protection in the State.

FLOODPLAINS

▶ The blue areas indicate the FEMA 100-year floodplain; orange areas indicate the FEMA 500-year floodplain; green areas indicate parks; red lines indicate city limits.



SUSTAINABILITY INDICATORS: **ENVIRONMENTAL AND RESOURCE MANAGEMENT: WASTE REDUCTION**

Per capita Solid Waste	○	Per capita tons of solid waste sent to landfill
Household Hazardous Waste	●	Pounds of HHW received annually; number of customers annually
Recycling	○	Tonnage of recycled material
Multifamily Unit Recycling	○	Percent of multifamily units with on-site recycling
Composting	●	Productive use of compost

● = within or exceeding acceptable level
○ = below desired level
U = unclassified

ENVIRONMENTAL AND RESOURCE MANAGEMENT: **WASTE REDUCTION**

With growing populations and high levels of consumption, waste production is an increasingly important factor in the environment and requires intensive management systems.

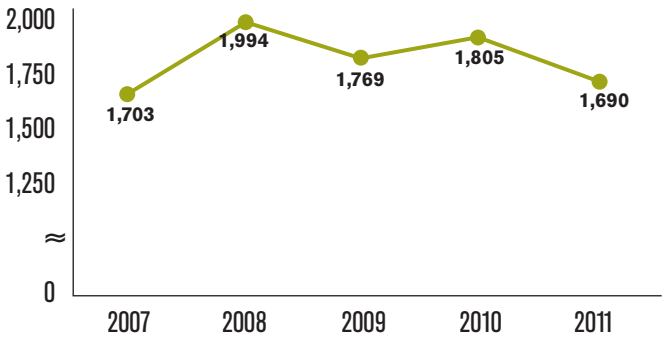
The average American produces approximately 4.5 pounds/day (U.S. EPA) one of the highest per capita in the world. Large reductions are necessary to establish sustainable waste practices. The Iowa City Landfill and Recycling Center processes waste from Johnson County, Kalona, and Riverside, taking in an average of 120,000 tons of trash annually. The landfill has been in its current location since 1971 and occupies 400 acres in total, half of which holds buried trash. The landfill is projected to remain in operation at its current location for another 23 years. The remaining land serves as a buffer for surrounding properties and wetlands. The Iowa Waste Reduction and Recycling Act was legislated in 1989, resulting in the ban of yard waste, tires, lead acid batteries, appliances, and oil from Iowa landfills. This led to the development of recycling programs that handle these other forms of waste and divert them from the landfill.*

** The landfill also participates in the Iowa DNR's Environmental Management System, which is a voluntary program to encourage responsible management while setting baselines and tracking continuous improvement. In addition, the City is considering ideas for innovative comprehensive waste reduction technologies at landfill.*

Waste for Johnson County has remained fairly consistent despite the growing population in the landfill service area.

Solid waste production per capita rose in 2008 when a large flood impacted many homes. The number has trended down about 5% annually since then although population has continued to increase in Johnson County. Increased recycling, the downturn in the economy and reduced packaging are likely contributors to waste reduction. Even with this decrease, the average per capita solid waste production is still slightly above the national average of 1,640 pounds annually.

PER CAPITAL SOLID WASTE (LBS/PERSON)



Source: Iowa City Landfill and Recycling Center, Iowa City Landfill Division; U.S. Census Bureau

Household hazardous waste (HHW) disposal has remained relatively stable since 2008, after a large number of pounds received in 2007. Drop-off appointments, which have increased each year, are required for disposal and reflect the continual expansion of the program.

Household hazardous waste products are those containing, "corrosive, toxic, ignitable, or reactive ingredients"—these are often found in paints, cleaners, vehicle fluids, batteries, and fluorescent bulbs (U.S. EPA). All residents of Johnson County, Riverside, and Kalona utilize the Iowa City Landfill's Hazardous Waste Collection Facility. It is important that hazardous materials are disposed of properly to protect residents' homes, the community, and the natural environment. The growing number of customers and diminished volume of HHW suggest that high awareness of these hazardous materials has inspired responsible disposal practices.

HOUSEHOLD HAZARDOUS WASTE (HHW)

	2007	2008	2009	2010	2011
HHW received (in lbs)	125,627	57,362	59,937	58,763	55,767
HHW customers	1,527	1,530	1,729	1,893	2,070

Source: Iowa City Landfill & Recycling Center, Iowa City Landfill Division

Since 2008, tonnages for both the curbside recycling program and the materials collected at the five City-operated drop-off recycling locations have increased.

In 2008, the City received funding to improve and advertise the drop-off sites. Curbside information was included in the advertising, which has contributed to the increases in both areas. In addition, the number of drop-off sites increased from four to five between 2007 and 2008; the number of households served curbside has increased steadily each year with the growth of the number of homes within Iowa City. Even with these increases, only about 65% of the residents who have curbside service use it regularly and about 75% of what goes into the Iowa City Landfill each year is plastic, cardboard, paper and metal which could be recycled.

HOUSEHOLDS WITH CURBSIDE RECYCLING

	drop-off	curb	total tons
2008	333	1,219	1,552
2009	567	1,435	2,002
2010	587	1,486	2,072
2011	548	1,512	2,060
2012	587	1,538	2,125

Source: Iowa City Landfill and Recycling Center, Iowa City Landfill Division; U.S. Census Bureau

Recycling programs in Iowa City include curbside pick-up, household hazardous waste, used motor oil, e-waste, home appliances, lawnmowers, carpet and bicycles. The recently opened East Side Recycling Center provides a site for residents to reuse and recycle materials through Habitat for Humanity's ReStore, the Salvage Barn, and the Furniture Project.

The East Side Recycling Center includes a LEED platinum-certified environmental education center, drop-off recycling bins, oil waste recycling, e-waste drop-off and compost and wood chips sales. The annual Rummage In The Ramp effort began in 2007 to keep tons of reusable material out of the landfill during the rental housing lease changeover at the end of July. During this time, residents can buy and donate furniture, electronics, beds, and more, as they leave/take up residence in the city.

RUMMAGE IN THE RAMP

	2007	2008	2009	2010	2011
Tons sold & diverted from landfill	20	19	24	25.8	23.5

Source: Iowa City Landfill & Recycling Center, Iowa City Landfill Division

For the roughly 1,030 Iowa City apartment complexes and condominium associations without City service, only 4% offer on-site recycling at their complexes.

A pilot project from February through December of 2012 researched best practices for implementing recycling programs for apartments with more than four units. A best-practices manual was completed and made available to Iowa City landlords and on the City website. This is an important step for our community because the high student population results in a higher proportion of rental housing than comparably-sized cities. Though there are several recycling drop-off sites in Iowa City, many students do not own cars and therefore would not be able to transport their recyclables.

Iowa City Community Compost is popular and 100% of available stock has sold out since 2009. Residential composting is also encouraged and many citizens compost at home.

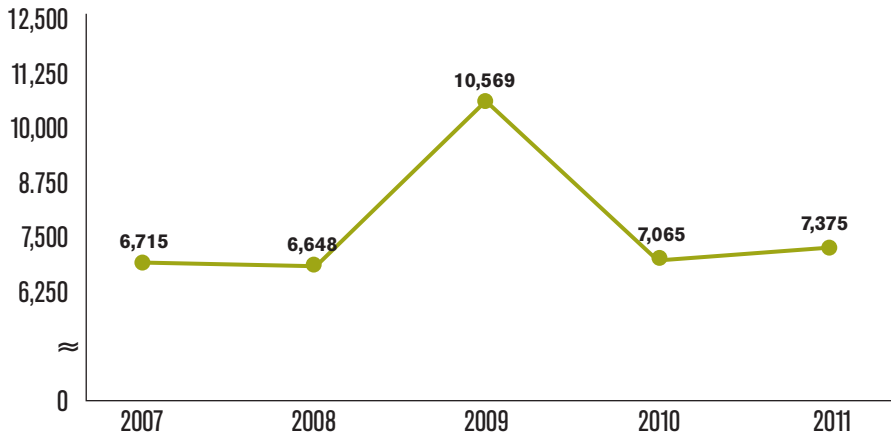
The ICLF has composted yard waste since 1988 when a state law banned it from landfills in Iowa. At ICLF, yard waste is either ground up into wood chips or composted; both products are available to residents and commercial users for landscaping. In FY2009, the incoming yard waste increased significantly due to flood debris. In 2007, a limited amount of food waste was accepted in the compost program; in 2010 a permit amendment allowed for an increase in the amount of food waste. Multiple community partners now contribute food waste to the program, including the University of Iowa (Hillcrest and Burge Dining Services), Regina Catholic Schools, New Pioneer Co-op, and the Bluebird Diner. About 170 tons of food waste were processed in the composting program in 2012.

CITY COMPOST BIN SALES

2009	25
2010	150
2011	200
2012	225

Source: Iowa City Landfill and Recycling Center, Iowa City Landfill Division.

TOTAL TONS COMPOSTED AT THE IOWA CITY LANDFILL



ENVIRONMENTAL AND RESOURCE MANAGEMENT: **NATURAL ECOSYSTEM**

Nearly 200 years ago, 83% of Iowa was tallgrass prairie broken by forests and wetlands along rivers and streams.

Today 97% of the state is farmland, and Iowa has been called one of the most altered landscapes in the country. Native ecosystems benefit people in many ways. They clean water, and air, provide flood protection by decreasing runoff, sequester carbon, and are habitat for a wide array of animals, insects, microbes and plants that provide us with medicine, pollination, foods, and aesthetic beauty. Natural ecosystems are no longer able to maintain themselves due to the absence of beneficial processes such as wild fires. Meanwhile, new challenges, such as invasive species and overly abundant nutrients in the water threaten natural populations.

SUSTAINABILITY INDICATORS: ENVIRONMENTAL AND RESOURCE MANAGEMENT: NATURAL ECOSYSTEM

Forest Ecosystem	●	Total acres of municipal owned forest
Prairie Ecosystem	●	Total acres of municipal owned prairie
Wetland Ecosystem	●	Total acres of municipal owned wetland acres including City wetland mitigation projects
Tree Canopy/Street Tree Diversity	U	Percent coverage of trees within city limits; percentage of all street tree species

● = within or exceeding acceptable level
○ = below desired level
U = unclassified

Natural ecosystem management practices that focus on restoration and maintaining function of native Iowa habitats are crucial to sustaining these resources. Iowa City owns over 800 acres of forests, wetlands and prairies. Management of these areas includes annual evaluation, prescribed burning and control of invasive species. This process is very labor intensive and presently relies upon significant volunteer effort to be effective. The success of natural areas management can be measured by their biodiversity or lack thereof.

Street tree inventories are useful management tools in the urban landscape, especially in cases of emerging threats such as the Emerald Ash Borer. This insect has been found in the state and nearby counties and has been known to devastate Ash tree populations. Evaluation of the species, age, condition, and location of the City's tree population would facilitate enhanced response efforts and minimize damage should an infestation occur. Tree canopy information would also contribute important information for assessing heat island effect and stormwater runoff modeling.

Iowa City is home to 41 parks, more than 34 miles of rivers and streams, and over 800 acres which contain prairie, wetland and forest.

Natural areas provide opportunities for outdoor activity and education, protect species diversity and the quality of water and soil, and reduce the occurrence and severity of floods as well as erosion. Very little of Iowa's natural ecosystem exists, and while many of the acres are constructed (i.e., not remnants) prairies and wetlands, the City has made an effort to plant native species in efforts to restore these types of ecosystems which once used to be abundant in Iowa. The table below provides the acreage of Iowa City's natural areas, which includes the Waterworks Park, 230 acres of constructed prairie and wetlands with a variety of native plants. The City also owns Ryersons Woods, which may soon gain preserve status and Hickory Hill Park, which includes 185 acres of woodland. Invasive species are a large threat to these ecosystems so they require continued monitoring and diverse management techniques.

NATURAL ECOSYSTEM COVERAGE

Urban Forest	425 acres
Prairie	211 acres
Wetland	96 acres

Source: Iowa City Parks & Forestry Division; Property Information Viewer, Johnson County

Tree canopy reflects the space covered by trees in the community. Urban forests clean the air, provide habitat for wildlife, absorb stormwater, reduce the heat island effect, and provide aesthetic, natural beauty for our city.

The National Arbor Day Foundation's Tree City USA program is coordinated in Iowa by the DNR's Forestry Bureau with the goal of enhancing the benefits of trees in local communities. Iowa City has been named a Tree City USA for 32 years. Requirements include that the city employ a city forester or active tree board, establish a tree ordinance, spend at least $2 per capita for the community forestry program, and issue a proclamation naming a day as "Arbor Day." Benefits include reduced costs for energy, stormwater management, erosion control and higher property values, among many others. For more than 15 years, the City of Iowa City has maintained a Memorial Tree Program in which trees can be purchased and planted in memory of someone who has passed away, or in celebration of birthdays, graduations, weddings, and more. In the last decade, the City has also had a goal to plant 100 trees annually in City parks and City owned land to beautify the landscape. Tree canopy coverage and street tree species composition data is not currently available.


GYROS

SUSTAINABILITY ASSESSMENT

SOCIAL

Iowa City is a unique and attractive Midwestern community that provides a wide variety of opportunities for exposure to arts and culture, collegiate and club sports, natural areas, and community events and festivals. Residents and visitors from diverse backgrounds and with varying interests have many opportunities to engage in the community and identify with other residents with similar interests. Iowa City's social atmosphere fosters creativity and engagement, fulfilling citizens and instilling a connection with those who live here. Residents demonstrate connection with the community through high rates of volunteerism, engagement in local arts and sporting events, and the pursuit of higher involvement in local schools which can result in greater higher graduation rates. Environmental conservation, education and economic prosperity should be coordinated to meet social needs such as security, prosperity, social interaction, connection to nature, and health. Iowa City sustainability indicators show that our community has good healthcare, many transportation options, low crime, healthy residents, clean air and drinking water, and engaged citizens. These traits are indicative of a livable, rewarding community which provides members with a good quality of life.

In Iowa City there are numerous social services such as a shelter house to support the homeless, a free lunch program, the free medical clinic, substance abuse and behavioral health services, services for elderly citizens, youth outreach services, and transitional living places. Having these services for citizens in times of need is a reflection of the community's care for all individuals. Enhanced social equity is a key component of sustainability that often goes unrecognized but is a reflection of the quality of the greater community.

SOCIAL: **HOUSING**

Iowa City is blend of older historic neighborhoods, newer development and rental properties.

The high student population of the University of Iowa and Kirkwood Community College account for the fact that 40% of the available housing in Iowa City is composed of rental properties. Additionally, there are also low- and high-income rental units available for residents. Location drives the value for student renters, who are looking for fair lease agreements, equitable move-in/move-out policies, building security and timely maintenance. Rental properties may be lacking in areas such as energy efficiency, recycling, and water conservation, which could be an opportunity for future improvements.

Affordability is especially important for renters and homeowners alike. Residents tend to prefer to live near their place of employment, other businesses and entertainment opportunities. Choosing a more affordable home that is further away from amenities

SUSTAINABILITY INDICATORS: SOCIAL: HOUSING

Affordable Housing	U	Percent of population living in affordable housing
Age of Housing Stock	U	Percentage of houses built in each decade
Energy Assistance	U	Percentage of households applying for energy assistance in the form of LIHEAP
Tenure by Household Income	U	Number of owner- and renter-occupied housing units within various income ranges
Homelessness	U	Johnson County percentage of homeless population
Lead Exposure Testing/Poisoning Rate	●	Percent of children under 6 tested for lead poisoning; incidence of lead poisoning among tested children

● = within or exceeding acceptable level
○ = below desired level
U = unclassified

means more driving and therefore higher transportation costs. Affordable housing and transportation also allows residents to spend their income on other essentials such as food, health and education, which allow for greater quality of life. Housing prices are also important for the job market—affordable homes permit more residents to reside in the community, which increases the opportunities for economic growth. Quality homes and neighborhoods make cities desirable places to live, providing a cornerstone for development, diversification, and prosperity.

The City of Iowa City has several programs in place to ensure affordable and desirable housing options. One of these is the UniverCity Housing project, in which the City buys and makes improvements to homes near downtown. These more affordable homes allow owners to live near the more dense populated and walkable downtown area. Funding through the City's Housing Rehabilitation program provides guidance and financial assistance to help residents rehabilitate and update their home to help maintain Iowa City's housing stock. The City also has a rental housing inspection program that ensures rental properties are safe for residents. New construction must adhere to the eight visit-ability requirements established by the 2009 International Residential Code as amended locally. These requirements promote sustainable housing by ensuring access and maneuverability for people using wheelchairs or other mobility aids, reducing the need for costly redesigns or building expansions. These efforts are an important step for increasing the sustainability of Iowa City's housing.

Affordable housing analysis in Iowa City is complex due to the high student population.

Iowa City conducts an affordable housing study every five years. The "Affordable Housing Market Analysis" can be found on the Iowa City website. This study's primary focus is to determine the need for affordable housing for non-student incomes. Affordable housing is considered to be affordable to households at or below 80% of the median household income in the Iowa City metro area. The most recent study documented that new residents continued to migrate into the Iowa City region and that suburban areas are the areas where the most growth is occurring. Existing demand for affordable housing will continue since many of the houses produced are higher priced units more than moderately priced units. The City has several programs in place to insure affordable housing. UniverCity Housing Project is a program which buys and makes improvements to homes near downtown and sells them at an affordable cost. The Housing Rehabilitation program provides assistance to help residents rehabilitate and update their current homes.

▶ One of the completed UniverCity Housing Project homes.

Iowa City has a variety of housing stock, including older houses, newer homes, and rental units. In the last 15 years the area has had two floods and a tornado, which destroyed many homes. Also, the economic downturn in 2008 had an effect of slowing down construction, which was a trend nation-wide.

Older homes in the area are desired by some residents, due to their unique character and style. Iowa City's Housing Rehabilitation program provides residents financial assistance to help residents repair their homes and preserve older home that may have more repair costs. Many of the homes bought by the City through the UniverCity housing are older homes close to campus. These homes are often previously rental homes that are restored maintaining their character. Newer homes and apartments continue to be constructed. Many of the new apartments constructed are in the downtown region, offering both high end housing and student housing within walkable distances of work, school, and other activities. Iowa City had more than 200 homes destroyed during the flood of 2008 damaged and demolition permits were higher than usual during this time, peaking in 2010. Construction permits fell during the time period indicated, likely due to economic reasons.

PERCENTAGE OF HOUSING UNITS BY AGE

Year Built	2007	2008	2009	2010	2011
2005 or later	3.3%	3.8%	4.8%	6.1%	6.9%
2000 to 2004	8.6%	8.5%	8.5%	8.8%	8.8%
1990 to 1999	13.9%	14.2%	13.9%	13.9%	13.8%
1980 to 1989	14.3%	14.2%	14.0%	14.0%	13.8%
1970 to 1979	16.6%	16.5%	16.3%	16.0%	15.8%
1960 to 1969	11.5%	11.4%	11.4%	11.1%	11.1%
1950 to 1959	11.4%	11.4%	11.3%	10.9%	10.9%
1940 to 1949	5.8%	5.9%	5.8%	5.5%	5.5%
1939 or earlier	14.5%	14.2%	14.0%	13.7%	13.5%

Source: 2011 American Community Survey 1-Year Estimates, U.S. Census Bureau

The number of households applying for LIHEAP increased regularly from 2007–2010, but declined in 2011 and 2012.

LIHEAP, the Low Income Home Energy Assistance Program, provides energy assistance for low-income households to protect vulnerable groups such as children, the elderly, and the disabled. Lowering the cost burden for energy needs also increases the capacity for these households to attain other necessities, such as healthcare, education, and healthy food. The flood of 2008 damaged many homes and businesses, increasing expenses while reducing incomes throughout the area.

NUMBER OF HOUSEHOLDS APPLYING FOR LIHEAP

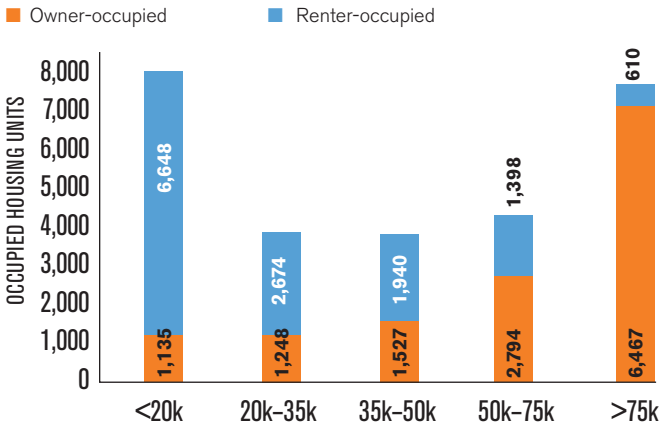
2007	2008	2009	2010	2011	2012
1,101	1,206	1,354	1,455	1,292	1,264

Source: Hawkeye Area Community Action Program, Inc.

While owner- and renter-occupied housing units are split evenly, tenure is characterized by income–groups earning less than$35,000 tend to occupy rental units, while those with incomes greater than $50,000 are much more likely to own households.

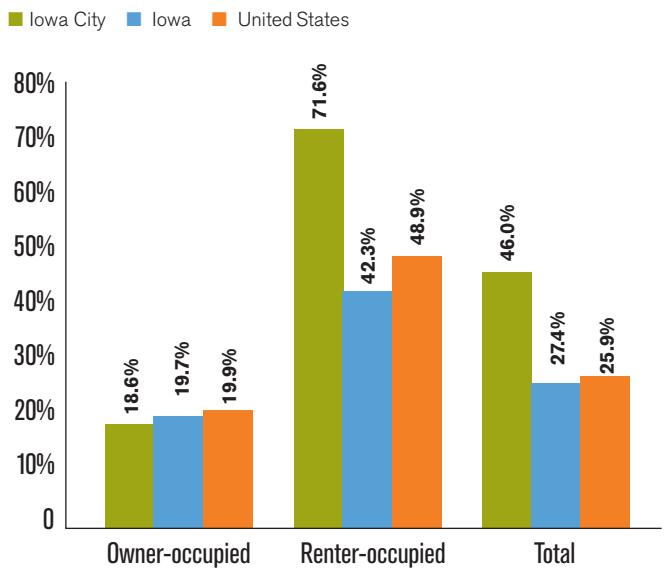
Iowa City has an atypical proportion of rental units due to the University population, which is expected to earn a lower income. Student populations fluctuate regularly—many graduates leave the city while new students take up residence, establishing a perpetual renter-occupied population. As rental units often include utilities as a fixed component of the rental fee, occupants may not be financially invested in efficiency and conservation of their resources (including water, gas, electricity, and heating/cooling). These units are also not eligible for curbside recycling, which limits the effectiveness of waste management programs in the city.

TENURE BY HOUSEHOLD INCOME



Source: 2006-2010 American Community Survey 5-Year Estimate, U.S. Census Bureau

HOMES THAT COST MORE THAN 30% OF INCOME



Source: 2010 Census, U.S. Census Bureau

Johnson County's homeless population represents 0.7% of the entire county's population.

Homeless statistics are not available for Iowa City alone. Iowa City is the largest city in the county and accounts for slightly over 50% of the county's population. The City provides numerous services for those in need, including a shelter house for the homeless. Other services include a free medical clinic, and free meal programs to provide for those in need. A complete list of services for people in need of assistance can be found on the Iowa City Public Library's website.

HOMELESS STATISTICS 2009–2010

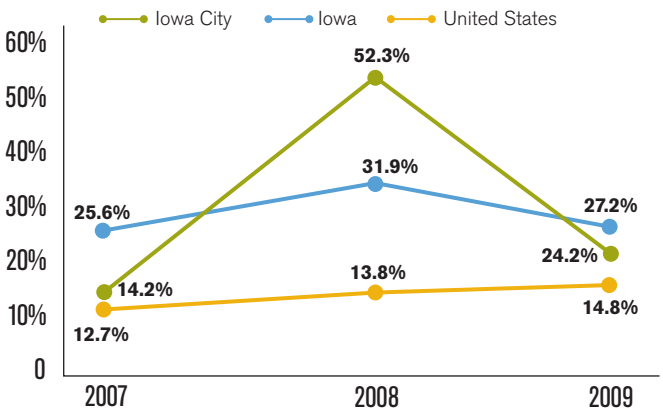
	Johnson County		Iowa
	Number of Homeless Served	**Percent of Total Served**	**Percent of Total Served**
By Age			
Adults	664	73%	67%
Children	235	26%	33%
By Race and Ethnicity			
White	426	47%	65%
Black	453	50%	29%
Hispanic or Latino	57	6%	8%
By Gender			
Male	473	52%	52%
Female	428	47%	47%
With A Long-Term Disability			
Total With At Least One Disability	174	19%	25%
Alcohol	59	7%	10%
Drugs	44	5%	10%
Mental	125	14%	15%
Physical/ Medical	74	8%	8%
Homeless Extent			
First Time	323	34%	40%
Multiple Times	319	34%	39%
Ongoing or Chronic	295	31%	21%
Total	**904**	**100%**	**100%**

Source: The 2010 Community Needs Assessment Indicators Report, United Way of Johnson County

From 2007–2009, Johnson County averaged a higher percentage of children tested for elevated blood lead levels than the state or nation, and found fewer incidences of elevated blood lead levels among the children tested.

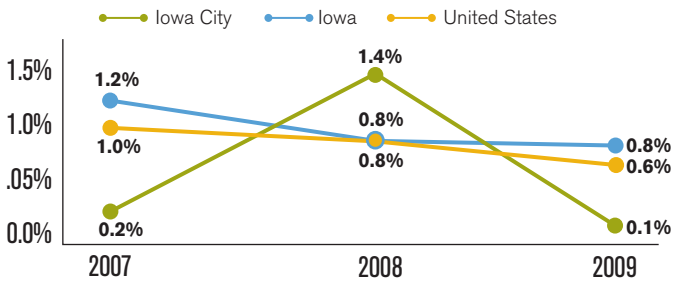
Lead poisoning occurs most frequently in homes with lead paint and dust, as well as those with lead water pipes. Industrial process can spread lead through the air and into the soil, posing risks for the population at large. Due to the high toxicity, moderate levels of lead can produce illnesses while high levels can slow development, introduce learning disabilities, and cause comas and death. Elevated blood lead levels are especially prevalent in children living in poverty and in older homes, so the indicator reflects the prevalence of these conditions throughout the population. Averaging 2007–2009 data, a larger percentage of children in Johnson County were tested than either the state or nation, and fewer cases of elevated blood lead levels result, indicating that the area is relatively safe from lead hazards.

PERCENT OF CHILDREN TESTED FOR ELEVATED BLOOD LEAD LEVELS



Source: Lead Data, Statistics, and Surveillance, Centers for Disease Control and Prevention

PERCENT OF CHILDREN TESTED WITH CONFIRMED ELEVATED BLOOD LEAD LEVELS



Source: Lead Data, Statistics, and Surveillance, Centers for Disease Control and Prevention

SOCIAL: **COMMUNITY WELLNESS**

Iowa City has a compact, walkable downtown, 48 miles of paved trails, and accessible parks and green space all of which encourage physical activity.

Easy access to over 800 acres of City owned natural areas and other open spaces benefits the mental and physical health of residents and has positive effects on children. Interest in local food production has increased farmer's market attendance, community supported agriculture (CSA) options, a growing number of community gardens and a number of restaurants focused on the local food supply and healthy menu options. Air quality can also affect health, so indicators were chosen to monitor several measures in that area. Iowa City's recreational facilities include indoor and outdoor pools and activities are well used and the Iowa City Senior Center offers a variety of classes and activities involving physical activities as well. Community encouragement of healthy activities also plays a major role in motivating and educating the

SUSTAINABILITY INDICATORS: SOCIAL: COMMUNITY WELLNESS

Healthy Weight	●	Percentage of adults with a BMI below 30.
Healthy Diets	○	Percentage of residents who eat who eat adequate fruits and vegetables daily
Farmers Market Attendance	●	Annual estimated attendees at the City's Farmers Market
Community Gardens	U	Square footage of community and school gardens
EPA Air Quality Index	●	Number of days within acceptable limits and number of days in unacceptable limits, annually
Rate of Asthma Incidence	●	Number of asthma-related inpatient discharges from Iowa City hospitals
Particulate Matter	○	Average annual PM2.5 concentration
Radon	○	Percentage of radon-tested household above 4 pci/L

● = within or exceeding acceptable level
○ = below desired level
U = unclassified

public about the practices and benefits of healthy living, and last year, there were 42 races, bike races and parades in town; a true show of community involvement. Iowa City was recently designated as one of the ten Blue Zone Communities in Iowa, a community-based program that will assist Iowa City in becoming an even more physically, emotionally, and socially healthier community.

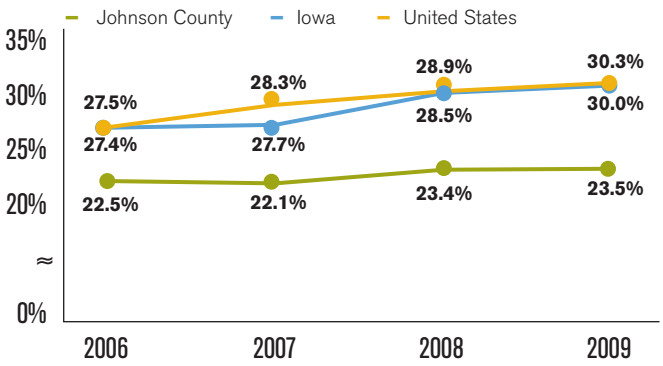
Along with healthy lifestyle, good health care is also an essential part of a sustainable community. Iowa City is home to the University of Iowa Hospitals and Clinics, listed in the *U.S. News & World Report*'s "Best Hospitals in America" report since 1990. U of I Hospitals and Clinics admits more than 30,000 patients per year from across the state for in-patient hospital care, in addition to receiving more than 50,000 emergency department visits and 930,000 clinic-patient visits. Iowa City is also home to the Mercy Hospital, which is a Blue Distinction Center for heart care and the only Accredited Chest Pain Center in the county, as well as the VA Medical Center, which is in the top ten medical facilities nationally in terms of research funding. In addition to Iowa City's three hospitals, Emma Goldman Clinic provides medical and Planned Parenthood services to women. The Free Medical Clinic provides medical and dental services for those that are unable to afford the cost of regular health care.

Since 2008, Iowa City and surrounding communities have partnered to create a combined response system for emergencies such as tornadoes, flooding, other natural disasters or emergencies. The community is in compliance with the National Incident Management System (NIMS) in order to respond quickly and effectively to assist citizens in the area in the event of an emergency.

Adult obesity in Johnson County is the lowest in all Iowa Counties at 23.5%, well below the state and national averages of 30.0% and 30.3% respectively.

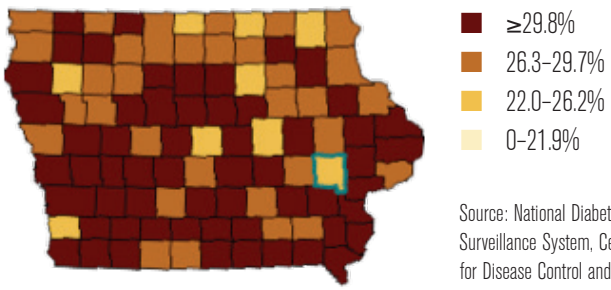
Obesity is defined as having a body mass index greater than 30, which significantly increases the likelihood of developing adverse health conditions such as type 2 diabetes, heart disease, and cancer. Obesity rates have been increasing considerably throughout the nation in recent decades, impacting national health and signifying a shift in production and consumption patterns, as well as food and health education. Johnson County remains comparatively healthy compared to the rest of the state and the nation as a whole. With the lowest adult obesity percentage in the state, Johnson County stands out as a more healthy and food-conscious district, which is likely due to the large population of those under the age of 34. Nearly one-quarter of Johnson County adults are still considered obese.

PERCENTAGE OF ADULT OBESITY



Source: National Diabetes Surveillance System, Centers for Disease Control and Prevention

JOHNSON COUNTY HAS THE LOWEST OBESITY PERCENTAGE IN IOWA AT 23.5%, FOLLOWED BY WINNESHIEK COUNTY WHICH HAS 24.7% OBESITY.



Source: National Diabetes Surveillance System, Centers for Disease Control and Prevention

The percentage of adults consuming adequate amounts of fruits and vegetables has remained steady, but still quite low. Poor eating habits can pose a significant risk to the health of the population.

Though difficult to measure, healthy diets are an essential component of sustainable communities because they signify and reflect attitudes towards health and personal responsibility. In 2008 and 2009, 22.6% of adults consumed an adequate amount of fruits and vegetables in Johnson County. While this pattern of low fruit and vegetable consumption is widespread, it is important to promote food responsibility at the local level to strengthen communities. While data is not available at the City level, Iowa City has been designated a Blue Zones community. The Blue Zone Program promotes healthy lifestyle habits and perhaps we will see a rise in this number due to healthier diets. (Source: Community Health Status Indicators, U.S. Department of Health and Human Services)

Iowa City's Farmer's Market has been active for 40 years as of 2012 and averages between 3,000 and 5,000 customers on a weekly basis, totaling around 200,000 annual attendees.

Farmer's Markets are excellent opportunities to connect with other members of the community and find healthy, local foods. Iowa City's Farmer's Market has been in operation since 1972—when it first opened there were a maximum of 13 stalls used on Saturdays. In 1980, the Wednesday market was added, and by 1999 there were 49 stalls selling goods at the markets. Today, there are 142 stalls on Saturday and 57 stalls on Wednesday with countless varieties of locally produced fruits, vegetables, meat, pastries, crafts, and more as popularity and attendance of the Farmer's Market continues to grow. The city's Farmer's Market was also ranked as #1 in the state for "America's Favorite Farmer's Markets" by American Farmland Trust from 2010–2012. An additional Farmer's Market location is being added in 2013 at Mercer Recreation Center.

Community garden plots available for rent allow residents to grow their own fruits and vegetables while connecting with other gardeners in the community.

Iowa City's community gardens include Wetherby Park, the Broadway Neighborhood Center, and the Children's Discovery Garden, as well as the New Pioneer Food Co-op's Earth Source Gardens and the Ped Mall's "My Soilmates" beds. The Children's Discovery Garden totals 1,500 square feet, while Wetherby Park's community garden spans an acre, and the Earth Source Gardens encompasses 2 acres divided into 10' by 50' plots available for rent to the public. Community gardens provide fun and educational opportunities while reestablishing a direct connection to land and food. They also facilitate interactions among experienced and beginner gardeners alike, spreading knowledge and passion for locally grown food.

Iowa City has a very similar Air Quality Index to the state of Iowa, though the city averages more days with "Good" air quality, and less days designated as "Unhealthy for sensitive groups"/"Unhealthy". In fact, from 2007-2011 Iowa City only had 4 days that were considered "Unhealthy for sensitive groups", while all of the rest were "Good" or "Moderate".

The Air Quality Index compiles measurements of all criteria air pollutants in a geographical area. By categorizing the levels of pollution, the EPA developed a scale to quantify the degree of healthiness of the air, which can be compared over time or between locations to determine the patterns and severity of air pollution. Maintaining healthy air is important for any community as air quality impacts the health of the population and the environment, and these monitoring systems allow for emergency responses to be quickly implemented if air quality becomes dangerously low. In addition to monitoring air quality to ensure safety and healthiness, the index captures pollution trends that can be correlated with human activities to determine the possible impacts from those activities on local air quality. Iowa City's Air Quality Index averaged from 2007-2011 shows that three-quarters of the studied days (average number of studied days = 353/year) are designated "Good", while the remaining quarter is "Moderate". This consistent pattern indicates a stable, healthy quality of air throughout the city, posing no significant risk to human health.

AIR QUALITY INDEX REPORT

	Number of Days with AQI	Number of Days Good	Number of Days Moderate	Number of Days USG*	Number of Days Unhealthy	Number of Days Very Unhealthy
2007	332	241	88	3	0	0
2008	348	281	66	1	0	0
2009	356	282	74	0	0	0
2010	365	251	114	0	0	0
2011	364	265	99	0	0	0
Average	353	264	88	1	0	0

*Unhealthy for Sensitive Groups. Source: Air Quality Index Report, U.S. Environmental Protection Agency

Asthma-related discharges from Iowa City hospitals have consistently remained low, and even shown an overall declining trend from 2007-2011.

Poor air quality is often a major trigger for asthma exacerbation, however Iowa City has only had 4 days in the last 5 years that were considered unhealthy for sensitive groups (all of which occurred in 2007 and 2008). With Iowa City's consistently healthy air quality and the incredibly low frequency of asthma-related discharges from Iowa City hospitals, it seems clear that there is little, if any, exacerbation of asthma symptoms due to air quality. Since Iowa City's hospitals serve a regional population, it is not likely all of the discharges are citizens of Iowa City.

ACUTE INPATIENT DISCHARGES FOR PATIENTS FROM IOWA CITY

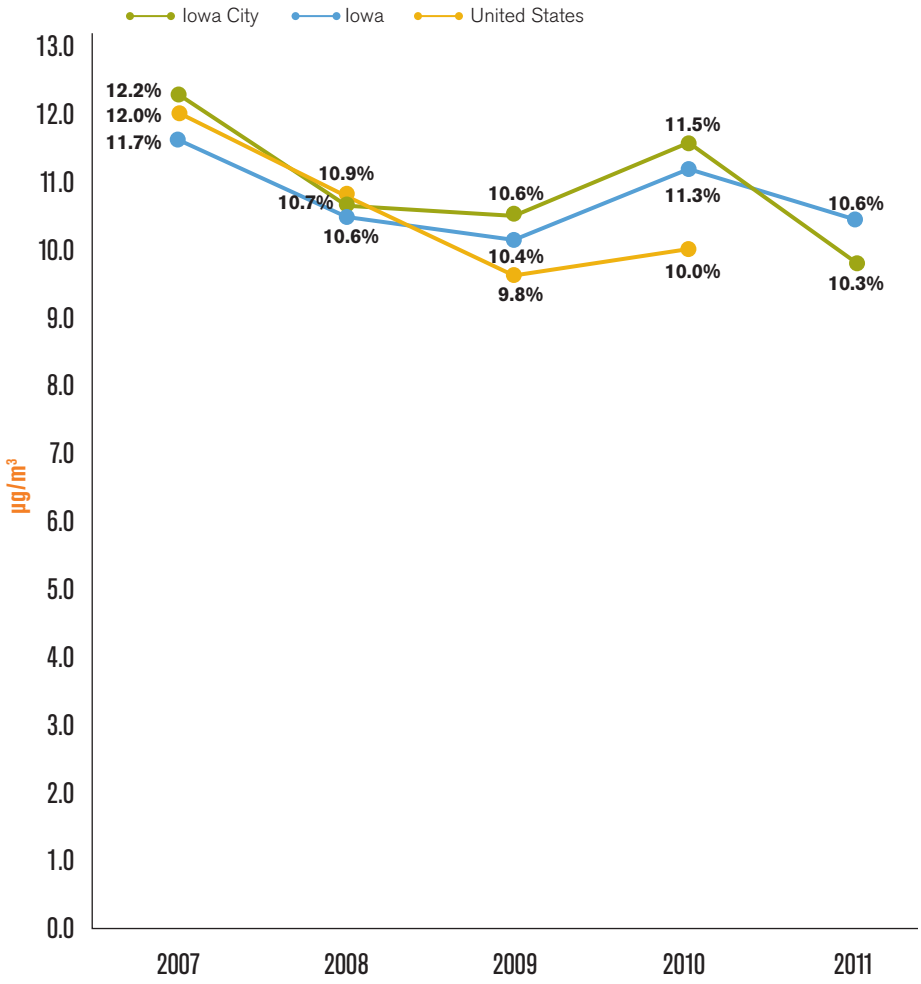
	2007	2008	2009	2010	2011
Total Asthma-related Discharges	57	54	58	44	47

Source: Information Center, Iowa Hospital Association

Average PM2.5 concentrations in Iowa City are slightly higher than both state and national averages, suggesting that these types of pollutants are prevalent in the city.

PM2.5 refers to particulate matter (particles of dust, dirt, soot, smoke, and liquid droplets found in the air) of less than 2.5 micrometers in diameter. These tiny particles are formed from combustion and industrial activities; they are so small that they can be inhaled and accumulate in the respiratory system where they pose significant health risks. States with PM2.5 levels exceeding EPA standards are designated as nonattainment areas to signify to the public that the air is unhealthy. In response, these states must produce a state implementation plan and take action to improve air quality. PM2.5 data in Iowa City is collected at Hoover Elementary School—their data shows that Iowa and Iowa City have extremely similar PM2.5 concentrations, and both are often higher than the national average. Iowa City's mean annual PM2.5 concentration is well below the three-year standard of 15 $\mu g/m^3$, but further reductions have the potential for greater health benefits while decreasing the likelihood of violations.

ANNUAL AVERAGE PM2.5 CONCENTRATIONS



Source: Monitor Values Report, U.S. Environmental Protection Agency

Radon has retained a consistently high presence in Iowa City for the last two decades, with high levels in more than one-third of households.

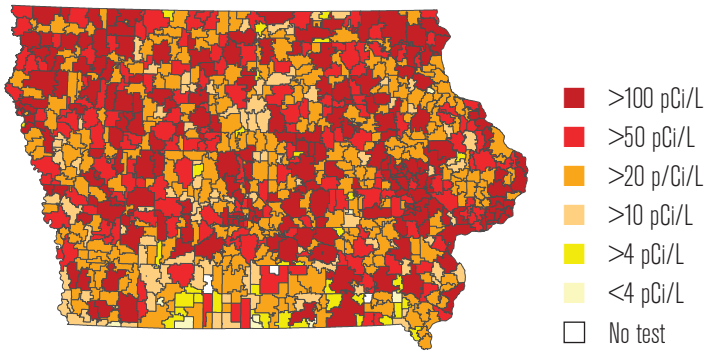
Radon is released through the ground and soil and enters homes through any openings (such as drains, cracks, and joints) in basement walls and floors. Radon is a carcinogenic, naturally occurring gas that is odorless and colorless, making it difficult to detect without specialized testing kits. The high frequency of basements and glacial sediments, as well as a high water table produce large amounts of radon throughout Iowa. The prevalence and potency has lead radon to become the leading cause of lung cancer in nonsmokers, making it a hazard that must be tested for regularly in the home. Concentrations above 4 pCi/L are a significant health risk and the EPA recommends action to reduce or eliminate radon in these cases. From 1990-2011, 37% of Iowa City homes were found to exceed this limit, indicating that radon is a significant health risk for many Iowa City residents. However, statewide measurements show that Iowa City is well below average for the percentage of households with harmful radon: as many as 49.6% of Iowa households have radon concentrations above 4 pCi/L.

1990–2011 RADON DATA

Iowa City Zip Code	Total count of households with radon	Percent of tested households above 4pCi/L*
52240	6,309	44%
52242	2,303	36%
52243	22	23%
52244	101	42%
52245	3,509	45%
52246	3,622	33%
Total	**15,866**	**37%**

*Picocuries per liter
Source: Radon Program, Iowa Department of Public Health

1990–2010 RADON SCREENING TESTS IN IOWA (HIGHEST LEVEL MEASURED BY ZIP CODE)



Source: Iowa Department of Public Health Radon Program

SOCIAL: **ARTS AND CULTURE**

Iowa City is a regional hub for the arts, with a rich community culture.

Often called the, "Athens of the Midwest" due to the artistic, cultural, and educational opportunities that are available, Iowa City is home to many galleries, venues, programs, and displays that bring the arts to the forefront of entertainment throughout the year. In 2008, The United Nations Educational, Scientific, and Cultural Organization (UNESCO) designated Iowa City as the world's third City of Literature, making it a part of the UNESCO Creative Cities Network. This title reflects the city's strong link with literature, exemplified in the Iowa Avenue Literary Walk, which features the words of writers stamped into bronze plaques with writers words and artistic images—all 49 authors and playwrights featured have ties to the state of Iowa. The University of Iowa Writers' Workshop, which celebrated its 75th anniversary in 2011, was the first creative writing degree program in the country, and is known as one of the best writing programs as well. Iowa City's artistic and cultural

SUSTAINABILITY INDICATORS: SOCIAL: ARTS AND CULTURE

Local Arts	●	Primary Indicators of Local Arts Index
Library Card Holders	●	Percent of residents with Iowa City Public Library cards
Volunteerism	●	Percent of residents who volunteer
Historic Preservation	●	Number of buildings on the National Register of Historic Places
Voter Participation	○	Number of residents registered to vote; number of voters in local elections
Senior Center Membership/Programs	●	Total number of members and programs offered at the Iowa City/Johnson County Senior Center

● = within or exceeding acceptable level
○ = below desired level
U = unclassified

focus is exemplified in the restored Iowa Territorial Capitol building, which now serves as Old Capitol Museum is located on the U of I campus adjacent to downtown Iowa City and is an iconic venue for and holds public lectures, press conferences, performances and celebrations.

The City's rich cultural landscape is celebrated by the Iowa Cultural Corridor Alliance, which represents over 120 arts/culture organizations and hosts a website that features a comprehensive list of upcoming events, activities, and attractions throughout the region. Iowa City also sponsors many festivals and events, listed in this section. The Iowa City Public Art Advisory Committee advises the City Council on potential sites for public art enhancement and oversees the Public Art Program, which includes downtown public arts projects, the Neighborhood Art Program, public art in city parks, and the Iowa Art's Showcase Pad. In addition, the University of Iowa has museums, performances, lectures and readings that are open to the public and are well attended.

The Iowa City Public Library is a hub of activity that attracts all ages. The Senior Center is a popular location hosting events and classes for those over 50, providing a variety of intergenerational programs and opporunities to people of all ages. Iowa City's rate of volunteerism is exceptional, ranking #3 in the country for mid-sized metros. Iowa City has a very high voter rate during national elections, but one area of improvement would be having higher turnout rates for local elections. Iowa City is an engaged community that promotes the arts and culture in so many numerous venues that cater to a wide variety of interests.

The state recently recognized Iowa City with two cultural districts: the Old Capitol District and the Iowa River Cultural District. These designations help to connect artists with businesses to enhance economic development through the support of arts, history and culture. Certified districts are also eligible for aid from the state for cultural rehabilitation and development.

Johnson County produces a large number of graduates in the visual and performance arts, while encouraging numerous independent artists through grants and community support.

The Local Arts Index was developed to better understand the characteristics of the cultural life in a community. The Index can be used to compare counties, but also reads as a scorecard for the community's arts participation and industry. The area produces an astounding number of graduates from the arts, due to high University enrollment, and receives significant funding from grants for various projects and programs. The county also features large numbers of independent artists and residents who readily attend performances and support the arts.

LOCAL ARTS INDEX– ARTS INDICATORS FOR JOHNSON COUNTY

Expenditures on entertainment admission fees per capita	$28.24
Expenditure on music instruments per capita	$24.15
NEA grants per 10,000 people, 2005 through 2009	$1,367.64
State arts agency grants per capita, 2003–2009	$6.40
AAM accredited museums per 100,000 population	.76
National arts education association members per capita	18.34
Solo artists per 100,000 population	370.56
Total nonprofit arts organizations per 100,000 population	20.63
Arts education nonprofit organizations per 100,000 population	.76
Performing arts and events nonprofit organizations per capita	7.64
Visual arts nonprofit organizations per 100,000 population	.76
Millennial share of all arts nonprofits	29.63%
Revenue share of millennial arts nonprofits	22.89%
Competitive environment for the nonprofit arts	57.85%
Visual and performing arts degrees 2003–2009	2,506.84
Accredited degree granting programs per 100,000 population	2.29
"Creative Industries" share of all businesses	4.1%
"Creative Industries" share of all employees	2.0%

Source: Arts Index: A Project of Americans for the Arts

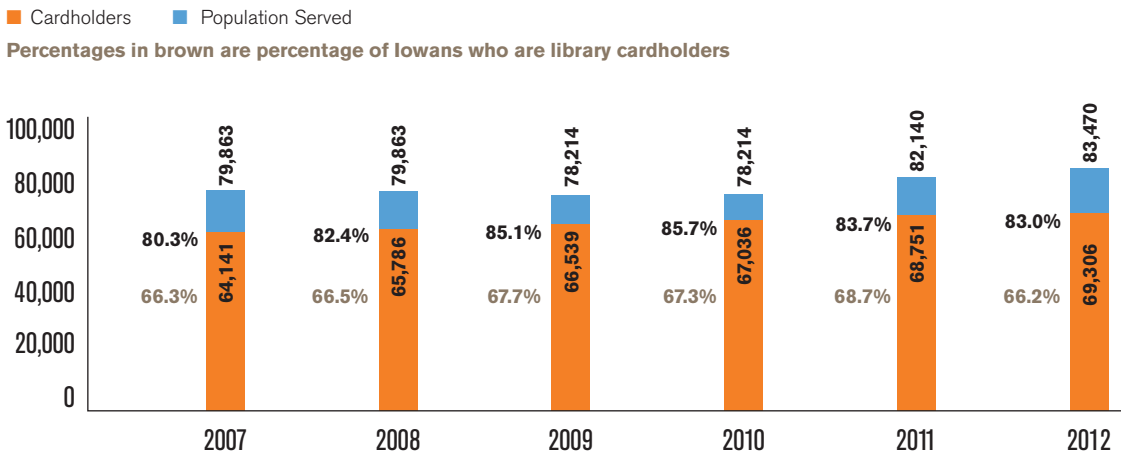
The Iowa City Public Library serves Iowa City, Rural Johnson County, University Heights, and Hills–a total population of over 90,000 people. Library cardholders have grown by nearly 5,000 users since 2007, as ICPL now has nearly 70,000 active library cards.

Libraries are an essential community service, and the Iowa City Public Library is no exception, serving as a major force within the community to assure equal access that transcends socioeconomic status. The mission of the Iowa City Public Library is to serve as, "an innovative and responsive community center that supports lifelong learning, literacy, and access to the world of ideas." The Iowa City Public Library is centrally located on the downtown Pedestrian Plaza, easily accessible from all areas of the City and conveniently located near the downtown Transit interchange. This accessibility, and a collection of nearly 250,000 materials (including books, magazines, eBooks, and eMagazines), draws over 760,000 people through the doors of the Library each year. With over 1.6 million annual circulations of library materials, Iowa City Public Library is the busiest library building in the state of Iowa.

The Iowa City Public Library serves as a community center, hosting over 2,100 meetings each year in its five public meeting rooms with nearly 27,000 people attending these meetings. The Library offers free WIFI service throughout the Library and on the City's Pedestrian Plaza, with nearly 100,000 unique connections each year. The Library has nearly 50 public internet computers and registers over 113,000 computer sessions each year as well as providing traditional reference service, answering more than 76,000 questions annually.

The Iowa City Public Library offers unique collections, including the Local Music Project (music.icpl.org) licensing music from local musicians and offering their music for free download via the ICPL website. The circulating Art-to-Go collection enables checkout of visual artwork of local artists while a new service of loaning Kindle readers with pre-loaded eBooks offers immediate access to eBooks without the necessity of Internet access. The Library strives to continually improve and meet the needs and expectations of patrons by expanding collections, programs and services to better serve the community. This dedication is readily apparent in the increasing number of active cardholders who benefit from all the Library has to offer.

IOWA CITY PUBLIC LIBRARY CARDHOLDERS

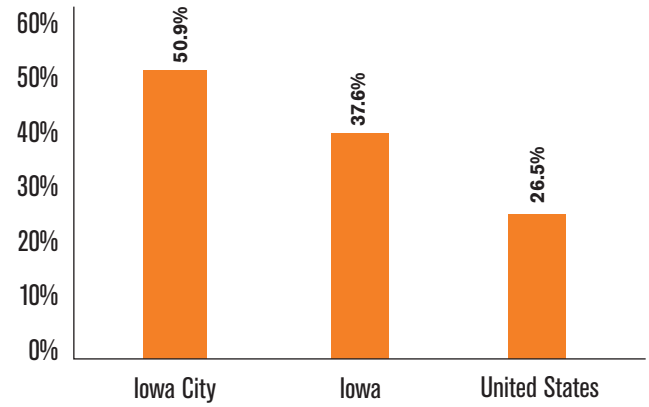


Source: Annual Reports, Iowa City Public Library

The percentage of residents who volunteer is significantly higher than both the state and national averages, with more than half of residents having volunteered during the 2007–2010 period. Iowa City ranks third in the country for volunteering for cities of similar size.

Volunteering builds connections, skills, and experiences, while instilling positivity, passion, and focus. Volunteers reflect their sense of community by helping others and sharing their experiences. The majority of Iowa City's residents have volunteered, indicating a strong belief in giving back, helping others, and working for the common good. The flood of 2008 also drew out thousands of volunteers and helped pull the community together to reduce the flood impact. Iowa City's student population is also frequently encouraged to volunteer to gain experience in various fields as well as connect with peers and potential employers. These programs draw volunteers further into the community, establishing new connections to their world and providing valuable opportunities that benefit everyone involved.

VOLUNTEER RATE (2007–2010)



Source: Volunteering in America

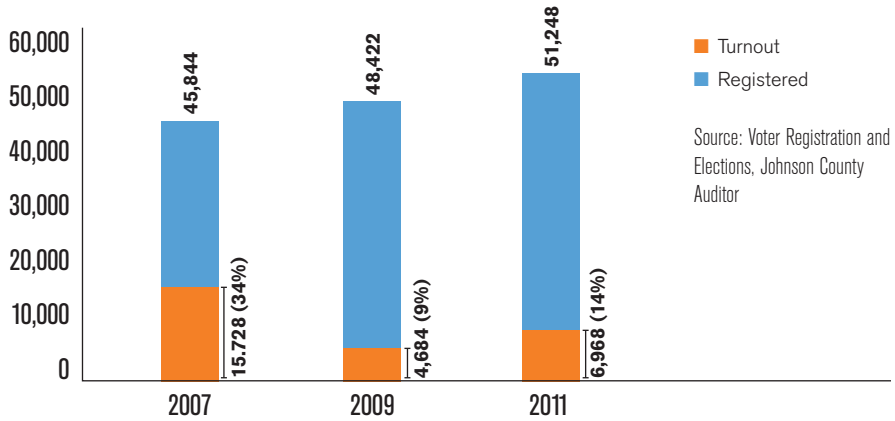
Iowa City has 43 local historic landmark properties, of which 34 are individually listed on the national Register of Historic Places. Iowa City also has eight Historic Districts and four Conservation Districts. All eight Historic Districts are listed on the National Register.

"The National Register of Historic Places is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect America's historic and archaeological resources" (National Register of Historic Places Program). Historic places serve as cultural artifacts and preserve the historic character of the ever-changing districts and neighborhoods comprising the community. Iowa City adopted the Historic Preservation Plan in 1992, setting immediate goals and a work plan to guide future historic preservation to be undertaken by the City and its citizens. The Plan was updated in 2008 to assess progress and reevaluate goals and strategies to protect historic places. This update reflects the City's long-term, continued effort to preserve historic places and maintain the culture that draws so many people to Iowa City.

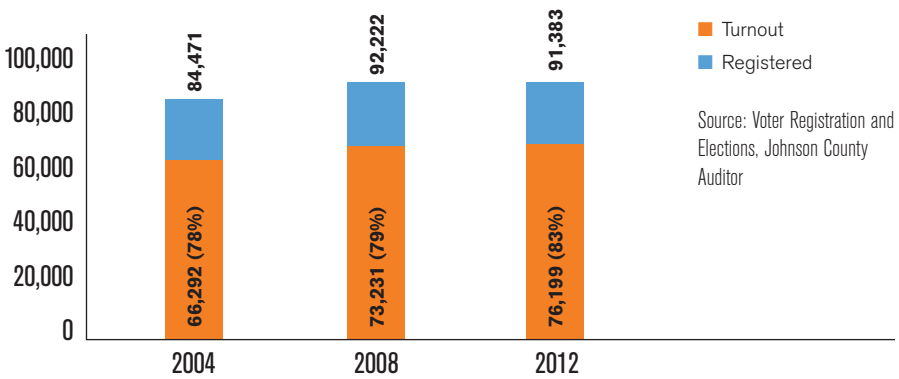
While more than 70% of Iowa City's residents are registered to vote, the overall turnout in recent city elections has declined significantly and represents a small percentage of the city's population.

Voting is an essential element to our democracy that allows residents to select policies, actions, and candidates for office; communities become defined through the actions of voters, and the inaction of non-voters, alike. Voters reflect their ideals and provide more opportunities for the candidates or positions they support, while non-voters opt out of the political system and sacrifice their chance to influence policies—this in turn creates a smaller field of opportunities due to the lack of voiced perspectives and concerns. In Iowa City, as with many other cities, counties, and states across the nation, voter pools are so small that the majority of the population is influenced by the selections of a small subset. It is worth noting that in the 2004, 2008, and 2012 presidential elections, Johnson County's voter turnout was roughly 80% of registered voters—however, participation in local elections is important for aligning city goals with community interests. In order to build a more sustainable city with open communication, common goals, and cooperative partnerships, voter turnouts in city elections must increase to more accurately represent the community and facilitate greater public input.

CITY ELECTION VOTING STATISTICS



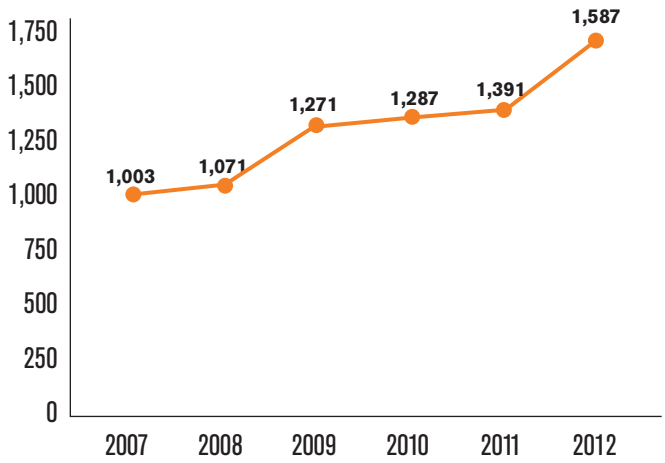
PRESIDENTIAL ELECTION VOTING STATISTICS



The mission of the Iowa City/Johnson County Senior Center is to promote optimal aging among adults 50+ years of age by offering programs and services that promote wellness, social interaction, community engagement, and intellectual growth. The Center serves the public through intergenerational programming and community outreach.

The Center offers programs, classes and services to the 50+ year-old members of our community. The Center also offers intergenerational programs and services. For instance, annually over 500 volunteers of all ages assist in class instruction, club and activity groups, counseling, supervising evening and weekend activities, video production, program planning, community outreach, communication, fundraising, and more. Classes at the Senior Center cover a range of topics, including art, current events, dance, environment, fitness, literature, languages, history, philosophy, religion, photography, science, technology, and wellness. Free professional services such as legal, health insurance, and mental health counseling, and income tax preparation are available. Regularly updated goals ensure the expansion of programs and opportunities at the Senior Center are current and in sync with community needs and interests.

IOWA CITY/JOHNSON COUNTY SENIOR CENTER MEMBERSHIP



Source: Iowa City/Johnson County Senior Center

PROGRAM GUIDE STATISTICS

	2007	2008	2009	2010	2011
Programs*	493	657	518	509	520

*Includes unique classes, events, special programs/performances, free professional services, groups, clubs, and performance groups.

Source: Iowa City/Johnson County Senior Center

Throughout the year, Iowa City features festivals that engage residents and visitors in the local arts community.

One Book Two Book (January)	www.onebooktwobook.org
University of Iowa Celebrating Cultural Diversity Festival (February/March)	ccdfestival.uiowa.edu
Mission Creek Festival (March/April)	www.missionfreak.com
Riverfest (April)	riverfest.uiowa.edu
Irving B. Weber Day (May)	www.icpl.org/weber
Friday and Saturday Night Concert Series (May–September)	www.summerofthearts.org/festival-menu/concert-series/about.aspx
Iowa City Farmer's Market (May–October)	www.icgov.org/?id=1108
Iowa Arts Festival (June)	www.summerofthearts.org/festival-menu/arts-festival/about.aspx
Riverside Theatre Summer in the Park (June/July)	www.riversidetheatre.org
Iowa City Jazz Festival (June/July)	www.summerofthearts.org/festival-menu/jazz-festival/about.aspx
Free Movie Series (June–August)	www.summerofthearts.org/festival-menu/movie-series/about.aspx
Iowa City Book Festival (July)	www.iowacitybookfestival.org
Johnson County Fair (July)	www.johnsoncofair.com/index.html
Iowa Soul Festival (September)	www.summerofthearts.org
Landlocked Film Festival (October)	landlockedfilmfestival.org
Oktoberfest (October)	www.northsideoktoberfest.com/index.php

SUSTAINABILITY ASSESSMENT

THE UNIVERSITY OF IOWA

The University of Iowa is an integral part of the Iowa City area. The University brings in over 30,000 students a year and employs over 27,000 people, including the University of Iowa Hospitals and Clinics. In 2009, the University of Iowa commissioned an economic impact report that determined the UI annually generates $6 billion for the Iowa economy. Visitors to the UI contribute $208 million to the economy each year. As a major research institution, government and industry funding for these efforts alone contribute an economic income of $963 million. Overall, the University of Iowa supports $1 out of every $30 in the Iowa economy. With such economic and social activity, the University of Iowa is an important and crucial entity to consider when assessing the overall sustainability of the City of Iowa City. In order to accomplish this, it is necessary to explore the University's commitment to sustainability through its academics and curriculum, social involvement, and campus-wide initiatives and programs (Economic Impact Report, University of Iowa, 2010).

With the establishment of the UI Office of Sustainability in 2008 and an increased campus-wide commitment to sustainability, a new vision for sustainability was created which became the University of Iowa 2020 Vision. In October 2010, President Sally Mason announced the University of Iowa's ambitious sustainability goals to be achieved by the end of the decade. As noted in the UI 2020 Vision, "It is the product of planning and initiatives undertaken by hundreds of people, including faculty, staff and students, as well as UI administrators. It sets out plans that have been adopted to pursue and expand sustainability efforts in several key areas of operations, research, education, and outreach. …The 2020 Vision does not capture all that is being done, nor is it intended to preclude the development of new initiatives and new plans. To the contrary, by stating these medium-term goals clearly and forthrightly, we aim to set a floor, not a ceiling, on institutional efforts toward sustainability." The 7 goals are outlined verbatim below. President Mason and EPA Region Seven Administrator, Karl Brooks, commemorated the adoption of the 2020 Sustainability Targets by jointly signing the EPA Sustainability Partnership Program Agreement on Friday, Oct. 29, 2010.

1.
Achieve Net-Negative Energy Growth

The UI will employ energy conservation efforts, build LEED facilities, modernize aged building systems, and nurture a culture of conservation to reach the goal of consuming less energy on campus in 2020 than in 2010, despite projected growth. Strategies to be pursued over the course of the decade:

- The UI will continue to update building design standards to lower the impact of growth.
- The UI will continue to pursue aggressive energy conservation opportunities.
- Campus divisions and departments will be incentivized to conserve energy.
- Building HVAC systems will be upgraded employing more energy efficient designs.
- Commissioning and retro-commissioning efforts will become standard practices.
- A branded energy conservation marketing effort will be developed and implemented.

University Programs

To address energy conservation and sustainability in new construction, the Iowa Board of Regents Sustainability Initiative (adopted April 2009: http://www.vpaf.uni.edu/energy/docs/CampusSustainabilityBORInitiativePartII.pdf) requires all major projects (new buildings and major capital renovations) initiated after April 1, 2009 shall meet or exceed the U.S. Green Building Council's guidelines for silver level LEED certification.

As of April 2013, University of Iowa LEED projects of note include:

- Beckwith Boathouse, LEED Gold, 1st LEED project on campus
- Sports Medicine Clinic, LEED Gold, 1st healthcare project in the state
- State Hygienic Laboratory, LEED Gold
- Stuit Hall Renovation (formerly Old Music Building), LEED Gold, 1st LEED renovation on campus
- Information Technology Facility, LEED Platinum
- Dental Science Building Addition, LEED Gold
- College of Public Health Building, LEED Platinum

The UI adopted a Conservation and Energy Management Plan in 2007. The plan provides guidelines for meeting future energy demand and a framework for the internal energy conservation fund. The University of Iowa also adopted sustainable construction standards which have been incorporated into the overall campus design standards. These standards include a minimum requirement of LEED Silver for new construction and major renovation, the requirement to give preference to design professionals with LEED certification experience, the requirement for new building and major capital renovation projects that alter mechanical and electrical systems to exceed the current American Society of Heating, Refrigerating & Air Conditioning Engineers (ASHRAE) 90.1 and to incorporate the latest energy efficient lighting design guidelines. The University of Iowa Facilities Management incorporates a "total cost of ownership" approach in the selection of project equipment and materials. This approach includes a lifecycle cost analysis and the application of the triple bottom line and sustainability principles.

New tools in energy conservation include the Energy Control Center and building dashboards. The Energy Control Center serves as a centralized location for the monitoring, analysis, and efficient dispatching of utility systems. Live displays of energy use (building dashboards) for all of the buildings connected to the main campus utilities systems (steam, electric, chilled water) are monitored and evaluated by energy engineers. The building dashboards display of real-time energy consumption to help building occupants track energy usage and provide immediate feedback on their energy conservation efforts.

2. Green Energy Portfolio

The UI will pursue a renewable energy supply strategy that optimizes long-term supply and fuel price stability while preserving an ability to test and take advantage of other potential fuels. As the UI transitions from dependency on fossil fuels, it will increase the use of biomass, geothermal, solar, wind, landfill gas, gasification, and other emerging energy alternatives to achieve the goal of 40 percent renewable energy consumption on the campus by 2020.

University Programs

In 2012, EPA's Green Power Partnership (GPP) recognized the University of Iowa as number 17 on its Top 20 On-site Generation list for its generation and use of renewable electricity. EPA's Green Power Partnership works with a variety of organizations, including Fortune 500 companies, agencies at all levels of government, and a growing number of colleges, universities, and schools, to promote the use of green power. EPA defines green power as electricity produced from solar, wind, geothermal, biogas, biomass, and low-impact small hydroelectric sources.

The University of Iowa is recognized for for using biomass (oat hulls) to displace coal in one of its two solid fuel boilers, which significantly reduces its greenhouse gas emissions. The university's Main Power Plant cogenerates nearly nine million kilowatt-hours of electricity from biomass-produced steam, which represents more than three percent of the main campus's annual electric power consumption.

Beginning in December 2010, The Office of Sustainability formed and engaged a biomass partnership project. The purpose of this partnership has been to bring together and consult with a diverse group of experts in agronomy and agriculture, forestry and forest products, equipment manufacturers, fuel suppliers, environmental regulations, and policy areas associated with using biomass as fuel. Members have been drawn from Iowa Department of Natural Resources director's office as well the department's forestry and geographic information systems departments, US Fish and Wildlife Service, US Department of Agriculture, Natural Resources Conservation Service, Amana Forestry, John Deere, River Trading Company, Iowa State University, Leopold Center for Sustainable Agriculture, and The University of Northern Iowa. Efforts to locate and develop sources of renewable solid fuel are focused within a 50-mile radius of Iowa City by identifying areas to grow dedicated energy crops (e.g. miscanthus, prairie and switch grass) and short rotation woody biomass crops (e.g. poplar, cottonwood, aspen trees), perform timber stand improvement, use opportunity fuels (e.g. storm damaged trees, emerald ash borer killed trees), use biomass produced from environmental management on public lands (reed canary grass harvest), and locate and evaluate suitable industrial byproducts and coproducts (e.g. clean wood waste, lignin). Defining the fuel-shed within a 50-mile radius of Iowa City limits the distance in which biomass and other fuels will be transported; it also defines where the positive economic impact of local fuel procurement will occur.

3. Decrease Our Production of Waste

The UI will foster a culture oriented to reducing waste, increasing recycling, facilitating composting of organic waste, and enhancing green purchasing practices to achieve a goal of a 60 percent waste diversion by 2020.

Sampling of strategies to be pursued over the course of the decade:

- A comprehensive recycling program will be developed and initiated.
- The UI will modify its buildings to facilitate recycling.
- A branded marketing effort will be developed and implemented.
- Green purchasing practices, designed to reduce waste, will be implemented.
- Waste minimization practices will be incentivized and facilitated at departmental levels.
- Campus food service and composting operations will be retooled to minimize and capture food waste.

Single-Stream

To increase recycling, the UI implemented a single-stream recycling system in September, 2011. The single-stream system, also known as "sort-free", allows all acceptable recyclables to be collected in a single bin instead of being sorted in different containers. The new system accepts newspaper, office paper, cardboard, lab plastics, nonredeemable drink containers, plastics, tin, aluminum, and most food containers. Glass, Styrofoam, plastic bags and food are not accepted in the recycling program.

Regular waste audits are conducted across campus. Waste audits are a key tool to discovering opportunities for reduction, reuse and recycling. The audits provide students, faculty and staff with the opportunity to examine the actual composition of their waste stream and review baseline data for planning future reduction efforts.

Changes in Hillcrest and UI Hospitals and Clinics

While campus pre-consumer food waste has been collected for composting for several years, in 2012 the UI started a new post-consumer food waste program. A new food pulper and dish machine were installed in Hillcrest Market Place, located in Hillcrest Hall. The pulper collects post-consumer food waste from plate scrapings. Both the pulper and the dish machine recycle water. Roughly 2,800 pounds of food waste are diverted each week to composting. Water savings exceed 3,000 gallons a day. The use of cleaning chemicals has been reduced significantly. The Hillcrest Market Place also implemented trayless food service, which has resulted in approximately $100,000 in savings in institutional food orders.

In 2013, the UI Hospitals and Clinics implemented changes in food service to reduce waste at the source, capture more post-consumer food waste and eliminate non-recyclable plastics. A switch was made from plastic utensils and Styrofoam containers to compostable materials. Post-consumer food waste collection was initiated in the dining areas. Both food waste and compostable utensils and containers are now collected and pulped for composting. Changes in food service include moving to smaller batch-style preparations. Food that was prepared but not served and that meets the UIHC's strict food handling requirements is donated to Table to Table.

Student-Run Composting

Local student composting efforts are managed by the University of Iowa Environmental Coalition's Green Consulting committee. The group volunteers 10–12 hours a week, making bi-weekly stops at local establishments that collect food waste for composting. The students collect the food waste and compost it at the University Student Garden. The finished compost is used as a soil amendment at the garden. The produce from the garden is sold to University Housing Residential Dining. The proceeds from the sale of the produce directly support the Student Garden.

Hydration Stations

In 2011, Elkay Filling Stations were installed in the UI Residence Halls to support reusable bottle use. The stations are automated machines that dispense chilled, filtered water directly into a reusable bottle. Each machine has a display that tracks the number of single-use bottles that have been avoided. In Spring 2012, in conjunction with the Office of Sustainability and the UI Student Government, UI Facilities Management outfitted the Iowa Memorial Union with one station and retrofitted the remaining fountains with goose-neck bottle fillers. Elkay Filling Stations are now being added into new and/or high-traffic buildings. Future waste audits may uncover the impact of these stations on student behavior through reduced plastic bottle waste. (Kelsey Zlevor, Sustainability Initiatives Advocate, UI Student Government).

Paper Reduction and Electronic Solutions

Paper is probably the most common purchase for most colleges and universities. Iowa universities are required to purchase paper with at least 30 percent post-consumer recycled paper content. All office paper ordered at the UI is 30 percent post consumer or higher content, with the exception of specialty papers ordered upon request where recycled content may vary. All purchased rough papers (paper towels, toilet paper) are 100 percent recycled content.

The amount of copy paper purchased at the UI over the past several years has been declining, due to paper conservation measures and efforts to reduce waste at the source. Since FY2005, total copy paper purchased has dropped 57 percent. UI has incorporated electronic solutions in virtually all business areas. These e-solutions include solicitations for goods and services, e-printing of most admissions-related items (including the University catalog, now only available online), payroll and travel items, and other administrative notifications.

- About 98 percent of all admissions applications are now received online.
- Employees have a paperless option for most notifications, including tax forms.
- UI's Workflow System for business transactions and employee self-service products are 100 percent paperless.

Move-out and Surplus Materials

Move-out collections have been held on campus each spring for the past several years. The event started as a student group project for a sustainability class and benefits Goodwill, Habitat Restore and the Crisis Center. The drive is organized by the UI Environmental Coalition, ECO Hawk, UI Housing, Office of Sustainability, Goodwill of the Heartland, Crisis Center, City of Iowa City and Habitat Restore. Housewares, furniture, clothing and other items are collected and donated, diverting several tons of material from landfilling each year.

4. Reduce the Carbon Impact of Transportation

The UI will seek ways to reduce the vehicle miles traveled by single occupant vehicles, employ increasingly efficient fuels and technologies, improve the greenhouse gas efficiency of vehicles operated by employees and students, and seek net reductions and/or offsets in University-related air travel with the goal of achieving, by 2020, a 10% reduction in per capita emissions of fossil fuel-produced CO^2 from University-related transportation and travel.

Sampling of Strategies to be pursued over the course of the decade:

- Carbon-efficient fuels and technologies will be increasingly employed.
- The UI will implement vehicle management practices for passenger and freight systems to improve the greenhouse gas efficiency of vehicles.
- Demand management programs will be expanded to reduce the vehicle miles traveled by single occupant vehicles used for commuting or intra-campus transportation.
- The UI will investigate a local offset program to address the greenhouse gas impacts of University-related air travel.

Because of the new addition to its maintenance facility which provides much more protection from weather, the biodiesel used in diesel fuel for Cambus (37 transit buses) rose from the 1–5 percent ratio that has been in use since FY2004, to 20 percent (B-20 formulation) in FY2011. The installation of newer engines that support the use of B-20 in their warranties, and the recent ability to store the fleet indoors (lower temperatures can gel higher ratios of biodiesel) allows the use of the higher ratio. In addition, idling times for buses have been significantly reduced (down from 45 minutes to ten minutes) due to new air lines that allow for quick pressurization of pneumatic systems.

The biodiesel ratio used in all other (non-Cambus) UI-owned transportation and non-transportation diesel engines rose from the 1–5 percent ratio to a 10 percent ratio (B–10) in FY2011. The number of alternative-fueled vehicles on the campus has been increasing. Currently, 52.4 percent of the vehicles managed by Fleet Services are E-85, hybrid or fully electric vehicles (285 out of 544 vehicles).

The discounted bus pass program supported through UI Parking and Transportation averages 1,600 employee and 2,100 student participants. The passes provide unlimited rides on Iowa City or Coralville Transit.

Van and Car Pools/Biking

The UI van pool program operates over 60 vans supporting close to 700 riders. At 70 percent occupancy levels for daily ridership, the operation of the van pool program reduces vehicle miles traveled by over nine million miles annually, reducing potential carbon dioxide emissions by approximately 3,200 metric tonnes.

Car- and van-pooling are encouraged and supported through Parking and Transportation. Bicycling on campus is supported by the installation and upgrading of bicycle parking spaces.

Most UI students (and faculty and staff) live off-campus and biking is an affordable and easy means of transportation around the campus and Iowa City. University officials coordinated in the update of the metro bike plan (http://www.jccog.org/documents/bikePlan.pdf) to enhance biking opportunities and safety around town.

To develop a stronger strategy to support bicycling on campus, in 2012 the UI developed a Bicycling Advisory Committee and applied for Bike Friendly Campus status. The UI received an "Honorable Mention. " With feedback from the League of American Cyclists, the Bicycling Advisory Committee will continue to work to develop biking resources on campus.

Video Conferencing

The use of videoconferencing is increasing as faculty and staff realize it is an effective means of communication and a time- and travel-saving tool. Real-time collaboration involves several kinds of synchronous communication tools such as: instant messaging, group chat, whiteboard collaboration, application sharing, desktop sharing, co-browsing, voice-over IP, and video and audio conferencing.

5. Increase Student Opportunities to Learn and Practice Principles of Sustainability

The UI will provide students with educational opportunities that elevate their knowledge of and problem-solving skills in environmental, social, and economic sustainability. These opportunities will include career-related certificate and/degree programs, internships, and sustainability-related research experiences. Sustainable practices will be incorporated into student campus activities, living and learning centers, food service, and health and wellness. A student sustainability activity fund will be created to support these efforts. To build leadership for a sustainable world, interdisciplinary internships for students will be increased. To promote the understanding of sustainability principles through the study of natural systems, the UI will enhance natural history activities and sustainability programming.

Curriculum

With the University-wide sustainability commitment, the education programs have also seen some changes in order to honor the University's goals. The University developed an Environmental Science major through the College of Liberal Arts and Sciences in 2004 that grants either a bachelor of arts or bachelor of science in Environmental Science. The B.S. program involves core classes, and then requires students to select a track to in biosciences, hydrosciences, geosciences, or chemical sciences. The B.A. program involves the same core courses, but students instead take one class from three of the four tracks. In 2004, the program had 89 students enrolled in the major, and 4 students enrolled in the minor. In spring of 2012, there were 160 students enrolled in the major, and 43 enrolled in the minor. These numbers indicate an increased interest through the years, which also spurred the development of the undergraduate Sustainability Certificate program (Art Bettis, University of Iowa Environmental Sciences Program Coordinator).

The University has many certificate programs, but the Sustainability Certificate (Fall 2009) has quickly become one of the more popular certificate programs. The program is open to all majors, requires a minimum 2.00 grade point average, and is a 24 credit hour program. It requires three core courses: Intro to Sustainability, Contemporary Environmental Issues, and Intro to Environmental Science, and four elective courses offered in "breadth" areas and a project course. Frank Yoder, academic advisor for the certificate program, stated that the certificate program had 35 students enrolled in 2009, and those numbers have roughly doubled each year. Last spring, 140 students were enrolled, and in the spring of 2012, over 30 students graduated with the certificate. Yoder and other colleagues anticipate continuing high enrollment in the coming years (Frank Yoder, Academic Advisor).

Student Organizations

The University of Iowa also provides opportunities to pursue environmental awareness and sustainability outside of the classroom, with many student organizations that either have ties or are solely dedicated to greening the University.

- Engineers for a Sustainable World–Open to all majors, increasing education about and promoting implementation of more sustainable infrastructure.
- University of Iowa Environmental Coalition–Promoting activism and enjoyment of the natural world and resources.
- Eco Hawk–"Easy Change Overall," pursuing sustainable solutions through a public-health lens, increasing waste reduction and recycling.
- Take Back the Tap–Promoting the safety and necessity of tap water in order to reduce plastic waste and the purchase of bottled water.
- University of Iowa Sierra Student Coalition–The UI chapter of a broad national network, working towards energy efficiency, renewable energy, and conservation through activism and campaign organization.
- UI Global Health Club – This network of students, faculty, staff, and community members focuses on issues pertaining to global health.
- College of Dentistry Go Green–Graduate and professional students and faculty promoting a sustainable workplace in the medical realm.
- UI Gardeners–Promoting local foods and the art and techniques of gardening.
- Simply Food–Education and raising awareness about local foods, as well as choosing organic foods.
- Engineers Without Borders–Using principles of infrastructure and design in order to innovate new ways of achieving basic human needs in less-fortunate areas.
- UI Physicians for Social Responsibility–Provides medical perspective on nuclear arms reduction, safe energy, environment and health, and social justice to benefit humanity and preserve the world's resources.
- University of Iowa Student Government–Oversees a broad spectrum of student issues, has a sustainability branch that works to increase opportunities and resources for students to practice sustainability in daily college-life.

UI Student Garden

Launched four years ago by student volunteers, the UI Student Garden serves as a resource for students to learn basic gardening skills and environmental processes such as composting. The UI Student Garden supplies produce to the Iowa Memorial Union catering services and University Housing Residential Dining. Additional produce is donated to the Johnson County Crisis Center. The garden is located on a one-third acre plot on the west side of the UI campus. Harvests are conducted bi-weekly in peak growing months and once a week during the fall and winter. During the 2012 growing season, the garden produced 200 heads of garlic, 350 pounds of zucchini, 20 heads of cabbage, 100 pounds of carrots, 60 pounds of beets, 100 pounds of cucumber, 30 heads of broccoli, and 150 pounds of potatoes. Depending on the season, the garden also produces tomatoes, radishes, watermelon, and salad greens.

6. Support and Grow Interdisciplinary Research in Sustainability-focused and Related Areas

The UI will pursue international prominence in water sustainability education and research by supporting interdisciplinary research, teaching, and service on issues of water availability, water quality, the economic and health impacts of floods, flood control, water conservation, rural economic development, and the linkages between emerging water resource issues and global climate change. The UI will work to increase awareness in Iowa about the shared value of Iowa's water resources and the impacts of land use in river watersheds. The water resource principles developed through sustainability research programs will be adapted where applicable to the UI campus and its operations.

Research conducted by both staff and students allows the entire campus community to get involved with building sustainability. The Center for Global and Regional Environmental Research (CGRER) is a state-funded institute devoted to studying and bettering our environment. Areas of focus include regional effects on natural ecosystems, environments, and resources, and effects on human health, culture, and social systems. To accomplish its missions, CGRER awards seed grants, fosters interdisciplinary courses, provides state-of-the-art research facilities, and holds seminars and symposia. Through these activities, CGRER assists Iowa's agencies, industries, politicians, and citizens as they prepare for accelerated environmental change.

IIHR—Hydroscience & Engineering is a unit of the University of Iowa's College of Engineering whose students, faculty members, and research engineers work together to understand and manage one of the world's greatest resources—water. Students from around the world benefit from IIHR's comprehensive multidisciplinary approach, which includes basic fluid mechanics, laboratory experimentation, and computational approaches.

To better address the problems and challenges faced by small towns in Iowa and the Midwest, the School of Urban and Regional Planning at the University of Iowa launched the Iowa Initiative for Sustainable Communities (IISC) in 2009. IISC's purpose is to enhance the capacity of towns, cities, and counties in Iowa, as well as elsewhere in the Midwest, to better become sustainable communities. More specifically, sustainability entails efforts to protect and preserve the environment, while both encouraging economic prosperity and the equitable distribution of economic and social opportunity.

The UI College of Engineering has a strong emphasis in wind energy research and collaboration. The University of Iowa College of Engineering and Iowa Lakes Community College of Estherville, Iowa, have an agreement that allows some Iowa Lakes students to transfer to either the UI Department of Electrical and Computer Engineering or the UI Department of Mechanical Engineering. The transfer program is designed specifically for students enrolled in the Iowa Lakes Wind Energy and Turbine Technology Associate in Applied Science program. The agreement was made possible in large part by Iowa Lakes' nationally recognized wind technology program, the UI's leadership role in wind technology in the state of Iowa, and the dramatic increase of wind power production and generation facilities in Iowa by private industry. The UI College of Engineering now offers a certificate in wind energy.

Rain Gardens and Bioswales/ Alternative Storm Water Management

The use of alternative storm water management methods on the campus is increasing. Rain gardens are structures designed to accept precipitation run-off from impervious surfaces, such as roofs and paved surfaces. Not only do these gardens help increase the beauty of the physical environment, they have a practical use as well. Rain gardens help filter runoff and recharge groundwater, thus improving water quality. The rain water or snow melt is redirected to a vegetated area and allowed to seep into the ground, rather than running off, carrying pollutants and causing erosion. The UI Chapter of Engineers for a Sustainable World has been instrumental in the installation of several rain gardens on campus in the past several years. The students have worked with the Johnson County Soil and Water Conservation office and the urban conservationist to design the gardens. In coordination with UI Facilities Management, the students installed gardens at the Kuhl House (home of University of Iowa Press), Shambaugh House, the Dey House (home of the Iowa Writer's Workshop), and the Law Admissions building. There are also rain gardens at the Beckwith Boat House and the Information Technology Facililty.

Alternative storm water management systems are being included in new building construction on campus; a prime example is the use of rain garden principles in the design of the landscape that surrounds the new College of Public Health building, designated LEED Platinum. The new building features a sustainable site design that includes rains gardens, a natural tall-grass prairie, the use of no-mow lawns and other native landscaping. The new State Hygienic Laboratory hosts a natural prairie landscape, as well. The renovation of Stuit Hall included the installation (in 2010) of a new rain garden on the east side of the building.

Tree Campus USA

The University of Iowa was proud to become the first Tree Campus USA designated in Iowa in 2009 and has maintained its designation since. UI Facilities Management staff organize spring tree plantings and other activities across campus which give students an opportunity to get involved.

Eco-friendly Deicer

Facilities Management staff use a product called Pro-Melt, an eco-friendly deicer that combines salt with a byproduct from sugar beet processing. The sugar additive remains active as a deicer at a lower temperature so overall, less deicer is used. The product has a tacky texture so it does not need to be mixed with sand. Some UI custodial staff report a decrease in the amount of sand tracked into buildings and reduced damage to tiles and carpets.

Reduction in Water Use

The treatment and use of water at the University of Iowa has reduced significantly in the past several years – by 11 percent from 2005. This is due to the elimination of single pass cooling in the main Power Plant, water recycling, and the installation of water-saving devices across campus.

7. Develop Partnerships to Advance Collaborative Initiatives, both Academic and Operational

The UI will continue to create and nurture partnerships with communities, businesses, government agencies and other educational institutions with the goal of understanding and meeting the ever-increasing need for environmental, social, and economic sustainability. In particular, the UI will work individually and collaboratively with Iowa businesses and community colleges to meet the demands of supporting the workforce and economic development needs of green industries in Iowa (2020 Vision—The University of Iowa's Sustainability Targets).

University and City of Iowa City Initiatives

Alcohol Harm Reduction

The city council of Iowa City acknowledged that underage drinking has a significant health impact on the health, safety and welfare of citizens. In 2010, they city council adopted an ordinance that prohibits those under the drinking age of 21 to enter establishments that serve alcohol after 10 p.m.

The UI Alcohol Harm Reduction effort, spear-headed by the UI Division of Student Life, is aimed at taking key actions that address high-risk drinking among college students. The Alcohol Harm Reduction Plan involves education, bystander interference, communication, and policy review.

Bongo

BONGO is a cross- promotional effort of the City of Iowa City, the City of Coralville and UI Parking and Transportation to increase public transit ridership. Bongo is a GPS- based, real-time passenger information system that allows riders to find current bus locations as well as predictions for upcoming bus arrivals for Iowa City, Coralville and the University of Iowa. The application is available on smart phones for individual use. Public kiosks are also placed in locations across campus, such as the Iowa Memorial Union, to assist passengers.

UniverCity Housing

A collaboration between the City of Iowa City and the University of Iowa, UniverCity Housing strives to achieve a healthy balance between rental and owner property throughout the city, as well as support safe and affordable housing that is within walking distance of the UI or downtown. This initiative serves to encourage investment in local neighborhoods, especially for business professionals working for the University. Iowa City recently secured a $1.25 million I-JOB grant to acquire and rehab 26 homes in designated areas to promote these concepts. The program is now in Phase 2.

Zipcar

The UI and the City of Iowa City jointly launched the Zipcar car sharing program in August 2012. This service supports a walking and biking lifestyle by offering affordable, accessible car rental by the hour. Ten high MPG vehicles are located on campus and in the downtown area.

Summary

In 2013, the University of Iowa received a STARS Gold Rating in recognition of its sustainability achievements from the Association for the Advancement of Sustainability in Higher Education (AASHE). STARS is a transparent, self-reporting framework for colleges and universities to measure their sustainability performance. STARS was developed by AASHE with broad participation from the higher education community. By requiring the public documentation of progress toward sustainability, STARS enables institutions to share best practices with other schools in the system (STARS, Association for the Advancement of Sustainability in Higher Education).

As both the City of Iowa City and the University of Iowa track and assess their sustainability measures, the entire community can work together to implement policies and practices that promote a more sustainable society.

RESOURCES AND CONTRIBUTORS

City of Iowa City

City of Iowa City — icgov.org

City Council, City of Iowa City — www.icgov.org/?id=1115

City Manager's Office, City of Iowa City — www.icgov.org/?id=1504

- **Tom Markus**, City Manager
- **Geoff Fruin**, Assistant to the City Manager
- **Adam Bentley**, Administrative Assistant

Public Works Department — www.icgov.org/?id=1810

- **Rick Fosse**, Director
- **Dave Elias**, Superintendent, Landfill and Wastewater Division
- **Brenda Nations**, Environmental Coordinator, Landfill Division
- **Kevin Cutsforth**, Sustainability Assessment Assistant, Landfill Division
- **Jennifer Jordan**, Recycling Coordinator, Landfill Division
- **Carol Sweeting**, Public Information/Volunteer Coordinator
- **Tom Hansen**, Superintendent, Equipment Division
- **Roger Overton**, Assistant Superintendent, Wastewater Division
- **Eric Tripp**, Energy Efficiency Intern, Landfill Division
- **Brooke Butler**, Scale House Operator, Landfill Division
- **Barb Meredith**, Senior Engineering Technician
- **Kay Irelan**, Graphic Technician, Engineering Division
- **Brian Boelk**, Senior Civil Engineer, Engineering Division

Planning and Community Development Department — www.icgov.org/?id=1340

- **Karen Howard**, Planner
- **Doug Ongie**, Associate Planner, Community Development Division
- **Wendy Ford**, Economic Development Coordinator
- **Sarah Walz**, Planner, Urban Planning Division
- **Tracy Hightshoe**, Planner
- **Cheryl Peterson**, Historic Preservationist
- **Marcia Bollinger**, Iowa City Neighborhood Services Coordinator, Neighborhood Services
- **Kristopher Ackerson**, MPOJC Assistant Transportation Planner

Parks & Recreation Department — www.icgov.org/?id=1082

- **Mike Moran**, Director
- **Tammy Neumann**, Administrative Secretary
- **Terry Robinson, Superintendent**, Parks & Forestry Division

Police Department www.icgov.org/?id=1318
Capt. Jim Steffen, Administrative Services Division Commander, Administrative Services Division

Housing & Inspection Services Department www.icgov.org/?id=1143
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Stan Laverman, Senior Housing Inspector, Housing Inspection Division

Senior Center www.icgov.org/?id=1215
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Kristin Kromray, Operations Assistant

Transportation Services www.icgov.org/?id=1515
Chris O'Brien, Director of Transportation Services, Transit Division

Iowa City Public Library www.icpl.org/
Susan Craig, Director, Iowa City Public Library
Elyse Miller, Administrative Services, Iowa City Public Library

Finance Department www.icgov.org/?id=1255
Kevin O'Malley, Director

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Liz Christiansen, Director, University of Iowa Office of Sustainability sustainability.uiowa.edu/

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Ferman Milster, Principal Engineer, Renewables sustainability.uiowa.edu/

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George McCrory, Communications Specialist, University of Iowa Office of Sustainability

Robert Lane, Administrative Services Coordinator, Facilities Management www.facilities.uiowa.edu/

General

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Gibbs, Brian, Key Account Manager, MidAmerican Energy — www.midamericanenergy.com/

Grimm, Jason, Food System Planner, Iowa Valley Resource and Conservation Development — www.ivrcd.org

Hayes, Sarah, Senior Director, Information Center, Iowa Hospital Association
www.ihaonline.org/imis15/ihaonline

Holland, Del, Director, Iowa City Bike Library — www.bikelibrary.com

Iowa City Area Chamber of Commerce — www.iowacityarea.com/

Iowa City Area Development Group — www.iowacityareadevelopment.com/

Iowa Cultural Corridor Alliance — www.culturalcorridor.org/

Iowa Department of Administrative Services — das.iowa.gov/

Iowa Department of Education — educateiowa.gov/

Iowa Department of Natural Resources — www.iowadnr.gov/

Iowa Department of Public Health — www.idph.state.ia.us/

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Johnson, Jessica, Executive Director, Iowa Cultural Corridor Alliance www.culturalcorridor.org/

Koepke, Scott, Education Outreach Coordinator, New Pioneer Food Co-op/Soilmates www.newpi.coop/

Metropolitan Planning Organization of Johnson County www.mpojc.org/

Mohr, Dave, Manager of Business Development, Eastern Iowa Light and Power Company www.easterniowa.com/

Moreland, Kate, Community Relations Coordinator, Iowa City Community School District www.edline.net/pages/ICCSD

Murley, Stephen, Superintendent of Schools, Iowa City Community School District www.edline.net/pages/ICCSD

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U.S. Environmental Protection Agency www.epa.gov/

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Volunteering in America www.volunteeringinamerica.gov/

Walk Score www.walkscore.com/

RESOURCES: SUSTAINABILITY INDICATORS INDEX

ECONOMIC AND COMMUNITY DESIGN: ECONOMIC PAGE 11

Unemployment Rate	●	Percent change in unemployment rate
Sector Diversity	●	Diversity of the economy
Poverty	●	Average household income (includes hidden economy of student population)
Gender Wage Gap	●	Female median wage as a percentage of male median wage
Bond Rating	●	Bond rating from Moody's Investor Service
Gross Domestic Product	●	Annual GDP growth rate
Local Purchases	U	Programs supporting local purchases and the local economy

ECONOMIC AND COMMUNITY DESIGN: COMMUNITY DESIGN AND TRANSPORTATION PAGE 19

Walkable Neighborhoods	●	Iowa City's walk score rating
Urban Density	U	Ratio of residents per acre
Access to Open Space	●	Percent of households within ½ mile of open space (including parks, schoolyards, and natural areas)
Public Transit Ridership	●	Number of public transit passenger trips per 1,000 residents
Vehicle Miles Traveled	●	Average vehicle miles traveled per capita
Safe Travel Network	●	Total number of traffic collisions, injuries and deaths

ENVIRONMENTAL AND RESOURCE MANAGEMENT: ENERGY PAGE 29

Building Standards	U	Number of commercial, industrial, and municipal buildings that meet LEED Standards
Renewable Energy Use	○	Amount of municipal energy use derived from renewable sources
Renewable Energy Use by Local Utility	●	Percentage of renewable energy on local utility grid
Community-wide CO_2e Emissions	○	Annual carbon dioxide equivalent emissions for the community in metric tonnes
CO_2e Emissions Per Capita	○	Annual carbon dioxide equivalent emissions per capita in metric tonnes
Municipal CO_2e Emissions	○	Annual carbon dioxide equivalent emissions for municipal operations

ENVIRONMENTAL AND RESOURCE MANAGEMENT: WATER — PAGE 37

Total Water Consumption	●	Total water consumption per capita, measured in gallons
Drinking Water Quality	●	Annual percent of drinking water quality testing meeting EPA standards
Gallons of Treated Municipal Water	U	Annual gallons of municipal water treated annually
Wastewater Quality	●	Annual percent of wastewater BOD, TSS, and Ammonia nitrogen meeting NPDES standards
Biosolids	●	Tons of Class A biosolids produced and land applied
Sanitary Sewer Overflows	●	Annual number of sanitary sewer overflows
Green Roofs	○	Number and area of green roofs
Urban Stream Bank Conditions	U	Percent of assessed urban stream miles with stable stream bank rating
Iowa River Water Quality	○	A section of the Iowa River within Iowa City is on DNR's Impaired Waters List
Local Stream Water	●	Average levels of nitrates and phosphorus under Level of Concern using IOWATER sampling methods
Floodplain Management	●	Recognized by F.E.M.A. as Class 8 CRS Community

ENVIRONMENTAL AND RESOURCE MANAGEMENT: WASTE REDUCTION — PAGE 44

Per capita Solid Waste	○	Per capita tons of solid waste sent to landfill
Household Hazardous Waste	●	Pounds of HHW received annually; number of customers annually
Recycling	○	Tonnage of recycled material
Multifamily Unit Recycling	○	Percent of multifamily units with on-site recycling
Composting	●	Productive use of compost

ENVIRONMENTAL AND RESOURCE MANAGEMENT: NATURAL ECOSYSTEM — PAGE 49

Forest Ecosystem	●	Total acres of municipal owned forest
Prairie Ecosystem	●	Total acres of municipal owned prairie
Wetland Ecosystem	●	Total acres of municipal owned wetland acres including City wetland mitigation projects
Tree Canopy/Street Tree Diversity	U	Percent coverage of trees within city limits; percentage of all street tree species

● = within or exceeding acceptable level
○ = below desired level
U = unclassified

SOCIAL: HOUSING

PAGE 55

Affordable Housing	U	Percent of population living in affordable housing
Age of Housing Stock	U	Percentage of houses built in each decade
Energy Assistance	U	Percentage of households applying for energy assistance in the form of LIHEAP
Tenure by Household Income	U	Number of owner- and renter-occupied housing units within various income ranges
Homelessness	U	Johnson County percentage of homeless population
Lead Exposure Testing/Poisoning Rate	●	Percent of children under 6 tested for lead poisoning; incidence of lead poisoning among tested children

SOCIAL: COMMUNITY WELLNESS

PAGE 63

Healthy Weight	●	Percentage of adults with a BMI below 30.
Healthy Diets	○	Percentage of residents who eat who eat adequate fruits and vegetables daily
Farmers Market Attendance	●	Annual estimated attendees at the City's Farmers Market
Community Gardens	U	Square footage of community and school gardens
EPA Air Quality Index	●	Number of days within acceptable limits and number of days in unacceptable limits, annually
Rate of Asthma Incidence	●	Number of asthma-related inpatient discharges from Iowa City hospitals
Particulate Matter	○	Average annual PM2.5 concentration
Radon	○	Percentage of radon-tested household above 4 pci/L

SOCIAL: ARTS AND CULTURE

PAGE 71

Local Arts	●	Primary Indicators of Local Arts Index
Library Card Holders	●	Percent of residents with Iowa City Public Library cards
Volunteerism	●	Percent of residents who volunteer
Historic Preservation	●	Number of buildings on the National Register of Historic Places
Voter Participation	○	Number of residents registered to vote; number of voters in local elections
Senior Center Membership/Programs	●	Total number of members and programs offered at the Iowa City/Johnson County Senior Center

● = within or exceeding acceptable level
○ = below desired level
U = unclassified

RESOURCES: **CITY ACCOLADES**

- #3 (mid-sized metros) in volunteer hours per resident, *Volunteer and Civic Life in America*, 2012
- One of America's Best Small Cities, *Money Magazine*, 2012
- 4th Best U.S. College Destination, American Institute for Economic Research, 2012
- City High and West High School named Best High Schools, *Newsweek*, 2012
- #1 in the state for "America's Favorite Farmers Markets," American Farmland Trust, 2010-2012
- #2 "Best Cities for Successful Aging" (small metros), Milken Institute, 2012
- Iowa City's Thornberry Dog Park named One of the Ten Best in America, Dogster Online Magazine, 2012
- Most Walkable City in Iowa, Walk Score, 2011
- #5 on the Top Ten Cities for Book Lovers list from Livability.com, 2011
- #8 on Best Performing Small Cities Index "Where America's Jobs are Created and Sustained," Milken Institute, 2011
- #13 on the Best Cities for Business and Careers (small cities) list, *Forbes*, 2011
- #10 Best City for Singles, Kiplinger, 2010
- One of the Top Towns for Jobs, MSN CareerBuilder, 2010
- Healthiest Town in the United States, *Men's Journal*, 2010
- #3 on the list of Gayest Cities in America, *The Advocate*, 2010
- Johnson County is among the top 25 counties in CNN/ *Money Magazine*'s Where the Jobs Are list, with over 22% growth in the past decade, 2010
- #10 on Best Cities for College Grads list, Richard Florida, 2010
- UNESCO City of Literature, 2008
- 10th Smartest City in the Nation, *Forbes*, 2008
- #8 Up and Coming Tech Cities, *Forbes*, 2008
- 2nd Best Small Metro Area for Business/Careers, *Forbes*, 2008
- The Iowa City Senior Center was the first in Iowa to become nationally accredited through the National Institute of Senior Centers, a unit of the National Council On Aging

CITY OF IOWA CITY

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THE UNIVERSITY OF IOWA

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