



PUBLIC INNOVATIONS & EFFICIENCIES (PIE) CHART

OFFICE OF AUDITOR OF STATE

STATE OF IOWA

State Capitol Building

Des Moines, Iowa 50319-0004

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This checklist serves as a framework to help State and local governments increase efficiency with taxpayer funds and communicate with the public about their efforts. The majority of the following recommendations are for all public entities, though some items may not apply to all public entities. If you would like to contribute an idea to this checklist (a "PIE recipe") or have feedback about this form, please submit your thoughts at www.auditor.iowa.gov/pie.

ENERGY EFFICIENCY

Estimated Cost Savings:

- Buildings consume approximately 40 percent of total energy use in the United States.¹
- In a recent study, the EPA found that buildings that were benchmarked consistently reduced energy use by an average of 2.4% per year, for a total savings of 7%.²

Points of Contact & Additional Resources

Energy Star®: [Free Technical Support](#)

Iowa B3 Public Buildings Benchmarking Program

- [About the Program](#) and [B3 Benchmarking](#)
- [B3 Benchmarking Registration Form](#)
- Adrienne Ricehill, Program Manager, B3 Benchmarking State Energy Office IEDA
Email: adreinne.ricehill@iowaeda.com

Jeremy Caron, Regional Energy Services Specialist- Iowa Association of Municipal Utilities

- Email: jcaron@iamu.org

Des Moines Public Schools [Energy Team](#) and [Energy Report Cards](#):

- Sarah Holland, Administrative Support Coordinator
Email: Sarah.Holland@dmschools.org

Category Savings Checklist

Benchmark and track utility usage across all facilities
<input type="checkbox"/> Use Iowa B3 Public Buildings Benchmarking ³
<input type="checkbox"/> Use the Energy Star® Portfolio Manager ⁴
Build an Energy Management Program
<input type="checkbox"/> Design and Implement Energy Programs via Office of Energy Efficiency & Renewable Energy ⁵
<input type="checkbox"/> Build an Energy Star® Energy Management Program ⁶
Designate a team or staff person responsible for energy management
After benchmarking, create an energy efficiency goal or target
Weekend/Off Day shutdown programs in place
Remove personal heaters and other appliances
Require use of pet warmer instead of space heater

¹ <https://ia.b3benchmarking.com/>

² https://www.energystar.gov/sites/default/files/buildings/tools/DataTrends_Savings_20121002.pdf

³ <https://ia.b3benchmarking.com/>

⁴ <https://www.energystar.gov/buildings/facility-owners-and-managers/existing-buildings/use-portfolio-manager>

⁵ <https://www.energy.gov/eere/slsc/design-and-implement-energy-programs>

⁶ <https://www.energystar.gov/buildings/facility-owners-and-managers/industrial-plants/build-energy-management-program>

LIGHTING	
Estimated Cost Savings:	
<ul style="list-style-type: none"> • LED bulbs use 75% less electricity than incandescent bulbs (Energy Star). • The City of Boston estimates that it cut its energy bill by \$2.8 million annually after converting 25,000 of its mercury vapor streetlights to LEDs. The City reports that LEDs last longer and which spares state employees from having to replace darkened street lights as often.⁷ 	
Category Savings Checklist	
<input type="checkbox"/>	Assess and implement a lighting upgrade ⁸
<input type="checkbox"/>	Lights are off in unoccupied rooms
<input type="checkbox"/>	Natural light is used where possible instead of artificial lighting
<input type="checkbox"/>	Window shades used to regulate light and block excess heat
<input type="checkbox"/>	Appropriate lighting levels are used
<input type="checkbox"/>	First 50% of installed bulbs are LED
<input type="checkbox"/>	An additional 25% of installed bulbs are LED (totaling 75%)
<input type="checkbox"/>	The Final 25% of installed bulbs are LED (totaling 100%)
<input type="checkbox"/>	Occupancy sensors (if present) set to short turn-off time
<input type="checkbox"/>	LED "Exit" signs installed
<input type="checkbox"/>	Replace neon window signs with LED signs
<input type="checkbox"/>	Light fixtures are regularly cleaned (to allow light through)

PAPER CONSUMPTION	
Estimated Cost Savings:	
<ul style="list-style-type: none"> • Public Sector agencies that have used the Digital Transformation Savings Calculator have discovered how much money they could save by going paperless. State and local agencies discovered potential savings of as much as \$41.6 million, while federal organizations discovered around \$24 million in potential savings.⁹ • The recent Adobe Digital Government Survey indicated that 62% of citizens would feel more positive toward government if online tools were improved.¹⁰ • Fewer sheets mailed may mean reduced postage. A single-sided 10 page letter costs about \$0.55 to mail; that same letter, copied onto both sides of the paper, uses only five sheets, and requires only \$0.33 in postage.¹¹ • By increasing double sided copying (duplexing), U.S. offices could reduce annual paper use by 20%. By using and discarding less paper, you are conserving resources, reducing water, and energy use.¹² • The Iowa Auditor of State in 2019 began saving an estimated \$11,000 per year by no longer printing, binding, and mailing its reports to its clients. It now sends PDFs instead, via email. 	
Category Savings Checklist	
<input type="checkbox"/>	Reduce printing by providing electronic PDFs where possible
<input type="checkbox"/>	Set duplex (two-sided) printing as the default for all printers
<input type="checkbox"/>	Transition into an electronic payroll and disbursement process
<input type="checkbox"/>	Create online access to employee tax documentation such as Employee W2s and Parent Childcare tax statements
<input type="checkbox"/>	Eliminate paper forms by using electronic tools such as PDF or Adobe Acrobat Standard DC
<input type="checkbox"/>	Replace copying and printing with scanning
<input type="checkbox"/>	Centralize printing and reduce the number of printers
<input type="checkbox"/>	

⁷ https://www1.eere.energy.gov/buildings/publications/pdfs/ssl/cooper_boston_pittsburgh2012.pdf

⁸ <https://www.althoffind.com/blog/how-to-plan-for-a-successful-facility-lighting-upgrade>

⁹ [Digital Transformation Savings Calculator](#)

¹⁰ [Adobe Digital Government Survey](#)

¹¹ <https://www.pca.state.mn.us/sites/default/files/w-hhw1-14.pdf>

¹² <https://www.pca.state.mn.us/sites/default/files/w-hhw1-14.pdf>

COMPUTERS, COPIERS, AND PRINTERS	
Estimated Cost Savings:	
<ul style="list-style-type: none"> Unused electronics can continue to draw power, even when turned off (this is called “vampire energy”). These devices can include: cell phones, laptops, tablet charges, small appliances, etc. By unplugging these devices, or plugging them into a power strip that can be turned off when not in use, you can save as much as 10% on your electric bill.¹³ The U.S. Department of Energy reports that 3 billion dollars are wasted every year on “vampire energy”. The U.S. Department of Energy reports that Energy Star® electronics can help reduce energy by 30%-60%. 	
Category Savings Checklist	
	ENERGY STAR® qualified computers, monitors, printers, and copiers in use
	Computers set to hibernate when not in use
	Computers turned off overnight (not just in sleep or screen saver mode) <i>*Note: be sure to check with your organization to prevent delays in software updates</i>
	Power save settings activated on computers
	Equipment plugged into power strips for easy disconnect from power source
	50% of electronic items are unplugged overnight
	Second 50% of electronic items are unplugged overnight

HEATING, VENTILATION, AND AIR CONDITIONING (HVA)	
Estimated Cost Savings:	
<ul style="list-style-type: none"> Window improvements can cut your lighting and HVAC costs by 10%-40%.¹ Save up to 10% each year on heating and cooling bills by turning back the thermostat 7°-10°F for 8 hours a day.¹ BAS typically saves 15% of the operating costs of the equipment. For most buildings this results in savings that range from \$0.20 to \$0.40 per square foot.¹ 	
Category Savings Checklist	
	Ventilation units are not blocked by books, papers, furniture, or other materials
	Windows & doors are closed when heating/cooling equipment is on <input type="checkbox"/> Examine for seal any air leaks in doors, walls, and roofs
	Windows & doors have weather stripping to avoid air leaks
	Windows are operable
	Thermostat is set to an appropriate temperature based on season, local weather conditions, humidity, and current occupancy
	Using a temperature setback policy <input type="checkbox"/> “Temperature setback policy” is a strategy to help save utility costs by setting up a default temperature in your room or building. This reduces how often your heating or cooling system operates. Experts recommend setting your thermostat between 65°-70°F for heating (during cooler months) and between 72°-78°F for cooling (during warmer months). As a result, setback temperatures automatically become effective when no specific temperature is programmed.
	Building Automation System (BAS) in place <input type="checkbox"/> Building Automation” is the automatic centralized control of a building’s heating, ventilation and air conditioning, lighting and other systems through a building management system or building automation system (BAS). BAS allows control over heating, ventilation, air and other systems which can help save energy and reduce costs.
	BAS trend logs are available
	Annual maintenance conducted on HVAC equipment

¹³ <https://www.energy.gov/articles/4-ways-slay-energy-vampires-halloween>

WATER SMART MEASURES	
Estimated Cost Savings:	
<ul style="list-style-type: none"> • The Environmental Protection Agency reports that by installing water-efficient fixtures and appliances, one uses 20 percent less water ¹ • Leaky faucets or slowly dripping taps can waste nearly 3,000 gallons of water per year¹ • The U.S. Department of Energy reports that fixing leaky faucets can save approximately \$35 and 1,661 gallons of water. In other words, one drip per second wastes 1,661 gallon of water ¹ 	
Category Savings Checklist	
	Fix leaky faucets
	Repair running toilets
	Sweep instead of hosing off floors

OTHER APPLIANCES	
Estimated Cost Savings	
<ul style="list-style-type: none"> • Since 1992, ENERGY STAR® and its partners helped American families and businesses save nearly 4 trillion kilowatt-hours of electricity and achieve over 3 billion metric tons of greenhouse gas reductions, equivalent to taking over 600 million cars off the road for a year¹⁴ • Families and businesses are saving with the help of ENERGY STAR® in the State of Iowa <ul style="list-style-type: none"> ○ Updated Iowa Report Card¹⁵ 	
Category Savings	
	ENERGY STAR® qualified appliances, including kitchen equipment, in use
	Freezers seal tightly when closed
	All plugged-in appliances are used regularly
	Rooms free of duplicate appliances (ex. Mini-fridges or space heaters)
	Vending Machines turned off or in sleep mode at the end of day

MISC.	
Estimated Cost Savings	
<ul style="list-style-type: none"> • Cisco has saved an estimated \$382 million travel costs with the use of telepresence¹⁶ 	
Category Savings Checklist	
	Contacted local utility for information/resources about rebates/programs related to efficiency
	Participated in local utility's rebates and energy efficiency programs
	Official policy encourages using telecommunications or video conferencing to reduce travel costs
	Provide easy access to shared, infrequently used equipment such as moving carts, folding tables, large water dispenser.
	Added fuel-efficient vehicles to fleet

¹⁴ https://www.energystar.gov/about/origins_mission/energy_star_numbers

¹⁵ <https://www.energystar.gov/sites/default/files/asset/document/iowa.pdf>

¹⁶ https://www.cisco.com/c/dam/global/en_ca/strategy/docs/gov/operational_efficiencies_public_sector.pdf

OPERATIONAL EFFICIENCIES	
Estimated Cost Savings	
<ul style="list-style-type: none"> During an Iowa Lean Enterprise event, a local public governmental organization team adopted Lean’s “Kaizen” strategy and reduced their current processing system from 142 steps to 100 steps. This resulted in a total time savings of 16 hours per month. Kaizen proved to provide a simpler and faster process while simultaneously removing waste (Iowa’s Lean Enterprise. n.d. Print). 	
Category Savings Checklist	
	Joined the Iowa Lean Consortium
	<p>Lean is a collection of principles, methods and tools that improve the speed and efficiency of any process by eliminating waste. Lean supports a culture that teaches people to identify waste and empowers them to solve problems through nonstop involvement. ILC Trainings can help increase employee productivity with straightforward means and basic planning processes; develop simple yet efficient systems for having a clean, organized work area; and, create standard work procedures for the entire workforce to follow and buy into.¹⁷</p> <ul style="list-style-type: none"> Member Only Forum Members Library & Discounts Member Directory Training Materials Member Shared Calendar Lean Tools <p><u>Point of Contact & Additional Resources</u> Teresa Hay McMahon- Iowa Lean Consortium Email: thmc@iastate.edu</p> <ul style="list-style-type: none"> Member Kanban Board ILC Radio Network
	Worked with Iowa Office of Lean Enterprise
	<p>The State of Iowa has been utilizing Lean methodology since 2003, resulting in increased efficiencies, improved communication and a culture change to one of continuous improvement. The Department of Management is responsible for leading the expansion of Lean efforts in Iowa state government. The Office of Lean Enterprise was created within the Department of Management to promote and facilitate continuous improvement through the use of a specific set of proven tools and methodologies collectively known as Lean.¹⁸</p> <ul style="list-style-type: none"> Process Improvement Training and Development Lean Facilitator Group Additional Resources: Department of Management https://dom.iowa.gov/lean-enterprise <p><u>Point of Contact & Additional Resources</u> Marcia Tope- Iowa Department of Management Lean Enterprise Administrator E-mail: marcia.tope@iowa.gov</p> <ul style="list-style-type: none"> Lean in Government Starter Kit Lean Methods Decision Tool: Finding the Lean Method That’s Right for Your Improvement Goals
	Created Internal Improvement Approach
	<p>The mission of the Continuous Improvement department is to provide district employees an established approach to evaluate all processes in order to identify opportunities for improvements leading to increased efficiencies, effectiveness, and greater student outcomes.</p> <p><u>Point of Contact & Additional Resources</u> Emma Knapp, Des Moines Public Schools Continuous Improvement Coordinator E-mail: Emma.Knapp@dmschools.org</p> <ul style="list-style-type: none"> Results and Recognitions Monthly Newsletters

¹⁷ <http://www.iowalean.org/>

¹⁸ <https://dom.iowa.gov/lean-enterprise>

BEST PRACTICES, INNOVATIONS, & EFFICIENCIES	
Category Savings Checklist	
	Use Single-Stream Recycling Collection.
	Scott County, Iowa City, and Clinton recently switched to this method of recycling collection, in which recyclables are sorted at a single facility instead of by residents. It is less work for residents, increases the amount of recyclable goods the government can sell to recyclers, and reduces usage of landfills. Scott County estimates it will save \$2,500,000 over 8 years and created 11 jobs. Read more here: https://bit.ly/2ICXZsp and Contact Kathy Morris, Waste Commission of Scott County Director, at 563-381-1300
	Cut Water Bill by Reducing Lawn Size
	<p>Benefits of Reducing Lawn Size: ¹⁹</p> <ul style="list-style-type: none"> • Reduced Water Consumption: According to the EPA, 30 to 60% of urban fresh water is used to water lawns each year. Turf requires two to three times the water of a mixed landscape. • Saves time and energy on lawn maintenance. • Less yard waste to be composted or taken to a landfill: a 2,000 sq. ft lawn produces 600-800 pounds of clippings pers summer on average • Reduced spending on lawn care products <p><u>Point of Contact & Additional Resources</u> Iowa State University Master Gardeners Program: https://www.extension.iastate.edu/mastergardener/ Tall Grass Prairie Center at the University of Northern Iowa: https://tallgrassprairiecenter.org/ Pollinator Partnership: http://pollinator.org/ Iowa Native Plant Nursery: https://ionxchange.com/ The Plant.Grow.Fly. Program at the Blank Park Zoo: https://www.blankparkzoo.com/conservation/plantgrowfly</p> <ul style="list-style-type: none"> • Funding Sources United States Department of Agriculture- Natural Resources Conservation Services <ul style="list-style-type: none"> • Managing Iowa Acreages- Low Maintenance Lawns • Neal Smith National Wildlife Refuge
	Use Cisterns to Save and Store Water
	<p>A Cistern is defined as any tank, or underground tank, used to store water. Cisterns were once very common in the US, especially in rural areas where homes relied on private wells for water. They were used to supplement well water, especially during extended droughts when groundwater levels receded below well depth.²⁰ Cisterns can be used to capture runoff from impervious areas, most often roofs. ²¹</p> <ul style="list-style-type: none"> • The typical cistern storage capacity ranges from 500 to 10,000 gallons per cistern (1.9 m3 to 37.8 m3); although multiple cisterns are often interconnected in large building sites.²² • Cisterns can be used for capturing and reusing stormwater: <p><u>Point of Contact & Additional Resources</u> Alliance for Water Efficiency: On-Site Alternate Water Sources & Use Introduction PennState Extension: Cisterns for Capturing and Reusing Stormwater</p>
	Use Composting Systems
	<p>Snohomish County in Washington State saved approximately \$25,000 annually by composing food waste from the jail. Food waste is heavy, and it would cost the County more money in garbage hauling and tipping fees to send food waste to a landfill than to compost it. In 2011, Middlebury College in Vermont saved \$100,000 on landfill fees by composting 90% of food waste generated on campus. The 370 tons of food Middlebury composted translated into a savings of \$270 per ton of waste. Novato schools save half the cost of their annual trash bill recycling and composting much of their waste and save the school district \$55,000 a year or more.</p> <p><u>Point of Contact & Additional Resources</u> Education Justice Project of The University of Illinois at Urbana-Champaign: Composting in Prison: Guidelines Based on a Pilot Program at Danville Correctional Center, Illinois Philadelphia’s Prison System is Fighting Food Waste and Recidivism with an Organic Farm Novato Schools Cut Costs by Composting New Food Waste Composting, Recycling and Incentive Program: Program Will Save \$55,000 Each Year For</p>

	<p>Schools</p> <p>Beverly James, Novato Sanitary District General Manger (415)-892-1694 or info@novatosan.com</p> <p>Food Waste Minimization Toolkit for Iowa Schools</p> <p>The Economics of Composting</p>
	<p>Collect Methane at Landfill to sell to Gas Companies</p>
	<p>Currently, about 40% of food produced is not eaten and nearly 20% of landfill waste is organic and can be recycled. The Muscatine Area Resource Recovery for Vehicles and Energy Program (MAARVE) receives organic waste and converts it to renewable natural gas that can be used by Compressed Natural Gas vehicles. This form of food waste diversion reduces landfills at a rate of 18-22%; food is easily diverted through composting or anaerobic digestion. For more information about the program visit: https://www.muscatineiowa.gov/1122/MARRVE.²³</p> <p><u>Benefits of converting organic waste to natural gas:</u></p> <ul style="list-style-type: none"> - Created \$250,000 in revenue during the first of 3 phases of MAARVE - Utilizing gas they saved an additional \$50,000 in their waste water planet - Lower air emissions - Provides a needed service to the community/industry (good for industry and the environment) - Long term potential for recouping capital and developing a revenue source for wastewater <p><u>Point of Contact & Additional Resources</u></p> <p>MAARVE PowerPoint Presentation (PPTX)</p> <p>MAARVE Flyer (PDF)</p> <p>WCCF Director Jon Koch: 563-263-2752 or E-mail Questions and Tour Requests</p>
	<p>Formed a Mental Health Court Program</p>
	<p>The Scott County Mental Health Court was formed in July 2016 after a group of citizens formed a task force to address the problem of mental illness problems leading into the criminal justice system when individuals were off their prescribed medication or were undiagnosed. The project is a collaborative partnership between Interfaith Quad Cities and Genesis Philanthropy. Nationally one in three inmates have mental health conditions. The specialty court is made up of two mental health professionals, two local police officers, an assistant county attorney, a defense attorney, jail staff, a volunteer psychologist, two probation officers, and a district judge. Additionally, this program helps prevent further costs in incarcerations or commitments to the hospital.</p> <ul style="list-style-type: none"> • 100% of participants are attending weekly groups, and have 24-hour access to the mental health care team • 100% of participants are in stable supportive housing up from 77 percent prior to the program • 59% of participants are actively attained employment up from 30 percent. • 62% of participants are actively volunteering or completing community service on a weekly basis. • The program has reported a total of \$367,000 in savings from diverting people with mental illness from the court system to treatment. <p><u>Point of Contact & Additional Resources</u></p> <p>Scott County Court Administration: 563-326-8783</p> <p>Scott County Program Coordinator Courtney Stenzel – cstenzel@transmhs.org</p> <p>Scott County's mental health court aims to offer treatment, not jail</p> <p>Scott County Mental Health Court celebrates one year</p> <p>First ever Mental Health Court graduation at Scott County Jail</p>

¹⁹ <https://learn.eartheasy.com/articles/how-to-reduce-the-size-of-your-lawn/>

²⁰ http://www.allianceforwaterefficiency.org/Alternative_Water_Sources_Intro.aspx

²¹ <https://extension.psu.edu/cisterns-for-capturing-and-reusing-stormwater>

²² http://www.allianceforwaterefficiency.org/Alternative_Water_Sources_Intro.aspx

²³ <https://www.muscatineiowa.gov/1122/MARRVE>

	<p>Coordinated Emergency Dispatch Services</p>
	<p>Working in collaboration with Ramsey County Emergency Communications Center, this project breaks down geographical barriers to ensure the quickest response time to emergencies such as fires and cardiac arrest. With all coordinated emergency vehicles equipped with an automatic vehicle locator, the Emergency Communications Center can identify the closest unit to the emergency instead of limiting its search to the closest fire station within a caller’s city or jurisdiction. The project has proven to save lives and reduce property damage.</p> <p><u>Point of Contact & Additional Resources</u> Video: Closest Unit Dispatching Program Ramsey County Emergency Communications Department Ramsey County: Emergency Communications and Fire Chiefs Association partnership earns innovation award</p>
	<p>Created a Community Planning Team</p>
	<p>The Pine Island Community Planning Team (CPT) turned their rural community setting into a functional, collaborative model to prioritize projects for their community. CPT began operating as an idea tank, rather than an objective-driven team. Their team grew organically to include their own township and the five neighboring communities, including representatives from the City, School District, Chamber of Commerce, and Economic Development Authority.</p> <p>The cross-functional team is tasked with addressing short- and long-term community planning to support future community growth, business development, school facilities, and community infrastructure.</p> <p><u>Point of Contact & Additional Resources</u> City of Pine Island: Community Planning Team Minnesota Local Government Innovations Awards: Pine Island Community Planning Team</p>
	<p>Created a Food Rescue Program</p>
	<p>Elkhart Community Schools in South Bend Indiana has adopted a pilot program to not only reduce food waste but address food insecurity in their community. The Chamber of Commerce’s Leadership Academy Commerce helped create a pilot program with Cultivate Culinary, a South Bend-based non-profit organization, to provide weekend meals to a small group of elementary students. Cultivate Culinary is devoted to ending the cycle of hunger in the local communities of northern Indiana by providing a food rescue service.²⁴</p> <p><u>Point of Contact & Additional Resources</u> Indiana school district turns unused cafeteria food into take-home meals for kids Local nonprofit sends excess food home with Elkhart students in need Cultivate Culinary 1403 Prairie Avenue South Bend, IN 46601 Phone: (574) 209-2711 JimC@cultivateculinary.com</p>

²⁴ <https://cultivateculinary.com/>

Connected with Iowa AmeriCorps

AmeriCorps is a network of national service programs that engage more than 50,000 Americans each year. Operated through the [University of Northern Iowa's Center for Energy and Environmental Education](#), Green Iowa AmeriCorps is a state-wide community service program founded to address conservation and sustainable usage of energy resources in Iowa communities after the devastating floods of 2008.

Members are trained as energy auditors and contribute to a comprehensive home energy program. Other involvement in the community includes deconstruction projects, creating energy educational programs for all ages, and assisting in the development of energy-related community events. AmeriCorps now have seven sites spread throughout Iowa in Black Hawk, Dubuque, Jefferson, Johnson, Linn, Polk, and Winneshiek counties.

In 2010 Green Iowa AmeriCorps was listed as one of the most innovative AmeriCorps programs in "Transforming Communities through Service: A Collection of 52 of the Most Innovative AmeriCorps Programs in the United States" by Americas Service Commissions and Innovations in Civic Participation.²⁵

Objectives:

1. Implement energy efficiency services to under-served populations to reduce financial burden and energy waste
2. Enhance and promote existing energy efficiency efforts in underserved Iowa communities
3. Provide energy conservation and efficiency education
4. Identify and address energy efficiency use issues via a team-based approach in target communities
5. Recruit and manage volunteers

Point of Contact & Additional Resources:

[Green Iowa AmeriCorps](#)

- [Home Energy](#): Sign Up for an Audit
- [Weatherization](#): Sign Up Forms
- [Sustainable School Districts](#)
- [Service Requests](#)
- [Connect with Green Iowa Today](#)

Ashley Craft, Program Director
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319-273-7273

Iowa Data Bike

The Data Bike is an initiative by the Des Moines Area Metropolitan Planning Organization in partnership with Iowa Department of Public Health and Iowa Natural Heritage Foundation that increases the efficiency of trail maintenance. Using an app that senses the roughness of pavement, the Data Bike will generate data scoring the condition of trails. The Data Bike will also collect 360-degree imagery along trails for Google Street View.

Point of Contact & Additional Resources:

[Des Moines Area Metropolitan Planning Organization](#)

[Iowa Data Bike](#)

[Iowa Data Bike: Prioritizing Maintenance for Regional Trail Projects](#)

['Data bike' pinpoints trouble spots on central Iowa trails](#)

Ben Champ, Iowa American Planning Association (APA)

Todd Ashby, Des Moines Area Metropolitan Planning Organization (MPO)

Andrea Boulton, Iowa Natural Heritage Foundation (INHF)

Utilizing 28-E organizations or Sharing Services

28E Organizations are defined "to permit state and local governments in Iowa to make efficient use of their powers by enabling them to provide joint services and facilities with other agencies and to cooperate in other

²⁵ <https://www.greeniowaamericorps.org/our-story>

ways of mutual advantage”²⁶ Working to pool resources instead of having competing projects with similar goals can help make better decisions and free up time to work on additional projects.

Point of Contact & Additional Resources:

[The Silo Mentality: How To Break Down The Barriers \(forbes.com\)](https://www.forbes.com)

[How Breaking Down Silos in Government Can Make Things Worse \(governing.com\)](https://www.governing.com)

²⁶ [28E.pdf \(iowa.gov\)](#)

	<p>Ice Storage Chiller Plant for Cooling Buildings</p> <p>Dickinson County has had success with installing an underground ice pit. The system creates Ice outside high demand hours, while electricity is cheaper. When the building reaches peak use, a chiller fan then engages to help cool the building. It has resulted in significant savings on the county utility bill and will pay for itself within 8 years. It can also operate as a backup air conditioning unit that can be utilized to keep the building cool for up 5-6 hours in the event of a breakdown.</p> <p><u>Points of Contact & Additional Resources:</u></p> <p>Dickinson County Maintenance Director – Chris McNab Email: clean@dickinsoncountyiowa.gov Phone: (712)-330-9684</p>
	<p>Cut Insurance Rates</p>
	<p>Cities that are registered within the Chapter 411 have seen a savings 30% on medical and 50% on prescriptions. North Risk Partners do not charge a commission or monthly fees; this is a contingency plan. They only receive payment if the city saves. Their network is national and includes Mayo, John Hopkins, Stanford, Cleveland Clinic, Baylor University, and thousands of more hospitals.</p> <p><u>Points of Contact & Additional Resources:</u></p> <p>North Risk Partners Sr. Risk Advisor Skip Lowe Email: skip.lowe@northriskpartners.com Phone: (641)-260-8301</p> <p>City of Marshalltown – Human Resources Director Jill Petermeier Email: jpetermeier@marshalltown-ia.gov</p>
	<p>Create a virtual or actual Internal Surplus Supply Store</p>
	<p>Create a virtual or actual Internal Surplus Supply Store where departments and offices can share gently used or new items (binders, files, small office equipment and supplies, etc.) for work-related use. Johnson County started a virtual store in 2013 and then created a “self-serve” physical one in 2018. A sign-in sheet helps the county track what items are shared and taken. Computer items are handled by the IT Department.</p> <p><u>Points of Contact & Additional Resources:</u></p> <p>Johnson County Sustainability Team Email: greenteam@johnsoncountyiowa.gov</p>
	<p>Cut Electric Bill by Using Solar Energy</p>
	<p>A report issued by the Iowa Auditor of State has shown that local entities have been able to save tax dollars by utilizing solar energy to offset or eliminate their energy needs. The average savings over the lifetime of an installation is over \$700,000. Larger installations can easily see larger savings. Below you can find the solar report and answers to local entities experiences implementing the project.</p> <p><u>Points of Contact & Additional Resources:</u></p> <p>IowaSolarReport_55192DA30BB49.pdf</p> <p>Iowa Auditor of State – Community Engagement Officer - Drew Stensland Email: Drew.stensland@aos.iowa.gov Phone: (515)-281-5835</p>