

DANE COUNTY GOVERNMENT SUSTAINABLE OPERATIONS PLAN



Completed January 2016

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Julie Anne Chase, *Director, Dane County Library Service*
Kevin Connors, *Director, Land and Water Resources*
Carlo Esqueda, *Clerk of Circuit Court/Register in Probate, Dane County Courthouse*
Bill Franz, *Chief Financial Officer, Alliant Energy Center*
Mindy Habecker, *Natural Resources/Community Development Educator, County Extension*
Jeff Halter, *Deputy Director, Henry Vilas Zoo*
Laura Huttner, *Facilities Management/ Human Services*
Mike Kirchner, *Engineering Director, Dane County. Airport*
Lowell Wright, *Landing Area, Dane County Airport*
Lisa MacKinnon, *Sustainability & Program Evaluation Coordinator, Office of the Dane County Board*
Dave Merritt, *Director of Policy & Program Development, Department of Administration*
Travis Myren, *Director, Department of Administration*
Greggar Petersen, *Highway Engineer, Public Works—Highway & Transportation Division*
Ronda Schwetz, *Director, Henry Vilas Zoo*
Todd Violante, *Director, Planning and Development*
John Welch, *Solid Waste Manager, Public Works—Solid Waste Division*
Brian Wilson, *Maintenance, Henry Vilas Zoo*
Sandy Yearman, *Sergeant, Dane County Sheriff's Office*

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Matt Alsaker, *Sergeant, Dane County Sheriff's Office*
Nick Bubbs, *Special Projects Manager, Administration*
David Caes, *Operations Manager, Public Health Madison-Dane County*
Julie Anne Chase, *Director, Dane County Library Service*
Kristi Chlebowski, *Dane County Register of Deeds*
Daniel Connery, *Veterans Service Officer*
John DeJung, *Director, Public Safety Communications*
Adam Gallagher, *Dane County Treasurer*
Laura Hicklin, *Deputy Director, Land and Water Resources*
Mindy Habecker, *Natural Resource/Community Development Educator, UW-Extension*
Barry Irmen, *Director of Operations, Medical Examiner*
Dave Janda, *Assistant Director, Emergency Management*
David Jensen, *Deputy Director—Facilities and Operations, Dane County Regional Airport*
Brad Logsdon, *Corporation Counsel—Child Support Agency*

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Marcia MacKenzie, Corporation Counsel

Lisa MacKinnon, Sustainability and Program Evaluation Coordinator, Office of the County Board

Brock McHenry, Alliant Energy Center

Mark Meixensperger, Director, Dane County Family Court Services

Travis Myren, Director, Administration

Laura Nachazel, Court Manager, Dane County Clerk of Courts

Julie Peterson, Juvenile Court Program

Mike Rupiper, Special Projects and Materials Manager, Public Works, Highway, & Transportation

Ronda Schwetz, Director, Henry Vilas Zoo

Todd Violante, Director, Planning and Development

Introduction

PURPOSE AND SCOPE

Dane County government is pursuing a goal of becoming more environmentally, socially, and economically sustainable in its planning, operations, management, and policymaking. Over the last several years the county has initiated and implemented numerous efforts that are contributing to greater sustainability through energy conservation, greenhouse gas emission reductions, stormwater runoff reduction, renewable fuel vehicles, and employee wellness programs [See *DANE COUNTY GOVERNMENT SUSTAINABILITY SUCCESSES*]. This plan provides a more formal and comprehensive guideline for building on our existing efforts and achieving greater environmental, social, and economic sustainability across county departments and functions.

Through becoming a more sustainable local government we have the opportunity to create positive impacts that go beyond our operations and our jurisdictional boundaries. In developing this plan, we are embracing several general assumptions:

1. We can set an example for the broader community by operating in the most sustainable manner possible;
2. Economic, social, and environmental well-being are mutually interdependent;
3. County policy and investment choices have long-term impacts;
4. Sustainable practices can create long-term cost efficiencies;
5. Organizational awareness, responsibility, participation, and education are key elements of sustainability; and
6. Local actions can have regional, national, and global implications.

The Dane County Board of Supervisors provided the initial direction for this planning effort with their unanimous adoption of Resolution 103, 2012-2013 in October 2012. Via this resolution, the county formally adopted a set of broad sustainability principles to provide a more systematic approach and a framework to make informed and strategic decisions regarding all aspects of county operations.

SUSTAINABILITY

In October 2012, the county formally adopted a set of broad sustainability principles to provide a more systematic approach and a framework to make informed and strategic decisions regarding all aspects of county operations. To ensure that Dane County's operations, programs, services, policies, and decision-making processes reflect our commitment to environmental, economic, and social sustainability, we will:

- Reduce and eventually eliminate Dane County government's contribution to fossil fuel dependence and to wasteful use of scarce metals and minerals;
- Reduce and eventually eliminate Dane County government's contribution to dependence upon persistent chemicals and wasteful use of synthetic substances;
- Reduce and eventually eliminate Dane County government's contribution to encroachment upon nature and harm to life-sustaining ecosystems (e.g., land, water, wildlife, forest, soil, ecosystems); and
- Reduce and eventually eliminate Dane County government's contribution to conditions that undermine people's ability to meet their basic human needs.

These principles are intended to be applied systematically and strategically across departments, agencies, and in the policymaking body of the Dane County Board of Supervisors to achieve greater sustainability in everything we do.

Dane County Board of Supervisors 2012-2013 Resolution 103

Within this plan, "sustainability" means the use, development, and protection of resources in a way that enables Dane County to meet the needs of residents and maintain a vibrant quality of life, without compromising the ability of future residents to do the same.

In this context, "resources" include land, air, and water along with the inherent value of the natural resources, biodiversity, and life-supporting functions associated with them; energy and materials for development and habitation; the people who work for and with our county government to carry out its missions and deliver services to the public every day; and the economic resources that come from taxpayers and other sources, which help us serve our community.

THE PLANNING PROCESS

The process for development of this plan began with the creation of the cross-departmental Sustainability Work Group, comprised of staff representatives from numerous Dane County departments and agencies. The group came together in early 2012 to work collaboratively across departments to improve the sustainability of county operations. Initially, the Work Group reviewed policies, practices, initiatives, and actions in their departments and across county government operations and asked, “Where are we meeting one or more of the county’s adopted sustainability principles and where are we violating these principles?” In other words, where are we currently operating in a sustainable manner, and where do we need to change and improve?

From this baseline inventory, the Work Group developed a “Sustainability Impacts Analysis” that identified the county’s most significant sustainability impacts and challenges across departments, facilities, and countywide operations. The Work Group then used this analysis as the basis for developing the operational categories, goals, objectives, and strategies contained in this plan.

The Dane County Sustainable Government Operations Plan was developed through a series of strategic planning meetings of the cross-departmental Sustainability Work Group and was submitted for further review and input by a team of department heads and constitutional officers convened by the Department of Administration. These groups worked to ensure that Dane County’s internal operational sustainability goals, objectives, and strategies reflect and advance the county’s commitment to sustainability. The intention of this plan is to build on and enhance numerous existing sustainable practices and resources and to provide additional strategic guidance for making county operations more sustainable, efficient, and resilient in the face of future challenges.

The sharing of ideas, experience, and teamwork exemplifies the county’s dedication to working collaboratively to ensure that every aspect of sustainability is incorporated and that we are accountable for implementing these goals together in our work at the county.

The **Dane County Government Sustainable Operations Plan (“the plan”)** focuses on the county’s internal operations and management and is intended to guide county leadership, elected officials, and county government staff in collectively carrying out the county’s daily operations in a sustainable manner. It incorporates the county’s adopted sustainability principles across virtually all operational areas of the county—the vehicles we drive, the energy and water we consume, the construction and operation of our buildings, the products we purchase, the way in which we view and handle our “used” materials—to create a more environmentally, economically, and socially sustainable county government now and into the future.

The comprehensive set of goals, objectives, and strategies identified in this plan are intended to be achievable by county staff. They are aimed at helping Dane County, as a government agency, transition to greater sustainability in its day-to-day operations. The strategies are intended to allow for flexibility and creativity in implementation in order to be most responsive to departments’ specific needs and functions. The plan recognizes that successful implementation will rely heavily on the experience, engagement, and collaboration of staff and decision makers across Dane County operations.

Working toward greater sustainability reflects not only the county’s commitment to future generations, but also to good government. Our focus on sustainability rewards efficiency and continuous improvement. Our successes in achieving sustainability goals will allow us to deal

more resiliently with uncertainty and future risks by being more efficient with limited natural and fiscal resources.

PLAN FORMAT

The plan is broken into eight key operational categories. Each category represents an operational aspect of county government that spans all departments and divisions, and for which numerous staff share some level of responsibility.

Plan Categories

The following are the plan categories and goals for each category. These goals represent what Dane County aspires to be true about its operations, management, and policy-making in a more sustainable future.

1. CLIMATE CHANGE MITIGATION & ADAPTATION

Dane County is committed to reducing greenhouse gas emissions generated by all county operations and facilities, and to planning for and implementing climate adaptation measures to build resilience in the face of current and future impacts of global climate change on government operations and our community.

2. TRANSPORTATION & VEHICLE FLEET

Dane County's on-road and off-road municipal fleet and transportation operations yield numerous environmental, social, and economic benefits. The county continually strives to enhance fleet efficiencies through education, updating infrastructure, and implementing new technologies. The county seeks to develop and support sustainable transportation choices for all Dane County employees.

3. WATER

Dane County demonstrates wise water use and promotes water conservation in all county government operations to ensure access to clean and abundant water for current and future generations.

4. WASTE

Dane County promotes sustainable materials management by reducing consumption of resources and by using resources most productively and sustainably throughout their lifecycles, from the point of resource extraction through material disposal. This approach optimizes the use of resources, reduces solid waste across county operations, and reduces associated environmental, economic, and social impacts.

5. COUNTY BUILDINGS & FACILITIES

Dane County's buildings and facilities are efficient and safe. Facilities Management uses standards, policies, and practices that promote resource efficiency and performance, with a focus on energy efficiency and performance, the use of sustainable materials, and an emphasis on occupant and user health and well-being.

6. PURCHASING

Dane County purchases and uses materials, products, and services in a fiscally responsible manner, while reducing resource consumption and waste, supporting local economic opportunities, and ensuring human health and well-being.

7. EDUCATION & OUTREACH

All Dane County employees and members of the public are strongly connected to Dane County government's sustainability efforts through wide-ranging opportunities for outreach, education, communication, and engagement.

8. EMPLOYEE EXPERIENCE

Dane County provides a sustainable, safe, equitable, and healthy work environment that promotes and enhances the health, well-being, and engagement of all Dane County employees.

Each operational category states a **broad goal, objectives** that have been identified to meet the goal, and a list of **strategies** identified to achieve the goal and objectives, including identification of parties responsible for implementation, timelines for implementation, and priority level.

Strategies identified to achieve the objectives range in ease of execution and expected timeline. High priority strategies are those that are viewed as important to initiate as soon as possible because they will have a significant impact on improving sustainability and/or because they are relatively simple to implement for various reasons. **High priority strategies** should begin implementation in Year 1 after passage of this plan. They may continue implementation into successive years. The **medium and low priority strategies** were designated as such either because they were seen as not having as immediate or significant an impact on operational sustainability as the high priority strategies and/or because they were seen as more difficult to implement, either because of financial or technical barriers that would need to be addressed first. Implementation of these strategies is intended to be initiated in Year 2 and beyond as resources are made available and after other higher priority strategies have been implemented.

Description of the Dane County Sustainable Government Operations Plan Elements

- **Goal:** General statements that describe how Dane County will conduct its operations in a sustainable future
- **Objectives:** Specific, tangible, and measurable steps by which the goals can be achieved
- **Strategies:** Specific actions, initiatives, policies, and practices that are to be taken to ensure realization of the plan's goals and objectives, with the **timeline, responsible parties, and priority level** identified
- **Measurements of Progress:** Metrics to determine whether improvements are occurring are identified in various strategies in the plan. For some strategies progress will be measured simply by completion of the strategy. For others, data will need to be tracked and compared with baseline information to determine whether we are achieving the stated objectives. Further metrics will need to be developed once baselines are established for specific operational areas that currently do not track or measure necessary data.

IMPLEMENTATION OF THE PLAN

Both the Dane County Board of Supervisors and the County Executive have made achieving greater sustainability a priority for the county and have supported their commitment through numerous policy initiatives, capital improvements, and investments. This plan is a continuation of that commitment and the County Board and County Executive will lead the county in the implementation of this plan toward even greater achievement of sustainability in everything we do.

Full implementation of the plan will achieve numerous results, including but not limited to:

- Creating a more sustainable and healthy built environment;
- Increasing water and energy efficiency and energy independence;
- Reducing greenhouse gas emissions and improving air quality;
- Minimizing waste;
- Conserving irreplaceable natural resources;
- Encouraging the growth of markets for environmental products and services;
- Increasing employee participation and decision making in workplace sustainability; and
- Reducing county expenses over the long term.

To support the full engagement of all departments and staff in achieving these successes, Dane County will offer opportunities for continuing sustainability education and develop a program to recognize employees who contribute practical and cost-effective suggestions for improving sustainability.

We also look forward to fostering partnerships in the community to assist with implementation of this plan where it will enhance our ability to achieve our sustainability goals, incorporate the most effective sustainable practices into our day-to-day operations, and multiply our successes.

The Dane County Government Sustainable Operations Plan is intended to be an adaptable plan that will be responsive to new ideas, strategies, technologies, partnerships, and available resources. This plan is expected to evolve as we learn from our experience and the research and experience of others. Major reviews and updates to the plan should occur every five years, or sooner, but smaller revisions should occur as needed based on results of outcomes monitoring and other evaluations. A departmental sustainability work group should meet on a regular basis to support plan implementation and review implementation progress.

To submit new ideas, comments, or questions regarding this plan, please contact:

Lisa MacKinnon, Sustainability and Program Evaluation Coordinator
Office of the County Board
City County Building, Room 106B
608-267-1529 / MacKinnon@countyofdane.com

DANE COUNTY GOVERNMENT SUSTAINABILITY SUCCESSES

Over the last several years the county has implemented numerous projects, initiatives, and policies to save energy, reduce waste, conserve natural resources, and reduce costs while meeting the needs of residents. This was made possible through the commitment and efforts of Dane County employees, the Dane County Executive and Board of Supervisors, local governments across Dane County, and our many partners in the community.

Some of the county's recent sustainability successes include:

- Creation by the County Executive of a cross-departmental Climate Change Action Council to assess county vulnerabilities to climate change impacts and create a climate change adaptation and resilience plan
- Converting county landfill gas to electricity, generating \$3.75 million in gross revenues for the county
- Using compressed natural gas (CNG) in 30 county fleet vehicles, offsetting the use of approximately 25,000 gallons of fossil-fuel gasoline and saving county taxpayers roughly \$50,000 annually. These savings will continue to grow as more CNG vehicles are added to the fleet.
- Locating an additional BioCNG filling station at the County's Rodefild Landfill, which will more than double the CNG generation of the county's existing CNG facilities at the landfill from 100 gallons of gasoline equivalent (GGE) per day up to a capacity of 250 GGE per day. The new station also will increase fuel storage more than six-fold. The BioCNG that the Rodefild filling station produces has the lowest GHG emissions of any vehicle fuel being sold today—even lower greenhouse gas emissions than regular CNG because there is no need to drill for natural gas.
- Completion of renewable energy and energy conservation upgrades at county facilities, such as: LED runway lights and solar panels at the Dane County Regional Airport; geothermal technologies at the new Badger Prairie Health Care Center and the Children's Zoo Barn
- Dane County is diverting increasing amounts of construction and demolition materials from our landfill.
- Construction of manure digesters that generate renewable electricity, reduce greenhouse gas emissions, and keep nutrient pollution out of county waters
- Hiring a Sustainability Coordinator in the County Board Office to coordinate and facilitate efforts to improve the sustainability of the county's operations, management, and policymaking
- Creation of a cross-departmental Sustainability Work Group to strategically identify opportunities and help implement actions that improve the sustainability of the county's operations, management and policymaking

- Assistance to departments and agencies with ongoing sustainability initiatives and projects through the budget process and through the SMART Fund for capital projects implemented by the Public Works and Transportation Committee's Sustainability Subcommittee. Since 2012 the SMART Fund has supported 43 projects, saved the county an estimated \$525,000 annually in operating costs, and avoided an estimated 2,500 metric tons of CO2 equivalent emissions annually.
- Dane County Regional Airport's 100 kW solar installation on the rooftop of the new Airfield Maintenance Facility is the largest municipal-owned solar system in Wisconsin. The system's 376 panels are expected to generate 135,000 kilowatt-hours per year supplying 50% of energy needs.
- Establishment of the Dane County Seed Library at several Dane County libraries, including the Bookmobile. The free seed library helps residents to save money by growing their own food and to participate in a culture of community sharing.
- County is a member of Dane Buy Local to demonstrate support for locally owned businesses.
- Purchasing policies have been developed to support local business.

RES. 257, 06-07 Local Food Purchase Policy

RES. 320, 11-12 Recognizing Dane County's Commitment To Local Food Production and Access To Food As a Human Right

OA. 1, 13-14 Creating a Purchasing Preference for Locally Made Goods
- Rain barrels to collect rooftop runoff are installed at Fen Oak Resource Center. This system supplies water for the teaching gardens surrounding this county building. Fen Oak also has a composting system set up outside of the building lunch area so that it can be easily used by county employees during their breaks and lunch times.
- The county's contracted food service vendor (Centerplate) utilizes a minimum of 30% locally grown and distributed food service products.
- Completed a Dane County Community-wide Air Emissions Inventory to inform climate action planning.
- Allocated \$35,000 in the 2016 Dane County budget for development of a Climate Action Plan.
- Equipped the Dane County Sheriff Freeway Service Team with a CNG bi-fuel system truck. The change will result in a 41.5% savings on fuel over the life of the truck.
- One of the only counties in the country to work with an independent third party consultant to conduct a racial equity analysis across its government operations. This racial equity analysis resulted in numerous recommendations that are being implemented, including the creation of a new Office of Equity and Inclusion.

Operational Categories

CLIMATE CHANGE MITIGATION & ADAPTATION

GOAL

Dane County is committed to reducing greenhouse gas emissions generated by all county operations and facilities, and to planning for and implementing climate adaptation measures to build resilience in the face of current and future impacts of global climate change on government operations and our community.

OBJECTIVES

- 1) Dane County will work toward avoiding and reducing greenhouse gas emissions in its operations and facilities.
- 2) Dane County will work toward achieving climate neutrality in its operations and facilities by offsetting emissions that remain after emission reduction efforts have been maximized.
- 3) Dane County will plan for and implement climate adaptation measures across county operations and facilities to become more resilient to the impacts of climate change.

STRATEGIES

- 1) **Strategy:** Update the county's 2007 baseline GHG emissions inventory for county operations in order to set emission reduction targets and measure outcomes.
 - a. **Timeline:**

Year 1: Identify parties and funding to perform the inventory.
Year 2 and ongoing: Perform the inventory; Evaluate research and identify next action steps.
 - b. **Parties Responsible for Implementation:** Primary: DOA; Public Works; Sustainability Coordinator.
 - c. **Priority:** High. Our current GHG emissions impact needs to be updated in order to effectively set reduction targets and measure our success.

- 2) **Strategy:** Research and identify best practices for emission reductions accomplished by other local and state governments, as well as non-government organizations, in their operations and facilities.
 - a. **Timeline:**

Year 1: Research counties/cities that have successfully implemented emission reduction programs and identify best practices.
 - b. **Parties Responsible for Implementation:** Primary: Sustainability Coordinator; Sustainability Work Group Supporting: All departments
 - c. **Priority:** High

- 3) **Strategy:** Develop a Climate Action Plan for Dane County operations that identifies near- and long-term adaptation strategies, sets GHG reduction goals and targets, identifies measurement methods and supports development of countywide/community-facing Climate Action Plan included in 2016 Dane County budget.
 - a. **Timeline:**

Year 1: Review Climate Change Action Council Plan for Mitigation and Adaptation for county operational vulnerabilities and prioritized county operations adaptation strategies, review county air emissions analysis overseen by Department of Planning and Development and determine process and scope of plan.

Adaptation: Identify staff and/or contractors to work on development of climate adaptation plan for all county operations.

Mitigation: Identify staff and/or contractors to work on development of mitigation plan and begin planning process for setting GHG reduction goals, targets, and strategies.

Year 1 and ongoing: Complete plans and begin implementation.

Year 3-5: Measure progress against baseline.

b. Parties Responsible for Implementation: Primary: Climate Change Action Council, County Executive; Designated staff planning group; Sustainability Coordinator; Sustainability Work Group Supporting: All departments

c. Priority: High

4) Strategy: Incorporate climate change considerations into planning and regulatory instruments

a. Timeline:

Year 1 and ongoing: To be done as planning and regulatory instruments (e.g., emergency management plans, etc.) are updated.

b. Parties Responsible for Implementation: Primary: All departments

c. Priority: High

5) Strategy: Expand installation of renewable energy systems to power county-owned buildings and facilities.

a. Timeline: Year 1 and ongoing

b. Parties Responsible for Implementation: Primary: DOA; County Executive; County Board Supporting: All departments.

c. Priority: High

6) Strategy: Transition county fleet vehicles to non-fossil, renewable fuels (including expanding the use of CNG sourced from the county landfill). (See Transportation section of this plan for more fleet-related strategies that reduce climate change impacts.)

a. Timeline:

Year 1: Develop short-term and long-term fleet conversion plans to implement new vehicle technologies.

Year 2: Implement fleet conversion plans.

b. Parties Responsible for Implementation: Primary: DOA; Highways Department

c. Priority: High. The county already has begun to implement this by converting vehicles to CNG, some of which is sourced from county landfill gas.

7) Strategy: Require all projects implemented in existing and new Dane County buildings and facilities to contribute to a reduction in the county's total greenhouse gas emissions footprint. (See Buildings and Facilities section of this plan for more building related strategies that reduce climate change impacts.)

a. Timeline: Year 1 and ongoing

b. Parties Responsible for Implementation: Primary: DOA; Public Works and Facilities
Supporting: All departments.

c. Priority: High.

8) Strategy: Explore opportunities for developing partnerships and projects in the community that reduce GHG emissions.

a. Timeline:

Year 1: Develop strategic plan identifying technologies and financing options.

Year 2 and ongoing: Implement plan.

b. Parties Responsible for Implementation: Primary: DOA and Land and Water Resources

c. Priority: High

9) Strategy: Support the Climate Change Action Council's efforts to advance implementation of Dane County government climate change mitigation and adaptation efforts.

a. Timeline: Year 1 and ongoing

b. Parties Responsible for Implementation: Primary: County Executive; DOA; County Board

c. Priority: High

10) Strategy: Implement county land management actions that increase carbon sequestration, promote carbon neutrality, and support adaptation outcomes (e.g., sustainable forestry practices, responses to carbon cycling, flood management, drought tolerance, use of gabion formations for erosion control systems that divert and control water run off from parking lots and roof drains, introduction of native species plantings landscaping for erosion control, etc.)

a. Timeline: Year 1 and ongoing

b. Parties Responsible for Implementation: Primary: All departments with land management functions; County Board

c. Priority: Medium

TRANSPORTATION & VEHICLE FLEET

GOAL

Dane County's on-road and off-road municipal fleet and transportation operations yield numerous environmental, social, and economic benefits. The county continually strives to enhance fleet efficiencies through education, updating infrastructure, and implementing new technologies. The county seeks to develop and support sustainable transportation choices for all Dane County employees.

OBJECTIVES

Dane County will:

- 1) Reduce total annual fuel consumption.
- 2) Reduce annual vehicle miles traveled.
- 3) Increase the fuel efficiency of all fleet vehicles.
- 4) Reduce emissions generated from the use of our fleet vehicles and off-road equipment.
- 5) Increase the use of high-efficiency, renewable, and non-fossil fuels in all county fleet vehicles to transition away from the use of fossil fuels.
- 6) Increase opportunities for employees and county residents to use sustainable alternative modes of transportation.
- 7) Increase the percentage of Dane County employees who use alternative forms of transportation to travel to and from work.
- 8) Raise awareness among Dane County employees about the importance of fleet efficiency and responsible use of fleet vehicles.
- 9) Establish policies and initiatives that promote a physical and cultural environment that supports and encourages safe, comfortable, and efficient ways for pedestrians, bicyclists, and transit users to travel throughout the county.

STRATEGIES

- 1) **Strategy:** Track and evaluate consumption of fuel used by all fleet vehicles on a per vehicle basis.
 - a. **Timeline:** Year 1 and Year 2 for implementation of process; ongoing annually.
 - b. **Parties Responsible for Implementation:** DOA; Highways Department; All departments with fleet vehicles will measure and catalog vehicles, fuel consumption, and log miles. Department management will work with DOA to develop feasible processes to implement for each of their departments / staff.
 - c. **Priority:** High. There are actionable steps that can be taken immediately and further steps will require gathering information to implement.

- 2) **Strategy:** Track and evaluate vehicle miles traveled (VMT) on a per vehicle basis for every fleet vehicle.
 - a. **Timeline:** Year 1
 - b. **Parties Responsible for Implementation:** Responsible: DOA Supporting: All departments
 - c. **Priority:** High

- 3) **Strategy:** Develop an annual fleet baseline data report that catalogs all current vehicles by: make, year, and model; average fuel economy rating (MPG); fuel type, annual VMT, annual fuel consumption, annual VMT divided by annual fuel consumption; and operation and maintenance cost per mile per vehicle.
 - a. **Timeline:** Begin in Year 1 and ongoing
 - b. **Parties Responsible for Implementation:** DOA; Highways Department; All departments with fleet vehicles
 - c. **Priority:** High

- 4) **Strategy:** Continue implementation of county's vehicle replacement policy to reduce fuel consumption, increase fleet vehicle fuel efficiency, and reduce emissions that includes replacement of existing vehicles with high-efficiency vehicles, and use of renewable, alternative fuels. Explore fuel and VMT reduction targets and measures, as well as equipment performance logging and predictive maintenance to reduce fuel consumption.
 - a. **Timeline:** Years 1 and 2
 - b. **Parties Responsible for Implementation:** DOA; Highways Department; All departments that maintain a fleet
 - c. **Priority:** High

5) Strategy: Work with county departments to determine vehicle replacement priorities and develop a fleet priority list, which includes any unique vehicle needs, in order to target the most efficient and effective replacement vehicles.

a. Timeline:

Year 1 and ongoing: Determine appropriate replacement vehicle priorities.

Year 1 and ongoing: Submit budget requests for replacement vehicles.

Year 2: Purchase replacement vehicles.

b. Parties Responsible for Implementation: Department heads/ fleet managers will work with DOA.

c. Priority: High to medium. Depends on replacement priority of vehicle.

6) Strategy: Increase use of CNG vehicles and develop CNG fueling infrastructure.

a. Timeline:

Years 1 & 2: Continue to purchase CNG cars and pickups.

Years 1 & 2: Begin purchase of CNG fleet vehicles for snowplow trucks.

Years 1 & 2: Budget for and build CNG fueling infrastructure, including additional fueling stations and budget for additional CNG vehicle purchases.

Years 3 – 5: Continue to grow program and add fueling stations, as necessary.

b. Parties Responsible for Implementation: DOA; Public Works / Highways Department; other departments purchasing fleet vehicles.

c. Priority: High. CNG fuel is produced as a byproduct of Dane County Landfill operations, which is a renewable source of CNG. Its continued use and development as an alternative energy source will reduce our dependence on new fuel production.

7) Strategy: Adopt, monitor, and enforce an idling reduction policy for all fleet vehicles and equipment.

a. Timeline:

Year 1: Develop, adopt, and implement policy

Year 2: Develop and pilot monitoring method (e.g., Explore use of existing GPS software to measure fleet vehicle idle time, run time, etc. and pilot in Highway Department before applying in other departments.)

b. Parties Responsible for Implementation: Primary: DOA; Highway Department; All departments; Supporting; Sustainability Coordinator

c. Priority: High. Can be done through immediate administrative action, education, and outreach efforts.

8) Strategy: Reassess and adjust county parking policies to provide greater benefits to non single-occupancy vehicle commutes and create effective communication campaign to inform employees of these benefits.

a. Timeline: Year 1

b. Parties Responsible for Implementation: Responsible: DOA ; Supporting: All departments

c. Priority: High

9) Strategy: Using an employee commute survey and other tools, assess current employee commute options and practices (e.g., what carpooling, vanpooling, bus, biking, and walking options are available to staff currently, and what percentage of staff are getting to and from county work using these options) and develop a program to increase percentage of employees who use more sustainable commute options.

a. Timeline:

Year 1: Conduct employee commute survey.

Year 2: Develop program and implement employee commute education and outreach program to increase percentage of employees who use more sustainable commute options.

Year 3-5: Implement and monitor program.

Year 5: Provide assessment of program to Dane County Board with quantifiable usage and GHG reduction numbers.

b. Parties Responsible for Implementation: Sustainability Coordinator; DOA; Human Resources; Wellness Committee; Subcommittee of department staff to champion this project.

c. Priority: High. Current staff participation depends on individual departments and office locations. Could work with departments and locations where there is high participation to determine how to encourage those with lower participation.

10) Strategy: Implement the use of new GPS software designed to improve route efficiency.

a. Timeline:

Year 1: Purchase routing software that uses GPS information to evaluate route efficiency.

Year 2: Implement and evaluate new routes. Evaluate use of software for other applications.

b. Parties Responsible for Implementation: Dane County Highway and Transportation; All departments, especially those that are transportation intensive.

c. Priority: High. Increasing route efficiency will reduce driving time thereby conserving fuel. In addition, better route efficiency will provide a greater level of service, and a more productive use of staff time.

11) Strategy: Train staff in sustainable vehicle operation and management practices (e.g., engine idling reduction, “eco-driving”, vehicle maintenance, etc.) related to fleet operations by incorporating the topic into existing training and/or providing access to eco-driving webinar training. Develop a tool to measure post-training outcomes (e.g., fuel use reduction, maintenance cost reduction, etc.). [The County Highway Department does a spring and fall training into which this could be incorporated. Could look into Ford’s and others’ eco-driving webinar trainings. Could have staff training in various departments and then have a start date from which to measure effectiveness in terms of VMT, fuel used, maintenance costs reduced, etc.]

a. Timeline:

Year 2: Development and implementation

Year 2-5: Document employees trained and compare annual reports with benchmark numbers.

Ongoing: Provide yearly training to staff

b. Parties Responsible for Implementation: DOA; Highway Department; All departments that maintain a vehicle fleet.

c. Priority: High. Training in best practices for fleet sustainability can provide an immediate impact on fuel consumption and awareness with minimal capital input.

12) Strategy: Add and maintain bicycle facilities, including additional bike racks and covered racks where there are sufficient riders throughout the year, in county facilities and transportation project planning.

a. Timeline

Year 1 & 2: Identify projects within the Capital Improvement Plan that have existing bike lanes or that are amenable to the addition of bike lanes; Develop a quantifiable way to report usage and environmental, social, and economic impact.

Years 3 - 5: Maintain existing bike lanes during construction and add new bike lanes as budgets allow.

Year 5: Provide assessment of the strategy to the Dane County Board.

b. Parties Responsible for Implementation: Dane County Highway and Transportation; Sustainability Coordinator; Other related departments.

c. Priority: Medium. Dane County has an active biking community that commutes to work and other locations on a daily basis. The maintenance and addition of bike lanes will provide opportunities for continued and increased bike use.

13) Strategy: Expand use of videoconferencing and telephone appearances in courts, as well as for any department staff who need to travel for trainings, meetings, and other aspects of their work. Expand use of virtual meetings whenever appropriate.

a. Timeline: Years 2-5.

b. Parties Responsible for Implementation: Clerk of Courts

c. Priority: Medium

14) Strategy: Provide park-and-ride facilities to encourage more efficient commuter opportunities.

a. Timeline:

Year 2: Work with WisDOT and develop possible locations (explore church parking lots, etc.).

Year 3-5: Incorporate areas into developing projects, plan communication campaign that includes benefits and possible pilot incentives.

Year 5: Assess if county can work with WisDOT or other agencies to continue.

b. Parties Responsible for Implementation: Dane County Highway and Transportation.

c. Priority: Low. These facilities are best tied to major state or interstate highways to provide access to the greatest number of motorists. Dane County can work with WisDOT to recommend locations where Park & Ride facilities can be incorporated into planning and design of highway projects.

WATER

GOAL

Dane County demonstrates wise water use and promotes water conservation in all county government operations to ensure access to clean and abundant water for current and future generations.

OBJECTIVES

- 1) Reduce water usage rates in all existing county-owned facilities, grounds, and infrastructure.
- 2) Promote continuous improvement in water conservation achievement across all county operations.

STRATEGIES

- 1) **Strategy:** Identify and implement a mechanism for tracking and reporting water consumption across county operations, facilities, and grounds to establish a water use baseline and identify high water use operations and areas. Consider installation of visible, “smart” meters, add water meter tracking to daily mechanical inspection rounds and generated daily logs, and consider installing bottle fillers with drinking fountains.
 - a. **Timeline:** Year 1 and ongoing
 - b. **Parties Responsible for Implementation:** Primary: Public Works and Facilities; DOA; Supporting: All departments
 - c. **Priority:** High

- 2) **Strategy:** Review water consumption across all county facilities and grounds to establish a water use baseline and identify high water use operations and areas.
 - a. **Timeline:** Ongoing
 - b. **Parties Responsible for Implementation:** Primary: Public Works and Facilities; DOA; Supporting: All departments
 - c. **Priority:** High

- 3) **Strategy:** Prioritize implementation of water conservation measures within high water use operations.
 - a. **Timeline:** Year 1
 - b. **Parties Responsible for Implementation:** Primary: Public Works and Facilities; DOA; Supporting: All departments
 - c. **Priority:** High

- 4) **Strategy:** Identify water conservation best practices and strategies that can be implemented in Dane County.
 - a. **Timeline:** Year 1
 - b. **Parties Responsible for Implementation:** Primary: Sustainability Coordinator; Sustainability Work Groups; Supporting: All departments
 - c. **Priority:** High

- 5) **Strategy:** Based on findings of the water consumption review, develop and adopt a water conservation policy for county operations that includes water use reduction goals and best practices (investigate the installation of a water credit meter for HVAC cooling equipment, outdoor hose bibs, and camping water feeds to reduce sewer charges on metered water).
- a. **Timeline:** Year 2
 - b. **Parties Responsible for Implementation:** Primary: Public Works and Facilities; DOA; Supporting: All departments
 - c. **Priority:** High.
- 6) **Strategy:** Replace or retrofit all existing county building plumbing fixtures to reduce water use (e.g., install low- or zero-flush toilets and urinals/ low water use faucets).
- a. **Timeline:** Year 2 and ongoing.
 - b. **Parties Responsible for Implementation:** Primary: DOA; Public Works and Facilities Supporting: All departments
 - c. **Priority:** Medium to High depending on water use baseline results
- 7) **Strategy:** Require construction plans and designs for all renovated and new county-owned facilities and infrastructure to include water conservation measures [e.g., Ensure that Dane County facilities construction achieves all points in the water-efficiency section of the LEED for New Construction and Major Renovations standard.]
- a. **Timeline:**
 - Year 1:** Investigate water conservation measures and standards.
 - Year 2:** Develop policies and implement
 - Years 3-5:** Ongoing implementation
 - b. **Parties Responsible for Implementation:** Primary: Sustainability Coordinator; Public Works and Facilities; Supporting: All departments
 - c. **Priority:** Medium
- 8) **Strategy:** Develop and implement a plan to use reclaimed water for landscape and other needs at county grounds and facilities.
- a. **Timeline:** Year 2
 - b. **Parties Responsible for Implementation:** Primary: Public Works and Facilities; Parks Supporting: All departments
 - c. **Priority:** Medium

9) Strategy: Implement water filtration systems to replace dump and fill pools in animal exhibits throughout the Zoo.

a. Timeline: Years 1 and 2

b. Parties Responsible for Implementation: Primary: DOA; Zoo; Public Works and Facilities

c. Priority: Medium

WASTE

GOAL

Dane County promotes sustainable materials management by reducing consumption of resources and by using resources most productively and sustainably throughout their lifecycles, from the point of resource extraction through material disposal. This approach optimizes the use of resources, reduces solid waste across county operations, and reduces associated environmental, economic, and social impacts.

OBJECTIVES

- 1) Establish a baseline by reviewing wastes produced and discarded across county facilities and operations, including wastes associated with remodeling, construction, and special events.
- 2) Identify wastes that can be reduced, recycled, or re-purposed and implement a plan to do so.
- 3) Identify and apply best practices to reduce resource consumption and waste production.
- 4) Increase rates of recycling in all county facilities.
- 5) Require new construction and renovation projects for county facilities and infrastructure to salvage, reuse, and recycle as many construction and demolition materials as possible.
- 6) Reduce solid waste that goes to the county landfill from county operations and facilities.

STRATEGIES

- 1) Strategy:** Conduct a waste sort at county facilities to get a baseline, evaluate the amount and types of waste produced throughout county operations and facilities, including wastes associated with remodeling, construction, and special events, and identify contributing factors to waste and barriers to waste reduction. [Include an inventory of the number of trash and recycling receptacles currently in use throughout county facilities to identify gaps in recycling site access, *i.e.*, Are they strategically placed? Do we need more? Are they functioning well?]
 - a. Timeline:**

Year 1: Identify how much waste is produced, types of waste produced, contributors and barriers.
 - b. Parties Responsible for Implementation:** Primary: Public Works, Solid Waste; Supporting: All county departments responsible for identifying and evaluating operational waste streams.
 - c. Priority:** High – [We are running out of space at the county landfill and current levels of waste production are not sustainable long term. Waste of materials costs money.]

- 2) Strategy:** Investigate and identify strategies to reduce, reuse, and recycle waste produced and discarded through county facilities and operations, and develop a plan for implementation (include exploration of different materials and processes, continue diversion of construction materials for county building projects, etc.)
 - a. Timeline:**

Year 1: Research and compile best practices; begin implementation planning
Year 2: Implement waste reduction plan.
 - b. Parties Responsible for Implementation:** Primary: Public Works, Solid Waste, Sustainability Coordinator; Supporting: All county departments responsible for implementing.
 - c. Priority:** High. We are running out of space at the county landfill and current levels of waste production are not sustainable long term. Waste of materials costs money.

- 3) Strategy:** Explore organic waste reduction and diversion options, including employee break room food wastes, and organics from consolidated food services and residential programs.
 - a. Timeline:**

Year 1: Get information as part of the baseline waste sort of all county facilities.
Year 2: Identify strategies and plan for implementation.
 - b. Parties Responsible for Implementation:** Primary: Public Works, Solid Waste; Supporting: All departments
 - c. Priority:** High for baseline determination. Medium for planning and implementation.

- 4) **Strategy:** Implement employee education initiative on waste reduction for all county staff.
- a. **Timeline:** Year 2 (After baselines and planning have been done)
 - b. **Parties Responsible for Implementation:** Primary: Public Works, Solid Waste; UW-Extension; Sustainability Coordinator. Supporting: All departments
 - c. **Priority:** High. Administrative priority and departmental support for behavior change is necessary to increase waste reduction rates.
- 5) **Strategy:** Continue implementation of the county's paper waste reduction policy and strategy (APM) that includes requirements for duplex printing and copying, more effective use of Printing and Services, reduction of individual-user office equipment, and transition to multi functional devices.
- a. **Timeline:**

Year 1 and ongoing: Continue implementation and track outcomes of APM policy on paper and office equipment
 - b. **Parties Responsible for Implementation:** Primary: DOA/ Printing and Services; Sustainability Coordinator Supporting: All departments
 - c. **Priority:** High
- 6) **Strategy:** Eliminate the distribution of paper paycheck stubs to county employees and implement an electronic system in its place.
- a. **Timeline:** Year 1 and ongoing
 - b. **Parties Responsible for Implementation:** Primary: DOA. Supporting: All departments for communication with staff
 - c. **Priority:** High
- 7) **Strategy:** Implement electronic ETR submittal for all county employees
- a. **Timeline:** Year 1 and ongoing. Train payroll and other staff on the new system and implement the new electronic ETR submittal system.
 - b. **Parties Responsible for Implementation:** Primary: DOA Supporting: All departments for communication with staff.
 - c. **Priority:** High
- 8) **Strategy:** Implement and refine systems for paperless submission of county employment applications and other forms
- a. **Timeline:** Year 1 and ongoing

Year 2: Develop and implement an efficient electronic workflow for staff

b. Parties Responsible for Implementation: Primary: DOA. Supporting: All departments for communication with staff.

c. Priority: High

9) Strategy: Based on findings of the waste and recycling assessment currently being conducted, increase number of recycling collection points at county facilities with improved communication, includes increasing total number of recycling collection points for events and use of signage with appropriate images on receptacles to distinguish different waste types for ease of use and compliance.

a. Timeline: Year 1 and ongoing

b. Parties Responsible for Implementation: Primary: Public Works, Solid Waste; Supporting: All departments

c. Priority: High.

10) Strategy: Discourage county purchase and use of bottled water and other single-use disposable products for county-sponsored meetings and events, as well as explore possibilities for providing filtered water bottle filling stations for county employees at county facilities.

a. Timeline:

Year 1: Research and develop policy and implementation plan.

Year 2: Implement policy.

b. Parties Responsible for Implementation: Primary: DOA- Purchasing. Supporting: All departments for communication with staff.

c. Priority: Medium

11) Strategy: Regularly advertise and encourage employees to use swap-shop and other resources for reusing materials and supplies.

a. Timeline:

Year 1: Choose venue and develop messaging

b. Parties Responsible for Implementation: Primary: All departments for communication with staff.

c. Priority: Medium

12) Strategy: Promote the existing county landfill tour program in order to increase the opportunities to educate county staff and county board supervisors in addition to the general public, regarding the resource and budget impacts of our waste.

a. Timeline: Year 2 (After planning and messaging have been done)

- b. Parties Responsible for Implementation:** Primary: Public Works, Solid Waste. Supporting: Sustainability Coordinator.
- c. Priority:** Low. Need to determine practical impacts on Solid Waste, Landfill staff, liability issues, etc.

COUNTY BUILDINGS & FACILITIES

GOAL

Dane County's buildings and facilities are efficient and safe. Facilities Management uses standards, policies, and practices that promote resource efficiency and performance, with a focus on energy efficiency and performance, the use of sustainable materials, and an emphasis on occupant and user health and well-being.

OBJECTIVES

- 1) Increase the resource efficiency and performance, including energy efficiency and performance, of all existing buildings and facilities owned by Dane County.
- 2) Plan and construct all new county facilities to emphasize and achieve resource efficiency and performance, including energy efficiency and performance.
- 3) Increase renewable energy generation by and for buildings and facilities owned by Dane County to transition away from the use of fossil fuels.
- 4) Use sustainable materials, products, and operation and maintenance practices throughout the lifecycle of all county buildings and facilities.
- 5) Use LEED, Energy Star, and other sustainable building certification standards in the design of all new construction and renovations to existing buildings and facilities to achieve environmental, economic, and human health benefits associated with sustainable building and renovation standards. This should extend to use of contractors that are hired for construction, demolition, or remodeling efforts.
- 6) Evaluate existing infrastructure to identify opportunities to reduce use of natural resources and impact on the environment.
- 7) Identify opportunities to improve and expedite the planning and development process for county buildings and facilities. Such efforts shall include the siting of facilities to enhance ability for multi-modal transportation while limiting or avoiding impacts on water and other natural resources, including hydric soils
- 8) Promote the health and well-being of occupants and users of county facilities and buildings by creating exterior and interior spaces that enhance the work experience and provide opportunities for improving wellness.
- 9) Consider employee and customer access to available and planned multimodal transportation opportunities when planning locations for new county buildings and facilities.
- 10) Educate county facilities staff, other employees, and county contractors on preferred sustainable building and facility operations and maintenance practices.

STRATEGIES

1) Strategy: Establish a comprehensive sustainable building and facilities policy with specifications for sustainable design, building, operation, and performance of new and existing county buildings and facilities. The policy should include guidance on the use of LEED and other sustainable building certification standards in the design of all new construction and renovations to existing buildings and facilities to achieve associated environmental, economic, and human health benefits.

a. Timeline:

Year 1: Identify policy development team to establish scope, research sample policies, and begin development of policy. Include research to investigate the feasibility of requiring LEED or other sustainable building certification standards for facilities.

Year 2: Complete development of policy, including evaluation criteria.

Ongoing: Implement policy and measure outcomes

b. Parties Responsible for Implementation: Primary: Public Works; All departments (to identify functional needs, conduct measurement); DOA and County Board (for budgeting); Facilities Management. Supporting: Sustainability Coordinator (for research of policy and practice resources).

c. Priority: High.

2) Strategy: Expand use and generation of clean, renewable energy at all county buildings, facilities, and properties.

a. Timeline:

Year 1: To develop policy

Year 2 and ongoing: To begin implementation

b. Parties Responsible for Implementation: Primary: County Board; DOA; Public Works

c. Priority: High.

3) Strategy: Establish bidding requirements that incorporate the county's sustainable building and facilities policies.

a. Timeline:

Year 2: Develop bidding requirements in line with the county's completed sustainable building and facilities policy. This could be done in concert with the checklist for building contractors.

Ongoing: Review and update bidding requirements.

b. Parties Responsible for Implementation: Primary: Public Works and each department that is doing the new building

c. Priority: High

4) Strategy: Assess all current county buildings and facilities to identify needs and prioritize replacement, upgrades, and renovations for greater sustainability performance (e.g., insulation and lighting upgrades, appliance replacement, etc.).

a. Timeline:

Year 1 and ongoing: Assessment and identification of priority projects and budget planning

Year 2 and ongoing: Implementation of initial priority projects

Years 3-5: Continue implementation and measurement

b. Parties Responsible for Implementation: Primary: Public Works and Facilities; Departments (to identify needs, conduct measurement); Administration and County Board (for budgeting); Facilities Management maintenance staff; Sustainability Coordinator (for SMART Fund proposals)

c. Priority: High. There are still a number of low cost measures to reduce energy inefficiencies in county facilities that have not yet been implemented and that could save the county energy and money in a short period of time. Some of these are identified through the SMART Fund proposal process and others through the ongoing facilities retrocommissioning process. However, it would make sense to identify classes of improvements that have significant energy benefits and quick returns, such as lighting upgrades to LEDs, and inventory opportunities for these across county facilities.

5) Strategy: Prioritize and implement the capital improvement recommendations for the CCB, PSB, and Courthouse made in the Retrocommissioning Report submitted by Sustainable Engineering Group, LLC.

a. Timeline:

Year 1: Prioritize projects and begin implementation of low cost measures.

Year 2 and ongoing: Continue implementation of all prioritized capital improvement measures.

b. Parties Responsible for Implementation: Primary: Public Works/ Facilities; Department maintenance staff

c. Priority: Medium to High depending on estimated payback and savings.

6) Strategy: Continue employing rigorous commissioning and retrocommissioning on new building projects and current facility remodeling projects from the design stage forward in order to maximize efficiency and building performance.

a. Timeline: Year 1 and ongoing: Identify and prioritize planned building and remodel projects for commissioning and retrocommissioning and begin implementation of commissioning/retrocommissioning.

b. Parties Responsible for Implementation: Primary: Public Works; DOA /Facilities; Department maintenance staff

c. Priority: High. For prioritized building and remodeling projects it will increase the performance and efficiency of the buildings and reduce costs.

7) Strategy: Establish and clearly communicate internal countywide energy policy regarding seasonal office temperatures, lighting, operation of computer monitors, printers, and other electrical appliances (*e.g.*, shutting down devices at the end of the day and on weekends.)

a. Timeline: Year 1

b. Parties Responsible for Implementation: Primary: DOA Supporting: Sustainability Coordinator for policy and implementation research

c. Priority: Medium

8) Strategy: Identify county facilities and grounds suitable for installation of cisterns, rain gardens, and other methods to reduce storm water runoff and reduce potable water use where use of graywater is appropriate and feasible.

a. Timeline:

Year 2: Inventory sites for suitability and create plan

Year 3-5: Prepare and implement installations

b. Parties Responsible for Implementation: Primary: Public Works and Facilities; Land and Water Resources; Parks; Supporting: All departments.

c. Priority: Medium

9) Strategy: Develop a comprehensive list of sustainable building design and construction requirements for contracted architects and engineers working on new construction and renovations of county buildings and facilities (*e.g.*, County's LEED building ordinance, lifecycle analysis of building projects, etc.)

a. Timeline:

Year 2: Establish a staff team to work on the checklist.

Year 3: Implement

b. Parties Responsible for Implementation: Primary: DOA; Public Works Supporting: All departments

c. Priority: Medium

PURCHASING

GOAL

Dane County purchases and uses materials, products, and services in a fiscally responsible manner, while reducing resource consumption and waste, supporting local economic opportunities, and ensuring human health and well-being.

OBJECTIVES

- 1) Reduce overall consumption of products for county operations, where possible.
- 2) Purchase and use products that perform and have the most beneficial environmental impact.
- 3) Pursue integrated materials management strategies that include reducing consumption, reusing materials, recycling waste materials that cannot be reused, and purchasing cost-competitive recycled content and recyclable products.
- 4) Incorporate lifecycle cost assessment methods into purchasing decisions to determine the best overall value for materials, products, and services.
- 5) Educate and support all county departments and staff on making sustainable purchasing decisions and take advantage of staff experience and knowledge with regard to performance of specific materials, products, and services.

STRATEGIES

- 1) Strategy:** Review current purchasing practices across all county operations to identify opportunities for improving sustainability of purchasing policies and practices.
 - a. Timeline:**

Year 1: Identify current county purchasing categories and processes, current specifications for those categories, and any current preferred materials, products, services vendors.
Year 2: Develop a current purchasing categories list to refer to when researching and comparing sustainable purchasing policies and processes.
 - b. Parties Responsible for Implementation:** Primary: DOA/Purchasing; Sustainability Coordinator; Departmental Sustainability Work Group. Supporting: All departments.
 - c. Priority:** High

- 2) Strategy:** Identify and evaluate sustainable purchasing policies and practices, and specifications and sources for materials, products, and services that improve sustainability through: reduced consumption of non-renewable natural resources; increased energy and water efficiency; reduced waste; improved public health; and increased durability and economy.
 - a. Timeline:**

Year 1: Identify staff team to conduct review and begin collection of information.
Year 2: Continue collection of information, develop resource report, and make recommendations to Purchasing Division for implementation.
 - b. Parties Responsible for Implementation:** DOA / Purchasing; Sustainability Coordinator; Departmental Sustainability Work Group.
 - c. Priority:** High

- 3) Strategy:** Develop and adopt a sustainable purchasing policy and process for county government that includes operational parameters and lifecycle cost assessment tools and methods to be considered for county sustainable purchasing practices. Factors to be considered should include: Environmental: Pollution prevention and reduction, waste reduction, GHG emissions, energy consumption, resource conservation; Social: Human health and safety, local economic development; Fiscal: Buying power leveraging, impact on staff time and labor, maintaining flexibility to take advantage of new environmental and technological opportunities as they arise.
 - a. Timeline:**

Year 1: Identify staff team to research policies and processes
Year 2: Staff team makes recommendations regarding policy and process for Dane County Purchasing.
Year 2-3: Develop and implement comprehensive sustainable purchasing policy and processes that incorporate the information gathered in the preceding strategies.

- b. Parties Responsible for Implementation:** DOA / Purchasing; Sustainability Coordinator; Departmental Sustainability Work Group and other identified staff.
 - c. Priority:** High
- 4) Strategy:** Incorporate Dane County's sustainability principles and policies into county bids, contracting, and purchasing forms to inform vendors and encourage them to provide more sustainable materials, products, and services.
 - a. Timeline:** Year 1
 - b. Parties Responsible for Implementation:** Primary: DOA/ Purchasing; Sustainability Coordinator; Supporting: All departments
 - c. Priority:** High.
- 5) Strategy:** Implement electronic submittal of all competitive proposals and bids.
 - a. Timeline:** Year 1
 - b. Parties Responsible for Implementation:** DOA / Purchasing
 - c. Priority:** High.
- 6) Strategy:** Promote and expand use of existing Dane County Buy Local Preference for all materials, services, products, and food.
 - a. Timeline:** Year 1 and ongoing
 - b. Parties Responsible for Implementation:** DOA/Purchasing; UW-Extension; departments doing the purchasing
 - c. Priority:** High. Because it supports the local economy, reinforces Dane County government's membership in Dane Buy Local, and there is already a system in place to build upon.
- 7) Strategy:** Develop a sustainable purchasing manual for Dane County staff and employees to accompany the sustainable purchasing policy and provide practical guidance on incorporating sustainability into all purchasing processes. The manual should identify preferred sustainable products, product specifications, services, sustainable supply sources, etc., and be available electronically.
 - a. Timeline:**
 - Year 1:** Research and draft policy / guide
 - Year 2:** Employee manual or APM developed
 - Ongoing:** Update manual and other communication tools as necessary.
 - b. Parties Responsible for Implementation:** Primary: DOA /Purchasing; Sustainability Coordinator; Sustainability Work Group.

c. **Priority:** High.

8) **Strategy:** Develop sustainable purchasing trainings for county employees.

a. **Timeline:** Year 2 – After employee manual or APM developed

b. **Parties Responsible for Implementation:** DOA /Purchasing; Sustainability Coordinator; Sustainability Work Group

c. **Priority:** Medium

9) **Strategy:** Identify Dane County vendors' current sustainability practices and policies to determine which vendors share the county's commitment to sustainable purchasing and to determine if there are common practices, ratings, and certifications already being used by Dane County vendors. [Note: This information could form the basis for later development of a preference system for considering sustainability factors in the responsiveness of prospective bidders.]

a. **Timeline:**

Year 1: Identify staff team and develop survey for Dane County vendors on their sustainability practices and policies.

Year 2: Administer survey to vendors and collect results; discuss outcome of survey and plan next steps with DOA/Purchasing and Sustainability Work Group.

b. **Parties Responsible for Implementation:** DOA/Purchasing; Departmental Sustainability Work Group

c. **Priority:** Medium

10) **Strategy:** Develop a sustainable purchasing performance evaluation system that includes a system for department staff to share information with each other about sustainable products and services. Collect data and compile records to support this system and provide an evaluation of the effectiveness of the county's sustainable purchasing policies and practices over time.

a. **Timeline:** Year 2 and ongoing

b. **Parties Responsible for Implementation:** DOA /Purchasing; Sustainability Coordinator; Sustainability Work Group; All departments

c. **Priority:** Medium

11) **Strategy:** Develop tools for disseminating current and updated information to county staff about sustainable purchasing issues, such as opportunities for how to acquire, reuse, and re-purpose products for county departments.

a. **Timeline:**

Year 1: Compile information re: resources for acquisition, reuse, and re-purposing (UW Swap Shop, Online Auction, internal departmental clearinghouse).

Year 1 – 2: Identify and implement communication system.

Ongoing: Update communication site and information as necessary.

b. Parties Responsible for Implementation: Primary: Departmental Sustainability Work Group; All departments for resource ideas, DOA/Information Management for assistance if it is a web-based system.

c. Priority: Medium

12) Strategy: Explore opportunities and benefits of participating in a Sustainable Purchasing Consortium.

a. Timeline:

Year 2: Identify opportunities for collectively encouraging markets for sustainably preferred products and services, efficient coordination and product distribution methods, pilot testing of potential new products and leveraging collective buying knowledge and power.

Year 3: Make recommendations regarding next steps.

b. Parties Responsible for Implementation: Primary: DOA / Purchasing; Supporting: All county department purchasing agents and contacts to identify commonly purchased products that would lend themselves to bulk purchasing.

c. Priority: Low

13) Strategy: Update county purchasing contract routing process to include a sustainability review element.

a. Timeline: Year 2

b. Parties Responsible for Implementation: Primary: DOA / Purchasing

c. Priority: Low. Other strategies need to be in place first.

14) Strategy: Identify and evaluate sustainable purchasing rating and certification systems or other options and develop an approved vendor list for agency use.

a. Timeline: Year 3 and ongoing

b. Parties Responsible for Implementation: Primary: DOA/ Purchasing

c. Priority: Low.

15) Strategy: Explore feasibility of moving from 30% post consumer recycled content paper to at least 50% post consumer content for county paper purchases.

a. Timeline: Year 2

b. Parties Responsible for Implementation: Primary: DOA/ Purchasing

c. Priority: Low.

EDUCATION & OUTREACH

GOAL

All Dane County employees and members of the public are strongly connected to Dane County government's sustainability efforts through wide-ranging opportunities for outreach, education, communication, and engagement.

OBJECTIVES

- 1) Educate all parties involved—County Executive, County Board, County Employees, County Contractors/Vendors, and Residents—about Dane County government's sustainability policies and practices to promote sustainability not just in Dane County government, but throughout the community.
- 2) Create opportunities for two-way communication with all community stakeholders about sustainability.
- 3) Promote county sustainability through the unique and various activities of county departments according to their respective strengths and opportunities (e.g., Dane County Sheriff's Office's "Night Out," Dane County Parks Division's "Free Fishing Day," Dane County Regional Airport at the Mallards game(s), Dane County Fair, etc.), as well as through the day-to-day operations of county agencies.

STRATEGIES

- 1) **Strategy:** Initiate a standing interdepartmental ‘Sustainability Work Group’ that would meet on a regular basis throughout the year (e.g., quarterly) to develop best practices, share ideas, and otherwise promote sustainability in Dane County.
 - a. **Timeline:** Year 1
 - b. **Parties Responsible for Implementation:** All departments and agencies, led and staffed by Sustainability Coordinator and Dane County Department of Administration.
 - c. **Priority:** High. It will be an early step in promoting sustainability within the county by establishing a forum for sharing ideas across departments.

- 2) **Strategy:** Add a regular “Sustainability Report” section to the County Board agenda where questions and concerns regarding Dane County government sustainability can be routinely addressed.
 - a. **Timeline:** Year 1
 - b. **Parties Responsible for Implementation:** Primary: Dane County Board (policy change and implementation), with a supporting role of all departments (contribution of information). The Sustainability Coordinator would prepare and present the report to the County Board.
 - c. **Priority:** High. It will keep sustainability in the forefront of the County Board’s policy making agenda and general awareness. It also will demonstrate to the public that sustainability is an important and ongoing part of Dane County government. All Dane County Board meetings are televised, which also will assist in informing the public about the significance of sustainability in our community.

- 3) **Strategy:** Create public relations and informational material on county sustainability activities to inform the public about how the county is responsibly managing our limited resources. This material may feature day-to-day practices, operations, and special projects of the county and be designed for both external use on the Dane County and departmental websites and internal use on DCINet.
 - a. **Timeline:** Year 1
 - b. **Parties Responsible for Implementation:** Sustainability Coordinator, Sustainability Work Group, and all departments and agencies (for contributing information).
 - c. **Priority:** High. It will be another early step in building the body of information needed to explain why the county community sustainability initiative is important and meaningful.

- 4) **Strategy:** Initiate an interdepartmental collaboration to develop sustainability best practices, share ideas, etc. via electronic communication, but that also includes an annual face-to-face celebration gathering with local foods to discuss progress and next steps.
 - a. **Timeline:** Year 1 and ongoing

b. Parties Responsible for Implementation: All departments and agencies

c. Priority: High

5) Strategy: Encourage Dane County departments to conduct sustainability outreach to their customers, clients, and partnering organizations using both the resources developed in the above strategy as well as those developed by and unique to the departments around their own respective areas of expertise.

a. Timeline: Year 2

b. Parties Responsible for Implementation: Sustainability Coordinator; Sustainability Work Group; All departments and agencies.

c. Priority: Medium.

6) Strategy: Host public outreach events (e.g., an annual Sustainability Summit) to highlight best practices in the field of sustainability.

a. Timeline: Year 2 and ongoing

b. Parties Responsible for Implementation: Sustainability Coordinator, Sustainability Work Group, and all departments and agencies (for contributing information and incorporating into specific facilities).

c. Priority: Medium.

7) Strategy: Collaborate on promoting sustainability with other levels of government, public agencies, nonprofits, and area businesses, especially large Dane County employers. Contact area civic groups to schedule presentations and disseminate sustainability informational material.

a. Timeline: Year 2 and ongoing

b. Parties Responsible for Implementation: Sustainability Coordinator, Sustainability Work Group, and all departments and agencies (for contributing information and incorporating into specific facilities), and our elected officials.

c. Priority: Medium. It will first take time for Dane County to establish a sound foundation for its own sustainability efforts before reaching out to other large community stakeholders to make the case to follow suit.

8) Strategy: Incorporate climate change educational 'kiosks' at county facilities where greenhouse gas (GHG) reduction efforts can be made visible to the public (e.g., Dane County Zoo, Alliant Energy Center, Dane County Parks, City-County Building, Fen Oak Resource Center, Dane County Landfill, etc.).

a. Timeline: Year 2 and ongoing

b. Parties Responsible for Implementation: Climate Change Action Council, Sustainability

Coordinator, Sustainability Work Group, and all departments and agencies (for contributing information and incorporating into specific facilities).

c. Priority: Medium.

9) Strategy: Incorporate the county's sustainability principles into all grant programs and their application processes (e.g., PARC fund). Public projects that are funded by the county should promote and support the county's sustainability principles in their implementation.

a. Timeline:

Year 2: Identify key message points and selection criteria based on the sustainability principles. Identify specific grant programs with which to pilot the new process.

Years 3-5: Implement and evaluate response to changes and effectiveness of changes.

b. Parties Responsible for Implementation: Primary: Departments that oversee the various grants; Administration (for any selection process issues) Supporting: Sustainability Coordinator to work with departments on educating about this change.

c. Priority: Medium. This could have a positive impact on behavior change on the part of applicants around the Dane County community.

10) Strategy: Promote sustainable agricultural practices and dietary habits associated with eating locally produced foods and sustainably farmed products.

a. Timeline: Year 2 and Beyond

Year 1: Identify key message points.

Year 2: Identify effective ways to disseminate message points.

Years 3-5: Evaluate and readjust message points to be more effective.

b. Parties Responsible for Implementation: Many departments. For example, Zoo is one agency/county facility that could reach a broad audience, as well as the Alliant Energy Center. UW/Dane County Extension would be integral to this effort: Work with the Dane County UW-Extension to source local foods.

c. Priority: Low, due to its focus on a more narrow, albeit important aspect of sustainability related to food production and consumption.

EMPLOYEE EXPERIENCE

GOAL

Dane County provides a sustainable, safe, equitable, and healthy work environment that promotes and enhances the health, wellbeing, and engagement of all Dane County employees.

OBJECTIVES

- 1) Increase and maintain employee satisfaction and engagement.
- 2) Increase and maintain employee wellness.
- 3) Increase and maintain racial and social equity among employees.
- 4) Increase and maintain opportunities for employees to participate in the daily activities of Dane County government.
- 5) Increase and maintain opportunities for employees to contribute their ideas for making Dane County operations more sustainable.

STRATEGIES:

- 1) **Strategy:** Develop and implement a system by which employees can contribute ideas and other input to improve sustainability of daily operations (e.g., via electronic newsletter and/or DCINet).
 - a. **Timeline:**
Year 1: Develop system and plan for implementation
Year 2: Communicate to employees and implement
 - b. **Parties Responsible for Implementation:** Sustainability Coordinator / Sustainability Work Group; IT if web-based Supporting: All departments for communication
 - c. **Priority:** High
- 2) **Strategy:** Implement recommendations from the July 2015 Racial Equity Analysis for Dane County Government
 - a. **Timeline:** Ongoing
 - b. **Parties Responsible for Implementation:** Primary: Office of Equity and Inclusion; Employee Relations; all departments
 - c. **Priority:** High
- 3) **Strategy:** Conduct employee opinion survey to identify employee views on workplace practices, effectiveness, accountability, resource management, and satisfaction.
 - a. **Timeline:**
Year 1 and ongoing: Develop and disseminate
Ongoing: Report results and response
 - b. **Parties Responsible for Implementation:** Primary: DOA; Human Resources; Wellness Committee; Unions Supporting: All departments
 - c. **Priority:** Medium
- 4) **Strategy:** Incorporate employee wellness considerations into capital improvement planning and policy making (e.g., active work stations, natural lighting, food and drink choices, etc.).
 - a. **Timeline:** Ongoing
 - b. **Parties Responsible for Implementation:** Primary: DOA; Human Resources; Wellness Committee; Unions Supporting: All departments
 - c. **Priority:** High

APPENDIX A

DEPARTMENTAL SUSTAINABLE OPERATIONS ACTION PLANS

ABOUT THE DEPARTMENTAL SUSTAINABLE OPERATIONS ACTION PLANS

The departmental sustainable operations action plans are listed alphabetically by name of the department. Each department submitted its own action plan(s). Some departments selected a number of initiatives to prioritize, while others chose to focus on one major initiative.

There is both an initiative-at-a-glance table, which provides information on the parties responsible for implementation, estimates of costs and any return on investment, the sections in the county Sustainable Operations Plan that are supported by the initiative, and the target timeframe for implementation. It also provides a narrative description of the project, its benefits, costs, and the department's plan for implementation of the initiative.

Alliant Energy Center — AEC Campus Lighting Conversion

Initiative-at-a-glance		
Person Responsible/Lead		Bill Franz
Supporting Individuals and Organizations		AEC Staff
Target Timeframe		2015
Operational Category		Climate: Objective: 1; Strategy: 2 Buildings: Objective: 1,4,6; Strategy: 4,5
Estimated Costs	Capital Costs	\$600,000 plus (Applied for SMART Fund grant)
	ROI	6.6 years average estimated payback + ongoing savings
	Ongoing Costs	TBD -- Operational costs estimated to decrease
	Staff Level of Effort	Moderate – For initial installation of fixtures and lights. Reduced maintenance after installation based on longevity of new bulbs, etc.

Description

The buildings, parking lots, and landscape areas on the Alliant Energy Center campus currently use hundreds of inefficient light fixtures. The majority of the light fixtures in the buildings on campus are original to the buildings, with the exception of the arena bowl fixtures in the Coliseum and the lights in the recently completed New Holland Pavilions. The arena bowl fixtures were upgraded to more efficient T8 fluorescents in 2012. The New Holland Pavilions are also equipped with T8 fluorescent fixtures that were originally installed as upgrades in the various barns in 2012 and then repurposed. In addition, the lights in the advertising panels on the marquee were upgraded to LEDs in 2014 with a SMART Fund grant.

The Alliant Energy Center will systematically convert to more efficient fixtures and lamps to significantly reduce the energy needed to light its facilities, thereby reducing its dependence on fossil fuels and reducing greenhouse gas emissions.

Implementation Steps

- Retrofit the more than 200 parking lot and street light fixtures that currently use high-pressure sodium lamps with more energy efficient LED lamps. This project will be completed by mid-2015 through a grant from the county's SMART fund.
- Retrofit the hundreds of fixtures and lamps in Exhibition Hall with LEDs and install a lighting control system as recommended in the Retro-commissioning Study that was recently completed by Sustainable Engineering Group. A SMART fund grant has been submitted to the County for this project. If awarded the grant, this projected would be completed by the fall of 2015.
- Replace the existing uplighting around Veterans Memorial Coliseum with energy LED fixtures. This project will be submitted to the County's SMART fund later in 2015 with a late 2015 or early 2016 anticipated completion date.
- Replace inefficient lamps and/or fixtures in the Administration building and other buildings on campus with LEDs as lamps burn out or funding becomes available of the next couple of years.

Benefits

- Cost savings
- Reduced energy consumption
- Reduced carbon footprint and air pollutant emissions

The parking lot fixtures are estimated to have a payback of approximately 6.5 years. The overall payback on the Exhibition Hall lighting conversion is estimated to be 6.6 years, with individual paybacks ranging from 0.4 to 22.3 years depending upon fixture type and amount of usage.

Costs

The total cost of retrofitting all of the parking lot and streetlights is estimated to be \$300,000 based on the bids that were received in February 2015. The various fixture and lamp upgrades and lighting control system for Exhibition Hall are estimated to cost \$265,100. The cost of retrofitting the uplighting on the Coliseum will depend upon the type and number of fixtures required to meet the desired aesthetic effect. Other fixture and lamp replacement costs will depend upon the timing and type of fixture that is chosen.

Alliant Energy Center — Retrocommissioning Study and Recommendations

Initiative-at-a-glance		
Person Responsible/Lead		Bill Franz
Supporting Individuals and Organizations		AEC Staff
Target Timeframe		2015
Operational Category		Climate: Objective: 1; Strategy: 2 Buildings: Objective: 1, 4, 6; Strategy: 4,5
Estimated Costs	Capital Costs	\$277,300 (applied for SMART Fund grant)
	ROI	1.4 – 3.1 years average estimated payback + ongoing savings
	Ongoing Costs	TBD -- Operational costs estimated to decrease
	Staff Level of Effort	Moderate – For initial installation of controls and mechanicals. Reduced maintenance post-installation based on efficiency of new mechanicals and controls.

Description

Conduct a Retrocommissioning Study of Veterans Memorial Coliseum and Exhibition Hall. These studies include the completion of an ASHRAE Level 1 energy audit, system performance testing, implementation of low-cost energy efficiency measures, and documentation of the existing building systems, including a summary of findings and results. The scope of the study includes the following systems: HVAC, hot water, ice-making, building controls, and lighting.

Implementation Steps

- Sustainable Engineering Group, LLC was contracted with in the fall of 2014 to perform the retrocommissioning study.
- Sustainable Engineering Group, LLC issued the studies on January 30, 2015.
- SMART fund applications have been submitted for the various mechanical system upgrades and adjustments that have been recommended. If funded, the recommendations contained in the studies should be completed by late summer of 2015. (See lighting conversion action plan for lighting recommendations that were contained in the studies.)

Benefits

- Cost savings
- Reduced energy consumption
- Reduced carbon footprint and air pollutant emissions

The overall payback on the Exhibition Hall recommendations is estimated to be 1.4 years, with individual paybacks ranging from 0.3 to 4.2 years. The overall payback on the Coliseum recommendations is estimated to be 3.1 years, with individual paybacks ranging from 0.2 to 7.6 years.

Costs

The mechanical system upgrades and adjustments being recommended are estimated to cost \$84,500 Exhibition Hall and \$192,800 for the Coliseum.

Alliant Energy Center — Water Runoff Control/Water Quality Initiatives

Initiative-at-a-glance		
Person Responsible/Lead		Bill Franz
Supporting Individuals and Organizations		AEC Staff
Target Timeframe		2015
Operational Category		Climate: Objective: 3; Strategy: 9 Buildings: Objective: 4,6, 10; Strategy: 4,8
Estimated Costs	Capital Costs	Already included in capital budget for pavilions
	ROI	TBD / improved water quality, reduced flooding
	Ongoing Costs	TBD
	Staff Level of Effort	Low

Description

The Alliant Energy Center campus includes approximately 5,800 paved parking stalls. The large number of parking stalls, expansive building footprints, and high water table around the campus necessitates careful water runoff management to reduce the likelihood of flooding on the campus and the surrounding neighborhood to the west. Hosting multiple horse and cattle events with large amounts of manure can create water quality issues if the manure is exposed to the elements.

Implementation Steps

- The New Holland Pavilions which opened in September, 2014 have covered manure bunkers to prevent rainwater from washing the manure away and potentially reaching getting into the surrounding lagoons and lakes. Prior to the opening of the pavilions the manure bunkers were not under cover.
- As part of the New Holland Pavilion project, gabion formations were installed along the former Bram Street to help with erosion control by diverting and better controlling water run off from the parking lots and roof drains.
- In conjunction with the City of Madison, a large retention pond was constructed in Lyckberg Park in the fall of 2014 to help control stormwater runoff from the parking lots. In the spring of 2015 a new trench drain will be cut into the south parking lot that will be connected to an inlet to the retention pond to complete this project.

Benefits

- Improved water quality
- Improved stormwater management
- Improved erosion control

Costs

The cost of the gabion formations was included in the New Holland Pavilion project. The City of Madison was responsible for the construction of the retention pond and installing the trench train and inlets. The Alliant Energy Center will be responsible for patching the parking lot after the trench drain is installed.

Alliant Energy Center — Locally Sourced Purchasing

Initiative-at-a-glance		
Person Responsible/Lead		Bill Franz
Supporting Individuals and Organizations		AEC Staff
Target Timeframe		2015 and ongoing
Operational Category		Climate: Objective: 1; Strategy: 2 Purchasing: Objective: 2,4,5; Strategy: 2,6
Estimated Costs	Capital Costs	None
	ROI	TBD / supports local food economy, reduced transportation
	Ongoing Costs	TBD / dependent on products purchased
	Staff Level of Effort	Low

Description

The Alliant Energy Center contracts with Centerplate as the exclusive onsite catering and concessions company to serve its customers, exhibitors, and visitors.

Implementation Steps

- The existing contract with Centerplate that expires on June 30, 2015 contains a target of 30% locally grown and distributed food service products be utilized in their operations.
- A new 10-year contract with Centerplate begins July 1, 2015 and also contains the same 30% locally grown and distributed food service product provision.

Benefits

- Reduced energy consumption related to the transportation and delivery of food service products
- Reduced carbon footprint and air pollution emissions
- Supports local economy

Costs

There is no additional cost to the Alliant Energy Center.

Alliant Energy Center — Alternative Fuel Vehicles and Equipment

Initiative-at-a-glance		
Person Responsible/Lead		Bill Franz
Supporting Individuals and Organizations		AEC Staff
Target Timeframe		2015 and ongoing
Operational Category		Climate: Objective: 1; Strategy: 2 Purchasing: Objective: 2,4,5; Strategy: 2,6
Estimated Costs	Capital Costs	TBD
	ROI	TBD / Anticipate emissions reductions
	Ongoing Costs	TBD / Anticipate lower operating costs with greater fuel efficiency
	Staff Level of Effort	Low / to investigate options and make proposals

Description

The Alliant Energy Center utilizes various vehicles and pieces of equipment in its daily operations. A good portion of these vehicles and equipment have outlived their useful lives and are very fuel-inefficient. As these vehicles and equipment are replaced, special consideration will be given to alternative fuel types and no- or low-emission options.

Implementation Steps

- The AEC purchased a new LP-powered forklift in December 2014.
- On an ongoing basis, all new vehicle and equipment purchases will include a review of alternative fuel models as an option.

Benefits

- Reduced energy consumption
- Reduced carbon footprint and air pollutant emissions

Costs

The cost will depend upon the specific vehicle or piece of equipment and the alternative fuel choice that is selected.

Clerk of Courts — Transition to Paperless Filing of Court Documents

Initiative-at-a-glance		
Person Responsible/Lead	Carlo Esqueda	
Supporting Individuals and Organizations	Wisconsin Supreme Court, Director of State Courts	
Target Timeframe	3-4 years until implementation, then ongoing	
Operational Category	Waste: Objectives 2,3, 6; Strategy: 2,5	
Estimated Costs	Capital Costs	TBD
	ROI	TBD / Anticipated reduction in storage costs
	Ongoing Costs	TBD
	Staff Level of Effort	High

Description

The Wisconsin Court System has implemented an electronic filing system designed to facilitate the transition of courts statewide to paperless operations. Usage of the e-filing system statewide has been low; the counties that have implemented it have seen less than 1% of eligible filings come in electronically. To bolster the use of the system, the Court System has introduced a rules petition to the Supreme Court to make e-filing mandatory in Wisconsin for all but self-represented litigants. I, along with the Wisconsin Clerks of Court Association, support this petition. If approved by the Supreme Court, all counties will make the transition to paperless filings within three years. Already open cases will also have to be converted to electronic cases at the time of implementation. This will mean the elimination of tens of thousands of pages of documents currently stored by the court, as well as no new paper coming into the system.

Implementation Steps

The first step is approval of the rules petition by the Wisconsin Supreme Court. Next, we will work with Wisconsin Court Operations to identify an implementation plan to make the transition within three years. The first step in implementation planning is to scan all cases that are expected to still be open at the time of implementation, as it will be required to start taking e-filings on all cases—not just the new ones—as of the implementation dates. We will also have to secure additional scanning devices from CCAP for the purpose of scanning *pro se* documents submitted via paper, as we have so many points of entry for new documents.

Benefits

The most significant ROI will be the gradual reduction of storage costs at the State Records Center. We currently budget \$40,500 per year for this storage. As old files age out and are destroyed they will not be replaced by new files.

Costs

Costs are undetermined at this time. If e-filing is mandated but CCAP is underfunded, the county may have to purchase scanning devices to implement e-filing. Given the volume of scanning that would need to be done prior to implementation, LTE time may be necessary (akin to the recent District Attorney initiative to scan all the documents that had been stored in the old range at the City-County Building). Costs will be determined when more is known about the timing of implementation.

Corporation Counsel — Best Practices for Computer Use

Initiative-at-a-glance		
Person Responsible/Lead		Brad Logsdon – Corporation Counsel
Supporting Individuals and Organizations		Staff
Target Timeframe		January 2015
Operational Category		Climate: Objective: 1; Strategy: 2 Buildings: Objective: 1,4; Strategy: 7
Estimated Costs	Capital Costs	N/A
	ROI	TBD
	Ongoing Costs	Minimal
	Staff Level of Effort	Minimal

Description

A fair amount of energy can be conserved if all staff turn off their computer monitors, printers, and lights nightly. Due to this agency using net-stations, turning staffs' computers completely off every night is not an option. While staff is aware that turning their computers off nightly is not something they can do, there may be confusion surrounding the ability to turn off the monitors.

A directive will be sent out to all staff via email that provides clear instruction to all staff that turning this equipment off nightly is required going forward. Consistent follow up by management will be required until all staff are compliant with the directive.

Implementation Steps

- 1) Time to draft the directive – approximately 15 minutes
- 2) Time to implement the directive – immediate
- 3) Follow up to check for compliance - ongoing

Benefits

The agency can reduce the amount of energy used with minimal time and effort by staff. Since there is no additional cost to this initiative and a favorable outcome is easily achieved, the return on investment can be quite large.

Costs

There are no costs for this project beyond very minimal time of staff.

Corporation Counsel — Four-day, 40-hour Workweek

Initiative-at-a-glance		
Person Responsible/Lead	Brad Logsdon – Corporation Counsel	
Supporting Individuals and Organizations	Staff	
Target Timeframe	2015	
Operational Category	Climate: Objective: 1; Strategy: 2 Transportation: Objective: 1,2,6,7,9; Strategy: 9 Employee Experience: Objective: 1,2,4; Strategy: 1,2,3	
Estimated Costs	Capital Costs	N/A
	ROI	Significant / Improved employee satisfaction and productivity, time savings, reduced emissions
	Ongoing Costs	Minimal
	Staff Level of Effort	Minimal

Description

Currently many employees, via employee request and supervisory approval, have changed their schedule to a four-day, 40-hour workweek. The positive impact on several fronts could be substantial if as many employees as feasible converted to this schedule. The idea of a four-day, 40-hour workweek has been out there for quite some time as a response to environmental issues and commuting pressures, as well as work-family balance.

Review departmental policies and procedures related to the positive impact of employees working a four-day, 40-hour workweek. This information can then be utilized within the department to optimize the use of flex schedules to reduce commuting. Results of implementation may be shared with other departments.

Implementation Steps

- 1) Research the different impacts of the four-day, 40-hour workweek - 2015
- 2) Communicate the findings of the research - 2015
- 3) Determine if changing schedules is appropriate - 2015

Benefits

The time shift for the four-day workers means fewer commuters during the traditional rush hours. It also means less time spent idling in traffic and, therefore, fewer emissions of greenhouse gases and other pollutants. There would be less use of building facilities (elevators, lights, etc.). Productivity could increase while also decreasing the amount of sick time used. The quantitative and qualitative returns on investment have the potential to be substantial.

Costs

There are minimal costs associated with use of existing staff to conduct the research and communicate the findings.

Corporation Counsel — PDF File Conversion

Initiative-at-a-glance		
Person Responsible/Lead	Brad Logsdon – Corporation Counsel	
Supporting Individuals and Organizations	Staff, IT Staff	
Target Timeframe	2015	
Operational Category	Climate: Objective: 1; Strategy: 2 Waste: Objective: 2,3,6; Strategy: 2,4,5	
Estimated Costs	Capital Costs	TBD / depends on program needed
	ROI	Large
	Ongoing Costs	Minimal
	Staff Level of Effort	Minimal

Description

This agency mails a substantial number of documents, specifically income withholdings, to employers on a daily basis. This process uses time and resources that could be saved if there were a program that converted KIDS documents into PDF files that can then be faxed to employers straight from the computer.

Research will be done to determine which computer program, if any, could create the conversion. The IT department would install the necessary program onto the computers of staff. Staff can then begin using the program to convert the documents to PDF files.

Implementation Steps

- 1) Research the best program to install for conversion - 2015
- 2) Install the conversion program onto the computers - 2015
- 3) Staff uses the new conversion process - 2015

Benefits

With minimal time and effort by staff, the agency can reduce the amount of time, paper, and postage used. In addition, it reduces greenhouse gases and other air pollutants by reducing emissions from mail carrier vehicles. Lastly, it will improve service because the employer will receive the document immediately and, in turn, get money to the families more quickly.

Costs

There would be relatively minimal expenses with this initiative, which would consist primarily of the IT staff time installing new programming on staff computers. Ongoing costs would simply be any Help Desk staff time used to resolve any technical issues that might arise.

County Board Office — Create Guidelines for Office Use of Printer/MFD

Initiative-at-a-glance		
Person Responsible/Lead		Lisa MacKinnon and Office Administrator
Supporting Individuals and Organizations		All staff from County Board, Veterans Affairs, and Clerks Offices who share the MFD
Target Timeframe		Year 1
Operational Category		Climate: Objective: 1; Strategy: 2 Waste: Objective: 2,3,6; Strategy: 2,4,5
Estimated Costs	Capital Costs	None
	ROI	Some minor printing cost savings but difficult to quantify financial ROI because we don't know how many of these large projects get printed on the MFD over time. Should be some minor energy savings, as well.
	Ongoing Costs	None
	Staff Level of Effort	Low

Description

Our office has a Multi Functional Device printer/copier/fax machine (MFD), which is used in various ways. Some people print large documents or multiple copies on the machine, which sometimes leads to delays for other people's work and also to paper jams and machine malfunctions. It also can cost more to print and copy on our MFD once the document size goes beyond a certain number of pages. Finally, the machine often is not shut off completely at the end of the day, so some "phantom electricity" is still being used when the machine is in "standby" or "energy conservation" mode at night. We will create a guideline for use of the Multi Functional Device printer/copier/fax machine (MFD), which will include:

- 1) The threshold document size for printing/copying in-office versus sending to Printing and Services for printing. The threshold for the size of document (or number of copies) where it becomes cost effective to send to Printing and Services rather than to print or copy in-house is about 200 "clicks" or 100 pages double-sided.
- 2) Guidance about responsibilities for end-of day shut down of devices by the last person out of the office.

Implementation Steps

- 1) Have Printing and Services rep give a tutorial about use and maintenance of shared MFD to all staff.
- 2) Write and send out policy to all staff who share the MFD with the APM attached for background. The policy should include guidance about "threshold" size and indicate that if an exception is necessary, then the person doing the printing or copying of a large document needs to be present to resolve any problems that often arise with large jobs, such as paper jams.
- 3) Prior to implementation we will use a watt-meter to measure standby mode energy on the MFD to compare it with complete shut down mode energy savings and calculate the estimated energy and cost savings on an annual basis.
- 4) Do 6-month check-in with Printing and Services to see whether large printing job orders increased for our three offices (determine if MFD can identify large jobs).
- 5) We will send out periodic reminders re: the policy to staff who share the devices,

Benefits

- 1) Will free up the MFD for others to use for smaller, quicker jobs
- 2) Should save cost on larger printing jobs given the discount from Printing and Services for larger jobs
- 3) May help staff to reconsider whether they need to print a large document in the first place

Costs

There should be no additional financial costs incurred to implement this action. There might be a time cost depending on how busy Printing and Services is when a Fast Copy request is made.

County Board Office — Develop Communication Plan for County Board Office Sustainability and Equity initiatives

Initiative-at-a-glance		
Person Responsible/Lead:		Lisa MacKinnon, Colleen Clark-Bernhardt
Supporting Individuals and Organizations		County Board office staff, other county staff engaged in work on these issue teams
Target Timeframe:		Year 1 and ongoing
Operational Category		Education & Outreach: Objective: 1,2,3; Strategy: 2,3,4,5 Employee Experience: Objective: 1,3,4; Strategy: 1
Estimated Costs	Capital Costs:	N/A
	ROI:	Qualitative: Increase in knowledge of these issues, programs, outcomes, etc. Greater engagement of staff and supervisors.
	Ongoing Costs:	Staff labor/time to create the periodic communication. No additional cost.
	Staff Level of Effort:	High: To develop plan for communication, select audience, develop content and format, and work with IM department for web hosting of content.

Description

The County Board Office is engaged in significant sustainability and equity initiatives and has two dedicated staff members working on these issues and collaborating with each other and with partners across county and city government and the community. These initiatives are resulting in plans, actions, and measureable outcomes around sustainability and equity in county government. In order to leverage further success and to continue to raise awareness and literacy around these issues, we will develop a plan for systematic and periodic communication of our efforts on these issues.

Implementation Steps

We anticipate the following will take 6 months to develop and to implement the pilot communication.

- 1) Develop a scope for the type of information we want to disseminate and a template for the information
- 2) Determine who will receive these communications (e.g., county staff, County Board Supervisors, partner groups, departments, etc.)
- 3) Develop a format for dissemination of the information (Website? Email?)
- 4) Develop a communication schedule (e.g., quarterly? Bi-annual?)
- 5) Identify other partners / staff who would be interested in contributing to the communication (e.g., perhaps for a feature that highlights activities of a department or team or staff member?)
- 6) Launch the pilot communication
- 7) Consider two-way communication opportunity for staff and supervisors to respond to communications, give input, and ask questions

Benefits

The return on investment for this initiative will initially be qualitative in that we hope it will improve staff and supervisor engagement in sustainability and equity issues. This will satisfy the *Education and Outreach* and the *Employee Experience* categories of the Dane County Government Sustainable Operations Plan. It may also inspire other sustainability and equity actions across county government, which could lead to additional qualitative and quantitative benefits in the future.

Costs

Assuming the work is done by existing staff, the only costs will be time and labor for County Board Office staff to develop the plan and create the periodic communications. There will also be a minor additional cost to the IM department assuming they assist with loading materials to the website(s). These would be operational costs but they would be included as a part of the current staff budgets. We anticipate using an electronic format for dissemination in order to cut down on printing/copying costs and resource use.

County Board Office — Explore Options for Optimizing Use of Technology in County Meeting Rooms

Initiative-at-a-glance		
Person Responsible/Lead	Karin Peterson-Thurlow	
Supporting Individuals and Organizations	County Board Office staff and supervisors	
Target Timeframe	Year 1	
Operational Category	Climate: Objective: 1; Transportation: Objective: 1,2 Strategy: 9,13 Buildings: Objective: 1,4; Strategy: 7	
Estimated Costs	Capital Costs	None known
	ROI	None known
	Ongoing Costs	None known
	Staff Level of Effort	Medium: To work with IM staff to explore and implement options and then to work with other county staff to educate about use.

Description

Dane County currently provides a number of meeting rooms with projectors, “thin clients”, computer keyboards, and internet connection in order to accommodate electronic posting of meeting materials in order to reduce paper use and increase public access to information at meetings. We will explore with Dane County Information Management additional possibilities for further optimizing use of technology in meeting rooms in order to reduce travel-related emissions and resource waste (paper, etc.) (e.g., Skype meetings and presentations for long-distance attendees of meetings).

Implementation Steps

We anticipate the following will take 6 months to research and determine additional resource and technology needs for any recommended changes.

- 1) Contact IM Department to discuss objectives, inventory current technological capabilities in meeting rooms, and determine if we are maximizing our current capacity to reduce paper use, increase public access, etc.
- 2) Work with IM Department to determine what additional technology exists to facilitate remotely accessing meetings in the meeting rooms and whether that technology and ability would be desirable.
- 3) Work with Corporation Counsel to determine if there are any public meetings laws or other legal considerations related to remote participation in meetings.
- 4) Determine resources needed if additional technology is desired to meet objectives.

Benefits

Potential benefits of this initiative could include: reducing GHG emissions and time from travel to meetings by allowing members who would otherwise have to travel long distances to join the meeting remotely; reducing mileage reimbursements for committee members; could increase public participation on committees for those who have difficulty traveling to meetings. [One issue to resolve: Guidelines for who may join remotely — e.g., could be based on mileage distance from meeting site.]

Costs

The only costs will be time / labor for County Board Office staff and IM Dept. staff to research the current and possible room technologies. Capital and other costs would only come into play if recommendations for new technology for the meeting rooms were adopted and implemented.

County Board Office — Reduce Emissions Impact of Office-Related Travel

Initiative-at-a-glance		
Person Responsible/Lead		Lisa MacKinnon/ Karin Peterson-Thurlow
Supporting Individuals and Organizations		County Board Office staff and County Board Supervisors
Target Timeframe		Ongoing
Operational Category		Climate: Objective: 1 Transportation: Objective: 1,2 Strategy: 9,13
Estimated Costs	Capital Costs	TBD
	ROI	TBD
	Ongoing Costs	TBD
	Staff Level of Effort	Medium

Description

Currently, many staff and supervisors travel to and from meetings, conferences, and other events via individual car. This increases our office’s contribution to climate disrupting greenhouse gas emissions and air pollution that harm public health. It also involves costs to our office in the form of fuel and mileage reimbursements.

We will explore ways to reduce travel costs and emissions from attendance at continuing education, professional development, conferences, meetings, and other events for staff and board supervisors.

- 1) Come up with recommendations for changes after exploring (e.g., webinars, meetings of the whole, Skype meetings, incentives for carpooling, guidelines for staff and supervisor travel, trip optimization actions, carbon offsets for travel)
- 2) Determine whether county has authorization to make carbon offset purchases.
- 3) Educate County Board members and staff re: carbon offset option for personal selection and payment
- 4) Measurements: Money, fuel, GHG emissions of bringing people to our meetings (committees and commissions) and sending people to conferences, etc.

Implementation Steps

We anticipate the following will take 6-12 months to develop and implement. All staff and chair would be involved in idea generation, recommendations, and prioritization of possible changes and policies.

- 1) Determine all types of events that are driven to and which ones are “essential” vs. “discretionary” (e.g., county board meetings vs. conferences)
- 2) Determine which types of events entail the greatest costs (environmental, economic, social)
- 3) Brainstorm ideas for improving emissions and costs
- 4) Ask supervisors and staff for review and comment on draft recommendations
- 5) Check into whether County Board Office has authority to purchase carbon offsets for travel
- 6) Identify training resources re: sustainable travel for supervisors and committee members
- 7) Develop measurement plan for any recommended actions that will be implemented
- 8) Develop a format for dissemination of the information (Supervisor website? Email?)
- 9) Develop a communication schedule with reminders and tips (e.g., Quarterly? Bi-annual?)
- 10) Consider two-way communication opportunity for staff and supervisors to respond to communications, give input, and ask questions re: any changes

Benefits

The benefits of this type of effort will depend on the actions taken and could include:

- 1) Reduced CO2 and other GHG emissions from reduced vehicle miles traveled
- 2) Reduced polluted air emissions that endanger public health
- 3) Reduced costs for mileage and per diem payments for driving

Cost savings could be calculated through tracking related reductions in mileage payments and general fuel cost reduction estimates (will depend on actions taken).

Costs

Operational costs would be entailed if we decided to participate in a carbon offsetting program for office-related travel. Offsetting could be done in a number of ways: in a lump sum based on estimated annual travel emissions, limited to large travel events such as air flights and paid at the time of the flight purchase, and/or paid voluntarily by individual supervisors at time of travel. These costs might be at least partially coverable through mileage savings from other VMT reduction efforts. Other costs are not anticipated at this time.

County Board Office — Implement the Dane County Equity Initiative

Initiative-at-a-glance		
Person Responsible/Lead		Colleen Clark-Bernhardt
Supporting Individuals and Organizations		County Board office staff, all other county staff engaged in work on these issue teams
Target Timeframe		Year 1 and ongoing
Operational Category		Education & Outreach: Objective: 1,2,3; Strategy: 1,2,3,4,5,7 Employee Experience: Objective: 1,2,3,4 Strategy: 1,2,3
Estimated Costs	Capital Costs	TBD
	ROI	Qualitative: Increase awareness and knowledge of racial and social equity issues, programs, outcomes, etc. Greater engagement of county and city staff on these issues. Ultimately, measurable outcomes indicating greater racial and social equity in Dane County government. Quantitative: TBD
	Ongoing Costs	Staff labor/time to facilitate.
	Staff Level of Effort	High: This will be an ongoing, multiyear project for which Colleen Clark’s principle time is allotted.

Description

The Dane County Board passed the Dane County Equity Initiative (2014 Res. 284), which directed Public Health of Madison and Dane County and the Office of the County Board to work with a staff team to address the root causes of racial inequity over the next 5 years. The County Board Office hired an Equity Coordinator/Program Analyst to implement these efforts on behalf of the County Board.

Ensuring social and racial equity in county government operations is an integral part of meeting human needs and achieving sustainability in Dane County government.

Our office will engage in an ongoing effort to implement the Dane County Equity Initiative.

Implementation Steps

We anticipate the following will take place in phases over the course of the next 1, 3, and 5 years:

- 1) Form a Racial Equity and Social Justice Initiative team made up of representatives across county departments
- 2) Analyze and highlight the current inequities in Dane County government, collect and summarize key indicators in multiple sectors using the Race to Equity report as a starting point
- 3) Share information with the County Board, County Executive’s office, county agencies, and the public
- 4) Work with the existing efforts to coordinate data and to focus efforts on equity indicators
- 5) Develop and implement an equity impact model to inform policies and practices that consider equity impacts in county government plans and decisions
- 6) Determine how the services provided by each department have an impact on equity

- 7) Seek input from individuals knowledgeable about racial equity, including community stakeholders, and consider approaches used in other communities that have adopted this approach
- 8) Work with the City of Madison Racial Equity and Social Justice Initiative to identify opportunities for alignment and to minimize duplication of efforts
- 9) Help to implement recommendations adopted as a result of this process

Benefits

The return on investment for this initiative will be multifold and likely to be both qualitative and quantitative. It will:

- 1) Increase awareness and knowledge among staff, elected officials, and the community about racial and social equity issues, programs, outcomes, etc. Greater engagement of county and city staff on these issues
- 2) Provide measurable outcomes indicating greater racial and social equity in Dane County government practices and policies.
- 3) Lead to a more just and equitable county government and community for all residents

Costs

The main costs will be time / labor for the County Board Office's Equity Coordinator to develop and facilitate these efforts. There will also be additional labor costs for the time of all county staff involved. These would be operational costs but they would be included as a part of the current staff budgets. Specific capital costs are not anticipated at this time, but it is possible that recommendations that come out of this initiative could entail capital costs.

County Board Office — Optimizing the Sustainability of the Shared Office Kitchen and Break Room

Initiative-at-a-glance		
Person Responsible/Lead		Lisa MacKinnon, Karin Peterson-Thurlow
Supporting Individuals and Organizations		Multi-departmental kitchen team; All staff from offices that will share the kitchen: Clerk’s, County Board, Veterans Services, Register of Deeds (Planning and Treasurer’s Offices have a separate kitchen but will join the discussion)
Target Timeframe		Immediate and ongoing
Operational Category		Education & Outreach: Objective: 1,2,3; Strategy: 1,4 Employee Experience: Objective: 1,2,3,4 Strategy: 1,2,3
Estimated Costs	Capital Costs	TBD
	ROI	Financial: TBD; Non-financial: Reduction in waste to landfill, reduction in trash pickup by facilities staff; increased awareness.
	Ongoing Costs	Limited kitchen supplies (cleaning, etc.) to be borne by staff who share space
	Staff Level of Effort	Medium: To convene the team to review all needs for the kitchen/break room, put together a list of durable goods and other purchases for the kitchen, and plan a process for keeping the kitchen at “almost zero-waste”. Ongoing staff labor in terms of taking compost to staff home or other compost site and cleaning the kitchen.

Description

Standard practice in our previous kitchen, which was shared among the County Board, Clerk’s, and Veterans Services Offices, was to use disposable items for food, such as styrofoam cups, paper plates and bowls for heating food, paper napkins, and plastic cutlery for eating meals. Even if people brought their food from home they often would use whatever disposable utensils were available in the kitchen. Most of these items were thrown away after a single use and contributed to unnecessary waste going to the county landfill, as well as wasted energy and costs associated with the manufacture and replacement of disposable goods. This situation was primarily due to the fact that the old kitchen did not contain a sink or other water source for washing utensils and dishes and staff did not feel comfortable washing dishes in the common public bathroom sink. Now that we will have a sink, this should allow us to outfit the kitchen only with reusable cups, plates, and utensils that individuals can wash, store here, and reuse.

Another issue with the old kitchen was the confusion over recyclable items and waste, which resulted in many recyclable items being thrown in the garbage rather than recycling bins. If we can divert more waste to recycling, we should be able to cut down on the times that facilities staff need to empty the waste baskets, which will allow them to direct their labor elsewhere. We will also divert more waste from the landfill.

The new kitchen will be shared among additional departments (6 total) and offers a chance for more sustainability impact with a larger group of staff.

Optimizing Sustainability of Shared Kitchen to plan for an “Almost Zero-Waste” Kitchen

- a. Set up kitchen team to explore and decide on process, products, responsible parties
- b. Discuss efficiency of appliances, water use practices, waste practices, single-stream recycling, healthy cleaning products, water filter rather than bottled water, set up responsibilities, composting, and other identified issues.
- c. Related: Explore opportunities for more socializing around break room with other department’s staff

Implementation Steps

We anticipate the following will take 2 months to develop and to implement. We want to implement as soon as the kitchen is completed so that we establish good habits from the start.

- 1) Form a Kitchen/ Break Room Organizational Team
- 2) Send survey to staff re: what they want/ need in the kitchen (utensils, etc.)
- 3) Decide on basic guidelines re: Efficiency of appliances, water use practices, waste practices, single-stream recycling, healthy cleaning products, water filter rather than bottled water, staff responsibilities, cleaning responsibilities (for plates, etc.), composting, occasional refrigerator cleaning, communication about policies, and other identified issues.
- 4) Source products (scale, dishes, utensils, napkins, fridge, microwave, cleaning products, etc.)
- 5) Determine process for purchasing any necessary products that cannot be brought in by individual staff.
- 6) Identify desire/opportunities for more social events between offices

Benefits

The benefits of this type of effort will include:

- 1) Reduced materials use, CO2 and other GHG emissions from reduced use of disposable products
- 2) Reduced waste sent to Dane Count landfill
- 3) Reduced trash pickup by facilities custodial staff, which frees them up for other projects
- 4) Reduced costs for not having to replace disposable items
- 5) Organic matter can go to compost site to be reused in staff member’s garden rather than to landfill
- 6) More social cohesion
- 7) Increased understanding of sustainability impacts of the choices we make around how we eat and serve food and dispose of kitchen- and food-related items.

Cost savings could be calculated through tracking costs for item replacement, but we do not have a baseline from past practice. However, we could calculate standard costs for reusable vs. disposable items such as cups, etc., and extrapolate savings from that.

Costs

Some initial costs are anticipated to provide various kitchen supplies that people don’t bring from home. The Kitchen Team will communicate with all departments sharing the kitchen and each department will make a contribution on a per-staff basis.

County Board Office — Reduce Waste and Improve Recycling Practices in County Board Office

Initiative-at-a-glance		
Person Responsible/Lead		Lisa MacKinnon
Supporting Individuals and Organizations		County Board Office staff and supervisors
Target Timeframe		Year 1 and ongoing
Operational Category		Waste: Objective: 2,3,4,6; Strategy: 2,3,4 Education & Outreach: Objective: 1,2,3; Strategy: 4 Employee Experience: Objective: 1,3,4; Strategy: 1
Estimated Costs	Capital Costs	TBD
	ROI	TBD
	Ongoing Costs	N/A
	Staff Level of Effort	Low: To review existing waste disposal and recycling practices in the County Board Office and make recommendations for changes that will optimize waste reduction and recycling in our office.

Description

Currently, waste reduction and recycling practices vary significantly throughout county facilities. Recycling practices are outdated and inconsistent and, in many cases, the current facilities and processes for recycling are inadequate and lead to recyclables being put into the landfill. It is clear that waste reduction and recycling rates can be improved throughout county facilities. The Solid Waste Projects Manager and Sustainability Coordinator will be conducting a waste and recycling assessment for all county facilities to determine current practices and facility needs and to make recommendations for improvements across all facilities.

We will review existing waste disposal and recycling practices in the County Board Office and make recommendations for changes that will optimize waste reduction and recycling in our office. This effort will assist with the larger facilities assessment by gathering information about our office and making recommendations for our own office practices, as well as the larger Dane County facility-wide effort.

Implementation Steps

We anticipate the following will take less than 1 month to accomplish. Implementation of some recommendations might take longer depending on whether purchases, such as additional recycling bins, are required.

- 1) Conduct a walkthrough of all County Board Office spaces prior to custodial trash pickup to assess current practices re: recycling and waste disposal
- 2) Talk with staff to determine what they need to reduce waste and optimize recycling
- 3) Make recommendations for any necessary changes in practices and policies and implement
- 4) Conduct occasional follow-up walkthroughs to determine if waste disposal and recycling practices have improved
- 5) Measure diversion and waste reduction rates where possible

Benefits

The benefits of this type of effort will include:

- 1) Improve recycling rates
- 2) Reduce waste that goes to landfill
- 3) Reduce use of trash liner bags
- 4) Reduce hauling costs for county
- 5) Reduce facilities custodial staff time used to collect waste and recyclables
- 6) Identify other potential efficiencies and resource use issues
- 7) Improve awareness around waste and recycling

Costs

The only costs will be time / labor for County Board Office staff to do the walkthrough. These would be operational costs but they would be included as a part of the current staff budgets. Capital costs would only come into play if recommendations, such as for purchase of additional recycling bins for each office, were adopted and implemented.

County Board Office — Review and Update Purchasing Practices for County Board Office to Ensure Consistency with County Sustainability Principles

Initiative-at-a-glance		
Person Responsible/Lead		Lisa MacKinnon & office administrator
Supporting Individuals and Organizations		County Board Office Staff; Purchasing Division
Target Timeframe		Year 1 to 2
Operational Category		Waste: Objective: 2,3,4,6; Strategy: 2,10 Purchasing: Objective: 1,2,3,4,5; Strategy: 1,2,9 Education & Outreach: Objective: 1,2; Strategy: 4
Estimated Costs	Capital Costs	TBD
	ROI	TBD
	Ongoing Costs	TBD—ongoing replacements
	Staff Level of Effort	Medium: To review all existing standard purchases for the office and to develop policies for purchasing the most environmentally preferable and sustainable products possible.

Description

Currently, the County Board Office purchases a variety of items, such as standard office supplies, to conduct its daily operations. It also occasionally purchases larger durable goods, such as furniture or electronic equipment. The county’s Purchasing Division currently does not have an environmentally preferable products policy, but both the Purchasing Division and the County Board Office have considered energy efficiency and other environmental and social sustainability characteristics when purchasing products on a case-by-case basis.

We would like to take a more comprehensive look at the products we routinely purchase in our office to determine whether they currently meet the county’s sustainability principles and whether we can improve upon our sustainability by selecting other products.

Implementation Steps

We anticipate the following will take several months to research and then to discuss and finalize with the Purchasing Division. Once a plan is in place, we will implement as product purchases become necessary.

Purchasing Actions:

- 1) Example of products to review: paper pads, pens, computers, markers, projectors, light bulbs, printer/copier, appliances, vending machines, vehicle use, etc.
- 2) Consult other local government environmentally preferable purchasing policies as a guideline for what to look for in our products; consult the Living Building Challenge’s materials “red list”
- 3) Review current slate of purchases for the office for environmental product preference, GHG emissions, fair trade/local choices, etc.
- 4) Look at catalogue specs for current products we use and for alternative products where we determine we’d like to improve upon a product’s performance
- 5) Discuss proposed changes with Purchasing Division to determine whether there are any issues with recommended changes

Benefits

The benefits of this type of effort could include:

- 1) Reduced resource and materials use, CO2 and other GHG emissions from reduced use of disposable products, toxic products, or use of recycled content products
- 2) Reduced waste sent to landfill
- 3) Reduced costs if reduction in use of certain products is recommended or if substitution of products results in a cost savings
- 4) Increased understanding of sustainability impacts of the product choices we make
- 5) Possible fair trade and local benefits if we are able to identify such products for use

Costs

The only initial costs will be time / labor for County Board Office staff to conduct the review, develop recommendations, and discuss with the Purchasing Division. These would be operational costs but they would be included as a part of the current staff budgets. Additional costs, or cost savings from use of different products are impossible to determine without first doing the review.

County Clerk — Cloud-Based Marriage License Applications

Initiative-at-a-glance		
Person Responsible/Lead		Clerk Scott McDonell
Supporting Individuals and Organizations		State Vital Records
Target Timeframe		Year 1 through 16 months
Operational Category		Transportation: Objective: 1,2,6 Waste: Objective: 2,3,6; Strategy: 2,4,5,8 Education & Outreach: Objective: 3; Strategy: 3,7
Estimated Costs	Capital Costs	TBD. Unclear. Covered by state
	ROI	TBD
	Ongoing Costs	None for County
	Staff Level of Effort	1 FTE will be needed for four months

Description

A new cloud-based marriage license application (SVRS) will not substantially alter the workflow in the County Clerk’s office, but it will achieve the following improvements: Couples can access their information online, as can the State Vital Records Office, Register of Deeds Office, and County Clerk’s Office. This will dramatically reduce the need for copies of vital records statewide. The County Clerk will still need to print marriage licenses, for now, due to the need for signatures of witnesses and officiants, but the Register of Deeds will be able to reduce printed documents.

Implementation Steps

The state is moving forward with the application now. It is expected to take 12-16 months to implement. It will be implemented statewide.

Benefits

Reductions in travel and printing and their associated costs.

Costs

This will lower costs for the county. The savings will increase over time as more people have digital “worksheets” such as digital birth certificates, death certificates, etc. We are exploring ways to attach digital images, as well, which could eliminate the need for printing and storage.

Dane County Regional Airport

In 2014, the Dane County Regional Airport completed its own sustainability plan, which includes their prioritized Sustainable Operations Action Plans. Those plans are incorporated here by reference and can be accessed at the bottom of this page: http://www.msnairport.com/about/ecomentality/general_information

Department of Human Services — Northport Energy Efficiency Initiative

Initiative-at-a-glance		
Person Responsible/Lead		Greg Brockmeyer
Supporting Individuals and Organizations		Facilities, Senior Staff, County Public Works
Target Timeframe		Year 1 and ongoing
Operational Category		Climate: Objective: 1,3; Strategy: 2,6,8 Buildings: Objective: 1,4,5,6,8,10; Strategy: 2,4,5,6,7
Estimated Costs	Capital Costs	\$1.6 million
	ROI	TBD
	Ongoing Costs	TBD
	Staff Level of Effort	High

Description

The 2014 Dane County budget included \$1.6 million in capital funds to perform a detailed energy efficiency analysis of the Dane County Department of Human Services' Lakeview (Northport) building and implement recommendations for capital investments the county could undertake to realize energy savings at the facility.

The Northport building is more than 70 years old and holds great promise for increased energy efficiency opportunities in the department.

Implementation Steps

Greg Brockmeyer, Department of Administration Facilities and Food Service Manager, will oversee the development of a contract to perform the Northport facility's energy efficiency analysis. The contract will be released for bids in early 2015.

Once the contract has been awarded, the efficiency analysis will begin. Recommendations from the analysis could be implemented as early as the fall of 2015.

Possible recommendations for energy efficiency upgrades could include an overhaul of the Northport facility's HVAC system (currently operating with dozens of inefficient individual heating and cooling units), installation of LED lighting, automated lighting control systems, and the installation of solar panels to offset the facility's energy use.

Benefits

The Northport facility has been called one of the county's least energy efficient facilities. While an exact ROI is unknown at this time, retrofits such as a new HVAC system and automated lighting have the potential to provide the county significant energy savings annually, as well as to reduce the county's GHG and CO2 emissions.

Costs

\$1.6 million in capital funds (already budgeted) for the initial assessment and to implement some recommendations from the assessment, if possible. Future costs to implement recommendations will be determined by the efficiency analysis.

**Department of Human Services — Form Department of Human Services
Sustainability Committee**

Initiative-at-a-glance		
Person Responsible/Lead		Casey Slaughter Becker
Supporting Individuals and Organizations		Greg Brockmeyer, Kari Clemens, Senior Staff
Target Timeframe		Year 1 / December 2014
Operational Category		Education & Outreach: Objective: 1,2,3; Strategy: 3,4,5,7 Has potential to affect all other plan categories
Estimated Costs	Capital Costs	None
	ROI	TBD
	Ongoing Costs	None
	Staff Level of Effort	Medium

Description

The Department of Human Services’ Sustainable Operations chair will form a Sustainability Committee comprised of the department’s facilities manager, systems coordinator (IM), and staff designated by the department’s management team as facility and/or division sustainability leads.

Implementation Steps

The committee will form by the end of 2014. Once formed, the committee will create a system for all staff to provide recommendations for department and division sustainability measures. Employee outreach will be conducted after January 1, 2015 to ensure the highest level of participation possible.

Once staff recommendations are collected, the committee will meet regularly to explore potential implementation. The suggestions will inform an update to the department’s sustainable operations plan in May 2015.

After the updated operations plan has been approved by the Department Director, the update will be shared with the county’s Department of Administration, and the committee will oversee the implementation of viable no-cost recommendations. Recommendations that may generate costs will be presented to the Department Director for consideration in her 2016 department budget proposal.

The committee will continue to meet regularly the remainder of 2015 to implement additional recommendations and continue to research additional sustainability strategies.

Benefits

The Department of Human Services is the largest department in Dane County government with services delivered through a number of facilities and neighborhood offices. Forming a committee to represent these different divisions and facilities will help in identifying and implementing as many sustainable practices as possible.

Costs

None anticipated.

Department of Human Services — Employee Sustainability Survey

Initiative-at-a-glance		
Person Responsible/Lead		Casey Slaughter Becker
Supporting Individuals and Organizations		DCHS Sustainability Committee, Senior Staff
Target Timeframe		Year 1 / January – April 2015
Operational Category		Education & Outreach: Objective: 2; Strategy: 4,5 Employee Experience: Objective: 1,2,3,4; Strategy: 1,2
Estimated Costs	Capital Costs	None
	ROI	TBD
	Ongoing Costs	None
	Staff Level of Effort	Medium

Description

The Department of Human Services’ Sustainability Committee will implement a system in 2015 to gather sustainability recommendations from department staff.

Implementation Steps

The department’s Sustainability Committee will solicit employee suggestions for department and/or division sustainability measures that can be implemented in 2015 and in future years through an online employee survey.

Once staff recommendations are collected, the committee will meet regularly to explore potential implementation. The suggestions will inform an update to the department’s sustainable operations plan in May of 2015.

Benefits

The Department of Human Services is the largest department in Dane County government with services delivered through a number of facilities and neighborhood offices. Staff working in these facilities will provide a beneficial perspective on what systems or practices could be changed to increase overall sustainability in the department.

Costs

None anticipated.

DOA: Information Management — Develop Best Practice Guide for Computer Use

Initiative-at-a-glance		
Person Responsible/Lead		Marv Klang / Information Management
Supporting Individuals and Organizations		Staff
Target Timeframe		Year 1 / Early 2015
Operational Category		Climate: Objective: 1; Strategy: 2 Buildings: Objective: 1,4,10; Strategy: 7 Education & Outreach: Objective: 1; Strategy: 4 Employee Experience: Objective: 3,4; Strategy: 1
Estimated Costs	Capital Costs	N/A
	ROI	Large - due to minimal investment
	Ongoing Costs	Minimal
	Staff Level of Effort	By Information Management – minimal By Managers throughout the county – moderate

Description

A fair amount of energy can be conserved by consistently following best practices regarding computer use. In general, staff are confused or not aware of the best practices regarding computer use at the end of the day. Some staff believe that it is more efficient to turn machines off, while others argue that putting machines to sleep ensures optimum energy efficiency. Others still may not be aware of the impact of not following best practices and otherwise leave their machine on all the time.

Information Management will research the best practices and develop a guide that provides clear instructions for staff that is specific to the kinds of devices that are used throughout county government (laptops, desktops, net stations, etc.). The guide can be shared with all county employees and be posted on DCINet. It is hoped that managers and supervisors can share this information with their employees and guide all county employees to follow best practices.

Implementation Steps

Time to research the issue – approximately a month
 Time to develop a guide – approximately a week
 Estimated implementation date – early 2015

Benefits

Energy savings can be achieved with a minimal contribution of current staff time. Since this effort requires no additional spending and could achieve energy reductions, the return on investment has the potential to be large.

Costs

The costs of this project are minimal and consist mainly of the time of existing staff to research and develop the guide.

DOA: Information Management — Phone and Video Conference Services

Initiative-at-a-glance		
Person Responsible/Lead		Marv Klang / Information Management
Supporting Individuals and Organizations		Appropriate Staff
Target Timeframe		Early 2015
Operational Category		Climate: Objective: 1,3; Strategy: 2,8 Transportation: Objective: 1,2,4; Strategy: 13
Estimated Costs	Capital Costs	N/A
	ROI	Moderate
	Ongoing Costs	Some
	Staff Level of Effort	Minimal

Description

Because of the variety of locations of different departments in Dane County government, interdepartmental meetings sometimes require traveling to other locations. Depending on the kind of meeting, some of these trips can be eliminated through additional phone and videoconferences. Information Management currently maintains several technologies to aid departments with phone and videoconferences. This project would clarify what services are available and how departments can go about accessing those services. This information would be distributed at MAC meetings and loaded to DCINet.

Implementation Steps

Time to summarize tools available and develop appropriate instructions – 2 months
 Time to distribute information to relevant groups and upload to DCINet – 2 months
 Estimated implementation date – early 2015

Benefits

Energy savings can be achieved with a minimal contribution of current staff time. Since this effort requires no additional spending and can achieve reasonable energy reductions, the return on investment has the potential to be large. Additionally this project has the potential to make staff more productive, as staff will spend less time traveling between meetings.

Costs

The costs of this project are minimal and consist mainly of the time of existing staff to use these technologies. However, some analysis needs to be done to determine what impact, if any, an increased use of these services will have on the Help Desk.

DOA: Printing and Services — Articulate the Benefits of Using Fast Copy

Initiative-at-a-glance		
Person Responsible/Lead		Printing and Services
Supporting Individuals and Organizations		Nick Bubb, Special Projects
Target Timeframe		Year 1 / 2015
Operational Category		Climate: Objective: 1; Strategy: 2 Transportation: Objective: 1,2,4,8; Strategy: 1,2 Waste: Objective: 2,3; Strategy: 2,4,5,8
Estimated Costs	Capital Costs	None
	ROI	Moderate to Significant
	Ongoing Costs	Moderate
	Staff Level of Effort	Moderate

Description

Printing and Services, in coordination with the County Board’s Sustainability Coordinator, developed an Administrative Practices Memo about paper use. That document specifies when it is cost-effective for departments to use the Fast Copy services in the Printing and Services department. This initiative will simplify that document and work on clearly communicating that information to other departments.

Implementation Steps

Early 2015 – work on distilling the APM into a simple message to be shared with other county departments

June/July 2015 – Share the message with other county departments. Schedule meetings. Post recommendations to DCINet. Share information with potential MAC meetings.

Track paper and transportation savings.

Benefits

There are savings to be realized from more efficiently using paper. The major work will be in convincing departments to use the services provided by Printing and Services. Since Printing and Services has already done the work of estimating the cost savings to departments, most of the work here will be dealing with communicating to departments how to change practices.

Costs

Costs of this initiative include existing staff time to communicate and distill the information into an easy-to-read format, and to distribute the information to additional departments.

DOA: Printing and Services — Run Mail Routes through Optimization Software

Initiative-at-a-glance		
Person Responsible/Lead		Printing and Services
Supporting Individuals and Organizations		Highway Department
Target Timeframe		Year 1 and ongoing / 2015 to 2016
Operational Category		Climate: Objective: 1; Strategy: 2 Transportation: Objective: 1,2,4,8; Strategy: 1,2,4,10,11
Estimated Costs	Capital Costs	Incurred in another budget item
	ROI	Moderate
	Ongoing Costs	Minimal
	Staff Level of Effort	Moderate – analysis and planning

Description

The Highway Department is planning on acquiring route optimization software for snowplows to ensure that plows are deployed using the most efficient routes. Once the Highway Department has acquired this software, this initiative calls for Printing and Services to use this software to conduct an analysis of the mail routes in order to determine the most efficient routes.

Implementation Steps

Work with the Highway Department to determine when the route optimization software could be used. When appropriate, Printing and Services would conduct the analysis on the routes and determine adjustments, if necessary. Could also incorporate eco-driving education into this initiative to optimize efficiency of driving on more efficient routes.

Benefits

This initiative could result in less fuel being used by Printing and Services when delivering mail. This would result in reducing greenhouse gas emissions and many resources spent on fuel.

Costs

No additional costs exist with this initiative. Staff time would be required to analyze the existing mail routes and determine if efficiencies can be achieved.

DOA: Facilities Management — Install Water-Saving Toilets/Faucets

Initiative-at-a-glance		
Person Responsible/Lead		Facilities Management
Supporting Individuals and Organizations		
Target Timeframe		Ongoing
Operational Category		Water: Objective: 1,2; Strategy: 3,4,6 Buildings: Objective: 1; Strategy: 4
Estimated Costs	Capital Costs	TBD
	ROI	TBD
	Ongoing Costs	TBD
	Staff Level of Effort	Moderate

Description

Under this initiative Facilities Management will install water saving fixtures.

Implementation Steps

- Adopt a policy that when replacement fixtures are needed water-saving fixtures will be installed.
- Investigate the feasibility of developing a replacement schedule for non-efficient fixtures.

Benefits

Water-saving fixtures have the ability to reduce the amount of water used in county facilities. By replacing current fixtures with water-saving models, we can reduce the amount of water used and the county's water utility costs.

Costs

There would be minimal costs to implement this initiative. Fixtures would be replaced as needed and existing staff time would be used to investigate if a more frequent replacement schedule is worthwhile.

DOA: Facilities Management — Motion Sensing Lighting

Initiative-at-a-glance		
Person Responsible/Lead		Facilities Management
Supporting Individuals and Organizations		
Target Timeframe		Year 1 / 2015-16
Operational Category		Climate: Objective: 1; Strategy: 2,6 Buildings: Objective: 1,4,6,10; Strategy: 4,5
Estimated Costs	Capital Costs	TBD
	ROI	TBD
	Ongoing Costs	TBD
	Staff Level of Effort	Moderate

Description

As funds are available, install motion-sensing lighting in low-traffic areas (restrooms, conference rooms, storage rooms, etc.)

Implementation Steps

- Develop a list of areas to be considered for motion-sensing lighting
- Prioritize the list based on areas that may require light fixture replacement
- Install motion-sensing fixtures as funds are available

Benefits

Motion-sensing fixtures in low-traffic areas can reduce lighting costs in office-oriented buildings.

Costs

This initiative would proceed as funds are available for replacements. Costs would be kept low by using existing staff time to develop a list of possible fixtures and to prioritize implementation as funds are available.

DOA: Employee Relations — Issue Frequent Reminders of Commuting Benefits

Initiative-at-a-glance		
Person Responsible/Lead		Employee Relations
Supporting Individuals and Organizations		
Target Timeframe		Year 1 / 2015-16
Operational Category		Climate: Objective: 1; Strategy: 2 Transportation: Objective: 1,2,6,7,9; Strategy: 1,2,4,10,11
Estimated Costs	Capital Costs	None
	ROI	Moderate – No direct cost savings to county government, GHG emission reductions
	Ongoing Costs	Minimal – Staff Time
	Staff Level of Effort	Moderate in startup time

Description

Commuting benefits to employees are described during orientation week and on the county’s website. However, employees may not remember or know all of the benefits that are available to them (Van pools, free bus passes, etc.). Under this initiative, Employee Relations would remind all Dane County employees of these benefits on a more frequent basis (for example – during open enrollment periods). Employee Relations would also work on developing a way to distribute information about van pools as spots are available.

Implementation Steps

- Research best possible communication methods (especially for van pool postings) – 2015
- Implement improved communication regarding alternative transportation methods – 2015
- Work new method into employee orientation – early 2016

Benefits

Employees may not be aware of all of the alternative methods of transportation that are available to them. Improved efforts to communicate this information may increase how many employees use these alternative modes of transportation. Increased use of alternative modes of transportation can contribute to a reduction in greenhouse gases, as well as other benefits to employees, such as more time, less wear and tear on personal vehicles, etc.

Costs

This initiative would require some additional staff time on the part of Employee Relations. Specifically, they would need to determine a process for publicizing information as it is made available (with respect to van pools) and how to regularly remind employees about other alternative forms of transportation. The employee orientation schedule would need to be analyzed and altered.

DOA: Ongoing Initiative — Paperless Recruiting

Initiative-at-a-glance		
Person Responsible/Lead		Employee Relations
Supporting Individuals and Organizations		Information Management
Target Timeframe		Ongoing
Operational Category		Climate: Objective: 1; Strategy: 2 Waste: Objective: 3; Strategy: 2,5,8 Education & Outreach: Objective: 1,2,3; Strategy: 3,4
Estimated Costs	Capital Costs	TBD
	ROI	TBD
	Ongoing Costs	TBD
	Staff Level of Effort	Significant

Description

Employee Relations and Information Management implemented an online application and recruitment in September 2014. This system is designed to reduce the amount of paper involved in the recruitment process. While all recruitments now use the online portal, there is still significant work that needs to be accomplished in order to improve the workflow for Employee Relations. There is also an ongoing staffing need with the system.

Implementation Steps

- Ongoing ad-hoc requests are completed in order to assist Employee Relations with processing applications
- Workflow enhancements for Employee Relations are in the planning stages
- Mention of sustainability priorities in communication with applicants and public

Benefits

Paper applications have been eliminated, drastically reducing the amount of paper used for this process.

Costs

Information Management has invested a significant amount of time designing and implementing the system. Information Management continues to spend a significant amount of time staffing the system. Employee Relations have spent a significant amount of time learning to work with the new system.

DOA: Ongoing Initiative — Self Service

Initiative-at-a-glance		
Person Responsible/Lead		Employee Relations and Information Management
Supporting Individuals and Organizations		Administration
Target Timeframe		Ongoing
Operational Category		Climate: Objective: 1; Strategy: 2 Waste: Objective: 3; Strategy: 5,7
Estimated Costs	Capital Costs	TBD
	ROI	TBD
	Ongoing Costs	TBD
	Staff Level of Effort	TBD

Description

Administration and Information Management have developed an Employee Self-Service portal for employees to look up payroll information. This portal will be a part of efforts to replace paper-based time reports.

Implementation Steps

The system is currently live, but not available to all employees. The plan is to roll out Self-Service to all employees by the end of 2015. Replacement of paper-based exception reports will require more time.

Benefits

The potential to eliminate paper-based time reports could drastically eliminate paper use and enhance efficiency across county government. In 2015, some employees will stop receiving notifications of deposits. Eventually, this initiative will be expanded to eliminate paper-based exception reports.

Costs

Information Management is spending existing staff time developing and planning the Self-Service site. Future developments, including possible efforts to replace exception reports, are still in the planning stages.

DOA: Ongoing Initiative — Suspension of Paper Checks

Initiative-at-a-glance		
Person Responsible/Lead		Payroll/Finance
Supporting Individuals and Organizations		Information Management
Target Timeframe		Ongoing
Operational Category		Climate: Objective: 1; Strategy: 2 Waste: Objective: 3; Strategy: 5,6 Education & Outreach: Objective: 3; Strategy: 5,6
Estimated Costs	Capital Costs	TBD
	ROI	TBD
	Ongoing Costs	TBD
	Staff Level of Effort	TBD

Description

Dane County stopped issuing paper checks in October of 2014. This is expected to save the county significant resources as the county will no longer spend money on the special paper and ink needed to produce the checks. Individuals who did not sign up for direct deposit signed up for an EBT card. Notice of deposits are still distributed on paper. Payroll and Information Management are exploring how to incorporate the notice of deposits into self-service and are working on making that a paperless process, as well.

Implementation Steps

- Explore options for paperless notice of deposits
- Measure paper, emissions, and cost savings from eliminating paper paychecks by comparing pre- and post-implementation purchases of special issue check paper and ink.

Benefits

The elimination of paper checks will save the county the costs associated with printing the checks (special issue paper and ink). This development will make our operations more sustainable.

Costs

The Finance Department and Information Management used staff time in order to switch from the paper process to the paperless process. Staff time was also used in educating employees about the switch to a paperless process.

DOA: Ongoing Initiative — Waste and Recycling Assessment

Initiative-at-a-glance		
Person Responsible/Lead		Facilities Management
Supporting Individuals and Organizations		Sustainability Coordinator and Solid Waste Project Manager
Target Timeframe		Ongoing
Operational Category		Climate: Objective: 1; Strategy: 2 Waste: Objective: 2,3,4,6; Strategy: 1,2,3,9,10,12 Education & Outreach: Objective: 1; Strategy: 4,5
Estimated Costs	Capital Costs	None
	ROI	N/A
	Ongoing Costs	Moderate – staff time to study and implement
	Staff Level of Effort	Moderate – staff time to travel to and walk through all county facilities and to write the report

Description

Facilities Management is working with the Dane County Sustainability Coordinator and Solid Waste Project Manager to conduct a waste and recycling assessment at all county facilities. The goal of this analysis is to produce a set of recommendations on how to enhance recycling and waste diversion at county facilities.

Implementation Steps

After the waste and recycling assessment is completed, Administration will evaluate potential alternatives designed to increase the recycling rates at county facilities. Based on that analysis, we will select an alternative for implementation. That alternative could be piloted at several county sites. If successful, that alternative could be expanded to other county facilities.

Benefits

This initiative has the potential to increase the recovery of recycled materials and reduce waste collections at county facilities. Facilities staff could potentially redirect their time currently spent on collecting waste to other tasks.

Costs

Existing staff time is used to complete this initiative. If new resources are required, those could be requested in a future budget.

DOA: Potential Capital Budget Item — Solar Panels on the City-County Building

Initiative-at-a-glance		
Person Responsible/Lead		Public Works
Supporting Individuals and Organizations		
Target Timeframe		3-5 years
Operational Category		Climate: Objective: 1,3; Strategy: 4,7,8 Buildings: Objective: 1,3,4; Strategy: 2,4
Estimated Costs	Capital Costs	Would be exclusively funded from the Capital Budget
	ROI	TBD
	Ongoing Costs	TBD
	Staff Level of Effort	TBD

Description

Administration would explore the feasibility of installing solar panels on the City-County Building. Implementing this could produce clean energy for the City-County Building, reduce greenhouse gas emissions, and reduce county energy costs.

Implementation Steps

Review existing solar feasibility study to determine if this is still possible. If it is, consider including resources for an implementation study and plan in a future county budget.

Benefits

Expanding Dane County’s commitment to solar energy would reduce county energy costs and reduce the county’s contribution to greenhouse gas emissions and other air pollutants.

Costs

This initiative would require funding from a future capital budget.

Emergency Management — Mindful Decision Making

Initiative-at-a-glance		
Person Responsible/Lead		Emergency Management Director
Supporting Individuals and Organizations		All department staff
Target Timeframe		Ongoing
Operational Category		Education & Outreach: Objective:1,3;Strategy: 4 Has potential to affect all other plan categories
Estimated Costs	Capital Costs	None
	ROI	TBD
	Ongoing Costs	TBD
	Staff Level of Effort	Minimal

Description

The Department of Emergency Management is a small office of ten employees. Daily operations are typical of an office environment. Department staff make every effort possible to run an efficient operation and to be good stewards of public resources. As a very small department, Emergency Management has a nominal part of the county organization’s overall contribution to fossil fuel dependence, dependence on and use of synthetic substances, encroachment on life sustaining ecosystems, and other conditions that undermine people’s ability to meet their basic human needs. In addition to being a small office, the department maintains only a small fleet, does not operate or maintain the facility in which the office is located, and does not set the general administrative rules and policy framework under which the department operates. Rather, Emergency Management’s daily operations are reliant on policies, support, and direction provided by the County Executive, the County Board, a number of other county departments, and numerous divisions within the Department of Administration. However, the department and its staff do have an important role in the effort to achieve greater sustainability in county operations.

Emergency Management has taken steps to reduce paper consumption, reduce waste, reduce energy use and corresponding greenhouse gas emissions, and improve the overall efficiency of the organization. These steps include, but are not limited to:

- Use of conference calls and webinars to reduce travel to off-site meetings, reducing cost, fuel consumption, and emissions
- Carpooling to meetings and other off-site events
- Transition from paper-based filing to electronic filing of forms and reports wherever possible
- Duplex printing and copying of paper documents
- Elimination of individual-user electronic office equipment and transition to one department-wide multi-function device
- Facilitation of a project to replace office fluorescent lighting with more efficient LED fixtures
- Elimination of an old, inefficient fleet vehicle
- Audit recycling and waste management practices within the department
- Incorporating lifecycle and life expectancy considerations in material and equipment purchasing decisions

These ongoing efforts will continue and expand.

The intent of this initiative is to build on these actions and to encourage department staff to make mindful decisions about how and when resources are used. Prior actions and decisions were often largely based on cost considerations. The next step will be to motivate decision-making based on sustainability considerations, above and beyond cost. This will require changes in thinking, changes in habit, and ultimately, changes in behavior. There are simple, incremental actions that, when added together, can account for a significant change:

- Turn off all office lights, computers, and other electronic equipment at the end of each and every workday.
- Turn off the lights in empty or unused rooms.
- Print electronic documents for personal use only when a paper copy is truly necessary.
- Print documents for distribution at meetings only when truly necessary.
- Travel to meetings only when a face-to-face presence is needed. Participate remotely whenever feasible.
- Consider the consequences of routine decisions, actions, and habits. Take personal responsibility and consciously consider resource use and sustainability principles in those routine decisions.
- Implement other best practices and policies identified in the Sustainable Operations Plan.

Implementation Steps

Implementation will require a behavior change on the part of department staff. The current practice is likely borne of insouciance rather than antipathy. The next steps will require a change of thinking to change the defaults: From leaving the lights on, to turning them off. From leaving the computer on, to turning it off. From automatically printing in order to read documents on paper, to reading on-screen and printing only if there is a need. From simply getting in the car and driving to a meeting without thinking about it, to using available technology to participate remotely.

The necessary behavior change will be achieved through a variety of techniques, ranging from education and regular reminders to positive and negative reinforcements and incentives.

Benefits

The financial benefit or return on investment cannot be readily calculated. The baseline data needed for this calculation is not readily available. The real benefit of this action is a long term, sustainable change of behavior that will have lasting benefits.

It should also be noted that the department has a number of computers and other electronic equipment that serve mission-critical purposes and must be left on and operating 24/7. These devices are excluded from this initiative.

Costs

This is a no-cost effort.

Juvenile Court — Purchase of a CNG Vehicle

Initiative-at-a-glance		
Person Responsible/Lead		John Bauman
Supporting Individuals and Organizations		Dept. of Administration
Target Timeframe		2 years
Operational Category		Climate: Objective: 1; Strategy: 2,5 Transportation: Objective: 3,4,5; Strategy: 1,2,4,6,11
Estimated Costs	Capital Costs	TBD
	ROI	TBD
	Ongoing Costs	TBD
	Staff Level of Effort	Low – Research options, negotiate purchase, train personnel on use and maintenance of CNG vehicle

Description

The department was fortunate to move into a new facility in the CCB in 2007. All but the Juvenile Shelter Home is located in this facility. As a result of thorough planning and design, there were numerous sustainability elements incorporated into the facility. Most of the lighting is on motion sensors; the water volume in toilets and sinks is highly controllable and is set to minimize water usage; large skylights were built to minimize electricity usage and create an atmosphere for staff and residents that promotes well being; and the use of glass and long sight lines were designed to promote supervision of residents, which allows for staffing efficiencies.

We have been able to update many areas of the Juvenile Shelter Home over the past seven years through the operating and capital budgets, as well as through the SMART Fund. Some of the major improvements that have promoted sustainability include replacing all of the windows with high efficiency models; adding insulation to the entire attic; replacing the washers and dryers with high-efficiency models; replacing all of the lighting with high-efficiency bulbs and adding motion sensors; choosing carpet remnant tiles to replace the carpeting throughout the facility rather than new roll carpeting; and replacing all of the plumbing fixtures with low water usage models and a higher efficiency hot water heater.

The department purchased a car for our Home Detention Program six years ago in order to get better gas mileage rather than reimburse staff for incurred miles while using their inefficient personal vehicles.

Implementation Steps

It is anticipated that the current car that is assigned to the Home Detention Program will need to be replaced in 2-3 years. We would purchase a CNG-powered car instead of a standard fuel vehicle at that time. We will research cost, fuel, and other savings prior to requesting budget funding for the vehicle. We also should be able to calculate fuel savings over time. This would be included in the operating budget.

Benefits

- Fuel savings
- Reductions in GHG and other air emissions
- Potential to use county-generated source of CNG

Costs To be determined

Juvenile Court — Computer Security Upgrades

Initiative-at-a-glance		
Person Responsible/Lead	John Bauman	
Supporting Individuals and Organizations	Dept. of Administration; Information Management	
Target Timeframe	Year 1 / Immediately	
Operational Category	Climate: Objective: 1; Strategy: 2,5 Transportation: Objective: 3,4,5; Strategy: 1,2,4,6,11	
Estimated Costs	Capital Costs	\$139,000 — Included in 2015 Capital Budget
	ROI	TBD
	Ongoing Costs	TBD
	Staff Level of Effort	Low—Research options, negotiate purchase, train personnel on use and maintenance of CNG vehicle

Description

An upgrade of the computer security system is included in the 2015 capital budget.

Implementation Steps

- Work with Information Management to install and implement system
- Train staff on use of system

Benefits

This upgrade should help with staff efficiency due to better technology and could reduce power usage as a result of the newer models.

Costs

\$139,000 — Already included in 2015 Capital Budget

Juvenile Court — Increase Locally-Sourced Purchases

Initiative-at-a-glance		
Person Responsible/Lead	John Bauman	
Supporting Individuals and Organizations	Dept. of Administration; Information Management	
Target Timeframe	Year 1 / Immediately	
Operational Category	Purchasing: Objective: 2,5; Strategy: 2,6	
Estimated Costs	Capital Costs	
	ROI	TBD – Would need to do more research on benefits to vendors, etc.
	Ongoing Costs	TBD – Would mirror existing procurement costs
	Staff Level of Effort	Low—Research options, negotiate purchase, train personnel on use and maintenance of CNG vehicle

Description

Will increase procurement and use of locally-sourced food, products, and services.

Implementation Steps

We can begin work on this immediately by working with Purchasing to discuss our department's needs and identify local sources for products and services.

Benefits

An emphasis on buying local across all programs whenever possible might not directly help the department with sustainable operations, but it would do so indirectly by helping the businesses of the county prosper. It would also increase the likelihood of reducing transportation-related emissions if products and services come from closer geographic sources.

Costs

The costs and benefits will be difficult to quantify and compare, but our department could work with Purchasing to quantify and compare relevant costs and benefits.

Juvenile Court — Provide Self-Care and Wellness Information for Staff

Initiative-at-a-glance		
Person Responsible/Lead		John Bauman
Supporting Individuals and Organizations		Dept. of Administration; Information Management
Target Timeframe		Year 1 / Immediately
Operational Category		Education & Outreach: Objective: 1,3; Strategy: 4 Employee Experience: Objective: 1,2,3,4; Strategy: 3
Estimated Costs	Capital Costs	None
	ROI	Potential for reduced illness and stress-related work absence.
	Ongoing Costs	None
	Staff Level of Effort	Low—Research and communicate relevant self-care and wellness options. Perhaps consult with Dane County Wellness team for additional resources.

Description

Most staff work on shifts in our 24/7 programs in the department. Juvenile Court and Juvenile Detention work can be highly stressful, so self-care is important in order to maintain a high level of staff functioning and morale.

Implementation Steps

The department can immediately increase the amount of information available to staff related to self-care and wellness, and encourage staff to take advantage of any related opportunities.

Benefits

Access to self-care and wellness information, as well as opportunities to implement self-care and wellness strategies, will help staff to reduce stress associated with work, as well as other life stress. Reduced stress and increased wellness among staff should improve their ability to perform and enjoy their work.

Costs

There should be no additional cost to the department to implement this initiative.

Juvenile Court — Paper Use Reduction Strategies

Initiative-at-a-glance		
Person Responsible/Lead	John Bauman	
Supporting Individuals and Organizations	Dept. of Administration; Information Management	
Target Timeframe	Year 1 / Immediately	
Operational Category	Waste: Objective: 3,6; Strategy: 2,4,5	
Estimated Costs	Capital Costs	None
	ROI	TBD — Would need to calculate paper cost reductions vs. computer cost
	Ongoing Costs	None — Should reduce operating costs by reducing paper and toner costs.
	Staff Level of Effort	Low

Description

Staff will be encouraged to minimize printing and to produce and read documents electronically.

Implementation Steps

- The department can immediately implement this initiative by purchasing a laptop for the Juvenile Shelter Home to promote mobile computer usage throughout the facility.
- We can also communicate the Paper and Office Equipment APM to all staff to provide strategies already approved by the county for paper reduction.
- We will track pre- and post-initiative implementation costs of paper through Printing and Services to determine cost savings.

Benefits

Reduction of paper use will reduce our consumption of raw resources, such as trees and water. It will also reduce GHG and other air emissions associated with the energy and fuel used to produce and transport paper products. Finally, it will reduce costs associated with paper purchases by the department.

Costs

The cost should be around \$1,000 for the laptop computer and will come from the operating budget.

Land and Water Resources — Timber Utilization and Reuse

Initiative-at-a-glance		
Person Responsible/Lead		Park Operations
Supporting Individuals and Organizations		Public Works- Solid Waste
Target Timeframe		Ongoing
Operational Category		Climate: Objective: 1; Strategy: 6,9 Waste: Objective: 2,3,4,5,6; Strategy: 2,3
Estimated Costs	Capital Costs	Varied — Minimal to moderate
	ROI	
	Ongoing Costs	Varied — Minimal to moderate
	Staff Level of Effort	Minimal to Moderate

Description

Timber and other wood materials need to be handled and disposed of, at various times and frequency. In response to the Emerald Ash Borer infestation, the Parks Division developed an Emerald Ash Borer Plan. This plan also addressed how to handle other streams of trees and wood debris that may result from hazard tree removal, diseased and dead trees, and trees and related wood debris as a result of a tornado or other catastrophic event.

Implementation Steps

The EAB Plan provides planning considerations for a wood utilization yard that would be created in the event of catastrophic event. The utilization yard would provide the ability to collect large amount of wood material in a short time frame that would allow the material normally considered ‘waste’ to a more positive and profitable use. Standard plans and specifications have also been developed for 3 different size park shelters. Timber for the shelters would come from trees removed from county properties, and other local municipalities. Current examples of these shelters can be found at Stewart Lake County Park and Brigham County Park

Benefits

Reduce the environmental impacts of the EAB within Dane County; mitigate the potential economic and social costs associated with Emerald Ash Borer control efforts and damage; find ways to put wood formerly considered “waste” to positive and profitable use.

Costs

While there will be associated costs for this project, the costs will also allow the potential for revenue that normally could not be realized in the event of a catastrophic event. Plans and specifications for the 3 shelter sizes are complete. Trees will have to be milled in to timbers for the construction of the shelters. The standard shelter design will create a legacy for the Dane County Park System.

Land and Water Resources — Migration from Paper to Digital Documents

Initiative-at-a-glance		
Person Responsible/Lead		Management Team
Supporting Individuals and Organizations		Department staff
Target Timeframe		Ongoing
Operational Category		Waste: Objective: 3,6; Strategy: 2,4,5
Estimated Costs	Capital Costs	Existing SMART Fund Grant
	ROI	Estimated \$70,000 annual savings (mostly labor)
	Ongoing Costs	Minimal — LTE
	Staff Level of Effort	Minimal — existing staff

Description

Transfer existing paper files from all LWRD Divisions to electronic media for efficient storage and retrieval.

Implementation Steps

Following successful implementation by WRE with the existing Sustainable grant, apply newly established processes and methods gained to other divisions as resources allow.

Benefits

As identified in the sustainable grant award to WRE, reduce consumption of paper; reduce space allocated to storage; improve retrieval ability to records and allow access to field applications

Costs

Hardware and software costs are covered by the existing SAMRT Fund grant. There will be an increase in Limited Term Employee hours to convert existing paper files to electronic media. New records will be stored on electronic media by existing staff. There will be a savings in paper costs, and reduced labor cost to access records maintained in paper files.

Land and Water Resources — Policy: Videoconferencing and travel for meetings

Initiative-at-a-glance		
Person Responsible/Lead		Management Team
Supporting Individuals and Organizations		Department staff
Target Timeframe		Ongoing
Operational Category		Transportation: Objective: 1,2,4; Strategy: 13
Estimated Costs	Capital Costs	None-minimal
	ROI	
	Ongoing Costs	None
	Staff Level of Effort	Minimal

Description

Develop a department wide policy to utilize videoconferencing capabilities for meetings and training sessions for staff.

Implementation Steps

The department is in the process of installing video monitors in conference rooms that will include connection to the county network and other digital media sources. We hope to include smaller conference rooms (“phone booths”) in the remodeling that will be undertaken on the 2nd floor this year. These phone booths would provide similar hardware and software capabilities as the conference rooms but for only 2-4 people.

Benefits

Utilizing emerging technology and increasing availability of meetings and other training sessions will save energy and staff time that is associated with travel to various locations.

Costs

Monitor and air media voice conferencing have already been installed and paid for. Any future related costs are not yet determined. There will be a significant savings in staff time and transportation-related expenses.

Land and Water Resources — Park Facilities Sustainability Initiatives

Initiative-at-a-glance		
Person Responsible/Lead		Park Operations
Supporting Individuals and Organizations		
Target Timeframe		Ongoing
Operational Category		Climate: Objective: 1; Strategy: 2 Water: Objective: 1,2; Strategy: 4,6 Buildings: Objective: 1,4; Strategy: 4
Estimated Costs	Capital Costs	\$54,360 -- \$46,800 from SMART Fund Grant and balance in 2015 capital budget
	ROI	
	Ongoing Costs	Net savings
	Staff Level of Effort	Minimal

Description

Retrofit existing park facilities with low consumption toilets, urinals, faucets; occupancy sensors and LED lighting in restrooms and parking lots

Implementation Steps

A sustainable grant has been received for the acquisition of the furnishings and lights. The acquisition of the plumbing fixtures is underway. All installation of grant-funded items will be installed as staff resources allow.

Benefits

A net savings to operational costs will result in the reduced consumption of water and electricity. These retrofits conform to adopted sustainability principles of reducing reliance on fossil fuels; reduce need for disposal of incandescent and halide lamps.

Costs

We have received a \$46,800 SMART Fund Grant. Installation will be done by existing Park Operations staff as time allows. A net savings in operation costs will result.

Land and Water Resources — Improve Stormwater and Nutrient Management

Initiative-at-a-glance		
Person Responsible/Lead	Department	
Supporting Individuals and Organizations		
Target Timeframe	Ongoing	
Operational Category	Climate: Objective: 1,3; Strategy: 9 Education & Outreach: Objective: 1,2,3; Strategy: 3,10	
Estimated Costs	Capital Costs	Varied - low to moderate
	ROI	
	Ongoing Costs	Varied - low to moderate
	Staff Level of Effort	Moderate

Description

Implement stormwater management practices on LWRD properties as individual Park Master Plans are developed or revised. Continue to evaluate and monitor implementation of conservation practices to minimize erosion and nutrient runoff on county-rented cropland.

Implementation Steps

The department continually monitors and evaluates opportunities to implement conservation practices on existing facilities as Park Master Plans are developed or revised. Typical examples are Stewart Lake County Park; Badger Prairie County Park; Prairie Moraine County Dog Park; Token Creek County Park; Cam Rock County Park; Donald County Park; Babcock County Park. The department also annually evaluates cropland that is leased, for compliance with applicable conservation and nutrient management plans. Nutrient management plans cannot exceed the state minimum requirements of a Phosphorus Index (PI) of 6 or less. For 2015, no crop field has a PI greater than 4, with the majority of both fields and cropland acres at a PI of 3 or less. We will also be implementing structural conservation practices on 2 properties.

Benefits

A reduction in runoff volume and improved water quality from existing and future developed properties, along with reduction in nutrient runoff from our cropland, demonstrates that by using common accepted practices, superior environmental performance can be achieved.

Costs

Primary cost is necessary staff time to develop site-specific conservation systems that can be readily implemented and sustained. Costs for structural practices at facilities are included in the development plan. Costs for structural practices on cropland are through existing grant programs.

Library — Purchase Compressed Natural Gas (CNG) Bookmobile

Initiative-at-a-glance		
Person Responsible/Lead		Tracy Herold, Library Service Director
Supporting Individuals and Organizations		Public Works and Department of Administration.
Target Timeframe		Immediate with completion in 8-9 months.
Operational Category		Climate: Objective: 1; Strategy: 2 Education & Outreach: Objective: 1,2,3; Strategy: 3,8
Estimated Costs	Capital Costs	\$375,000 (budgeted in 2015 capital budget)
	ROI	Non-financial – improved air quality and education/outreach benefit to community
	Ongoing Costs	Annual diesel fuel costs to run the Bookmobile have been about \$20,000. Converting to the CNG vehicle will save approximately \$4,200 annually over diesel fuel, for an annual cost of approximately \$16,000.
	Staff Level of Effort	Moderate. Mostly to construct the modifications to the garage.

Description

The Dane County Library Service has offered mobile library service in 15-20 communities without municipal libraries since 1967, providing access to books for all county residents six days a week and increasing social equity. Bookmobiles can be expected to provide reliable service for 10-12 years. The current diesel-fueled Bookmobile has been in service since 2003 and has been driven 165,000 miles. It has required additional maintenance and increased repair costs in recent years as it reaches the end of its life expectancy despite careful maintenance. This project will replace the old diesel-fueled Bookmobile with cleaner burning, more fuel-efficient Compressed Natural Gas (CNG) engine. The project will also require modifications to the garage where the Bookmobile is stored to comply with exhaust requirements.

The new CNG Bookmobile will contain approximately 4,500 books and other library materials, provide computer access (where available), and provide on-site library programming.

Implementation Steps

- Develop bid specifications
- Initiate the bid process
- Purchase the CNG Bookmobile
- Outfit the CNG Bookmobile
- Modify the Library Garage as needed to comply with CNG vehicle storage requirements
- Provide educational outreach on GHG reductions of the Bookmobile located on the vehicle

Benefits

- Will continue community access to free library books, materials, and programming
- Will reduce increasing maintenance and repair costs
- Will reduce GHG and other polluted air emissions. Natural gas vehicles generally emit 13–21 percent fewer GHG emissions than comparable gasoline and diesel vehicles on a well-to-wheels basis.
- Will reduce the county's fleet vehicle fuel costs by approximately \$4,200 annually
- Will provide another opportunity for educational outreach to the public around the county's commitment to GHG reduction and climate change efforts due to the high community visibility of the Bookmobile.

Costs

The anticipated costs are \$375,000 for vehicle replacement and modifications to the Library Garage to comply with CNG vehicle storage requirements. These costs are included in the 2015 capital budget.

Medical Examiner — New Facility, Case Management Software, and CNG Vehicle

Initiative-at-a-glance		
Person Responsible/Lead		Barry Irmen
Supporting Individuals and Organizations		Administration, DIM, Facilities Management
Target Timeframe		Ongoing - 3 years
Operational Category		Climate: Objective: 1; Strategy: 2, 4, 5 Transportation: Objective: 1,2,4,8; Strategy: 2, 6 Waste: Objective: 2,3,6; Strategy: 2 Buildings: Objective: 1,2,3,4,5; Strategy: 2,6
Estimated Costs	Capital Costs	ME Bldg already budgeted
	ROI	TBD
	Ongoing Costs	TBD
	Staff Level of Effort	Moderate

Description

Currently the ME's Office is taking the following steps to promote sustainability:

In an attempt to reduce printing costs, all FAX documents are delivered into a folder on the desktop. This allows staff to determine if the document legitimately needs to be printed in total or in part. We also promote two-sided copying/printing when appropriate.

In an attempt to reduce fuel consumption, the Medicolegal Investigators (MLIs) are reducing the number of trips around the county to various funeral homes. We do this by having funeral homes call in by 10:00AM to request cremation examinations. This allows the MLI staff to plan the most direct route to meet those statutorily-required cremation exams spread about the county.

The ME's Office has also taken advantage of a CNG grant to obtain a dual fuel vehicle, thereby reducing fuel use and reduce emissions in the office.

Future efforts include:

A review of the current records management system moving forward. Our goal is to implement a system that reduces the number of required 'paper files' in the office. This will be a lengthy process but as case management systems are introduced and reviewed by other offices, we are attempting to review the potential positive and negative impacts of our current way of doing business. We are currently awaiting a final product from the NY Office of the Chief Medical Examiner. This software would be free and its development is funded by the federal government.

We are considering the purchase of another dual fuel CNG vehicle.

The County is in the design process of a new facility, which will take advantage of the heat generated by the large generators at the landfill. This recovered heat will be used to heat the new facility. The new facility will also hopefully take advantage of other energy saving possibilities throughout the design process.

Implementation Steps

The implementation of a new records software system will ideally reduce the amount of paper used in records or case management. I would estimate that this will occur in the next three years as review continues.

Benefits

The ROI on the use of the CNG vehicle should not be difficult to calculate, if required.

The ROI for the FAX printing changes is something that may be estimated by comparisons of printing and services costs over the last 12 months compared to previous years. Although the case load and outside autopsy frequency is increasing.

The savings from a new facility should be something that can be estimated once occupancy is allowed. The facility will be much larger than the current Medical Examiner's Office. However, the savings from design changes is estimated in the current planning. There are still decisions to be made in regard to air handling and lighting in the new facility, which could allow for more economical operation.

Costs

The case management changes may come with no additional or capital costs if we find that they NYCOCME software is appropriate. If we go with another software vendor, there will be a capital cost associated with the change.

The possibility of an additional dual fuel CNG vehicle will result in an additional capital cost, over and above the cost of the vehicle. This is about a \$12,000.00 increase in the capital costs overall. This will be an expenditure in the 2015 budget year.

The new Medical Examiner's facility will be a large capital expenditure that is planned for 2014 – 2016 currently.

Planning & Development — Reduce Paper Consumption through Greater Use of Electronic Media

Initiative-at-a-glance		
Person Responsible/Lead	Land Records Administrator and Zoning Administrator	
Supporting Individuals and Organizations	Director, County Surveyor, Assistant Zoning Administrators, all department staff, Department of Administration, County Executive, County Board of Supervisors	
Target Timeframe	Ongoing/already begun; no looming deadlines or applicable timelines	
Operational Category	Climate: Objective: 1; Strategy: 2 Waste: Objective: 3; Strategy: 2, 5	
Estimated Costs	Capital Costs	Costs of scanning equipment, software, and outsourced scanning contracts; department already has most of the equipment and software required
	ROI	Qualitatively, the department will use less paper and consume fewer trees
	Ongoing Costs	Equipment maintenance, leasing, file storage/server availability, etc.
	Staff Level of Effort	Already woven into department staff duties and responsibilities

Description

The Planning and Development Department uses a great deal of paper. In any given month, the department can roughly consume well over 7,000 sheets of paper, which equates to over 14 reams. (One ream equals 500 sheets of paper.) This can be extrapolated to 168 reams per year. Calculators found online suggest on average that one standard, harvest-aged tree can produce between 14 and 16 reams of paper, which would suggest that we're consuming as a department on the order of one tree per month, or over 12 trees per year. While this is simply illustrative, and it doesn't account for the recycled paper content of the paper purchased by the county, the types of trees being harvested, or other such considerations, the simple objective is to reduce the volume of paper used and the number of trees consumed. The primary method proposed is to leverage the capabilities of electronic devices and electronic file creation, storage, and access to lessen the volume of paper used.

Implementation Steps

No additional capital or operational costs are anticipated in the foreseeable future. Implementation is an ongoing effort. Staff in both the Records and Support Division, which includes the Office of the County Surveyor, and the Zoning Division have been actively engaged in document scanning and indexing for many years. The County Surveyor oversees the scanning of county survey records, and the Zoning Administrator, or their designee within the Zoning Division, is responsible for overseeing the conversion of zoning records in the department. To-date, the department has already electronically imaged and indexed thousands of documents.

Electronic imaging very broadly consists of two areas of focus: 1) scanning historical records; and 2) scanning current documents from today's date forward. Scanning historical records

consists more of reducing paper file storage volume, and is less related to reducing new paper usage, while the second category is intended to reduce or eliminate the creation of new paper files in the first place, or to lessen the need to make paper copies for document replication and distribution. As noted, everything is already in place to carry out both scanning categories, and nothing more needs to be done by the department before this work can begin; we're already doing it. The department is already leasing a large format plotter/scanner for scanning larger documents (e.g. large plat maps), and we have purchased a smaller scanner that we use regularly in imaging smaller conventional office-sized documents.

To expedite the process, the department may pursue a contract to outsource the scanning and indexing of historical documents to reduce the physical space demands of hardcopy document storage. The department currently shares with the Dane County District Attorney's Office approximately 200 square feet of storage space on the second floor of the City-County Building. The department's objective over 2015 and beyond is to substantially reduce the need for this ancillary space.

Benefits

There are a number of benefits to reducing department paper usage: fewer trees harvested for paper; less money expended on paper; less physical office space consumed for file storage, and fewer environmental impacts from manufacturing and transporting paper, including reduction of greenhouse gas emissions. However, the county should perform a more thorough cost-benefit analysis to determine if the full costs and benefits of paper reduction is offset by the full costs of electronic file management. Trees are good for the environment, and they are a replaceable, sustainable resource, unlike all the heavy metals that are mined and incorporated into electronic devices, which quickly become obsolete and discarded. As part of this analysis, it would be worthwhile to compare and contrast resource availability and recyclability of paper versus that of electronic devices. However, until such an analysis is done, the operating assumption is that paper reduction is good, and the department's current goal is to do so.

Costs

Capital costs would consist of equipment acquisition and replacement. The department already has most, if not all of the equipment and software that would be needed for the foreseeable future, i.e., scanning equipment, scanning function on office copiers, software for document imaging and file management/indexing, server space for electronic file conversion and storage, etc. No additional capital costs are anticipated at this time.

The costs of maintenance, equipment leasing, and outsourced imaging contracts would be operational costs. Equipment maintenance and leasing costs are already incorporated into the department's operational budget for existing equipment.

The only exception or addition to these costs would be the possible future outsourcing of imaging services, or hiring of a part-time, limited-term employee (LTE) to both expedite the rate of conversion from historical existing paper files to electronically stored files and to scan and index incoming, point-forward documents. Between 2008 and 2010, the department contracted with two separate imaging firms (US Imaging and eDocs) for a total of \$54,500 to back-scan and backup historical survey documents stored in the department in the Office of the County Surveyor. To-date, the Office of the County Surveyor has scanned approximately 220,000 survey related documents. Existing staff of the department continue on an ongoing basis as time permits to scan and index survey records, as well as Zoning Division files, including both

historical and current zoning permits, rezoning, and conditional use permit files, of which we have over 8,500 documents already scanned and indexed.

For now, as noted above, the department currently has about 200 square feet of ancillary storage space on the second floor of the CCB that is shared with the department by the District Attorney's Office. This is an ample amount of space, and there is not an imperative that the department eliminate this space anytime soon. Nonetheless, it is still the department's goal to reduce the need for this space over time.

Planning & Development — Promote Alternative Modes of Employee Commuting

Initiative-at-a-glance		
Person Responsible/Lead	Director	
Supporting Individuals and Organizations	Division Administrators, staff, County Executive, County Board of Supervisors, Department of Administration	
Target Timeframe	Present and ongoing	
Operational Category	Climate: Objective: 1; Strategy: 2 Transportation: Objective: 1,2,4,6,7,9; Strategy: 12 Employee Experience: Objective: 1,2,4 Strategy: 3	
Estimated Costs	Capital Costs	Potential costs of additional bicycle amenities like lockers, showers, maintenance space, etc. to make bicycling more possible and appealing to potential bike commuters
	ROI	Fewer cars on the road, less air pollution, less roadway congestion, greater employee fitness (bicycling and walking), improved health and wellness, lower county costs for parking, etc., all of which may be quantifiable, albeit outside of the scope of this action plan
	Ongoing Costs	Maintenance of bicycle amenities, ongoing costs of rideshare programs, etc.
	Staff Level of Effort	Probably entails minimal staff effort to promote such programs. There is already a Rideshare coordinator with the staff to the Madison Area Transportation Planning Board. Any capital improvements would entail more staff effort to define a scope of work, draft an RFP and contract, oversee a contract, and see a project through to completion.

Description

Create an environment in the office to enable, promote, and accommodate modes of employee commuting as alternatives to driving single-occupancy vehicles (SOVs). Transportation modes such as bicycling, riding the bus, walking, and carpooling are preferred modes for many reasons, including environmental, financial, and employee health. The Planning and Development Department already has very high levels of alternative commuting to work, particularly during non-winter months, and the department’s objective is to continue to promote such commuting.

Implementation Steps

Dane County already has a very good Rideshare program that is administered by staff to the Madison Area Transportation Planning Board, and Dane County already contributes to and supports this program on behalf of its employees, particularly with respect to providing free bus passes to employees, and reduced or waived monthly fees for the Dane County parking ramp for participants in the Rideshare program. The department already has many employees that participate in the Rideshare program and bus to work. Similarly, the department has a very high rate of employee bicycle commuting, especially during the ‘non-winter’ months of the year (roughly April thru October).

One important way to promote or implement alternative modes of transportation to work is to allow for a more flexible work schedule. While still requiring eight-hour days, or 40-hour weeks, being flexible with respect to employee starting and ending times can greatly increase the

appeal of alternative employee commuting. Riding the bus to work can create unforeseen delays for employees, and fixed bus schedules can sometimes be difficult to work around, so flexibility on the employer/department's part can help support the use of alternative modes of transportation. Similarly, biking to work can take more time relative to driving to work, so allowing employees more flexibility in terms of when they start and end their days is important. This flexibility can be a significant, overlooked incentive with virtually no cost to Dane County.

Another key factor in promoting alternative modes of commuting, especially biking, is providing locker rooms. Having facilities in which employees can shower if they choose, change, and store bicycling gear is critical to increasing the potential that more employees will consider biking to work. Dane County already provides such amenities in multiple county employment sites, including at the City-County Building.

Benefits

Benefits include improved employee health and wellness, lower insurance costs to Dane County, lower parking costs to both employee and Dane County, lower employee household costs attributed to transportation, less roadway congestion, improved air quality, etc.

Costs

The costs of Dane County's support for the Rideshare program can be provided by the Dane County Department of Administration. There are no costs to the department, or the employee. Specific costs related to providing bicycle amenities would need to be calculated on a case-by-case basis.

Planning & Development — Allow for Flexible Employee Work Hours and Schedules

Initiative-at-a-glance		
Person Responsible/Lead	Department Director and Division Administrators	
Supporting Individuals and Organizations	County Executive, County Board of Supervisors, and staff	
Target Timeframe	Ongoing	
Operational Category	Climate: Objective: 1; Strategy: 2 Transportation: Objective: 1,2,6,7,9; Strategy: 12 Employee Experience: Objective: 1,2,4 Strategy: 4	
Estimated Costs	Capital Costs:	None
	ROI:	Serves as an inducement to consider alternative modes of transportation (see previous action item); spreading work hours out over longer periods of the day lessens the problem of peak-hour traffic congestion and commensurate air pollution; working with individual schedules of staff makes for less stressed, happier, and more productive staff; much lower staff attrition rates
	Ongoing Costs:	None
	Staff Level of Effort:	Perhaps some nominal level of increased effort and attention by both supervisors and employees to monitor and manage employee work hours

Description

As noted in the previous action item, this action goes hand-in-hand with increasing the feasibility of promoting alternative modes of employee commuting. Instead of strictly adhering to the conventional starting time of 7:45 a.m. and ending time of 4:30 p.m., allowing a more flexible employee work schedule that varies from employee-to-employee, while still requiring the parameters of an eight-hour day, or 40-hour week, has more benefits than costs, particularly with respect to sustainability objectives.

Implementation Steps

Flexible employee scheduling has been a long-standing practice of the department that began over 11 years ago, and it has been supported by the department director, division administrators, and staff throughout that time. In addition to a number of other benefits outlined below, allowing for such flexibility has contributed to very high rates of employee commuting by alternative modes of transportation, at times exceeding half of the department during the ‘non-winter’ months of April thru October. Without a flexible schedule, many employees would not even consider biking or riding the bus to work; for many, it would simply not be an option.

In order to implement a flexible employee work schedule, it entails more interaction between supervisors and staff to manage schedules varying between employees, and it requires an additional degree of trust in the department that employees are at work and working at times when supervisors or other staff may not be present in the office. However, in practice such issues are minimal and can often be addressed constructively and cooperatively when they do appear. Overall, while there can be challenges in scheduling work hours, especially if standard office hours are required to staff a public service counter, the benefits of a flexible schedule far outweigh what is required with respect to implementation.

Benefits

As noted in the 'At-a-Glance' summary above, a flexible schedule serves as a key inducement for staff to consider alternative modes of transportation (see Action Item No. 2 above) and contributes greatly to multiple sustainability objectives. Spreading work hours out over longer periods of the day has a number of environmental benefits. It lessens the problem of peak-hour traffic congestion and commensurate air pollution. The problem of peak-hour roadway congestion is largely a function of most area employees starting and ending work around the same times of the day, thus creating area-wide congestion on the roadways during these specific *peak* hours of the day. If the starting and ending times for employees are spread over a longer period of time, congestion levels on the roadways will be reduced, as will the associated air pollution contribution from idling vehicles. Lastly, but certainly not least, working with the individual schedules of staff makes for less stressed, happier, healthier, and more productive staff, which contributes to much lower staff attrition rates.

Costs

There are very few if any costs encountered with implementing flexible employee work schedules, at least none that are evident, significant, and quantifiable that have been experienced by the department.

Planning & Development — Transition to a Cleaner, More Fuel-Efficient Vehicle Fleet

Initiative-at-a-glance		
Person Responsible/Lead	Patrick Klinkner, Zoning Inspector	
Supporting Individuals and Organizations	Zoning Administrator, Director, County Executive, County Board of Supervisors	
Target Timeframe	As vehicle replacement purchases warrant and capital budget funding is available	
Operational Category	Climate: Objective: 1; Strategy: 5 Transportation: Objective: 1,3,4,5; Strategy: 4,5,6	
Estimated Costs	Capital Costs	Approximately \$25,000 to \$30,000/vehicle; one vehicle to be purchased within the next 1-2 years, and then not for several years thereafter
	ROI	Financial and air quality benefits from more fuel efficient, cleaner-burning technology
	Ongoing Costs	Vehicle maintenance already part of recurring annual operational base
	Staff Level of Effort	No additional effort needed simply for change in vehicle fuel type

Description

The Zoning Division of the department has a small fleet of three zoning inspection vehicles. Over time, the department’s intent is to transition entirely to more fuel-efficient vehicles. This is a very tangible objective: Of the department’s three vehicles, one already runs on compressed natural gas (CNG), and another is already relatively fuel efficient, getting 30 miles per gallon (mpg).

Implementation Steps

The department has the following three vehicles:

	Vehicle Make/Model/Type	Fuel Type	Year	Mileage ¹	Miles Per Gallon
1.	Subaru Forester Sport Utility	Gasoline	2014	4,564	30
2.	Ford F150 Crew Cab 4x4 Pickup Truck	CNG-Duel Fuel	2011	33,825	17 ²
3.	Ford Ranger Light-Duty Pickup Truck	Gasoline	2007	146,590	20

With each future vehicle replacement purchase, the department intends to seek out alternatively-fueled vehicles with improved fuel efficiency and air emissions. When the next vehicle reaches its practical lifespan, which may be in the next year with the 2007 Ford Ranger, the department would implement this action item by proposing a vehicle purchase in the next available Dane County capital budget, which may be as early as the 2016 budget.

¹ Mileage reading is from April 2014.

² Miles-per-gallon (mpg) for the Ford F150 is 17 regardless of the fuel type.

Benefits

The benefits of this action item are improved fuel efficiency, financial savings from fewer dollars spent on fuel, and fewer and cleaner air emissions from improved exhaust systems.

Costs

The department's most recent vehicle acquisition was the 2014 Subaru Forester, which cost approximately \$25,000. A future capital budget item would likely fall in the range of \$25,000 to \$30,000. A Toyota Prius or a Ford Fusion Hybrid would both fall within this price range.

Planning & Development — Enable Off-Site Permit Application Options

Initiative-at-a-glance		
Person Responsible/Lead		Zoning Administrator
Supporting Individuals and Organizations		Director, Zoning Division staff, County Executive, and County Board of Supervisors
Target Timeframe		Already initiated and presently ongoing to expand efforts
Operational Category		Climate: Objective: 1; Strategy: 2 Education & Outreach: Objective: 3; Strategy: 3
Estimated Costs	Capital Costs	Capital cost of computer hardware has already been expended
	ROI	Fewer vehicle trips into CBD from rural areas, improved air quality, and increased convenience for the public
	Ongoing Costs	Hardware and software maintenance is already largely rolled into existing operational base expenditures
	Staff Level of Effort	Zoning Division staff will need to work out the logistics of such a service, which will entail staff time, town official time, and promotion of the service to the public

Description

A significant portion of the department’s work relates to operating a public counter at which department staff work with citizens to issue zoning permits and take in zoning applications for new development. This aspect of the zoning process requires members of the public to drive into downtown Madison to visit the office to make such applications. Dane County is 1,200 square miles, and such trips can often be lengthy in both time and distance. Virtually all of these trips are conducted by single-occupancy vehicles, and the exhaust from such vehicle trips has a corresponding environmental impact by contributing to greenhouse gas emissions. Meanwhile, the department has Zoning Inspectors in the field every day conducting inspections.

If the department were technologically capable of having remote access to the appropriate data in the office, and was also capable of physically printing out the necessary application material, it would be possible for department staff to have ‘office hours’ in various parts of the county on a rotating basis to issue permits in the field. This opportunity could reduce the number of vehicle miles traveled by lessening the need for some rural property owners to drive into Madison to make applications. Zoning Inspectors are already in the field everyday as part of their routine inspection trips, so taking time on a periodic basis to setup operations in a cooperative town hall for a portion of a day would require fewer net vehicle trips, and it creates a convenience for the public. Such a program could be expanded over time based upon the success of an initial pilot program.

Implementation Steps

The department has a goal to expand its efforts in this regard over 2015 and 2016. This effort requires the appropriate computer hardware and data access, i.e. laptop computer with wireless communication capabilities, portable printer, and full access to all relevant land records. The department has already acquired the needed laptop and printer, and most of the required land records information has already been electronically imaged and indexed. The department is now technologically capable of putting this service to the test. Over the course of 2015 and beyond, the department will work with the rural towns on setting up a pilot program to test the potential for off-site permitting.

Benefits

Benefits would include reduced vehicular trips into central Madison, improved air quality, and increased convenience for the public.

Costs

As noted above, there are few if any initial costs, as the hardware has already been acquired. Following a pilot program, there may very well be costs associated with expanding the use of off-site permitting, likely attributed to additional computer hardware purchases.

Planning & Development — Enable and Utilize Audio and Videoconferencing as Meeting Options

Initiative-at-a-glance		
Person Responsible/Lead	Land Records Administrator	
Supporting Individuals and Organizations	Director, DOA/Information Management, County Executive, and Dane County Board of Supervisors	
Target Timeframe	Immediate and ongoing	
Operational Category	Climate: Objective: 1; Strategy: 2 Transportation: Objective: 1,2,4; Strategy: 13	
Estimated Costs	Capital Costs	Already included in DOA capital budget for 2014 office reconstruction
	ROI	Fewer vehicle and other trips made to attend meetings
	Ongoing Costs	Hardware and software maintenance
	Staff Level of Effort	Minimal, i.e., already budgeted and in-process

Description

The department is engaged in frequent meetings with the public, other county agencies, project consultants, etc. Incorporating audio- and videoconferencing hardware into department meeting space will enable alternative meeting options that will lessen the number of vehicular and other trips initiated by the department, and it will increase convenience for the public, county staff, consultants, and department staff to attend meetings.

Implementation Steps

In the case of the Planning and Development Department, the hardware and meeting space have already been secured as part of the department's 2014 office reconstruction. A conference room has been incorporated into the rebuilt office, and it currently includes an IP phone capable of audio-conferencing. It will also eventually include a large wall monitor equipped with two-way video-conferencing capabilities. The department's Land Records Administrator is working with Dane County's Information Management Division to acquire, install, and set up the monitor.

Benefits

As noted above, there will be fewer vehicular and other trips made as a result of department meetings, and it creates an additional meeting attendance option. In turn, in addition to being a convenience, it will also have an environmental benefit with respect to decreasing vehicle emissions resulting from vehicle trips made to attend department meetings, and thus a positive impact on air quality and climate change emissions.

Costs

The costs associated with installation of the IP phone and two-way video conferencing monitor was included in the 2014 office reconstruction capital budget.

Planning & Development — Initiate Internship for Mentoring Minority Youth to Promote Interest and Diversity in the Land Use Professions

Initiative-at-a-glance		
Person Responsible/Lead	Director	
Supporting Individuals and Organizations	Division administrators, DOA, department staff, County Executive, County Board of Supervisors, UW Extension, Dane County school districts	
Target Timeframe	2016 and beyond	
Operational Category	Education & Outreach: Objective: 1,2,3; Strategy: 5,7	
Estimated Costs	Capital Costs	None
	ROI	Promote interest and diversity in the land use professions and long-term education and career development
	Ongoing Costs	Ongoing operational costs depend on whether they are paid or unpaid internships
	Staff Level of Effort	Designing program, coordination of intern selection, oversight, and mentorship

Description

Coordinate with area school districts and UW Extension to discuss and design a youth internship and mentoring program to promote interest and diversity in the land use professions and present an option to area minority youth for potential career paths. This program could be similar to UW Extension’s Youth in Governance Program.

Implementation Steps

The process would likely begin with an internal department and Dane County discussion to explore what ideas and project opportunities we have in the department that may be of interest to area school districts and youth. This step would include conversations with UW Extension about the current Youth in Governance Program (YGP). In Dane County, YGP focuses on youth in political governance and learning about the legislative branch of county government by placing area high school students on various standing committees of the Dane County Board of Supervisors. The idea behind this program would be similar, but focused more on the civil service arm of the executive branch of county government, with an emphasis on area minority youth and the objective of promoting awareness of and interest in the land use professions. The process would include input and guidance from the Dane County Executive’s Office of Equal Opportunity and the Equity Coordinator of the Dane County Board Office. Program objectives and criteria would need to be established jointly among Dane County, UW Extension, and area school districts.

Benefits

The benefits of this program would be to bring to the attention of area minority youth the potential career path of the land use professions and to generate interest in a possible educational path to the career(s). It would additionally provide general insight into the common workings of an office to the benefit of any young person forming their future education and career plans.

Costs

One cost would be the time investment of department staff to develop and implement the program, but this would be provided within current staffing levels. Additionally, it would entail some time from area school districts, UW Extension, and the county offices noted above. The internships could be free, or they could be paid, depending on program design and the availability of budgeted funds. For the sake of discussion, an internship of five to 10 hours per week for 50 weeks in a year at a rate of \$8.50/hour would require between \$2,125 and \$4,250 in funding annually.

Public Health — Mileage Reduction, Videoconferencing

Initiative-at-a-glance		
Person Responsible/Lead	Director and staff	
Supporting Individuals and Organizations	Staff	
Target Timeframe	Ongoing	
Operational Category	Climate: Objective: 1; Strategy: 2 Transportation: Objective: 1,2,4; Strategy: 13	
Estimated Costs	Capital Costs	None
	ROI	Small financial returns, large staff time returns
	Ongoing Costs	Annual fuel costs
	Staff Level of Effort	N/A

Description

Public Health has reduced staff mileage by consolidating from five office sites to four, moving staff so that program teams could be co-located. The first move was in June 2010; the last was in September 2011. This has resulted in the following mileage and cost reductions:

	2009	2010	2011	2012	2013
Annual Mileage Costs	\$177,031	\$149,819	\$155,100	\$122,878	\$122,337
Approximate Miles Driven	350,556	290,911	301,165	243,323	242,251

We also purchased videoconferencing equipment in 2011 using grant funds so that video meetings can be held. Typical savings are only about \$270 per year for mileage as the only group that takes advantage of the equipment is the program supervisors group. There are significant savings in staff time.

Implementation Steps

These actions are already being implemented and will be ongoing.

Benefits

The benefits of these initiatives are reductions in fuel use and fuel costs, reduction in staff travel time, which can then be used for other service delivery.

Costs

None

Public Health — Video “DOT” – Directly-Observed Therapy

Initiative-at-a-glance		
Person Responsible/Lead		Director and staff
Supporting Individuals and Organizations		Staff
Target Timeframe		Ongoing
Operational Category		Climate: Objective: 1; Strategy: 2 Transportation: Objective: 1,2,4; Strategy: 13
Estimated Costs	Capital Costs	None
	ROI	Reductions in fuel use, fuel costs, and staff travel time
	Ongoing Costs	N/A
	Staff Level of Effort	Low

Description

PHMDC is required to do directly-observed therapy to ensure that active TB clients are taking their medication. This has been done by having a PHMDC staff member go to the person's home. PHMDC has been working with the state to change this protocol, but until May of 2014 this was only allowed when there have been extenuating circumstances. PHMDC began a pilot using video monitoring with one client in May 2014, with the intent of adding 1-2 more clients if the project works well.

Implementation Steps

These actions are already being implemented and will be ongoing. This action may be scalable if the initiative is effective.

Benefits

The benefits of these initiatives are reductions in fuel use and fuel costs, reduction in staff travel time, which can then be used for other service delivery, and effective service delivery to clients of PHMDC.

Costs

None

Public Health — Replacement of Boilers and Air Conditioning Units

Initiative-at-a-glance		
Person Responsible/Lead		Director and staff
Supporting Individuals and Organizations		Staff
Target Timeframe		2016
Operational Category		Climate: Objective: 1; Strategy: 2 Buildings: Objective: 1; Strategy: 4
Estimated Costs	Capital Costs	None
	ROI	Reduction of energy costs
	Ongoing Costs	N/A
	Staff Level of Effort	Low

Description

Replace boiler and AC units at the East Washington office with more energy-efficient units.

Implementation Steps

Determine feasibility of replacement in leased space. If feasible, get bids for work and incorporate into budget request.

Benefits

The benefits of these initiatives are reductions in energy use and energy costs.

Costs

To be determined

Public Health — Paper Reduction

Initiative-at-a-glance		
Person Responsible/Lead	Director and staff	
Supporting Individuals and Organizations	Staff	
Target Timeframe	2016	
Operational Category	Waste: Objective: 2,3; Strategy: 2,5	
Estimated Costs	Capital Costs	None
	ROI	Reduction in paper use and costs
	Ongoing Costs	N/A
	Staff Level of Effort	Low

Description

Evaluate work processes to determine which can be shifted to electronic storage so that there can be a reduction in paper use. One area of study is using electronic transmittal for most of our payroll (initial rough projection is that this could save about 16 reams of paper a year.)

Implementation Steps

Determine feasibility of replacement in leased space. If feasible, get bids for work and incorporate into budget request.

Benefits

The benefits of these initiatives are reductions in energy use and energy costs.

Costs

To be determined

Public Safety Communications / 911 Center — Radio Tower Site Improvements

Initiative-at-a-glance		
Person Responsible/Lead	John Dejung	
Supporting Individuals and Organizations	<ul style="list-style-type: none"> • Rich McVicar & Chad Fleck (PSC) • Dane County Public Works • Harris Corporation (system designer and installer) • Federal Engineering, Inc. 	
Target Timeframe	2014/2015	
Operational Category	Buildings: Objective: 1,4; Strategy: 4	
Estimated Costs	Capital Costs	Already budgeted (in 2015; part of \$3M addition to DaneCom budget)
	ROI	No financial ROI anticipated; improved service delivery
	Ongoing Costs	N/A (one-time installation)
	Staff Level of Effort	Low. Initial “design” and contract discussion; perhaps 12 staff hours

Description

Dane County will be adding 4 radio tower sites as part of an enhancement to the extant DaneCom radio system. These additions will most likely be at existing sites where we’ll be leasing tower space from commercial tower owners at/on existing towers. However, these sites may require capital improvements such as new shelter space (in which to place the radio/computer equipment) with continuous and emergency back-up power sources. It may be possible to improve the sustainability “footprint” of these sites if the shelters can be built with sustainable materials, and it may be possible to choose a more energy-efficient power system for primary and/or emergency power (such as solar power).

Implementation Steps

- 1) Work with Harris Corporation, Federal Engineering (consulting engineers), and Dane Co. Public Works to ascertain what, if any, sustainability measures at the new tower sites are feasible.
- 2) Develop plans in 2015 to implement any feasible and cost-effective improvements.
- 3) Build the shelters and provision the power supplies in the spring-summer of 2015.

Benefits

Financial return on investment (ROI), if any, will be small and perhaps not calculable.

Costs

Costs will be determined along with feasibility in step 1 of the implementation steps noted above.

Public Works, Highway, & Transportation Engineering Division — Energy Assessment at County Facilities

Initiative-at-a-glance		
Person Responsible/Lead	Assistant Public Works Director	
Supporting Individuals and Organizations	Facilities Management, Special Projects Manager	
Target Timeframe	2015 - 2016	
Operational Category	Climate: Objective:1,3; Strategy: 1,2 Buildings: Objective:1,3,6; Strategy: 4,5, 6	
Estimated Costs	Capital Costs	TBD by project
	ROI	TBD by project
	Ongoing Costs	TBD by project
	Staff Level of Effort	Low – (0-10 hours / week)

Description

Dane County facilities use over 1.25 million therms of natural gas and 33 million kWh of electricity annually, according to data collected for the Greenhouse Gas Emissions Inventory of 2007 Government Operations. Annual utility costs for county facilities total over \$4.1 million. Improving the energy efficiency of county buildings will contribute to a more sustainable system by saving money and reducing the carbon footprint and air pollutant emissions associated with energy produced from non-renewable sources.

The Engineering Division has responsibility for reviewing and assessing county facilities, as well as developing recommendations for facility repairs and maintenance. Conducting an energy assessment and benchmarking energy use at all county facilities will provide the information needed to identify and prioritize upgrades and renovations for greater energy efficiency (e.g., insulation and lighting upgrades, appliance replacement, etc.). Recommendations for system improvements will be made for each facility based on the assessment, retrocommissioning, and input from facilities management staff.

Implementation Steps

- Develop an energy assessment form
- Benchmark (measure, track, and compare) each facility’s energy performance with Energy Star Portfolio Manager.
- Assess all current county buildings and facilities to identify needs and prioritize upgrades and renovations for greater energy efficiency (e.g., insulation and lighting upgrades, appliance replacement, etc.).
- Conduct retrocommissioning for existing buildings and facilities (A Retrocommissioning Report has already been prepared by Sustainable Engineering Group in 2010 for the CCB, PSB, and Courthouse.)
- Prioritize and implement the recommended energy efficiency improvements depending on estimated payback and savings

Energy assessments will be conducted by Engineering Division staff in coordination with Facilities Management at an estimated rate of two facilities per month.

Benefits

- Cost savings
- Reduced energy consumption
- Reduced carbon footprint and air pollutant emissions

A Return on Investment (ROI) can be calculated on a project-by-project basis based on an analysis of the current practices, project cost, and the energy savings associated with the recommended improvements implemented at each facility.

Costs

Costs for conducting the actual energy assessments will be limited to staff time. Typical costs for a retrocommissioning study are \$35,000 per building. These costs should be budgeted by the department that is the primary user of the building being retrocommissioned. The capital costs for a particular energy upgrade or renovation will be determined as a result of the assessments and retrocommissioning. It will be subsequently budgeted for by the appropriate department.

Resources

U.S. EPA *Energy Star Program* <https://www.energystar.gov/>

Public Works, Highway, & Transportation Engineering Division — Water Assessment at County Facilities

Initiative-at-a-glance		
Person Responsible/Lead	Assistant Public Works Director	
Supporting Individuals and Organizations	Facilities Management, Special Projects Manager	
Target Timeframe	2016 - 2017	
Operational Category	Water: Objective: 1,2; Strategy: 2,3,4,5,6,8 Buildings: Objective:1,3,6; Strategy: 4,5, 6	
Estimated Costs	Capital Costs	TBD by project
	ROI	TBD by project
	Ongoing Costs	TBD by project
	Staff Level of Effort	Low – (0-10 hours / week)

Description

Water used in office buildings accounts for approximately 9 percent of the total potable water use in commercial and institutional facilities in the United States. The three largest uses of water in office buildings are restrooms, heating and cooling, and landscaping.

The Engineering Division has responsibility for reviewing and assessing county facilities, as well as developing recommendations for facility repairs and maintenance. Conducting a water assessment and benchmarking water use at all county facilities will provide the information necessary to identify and prioritize replacement or retrofit of plumbing fixtures to reduce water use (e.g., install water efficient toilets, urinals, faucets, etc.) and identify the potential for cisterns, rain gardens, and other methods to reduce storm water runoff and reduce potable water use for landscaping at county grounds and facilities.. Recommendations for system improvements will be made for each facility based on the assessment and input from facilities management staff.

Implementation Steps

- Develop a water assessment form
- Benchmark (measure, track, and compare) each facility's water consumption with EPA Portfolio Manager.
- Assess all current county buildings and facilities to identify needs and prioritize replacement or retrofit of plumbing fixtures to reduce water use (e.g., install water efficient toilets, urinals, faucets, etc.).
- Identify county facilities and grounds suitable for installation of cisterns, rain gardens, and other methods to reduce storm water runoff and reduce potable water use for landscaping at county grounds and facilities.
- Prioritize and implement the improvement recommendations depending on estimated payback and savings.

Water assessments will be conducted by Engineering Division staff in coordination with Facilities Management at an estimated rate of two facilities per month.

Benefits

- Cost savings
- Reduced water consumption

A Return on Investment (ROI) can be calculated on a project-by-project basis based on an analysis of the current practices, project cost, and the water savings associated with the recommended improvements implemented at each facility.

Costs

Costs for conducting the actual water assessments will be limited to staff time. The capital costs for a particular water conservation upgrade or renovation will be determined as a result of the assessments and will be subsequently budgeted for by the department that is the primary user of the building.

Resources

U.S. EPA *Water Sense Program* <http://www.epa.gov/watersense/>

Public Works, Highway, & Transportation Engineering Division — Increasing Sustainability of Capital Building Projects

Initiative-at-a-glance		
Person Responsible/Lead	Assistant Public Works Director	
Supporting Individuals and Organizations	Facilities Management, Special Projects Manager	
Target Timeframe	Ongoing	
Operational Category	Climate: Objective: 1; Strategy: 2,4,6; Water: Objective: 1,2; Strategy: 2,3,4,5,6,8; Waste: Objective: 5; Strategy: 2; Buildings: Objective:1,2,3,4,5,6,8,10; Strategy: 1,2,3,5,9	
Estimated Costs	Capital Costs	TBD by project
	ROI	TBD by project
	Ongoing Costs	TBD by project
	Staff Level of Effort	Low – (0-10 hours / week)

Description

Dane County adopted a green building policy for county-owned buildings in 2000. The overall goal of Dane County’s sustainable building policy is to protect human health, be environmentally responsible, and be fiscally prudent over the life of the building. To meet this goal, the adopted resolution directed construction planners, engineers, and contractors for Dane County to:

- Strive to exceed all local, state and federal environmental standards;
- Use resources efficiently and minimize the consumption of raw materials and resources (energy, water, land, and materials) during the construction and life of the facility;
 - Maximize the reuse of resources;
 - Minimize or eliminate the use of toxic materials;
 - Seek out renewable energy sources as opposed to using fossil fuels;
 - Create a healthy environment for workers, visitors, and neighbors;
 - Design facilities for long term durability, flexibility, and eventual reuse; and
 - Protect and restore the natural environment.

The Engineering Division designs County projects; prepares plans and specifications; and manages the bidding, construction, closeout, and payment of the projects. The Division is also responsible for preparing Requests for Proposals (RFPs) from architectural and engineering consultants for various major county projects or for projects where additional expertise is needed. The Division will continue to incorporate the County’s adopted green building policy and sustainability principles into the planning and development of capital improvement projects.

Implementation Steps

Recent RFPs for architectural / engineering services for county building projects have specified that:

- ✓Adherence to Dane County Green Building Policy is required for the project
- ✓Obtaining a LEED® rating is a goal of the project
- ✓Commissioning is to be performed for all projects over \$1 million.

Future RFPs for architectural / engineering services for county building projects will also specify that:

- ✓ The use of EPA Water Sense and Energy Star certified products is required for the project
- ✓ Solar Ready Criteria will be incorporated into the design of the project
- ✓ A solar feasibility study will be conducted for the project

The RFP requirements will be updated by Engineering Division staff in 2015.

Benefits

- Cost savings
- Reduced energy and natural resource consumption
- Reduced carbon footprint and air pollutant emissions

A Return on Investment (ROI) can be calculated on a project-by-project basis based on an analysis of the costs and benefits of the recommended green building practices implemented on each project.

Costs

LEED Certification fees for building design and construction range from \$4,200 to \$31,200, depending on the gross floor area of the building. Typical costs for a commissioning study are \$55,000 to \$85,000, depending on the level of complexity of the building. Typical costs for a solar feasibility study are \$5,000 per building.

The costs for a particular green building practice will be determined during the design and bidding process for each building.

Resources

U.S. Green Building Council *Leadership in Energy & Environmental Design*
<http://www.usgbc.org/leed>

U.S. Department of Energy National Renewable Energy Laboratory *Solar Ready Buildings Planning Guide* <http://www.nrel.gov/docs/fy10osti/46078.pdf>

Public Works, Highway, & Transportation Engineering Division — Fleet Conversion to CNG

Initiative-at-a-glance		
Person Responsible/Lead	Highway Operations Manager	
Supporting Individuals and Organizations	Solid Waste Division	
Target Timeframe	Ongoing	
Operational Category	Climate: Objective: 1,3; Strategy: 5 Transportation: Objective: 3,4,5 Strategy: 6	
Estimated Costs	Capital Costs	\$10,000-\$50,000 per vehicle ³
	ROI	55% - 122%
	Ongoing Costs	TBD by project
	Staff Level of Effort	Low – (0-10 hours / week)

Description

Currently, the most ideal candidates for compressed natural gas (CNG) fueled fleets tend to be low fuel-efficiency, high-mileage vehicles that have predictable routes with good access to CNG filling stations. A typical county snow plow travels 12,000 miles per year and has a fuel economy of 5 miles per gallon, consuming 2,400 gallons of diesel fuel per year. Transitioning the fleet vehicles in the Highway Division to CNG and renewable CNG (rCNG) produced at Dane County Landfill #2 contributes to a more sustainable system since these fuels are less expensive, more energy efficient, and less polluting.

Dane County has been systematically developing its CNG and rCNG-fueling infrastructure since 2010. The County currently owns and operates two CNG fueling stations. There is a station at the Dane County Parks Office (4318 Robertson Road) that delivers CNG from pipeline gas and a station at the Dane County Rodefild Landfill (7102 US Hwy 12) that provides rCNG from landfill gas. In addition there are two public CNG fueling stations in Dane County: a Kwik Trip in Verona, and a Speedway in Monona. Madison Gas & Electric also operates a private station that is available to fleet customers. There is currently enough CNG fueling infrastructure in operation to support the use of CNG-only vehicles in the Dane County fleet.

The Highway Division has been steadily converting its fleet to CNG-fueled vehicles since 2009. The Highway Division currently has two CNG single axle snow plow trucks, four CNG 1-ton dump trucks, and three CNG F-150 supervisor pickups actively in service. There are five CNG tandem axle plow trucks currently on order. The 2015 budget proposal includes purchasing ten more CNG snowplow trucks, two CNG one-ton trucks and a CNG car. Plans are to turn over the fleet to CNG as units are replaced on schedule.

Fleet conversion to CNG also requires that vehicle storage buildings and maintenance areas be brought into compliance with building and safety codes for CNG vehicles. This includes installation of detectors for CO, NO2, and CH4 (methane), fire alarm systems, ventilation and exhaust equipment, “no open flame” heating units, and emergency gas and electrical shut-offs. Building code compliance for CNG vehicles can be done on new buildings for very little additional expense. But that is not always the case on existing, older buildings because the

³ Vehicle conversion costs only. Estimated costs do not include fueling infrastructure or maintenance facility improvement costs.

upgrades needed to make to the HVAC and alarm systems CNG compliant can trigger other code requirements to bring the entire space up to current building codes.

The Highway Divisions' fleet to CNG conversion effort is part of a broader plan for the conversion of County fleet vehicles to CNG.

Completed and in service

- ✓2- CNG single axle snow plow trucks
- ✓4- CNG 1-ton dump trucks
- ✓3- CNG F-150 supervisor pickups
- ✓CNG fueling station at Dane County Parks office
- ✓rCNG fueling station at Dane County Landfill #2

Implementation Steps

2014

- 5 - CNG tandem axle plow trucks ordered
- Modify vehicle storage building (blue shed) at the main highway garage (Fish Hatchery Road) to be CNG compliant

2015

- 10 - CNG snow plow trucks
- 2 CNG one ton trucks
- 1 CNG car
- New highway garage at CTH AB will be CNG compliant
- Main highway garage and shop will be compliant for both storage and repair of CNG vehicles
- Convert the remaining fleet to CNG as units are replaced on schedule.

Benefits

- Operation and maintenance cost savings
- Reduced energy consumption
- Reduced carbon footprint and air pollutant emissions

Fleet fuel costs will be lowered considerably, since CNG and rCNG are significantly less expensive than diesel fuel. The average county snowplow consumes 2,400 gallons of diesel fuel per year. The cost of rCNG and CNG is \$1.25 to \$2.00 per diesel gallon equivalent, respectively. With diesel prices at nearly \$3.75 a gallon locally, that amounts to a \$4,200 - \$6,000 in fuel savings per CNG plow per year. Using a 13-year average life for the vehicles, the Return on Investment of the \$35,200 incremental cost for a CNG plow truck is 55% - 122%, depending on if CNG or rCNG is used. Because CNG burns so cleanly, CNG vehicles also cost less to maintain. They show significantly less engine wear, spark plugs last longer, and oil changes are needed less frequently.

Increased use of CNG and rCNG will result in a significant reduction of emissions due to the cleaner burning nature of CNG and a reduction of our fossil fuel dependence. The U.S. Department of Energy Argonne National Laboratory's Greenhouse gases, Regulated Emissions, and Energy use in Transportation (GREET) Fleet Footprint Calculator can be used to measure the differences in energy consumption and emissions between diesel and CNG fleet vehicles. According to the U.S. Department of Energy's GREET Fleet Footprint Calculator, the use of rCNG or CNG fuel in a snowplows results in the equivalent of almost 52 fewer barrels of oil used

per year per vehicle than diesel fuel on a well-to-wheels (life cycle) basis. The reduction in greenhouse gas emissions are expected to be 3.5 tons CO₂ equivalent per year when using CNG and 22.7 tons CO₂ equivalent per year when using rCNG from landfill gas compared to diesel fuel on a well-to-wheels basis. According to the U.S. Environmental Protection Agency, CNG also reduces carbon monoxide by 90%, reduces ground-level ozone emissions by 75%, and produces little or no particulate pollution.

Costs

Costs for CNG vehicles compared to conventionally fueled vehicles vary by vehicle type. The incremental cost increase for a CNG plow truck compared to a diesel plow truck is approximately \$35,200 based on a recent bid. Estimated incremental capital costs for 10 CNG snowplow trucks in 2015 was \$352,000.

The vehicle storage building on Fish Hatchery Road is being brought into compliance with building and safety codes for CNG vehicles at an estimated cost of \$210,000. This cost was funded by the 2014 Dane County Sustainable Management And Renewable Technologies (SMART) Fund. The estimated capital cost to make the main highway garage and shop compliant for both storage and repair of CNG vehicles in 2015 is \$417,100 and was included in the 2015 budget. The cost to make the new highway garage on CTH AB CNG-compliant is included in the capital cost of that project.

Resources

U.S. Department of Energy Argonne National Laboratory *Greenhouse gases, Regulated Emissions, and Energy use in Transportation (GREET) Fleet Footprint Calculator*
https://greet.es.anl.gov/fleet_footprint_calculator

Public Works, Highway, & Transportation Solid Waste Division — Waste Assessment at County Facilities

Initiative-at-a-glance		
Person Responsible/Lead	Special Projects and Materials Manager	
Supporting Individuals and Organizations	Sustainability and Program Evaluation Coordinator	
Target Timeframe	2015 with 2016 implementation of recommendations	
Operational Category	Waste: Objective: 3,4,6; Strategy: 1,2,9	
Estimated Costs	Capital Costs	\$0-\$10,000 (staff time)
	ROI	TBD
	Ongoing Costs	
	Staff Level of Effort	Low – (0-10 hours / week)

Description

Wisconsin's recycling laws ban disposal of certain materials in Wisconsin landfills or incinerators, and require recycling of these materials under local recycling ordinances. These laws apply equally to all residential and non-residential locations throughout the state, including all commercial, retail, industrial, and institutional locations. Businesses and other workplaces must recycle designated materials, as well as provide for the recycling of these materials by their clients or customers. Recovering these materials contributes to a more sustainable system by conserving the resources and reducing the energy use (and the resulting greenhouse gas emissions) that would otherwise be needed to produce new products.

Dane County provides refuse and recycling collection at its facilities through a contract with a waste hauler. Pellitteri Waste Systems is the current service provider. Most of the signage and receptacles currently in county facilities date back to when recycling was first implemented. At that time different grades of paper and containers had to be kept separate. The current practice used by most waste haulers, including Pellitteri, is to collect all recyclables commingled in one container.

The types of plastic containers and grades of paper that can be accepted for recycling have also expanded over the years. Thus there is a need to review and update current practices at county facilities including the signs and labeling used.

There are 37 county facilities and parks with collection of trash and recycling. Conducting a waste assessment at all county facilities will provide information on the current state of trash and recycling collection at each facility including the number, location, and signage of receptacles and general composition of the trash and recyclables. Recommendations for system improvements will be made for each facility based on the assessment and input from custodial staff.

Implementation Steps

2014 - 2015

- Develop a waste assessment form
- Conduct waste assessments at each county facility
- Recommend system improvements for each facility
- Implement system improvements at each facility

Waste assessments will be conducted by the Special Projects & Materials Manager and the Sustainability and Program Evaluation Coordinator in coordination with Facilities Management at an estimated rate of one facility per week.

Benefits

- Cost savings
- Reduced use of natural resources
- Reduced energy consumption

Recycling collection and processing costs between \$70 and \$170 per month less than trash collection and disposal for an equivalent collection volume and pick-up frequency. The US Environmental Protection Agency Waste Reduction Model can be used to compare life-cycle greenhouse gas (GHG) and energy use associated with increased recycling versus landfilling of common municipal solid waste materials.

A Return on Investment (ROI) can be calculated on a facility-by-facility basis based on an analysis of the current practices and the recommended improvements implemented at each facility.

Costs

Costs for conducting the actual waste assessments will be limited to staff time. The Solid Waste Fund includes \$10,000 for recycling public education that could be used to cover ongoing costs associated with new signage and printed informational materials. A capital expenditure may be required at some facilities for additional receptacles.

Resources

US EPA. *Waste Reduction Model* <http://epa.gov/epawaste/conserves/tools/warm/index.html>

Register of Deeds — IT Equipment Purchases and Replacement

Initiative-at-a-glance		
Person Responsible/Lead	Elected Official/Department Head	
Supporting Individuals and Organizations	Deputy, staff & IM liaison	
Target Timeframe	2016 and continual	
Operational Category	Purchasing: Objective: 2,5; Strategy: 1,2	
Estimated Costs	Capital Costs	None
	ROI	Unknown
	Ongoing Costs	Variable
	Staff Level of Effort	Medium-high

Description

The Register of Deeds department operation relies heavily on information technology & inherent peripherals. Although every past purchasing effort has considered the energy efficiency in addition to various other variables when making IT purchases, the department sustainability supporting persons can ascertain vendors/manufacturers whose products enhance the county's sustainability initiative when future purchases are made.

Implementation Steps

The Register of Deeds periodically schedules meetings with the IM liaison to plan for IT purchases based on past attrition rates and future technology needs contingent on software upgrades/changes. Those IT purchase plans will include ascertaining whether some vendors/manufacturers offer items with enhanced sustainability models.

The Register of Deeds will also practice the already in place re-purposing of veteran equipment and peripherals with county partners, to extend, when possible, the life of equipment and defer the disposal of them.

Benefits

Refurnishing the department with sustainable IT purchases will further the goals and mission of the county as an organization.

- Reduce energy consumption
- Reduce carbon footprint with sustainable purchases

Costs

Costs are expected to be negligible to implement, although purchasing sustainable IT equipment and peripherals may result in a higher purchase price. At this writing costs are not known and impossible to predict.

Register of Deeds — Employee Sustainability Survey

Initiative-at-a-glance		
Person Responsible/Lead	Elected Official/Department Head	
Supporting Individuals and Organizations	Deputy and senior staff	
Target Timeframe	2016	
Operational Category	Employee Experience: Objective: 4,5; Strategy: 1,3	
Estimated Costs	Capital Costs	None
	ROI	Unknown
	Ongoing Costs	Unknown
	Staff Level of Effort	Medium

Description

The Register of Deeds will implement a process to gather ideas and talents from department staff to further sustainability efforts for our department, and the County as an organization.

Implementation Steps

The Register of Deeds plans to solicit employee suggestions for department and/or division sustainability measures that can be implemented in the current calendar year, in addition to future years, via an online employee survey and email recommendations.

Once staff recommendations are collected, the department head will implement feasible recommendations throughout the department, while periodically monitoring effects via communication with staff and Dane County Sustainability Coordinator.

Benefits

Some of the benefits derived will be employee education, greater creativity/knowledge base for sustainability operations, team building/leadership modeling within core department.

Costs

None anticipated at this time.

Sheriff’s Office — In-house Laundry Improvements

Initiative-at-a-glance		
Person Responsible/Lead	Lt. Jeff Blakley	
Supporting Individuals and Organizations	Sheriff’s Office, Public Works, Facilities Management	
Target Timeframe	2016 - ongoing	
Operational Category	Buildings: Objective: 4; Strategy: 4; Water: Objective: 1; Strategy: 2; Education: Objective: 3; Strategy: 5;	
Estimated Costs	Capital Costs	\$180,000 if the water temperature is boosted via gas water heaters or \$154,000 if boosted via electric water heaters.
	ROI	TBD
	Ongoing Costs	TBD
	Staff Level of Effort	High

Description

The Sheriff’s Office currently contracts with an outside provider for laundering inmate linens. Inmate personal laundry is done in the facility utilizing inmate labor with existing but aged equipment. Changes in DOC 350 requiring more frequent laundering of inmate linens and personal laundry necessitated a contractual revision. The current laundry facilities in all three buildings are utilized on a daily basis for inmate personals, to launder soiled clothing coming in through intake and other areas of the facility, inmate worker uniforms, and others as needed to maintain operations.

In the fall of 2014, we tested the temperature of the water entering the inmate laundry in the Public Safety Building (Work Order 7747 September 4, 2014). At that time, the temperature in the PSB Basement Laundry was 113.2 degrees. While the exact water temperature in the CCB is unknown, Facilities Management (FM) advised us that the water goes out of the hot water system at a maximum of 120 degrees on the ground level and by the time it makes it to 6th floor it’s below that. We were also advised that the Ferris Center would be similar.

Industry standard for water temperature for laundering is over 160 degrees. In fact our contracted laundry provider uses water temperatures at 170 degrees. The temperature of the water is important to ensure proper cleaning and disinfecting.

In addition, the Security Services Division is seeking to improve inmate living and sanitary conditions, improve operations, and increase safety and security by issuing all inmate personals (socks, underwear, t-shirts, bras and thermal tops). Under the current system, these items are the sole property of the inmates. Inmates with local family support systems and economic means have the ability to have money placed on their inmate’s trust account to purchase personals through commissary as we no longer allow inmate property to come into the facility through visitation to combat growing concerns about contraband introduction. This places those without means at a disadvantage, even with provisions for indigence. The laundering of these items has been and is currently handled in-house. In the City-County Building (CCB) Jail, inmate personals, in mesh bags, are collected twice weekly as required by the updates to DOC 350. It is then taken to the CCB laundry room where it is washed in the individual mesh bags independently from each other. Multiple mesh bags are not laundered together as the bags often come open or tear resulting in claims against the county. This practice is not only very inefficient, but is costly as well. The 2014 change to DOC 350, requiring an increase from once a

week to twice weekly laundering of all inmate clothing, exacerbated the inefficiencies in our system.

Inmate personal laundry at the Ferris Center (FC) and the Public Safety Building (PSB) are handled differently. The PSB was originally designed as a minimum security Huber/work release facility. Today, only 19.61% of the permanent general population housing beds in the PSB are utilized for Huber/work release. The remaining 80.39% of the general population beds house minimum and medium security inmates that do not have work release privileges. This distinction is necessary to highlight the inequity between the facilities. In theory, the PSB, and certainly the FC, are the least restrictive of our facilities and should allow inmates housed there the greatest amount of privileges. In term of laundry, this is not the case. These inmates, who are primarily unsentenced or have no Huber, are placed at a disadvantage by our current practice that may cause undue burden on them and their families. These inmates have access to laundering facilities in their housing units and are expected to wash all personals at their own expense.

Under this proposal Huber inmates would have access to laundering services to wash their own clothing needed to exercise Huber privileges without charge. Many of the Huber inmates that exercise Huber privileges volunteer through our volunteer program. Those that do have employment, often have low paying jobs that barely cover Huber fees. Eliminating the cost of laundering personal clothing removes yet another barrier for the inmate.

Inmates at the PSB and FC launder their clothing by utilizing card operated washers and dryers, which are currently provided through a contract with another third party provider as noted below.

Implementation Steps

To accomplish this, a boost is needed to bring the temperature up in all three of the jail facilities. At our request, FM priced two options, electric and natural gas. An electric water heater costs less and is less costly to install than a gas water heater, but is less efficient as it uses more energy. In addition, the overall cost of operating an electric water heater is higher. Based on the local utility rate structure, we will pay significantly more in terms of energy costs for the electric option as the overall electric bill is based on "peak" service fees. We have put together a proposal for meeting our needs and are committed to the utilization of products, services, and processes that encourage environmental stewardship. Equipment selection is a crucial component of this.

Benefits

We believe the plan to issue inmate personals restores parity for non-Huber, unsentenced inmates housed in the PSB; it promotes efficiency, and reduces energy and water consumption. It also assists in mitigating claims due to loss of inmate-owned property. More importantly, the practice of laundering personals in mesh bags independently is eliminated, thereby allowing increased load size, which promotes energy- and water-efficiency along with having a positive environmental impact that aligns with the county's sustainability goals.

Costs

The total budget for this project is \$180,000 if the water temperature is boosted via gas water heaters; or \$154,000 if boosted via electric water heaters. A contingency was added to cover any variations due to the CCB and the cost of purchasing carts.

Treasurer’s Office — Duplex Printing

Initiative-at-a-glance		
Person Responsible/Lead	Treasurer	
Supporting Individuals and Organizations	Treasurer’s Office	
Target Timeframe	Ongoing	
Operational Category	Waste: Objective: 2,3; Strategy: 2,5	
Estimated Costs	Capital Costs	None
	ROI	Save Paper
	Ongoing Costs	None
	Staff Level of Effort	Low – 6 of 6 staff

Treasurer’s Office — Reuse Single-sided Waste Paper

Initiative-at-a-glance		
Person Responsible/Lead	Treasurer	
Supporting Individuals and Organizations	Treasurer’s Office	
Target Timeframe	Ongoing	
Operational Category	Waste: Objective: 2,3; Strategy: 2,5	
Estimated Costs	Capital Costs	None
	ROI	Save Paper
	Ongoing Costs	None
	Staff Level of Effort	Low – 2 of 6 staff currently

Treasurer’s Office — Turn Off Computers and Printers Over the Weekend

Initiative-at-a-glance		
Person Responsible/Lead	Treasurer	
Supporting Individuals and Organizations	Treasurer’s Office	
Target Timeframe	Ongoing	
Operational Category	Climate: Objective: 1; Strategy: 2,5; Waste: Objective: 3; Strategy: 5	
Estimated Costs	Capital Costs	None
	ROI	Reduced energy consumption
	Ongoing Costs	None
	Staff Level of Effort	Low – 6 of 6 staff currently

Treasurer’s Office — Turn Off Lights When Not in Use (ex. Treasurer & Deputy offices, vault, ante-room, storage room, public area)

Initiative-at-a-glance		
Person Responsible/Lead	Treasurer	
Supporting Individuals and Organizations	Treasurer’s Office	
Target Timeframe	Ongoing	
Operational Category	Buildings: Objective: 1; Strategy: 7	
Estimated Costs	Capital Costs	N/A – installed motion sensors as part of renovation
	ROI	Reduced energy consumption
	Ongoing Costs	None
	Staff Level of Effort	Low – 6 of 6 staff currently

Treasurer’s Office — Bike, Bus, and Walk to Work When Possible

Initiative-at-a-glance		
Person Responsible/Lead	Treasurer	
Supporting Individuals and Organizations	Treasurer’s Office	
Target Timeframe	Ongoing	
Operational Category	Transportation: Objective: 1,2,6,7,9; Strategy: 9; Employee Experience: Objective: 2; Strategy: 4	
Estimated Costs	Capital Costs	None
	ROI	Lower carbon emissions and better health
	Ongoing Costs	None (existing employee incentives, Metro pass, etc.)
	Staff Level of Effort	Low – 2 of 6 staff currently

Treasurer’s Office — Scan documents for saving and distributing if a paper copy is not needed

Initiative-at-a-glance		
Person Responsible/Lead	Treasurer	
Supporting Individuals and Organizations	Treasurer’s Office	
Target Timeframe	Ongoing	
Operational Category	Waste: Objective: 2,3; Strategy: 2,5	
Estimated Costs	Capital Costs	None
	ROI	Reduced paper, toner, wear & tear on copier
	Ongoing Costs	None (already have a scanner)
	Staff Level of Effort	Low – 2 of 6 staff currently

Treasurer’s Office — Provide Municipalities with Digital Tax Documents When Possible

Initiative-at-a-glance		
Person Responsible/Lead	Treasurer	
Supporting Individuals and Organizations	Treasurer’s Office	
Target Timeframe	Ongoing	
Operational Category	Waste: Objective: 3; Strategy: 2	
Estimated Costs	Capital Costs	None
	ROI	Reduced paper, toner, wear & tear on copier
	Ongoing Costs	None (Create reports on CDs for municipalities)
	Staff Level of Effort	Low – 2 of 6 staff currently

Treasurer’s Office — Order Recycled Paper for Printing and Copying

Initiative-at-a-glance		
Person Responsible/Lead	Treasurer	
Supporting Individuals and Organizations	Treasurer’s Office	
Target Timeframe	Ongoing	
Operational Category	Waste: Objective: 3; Strategy: 2	
Estimated Costs	Capital Costs	None
	ROI	Lower carbon footprint & use of recycled materials
	Ongoing Costs	TBD
	Staff Level of Effort	Low – 6 of 6 staff currently

UW Extension — Multiple Sustainability Strategies at Fen Oak Facility

Initiative-at-a-glance		
Person Responsible/Lead	All agencies and department at Fen Oak Resource Center	
Supporting Individuals and Organizations	Engineering, Facilities, Operations, Accounting, Senior Staff	
Target Timeframe	3-5 years	
Operational Category	Multiple plan categories, objectives, and strategies	
Estimated Costs	Capital Costs	Undetermined at this time
	ROI	Undetermined at this time
	Ongoing Costs	Undetermined at this time
	Staff Level of Effort	Will change depending on where we are in the project timeline.

Description

This initiative at Fen Oak Resource Center would address multiple strategies in several target areas. We propose to identify actions and updates to the Fen Oak Resource Center building and grounds that would allow us to meet the following sustainability goals: environmental pollution prevention and reduction, waste reduction, GHG emissions reduction, energy consumption reduction, resource conservation, human health and safety, local economic development, buying power leveraging, positive impact on staff time and labor, maintaining flexibility to take advantage of new environmental and technological opportunities as they arise. We could then showcase these practices over time and at multiple events. Since Fen Oak Resource Center provides primary venues for educational learning and houses both educational, natural resource conservation, and recreational agencies within it, it makes it an ideal location to be such a sustainability showcase for Dane County. Some potential action items for this Fen Oak Resource Center may be: energy efficient lighting (motion sensor detection in bathrooms), key light areas in hallways, dimmer switches, smart meters, educational display and “check out”, enhanced bike rack area (some employees bike to work year-round), below-ground cistern for teaching gardens, ADA gardens, drip irrigation for gardens, porous pavers in parking lot, hoop house for garden and small farm education, solar panels, improved outdoor meeting areas for small conference meetings, energy efficient heating and cooling systems, etc.

Implementation Steps

We envision this to be a 3-5 year project. Below is a rough schedule of anticipated actions and who would need to be involved. Costs at this point are undetermined.

Year 1

- Form a Building Planning team consisting of representatives of the housed departments and agencies at Fen Oak Resource Center to refine and detail our plan.
- Assess building and its infrastructure including grounds and parking area needs and anticipated replacement schedule. Look to see where initiative’s sustainability goals could be met.
- Develop a companion piece that is educational outreach for the proposed initiative along with evaluation components.

- Develop a timeline, cost estimate, and research cutting edge technology needs to address assessed building, infrastructure, and grounds needs along with developing educational components for these practices. Scale so it is doable over the 3-5 year period and will provide educational impact opportunities.
- Implement “low hanging fruit” items to kick-off the project.

Year 2

- Begin first major project phase -- may be either interior or exterior. Dependent on finances needed and available, and replacement needs of system components.
- Provide educational outreach on project phase 1.

Year 3

- Begin year three actions on the plan and its companion educational components.
- Hold educational events and develop educational materials that can be shared via the website.

Year 4-5

- Continue with year 4 and 5 actions.
- Provide educational outreach as per plan
- Evaluate initiative

Benefits

This initiative has the added benefits of not only providing a key county building with a suite of sustainable practices, but also providing the added benefit of educational outreach. The Fen Oak Resource Center is the site where the county’s master gardeners, master composters, and many others come for education and training throughout the year. Farmers, Dane County citizens, developers, businessmen, and nonprofits all come to this building for educational programs and meetings.

Costs

To be determined.

Veterans Service Office — Training and Education

Initiative-at-a-glance		
Person Responsible/Lead	CVSO Dan Connery	
Supporting Individuals and Organizations	CVSO Staff	
Target Timeframe	Ongoing	
Operational Category	Climate: Objective: 1; Strategy: 2; Waste: Objective: 3, Strategy: 4,5	
Estimated Costs	Capital Costs	None
	ROI	Reduction in paper purchase costs and in vehicle emissions
	Ongoing Costs	None
	Staff Level of Effort	Low (Coordination/Planning Only)

Description

Dane County Veterans Service Office staff will undertake an effort to educate veterans on the availability of electronic resources to file claims with the U.S. Department Veterans Affairs (VA). When appropriate, Veterans Service Office staff will encourage veterans to first attempt to file simple claims electronically, prior to scheduling an appointment for a veteran to meet in the office for assistance in filing.

Implementation Steps

This will be an ongoing and evolving process, as the VA makes available more electronic resources to file different types of claims. The initiative will start with educating clerical staff on the availability of electronic resources. It will also start with drafting sets of instructions that walk veterans through step-by-step processes of accessing and using these electronic resources. By January 2015, it is the office’s goal to routinely e-mail instructions to veterans who call the main line, requesting assistance with simple claims they can file electronically, without the assistance of our staff. The office will start by developing instructions for adding a dependent in the VA “eBenefits” application. The office will then develop instructions for updating an address in the VA “eBenefits” application. As new applications are developed, refined, and proven to operate reliably, the office will educate veterans on an increasing number of self-service options.

Benefits

Educating veterans on the availability of electronic resources will support multiple County Sustainable Operations Plan categories. First, educating veterans on the process of independently filing simple claims electronically with the VA will reduce the amount of customers driving to the City-County Building, which will reduce the amount of greenhouse gas emissions generated by office operations. Secondly, it will reduce the consumption of paper by eliminating the need for the office to request copies of documentation from customers. While it will be difficult to calculate a concrete financial Return on Investment (ROI), the office should gradually expect to see a reduction in the types of claims that are physically brought in once veterans are taught to file electronically on their own. This option should also provide a convenience and time savings benefit to our clients. The office tracks the number of VA dependency claims submitted annually, in support of its application for Wisconsin Department of Veterans Affairs (WDVA) grant funds.

Costs

There are no monetary costs associated with adopting this plan.

Veterans Service Office — Digital Claim Processing

Initiative-at-a-glance		
Person Responsible/Lead	Asst. CVSO Supervisor Lisa Vining	
Supporting Individuals and Organizations	CVSO Staff	
Target Timeframe	Ongoing	
Operational Category	Waste: Objective: 3, Strategy: 4,5	
Estimated Costs	Capital Costs	\$3,000
	ROI	None
	Ongoing Costs	Reduction in paper purchase costs
	Staff Level of Effort	Medium (Training/Process Change)

Description

Dane County Veterans Service Office will install desktop scanners at six work stations, enabling the adoption of a paperless system of filing U.S. Department of Veterans Affairs (VA) claims.

Implementation Steps

After receiving the desktop scanners, the office will allow a three month training period before full implementation of the paperless claim filing process. The office will begin paperless claim filing in 2015. Printing & Services data on pages photocopied and printed will be compared for the following quarters: July – September 2014, October – December 2014, January 2015 – March 2015, and April 2015 – June 2015. The Assistant Veterans Service Officer Supervisor is responsible for tracking and recording this data. Tracking dates will be modified based on date of initial scanner installation.

Benefits

Adoption of a paperless system of filing VA claims will support multiple County Operational Categories and all county Sustainability Principles.

Adoption of a paperless system of filing claims will reduce county government's contribution to encroachment upon nature and harm to life-sustaining ecosystems by greatly reducing the amount of paper produced in the office by printing and photocopying. In 18 months, our office used 11 cartons of paper (standard box of copy paper), with an average of 7.33 cartons used over a one year period (for an average of 366.5 pounds of paper per year). The office projects cutting the amount of paper used by a minimum of 50%, which would reduce annually: 3 million BTUs of net energy, 456 pounds of greenhouse gases, 1,786 gallons of water, 155 pounds of solid waste, 2 million BTUs of purchased energy, 2 pounds of SO₂, 1 pound of Total Suspended Solids (TSS), 2 pounds of Chemical Oxygen Demand (COD), and 1 pound of Biochemical Oxygen Demand (BOD).⁴

Additionally adoption of a paperless system of filing claims will save the Dane County Veterans Service Office money. Assuming we cut our paper use in half, we should reduce our annual expenditures on paper and copies from \$851.29 to \$425.64. Please note in 2012/2013, the office drastically reduced the amount of paper it uses (from 40,114 copies in 2010 to 7,894 copies in 2013) by converting paper files to digital files. Purchasing the desktop scanners will allow us to continue this trend.

⁴ Refer to www.papercalculator.org

Adoption of a paperless system of filing claims will reduce county government's contribution to fossil fuel dependence and to wasteful use of scarce metals and minerals by eliminating the need to transport paper mail between the City-County Building and VARO Milwaukee will reduce gasoline. Additionally, the current outdated officer scanner will be replaced with an ENERGY STAR Qualified scanner that produces lower emissions/pollutants and provides savings on energy bills.

Adoption of a paperless system of filing claims will reduce county government's contribution to dependence upon persistent chemicals and wasteful use of synthetic substances by reducing the amount of copy/printer toner used in the office.

Note: It must be conceded that supporting documentation in excess of 25 pages will still be mailed to VARO Milwaukee, and in the short- to mid-term, the claim filing process will not be absolutely paperless. Additionally, paper savings do not take into account unforeseen instances of client requests for copies of service treatment records, private treatment records, and military personnel records.

Costs

The implementation of this project will cost an estimated \$3,000 (funded by a SMART Fund Grant).

Veterans Service Office — Carpooling to Out-of-Office Events

Initiative-at-a-glance		
Person Responsible/Lead	Asst. CVSO Supervisor Lisa Vining	
Supporting Individuals and Organizations	CVSO Staff	
Target Timeframe	Ongoing	
Operational Category	Climate: Objective:1; Strategy: 2; Transportation: Objective: 1,2,6,7; Strategy: 9	
Estimated Costs	Capital Costs	None
	ROI	Reduction in emissions
	Ongoing Costs	None
	Staff Level of Effort	Low (Coordination/Planning Only)

Description

Dane County Veterans Service Office staff will place increased priority on carpooling to out-of-office events, such as training conferences, meetings, and outreach activities.

Implementation Steps

Effective immediately, office staff meeting agendas will address transportation plans in support of staff attendance of training conferences and meetings. By adding this coordination item to our agendas, and placing increased emphasis on advanced planning, our office will find increased opportunities to coordinate carpools, thereby reducing the total number of vehicles traveling to and from events.

Benefits

Placing increased emphasis on carpooling to and from events will support multiple County Sustainable Operations Plan categories.

Most significantly, it will contribute to the goal of mitigating climate change by reducing the amount of greenhouse gas emissions generated by transporting staff to and from events. While it will be difficult to calculate a concrete financial Return on Investment (ROI), the office should expect to see a reduction in the number of vehicles driven in support of outside events, which ideally should be evidenced by only one staff member claiming mileage to and from a specific event. This option should also provide an increased measure of safety to office staff by allowing for opportunities to swap tired drivers on longer trips.

Costs

There are no monetary costs associated with adopting this plan.

Veterans Service Office — End-of-Day Electricity Check

Initiative-at-a-glance		
Person Responsible/Lead		Asst. CVSO Supervisor Lisa Vining
Supporting Individuals and Organizations		CVSO Staff
Target Timeframe		Ongoing
Operational Category		Climate: Objective:1; Strategy: 2; Buildings: Objective: 10; Strategy: 7
Estimated Costs	Capital Costs	None
	ROI	Reduction in emissions
	Ongoing Costs	None
	Staff Level of Effort	Low (Coordination/Simple process change)

Description

Dane County Veterans Service Office staff will implement a daily end-of-day sweep to check for, and power down, electronic devices and lights that inadvertently may have been left on.

Implementation Steps

Effective immediately, the last staff member to leave the office each evening will check every room for electronic devices and lights that inadvertently may have been left on.

Benefits

This simple initiative will support multiple County Sustainable Operations Plan categories, primarily the goal to ensure county buildings and facilities are energy efficient and safe. While it will be difficult to calculate a concrete financial Return on Investment (ROI), the office should expect to reduce energy bills by implementing this initiative. This option will also promote a safe environment by reducing fire risk from electric items such as coffee pots that could be left on overnight.

Costs

There are no monetary costs associated with adopting this plan.

Henry Vilas Zoo — Reassess and Adjust County Parking Policies to Reward Non Single-Occupancy Vehicle Commutes

Initiative-at-a-glance		
Person Responsible/Lead		County Administration
Supporting Individuals and Organizations		County Administration, Zoo Staff
Target Timeframe		Ongoing
Operational Category		Climate: Objective:1; Strategy: 2; Buildings: Objective: 10; Strategy: 7
Estimated Costs	Capital Costs	None
	ROI	Reduced emissions
	Ongoing Costs	None
	Staff Level of Effort	Minimal to Non-Feasible

Description

Currently the zoo has many staff members who ride their bike, take the bus, or car share to get to work. It would be nice to offer more options to staff members to get to work especially because parking is so limited at the zoo, especially in the summer months and busy season.

Implementation Steps

It would be fantastic to have a county incentive system available for staff to encourage them to use alternate transportation. From an operations standpoint it becomes more feasible when employees are on consistent schedules so carpooling is a viable option. The zoo would need county support in terms of having the bus or carpooling become a feasible option for staff given current practices. Another possibility is having meetings countywide where the satellite departments can call in or skype to save the cost of them driving to CCB.

Benefits

It is possible to track this through the intranet or possibly through an incentive program where staff can enter how they walked, biked, or carpooled to work as part of both an incentive program as well as a tracking program.

Costs

Costs will be realized in staff developing and implementing a tracking database and also in providing incentive rewards. Bigger costs could come if taking the bus or other bigger picture solutions come into place.

Henry Vilas Zoo — Develop an Annual Fleet Baseline Data Report

Initiative-at-a-glance		
Person Responsible/Lead	Brian Wilson	
Supporting Individuals and Organizations	Zoo Management, Facilities, Operations	
Target Timeframe	Ongoing	
Operational Category	Transportation: Objective: 1,2,3,4 Strategy: 1,2,3	
Estimated Costs	Capital Costs	None / TBD
	ROI	Reduced emissions
	Ongoing Costs	None
	Staff Level of Effort	Minimal

Description

Develop an annual fleet baseline data report that catalogs all current vehicles by: make, year, and model; average fuel economy rating (MPG); fuel type, annual VMT, annual fuel consumption, annual VMT divided by annual fuel consumption; and operation and maintenance cost per mile per vehicle.

Implementation Steps

Once a standard form has been developed (ideally countywide), our facilities team can input the data from all of our zoo vehicles to track each variable being requested.

Benefits

This will allow us to compare data year to year and from vehicle to vehicle. It can lead us into learning best practices to lower fuel consumption and identify the most efficient vehicle to use for different purposes.

Costs

Operationally the costs will be labor time to input and analyze the data. Capital costs would come in if it is determined replacing the current vehicle with a more cost- and energy-efficient vehicle would be better.

Henry Vilas Zoo — Establish a comprehensive sustainable building and facilities policy

Initiative-at-a-glance		
Person Responsible/Lead	Zoo Management	
Supporting Individuals and Organizations	Zoo Management, Facilities, Public Works, WDM Architects, Friends of the Zoo	
Target Timeframe	Ongoing	
Operational Category	Buildings: Objective: 1,2,3,4 Strategy: 1	
Estimated Costs	Capital Costs	TBD
	ROI	TBD
	Ongoing Costs	Staff time and architect fees
	Staff Level of Effort	Medium – a lot of up front work to identify this information and long-term implementation

Description

Establish a comprehensive sustainable building and facilities policy with specifications for sustainable design, building, operation, and performance of new and existing county buildings and facilities.

This process has already been in place for the zoo since 2011 when we hired the architectural firm WDM to design our Animal Health Center and subsequently Arctic Passage, as well as an overall zoo master plan after that. All buildings being designed are incorporating LEED standards, and being built with sustainable principles in mind such as recycling waste construction material whenever possible.

Implementation Steps

Zoo Management, Facilities staff, WDM architects, Public Works and Friends of the Zoo all are working together to identify which zoo areas need to be updated and are designing the updates with LEED principles in mind. So far both the Animal Health Center built in 2012-13 and Arctic Passage opened in summer 2015, have been designed with many sustainable features such as rain gardens, solar panels, rainwater collection, and energy efficient materials. The entire zoo is going to have a new master plan with these principles incorporated over the next 10–15 years. All of this will be done by partnering with Public Works, Zoo staff, Friends staff, and the community.

Benefits

Once these buildings are operational, we can collect energy and water use data to measure savings both in terms of usage and cost.

Costs

Operations costs would come from labor hours for designing, developing, and implementing the new buildings and measures at the zoo. Capital costs come from the building of these new structures. The Animal Health Center was at no cost to the zoo since the Friends of the Zoo paid for the building. Shared costs for the Arctic Passage for the county came to approximately \$7.25 million, operational cost savings can be measured as determined by the Zoo Administration.

Henry Vilas Zoo — Track and Evaluate Vehicle Miles traveled (VMT) on a Per Vehicle Basis for Every Fleet vehicle

Initiative-at-a-glance		
Person Responsible/Lead	Brian Wilson	
Supporting Individuals and Organizations	Zoo Management	
Target Timeframe	Ongoing	
Operational Category	Transportation: Objective: 1,2,3,4 Strategy: 1,2,3	
Estimated Costs	Capital Costs	None
	ROI	TBD
	Ongoing Costs	None
	Staff Level of Effort	Minimal

Description

Zoo managers and facilities personnel will measure and catalog fleet vehicles, fuel consumption, and log miles. Hopefully a department wide form can be developed to measure these items consistently across departments.

Implementation Steps

It would be important to have a standard form created for this initiative. Once the form is implemented it would be nice to have a database in which to enter the information so it can be measured across departments. To fill out the form would be the responsibility of each facility's staff.

Benefits

This information can tell us which vehicles are most in use and how much fuel they are using. It could lead to identifying other vehicles that could serve the same purpose but use fewer resources.

Costs

In terms of measuring, the only cost would be staff time.

Henry Vilas Zoo — Track and Evaluate consumption of fuel used by all fleet vehicles on a Per Vehicle Basis

Initiative-at-a-glance		
Person Responsible/Lead	Brian Wilson	
Supporting Individuals and Organizations	Zoo Management	
Target Timeframe	Ongoing	
Operational Category	Transportation: Objective: 1,2,3,4 Strategy: 1,2,3	
Estimated Costs	Capital Costs	None
	ROI	TBD
	Ongoing Costs	None
	Staff Level of Effort	Minimal -- record data on sheet

Description

Zoo Maintenance staff will track fuel consumption on all of applicable zoo vehicles on a form that will be designed by the county. This will be ongoing to be able to compare usage from year to year.

Implementation Steps

First, a form that shows desired measurable items for fuel consumption needs to be developed (same across department lines?). The next step is to determine if measurement is taken after each use of the vehicle or on a monthly/weekly basis. There will also need to be a database developed to track the measurements so they can be compared year to year.

Benefits

This information could be used to reduce fuel consumption by altering practices (fewer trips with bigger vehicles if a more fuel efficient one is available, for example), and/or replacing vehicles with large fuel consumption with those that are more efficient. A ROI can be calculated once we have baseline measurements.

Costs

Costs from measuring would be staff time and labor. If vehicles are identified that can be utilized more efficiently, that is another measurement. Finally, the costs of replacing fuel-inefficient vehicles with more efficient ones can be calculated once the replacement vehicle is identified.

Henry Vilas Zoo — Review Water Consumption Across All County Facilities and Grounds

Initiative-at-a-glance		
Person Responsible/Lead	Brian Wilson	
Supporting Individuals and Organizations	Zoo Management, Facilities, MMSD	
Target Timeframe	Ongoing	
Operational Category	Water: Objective: 1,2 Strategy: 1,2	
Estimated Costs	Capital Costs	\$380,000 currently for Arctic Passage
	ROI	Over 2 million gallons of water saved per year
	Ongoing Costs	None
	Staff Level of Effort	Maximum on a day-to-day monitoring basis

Description

Review water consumption across all county facilities and grounds to establish a water use baseline and identify high water use operations and areas. Use information to establish water reduction goals. Identify opportunities for use of reclaimed water for landscape and other needs at zoo.

Zoo staff can get water usage from MMSD to find current consumption before Arctic Passage opens for base line as well as after Arctic Passage is open to find that baseline. The zoo is working with engineers from our architect firm WDM to identify sustainability additions throughout our new zoo master plan that is still in development. The zoo is already using rainwater collection techniques to hose down the goat pens and help with irrigation.

Implementation Steps

Zoo Management and Facilities staff can keep a database of usage over the years to compare and contrast each year's usage. The installation of SMART meters can be used to share with the guests, as well, and to help us keep track of usage and adjust more quickly when we see increased water consumption. Additional capital projects will be designed and built to reduce water consumption, especially if pools and filtration are needed. The zoo has already implemented using rainwater for cleaning areas of the zoo.

Benefits

This information can let the zoo team know of any issues that might arise such as a possible broken water line if usage is unusually high one month. The zoo has already built this action into our new Arctic Passage exhibit and will continue to do so in future exhibits. The zoo has already measured the amount of gallons saved from usage when we had bears/seals in 2010-2012 to estimations of usage in 2015 and beyond from the Arctic Passage. Hard numbers will be available to look at for every year at the zoo in the future. The zoo will be able to share these and other county energy and cost saving messages to the over 725,000 visitors each year.

Costs

Operations costs would come from labor hours for inputting and analyzing the data and maintaining the new infrastructure. Capital costs will come when updating or re-doing areas of the zoo, such as Arctic Passage, which replaces the bear grottos, seal pool and flamingo pond.

Henry Vilas Zoo — Identify and Evaluate Sustainable Purchasing Policies and Practices

Initiative-at-a-glance		
Person Responsible/Lead	Zoo Management	
Supporting Individuals and Organizations	Zoo Management, Facilities, Clerk, Friends of the Zoo	
Target Timeframe	Ongoing	
Operational Category	Purchasing: Objective: 1,2,3,5 Strategy: 1,2,3	
Estimated Costs	Capital Costs	TBD
	ROI	TBD
	Ongoing Costs	Staff time
	Staff Level of Effort	Medium – a lot of upfront work to identify this information and long term implementation

Description

Identify and evaluate sustainable purchasing policies and practices, and specifications and sources for materials, products, and services that improve sustainability

The zoo would easily be able to purchase through cost savings once the county identifies preferred vendors who are either local or sustainable in their operations. The option to do that already exists in the zoo field through the Association of Zoos and Aquaria (AZA) SMART source program. Combining that opportunity with the County's ability to create bulk purchase discounts, we should be able to incorporate that into most facets of our unique business.

Implementation Steps

Zoo Management, along with the clerical and purchasing staff, already looks for these options in purchasing. The AZA marketplace has already adopted and implemented this program and can be used anywhere we are not under a county contract.

Benefits

Potentially if you compare the line items for each year you would be able to see the cost savings on purchasing. Possibly other metrics could be calculated depending on the degree of complication.

Costs

Operations costs would come from labor hours for developing county procedures to start these programs. Capital costs would come into play on purchasing for new buildings and equipment.

Henry Vilas Zoo — Train Staff in Sustainable Vehicle Operation and Management Practices

Initiative-at-a-glance		
Person Responsible/Lead	Zoo Management and Sustainability Coordinator	
Supporting Individuals and Organizations	Zoo Management	
Target Timeframe	Ongoing	
Operational Category	Transportation: Objective: 1,3,8 Strategy: 11	
Estimated Costs	Capital Costs	None
	ROI	TBD
	Ongoing Costs	None
	Staff Level of Effort	Minimal

Description

Train staff in sustainable vehicle operation and management practices (e.g., engine idling reduction, “eco-driving”, vehicle maintenance, etc.) related to fleet operations. [The County Highway Department does a spring and fall training into which this could be incorporated. Could look into Ford’s and others’ eco-driving webinar trainings. Could have staff training in various departments and then have a start date from which to measure effectiveness in terms of VMT, fuel used, maintenance costs reduced, etc.]

Zoo staff can attend a countywide training or webinar (preferably) to learn how to drive more efficiently and sustainably.

Implementation Steps

The county would need to adopt and/or develop a training program to administer to staff and document when the training is completed.

Benefits

This information will educate staff on how to drive more efficiently and, therefore, more sustainably. This would be measured from the initiative to track and document fuel consumption and mileage in another sustainable action plan.

Costs

Costs from developing and maintaining the records for staff, as well as staff labor time to take the training would be incurred. These are operational costs.

Henry Vilas Zoo — Conduct a Waste Sort at Zoo

Initiative-at-a-glance		
Person Responsible/Lead	Jeff Halter, Zoo Maintenance	
Supporting Individuals and Organizations	Zoo Management, Facilities, County Landfill, Pellitteri, Friends of the Zoo	
Target Timeframe	Ongoing	
Operational Category	Waste: Objective: 1,2 Strategy: 1	
Estimated Costs	Capital Costs	None
	ROI	TBD
	Ongoing Costs	None
	Staff Level of Effort	Moderate – a lot of upfront work to identify this information

Description

Conduct a waste sort at county zoo to get a baseline, evaluate the amount and types of waste produced throughout zoo operations and facilities, including wastes associated with remodeling, construction, and special events, and identify contributing factors to waste and barriers to waste reduction. [Include an inventory of the number of trash and recycling receptacles currently in use throughout zoo facilities to identify gaps in recycling site access, *i.e.*, are they strategically placed? Do we need more? Are they functioning well?]

This would be under a bigger countywide umbrella where the process to determine these baseline parameters would be developed. Zoo staff would then implement the plan to find out what types of waste and how much waste we are producing.

Implementation Steps

Zoo Management and Facilities staff can keep a database of usage over the years to compare and contrast each year's usage after a general format is developed on how to document and evaluate. There is some information available to measure already (such as tonnage produced in a month, how many Pellitteri waste and recycling containers are at the zoo, and so on). Pellitteri has had an interest in working on this type of project with the zoo already. Steps taken to help reduce waste can be shared with our visitors along with tips on how they as individuals can help with waste reduction.

Benefits

This information can let the zoo team know where they can reduce waste products and increase using recyclable products. It also can potentially reduce costs associated with waste removal. The zoo already composts on a small scale so we could get the support needed throughout the county to leverage cost savings countywide.

Costs

Operations costs would come from labor hours for inputting and analyzing the data and measuring the waste usage. Capital costs could come from implementing new systems that would help in waste reduction and cost reduction in the long term.

Henry Vilas Zoo — Conservation Education Curator, Henry Vilas Zoo

Initiative-at-a-glance		
Person Responsible/Lead	Zoo Management	
Supporting Individuals and Organizations	Zoo Management and facilities personnel	
Target Timeframe	Ongoing	
Operational Category	Education: Objective: 2,3 Strategy: 3,8	
Estimated Costs	Capital Costs	TBD
	ROI	TBD
	Ongoing Costs	Example: A minimum of \$150/sign for sign development, production, and installation outside of the Arctic Passage project. Other forms of communication have different costs associated with them (i.e., social media is free).
	Staff Level of Effort	High for focused periods of time; low overall

Description

Initiative: Develop outreach and educational content on county sustainability activities to inform the public about how the county is responsibly managing our limited resources. The content will incorporate climate change information. Content can also be developed to communicate other sustainability initiatives and policies as passed by Dane County.

Details: We designed outreach material, interpretives, and educational signage as part of our Arctic Passage exhibit that showcases what Dane County and the zoo are doing towards sustainable practices and what individuals can do on their own to combat global climate change. This includes information about global climate change, solar panels, rain collection barrels, and rain gardens that allow the zoo to use rainwater for the plants at the zoo and a water retention system that allows the zoo to drain the pools into a tank, clean the water and pump back into the pools, reducing water consumption by over 2 million gallons per year. This developed messaging can be replicated or expanded to meet other departmental needs.

Implementation Steps

The Zoo Conservation Education Curator developed the educational content for the sustainability points mentioned above for the Arctic Passage exhibit. The exhibit opened in mid-2015. Required personnel and resources for design, production, and installation of this education content have been funded by Dane County.

Replication of developed material in electronic format will be free. Replication of printed products involves the cost of production and installation of signage. This is simple once the final product has been developed.

A vehicle and equipment idling reduction policy can be communicated to school groups in their confirmation when scheduling a presentation at the zoo and a sign can be developed to display at the entrances to the zoo and zoo administration building to communicate to bus drivers and delivery drivers that the zoo is an idle-free zone and to please turn off their vehicles. This requires the time and resources of the Conservation Education Curator, a graphic designer, a printer, and zoo facilities to develop content, design, produce, and install signs. Adding this information to school presentation confirmations will cost nothing beyond development of content by the Conservation Education Curator.

Benefits

The zoo has the unique asset of being free and reaching up to 725,000 people annually. This is a powerful opportunity to communicate our messaging and to affect positive change in sustainability initiatives across our community. No financial ROI is associated with this project.

Costs

Required personnel and resources for design, production, and installation of educational sustainability content for Arctic Passage have been funded by Dane County.

Replication of developed material in electronic format will be free. Replication of printed products involves the cost of production and installation of signage. This is simple once the final product has been developed. A minimum of \$150/sign for sign development, production, and installation outside of the Arctic Passage project.

Development of content in regards to an idle reduction policy and inclusion in school presentation confirmations will cost nothing beyond development of content by the Conservation Education Curator. Production of idle reduction signage requires the time and resources of the Conservation Education Curator, a graphic designer, a printer, and zoo facilities to develop content, design, produce, and install signs (a minimum of \$150/sign). Zoo signage expenses outside of exhibit projects have been funded by the self-funded Henry Vilas Zoo Education Department.