# 2010
# Wisconsin Energy Independent Community Partnership

# 25 x 25 Plan for Energy Independence

# Report completed by:
# City of Jefferson


**Issue Date:** **December 21, 2010**

Wisconsin Office of Energy Independence

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# Table of Contents

# Overview

## Introduction

The Wisconsin Office of Energy Independence (OEI) administers energy programs to assist Wisconsin to profitably and sustainably promote energy efficiency and renewable energy resources. The goal of the Wisconsin Energy Independent Community Partnership administered by the OEI is to effectively increase energy independent assessments for Wisconsin communities. Currently, there are many communities across the State of Wisconsin interested in implementing and adopting renewable energy and energy efficient projects. In 2010, the program assisted 11 communities/partnerships/counties that were pilots or models for completing an energy independence assessment, allowing the pilot to then move forward with energy efficiency and/or renewable energy projects.

## Definition

- Energy Independent Community (EIC) – a community that is willing to set a goal of "25 by 25" to increase our energy independence, and promote a sustainable energy policy for the State of Wisconsin

## Objectives

The objectives of the Wisconsin Energy Independent Community Partnership are to:

- Increase the use of renewable energy and renewable fuels by 25% by 2025 across the State of Wisconsin.
- Increase and promote public awareness regarding the benefits of increased energy conservation, energy efficiency, and renewable energy use by counties and municipalities around the state. These benefits include and are not exclusive to: clean air and water, intelligent land management, rural and urban economic development, as well as state and national energy independence.

### Eligible Participants

Applicant must be a Wisconsin, city, village or town that has shown willingness to improve the community's efforts related to energy conservation, efficiency and potential renewable opportunities. Applicants, if they are responsible for their own municipal water, sewer, or electrical system, must be in compliance with all appropriate state and federal regulations. The applicants also must passed a resolution identifying themselves as a partner with the State of Wisconsin in the pursuit of the "25 x 25" goals for energy independence.

### City of Jefferson Commitment

#### Resolution

On October 6, 2010, the City of Jefferson Common Council adopted a resolution (See City of Jefferson Resolution, Document No 64. in Appendix B) which formally committed the City to the 25x25 energy independence goals. The resolution declared that Common Council of the City of Jefferson is a partner with the State of Wisconsin in the pursuit of "25x25" goals for energy independence. The resolution authorized the development of a Committee and the development of policies, guidelines, goals, and a Strategic Plan for the City.

#### Energy Independence Initiative

The Energy Independence Initiative will yield cost savings to taxpayers by reducing City energy and operating costs. The City of Jefferson committed itself to the long term goal of energy independence through the creation of an Energy Independence Initiative Committee by charter ordinance, adopted March 16, 2010.

#### Energy Independence Initiative Committee Ordinance

City of Jefferson Municipal Code § 14-15 reads as follows:

A. Mission statement. The purpose of the City of Jefferson Energy Independence Initiative is to reduce by 25% the City's municipal energy and fuel consumption through conservation and the use of renewable resources by the year 2025. Energy and conservation policies and procedures adopted as part of the Energy Independence Initiative will be based upon sound economic cost/benefit principles and long-term financial accountability. The Energy Independence Initiative will promote and provide

community education and outreach on topics related to energy, conservation and the use of renewable energy.

B. Composition. The Energy Independent Initiative Committee shall be comprised of seven members. All members shall be residents or employed in the City of Jefferson, and include the Mayor, a council representative, utility commission representative, two community business representatives, and two community representatives. The City Administrator shall also serve as an ad hoc member to the committee.

C. Appointments and terms. Members shall be appointed by the Mayor, subject to confirmation of the Common Council. The Mayor and council representative shall serve a one-year term. The remainder shall serve terms of five years, commencing May 1, with the term staggering so that at least one but not more than two terms expire annually.

D. Powers and duties. Jefferson Energy Independent Initiative Committee shall serve as an advisory commission to the Common Council, advising the Council on all matters pertaining to the Energy Independence Initiative. Areas of responsibility shall include, but are not limited to:
   (1) Determining a municipal energy use baseline and evaluate its sources;
   (2) Inventorying energy uses;
   (3) Designing an energy efficient and conservation strategy;
   (4) Evaluating potential energy technologies;
   (5) Matching energy needs to capacity;
   (6) Preparing an energy independence plan with projected savings and implementation costs.
   (7) Advising the council on issues of energy independence, efficiency and conservation.

E. Energy Independence Initiative Team. In addition to the committee, City staff shall serve as the Energy Independent Initiative Team as follows: City Engineer (Team Leader), Wastewater Utility Superintendent, Jefferson Utilities Superintendent and Park and Recreation Director shall all serve as the Energy Independent Team. The Team shall provide administrative or technical support to the committee. At the discretion of the Team Leader, all department heads may be required to participate.

Energy Independence Initiative Organization

The Energy Independence Initiative has provided the framework for the City to develop the organization, membership, policies, and planning processes.

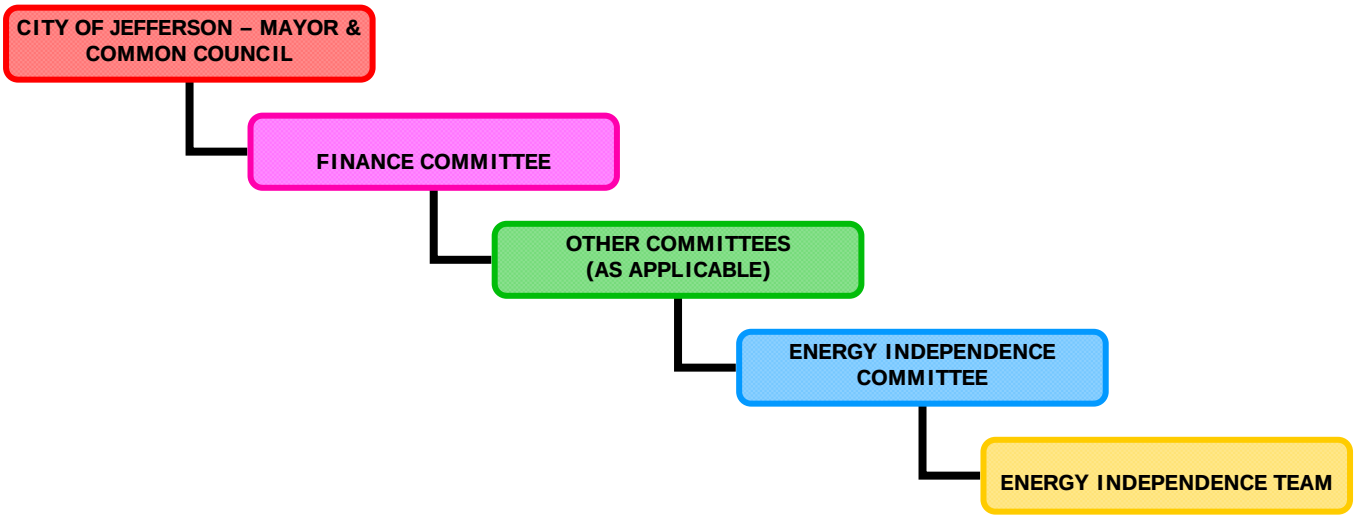



Figure 1. Organization Chart of the City of Jefferson Energy Independence Initiative

City of Jefferson Process Overview

In December 2009, the City of Jefferson (City) submitted an application to OEI to become one of their pilots for 2010. The City was selected as one of the 2010 pilots to complete an energy independence assessment and develop strategies to achieve “25 by 25”. The City was responsible for measuring energy use and fuel

consumption levels to assist with developing our energy use baseline, assess our anticipated energy usage in the year 2025 and then develop a plan by December 31, 2010 that identifies the City's strategies to achieve 25% of the City's energy use in the year 2025 to come from renewable energy sources.

City staff began discussing the need for the City to develop a baseline for our energy use to better understand the amount of energy being used and where it was being used with the City Council. The Council understood the importance and worked with staff to create the Energy Independence Initiative Committee Ordinance City of Jefferson Municipal Code § 14-15.

In February 2010, the City of Jefferson was notified that we had received a grant from the Wisconsin Office of Energy Independence to complete our "25 by 25" plan. As a result, the City Energy Independence Initiative Team (Team) began meeting. The Team is made up of City Engineer/Director of Public Works Jill Weiss, Wastewater Utility Superintendent Mike Kelly, Jefferson Utilities Superintendent Bruce Folbrecht, Park and Recreation Director Cyndi Keller and WPPI Energy Representative Greg Hoffmann. Through 2010 the Team met at a minimum monthly.

The initial focus of the Team was to determine all the energy users in the City and then determine how best to obtain the energy usage records. All meter information was obtained to all the facilities. For electric this meant the Jefferson Utilities records. Jefferson Utilities provided excellent records that could be used from 2003-2009. For gas, We Energies provided records on-line for all the facilities from 2007-2009. For records from 2003-2007, We Energies provided print outs of the gas use for all the facilities. Fuel data was obtained from the City's fuel station records. Prior to 2006, the data was found to be incomplete so only 2006-2009 information was utilized. All this data was entered into the EPA Portfolio Manager or into the Energy of Wisconsin spreadsheets.

After the energy data was complied and given to the Energy Center of Wisconsin for analysis to determine the City's baseline energy usage, the City began to focus on ways to reduce our energy usage through conservation/efficiency measures, behavior modification measures, and renewable energy opportunities available to the City. We also started to consider educational opportunities for our Team but also considered ways to involve and educate the public.

Facility audits were completed by both Focus on Energy and WPPI Energy. These audits were used to determine some of the proposed measures. Department heads were asked for suggestions that they felt could reduce the energy usage in their department. The Team used educational trainings and brainstorming to identify potential energy saving measures and renewable energy opportunities. The Team finally evaluated the measures utilizing the baseline tool provided by the Energy Center of Wisconsin. The final measures selected were based on what activities the City was already committed to completing and the sound economic cost/benefit of the measure based on long-term financial accountability.

To simplify the development of energy independence strategies to achieve "25 by 25" the Team developed these strategy components:

1. Administration
2. Facilities
3. Education
4. Renewable Energy
5. Fleet

The strategy components are overlapping in some cases, but assist in developing the road map to "25 by 25".

## What was measured? Why?

In order to meet the City's 25x25 energy independence goals, it was necessary to measure the existing energy usage at City's facilities. The City measured all our energy usages as far back as we could obtain reliable records. This ultimately translated into energy usage for facilities from 2003 – 2009 for both gas and electrical usage (35 Facilities). The gas was measured per monthly billing cycles in therms and in total cost. The electrical usage was measured per monthly billing cycles in kWh and in total cost. For fleet and equipment energy usage only 2006-2009 data was reliable. The fuel data was identified by department, make/model, year, gallons of fuel (unleaded or diesel), mileage and vehicle hours as applicable. Personal vehicle usage was not measured as there are no mechanisms in place to measure the energy consumption where personal vehicles are used. We also measured lighting. If there was a direct facility that the lighting could be associated to, such as in the case of park lighting, we generally considered that to be a facility. If the lighting was not associated to a facility, it was recognized separately as lighting. Where possible lighting was considered a facility so that it could be included in EPA Portfolio Manager for long term record keeping.

**Table 1. List of Facilities and Lighting in the City of Jefferson**
(Energy Usage Obtained from all Facilities).

| **FACILITIES** |
|---|
| Public Works Facility |
| Senior Center |
| Riverfront Park, Tennis Court |
| Jefferson Utilities/Police Department |
| EMS/Parks/Cold Storage |
| Aquatic Center |
| Stoppenbach Park |
| Stoppenbach Park Shelter |
| Tensfeldt Park, Soccer Field Concession Stand |
| Riverfront Park |
| Riverfront Park, New Shelter |
| Riverfront Park, Little League Stand |
| Museum - Oakridge Park |
| City Hall/Library/Meeting Rooms/Museum |
| Fire Station |
| Dam |
| Remote Fire Alarm |
| PD-Shooting Range/Compost Site |
| **WATER** |
| Wastewater Treatment Plant |
| Lift Station #1 |
| Lift Station #2 |
| Lift Station #3 |
| Lift Station #4 |
| Lift Station #5 |
| Well #2 |
| Well #3 |
| Well #4 |
| Well #5 |
| **LIGHTS** |
| Street Lights (By Wattage) |
| North Street Bridge Lights |
| Fischer Field Lights |
| Riverfront Park, Playground Security Lighting |

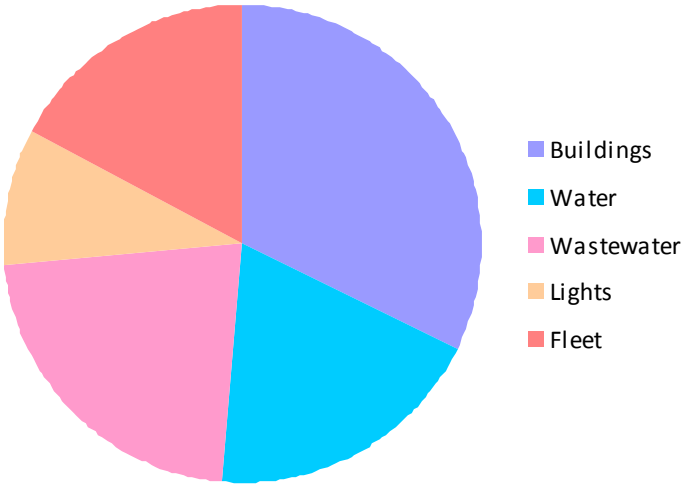
**Table 2. Examples of the Fleet in the City of Jefferson (Energy Usage Obtained from all Fleet and Equipment – 96 Items).**

| Make | Model |
|---|---|
| 1992 Case | Loader Backhoe |
| 2002 International | Dump Truck |
| 1999 International | Dump Truck |
| 1992 GMC | Pick Up Truck |
| 2006 International | Dump Truck |
| 1988 GMC | Dump Truck |
| 2005 Chevrolet | Dump Truck |
| 1997 Chevrolet | Pick Up Truck |
| 1997 International | Dump Truck |
| 2000 Chevrolet | 1 Ton Pick Up |
| 1987 John Deere | 672 B Grader |
| John Deere | Tractor Loader |
| 1993 Elgin | Sweeper |
| 2000 Chevrolet | ¾ Ton Pick Up |
| 1979 | Leaf Machine |
| 1989 Ford | Tractor Mower |
| Sincard | Snow Blower |
| 2004 International | Dump Truck |
| 1995 Morbark | Brush Chipper |
| 1996 Dodge | Dakota |
| | Crack Sealer |
| 2001 Clipper | Concrete Saw |
| 1994 Ford | F-250 Pick Up |
| 1995 International | 4700 Truck |
| 1994 Case | 1840 Skid Steer |
| 2009 Bandit | Brush Chipper |
| 1996 Giant | Leaf Vac |
| 1962 | Band Wagon |
| Massey Ferguson | Mower & leaf |
| 2000 Chevrolet | ¾ Ton Pick Up |
| 2000 John Deere | Endloader |

To measure energy usage, first the energy users had to be indentified. Then it was necessary to determine how best to obtain the energy usage records. All meter information was obtained to all the facilities. For electric this meant the Jefferson Utilities records. Jefferson Utilities provided excellent records that could be

used from 2003-2009. For gas, We Energies provided records on-line for all the facilities from 2007-2009. For records from 2003-2007, We Energies provided print outs of the gas use for all the facilities. Fuel data was obtained from the City's fuel station records. Prior to 2006, the data was found to be incomplete so only 2006-2009 information was utilized. All this data was entered into the EPA Portfolio Manager or into the Energy Center of Wisconsin spreadsheets.

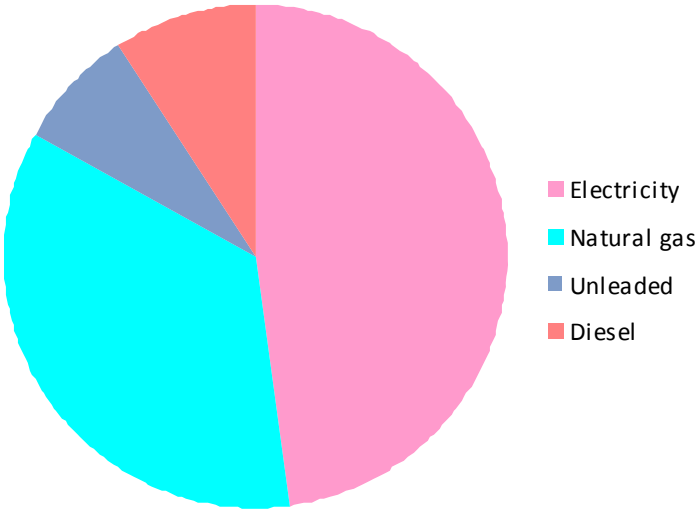
It was important in the City's process for the information we were recording to have meaning. So in many cases, we obtained more information than what was required by the Energy Center of Wisconsin to develop our baseline but we wanted to provide the clearest and most complete energy baseline possible. In many cases, during the data collection phase it was not known how useful some of the information would be, but since we were making the effort to gather all the information we felt that it was critical to be as detailed and systematic as possible with the information. It was the goal to have an accurate assessment of the City's baseline energy usage.




**Total Consumption by End Use**

| *Energy end use* | *Percent of total Btus* |
|---|---|
| Buildings | 32% |
| Water | 19% |
| Wastewater | 22% |
| Lights | 9% |
| Fleet | 17% |

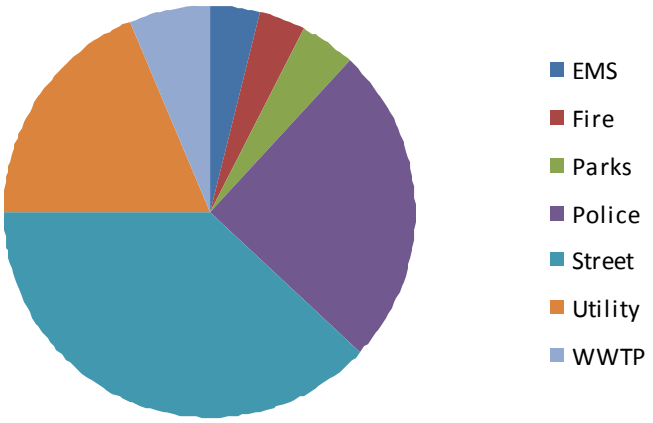
**Figure 2. Energy Consumption by Use**




**Total Consumption by Energy Type**

| *Energy type* | *Percent of total Btus* |
|---|---|
| Electricity | 48% |
| Natural gas | 35% |
| Unleaded | 8% |
| Diesel | 9% |

**Figure 3. Energy Consumption by Type**




**Fleet breakdown by department**

| *Department* | *Percent of total Btus* |
|---|---|
| EMS | 4% |
| Fire | 4% |
| Parks | 4% |
| Police | 25% |
| Street | 38% |
| Utility | 19% |

WWTP 6%

**Figure 4. Fleet Consumption by Department**

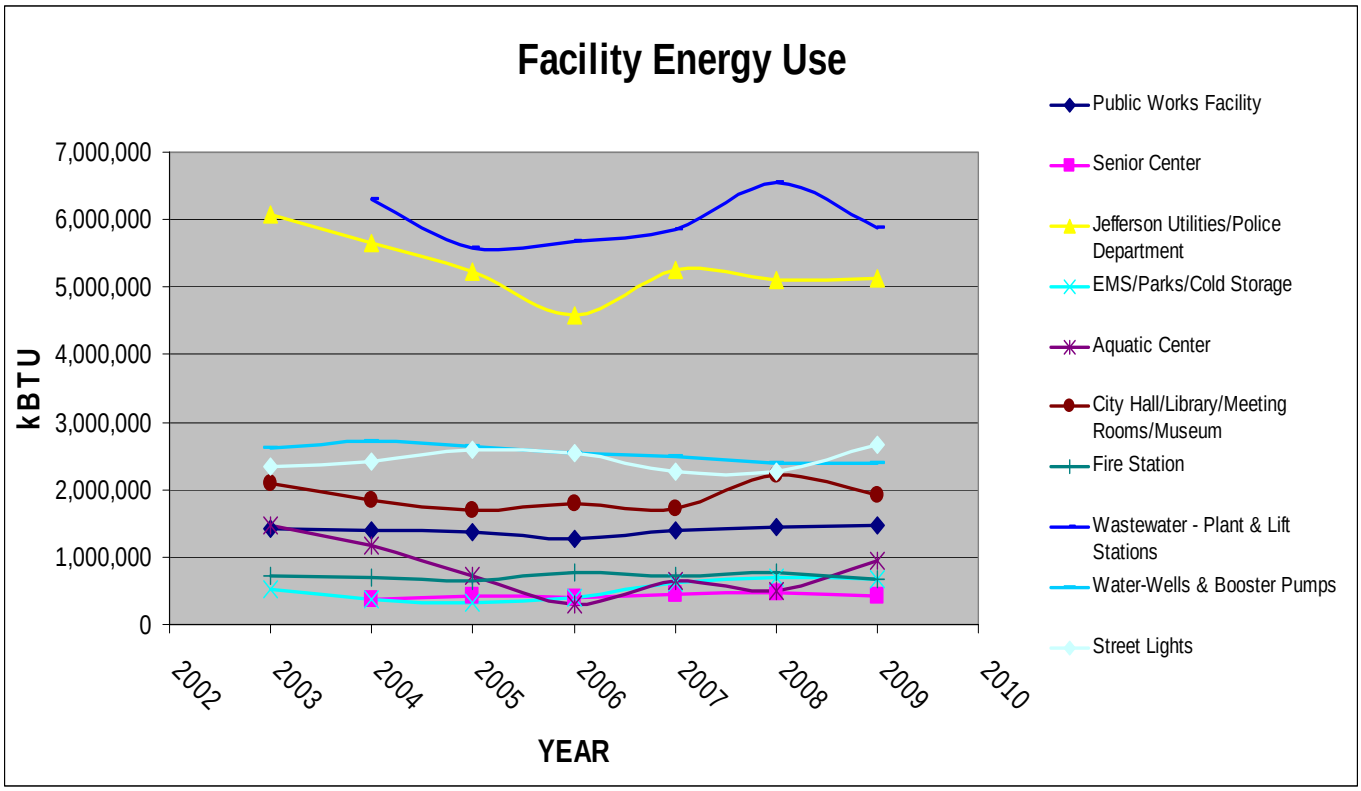



**Figure 5. Energy Consumption for the City's Major Buildings/Facilities**

## Discoveries/Surprises

One of the biggest discoveries for the Team was the amount of energy conservation projects and efforts done at a department level but never considered at a City level. Throughout the last 5-7 years WPPI Energy had conducted numerous energy audits for various departments including City Hall, Public Works Facility, and the EMS Facility. All of the lighting recommendations had been implemented over the years improving energy efficiency at the department level of those departments that had obtained the audit. We focused on making sure that all the facilities obtained both a WPPI energy audit as well as a Focus on Energy audit.

Another discovery was the overall need to track our energy use and have a system in place so that it is tracked accurately and regularly. We found most concerning was the lack of accurate, useful information available through our fueling station system. The information was not easy to process or utilize. We also found that for a number of vehicles inaccurate mileage or hours were entered by staff when they fueled vehicles or equipment, which minimized the analysis of the data.

Our newest facility, the Jefferson Utilities/Police Department building which was a combination new construction and remodel, completed 2000, is our second most significant energy user. Figure 5. Energy Consumption for the City's Major Buildings/Facilities shows the amount of energy consumed by this facility as compared to our other main facilities. As a result, this facility is under a review of its heating, ventilation, and air conditioning (HVAC). It is evident by the amount of gas used at the facility that the top energy user at this facility is the HVAC system.

A big surprise to the City is how much one project could potentially impact the City's energy use. Review the street lighting energy usage in Figure 5. Energy Consumption for the City's Major Buildings/Facilities. In 2008, the Wisconsin Department of Transportation (WISDOT) reconstructed U.S.H. 18 which is the main east – west roadway through the City of Jefferson. As part of this project, the lighting was redone. The City never considered the potential impact that this lighting retrofit would make on its energy usage. The lighting installed significantly increased our energy use and the reasons for this was the overall design on the system. The design and ultimately installation has the spacing of the lighting very close, the wattages are very high, and the technology is old. The City is working to make a policy to review all major projects for energy usage prior to any plan approvals so that installation can not occur without the anticipated energy consumption being reviewed.

Another surprise to us was some efficiency changes have negative effects. These are difficult to quantify for this study as we looked to achieve "25 by 25" but we are definitely aware that some efficiency measures may not truly reduce the energy usage as much as anticipated. A good example of this is in 2008 we completed an interior lighting retrofit. We found, as expected, that this reduced our electrical usage, but to our surprise we also increase our gas usage. Higher efficiency lighting wastes less energy through heat losses which results in needing to use more gas to heat the same space. Lighting retrofits are still a net energy savings, but this example shows that there are can be unexpected results and care must be taken when implementing an energy saving strategies.

Another major discovery known by all but a few at the City that the wastewater treatment plant has an anaerobic digester which makes methane and part of the methane is used to heat the anaerobic digestion process but the remainder of the methane is flamed off. The digester could provide a renewable energy source to the City and much of the needed infrastructure is already in place. A feasibility study was already being considered prior to the City becoming an OEI pilot community

The amount of energy used ((26,890 million Btus for all energy used) which includes 3.75 million kilowatt hours of electricity and 94 thousand therms of natural gas) for all City facilities and the amount of fuel used (16,713 gallons of gasoline and 17,451 gallons of diesel fuel) for all City vehicles, was a major surprise for all. Annually, the City uses enough electricity to operate over 300 homes. We now know that the City uses a significant amount of energy each year, in dollars and Btu's. Although energy efficiency efforts have been ongoing for a number of years, our new Citywide coordinated review of energy use provides tremendous opportunities to reduce energy consumption and carbon emissions.

Another discovery was the progress over the past several years in the development of various energy and fuel technologies. Significant progress has been made in Photovoltaic (PV) Solar Electric, Solar Hot Water,

Wind Turbine technologies, anaerobic digestion and Geothermal. A major discovery to the City was also the incentives that are available to implement some of the renewable technologies. The City is and continues to be very interested in the development of all technologies and will be selecting those that best help meet our energy goals while offering the most cost efficient solutions.

## Total Projects Considered

Through this process over 90 measures to achieve "25 by 25" were evaluated. The Team in developing a 25x25 Energy Independence Plan focused on five major strategies. The first strategy is administrative policies and procedures that are necessary to implement long-term economically sound sustainability including energy efficiency and renewable energy practices. The next is a facility energy strategy that focuses on efficiency and conservation improvements and renewable energy projects at the buildings or facilities located throughout the City. The third strategy is education programs that are focused on community education and staff education. Educational programs benefit both community groups and City citizens and employees. The City also intends to use the education programs as a way to create and foster partnerships. Renewable Energy production and Fleet strategies for gasoline and diesel fueled vehicles as well as equipment are the final two activities strategies.

Administration

The Team and Energy Independence Initiative Committee reviewed City policies, procedures, and programs that it felt are necessary to successfully implement a City wide energy plan that would meet the 25x25 energy independence goals. Policies and procedures considered included energy conserving purchasing, energy policy for all city energy use, energy policies for each department, energy design criteria for renovation and new construction projects, energy design review for all renovation and new construction projects, building energy schedules, workplace environment, and energy and fuel purchasing. Program evaluations included copier and printer analysis, procurement documents, energy efficiency driver training, behavior modification training, and department contests for energy saving. Other program evaluations that might be more long-term included energy partnerships with vendors and suppliers, document handling, consolidated procurement with municipal energy partners, and alternative transportation methods.

Facilities

The City established a baseline of 3.75 million kilowatt hours of electricity and 94 thousand therms of natural gas that is used annually in approximately 32 minor facilities which includes outdoor lighting throughout the City. There are 10 major facilities within the City that warrant significant evaluation. We felt that our first effort should be to insure all buildings were operating as efficiently as possible. City completed energy audits for major facilities to identify efficiency opportunities in facility operations. Most of these audits were completed with the help of WPPI Energy and Focus on Energy. We felt it would be most cost effective to consider buildings for auditing that would provide the best energy savings from the auditing effort. Typically measures evaluated were lighting (interior and exterior) and HVAC retrofits. Facility specific energy efficiency measures were evaluated as well. Examples of these are items such as a pool cover for the Aquatic Center and on-demand hot water system for the Fire Station.

The remaining facilities have been reviewed to determine if there are any energy efficiency improvements that can be made. Where audits were completed by WPPI Energy and/or Focus on Energy, these facilities were such small energy users that the improvements could not save enough energy to ever pay for the improvement. We will continue to review these minor energy users to verify that there are not new options for them in the future.

Measures we also considered were the removal of energy users wherever possible. True conservation was implemented by considering what we truly do not need to have for the City to continue to operate successfully.

Education

The Team and Committee considered various educational programs that will help convey information regarding the City's Energy Independence Initiative to employees and citizens. Initially the City started small in regards to its educational efforts by posting information on it's website and on Facebook. From those small efforts the City developed its Energy Independence Initiative Educational Series (EIIES). The first EIIES program occurred on November 11, 2010. This was intended to be the Series kickoff event so the intended audience was very broad. We invited citizens (County wide), business owners (commercial and industrial), and all municipalities in the County. We had over 100 people in attendance. It is the intent of the City to continue to hold the EIIES quarterly and modify each program so that it is geared more closely to specific audiences. We want to provide information on energy conservation, energy efficiency and renewable energy opportunities. Upcoming events include 'What is Renewable Energy?' and 'Meet an Energy Innovator: Orion'. A City wide energy recognition program is in the works that will recognize business and individuals for their energy independence efforts.

The second component of our education strategy is to educate City staff and elected officials. This includes providing formal off-site training opportunities for staff and internal educational programs to initiate behavior changes that equate directly to energy savings.

Renewable Energy

The City investigated various technologies for building site renewable energy projects for both immediate and long-term timelines. These included photovoltaic and wind for generating electricity, solar heating for hot water, geothermal for heating and cooling, and biomass for heating. We considered photovoltaic projects at all our major facilities. We investigated geothermal and biomass for new buildings and future HVAC upgrade projects throughout the City.

Projects evaluated include the following:

- distribution of landfill gas from Deer Tracks Landfill (5 miles north) to be utilized in a combined heat and power district in the proposed Renewable Energy Park on the north end of the City,
- distribution of waste heat from the Valero ethanol plant to be utilized in a combined heat and power district in the proposed Renewable Energy Park on the north end of the City,
- solar photovoltaic installed on the roofs of all major facilities for electrical production,
- solar hot water for facility domestic hot water,
- solar hot water for facility heating,
- small and large wind turbines located on the north west side of the City for electrical production,
- hydroelectric evaluation of the City dam for electrical production,
- geothermal retrofit for HVAC facilities,
- geothermal production district in the downtown area,
- anaerobic digester for production of methane utilizing existing processes and utilizing additional feedstocks for increased production of methane, and
- anaerobic digester for production of methane utilizing City waste feedstocks – brush, leaves, grass clippings, garden waste at the City's compost site.

Fleet

The City established an annual baseline of 16,713 gallons of gasoline and 17,451 gallons of diesel fuel used in 96 vehicles and equipment owned by the City. As with buildings, we felt that fuel efficiency and conservation projects should be considered as a part of our overall strategy for an alternative fuel program. City considered both training in fuel-efficient driving as well as the purchase of fuel-efficient vehicles as part of our fuel-efficiency and conservation efforts.

City investigated several alternative fuel vehicles including flex-fuel, hybrids, electric, fuel cell, and compressed gas vehicles. Fueling options evaluated include the following:

- Compressed Methane
- Ethanol
- Biodiesel
- LP
- Natural Gas
- Electric
- Fuel Cells (Hydrogen On-Demand) to Work with Traditional

Typically we found that the cost of the fueling station and the reduced fuel mileage made most of the fuel alternates very unattractive. Electric may be an option if there was a renewable and economic fueling station available in the City. The alternative fuel vehicles do not have the high-performance capabilities some departments need.

## Pathways to 25 x 25

The City pathways to "25 by 25" are based on our general strategies to achieve 25% of our 2025 energy usage from renewable energy resources. Our pathways involve activities related to our five major strategies.

1. Administrative policies and procedures will be implemented to change what we are doing or do what we do better so that we are able to become more energy independent by how we operate. All new projects and purchases will be held to new standards that insure energy efficiency and conservation for our future purchases and contracts. We will continue to evaluate our existing programs to find ways to operate more efficiently and economically sound.
2. Achieve maximum energy efficiency in our buildings and continue to develop current and new renewable energy resources at our facilities. Our current energy efficiency plan which will be implemented over the next 2-3 years will reduce our energy use by approximately 6 percent.
3. Education programs are being developed for our citizens, business owners (commercial and industrial), municipalities, and our employees. These programs will focus on energy independence and developing partnerships.
4. Renewable energy opportunities will continue to be developed and researched. Review, develop, and implement renewable energy measures will be our on going mission. Our "25 by 25" plan must be alive, and change and grow as technologies become more cost effective and new technologies are developed. Our most favorable renewable energy opportunity is utilizing our methane digester to create electricity. Simply utilizing the facility at our Wastewater Treatment Plant with some upgrades to generate electricity will produce 4-5 percent of our City's current energy use. We will continue to seek partnerships where we may be able to utilize tax incentives only available to tax paying entities.
5. The City will pursue projects for gasoline and diesel vehicles/equipment. We are currently looking toward fuel cell technology to make our vehicles more efficient without costly fueling station change out and vehicle modifications.

## Projects Selected – Explanation

The City selected our "25 by 25" projects based on return on investment (ROI) or our savings to investment ratio (SIR) determined by the Energy Center of Wisconsin baseline tool. We also selected projects that the City was vested in currently. These projects may not have as high SIR but the City is already committed to the project or there has been an obvious desire to pursue the project. The explanation of our selected projects is organized by our five major strategies.

Administration

Our Team and Committee have been working on developing energy independence based policies and procedures to implement that will result in behavior modification, energy efficiency, and conservation throughout the City. We are working to implement policies and procedures that address the following: energy conserving purchasing, energy policy for all city energy use, energy policies for each department, energy design criteria for renovation and new construction projects, energy design review for all renovation and new construction projects, building energy schedules, and energy and fuel purchasing. Programs will include procurement documents, energy efficiency driver training, behavior modification training, and department contests for energy saving. We are looking to develop a long-term energy purchasing policy that will include energy partners with other major purchasing entities with vendors and suppliers, document handling, consolidated procurement with municipal energy partners, and alternative transportation methods (such as an NEV ordinance.)

Facilities

Energy Efficiency Projects

The City focused on our 10 major facilities since these showed a reasonable payback for most energy efficiency modification proposed for these facilities. Many of our major facilities have had energy efficiency measures completed. We felt that our first effort should be to insure all buildings were operating as efficiently as possible. The City completed energy audits for major facilities to identify efficiency opportunities in facility operations. Most of these audits were completed with the help of WPPI Energy and Focus on Energy. We felt it would be most cost effective to consider buildings for auditing that would provide the best energy savings from the auditing effort. Typically measures evaluated were lighting (interior and exterior) and HVAC retrofits. Facility specific energy efficiency measures were evaluated as well. Examples of these are such items as a pool cover for the Aquatic Center and on-demand hot water system for the Fire Station.

The following projects were selected because they either had high SIR or they are projects that the City is committed to completing:

- Lighting Retrofits – Energy Efficiency Upgrades
  - EMS/Parks/Cold Storage
  - Fire Station
  - City Hall/Library/Meeting Rooms/Museum (Library)
  - Senior Center
  - Wastewater Treatment Plant (Maintenance Bay Lighting Building 78 & Lab Lighting Building 75)
  - Street Lights (Induction Retrofit)
- HVAC Retrofits – Energy Efficiency Upgrades
  - EMS/Parks/Cold Storage (Tune Up)
  - Fire Station (System Replacement)
  - City Hall/Library/Meeting Rooms/Museum (System Replacement)
  - Jefferson Utilities/Police Department (System Modifications)
  - Wastewater Treatment Plant - Building 75 (System Replacement)
- HVAC Modifications – Setback Thermostat Installation
  - EMS/Parks/Cold Storage
- Hot Water - Energy Efficiency Upgrades
  - Fire Station
  - Jefferson Utilities/Police Department - On Demand Hot Water Heater

Hot Water - Water Temperature Reduction
- Fire Station
- City Hall/Library/Meeting Rooms/Museum
- Senior Center

Motor/Pump Replacement
- Wastewater Treatment Plant - Plant Upgrades
  - Aeration Blower #4 Motor
  - Channel Blower #2 Motor
  - Primary Clarifier #2 Motor
  - DAF Recycle pump #1 replacement
  - DAF Recycle pump #2 replacement
  - Clarifier Drive #1 Motor
  - Primary Clarifier Drive #1 Motor

All these projects are scheduled to be implemented from 2011-2015, with the least expensive modifications/retrofits occurring first.

Energy Conservation Projects

Projects that we also selected were ones that permanently remove an energy user. True conservation or not using the energy is very easy to justify because even with removal costs it typically pays back quickly. The following projects permanently removed the energy users and had relatively high SIR:

- Senior Center - Remove Soda Machine
- Warming House – Remove Facility

Other projects that we selected were considered conservation projects, because they did not replace an energy user with a high efficiency retrofit. The conservation projects operate so that the main energy users do not have to work as hard. In the case of the fans, these will use energy for their operation but the amount of energy that they will save far out weighs their use. The following projects were selected because of their relatively high SIR:

- Aquatic Center – Chemical Pool Cover
- Public Works Facility - Fans to Push Hot Air Down to Floor Level - Mechanics Bays

Education

The Team and Committee evaluated educational programs that would help convey information regarding the City's Energy Independence Initiative to as many people as possible. We have decided to continue with our efforts by placing information on our website and Facebook. We will continue to invest in our Energy Independence Initiative Educational Series (EIIES) where we plan to invite citizens (City wide), business owners (commercial and industrial), and all municipalities in the County to attend these events. We will continue to hold the EIIES quarterly and modify each program so that it is geared more closely to specific audiences. We will provide information on energy conservation, energy efficiency and renewable energy opportunities. Upcoming events include 'What is Renewable Energy?' and 'Meet an Energy Innovator: Orion'. A City wide energy recognition program is in the works that will recognize business and individuals for their energy independence efforts.

The second component of our education strategy is to educate City staff and elected officials. This includes providing formal off-site training opportunities for staff and internal educational programs to initiate behavior changes that equate directly to energy savings. We will continue to develop this program as well and continue to encourage all staff and elected officials to attend the EIIES events.

Renewable Energy

The City investigated a large number of renewable opportunities; unfortunately many of the potential projects' saving to investment ratios are too low to justify the expense. Not being able to participate in the tax credit incentives, in many cases, is the difference in making the large scale renewables payback in a reasonable period of time. We will continue to review the available technologies and incentives to find additional renewable projects that will work for the City. The following are the projects we plan to continue to investigate:

Projects evaluated include the following:

- solar photovoltaic installed on the roofs of all major facilities for electrical production,

- small and large wind turbines located on the north west side of the City for electrical production,
- geothermal retrofit for HVAC facilities,
- geothermal production district in the downtown area,
- anaerobic digester for production of methane utilizing additional feedstocks for increased production of methane, and
- anaerobic digester for production of methane utilizing City waste feedstocks – brush, leaves, grass clippings, garden waste at the City's compost site.

The City selected three main renewable energy projects to achieve "25 by 25" based on all the information available today. The following projects were selected because of their SIR was greater than one (1):

- solar hot water for heating the Aquatic Center pool,
- anaerobic digester for production of methane to produce electricity utilizing existing waste stream and processes, and
- the purchase of 2,800 renewable energy blocks (each block is 300 kWh for $2.00 per block from WPPI Energy)

All of our selected practices are proposed to be implemented by 2016, except for the purchase of renewable energy block. This schedule allows for us to continue to pursue additional renewable energy opportunities prior to 2025.

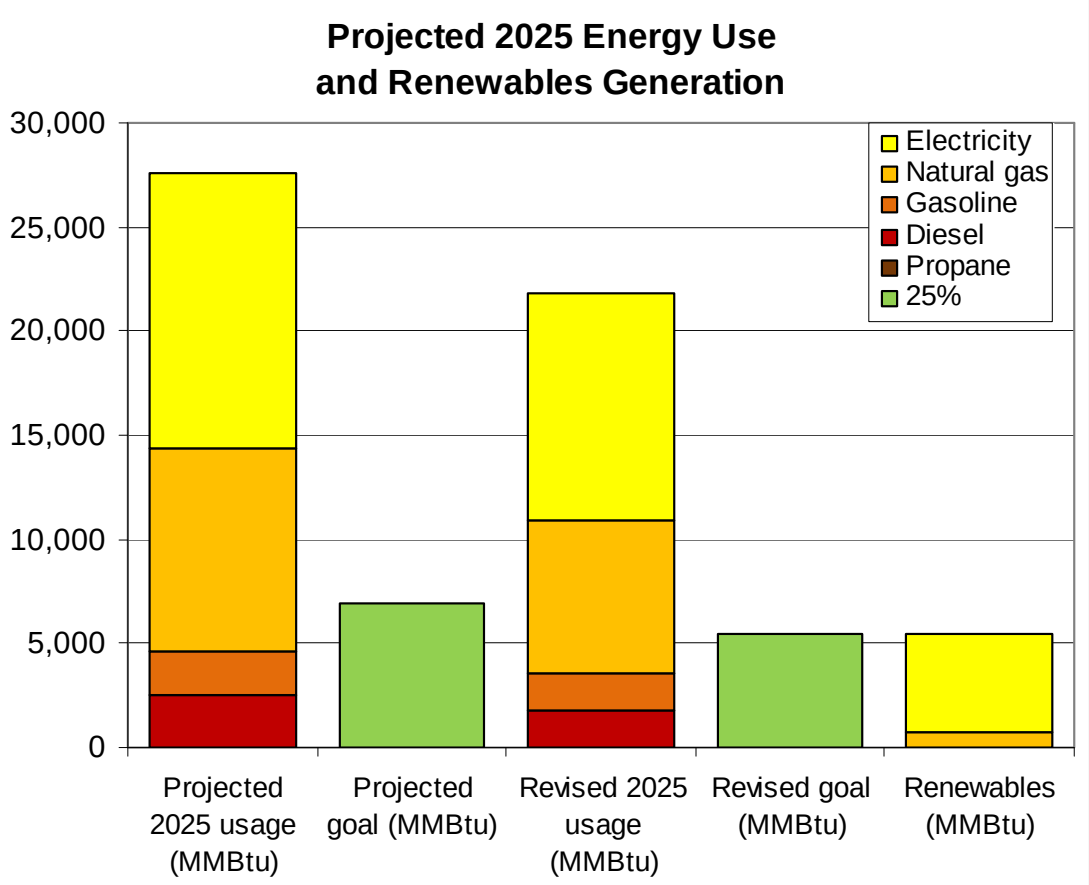
Fleet

As with buildings, we felt that fuel efficiency and conservation projects should be considered as a part of our overall strategy for an alternative fuel program. City will implement training in fuel-efficient driving as well as the evaluation of fuel-efficient options with all vehicle/equipment purchases; both these items are considered part of our administration strategy. We estimate very conservatively that behavior modification training can reduce energy usage by a minimum of one (1) percent.

Currently, we found that alternative fuels generally do not have a reasonable payback. The cost of the fueling station and the reduced fuel mileage made most of the fuel alternates very unattractive. Electric may be an option if there was a renewable and economic fueling station available in the City. The alternative fuel vehicles do not have the high-performance capabilities some departments needs.

From all the options available, the hydrogen on demand fuel cell work being completed by the City of Beloit shows significant promise. This option does not require significant retrofitting of vehicles or the purchase of an expensive fueling station. We found that we currently have about thirty-three (33) vehicles/equipment that may be able to be modified to an on demand hydrogen system, however; only sixteen (16) are considered to be good candidates. These systems have shown to be able to double the fuel mileage of vehicles. Unfortunately, the technology is still in the development stages. We are planning for 2015 to be the time, when these fuel cells will be available and we will be able to retrofit 16 vehicles to the on-demand hydrogen system. As with the renewable energy strategy, part of our plan is to continue to seek out new opportunities and technologies for our fleet.

| PORTFOLIO SUMMARY | | | | |
|---|---|---|---|---|
| Installed cost before incentives | Incentive amounts | Present value cost with incentives | lbs $CO_2$ avoided from fossil emissions | Percent of goal achieved (see below) |
| $ 1,348,527.55 | $ 177,200.00 | $ 1,304,359.40 | 1,979,648 | 100% |




| | |
|---|---|
| Projected 2025 usage (MMBtu) | 27,597 |
| Revised 2025 usage (w/ efficiency) (MMBtu) | 21,862 |
| Revised 25% 2025 renewables goal (MMBtu) | 5,465 |
| Sum of renewable measures (MMBtu) | 5,463 |
| Percent of goal achieved | 100% |

**Figure 6. Baseline Results for Selected Projects**

# Narrative – Potential Renewable Feedstocks

Wind

West side of City has very favorable wind conditions. Currently will not reasonably pay back but worth continued effort to look for partners, incentives, and new technologies to make this a viable renewable option for the City.

Solar

Solar hot water system (Hot Water-Pool & Domestic Use)

From our preliminary feasibility studies, only the Aquatic Center pool is considered to be a viable use of solar hot water for heating the pool. Solar Hot water systems were considered for other facilities but were found not to be practical at this time.

Solar hot water system (Building Heat)

Solar hot water systems were evaluated for building heating but these were found to be the least efficient use of solar technology.

Solar (Electricity Production – Photovoltaic (PV))

Solar PV was evaluated for the roofs of all City buildings and is an option for the City. We are interested in roof mounted solar PV, however, at this time, it does not provide a reasonable pay back. (The City also reviewed ground mounted Solar PV but found roof mounting to be more economical.) We will continue to pursue partners, incentives, and new technologies to make this a viable renewable option for the City. We definitely see this as a potential option for us if we could find a partner for the tax incentives. A private company, Green States Energy, is working on a project 'Jefferson Sun One' that is proposed to produce 25 megawatts.

Biogas (landfill, agriculturally-based)

Biogas – City Wide

The City has been working to develop biogas options for their proposed Renewable Energy Park from the ethanol plant, Valero, and from other sources such as piping landfill gas 5 miles from the Deer Tracks Landfill in Johnson Creek. These sources are currently not viable but have solid promise in the future. Other such sources in the area include byproducts from local food producers, potentially other commercial/industrial byproducts and local agricultural wastes.

Biogas – Wastewater Treatment Plant (WWTP)

The WWTP has a anaerobic digester that produces methane. Currently a portion of the waste methane is used in the process to operate a heater and the used portion of methane is flamed off. We have worked on developing a strategy to increase methane production and utilized all the methane produced. We have looked at our system configuration to try to maximize the production, assessed the type of gas we are producing and what potential feed stocks we have available to us. Some of the feed stocks we have reviewed are algae, Nestle meat scraps, Tyson oil/grease, and Valero process distillate. The most cost effective option for us currently is to maximize our current production, which we plan to work toward over the next year.

Biomass (wood, prairie grasses, other)

The City provides leaf and brush pick up to its residents. It also has a compost site for its residents to bring leaves, grass clippings, brush and garden waste. The use of this type of biomass has been reviewed for use in methane production. More research needs to be completed to see how viable such a process could be and all the associated costs. With the looming, Emerald Ash Borer Disease, the City will be developing strategies for utilizing the wood that will become available. We are currently considering wood heat however we currently have ordinances that prohibit outside wood burning. The digester may ultimately be a viable option in the future. This may also push forward the City's usable of compressed methane for vehicle/equipment fuels.

Hydro

The City has a small dam, but there is very little head so utilizing this dam for hydroelectric power would be very costly for the amount of power it could produce. In the future there may be more cost effective options for harnessing hydroelectric power that would work for the City.

Geothermal

The City will continue its efforts related to geothermal. Geothermal will be considered for all future facilities. The City will continue to consider the development of a downtown geothermal district. Based on area reports, the soils in the Jefferson area have a very high conductivity, which is critical for geothermal projects.

## Existing Unknowns – Necessary Information for Future

There are many unknowns at this time. Due to these unknowns our plan needs to be a living and breathing document where changes can be made continually and the City must stay vigilant seeking new opportunities. The main existing unknowns are as follows:

- Renewable Energy Technologies (Current and Future Technologies)
- Funding (Local Funding and Other Funding)
  - Funding for Projects and Feasibility Studies
  - Future Incentives – Grant, Focus on Energy, WPPI Energy
- Acceptable Returns on Investments
- Long Term Political and Public Support
- Energy Partnerships
- Price of Traditional Energy Resources

Renewable Energy Technologies

Given the information currently available there is no way to know what advancements will be made in the renewable energy field. Renewable energy is a popular topic and there is much interest as well as monies being put into renewable energy research. This makes predicting the future of renewable energy even more difficult but as long as the economic climate stays as it currently is, there will likely be substantial advancements in this technology. Most technologies available do not have a reasonable return on investment. We are hopeful that will change with continued interest and monies for research, ultimately renewable technology will become more affordable. The rapid development of new technologies also adds a level of apprehension for the City to invest in technology that may be unproven. The City will continue to monitor the renewable technology world, with the intent of finding affordable and reliable renewables.

Funding

Funding for Projects and Feasibility Studies

Municipal budgets are being more limited due to the overall economic crisis. The City has been very conservative in its spending so not in direct financial distress but anticipates that there will be significant changes in the upcoming budget years as shared revenue is anticipated to be cut, levy limits continue, and reduced income due to less fees for such things as building inspections. It is unknown if the City will be able to make any substantial investments into energy independence long term so that projects can be implemented. Also, with the poor economy there is additional public pressure not to do projects even if they may be economically sound.

Future Incentives – Grant, Focus on Energy, WPPI Energy

Outside funding sources such as grants, Focus on Energy and WPPI Energy incentives will likely be needed more than ever as the City will need to work with shrinking budgets. The City has been very fortunate in the recent past, as a recipient of funds for the Wisconsin Energy Independent Communities 25 x 25 Plan Grant and received $145,700 in Energy Efficiency Conservation Block Grant (EECBG) funds in 2010 for the HVAC retrofit for our City Hall/Library Facility. These funds provided a significant source of revenue for planning as well as for one of our projects identified in our 25 x 25 Energy Independence Plan.
We anticipate that unless there is an economic shift funding incentives will become harder to obtain. Economy challenges and budgetary constraints have put an extreme emphasis on the need to make sound financial decisions.

Acceptable Returns on Investments

Our approach to paybacks for investments was conservative, however, the true acceptable return on investment (ROI) will not be known until the project is put forth for review and approval. We selected projects with a savings to investment ratio (SIR) of greater than 1.00 based on the Energy Center of Wisconsin energy tool unless the City has already shown commitment for a specific project. Given the value of money and the anticipated timing on implementing the project, any project with a SIR greater than 1.00, pays back in a reasonable time period. We also reviewed a simple payback period for comparison purposes. This has been an acceptable approach for planning but until we are in a position to fund the project it is unknown if the proposed project with have an acceptable return on investment.

Long Term Political and Public Support

The City of Jefferson Common Council has contributed significant support to promote energy independence. They recognize the value in researching and pursuing energy independence, energy conservation, energy efficiency, and renewable energy opportunities. We generally have public support as well. But in both cases there is no way to know if this support will continue. With increasing budget constraints it will be difficult to support the funding of any projects in the future. Also, if media coverage of subjects such as sustainability and energy is discontinued, we anticipate the political and public support will change as well. It is important that public awareness of the many energy challenges continues and that evidence of success in regards to the development of renewable energy is publicized. The price of traditional energy resources will also influence political and public support. Continued support from all is necessary for the City to achieve 25x25 goals.

Energy Partnerships

The potential for success in achieving the goals and objectives of the 25 x 25 Energy Independence Plan increase based on the ability to develop sound partnerships. We continue to engage with the County, other municipalities, and other Energy Independence Communities through direct contact and through our Energy Independence Education Series. We need to explore public/private partnerships with research & development interests to implement and evaluate new energy technologies. Relationships with educational and research institutions need to be developed and pursued. Intergovernmental partnerships, not only with funding sources such as the state and federal government but also with local government at the municipal and school district level must be utilized.

Price of Traditional Energy Resources

An issue that is not explored in all our planning is the anticipated price of traditional energy resources. As these prices are expected to continue to climb, it is anticipated that renewable technologies will become more affordable. Relatively inexpensive traditional energy resources make most renewable technologies cost-ineffective. Pricing of fuels (gasoline and diesel) have fluctuated dramatically over the last 3 years. Due to such fluctuations, major expenditures for alternative fuels may be difficult to justify even when fuel prices are high. The economic uncertainty is impacting pricing at all levels.

## Action Steps – Immediate & Long - Term

The City identified immediate and long-term actions. The timing of these actions is still tied to many of the unknowns discussed in the previous section. All of our proposed projects are intended to be implemented in the relative short term, with the exception of the purchase of renewable energy blocks. We only plan to make these purchases when it is advantageous to the City or as a last resort to achieve "25 by 25". With the two proposed renewable energy projects we are able to get to fifty-three (53) percent of our goal.

**Table 3. Action Steps**

| Actions | Responsibility | Schedule |
|---|---|---|
| *Energy Renewables* | | |
| Aquatic Center – Solar Hot Water | Facilities/Parks | 2011-2012 |
| Wastewater Treatment Plant - Anaerobic Digester -Methane Utilization – Implement Plan for Electric Generation by Maximizing Current System Load | Facilities/WWTP | 2011-2012 |
| *Policies/Procedures - Energy Policy/Purchasing Policy/Behavior Modification* | | |
| Purchasing Policy | Energy Independence Team/Committee | 2011 |
| Individual and Department Energy Policies | Energy Independence Team/Committee | 2011 |
| Vehicle Operation and Care Policy | Energy Independence Team/Committee | 2011 |
| *Education/Outreach* | | |
| Energy Independence Initiative Series | Energy Independence Committee | 2011 - ? |
| Staff Trainings | Energy Independence Team | 2011 - ? |
| - Energy Policy Trainings | Energy Independence Team | 2011 - ? |
| - Personal Responsibilities for Energy Usage Trainings | Energy Independence Team | 2011 - ? |
| - Energy Efficiency Driver Training | Energy Independence Team | 2011 - ? |
| - Department Competition for Energy Efficiency (Energy Challenges) | Energy Independence Team | 2011 - ? |
| *Energy Efficiency and Conservation - LIGHTING* | | |
| EMS/Parks/Cold Storage | Facilities/EMS & Parks | 2011 |
| Fire Station | Facilities/Fire Department | 2011 |
| City Hall/Library/Meeting Rooms/Museum (Library) | Facilities/Library | 2011 |
| Senior Center | Facilities/Parks | 2011 |
| Wastewater Treatment Plant (Maintenance Bay Lighting Building 78) | Facilities/WWTP | 2013 |
| Wastewater Treatment Plant (Lab Lighting Building 75) | Facilities/WWTP | 2014 |
| Street Lights (Induction Retrofit) | Facilities/Street/Public Works & Jefferson Utilities | 2015 |
| *Energy Efficiency and Conservation - HVAC UPGRADES* | | |
| EMS/Parks/Cold Storage (Tune Up) | Facilities/EMS & Parks | 2012 |
| Fire Station (System Replacement) | Facilities/Fire Department | 2011 |
| City Hall/Library/Meeting Rooms/Museum (System Replacement) | Facilities/Administration | 2011 |
| Jefferson Utilities/Police Department (System Modifications) | Facilities/Utility Board/Police Department/Jefferson Utilities | 2013 |
| Wastewater Treatment Plant - Building 75 (System Replacement) | Facilities/WWTP | 2014 |
| *Energy Efficiency and Conservation - HVAC Modifications* | | |
| EMS/Parks/Cold Storage - Setback Thermostat Installation | EMS & Parks | 2011 |
| Public Works - Temperature Reductions | Public Works | 2011 |
| Fire Station - Temperature Reductions | Fire Department | 2011 |
| City Hall/Library/Meeting Rooms/Museum - Temperature Reductions | Administration | 2011 |
| Jefferson Utilities/Police Department - Temperature Reductions | Jefferson Utilities/Police Department | 2011 |
| Wastewater Treatment Plant - Temperature Reductions | WWTP | 2011 |

**Table 3. Action Steps (Continued)**

| Actions | Responsibility | Schedule |
|---|---|---|
| *Energy Efficiency and Conservation - Domestic Hot Water - Energy Efficiency Upgrades* | | |
| Fire Station - On Demand Water Heater Installation Replacement | Facilities/Fire Department | 2015 |
| Jefferson Utilities/Police Department - On Demand Water Heater Installation Replacement | Facilities/Utility Board/Jefferson Utilities/Police Department | 2015 |
| *Energy Efficiency and Conservation - Domestic Hot Water - Water Temperature Reduction* | | |
| Fire Station | Fire Department | 2011 |
| City Hall/Library/Meeting Rooms/Museum | Adminstration | 2011 |
| Senior Center | Parks | 2011 |
| Public Works Facility | Public Works | 2011 |
| *Energy Efficiency and Conservation - Remove Energy Usage* | | |
| Senior Center - Remove Soda Machine | Parks | 2011 |
| Warming House – Remove Facility | Parks | 2011 |
| *Energy Efficiency and Conservation - General Conservation* | | |
| Aquatic Center – Chemical Pool Cover | Parks | 2012 |
| Public Works Facility - Fans to Push Hot Air Down to Floor Level - Mechanics Bays | Facilities/Public Works | 2013 |
| Wastewater Treatment Plant - Plant Upgrades | | |
| Aeration Blower #4 Motor | Facilities/WWTP | 2012 |
| Channel Blower #2 Motor | Facilities/WWTP | 2012 |
| Primary Clarifier #2 Motor | Facilities/WWTP | 2012 |
| DAF Recycle pump #1 replacement | Facilities/WWTP | 2014 |
| DAF Recycle pump #2 replacement | Facilities/WWTP | 2014 |
| Clarifier Drive #1 Motor | Facilities/WWTP | 2015 |
| Primary Clarifier Drive #1 Motor | Facilities/WWTP | 2015 |
| *Fleet/Equipment - Efficiency* | | |
| 16 Vehicles - Hybrid Fuel Cells (Hydrogen On-Demand) | Public Works | 2015 |

## Energy Independence Initiative Team Members

Jill M. Weiss, P.E., City Engineer/Director of Public Works - Energy Independence Initiative Team Leader
Cyndi Keller, Director of Parks, Recreation and Forestry - Energy Independence Initiative Team
Michael Kelly, Wastewater Superintendent - Energy Independence Initiative Team
Bruce Folbrecht, Jefferson Utilities Manager - Energy Independence Initiative Team
Greg Hoffmann, Jefferson Utilities Manager/WPPI Energy Services Representative - Energy Independence Initiative Team

## Energy Independence Initiative Committee Members

Dale Oppermann – Mayor - Energy Independence Initiative Committee
Dave Carnes – Council Person - Energy Independence Initiative Committee
Steve Adams – Utility Commission Representative - Energy Independence Initiative Committee
Dev Traver – Business Representative - Energy Independence Initiative Committee
Kirk Lawrence – Business Representative - Energy Independence Initiative Committee
Jerry Tinberg – Community Representative - Energy Independence Initiative Committee Chairman
Boyd Janney – Community Representative - Energy Independence Initiative Committee
Tim Freitag – City Administrator - Energy Independence Initiative Committee (Non-voting Member)

# Appendix A: Baseline Energy Consumption Data – Spreadsheets

**'Growth Rate' Tab**

In order to determine the Jefferson's 2025 municipal energy use baseline, we need to estimate the rate at which we can expect municipal energy usage to grow.

This value will differ for every community.
Possible values are listed below. To run this baseline tool, please select one of those values, or determine your own, and enter it (as a percent) into the green box.

| | |
|---|---|
| 0.2% | |

| | |
|---|---|
| 0.3% | Jefferson's estimated population growth rate |
| 0.2% | Population growth rate discounted by percent of energy attributable to buildings |
| 1.4% | Annual growth rate of Jefferson's municipal energy usage, 2007 to 2009 |

(As a way to perform a reality check on your estimate, an annual growth rate of 4.4% would mean doubling your energy consumption by 2025.)

Once you have entered a growth rate, please proceed to the next tab.

**'Baseline + Goals' Tab**

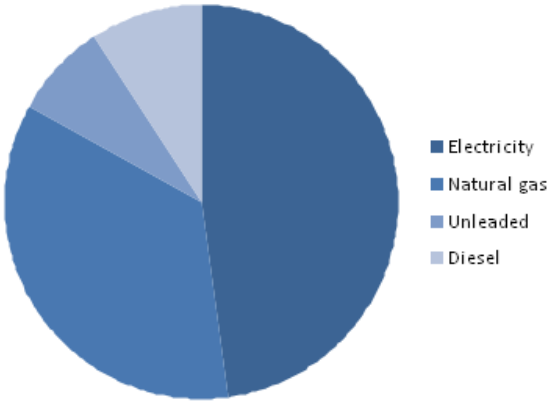
| | | |
|---|---|---|
| Your energy usage baseline is | 26,890 | million (MM) Btus.* |
| That baseline is comprised of | 3,751,898 | kWh, |
| | 94,290 | therms, |
| | 16,713 | gallons of unleaded, |
| and | 17,451 | gallons of diesel. |
| By assuming an annual growth rate of | 0.20% | , |
| in 2025 your energy use baseline will be | 27,763 | MMBtu. |
| Your 25% renewable energy goal for 2025 is therefore | 6,941 | MMBtu, |
| or | 26% | of your baseline consumption. |
| This translates into | 2,034,235 | kWh or |
| | 69,408 | therms or |
| | 55,974 | gallons gas or |
| | 49,934 | gallons diesel, or some combination of those fuels. |

**'Energy Analysis 1' Tab**

## Jefferson Energy Baseline: Additional Info

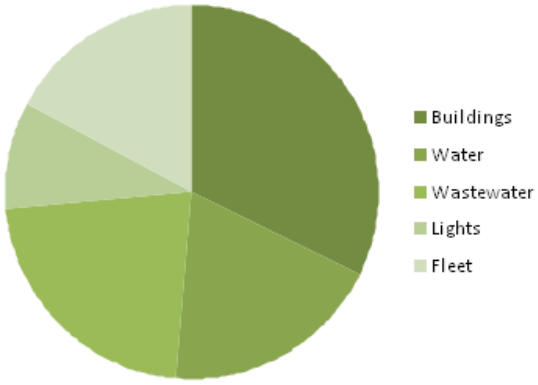
**Total Consumption by Energy Type**

| *Energy type* | *Percent of total Btus* |
|---|---|
| Electricity | 48% |
| Natural gas | 35% |
| Unleaded | 8% |
| Diesel | 9% |




**Total Consumption by End Use**

| *Energy end use* | *Percent of total Btus* |
|---|---|
| Buildings | 32% |
| Water | 19% |
| Wastewater | 22% |
| Lights | 9% |
| Fleet | 17% |



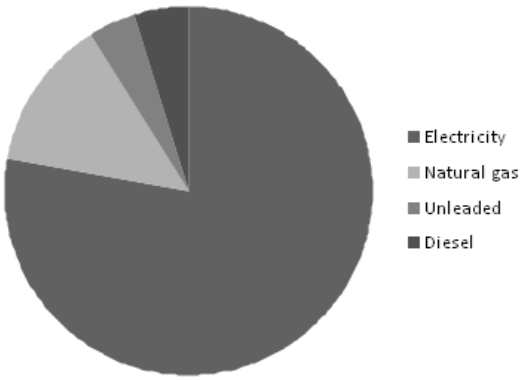

**'Energy Analysis 2' Tab**

## Jefferson Energy Baseline: Additional Info

**Total CO2 Emissions by Energy Type**

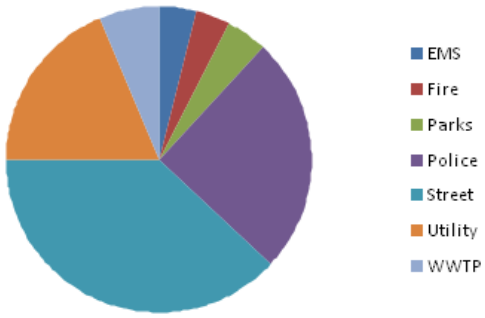
| *Energy type* | *Percent of total CO2* |
|---|---|
| Electricity | 78% |
| Natural gas | 14% |
| Unleaded | 4% |
| Diesel | 5% |

Total: 8 million lbs CO2




**Fleet breakdown by department**

| *Department* | *Percent of total Btus* |
|---|---|
| EMS | 4% |
| Fire | 4% |
| Parks | 4% |
| Police | 25% |
| Street | 38% |
| Utility | 19% |
| WWTP | 6% |



**'Assumptions' Tab**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Assumptions** | | | | | | | | |
| | | | | | | | | |
| *Baseline Energy Usage, Rates and Generation* | | | | | | | | |
| | Baseline usage | | 2009 rates | | | Baseline existing generation | | |
| electricity | 3,751,898 | kWh | $ 0.07 | /kWh | | | kWh | |
| natural gas | 94,290 | therms | $ 1.00 | /therm | | | therms | |
| unleaded gasoline | 16,713 | gallons | $ 2.33 | /gal | | | gallons | |
| diesel fuel | 17,451 | gallons | $ 2.42 | /gal | | | gallons | |
| gallons propane | | gallons | | /gal | | | gallons | |
| | | | | | | | | |
| *Factors* | | | | | | | | |
| Estimated annual growth rate for municipal energy | 0.2% | | | | | | | |
| | | | | | | | | |
| *Purchase renewable electricity from utility* | | | | | | | | |
| Block size | 300 | kWh | | | | | | |
| *Incremental* cost per block | $2.00 | | | | | | | |
| | | | | | | | | |
| Year of last billing data | 2009 | | | | | | | |
| First project year | 2011 | | | | | | | |
| Final project year | 2025 | | | | | | | |
| | | | | | | | | |

**'Measures' Tab**

| ***Measure Name*** | Measure Description | ***Total Installed Cost*** | Financial Incentives | ***Measure Life*** | ***Measure Installed Date*** | ***Annual Energy Saved*** | | | | | ***Annual Energy Generated*** | | | | | Non-Energy Cost 1 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | kWh | therms | gallons unleaded | gallons diesel | gallons propane | kWh | therms | gallons unleaded | gallons diesel | gallons propane | Description | Cost ($) | How often (years) |
| EMS/Parks/Cold Storage - Lighting - Lighting Retrofit | WPPI Purchased Lights-Labor Nominal (Energy Saving Estimated off of 2 months bills 2010) | $100 | | 25 | 2011 | 3,000 | | | | | | | | | | | | |
| EMS/Parks/Cold Storage - HVAC - Furnace Tune Up | Focus on Energy Recommendations | $200 | | 1 | 2012 | | 99 | | | | | | | | | | | |
| EMS/Parks/Cold Storage - HVAC - Setback Thermostat Installation | Focus on Energy Recommendations - Assuming Setbacks of 2 degrees for 6% savings | $50 | | 25 | 2012 | 390 | 140 | | | | | | | | | | | |
| EMS/Parks/Cold Storage - HVAC - Window Treatment - Blinds | Focus on Energy Recommendations - Assuming Walmart Energy Savings Blinds & energy savings of .1% | $500 | | 25 | 2011 | 7 | 2 | | | | | | | | | | | |
| EMS/Parks/Cold Storage - Renewables - Solar Electric Power | Focus on Energy Recommendations | $600,000 | | 25 | 2015 | | | | | | 98,340 | | | | | | | |
| Fire Station - HVAC - Furnace Retrofit-High Efficiency | Lake Country Heating and Cooling (Actual Bills) (Energy Saving Estimated off of 2 months bills 2010) | $12,668 | | 25 | 2011 | 1,500 | 180 | | | | | | | | | | | |
| Fire Station - Lighting - Lighting Retrofit | WPPI Purchased Lights(Energy Saving Estimated off of 2 months bills 2010) | $500 | | 25 | 2011 | 1,200 | | | | | | | | | | | | |
| Fire Station - Domestic Hot Water - Water Heater - Upgrade High Efficient | Focus on Energy Recommendations - Assuming On-Demand - 20% savings on gas & electric for HW based on FOE facility energy use break down | $2,000 | | 25 | 2015 | 30 | 380 | | | | | | | | | | | |

**'Measures' Tab (Continued)**

| Measure Name | Measure Description | Total Installed Cost | Financial Incentives | Measure Life | Measure Installed Date | Annual Energy Saved | | | | | Annual Energy Generated | | | | | Non-Energy Cost 1 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | kWh | therms | gallons unleaded | gallons diesel | gallons propane | kWh | therms | gallons unleaded | gallons diesel | gallons propane | Description | Cost ($) | How often (years) |
| Fire Station - Domestic Hot Water - Water Temperature Reduction on Water Heater | Focus on Energy Recommendations | $1 | | 100 | 2011 | | 2 | | | | | | | | | | | |
| Fire Station - Renewables - Solar Electric Power | Focus on Energy Recommendations | $250,000 | | 25 | 2015 | | | | | | 43,643 | | | | | | | |
| Aquatic Center - Conservation - Chemical Pool Cover | Standard Residential Covers (DOE says 1 gallon of 80 degree water equates to 8,000 Btus removed from the pool) All Btus converted to therms - 1 bottle per week | $236 | | 1 | 2012 | | 1,496 | | | | | | | | | | | |
| Aquatic Center - Conservation - Pool Cover | Standard Residential Covers (high end) average $0.50/sf - Assumed custom cover with roll up ability to be $1.00/sf - Assumed 0.5" evaporation each week for 12 weeks (DOE says 1 gallon of 80 degree water equates to 8,000 Btus removed from the pool) All Bt | $5,000 | | 5 | 2012 | | 1,496 | | | | | | | | | Staff Time | $1,428 | 1 |
| Aquatic Center - Lighting - Building Lighting Retrofit | WPPI Recommendation | $5,250 | | 25 | 2011 | 600 | | | | | | | | | | | | |
| Aquatic Center - Lighting - Facility Lighting Retrofit | WPPI Recommendation | $6,000 | | 25 | 2011 | 1,500 | | | | | | | | | | | | |
| Aquatic Center - Renewable - Solar Hot Water | Focus on Energy Recommendations | $107,000 | $31,500 | 25 | 2011 | | 3,828 | | | | | 7,656 | | | | gas heater | $17,000 | 10 |
| Aquatic Center - Renewables - Solar Electric Power | Focus on Energy Recommendations | $45,000 | | 25 | 2015 | | | | | | 5,000 | | | | | | | |

**'Measures' Tab (Continued)**

| ***Measure Name*** | Measure Description | ***Total Installed Cost*** | Financial Incentives | ***Measure Life*** | ***Measure Installed Date*** | ***Annual Energy Saved*** | | | | | ***Annual Energy Generated*** | | | | | Non-Energy Cost 1 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | kWh | therms | gallons unleaded | gallons diesel | gallons propane | kWh | therms | gallons unleaded | gallons diesel | gallons propane | Description | Cost ($) | How often (years) |
| City Hall/Library/Mtg Rooms/Museum - Lighting - Library Lighting Retrofit | WPPI Recommendation | $500 | | 25 | 2011 | 13,400 | | | | | | | | | | | | |
| City Hall/Library/Mtg Rooms/Museum - Domestic Hot Water - Pipe Insulation on Domestic Hot Water Lines | Focus on Energy Recommendations | $500 | | 25 | 2011 | | 8 | | | | | | | | | | | |
| City Hall/Library/Mtg Rooms/Museum - Domestic Hot Water - Water Temperature Reduction on Water Heater | Focus on Energy Recommendations | $1 | | 100 | 2011 | | 2 | | | | | | | | | | | |
| City Hall/Library/Mtg Rooms/Museum - HVAC - Boiler Plumbing - Insulation | Focus on Energy Recommendations | $500 | | 25 | 2011 | | 8 | | | | | | | | | | | |
| City Hall/Library/Mtg Rooms/Museum - HVAC - Boiler Replacement & Controls Upgrade - High Performance | Focus on Energy Recommendations (Based on Donn Trieloff Report and FOE break down of Energy Use 35% reduction in energy use for boilers) | $96,000 | $62,165 | 25 | 2011 | 14,400 | 2,500 | | | | | | | | | | | |
| City Hall/Library/Mtg Rooms/Museum - HVAC - Air Condensers Replacement/Air Handlers (All except meeting rooms and council chambers) - High Efficiency | (Based on Donn Trieloff Report) | $129,000 | $83,535 | 25 | 2011 | 18,600 | | | | | | | | | | | | |
| City Hall/Library/Mtg Rooms/Museum - HVAC - Preventative Maintenance Program | Focus on Energy Recommendations | $300 | | 25 | 2011 | 1 | 10 | | | | | | | | | | | |
| City Hall/Library/Mtg Rooms/Museum - Renewables - Solar Hot Water | Focus on Energy Recommendations - (Determined to not be worthwhile by evaluators) | | | | | | | | | | | | | | | | | |

**'Measures' Tab (Continued)**

| ***Measure Name*** | Measure Description | ***Total Installed Cost*** | Financial Incentives | ***Measure Life*** | ***Measure Installed Date*** | ***Annual Energy Saved*** | | | | | ***Annual Energy Generated*** | | | | | Non-Energy Cost 1 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | kWh | therms | gallons unleaded | gallons diesel | gallons propane | kWh | therms | gallons unleaded | gallons diesel | gallons propane | Description | Cost ($) | How often (years) |
| City Hall/Library/Mtg Rooms/Museum - Renewables - Solar Electric Power | Focus on Energy Recommendations | $427,000 | $32,850 | 25 | 2015 | | | | | | 73,842 | | | | | | | |
| Public Works Facility - Domestic Hot Water - Tank Insulation on Water Heater | Focus on Energy Recommendations | $200 | | 10 | 2012 | | 10 | | | | | | | | | | | |
| Public Works Facility - Domestic Hot Water -Water Temperature Reduction on Water Heater | Focus on Energy Recommendations | | | | | | | | | | | | | | | | | |
| Public Works Facility - HVAC - Fans to Push Hot Air Down to Floor Level - Mechanics Bays | Big Ass Fans Quote - Fans used at Wisconsin Dells Kalahari to reduce energy usage - 2' clearance all sides- 14' diameter- 1 year warranty - Capable of reducing energy usage by 30% - assumed 10% reduction in therms and 1% reduction in electrical | $2,750 | | 25 | 2013 | 727 | 1,150 | | | | | | | | | | | |
| Public Works Facility - HVAC - Furnace Tune-up | Focus on Energy Recommendations (Assuming .1% energy reduction) | $350 | | 25 | 2012 | 7 | 1 | | | | | | | | | Annual Expense | $350 | 1 |
| Public Works Facility - HVAC - Overhead Door Seals - Replacement | Focus on Energy Recommendations (Assuming 1% energy reduction) | $20,000 | | 25 | 2013 | 70 | 10 | | | | | | | | | | | |
| Public Works Facility - Renewable - Solar Electric Power | Focus on Energy Recommendations | $1,070,000 | | 25 | 2015 | | | | | | 167,659 | | | | | | | |
| Senior Center - Lighting - Lighting Retrofit | WPPI Recommendation ($2-$4/lamp) | $104 | | 10 | 2011 | 2,000 | | | | | | | | | | | | |

**'Measures' Tab (Continued)**

| ***Measure Name*** | Measure Description | ***Total Installed Cost*** | Financial Incentives | ***Measure Life*** | ***Measure Installed Date*** | ***Annual Energy Saved*** | | | | | ***Annual Energy Generated*** | | | | | Non-Energy Cost 1 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | kWh | therms | gallons unleaded | gallons diesel | gallons propane | kWh | therms | gallons unleaded | gallons diesel | gallons propane | Description | Cost ($) | How often (years) |
| Senior Center - Domestic Hot Water - Water Temperature Reduction on Water Heater | Focus on Energy Recommendations | $1 | | 25 | 2011 | | 2 | | | | | | | | | | | |
| Senior Center - HVAC - Furnace Tune-up | Focus on Energy Recommendations | $350 | | 25 | 2011 | | 48 | | | | | | | | | Annual Expense | 350 | 1 |
| Senior Center - HVAC - Window Treatment - Blinds | Focus on Energy Recommendations | $5,000 | | 25 | 2012 | 4 | 1 | | | | | | | | | | | |
| Senior Center - Remove Soda Machine | | $20 | | 100 | 2011 | 630 | | | | | | | | | | | | |
| Senior Center - Renewables - Solar Electric Power | Focus on Energy Recommendations | $175,000 | | 25 | 2015 | | | | | | 28,685 | | | | | | | |
| Jefferson Utilities/Police Department - Domestic Hot Water - On Demand Water Heater Installation | Focus on Energy Recommendations - Assumed 20% savings on gas & electric for HW based on FOE facility energy use break down | $2,000 | | 25 | 2015 | 100 | 925 | | | | | | | | | | | |
| Jefferson Utilities/Police Department - HVAC -High Efficiency Retrofits/Internal Heating of Air with CO Sensor | Partial Focus on Energy Recommendation (Lump System Issues together - System too complicated to separate at this time) Assumed current system salvageable and complete overhaul - Assume 40% reduction in energy usage - based on modified FOE spreadsheet | $400,000 | | 25 | 2013 | 104,432 | 9,862 | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jefferson Utilities/Police Department - Renewables - HVAC-Geothermal | Assuming System not salvageable - Assuming 60% reduction- based on modified FOE spreadsheet | $900,000 | | 25 | 2013 | 156,647 | 14,793 | | | | | | | | | | | |

**'Measures' Tab (Continued)**

| ***Measure Name*** | Measure Description | ***Total Installed Cost*** | Financial Incentives | ***Measure Life*** | ***Measure Installed Date*** | ***Annual Energy Saved*** | | | | | ***Annual Energy Generated*** | | | | | Non-Energy Cost 1 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | kWh | therms | gallons unleaded | gallons diesel | gallons propane | kWh | therms | gallons unleaded | gallons diesel | gallons propane | Description | Cost ($) | How often (years) |
| Jefferson Utilities/Police Department - Renewables - Solar Hot Water | Focus on Energy Recommendations - Determined to not be worth it by Solar Auditor | | | | | - | - | | | | | | | | | | | |
| Jefferson Utilities/Police Department - Renewables - Solar Electric Power | Focus on Energy Recommendations | $1,100,000 | | 25 | 2015 | | | | | | 195,574 | | | | | | | |
| Wastewater Treatment Plant - HVAC - Exhaust Air Heat Recovery System | Focus on Energy Recommendations | | | | | | | | | | | | | | | | | |
| Wastewater Treatment Plant - HVAC - Furnace Tune-up | Focus on Energy Recommendations | | | | | | | | | | | | | | | | | |
| Wastewater Treatment Plant - HVAC - Infrared Heating Units - Replace Existing System | Focus on Energy Recommendations | | | | | | | | | | | | | | | | | |
| Wastewater Treatment Plant - HVAC - Linkage less Boiler Control | Focus on Energy Recommendations | | | | | | | | | | | | | | | | | |
| Wastewater Treatment Plant - Plant Upgrades - Aeration Blower #4 Motor | WPPI Recommendation - Motor downsize and efficiency upgrade | $1,300 | | 20 | 2012 | 44,050 | | | | | | | | | | | | |
| Wastewater Treatment Plant - Channel Blower #2 Motor | WPPI Recommendation - Motor downsize and efficiency upgrade | $350 | | 20 | 2012 | 6,824 | | | | | | | | | | | | |

**'Measures' Tab (Continued)**

| ***Measure Name*** | Measure Description | ***Total Installed Cost*** | Financial Incentives | ***Measure Life*** | ***Measure Installed Date*** | ***Annual Energy Saved*** | | | | | ***Annual Energy Generated*** | | | | | Non-Energy Cost 1 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | kWh | therms | gallons unleaded | gallons diesel | gallons propane | kWh | therms | gallons unleaded | gallons diesel | gallons propane | Description | Cost ($) | How often (years) |
| Wastewater Treatment Plant - Plant Upgrades - Primary Clarifier #2 Motor | WPPI Recommendation - Motor downsize and efficiency upgrade | $250 | | 20 | 2012 | 1,264 | | | | | | | | | | | | |
| Wastewater Treatment Plant - Plant Upgrades - Non-potable water pump #1 motor | WPPI Recommendation - Motor downsize and efficiency upgrade | $475 | | 20 | 2013 | 387 | | | | | | | | | | | | |
| Wastewater Treatment Plant - Plant Upgrades - Non-potable water pump #2 motor | WPPI Recommendation - Motor downsize and efficiency upgrade | $475 | | 20 | 2013 | 387 | | | | | | | | | | | | |
| Wastewater Treatment Plant - Plant Upgrades - Non-potable water pump #1 motor | WPPI Recommendation - Motor downsize and efficiency upgrade | $475 | | 20 | 2013 | 387 | | | | | | | | | | | | |
| Wastewater Treatment Plant - Plant Upgrades - Non-potable water pump #2 motor | WPPI Recommendation - Motor downsize and efficiency upgrade | $475 | | 20 | 2013 | 387 | | | | | | | | | | | | |
| Wastewater Treatment Plant - Plant Upgrades - DAF Recycle pump #1 replacement | WPPI Recommendation - Motor efficiency upgrade | $900 | | 20 | 2014 | 6,145 | | | | | | | | | | | | |
| Wastewater Treatment Plant - Plant Upgrades - DAF Recycle pump #2 replacement | WPPI Recommendation - Motor downsize and efficiency upgrade | $900 | | 20 | 2014 | 6,145 | | | | | | | | | | | | |
| Wastewater Treatment Plant - Primary Clarifier Drive #1 Motor | WPPI Recommendation - Motor efficiency upgrade | $300 | | 20 | 2015 | 1,742 | | | | | | | | | | | | |

**'Measures' Tab (Continued)**

| ***Measure Name*** | Measure Description | ***Total Installed Cost*** | Financial Incentives | ***Measure Life*** | ***Measure Installed Date*** | ***Annual Energy Saved*** | | | | | ***Annual Energy Generated*** | | | | | Non-Energy Cost 1 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | kWh | therms | gallons unleaded | gallons diesel | gallons propane | kWh | therms | gallons unleaded | gallons diesel | gallons propane | Description | Cost ($) | How often (years) |
| Wastewater Treatment Plant - Plant Upgrades - Primary Clarifier Drive #1 Motor | WPPI Recommendation - Motor efficiency upgrade | $300 | | 20 | 2015 | 1,743 | | | | | | | | | | | | |
| Wastewater Treatment Plant - HVAC - Building 75 | WPPI Recommendation - Boiler Replacement | $8,000 | | 25 | 2014 | | 2,424 | | | | | | | | | | | |
| Wastewater Treatment Plant - HVAC - Building 10 | WPPI Recommendation - Boiler Replacement | $5,000 | | 25 | 2016 | | 431 | | | | | | | | | | | |
| Wastewater Treatment Plant - Lighting - Maintenance Bay Lighting Building 78 | WPPI Recommendation - Lighting Fixture Replacement | $1,212 | | 20 | 2013 | 3,200 | | | | | | | | | | | | |
| Wastewater Treatment Plant - Lighting - Lab Lighting Building 75 | WPPI Recommendation - Lighting Fixture Replacement | $750 | | 20 | 2014 | 1,200 | | | | | | | | | | | | |
| Wastewater Treatment Plant - Lighting -Light Fixtures Building 68 | WPPI Recommendation - Lighting Fixture Replacement | $2,144 | | 20 | 2015 | 1,600 | | | | | | | | | | | | |
| Wastewater Treatment Plant - Lighting -Light Fixtures Building 75 | WPPI Recommendation - Lighting Fixture Replacement | $560 | | 20 | 2016 | 900 | | | | | | | | | | | | |
| Wastewater Treatment Plant - HVAC - Heat Exchanger Building 68 | WPPI Recommendation - Air to Air Heat Exchanger | $15,000 | | 20 | 2016 | 1,956 | | | | | | | | | | | | |

**'Measures' Tab (Continued)**

| ***Measure Name*** | Measure Description | ***Total Installed Cost*** | Financial Incentives | ***Measure Life*** | ***Measure Installed Date*** | ***Annual Energy Saved*** | | | | | ***Annual Energy Generated*** | | | | | Non-Energy Cost 1 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | kWh | therms | gallons unleaded | gallons diesel | gallons propane | kWh | therms | gallons unleaded | gallons diesel | gallons propane | Description | Cost ($) | How often (years) |
| Wastewater Treatment Plant - HVAC - Heat Exchanger Building 12 | WPPI Recommendation - Air to Air Heat Exchanger | $15,000 | | 20 | 2016 | 1,956 | | | | | | | | | | | | |
| Wastewater Treatment Plant - Renewables - Anaerobic Digester - Methane Utilization of Current Loading | 187,118 kWh & 7,667 Therms | $200,000 | | 20 | 2012 | | | | | | 299,361 | | | | | | | |
| Wastewater Treatment Plant - Renewables - Anaerobic Digester - Methane Utilization of Maximum Loading | Conservative - not using three tanks (may be possible to create some more) Assumed waste from Tyson grease and Valero distill ant-kWh shown same as 352,238 kWh and 14,434 therms | $400,000 | | 20 | 2017 | | | | | | 563,551 | | | | | | | |
| Wastewater Treatment Plant - Building #10, 12, 68, 75, 78, 80 - Renewables - Solar Electric Power | Focus on Energy Recommendations | $551,000 | | 25 | 2015 | | | | | | 85,605 | | | | | | | |
| Museum - Demo - Eliminate Consumption | | $2,903 | | 100 | 2011 | 1,300 | 535 | | | | | | | | | | | |
| Street Lights - Lighting - LED Retrofit | | $602,000 | | 25 | 2015 | 390,769 | | | | | | | | | | | | |
| Street Lights - Lighting - Induction Retrofit | | $344,000 | | 25 | 2015 | 390,769 | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Street Lights - Lighting - Fluorescent Retrofit | | $301,000 | | 25 | 2015 | 390,769 | | | | | | | | | | | | |

**'Measures' Tab (Continued)**

| ***Measure Name*** | Measure Description | ***Total Installed Cost*** | Financial Incentives | ***Measure Life*** | ***Measure Installed Date*** | ***Annual Energy Saved*** | | | | | ***Annual Energy Generated*** | | | | | Non-Energy Cost 1 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | kWh | therms | gallons unleaded | gallons diesel | gallons propane | kWh | therms | gallons unleaded | gallons diesel | gallons propane | Description | Cost ($) | How often (years) |
| Dam - Renewables - Hydroelectric | Found to be generally cost prohibitive. There may be low cost ways to produce some power but still the investment out weighs the costs. More feasibility study work would be needed to truly assess costs and potential energy production | | | | | | | | | | | | | | | | | |
| Compost Site - Renewables - Digestor-BioGas Technology (Methane Production from Yard Waste/Woody Vegetation/Leaf Collection) | | | | | | | | | | | | | | | | | | |
| Public - Renewables - Solar | Determined to be more costly than roof installations per solar auditor - not pursued at this time | | | | | | | | | | | | | | | | | |
| Public - Renewables - Wind | Fair Park Audit - information Endurance Wind Power - must be sited on west side of City - No land acquisition costs included | $350,000 | $100,000 | 25 | 2015 | | | | | | 120,570 | | | | | Operation and Maintenance | 1750 | 1 |
| Public - Renewables - Wind | Fair Park Audit information - Northern Power Systems - must be sited on west side of City - No land acquisition costs included | $550,000 | $100,000 | 25 | 2015 | | | | | | 139,057 | | | | | Operation and Maintenance | 2750 | 1 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Public - Renewables - Wind | Fair Park Audit information -Global Wind Power - must be sited on west side of City | $750,000 | | 25 | 2015 | | | | | | 335,725 | | | | | Operation and Maintenance | 3750 | 1 |
| Public - Renewables - Wind | Fair Park Audit information - RRB Energy - must be sited on west side of City - No land acquisition costs included | $1,800,000 | | 25 | 2015 | | | | | | 1,020,553 | | | | | Operation and Maintenance | 9000 | 1 |
| Public - Renewables - Wind | Fair Park Audit information - Power wind - must be sited on west side of City - No land acquisition costs included | $2,700,000 | | 25 | 2015 | | | | | | 1,778,753 | | | | | Operation and Maintenance | 27000 | 1 |

**'Measures' Tab (Continued)**

| ***Measure Name*** | Measure Description | ***Total Installed Cost*** | Financial Incentives | ***Measure Life*** | ***Measure Installed Date*** | ***Annual Energy Saved*** | | | | | ***Annual Energy Generated*** | | | | | Non-Energy Cost 1 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | kWh | therms | gallons unleaded | gallons diesel | gallons propane | kWh | therms | gallons unleaded | gallons diesel | gallons propane | Description | Cost ($) | How often (years) |
| Fleet - Renewables - Compressed Methane | More Feasibility work needed - Initial research showing investment/setup costs outweighs savings both in fuel and costs | | | | | | | | | | | | | | | | | |
| Fleet - Renewables - Ethanol | More Feasibility work needed - Initial research showing investment/setup costs outweighs savings both in fuel and costs | | | | | | | | | | | | | | | | | |
| Fleet - Renewables - Biodiesel | More Feasibility work needed - Initial research showing investment/setup costs outweighs savings both in fuel and costs | | | | | | | | | | | | | | | | | |
| Fleet - Efficiency - LP | More Feasibility work needed - Initial research showing investment/setup costs outweighs savings both in fuel and costs | | | | | | | | | | | | | | | | | |
| Fleet - Efficiency - Natural Gas | More Feasibility work needed - Initial research showing investment/setup costs outweighs savings both in fuel and costs | | | | | | | | | | | | | | | | | |
| Fleet - Efficiency - Electric | More Feasibility work needed - Each future purchase will need to be evaluated to see if electric is the right type of vehicle for the City | | | | | | | | | | | | | | | | | |
| Fleet - Efficiency - Hybrid Fuel Cells (Hydrogen On-Demand) | Potential to achieve double fuel mileage - Minimum Savings for vehicle 320 gallons annually | $40,000 | | 5 | 2015 | | | 2,900 | 4,650 | | | | | | | Operation and Maintenance | 8000 | 1 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Fleet - Efficiency - Hybrid | More Feasibility work needed - Each future purchase will need to be evaluated to see if a hybrid is the right type of vehicle for the City | | | | | | | | | | | | | | | | | |
| Policy - Energy Policy/Purchasing Policy - Behavior modification | Assuming that changes in policies and behaviors can save a minimum of 1% of energy | $1,000 | | 1 | 2012 | 37,519 | 943 | 167 | 174 | | | | | | | On-going training and efforts | | 1 |

**‘Alt Fuels’ Tab**

**2025 fleet projection**

*Your community's fuel use*

| | | |
|---|---|---|
| Unleaded | 17,256 | gallons |
| Diesel | 18,018 | gallons |

*Reference table*

| | | | |
|---|---|---|---|
| Ethanol | 80,000 | Btus/gallonR | |
| Biodiesel | 120,000 | Btus/gallonR | |
| CNG | 38,000 | Btus/gallonNG | @ 3,000-3,600 psi |
| LNG | 73,500 | Btus/gallonNG | @ 73,500 psi |
| LPG | 84,000 | Btus/gallonP | @ 84,000 psi |

*Fleet conversion*

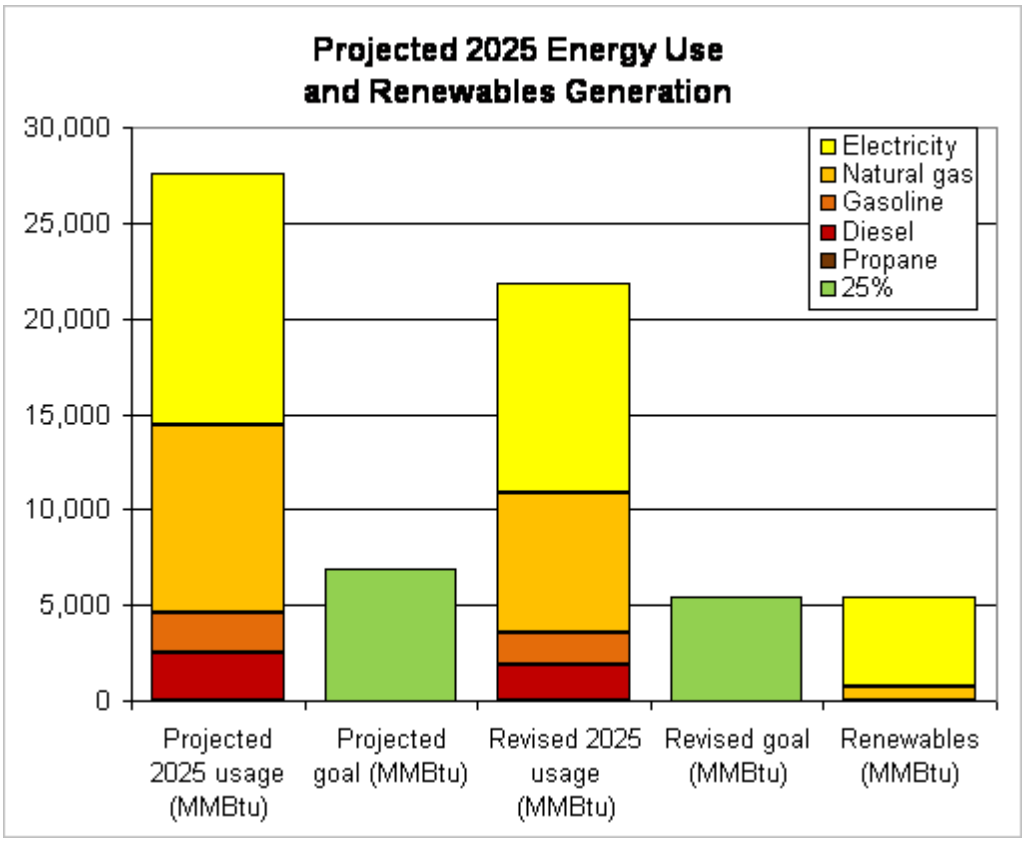
| | Enter *either* ... | | To be replaced or blended with ... | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Existing fleet type | Gallons | Percentage | Alternate fuel | What amount (100% for replacement, 85% for E85, etc.) | Unleaded gallons avoided w/ renewables | Diesel gallons avoided w/ renewables | Natural gas expended (therms) | Propane expended (nat gas) | Original gallons | Original Btu content per gallon | New Btu content if liquid fuel replacement | Equivalent gallons (on Btu basis) of replacement | Portion of replacement fuel that is still fossil | Gallons of fossil avoided w/ liquid fuel alternative | Therms of natural gas needed | Gallons of propane needed |
| Unleaded | | 25% | Ethanol | 85% | 3,387 | | | | 4314.021 | 124000 | 86600 | 6177.12 | 926.57 | 3387 | | |
| | | | | | | | | | | | #N/A | #N/A | #N/A | #N/A | #N/A | #N/A |
| | | | | | | | | | | | #N/A | #N/A | #N/A | #N/A | #N/A | #N/A |
| | | | | | | | | | | | #N/A | #N/A | #N/A | #N/A | #N/A | #N/A |
| | | | | | | | | | | | #N/A | #N/A | #N/A | #N/A | #N/A | #N/A |
| | | | | | | | | | | | #N/A | #N/A | #N/A | #N/A | #N/A | #N/A |
| | | | | | | | | | | | #N/A | #N/A | #N/A | #N/A | #N/A | #N/A |
| | | | | | | | | | | | #N/A | #N/A | #N/A | #N/A | #N/A | #N/A |
| | | | | | | | | | | | #N/A | #N/A | #N/A | #N/A | #N/A | #N/A |
| | | | | | | | | | | | #N/A | #N/A | #N/A | #N/A | #N/A | #N/A |
| | | | | | 3,387 | - | - | - | | | | | | | | |
| Measure | Measure | Total | Financial | Measure | Measure | Annual Energy Saved | | | Annual Energy Generated | | | | | Non-Energy Cost 1 | | |

| Name | Description | Installed Cost | Incentives | Life | Installed Date | kWh | therms | gallons unleaded | gallons diesel | gallons propane | kWh | therms | gallons unleaded | gallons diesel | gallons propane | Description | Cost ($) | How often (years) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Liquid fuel reduction/ replacement | 1 different fleet changes | | | | | | - | | | - | | | 3,387 | - | | | | |

* Copy and paste cells A25:P25 onto one of the rows in the measure tab to use this as a measure. (Be sure to PASTE SPECIAL: VALUES ONLY.) You are responsible for cost, incentive, measure life, etc., information.

**'Results' Tab**

| PORTFOLIO SUMMARY | | | | |
|---|---|---|---|---|
| Installed cost before incentives | Incentive amounts | Present value cost with incentives | lbs $CO_2$ avoided from fossil emissions | Percent of goal achieved (see below) |
| $ 1,348,527.55 | $ 177,200.00 | $ 1,304,359.40 | 1,979,648 | 100% |




| | |
|---|---|
| Projected 2025 usage (MMBtu) | 27,597 |
| Revised 2025 usage (w/ efficiency) (MMBtu) | 21,862 |
| Revised 25% 2025 renewables goal (MMBtu) | 5,465 |
| Sum of renewable measures (MMBtu) | 5,463 |
| Percent of goal achieved | 100% |

| | |
|---|---|
| Baseline lbs $CO_2$: | 8,169,118 |
| New lbs $CO_2$: | 6,189,470 |
| CO2 Reduction: | 0 |

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**'Results' Tab (Continued)**

| | | MEASURES | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Name | Savings-to-investment ratio | Savings/ generation | Installed cost before incentives | Incentive amounts | Present value cost with incentives | lbs $CO_2$ avoided from fossil emissions |
| 10% | R | Wisconsin RPS | -- | 291361 kWh | -- | -- | -- | 492,982 |
| 2,800 | R | Purchased renewable electricity | 13.08 | 840000 kWh | $ 5,600 | -- | $ 64,232 | 1,421,280 |
| On | E | EMS/Parks/Cold Storage - Lighting - Lighting Retrofit | 22.72 | 3000 kWh | $ 100 | $ - | $ 100 | 17 |
| On | E | EMS/Parks/Cold Storage - HVAC - Furnace Tune Up | 1.10 | 99 therms | $ 200 | $ - | $ 1,083 | 116 |
| On | E | EMS/Parks/Cold Storage - HVAC - Setback Thermostat Installation | 40.38 | 140 therms | $ 50 | $ - | $ 49 | 166 |
| Off | E | EMS/Parks/Cold Storage - HVAC - Window Treatment - Blinds | 0.06 | 2 therms | $ 500 | $ - | $ 500 | 2 |
| Off | R | EMS/Parks/Cold Storage - Renewables - Solar Electric Power | 0.09 | 98340 kWh | $ 600,000 | $ - | $ 532,800 | 568 |
| Off | E | Fire Station - HVAC - Furnace Retrofit-High Efficiency | 0.28 | 180 therms | $ 12,668 | $ - | $ 12,668 | 219 |
| On | E | Fire Station - Lighting - Lighting Retrofit | 1.82 | 1200 kWh | $ 500 | $ - | $ 500 | 7 |
| On | E | Fire Station - Domestic Hot Water - Water Heater - Upgrade High Efficient | 1.92 | 380 therms | $ 2,000 | $ - | $ 1,776 | 445 |
| On | E | Fire Station - Domestic Hot Water - Water Temperature Reduction on Water Heater | 26.24 | 2 therms | $ 1 | $ - | $ 1 | 2 |
| Off | R | Fire Station - Renewables - Solar Electric Power | 0.10 | 43643 kWh | $ 250,000 | $ - | $ 222,000 | 252 |
| On | E | Aquatic Center - Conservation - Chemical Pool Cover | 14.12 | 1496 therms | $ 236 | $ - | $ 1,278 | 1,752 |
| Off | E | Aquatic Center - Conservation - Pool Cover | 0.66 | 1496 therms | $ 5,000 | $ - | $ 27,401 | 1,752 |
| Off | E | Aquatic Center - Lighting - Building Lighting Retrofit | 0.09 | 600 kWh | $ 5,250 | $ - | $ 5,250 | 3 |
| Off | E | Aquatic Center - Lighting - Facility Lighting Retrofit | 0.19 | 1500 kWh | $ 6,000 | $ - | $ 6,000 | 9 |
| On | R | Aquatic Center - Renewable - Solar Hot Water | 1.52 | 11484 therms | $ 107,000 | $ 31,500 | $ 99,062 | 13,445 |
| Off | R | Aquatic Center - Renewables - Solar Electric Power | 0.06 | 5000 kWh | $ 45,000 | $ - | $ 39,960 | 29 |
| On | E | City Hall/Library/Mtg Rooms/Museum - Lighting - Library Lighting Retrofit | 20.30 | 13400 kWh | $ 500 | $ - | $ 500 | 77 |
| Off | E | City Hall/Library/Mtg Rooms/Museum - Domestic Hot Water - Pipe Insulation on Domestic Hot Water Lines | 0.21 | 8 therms | $ 500 | $ - | $ 500 | 9 |
| On | E | City Hall/Library/Mtg Rooms/Museum - Domestic Hot Water - Water Temperature Reduction on Water Heater | 26.24 | 2 therms | $ 1 | $ - | $ 1 | 2 |
| Off | E | City Hall/Library/Mtg Rooms/Museum - HVAC - Boiler Plumbing - Insulation | 0.21 | 8 therms | $ 500 | $ - | $ 500 | 9 |
| On | E | City Hall/Library/Mtg Rooms/Museum - HVAC - Boiler Replacement & Controls Upgrade - High Performance | 1.29 | 2500 therms | $ 96,000 | $ 62,165 | $ 33,835 | 3,010 |
| On | E | City Hall/Library/Mtg Rooms/Museum - HVAC - Air Condensers Replacement/Air Handlers (All except meeting rooms and council chambers) - High Efficiency | 0.31 | 18600 kWh | $ 129,000 | $ 83,535 | $ 45,465 | 107 |
| On | E | City Hall/Library/Mtg Rooms/Museum - HVAC - Preventative Maintenance Program | 0.44 | 10 therms | $ 300 | $ - | $ 300 | 12 |
| Off | | | | | | | | |
| Off | R | City Hall/Library/Mtg Rooms/Museum - Renewables - Solar Electric Power | 0.11 | 73842 kWh | $ 427,000 | $ 32,850 | $ 350,005 | 426 |
| Off | E | Public Works Facility - Domestic Hot Water - Tank Insulation on Water Heater | 0.36 | 10 therms | $ 200 | $ - | $ 339 | 12 |
| Off | | | | | | | | |
| On | E | Public Works Facility - HVAC - Fans to Push Hot Air Down to Floor Level - Mechanics Bays | 5.06 | 1150 therms | $ 2,750 | $ - | $ 2,593 | 1,351 |
| Off | E | Public Works Facility - HVAC - Furnace Tune-up | 0.00 | 1 therms | $ 350 | $ - | $ 3,955 | 1 |
| Off | E | Public Works Facility - HVAC - Overhead Door Seals - Replacement | 0.01 | 10 therms | $ 20,000 | $ - | $ 18,860 | 12 |
| Off | R | Public Works Facility - Renewable - Solar Electric Power | 0.09 | 167659 kWh | $ 1,070,000 | $ - | $ 950,160 | 968 |
| On | E | Senior Center - Lighting - Lighting Retrofit | 8.35 | 2000 kWh | $ 104 | $ - | $ 181 | 12 |
| On | E | Senior Center - Domestic Hot Water - Water Temperature Reduction on Water Heater | 26.24 | 2 therms | $ 1 | $ - | $ 1 | 2 |
| Off | E | Senior Center - HVAC - Furnace Tune-up | 0.15 | 48 therms | $ 350 | $ - | $ 4,305 | 56 |
| Off | E | Senior Center - HVAC - Window Treatment - Blinds | 0.00 | 1 therms | $ 5,000 | $ - | $ 4,855 | 1 |
| On | E | Senior Center - Remove Soda Machine | 23.86 | 630 kWh | $ 20 | $ - | $ 20 | 4 |

**'Results' Tab (Continued)**

| | | MEASURES | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Name | Savings-to-investment ratio | Savings/ generation | Installed cost before incentives | Incentive amounts | Present value cost with incentives | lbs $CO_2$ avoided from fossil emissions | Simple Payback [years] |
| Off | R | Senior Center - Renewables - Solar Electric Power | 0.09 | 28685 kWh | $ 175,000 | $ - | $ 155,400 | 166 | 87.15 |
| On | E | Jefferson Utilities/Police Department - Domestic Hot Water - On Demand Water Heater Installation | 4.69 | 925 therms | $ 2,000 | $ - | $ 1,776 | 1,084 | 2.15 |
| On | E | Jefferson Utilities/Police Department - HVAC -High Efficiency Retrofits/Internal Heating of Air with CO Sensor | 0.46 | 9862 therms | $ 400,000 | $ - | $ 377,200 | 12,149 | 23.29 |
| Off | E | Jefferson Utilities/Police Department - Renewables - HVAC-Geothermal | 0.31 | 14793 therms | $ 900,000 | $ - | $ 848,700 | 18,224 | 34.94 |
| Off | | | | | | | | | #DIV/0! |
| Off | R | Jefferson Utilities/Police Department - Renewables - Solar Electric Power | 0.10 | 195574 kWh | $ 1,100,000 | $ - | $ 976,800 | 1,129 | 80.35 |
| Off | | | | | | | | | #DIV/0! |
| Off | | | | | | | | | #DIV/0! |
| Off | | | | | | | | | #DIV/0! |
| Off | | | | | | | | | #DIV/0! |
| On | E | Wastewater Treatment Plant - Plant Upgrades - Aeration Blower #4 Motor | 24.21 | 44050 kWh | $ 1,300 | $ - | $ 1,262 | 254 | 0.42 |
| On | E | Wastewater Treatment Plant - Channel Blower #2 Motor | 13.93 | 6824 kWh | $ 350 | $ - | $ 340 | 39 | 0.73 |
| On | E | Wastewater Treatment Plant - Plant Upgrades -Primary Clarifier #2 Motor | 3.61 | 1264 kWh | $ 250 | $ - | $ 243 | 7 | 2.83 |
| Off | E | Wastewater Treatment Plant - Plant Upgrades -Non-potable water pump #1 motor | 0.55 | 387 kWh | $ 475 | $ - | $ 448 | 2 | 17.53 |
| Off | E | Wastewater Treatment Plant - Plant Upgrades -Non-potable water pump #2 motor | 0.55 | 387 kWh | $ 475 | $ - | $ 448 | 2 | 17.53 |
| Off | E | Wastewater Treatment Plant - Plant Upgrades -Non-potable water pump #1 motor | 0.55 | 387 kWh | $ 475 | $ - | $ 448 | 2 | 17.53 |
| Off | E | Wastewater Treatment Plant - Plant Upgrades -Non-potable water pump #2 motor | 0.55 | 387 kWh | $ 475 | $ - | $ 448 | 2 | 17.53 |
| On | E | Wastewater Treatment Plant - Plant Upgrades -DAF Recycle pump #1 replacement | 4.27 | 6145 kWh | $ 900 | $ - | $ 824 | 35 | 2.09 |
| On | E | Wastewater Treatment Plant - Plant Upgrades -DAF Recycle pump #2 replacement | 4.27 | 6145 kWh | $ 900 | $ - | $ 824 | 35 | 2.09 |
| On | E | Wastewater Treatment Plant - Primary Clarifier Drive #1 Motor | 3.36 | 1742 kWh | $ 300 | $ - | $ 266 | 10 | 2.46 |
| On | E | Wastewater Treatment Plant - Plant Upgrades -Primary Clarifier Drive #1 Motor | 3.36 | 1743 kWh | $ 300 | $ - | $ 266 | 10 | 2.46 |
| On | E | Wastewater Treatment Plant - HVAC - Building 75 | 3.29 | 2424 therms | $ 8,000 | $ - | $ 7,320 | 2,838 | 3.30 |
| Off | E | Wastewater Treatment Plant - HVAC - Building 10 | 0.80 | 431 therms | $ 5,000 | $ - | $ 4,315 | 505 | 11.60 |
| On | E | Wastewater Treatment Plant - Lighting - Maintenance Bay Lighting Building 78 | 1.77 | 3200 kWh | $ 1,212 | $ - | $ 1,143 | 18 | 5.41 |
| On | E | Wastewater Treatment Plant - Lighting - Lab Lighting Building 75 | 1.00 | 1200 kWh | $ 750 | $ - | $ 686 | 7 | 8.93 |
| Off | E | Wastewater Treatment Plant - Lighting -Light Fixtures Building 68 | 0.43 | 1600 kWh | $ 2,144 | $ - | $ 1,904 | 9 | 19.14 |
| Off | E | Wastewater Treatment Plant - Lighting -Light Fixtures Building 75 | 0.85 | 900 kWh | $ 560 | $ - | $ 483 | 5 | 8.89 |
| Off | E | Wastewater Treatment Plant - HVAC - Heat Exchanger Building 68 | 0.07 | 1956 kWh | $ 15,000 | $ - | $ 12,945 | 11 | 109.55 |
| Off | E | Wastewater Treatment Plant - HVAC - Heat Exchanger Building 12 | 0.07 | 1956 kWh | $ 15,000 | $ - | $ 12,945 | 11 | 109.55 |
| On | R | Wastewater Treatment Plant - Renewables - Anaerobic Digester -Methane Utilization of Current Loading | 1.07 | 299361 kWh | $ 200,000 | $ - | $ 194,200 | 1,728 | 9.54 |
| Off | R | Wastewater Treatment Plant - Renewables - Anaerobic Digester -Methane Utilization of Maximum Loading | 0.68 | 563551 kWh | $ 400,000 | $ - | $ 334,800 | 3,253 | 10.14 |
| Off | R | Wastewater Treatment Plant - Building #10, 12, 68, 75, 78, 80 - Renewables - Solar Electric Power | 0.09 | 85605 kWh | $ 551,000 | $ - | $ 489,288 | 494 | 91.95 |
| On | E | Museum - Demo - Eliminate Consumption | 2.76 | 535 therms | $ 2,903 | $ - | $ 2,903 | 634 | 4.64 |
| Off | E | Street Lights - Lighting - LED Retrofit | 0.38 | 390769 kWh | $ 602,000 | $ - | $ 534,576 | 2,256 | 22.01 |
| On | E | Street Lights - Lighting - Induction Retrofit | 0.66 | 390769 kWh | $ 344,000 | $ - | $ 305,472 | 2,256 | 12.58 |
| Off | E | Street Lights - Lighting - Fluorescent Retrofit | 0.75 | 390769 kWh | $ 301,000 | $ - | $ 267,288 | 2,256 | 11.00 |
| Off | | | | | | | | | #DIV/0! |
| Off | | | | | | | | | #DIV/0! |

**'Results' Tab (Continued)**

| | | MEASURES | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Name | Savings-to-investment ratio | Savings/ generation | Installed cost before incentives | Incentive amounts | Present value cost with incentives | lbs $CO_2$ avoided from fossil emissions | Simple Payback [years] |
| Off | | | | | | | | | #DIV/0! |
| Off | R | Public - Renewables - Wind | 0.26 | 120570 kWh | $ 350,000 | $ 100,000 | $ 235,265 | 696 | 29.62 |
| Off | R | Public - Renewables - Wind | 0.17 | 139057 kWh | $ 550,000 | $ 100,000 | $ 420,445 | 803 | 46.23 |
| Off | R | Public - Renewables - Wind | 0.25 | 335725 kWh | $ 750,000 | $ - | $ 694,425 | 1,938 | 31.91 |
| Off | R | Public - Renewables - Wind | 0.31 | 1020553 kWh | $ 1,800,000 | $ - | $ 1,666,620 | 5,892 | 25.20 |
| Off | R | Public - Renewables - Wind | 0.35 | 1778753 kWh | $ 2,700,000 | $ - | $ 2,602,260 | 10,269 | 21.68 |
| Off | | | | | | | | | #DIV/0! |
| Off | | | | | | | | | #DIV/0! |
| Off | | | | | | | | | #DIV/0! |
| Off | | | | | | | | | #DIV/0! |
| Off | | | | | | | | | #DIV/0! |
| Off | | | | | | | | | #DIV/0! |
| On | E | Fleet - Efficiency - Hybrid Fuel Cells (Hydrogen On- Demand) | 1.22 | 4650 gallons diesel | $ 40,000 | $ - | $ 153,240 | 21,485 | 2.22 |
| Off | | | | | | | | | #DIV/0! |
| On | E | Policy - Energy Policy/Purchasing Policy - Behavior modification | 8.92 | 37519 kWh | $ 1,000 | $ - | $ 5,417 | 2,266 | 0.23 |

**'Summary' Tab**

Jefferson

| | 2003 | | | | | | | | 2004 | | | | | | | | 2005 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kWh | therms | unleaded | diesel | Other 1 | Other 2 | Other 3 | dollars | kWh | therms | unleaded | diesel | Other 1 | Other 2 | Other 3 | dollars | kWh | therms | unleaded | diesel | Other 1 | Other 2 | Other 3 | dollars |
| Buildings | 710,193 | 69,888 | | | -4,483 | | | $98,771 | 692,749 | 64,873 | | | 4 | | | $100,116 | 735,787 | 55,082 | | | -9 | | | $105,633 |
| Water | 1,029,576 | 21,913 | | | -10,027 | | | $128,812 | 2,397,165 | 36,547 | | | -3 | | | $135,839 | 2,236,455 | 31,884 | | | 5 | | | $137,764 |
| Lights | | | | | | | | | | | | | | | | | | | | | | | | |
| Fleet | | | | | | | | | | | | | | | | | | | 6,376 | 7,657 | | 444 | | $32,646 |

*In MMBTus*

| | 2003 | | | | | | | | 2004 | | | | | | | | 2005 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kWh | therms | unleaded | diesel | Other 1 | Other 2 | Other 3 | end use subtotals | kWh | therms | unleaded | diesel | Other 1 | Other 2 | Other 3 | end use subtotals | kWh | therms | unleaded | diesel | Other 1 | Other 2 | Other 3 | end use subtotals |
| Buildings | 2,423 | 6,989 | 0 | 0 | -4 | 0 | 0 | 9,407 | 2,364 | 6,487 | 0 | 0 | 0 | 0 | 0 | 8,851 | 2,511 | 5,508 | 0 | 0 | 0 | 0 | 0 | 8,019 |
| Water | 3,513 | 2,191 | 0 | 0 | -10 | 0 | 0 | 5,694 | 8,179 | 3,655 | 0 | 0 | 0 | 0 | 0 | 11,834 | 7,631 | 3,188 | 0 | 0 | 0 | 0 | 0 | 10,819 |
| Lights | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fleet | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 791 | 1,064 | 0 | 58 | 0 | 1,913 |
| Totals | 5,936 | 9,180 | 0 | 0 | -15 | 0 | 0 | 15,102 | 10,543 | 10,142 | 0 | 0 | 0 | 0 | 0 | 20,685 | 10,141 | 8,697 | 791 | 1,064 | 0 | 58 | 0 | 20,751 |
| Dollars | | | | | | | | $227,582 | | | | | | | | $235,955 | | | | | | | | $276,043 |

**'Summary' Tab (Continued)**

| | 2006 | | | | | | | | 2007 | | | | | | | | 2008 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kWh | therms | unleaded | diesel | Other 1 | Other 2 | Other 3 | dollars | kWh | therms | unleaded | diesel | Other 1 | Other 2 | Other 3 | dollars | kWh | therms | unleaded | diesel | Other 1 | Other 2 | Other 3 | dollars |
| Buildings | 710,053 | 49,976 | | | 13 | | | $102,749 | 756,059 | 57,795 | | | -1 | | | $116,015 | 738,612 | 62,947 | | | -1 | | | $132,214 |
| Water | 2,298,731 | 26,823 | | | -3 | | | $141,374 | 2,285,317 | 31,783 | | | -6 | | | $149,325 | 2,378,935 | 33,681 | | | -2 | | | $170,302 |
| Lights | 758,961 | 0 | | | 0 | | | $92,668 | 689,392 | 0 | | | 0 | | | $93,629 | 684,345 | 0 | | | 0 | | | $97,313 |
| Fleet | | | 14,085 | 11,917 | | 1,144 | | $68,513 | | | 16,683 | 17,466 | | 1,103 | | $95,213 | | | 15,346 | 18,804 | | 1,075 | | $112,395 |

*In MMBTus*

| | kWh | therms | unleaded | diesel | Other 1 | Other 2 | Other 3 | end use subtotals | kWh | therms | unleaded | diesel | Other 1 | Other 2 | Other 3 | end use subtotals | kWh | therms | unleaded | diesel | Other 1 | Other 2 | Other 3 | end use subtotals |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Buildings | 2,423 | 4,998 | 0 | 0 | 0 | 0 | 0 | 7,420 | 2,580 | 5,779 | 0 | 0 | 0 | 0 | 0 | 8,359 | 2,520 | 6,295 | 0 | 0 | 0 | 0 | 0 | 8,815 |
| Water | 7,843 | 2,682 | 0 | 0 | 0 | 0 | 0 | 10,526 | 7,798 | 3,178 | 0 | 0 | 0 | 0 | 0 | 10,976 | 8,117 | 3,368 | 0 | 0 | 0 | 0 | 0 | 11,485 |
| Lights | 2,590 | 0 | 0 | 0 | 0 | 0 | 0 | 2,590 | 2,352 | 0 | 0 | 0 | 0 | 0 | 0 | 2,352 | 2,335 | 0 | 0 | 0 | 0 | 0 | 0 | 2,335 |
| Fleet | 0 | 0 | 1,746 | 1,656 | 0 | 149 | 0 | 3,552 | 0 | 0 | 2,069 | 2,428 | 0 | 143 | 0 | 4,640 | 0 | 0 | 1,903 | 2,614 | 0 | 140 | 0 | 4,656 |
| Totals | 12,856 | 7,680 | 1,746 | 1,656 | 0 | 149 | 0 | 24,087 | 12,729 | 8,958 | 2,069 | 2,428 | 0 | 143 | 0 | 26,327 | 12,972 | 9,663 | 1,903 | 2,614 | 0 | 140 | 0 | 27,291 |
| Dollars | | | | | | | | $405,304 | | | | | | | | $454,182 | | | | | | | | $512,224 |

| | 2009 | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | kWh | therms | unleaded | diesel | Other 1 | Other 2 | Other 3 | dollars |
| Buildings | 687,533 | 64,531 | | | -1 | | | $116,120 |
| Water | 2,236,129 | 32,133 | | | 1 | | | $169,908 |
| Lights | 799,373 | 0 | | | 0 | | | $112,383 |
| Fleet | | | 18,111 | 16,084 | | 1,541 | | $77,739 |

*In MMBTus*

| | kWh | therms | unleaded | diesel | Other 1 | Other 2 | Other 3 | end use subtotals |
|---|---|---|---|---|---|---|---|---|
| Buildings | 2,346 | 6,453 | 0 | 0 | 0 | 0 | 0 | 8,799 |
| Water | 7,630 | 3,213 | 0 | 0 | 0 | 0 | 0 | 10,843 |
| Lights | 2,727 | 0 | 0 | 0 | 0 | 0 | 0 | 2,727 |
| Fleet | 0 | 0 | 2,246 | 2,236 | 0 | 200 | 0 | 4,682 |
| Totals | 12,703 | 9,666 | 2,246 | 2,236 | 0 | 200 | 0 | 27,051 |
| Dollars | | | | | | | | $476,150 |

**'Summary' Tab (Continued)**

*Increases*

| | 2003-04 | 2004-05 | 2005-06 | 2006-07 | 2007-08 | 2008-09 | 2007 -2009 | Annualized growth rate |
|---|---|---|---|---|---|---|---|---|
| Buildings | -6% | -9% | -7% | 13% | 5% | 0% | 5% | 2.6% |
| Water | 108% | 0% | -3% | 4% | 5% | -6% | -1% | -0.6% |
| Lights | #DIV/0! | #DIV/0! | 0% | -9% | -1% | 17% | 16% | 7.7% |
| Fleet | #DIV/0! | #DIV/0! | 86% | 131% | 0% | 1% | 1% | 0.5% |
| Electricity | 78% | -4% | 27% | -1% | 2% | -2% | 0% | -0.1% |
| Natural gas | 10% | -14% | -12% | 17% | 8% | 0% | 8% | 3.9% |
| Unleaded | #DIV/0! | #DIV/0! | 121% | 18% | -8% | 18% | 9% | 4.2% |
| Diesel | #DIV/0! | #DIV/0! | 56% | 47% | 8% | -14% | -8% | -4.0% |
| Dollars | 4% | 17% | 47% | 12% | 13% | -7% | 5% | 2.4% |
| totals | 37% | 0% | 16% | 9% | 4% | -1% | 3% | 1.4% |

*Subtotals (in MMBtu)*

| | 2007 | 2008 | 2009 | Average | Percent of total | Total years considered |
|---|---|---|---|---|---|---|
| Buildings | 8,359 | 8,815 | 8,799 | 8,658 | 32% | 3 |
| Water | 10,976 | 11,485 | 10,843 | 11,101 | 41% | |
| Lights | 2,352 | 2,335 | 2,727 | 2,472 | 9% | |
| Fleet | 4,640 | 4,656 | 4,682 | 4,659 | 17% | |
| Dollars | 454,182 | 512,224 | 476,150 | 480,852 | | |

| | 2007 | 2008 | 2009 | Average | Percent of total | in original units | lbs CO2 | Percent of total |
|---|---|---|---|---|---|---|---|---|
| Electricity | 12,729 | 12,972 | 12,703 | 12,801 | 48% | 3,751,898 | 6,348,212 | 78% |
| Natural gas | 8,958 | 9,663 | 9,666 | 9,429 | 35% | 94,290 | 1,103,950 | 14% |
| Unleaded | 2,069 | 1,903 | 2,246 | 2,072 | 8% | 16,713 | 326,575 | 4% |
| Diesel | 2,428 | 2,614 | 2,236 | 2,426 | 9% | 17,451 | 390,381 | 5% |
| Other | 143 | 140 | 200 | 161 | 1% | | | |
| MMBtus | 26,327 | 27,291 | 27,051 | 26,890 | | *Total* | 8,169,118 | |

*2009 vs. average*

| | 2009 | Average | Difference |
|---|---|---|---|
| Buildings | 8,799 | 8,658 | 2% |
| Water | 10,843 | 11,101 | -2% |
| Lights | 2,727 | 2,472 | 10% |
| Fleet | 4,682 | 4,659 | 0% |
| Electricity | 12,703 | 12,801 | -1% |
| Natural gas | 9,666 | 9,429 | 3% |
| Unleaded | 2,246 | 2,072 | 8% |
| Diesel | 2,236 | 2,426 | -8% |
| totals | 27,051 | 26,890 | 1% |

<-- check for reasonableness

| | |
|---|---|
| Total number of Nov09s in bldg/water | 0 |
| Total number of facilities in bldg/water | 29 |

Project parameters

| | |
|---|---|
| Goal year | 2025 |
| Activity year | 2010 |
| Year of most recent data | 2009 |
| Year plan begins | 2011 |
| Example growth rate | 4.4% |
| Renewable goal | 25% |

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**'Buildings' Tab**

*Columns were deleted that contained redundant information or had zero values.

| Building ID | Facility Name | Period Ending Date | Year | Original Electric Use (kWh) | Electric Use (kWh) | Original Natural Gas Use (therms) | Natural Gas Use (therms) | Original Site Energy Use (kBtu) | Site Energy Use (kBtu) | Non-kWh/therm Use (kBtu) | Original Annual Energy Cost (US Dollars ($)) | Annual Energy Cost (US Dollars ($)) | Facility Type | Current Total Floor space (Sq. Ft.) | Direct GHG Emissions (MtCO2e) | Site EUI (kBtu/Sq. Ft.) | Weather Normalized Site EUI (kBtu/Sq. Ft.) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2236043 | JF Public Works Facility | 12/31/2002 | 2002 | N/A | **N/A** | N/A | **N/A** | N/A | **N/A** | 0.0 | 2,426.43 | **2,426.43** | Other | 5,500 | N/A | N/A | N/A |
| 2236043 | JF Public Works Facility | 12/31/2003 | 2003 | 72,550.3 | **72,550.3** | 11,797.5 | **11,797.5** | 1,419,332.8 | **1,419,332.8** | -7,958.8 | 14,205.89 | **14,205.89** | Other | 5,500 | 62.76 | 258.1 | 259.8 |
| 2236043 | JF Public Works Facility | 12/31/2004 | 2004 | 74,419.4 | **74,419.4** | 11,488.8 | **11,488.8** | 1,402,803.0 | **1,402,803.0** | 4.0 | 15,896.58 | **15,896.58** | Other | 5,500 | 61.12 | 255.1 | 272.1 |
| 2236043 | JF Public Works Facility | 12/31/2005 | 2005 | 74,120.6 | **74,120.6** | 11,123.1 | **11,123.1** | 1,365,207.0 | **1,365,207.0** | -2.5 | 16,592.04 | **16,592.04** | Other | 5,500 | 59.17 | 248.2 | 266.3 |
| 2236043 | JF Public Works Facility | 12/31/2006 | 2006 | 73,601.3 | **73,601.3** | 10,113.8 | **10,113.8** | 1,262,511.5 | **1,262,511.5** | 3.9 | 16,275.97 | **16,275.97** | Other | 5,500 | 53.81 | 229.5 | 257.1 |
| 2236043 | JF Public Works Facility | 12/31/2007 | 2007 | 75,959.4 | **75,959.4** | 11,264.9 | **11,264.9** | 1,385,663.0 | **1,385,663.0** | -0.5 | 17,968.76 | **17,968.76** | Other | 5,500 | 59.93 | 251.9 | 267.1 |
| 2236043 | JF Public Works Facility | 12/31/2008 | 2008 | 76,792.2 | **76,792.2** | 11,928.1 | **11,928.1** | 1,454,823.4 | **1,454,823.4** | -1.6 | 19,863.21 | **19,863.21** | Other | 5,500 | 63.46 | 264.5 | 253.5 |
| 2236043 | JF Public Works Facility | 12/31/2009 | 2009 | 60,639.2 | **60,639.2** | 12,592.4 | **12,592.4** | 1,466,145.5 | **1,466,145.5** | 4.5 | 18,009.75 | **18,009.75** | Other | 5,500 | 66.99 | 266.6 | 269.4 |
| 2236249 | JF Senior Center | 12/31/2002 | 2002 | N/A | **N/A** | N/A | **N/A** | N/A | **N/A** | 0.0 | 595.43 | **595.43** | Social/Meeting | 5,993 | N/A | N/A | N/A |
| 2236249 | JF Senior Center | 12/31/2003 | 2003 | N/A | **N/A** | N/A | **N/A** | N/A | **N/A** | 0.0 | 2,228.11 | **2,228.11** | Social/Meeting | 5,993 | N/A | N/A | N/A |
| 2236249 | JF Senior Center | 12/31/2004 | 2004 | 43,152.8 | **43,152.8** | 2,369.9 | **2,369.9** | 384,224.5 | **384,224.5** | -2.9 | 5,222.34 | **5,222.34** | Social/Meeting | 5,993 | 12.61 | 64.1 | 66.9 |
| 2236249 | JF Senior Center | 12/31/2005 | 2005 | 54,964.8 | **54,964.8** | 2,352.1 | **2,352.1** | 422,746.5 | **422,746.5** | -3.4 | 6,730.34 | **6,730.34** | Social/Meeting | 5,993 | 12.51 | 70.5 | 72.5 |
| 2236249 | JF Senior Center | 12/31/2006 | 2006 | 53,739.6 | **53,739.6** | 2,063.1 | **2,063.1** | 389,667.8 | **389,667.8** | -1.7 | 6,400.21 | **6,400.21** | Social/Meeting | 5,993 | 10.98 | 65.0 | 68.7 |
| 2236249 | JF Senior Center | 12/31/2007 | 2007 | 58,173.7 | **58,173.7** | 2,446.9 | **2,446.9** | 443,179.5 | **443,179.5** | 0.8 | 7,429.29 | **7,429.29** | Social/Meeting | 5,993 | 13.02 | 74.0 | 75.5 |
| 2236249 | JF Senior Center | 12/31/2008 | 2008 | 54,829.7 | **54,829.7** | 2,774.7 | **2,774.7** | 464,548.4 | **464,548.4** | -0.5 | 8,164.40 | **8,164.40** | Social/Meeting | 5,993 | 14.76 | 77.5 | 76.1 |
| 2236249 | JF Senior Center | 12/31/2009 | 2009 | 40,463.2 | **40,463.2** | 2,881.9 | **2,881.9** | 426,251.9 | **426,251.9** | 1.5 | 6,462.08 | **6,462.08** | Social/Meeting | 5,993 | 15.33 | 71.1 | 71.0 |
| 2236779 | JF Riverfront Park, Tennis Court | 12/31/2002 | 2002 | N/A | **N/A** | N/A | **N/A** | N/A | **N/A** | 0.0 | 4.67 | **4.67** | Other | 0 | N/A | 0.0 | 0.0 |
| 2236779 | JF Riverfront Park, Tennis Court | 12/31/2003 | 2003 | N/A | **N/A** | N/A | **N/A** | N/A | **N/A** | 0.0 | 478.87 | **478.87** | Other | 0 | N/A | 0.0 | 0.0 |
| 2236779 | JF Riverfront Park, Tennis Court | 12/31/2004 | 2004 | N/A | **N/A** | N/A | **N/A** | N/A | **N/A** | 0.0 | 407.86 | **407.86** | Other | 0 | N/A | 0.0 | 0.0 |
| 2236779 | JF Riverfront Park, Tennis Court | 12/31/2005 | 2005 | 5,463.1 | **5,463.1** | 0.0 | **0.0** | 18,640.2 | **18,640.2** | 0.1 | 462.25 | **462.25** | Other | 0 | N/A | 0.0 | 0.0 |
| 2236779 | JF Riverfront Park, Tennis Court | 12/31/2006 | 2006 | 5,503.1 | **5,503.1** | 0.0 | **0.0** | 18,776.6 | **18,776.6** | 0.0 | 459.24 | **459.24** | Other | 0 | N/A | 0.0 | 0.0 |
| 2236779 | JF Riverfront Park, Tennis Court | 12/31/2007 | 2007 | 4,588.3 | **4,588.3** | 0.0 | **0.0** | 15,655.4 | **15,655.4** | 0.1 | 438.64 | **438.64** | Other | 0 | N/A | 0.0 | 0.0 |
| 2236779 | JF Riverfront Park, Tennis Court | 12/31/2008 | 2008 | 1,456.4 | **1,456.4** | 0.0 | **0.0** | 4,969.3 | **4,969.3** | 0.1 | 171.70 | **171.70** | Other | 0 | N/A | 0.0 | 0.0 |
| 2236779 | JF Riverfront Park, Tennis Court | 12/31/2009 | 2009 | 1,276.1 | **1,276.1** | 0.0 | **0.0** | 4,354.2 | **4,354.2** | 0.1 | 156.93 | **156.93** | Other | 0 | N/A | 0.0 | 0.0 |

**'Buildings' Tab (Continued)**

*Columns were deleted that contained redundant information or had zero values.

| Building ID | Facility Name | Period Ending Date | Year | Original Electric Use (kWh) | Electric Use (kWh) | Original Natural Gas Use (therms) | Natural Gas Use (therms) | Original Site Energy Use (kBtu) | Site Energy Use (kBtu) | Non-kWh/therm Use (kBtu) | Original Annual Energy Cost (US Dollars ($)) | Annual Energy Cost (US Dollars ($)) | Facility Type | Current Total Floor space (Sq. Ft.) | Direct GHG Emissions (MtCO2e) | Site EUI (kBtu/Sq. Ft.) | Weather Normalized Site EUI (kBtu/Sq. Ft.) | Percentage Attributable to Building (not Water) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2245854 | JF Jefferson Utilities/Police Department | 12/31/2002 | 2002 | N/A | **N/A** | N/A | **N/A** | N/A | **N/A** | 0.0 | 4,723.86 | **4,723.86** | Office | 16,851 | N/A | N/A | N/A | |
| 2245854 | JF Jefferson Utilities/Police Department | 12/31/2003 | 2003 | 251,667.0 | **251,667.0** | 21,913.2 | **21,913.2** | 3,039,975.7 | **3,039,975.7** | -10,027.2 | 28,689.33 | **28,689.33** | Office | 16,851 | 233.16 | 360.8 | 362.6 | |
| 2245854 | JF Jefferson Utilities/Police Department | 12/31/2004 | 2004 | 252,336.0 | **252,336.0** | 19,717.5 | **19,717.5** | 2,832,722.1 | **2,832,722.1** | 1.7 | 28,768.78 | **28,768.78** | Office | 16,851 | 209.79 | 336.2 | 349.7 | |
| 2245854 | JF Jefferson Utilities/Police Department | 12/31/2005 | 2005 | 276,624.0 | **276,624.0** | 16,734.2 | **16,734.2** | 2,617,255.8 | **2,617,255.8** | -0.3 | 31,833.19 | **31,833.19** | Office | 16,851 | 178.05 | 310.6 | 315.0 | 50% |
| 2245854 | JF Jefferson Utilities/Police Department | 12/31/2006 | 2006 | 251,808.0 | **251,808.0** | 14,360.4 | **14,360.4** | 2,295,205.7 | **2,295,205.7** | 1.8 | 28,934.01 | **28,934.01** | Office | 16,851 | 152.79 | 272.4 | 284.3 | |
| 2245854 | JF Jefferson Utilities/Police Department | 12/31/2007 | 2007 | 275,520.0 | **275,520.0** | 16,904.7 | **16,904.7** | 2,630,537.5 | **2,630,537.5** | -1.7 | 33,859.59 | **33,859.59** | Office | 16,851 | 179.87 | 312.2 | 311.6 | |
| 2245854 | JF Jefferson Utilities/Police Department | 12/31/2008 | 2008 | 263,712.0 | **263,712.0** | 16,506.8 | **16,506.8** | 2,550,461.2 | **2,550,461.2** | 0.9 | 36,843.10 | **36,843.10** | Office | 16,851 | 175.63 | 302.7 | 297.6 | |
| 2245854 | JF Jefferson Utilities/Police Department | 12/31/2009 | 2009 | 255,264.0 | **255,264.0** | 16,994.5 | **16,994.5** | 2,570,405.0 | **2,570,405.0** | -0.8 | 32,615.37 | **32,615.37** | Office | 16,851 | 180.82 | 305.1 | 306.4 | |
| 2245886 | JF EMS/Parks/Cold Storage | 12/31/2002 | 2002 | N/A | **N/A** | N/A | **N/A** | N/A | **N/A** | 0.0 | 1,458.59 | **1,458.59** | Other | 3,165 | N/A | N/A | N/A | |
| 2245886 | JF EMS/Parks/Cold Storage | 12/31/2003 | 2003 | 14,822.3 | **14,822.3** | 4,641.8 | **4,641.8** | 514,749.8 | **514,749.8** | -3.9 | 5,297.21 | **5,297.21** | Other | 3,165 | 24.69 | 162.6 | 162.8 | |
| 2245886 | JF EMS/Parks/Cold Storage | 12/31/2004 | 2004 | 16,986.2 | **16,986.2** | 3,165.4 | **3,165.4** | 374,500.2 | **374,500.2** | 3.3 | 4,556.02 | **4,556.02** | Other | 3,165 | 16.84 | 118.3 | 134.0 | |
| 2245886 | JF EMS/Parks/Cold Storage | 12/31/2005 | 2005 | 16,219.5 | **16,219.5** | 2,798.6 | **2,798.6** | 335,199.9 | **335,199.9** | -1.0 | 4,579.70 | **4,579.70** | Other | 3,165 | 14.89 | 105.9 | 116.9 | |
| 2245886 | JF EMS/Parks/Cold Storage | 12/31/2006 | 2006 | 19,707.7 | **19,707.7** | 3,303.0 | **3,303.0** | 397,547.3 | **397,547.3** | 4.6 | 5,573.37 | **5,573.37** | Other | 3,165 | 17.57 | 125.6 | 141.7 | |
| 2245886 | JF EMS/Parks/Cold Storage | 12/31/2007 | 2007 | 36,575.9 | **36,575.9** | 4,929.5 | **4,929.5** | 617,744.9 | **617,744.9** | -2.1 | 8,709.11 | **8,709.11** | Other | 3,165 | 26.22 | 195.2 | 206.8 | |
| 2245886 | JF EMS/Parks/Cold Storage | 12/31/2008 | 2008 | 48,155.9 | **48,155.9** | 5,355.1 | **5,355.1** | 699,816.8 | **699,816.8** | -1.1 | 10,676.93 | **10,676.93** | Other | 3,165 | 28.49 | 221.1 | 213.5 | |
| 2245886 | JF EMS/Parks/Cold Storage | 12/31/2009 | 2009 | 45,873.8 | **45,873.8** | 5,088.2 | **5,088.2** | 665,343.5 | **665,343.5** | 2.1 | 9,679.73 | **9,679.73** | Other | 3,165 | 27.07 | 210.2 | 209.7 | |

**'Buildings' Tab**

*Columns were deleted that contained redundant information or had zero values.

| Building ID | Facility Name | Period Ending Date | Year | Original Electric Use (kWh) | Electric Use (kWh) | Original Natural Gas Use (therms) | Natural Gas Use (therms) | Original Site Energy Use (kBtu) | Site Energy Use (kBtu) | Non-kWh/therm Use (kBtu) | Original Annual Energy Cost (US Dollars ($)) | Annual Energy Cost (US Dollars ($)) | Facility Type | Current Total Floor space (Sq. Ft.) | Direct GHG Emissions (MtCO2e) | Site EUI (kBtu/Sq. Ft.) | Weather Normalized Site EUI (kBtu/Sq. Ft.) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2245898 | JF Aquatic Center | 12/31/2002 | 2002 | N/A | **N/A** | N/A | **N/A** | N/A | **N/A** | 0.0 | 379.92 | **379.92** | Office | 3,316 | N/A | N/A | N/A |
| 2245898 | JF Aquatic Center | 12/31/2003 | 2003 | 41,262.4 | **41,262.4** | 13,218.0 | **13,218.0** | 1,473,541.5 | **1,473,541.5** | 10,954.2 | 12,394.63 | **12,394.63** | Office | 3,316 | 70.32 | 444.4 | 453.9 |
| 2245898 | JF Aquatic Center | 12/31/2004 | 2004 | 39,554.4 | **39,554.4** | 10,247.0 | **10,247.0** | 1,159,659.5 | **1,159,659.5** | -0.1 | 11,486.71 | **11,486.71** | Office | 3,316 | 54.51 | 349.7 | 400.1 |
| 2245898 | JF Aquatic Center | 12/31/2005 | 2005 | 38,585.6 | **38,585.6** | 5,839.0 | **5,839.0** | 715,554.2 | **715,554.2** | 0.1 | 8,139.45 | **8,139.45** | Office | 3,316 | 31.06 | 215.8 | 183.4 |
| 2245898 | JF Aquatic Center | 12/31/2006 | 2006 | 39,879.0 | **39,879.0** | 1,692.0 | **1,692.0** | 305,267.1 | **305,267.1** | 0.0 | 4,934.31 | **4,934.31** | Office | 3,316 | 9.00 | 92.1 | 82.3 |
| 2245898 | JF Aquatic Center | 12/31/2007 | 2007 | 41,711.9 | **41,711.9** | 5,014.0 | **5,014.0** | 643,720.9 | **643,720.9** | -0.1 | 8,147.78 | **8,147.78** | Office | 3,316 | 26.67 | 194.1 | 165.0 |
| 2245898 | JF Aquatic Center | 12/31/2008 | 2008 | 34,180.9 | **34,180.9** | 3,811.0 | **3,811.0** | 497,725.3 | **497,725.3** | 0.1 | 8,258.05 | **8,258.05** | Office | 3,316 | 20.27 | 150.1 | 130.6 |
| 2245898 | JF Aquatic Center | 12/31/2009 | 2009 | 36,334.7 | **36,334.7** | 8,139.0 | **8,139.0** | 937,874.1 | **937,874.1** | 0.1 | 8,115.53 | **8,115.53** | Office | 3,316 | 43.30 | 282.8 | 322.4 |
| 2245909 | JF Stoppenbach Park | 12/31/2002 | 2002 | N/A | **N/A** | N/A | **N/A** | N/A | **N/A** | 0.0 | 11.70 | **11.70** | Other | 836 | N/A | N/A | N/A |
| 2245909 | JF Stoppenbach Park | 12/31/2003 | 2003 | 3,361.4 | **3,361.4** | 0.0 | **0.0** | 11,468.9 | **11,468.9** | -0.2 | 307.18 | **307.18** | Other | 836 | N/A | 13.7 | 13.7 |
| 2245909 | JF Stoppenbach Park | 12/31/2004 | 2004 | 3,091.6 | **3,091.6** | 0.0 | **0.0** | 10,548.5 | **10,548.5** | 0.0 | 296.45 | **296.45** | Other | 836 | N/A | 12.6 | 12.6 |
| 2245909 | JF Stoppenbach Park | 12/31/2005 | 2005 | 2,922.8 | **2,922.8** | 0.0 | **0.0** | 9,972.6 | **9,972.6** | 0.0 | 306.64 | **306.64** | Other | 836 | N/A | 11.9 | 11.9 |
| 2245909 | JF Stoppenbach Park | 12/31/2006 | 2006 | 3,249.7 | **3,249.7** | 0.0 | **0.0** | 11,088.1 | **11,088.1** | 0.1 | 332.61 | **332.61** | Other | 836 | N/A | 13.3 | 13.3 |
| 2245909 | JF Stoppenbach Park | 12/31/2007 | 2007 | 3,432.2 | **3,432.2** | 0.0 | **0.0** | 11,710.8 | **11,710.8** | 0.1 | 365.80 | **365.80** | Other | 836 | N/A | 14.0 | 14.0 |
| 2245909 | JF Stoppenbach Park | 12/31/2008 | 2008 | 3,292.7 | **3,292.7** | 0.0 | **0.0** | 11,234.6 | **11,234.6** | -0.1 | 373.82 | **373.82** | Other | 836 | N/A | 13.4 | 13.4 |
| 2245909 | JF Stoppenbach Park | 12/31/2009 | 2009 | 2,732.5 | **2,732.5** | 0.0 | **0.0** | 9,323.2 | **9,323.2** | -0.1 | 335.15 | **335.15** | Other | 836 | N/A | 11.2 | 11.2 |
| 2245931 | JF Stoppenbach Park Shelter | 12/31/2002 | 2002 | N/A | **N/A** | N/A | **N/A** | N/A | **N/A** | 0.0 | 8.10 | **8.10** | Other | 0 | N/A | 0.0 | 0.0 |
| 2245931 | JF Stoppenbach Park Shelter | 12/31/2003 | 2003 | 1,704.7 | **1,704.7** | 0.0 | **0.0** | 5,816.5 | **5,816.5** | 0.1 | 196.63 | **196.63** | Other | 0 | N/A | 0.0 | 0.0 |
| 2245931 | JF Stoppenbach Park Shelter | 12/31/2004 | 2004 | 1,452.7 | **1,452.7** | 0.0 | **0.0** | 4,956.6 | **4,956.6** | 0.0 | 183.25 | **183.25** | Other | 0 | N/A | 0.0 | 0.0 |
| 2245931 | JF Stoppenbach Park Shelter | 12/31/2005 | 2005 | 853.6 | **853.6** | 0.0 | **0.0** | 2,912.3 | **2,912.3** | -0.2 | 149.90 | **149.90** | Other | 0 | N/A | 0.0 | 0.0 |
| 2245931 | JF Stoppenbach Park Shelter | 12/31/2006 | 2006 | 872.2 | **872.2** | 0.0 | **0.0** | 2,976.0 | **2,976.0** | 0.1 | 150.58 | **150.58** | Other | 0 | N/A | 0.0 | 0.0 |
| 2245931 | JF Stoppenbach Park Shelter | 12/31/2007 | 2007 | 1,018.2 | **1,018.2** | 0.0 | **0.0** | 3,474.0 | **3,474.0** | -0.1 | 167.56 | **167.56** | Other | 0 | N/A | 0.0 | 0.0 |
| 2245931 | JF Stoppenbach Park Shelter | 12/31/2008 | 2008 | 654.5 | **654.5** | 0.0 | **0.0** | 2,233.1 | **2,233.1** | -0.1 | 142.00 | **142.00** | Other | 0 | N/A | 0.0 | 0.0 |
| 2245931 | JF Stoppenbach Park Shelter | 12/31/2009 | 2009 | 772.6 | **772.6** | 0.0 | **0.0** | 2,636.2 | **2,636.2** | 0.1 | 155.65 | **155.65** | Other | 0 | N/A | 0.0 | 0.0 |

**'Buildings' Tab (Continued)**

*Columns were deleted that contained redundant information or had zero values.

| Building ID | Facility Name | Period Ending Date | Year | Original Electric Use (kWh) | Electric Use (kWh) | Original Natural Gas Use (therms) | Natural Gas Use (therms) | Original Site Energy Use (kBtu) | Site Energy Use (kBtu) | Non-kWh/therm Use (kBtu) | Original Annual Energy Cost (US Dollars ($)) | Annual Energy Cost (US Dollars ($)) | Facility Type | Current Total Floor space (Sq. Ft.) | Direct GHG Emissions (MtCO2e) | Site EUI (kBtu/Sq. Ft.) | Weather Normalized Site EUI (kBtu/Sq. Ft.) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2245934 | JF Tensfeldt Park, Soccer Field Concession Stand | 12/31/2006 | 2006 | N/A | **N/A** | N/A | **N/A** | N/A | **N/A** | 0.0 | 35.24 | **35.24** | Other | 1,500 | N/A | N/A | N/A |
| 2245934 | JF Tensfeldt Park, Soccer Field Concession Stand | 12/31/2007 | 2007 | N/A | **N/A** | N/A | **N/A** | N/A | **N/A** | 0.0 | 84.09 | **84.09** | Other | 1,500 | N/A | N/A | N/A |
| 2245934 | JF Tensfeldt Park, Soccer Field Concession Stand | 12/31/2008 | 2008 | 4,507.0 | **4,507.0** | 0.0 | **0.0** | 15,377.9 | **15,377.9** | 0.0 | 455.02 | **455.02** | Other | 1,500 | N/A | 10.3 | 10.3 |
| 2245934 | JF Tensfeldt Park, Soccer Field Concession Stand | 12/31/2009 | 2009 | 1,763.5 | **1,763.5** | 0.0 | **0.0** | 6,017.1 | **6,017.1** | 0.0 | 247.25 | **247.25** | Other | 1,500 | N/A | 4.0 | 4.0 |
| 2245936 | JF Riverfront Park | 12/31/2002 | 2002 | N/A | **N/A** | N/A | **N/A** | N/A | **N/A** | 0.0 | 18.34 | **18.34** | Other | 850 | N/A | N/A | N/A |
| 2245936 | JF Riverfront Park | 12/31/2003 | 2003 | 11,964.7 | **11,964.7** | 0.0 | **0.0** | 40,823.4 | **40,823.4** | -0.2 | 981.95 | **981.95** | Other | 850 | N/A | 48.0 | 48.6 |
| 2245936 | JF Riverfront Park | 12/31/2004 | 2004 | 10,467.2 | **10,467.2** | 0.0 | **0.0** | 35,714.1 | **35,714.1** | 0.0 | 905.40 | **905.40** | Other | 850 | N/A | 42.0 | 43.2 |
| 2245936 | JF Riverfront Park | 12/31/2005 | 2005 | 13,860.3 | **13,860.3** | 0.0 | **0.0** | 47,291.3 | **47,291.3** | 0.0 | 1,238.29 | **1,238.29** | Other | 850 | N/A | 55.6 | 47.3 |
| 2245936 | JF Riverfront Park | 12/31/2006 | 2006 | 11,276.8 | **11,276.8** | 0.0 | **0.0** | 38,476.6 | **38,476.6** | 0.2 | 1,031.72 | **1,031.72** | Other | 850 | N/A | 45.3 | 43.0 |
| 2245936 | JF Riverfront Park | 12/31/2007 | 2007 | 10,618.1 | **10,618.1** | 0.0 | **0.0** | 36,229.1 | **36,229.1** | 0.1 | 1,062.09 | **1,062.09** | Other | 850 | N/A | 42.6 | 36.2 |
| 2245936 | JF Riverfront Park | 12/31/2008 | 2008 | 4,351.8 | **4,351.8** | 0.0 | **0.0** | 14,848.3 | **14,848.3** | 0.0 | 549.19 | **549.19** | Other | 850 | N/A | 17.5 | 17.5 |
| 2245936 | JF Riverfront Park | 12/31/2009 | 2009 | 4,855.6 | **4,855.6** | 0.0 | **0.0** | 16,567.1 | **16,567.1** | -0.2 | 619.43 | **619.43** | Other | 850 | N/A | 19.5 | 19.5 |
| 2247526 | JF Riverfront Park, New Shelter | 12/31/2002 | 2002 | N/A | **N/A** | N/A | **N/A** | N/A | **N/A** | 0.0 | 78.78 | **78.78** | Other | 0 | N/A | 0.0 | 0.0 |
| 2247526 | JF Riverfront Park, New Shelter | 12/31/2003 | 2003 | 9,860.6 | **9,860.6** | 0.0 | **0.0** | 33,644.5 | **33,644.5** | 0.1 | 732.57 | **732.57** | Other | 0 | N/A | 0.0 | 0.0 |
| 2247526 | JF Riverfront Park, New Shelter | 12/31/2004 | 2004 | 8,950.8 | **8,950.8** | 0.0 | **0.0** | 30,540.1 | **30,540.1** | 0.0 | 687.77 | **687.77** | Other | 0 | N/A | 0.0 | 0.0 |
| 2247526 | JF Riverfront Park, New Shelter | 12/31/2005 | 2005 | 10,643.2 | **10,643.2** | 0.0 | **0.0** | 36,314.6 | **36,314.6** | 0.0 | 868.59 | **868.59** | Other | 0 | N/A | 0.0 | 0.0 |
| 2247526 | JF Riverfront Park, New Shelter | 12/31/2006 | 2006 | 10,546.5 | **10,546.5** | 0.0 | **0.0** | 35,984.6 | **35,984.6** | -0.1 | 895.82 | **895.82** | Other | 0 | N/A | 0.0 | 0.0 |
| 2247526 | JF Riverfront Park, New Shelter | 12/31/2007 | 2007 | 11,595.9 | **11,595.9** | 0.0 | **0.0** | 39,565.3 | **39,565.3** | 0.1 | 1,009.13 | **1,009.13** | Other | 0 | N/A | 0.0 | 0.0 |
| 2247526 | JF Riverfront Park, New Shelter | 12/31/2008 | 2008 | 9,697.6 | **9,697.6** | 0.0 | **0.0** | 33,088.2 | **33,088.2** | 0.0 | 922.26 | **922.26** | Other | 0 | N/A | 0.0 | 0.0 |
| 2247526 | JF Riverfront Park, New Shelter | 12/31/2009 | 2009 | 11,523.0 | **11,523.0** | 0.0 | **0.0** | 39,316.4 | **39,316.4** | -0.1 | 1,116.67 | **1,116.67** | Other | 0 | N/A | 0.0 | 0.0 |
| 2247531 | JF Riverfront Park, Little League Stand | 12/31/2002 | 2002 | N/A | **N/A** | N/A | **N/A** | N/A | **N/A** | 0.0 | 6.21 | **6.21** | Other | 640 | N/A | N/A | N/A |
| 2247531 | JF Riverfront Park, Little League Stand | 12/31/2003 | 2003 | 7,446.0 | **7,446.0** | 0.0 | **0.0** | 25,405.6 | **25,405.6** | -0.2 | 594.26 | **594.26** | Other | 640 | N/A | 39.7 | 40.3 |
| 2247531 | JF Riverfront Park, Little League Stand | 12/31/2004 | 2004 | 6,934.1 | **6,934.1** | 0.0 | **0.0** | 23,659.2 | **23,659.2** | 0.1 | 591.12 | **591.12** | Other | 640 | N/A | 37.0 | 42.5 |
| 2247531 | JF Riverfront Park, Little League Stand | 12/31/2005 | 2005 | 10,874.5 | **10,874.5** | 0.0 | **0.0** | 37,103.8 | **37,103.8** | 0.0 | 933.56 | **933.56** | Other | 640 | N/A | 58.0 | 49.3 |
| 2247531 | JF Riverfront Park, Little League Stand | 12/31/2006 | 2006 | 10,176.4 | **10,176.4** | 0.0 | **0.0** | 34,721.9 | **34,721.9** | 0.0 | 862.31 | **862.31** | Other | 640 | N/A | 54.3 | 50.0 |
| 2247531 | JF Riverfront Park, Little League Stand | 12/31/2007 | 2007 | 10,041.8 | **10,041.8** | 0.0 | **0.0** | 34,262.6 | **34,262.6** | 0.0 | 953.48 | **953.48** | Other | 640 | N/A | 53.5 | 45.6 |
| 2247531 | JF Riverfront Park, Little League Stand | 12/31/2008 | 2008 | 3,270.8 | **3,270.8** | 0.0 | **0.0** | 11,160.1 | **11,160.1** | 0.1 | 375.55 | **375.55** | Other | 640 | N/A | 17.4 | 17.4 |
| 2247531 | JF Riverfront Park, Little League Stand | 12/31/2009 | 2009 | 5,354.7 | **5,354.7** | 0.0 | **0.0** | 18,270.3 | **18,270.3** | 0.1 | 590.91 | **590.91** | Other | 640 | N/A | 28.5 | 29.9 |

**'Buildings' Tab (Continued)**

*Columns were deleted that contained redundant information or had zero values.

| Building ID | Facility Name | Period Ending Date | Year | Original Electric Use (kWh) | Electric Use (kWh) | Original Natural Gas Use (therms) | Natural Gas Use (therms) | Original Site Energy Use (kBtu) | Site Energy Use (kBtu) | Non-kWh/therm Use (kBtu) | Original Annual Energy Cost (US Dollars ($)) | Annual Energy Cost (US Dollars ($)) | Facility Type | Current Total Floor space (Sq. Ft.) | Direct GHG Emissions (MtCO2e) | Site EUI (kBtu/Sq. Ft.) | Weather Normalized Site EUI (kBtu/Sq. Ft.) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2247539 | JF Museum - Oakridge Park | 12/31/2002 | 2002 | N/A | **N/A** | N/A | **N/A** | N/A | **N/A** | 0.0 | 134.44 | **134.44** | Other | 2,248 | N/A | N/A | N/A |
| 2247539 | JF Museum - Oakridge Park | 12/31/2003 | 2003 | 3,119.9 | **3,119.9** | 262.1 | **262.1** | 39,409.0 | **39,409.0** | 2,553.9 | 599.62 | **599.62** | Other | 2,248 | 1.39 | 17.5 | 16.4 |
| 2247539 | JF Museum - Oakridge Park | 12/31/2004 | 2004 | 2,887.0 | **2,887.0** | 543.0 | **543.0** | 64,148.4 | **64,148.4** | -2.0 | 876.69 | **876.69** | Other | 2,248 | 2.89 | 28.5 | 32.0 |
| 2247539 | JF Museum - Oakridge Park | 12/31/2005 | 2005 | 1,579.4 | **1,579.4** | 538.1 | **538.1** | 59,198.1 | **59,198.1** | -0.8 | 852.78 | **852.78** | Other | 2,248 | 2.86 | 26.3 | 28.7 |
| 2247539 | JF Museum - Oakridge Park | 12/31/2006 | 2006 | 934.1 | **934.1** | 434.7 | **434.7** | 46,656.8 | **46,656.8** | -0.3 | 714.20 | **714.20** | Other | 2,248 | 2.31 | 20.8 | 23.7 |
| 2247539 | JF Museum - Oakridge Park | 12/31/2007 | 2007 | 1,115.2 | **1,115.2** | 488.4 | **488.4** | 52,645.2 | **52,645.2** | 0.1 | 779.14 | **779.14** | Other | 2,248 | 2.60 | 23.4 | 25.0 |
| 2247539 | JF Museum - Oakridge Park | 12/31/2008 | 2008 | 1,028.9 | **1,028.9** | 567.9 | **567.9** | 60,299.2 | **60,299.2** | -1.4 | 902.86 | **902.86** | Other | 2,248 | 3.02 | 26.8 | 25.5 |
| 2247539 | JF Museum - Oakridge Park | 12/31/2009 | 2009 | 1,561.3 | **1,561.3** | 533.6 | **533.6** | 58,684.2 | **58,684.2** | -3.0 | 850.51 | **850.51** | Other | 2,248 | 2.84 | 26.1 | 26.4 |
| 2247553 | JF City Hall/Library/Meeting Rooms/Museum | 12/31/2002 | 2002 | N/A | **N/A** | N/A | **N/A** | N/A | **N/A** | 0.0 | 1,953.55 | **1,953.55** | Public Assembly | 31,907 | N/A | N/A | N/A |
| 2247553 | JF City Hall/Library/Meeting Rooms/Museum | 12/31/2003 | 2003 | 237,891.5 | **237,891.5** | 12,728.2 | **12,728.2** | 2,084,505.7 | **2,084,505.7** | -0.1 | 22,844.98 | **22,844.98** | Public Assembly | 31,907 | 67.71 | 65.3 | 65.5 |
| 2247553 | JF City Hall/Library/Meeting Rooms/Museum | 12/31/2004 | 2004 | 181,628.5 | **181,628.5** | 12,146.1 | **12,146.1** | 1,834,324.7 | **1,834,324.7** | -1.7 | 20,942.11 | **20,942.11** | Public Assembly | 31,907 | 64.62 | 57.5 | 58.7 |
| 2247553 | JF City Hall/Library/Meeting Rooms/Museum | 12/31/2005 | 2005 | 175,113.2 | **175,113.2** | 10,950.9 | **10,950.9** | 1,692,575.4 | **1,692,575.4** | -0.8 | 22,874.29 | **22,874.29** | Public Assembly | 31,907 | 58.26 | 53.0 | 54.1 |
| 2247553 | JF City Hall/Library/Meeting Rooms/Museum | 12/31/2006 | 2006 | 169,976.7 | **169,976.7** | 12,235.8 | **12,235.8** | 1,803,543.1 | **1,803,543.1** | 2.6 | 24,426.17 | **24,426.17** | Public Assembly | 31,907 | 65.09 | 56.5 | 59.4 |
| 2247553 | JF City Hall/Library/Meeting Rooms/Museum | 12/31/2007 | 2007 | 158,421.3 | **158,421.3** | 11,730.2 | **11,730.2** | 1,713,551.8 | **1,713,551.8** | -1.7 | 23,075.50 | **23,075.50** | Public Assembly | 31,907 | 62.40 | 53.7 | 53.7 |
| 2247553 | JF City Hall/Library/Meeting Rooms/Museum | 12/31/2008 | 2008 | 174,522.3 | **174,522.3** | 16,171.5 | **16,171.5** | 2,212,622.6 | **2,212,622.6** | 2.5 | 31,827.34 | **31,827.34** | Public Assembly | 31,907 | 86.03 | 69.3 | 68.8 |
| 2247553 | JF City Hall/Library/Meeting Rooms/Museum | 12/31/2009 | 2009 | 162,908.3 | **162,908.3** | 13,513.1 | **13,513.1** | 1,907,152.5 | **1,907,152.5** | -0.6 | 26,123.74 | **26,123.74** | Public Assembly | 31,907 | 71.89 | 59.8 | 60.3 |
| 2247662 | JF Fire Station | 12/31/2002 | 2002 | N/A | **N/A** | N/A | **N/A** | N/A | **N/A** | 0.0 | 3,682.58 | **3,682.58** | Other | 7,270 | N/A | N/A | N/A |
| 2247662 | JF Fire Station | 12/31/2003 | 2003 | 52,406.9 | **52,406.9** | 5,327.2 | **5,327.2** | 711,531.3 | **711,531.3** | -1.0 | 8,103.71 | **8,103.71** | Other | 7,270 | 28.34 | 97.9 | 100.2 |
| 2247662 | JF Fire Station | 12/31/2004 | 2004 | 48,785.4 | **48,785.4** | 5,194.9 | **5,194.9** | 685,947.8 | **685,947.8** | 2.0 | 8,194.11 | **8,194.11** | Other | 7,270 | 27.64 | 94.4 | 100.7 |
| 2247662 | JF Fire Station | 12/31/2005 | 2005 | 51,849.4 | **51,849.4** | 4,745.6 | **4,745.6** | 651,470.4 | **651,470.4** | 0.2 | 8,966.00 | **8,966.00** | Other | 7,270 | 25.25 | 89.6 | 97.4 |
| 2247662 | JF Fire Station | 12/31/2006 | 2006 | 56,654.8 | **56,654.8** | 5,773.6 | **5,773.6** | 770,668.5 | **770,668.5** | 2.3 | 10,610.18 | **10,610.18** | Other | 7,270 | 30.72 | 106.0 | 116.4 |
| 2247662 | JF Fire Station | 12/31/2007 | 2007 | 65,159.2 | **65,159.2** | 5,016.2 | **5,016.2** | 723,947.1 | **723,947.1** | 3.9 | 10,852.24 | **10,852.24** | Other | 7,270 | 26.69 | 99.6 | 104.4 |
| 2247662 | JF Fire Station | 12/31/2008 | 2008 | 55,985.7 | **55,985.7** | 5,831.6 | **5,831.6** | 774,183.1 | **774,183.1** | -0.1 | 11,575.44 | **11,575.44** | Other | 7,270 | 31.02 | 106.5 | 102.8 |
| 2247662 | JF Fire Station | 12/31/2009 | 2009 | 54,113.8 | **54,113.8** | 4,788.5 | **4,788.5** | 663,481.5 | **663,481.5** | -4.8 | 9,850.78 | **9,850.78** | Other | 7,270 | 25.47 | 91.3 | 92.1 |
| 2247683 | JF Dam | 12/31/2002 | 2002 | N/A | **N/A** | N/A | **N/A** | N/A | **N/A** | 0.0 | 4.88 | **4.88** | Other | 0 | N/A | 0.0 | 0.0 |
| 2247683 | JF Dam | 12/31/2003 | 2003 | 2.0 | **2.0** | 0.0 | **0.0** | 6.8 | **6.8** | 0.0 | 83.79 | **83.79** | Other | 0 | N/A | 0.0 | 0.0 |
| 2247683 | JF Dam | 12/31/2004 | 2004 | 2.0 | **2.0** | 0.0 | **0.0** | 6.8 | **6.8** | 0.0 | 84.34 | **84.34** | Other | 0 | N/A | 0.0 | 0.0 |
| 2247683 | JF Dam | 12/31/2005 | 2005 | 0.7 | **0.7** | 0.0 | **0.0** | 2.3 | **2.3** | -0.1 | 84.13 | **84.13** | Other | 0 | N/A | 0.0 | 0.0 |
| 2247683 | JF Dam | 12/31/2006 | 2006 | 0.3 | **0.3** | 0.0 | **0.0** | 1.1 | **1.1** | 0.1 | 84.09 | **84.09** | Other | 0 | N/A | 0.0 | 0.0 |
| 2247683 | JF Dam | 12/31/2007 | 2007 | N/A | **N/A** | N/A | **N/A** | N/A | **N/A** | 0.0 | 84.02 | **84.02** | Other | 0 | N/A | 0.0 | 0.0 |
| 2247683 | JF Dam | 12/31/2008 | 2008 | 57.0 | **57.0** | 0.0 | **0.0** | 194.5 | **194.5** | 0.0 | 89.45 | **89.45** | Other | 0 | N/A | 0.0 | 0.0 |
| 2247683 | JF Dam | 12/31/2009 | 2009 | N/A | **N/A** | N/A | **N/A** | N/A | **N/A** | 0.0 | 84.33 | **84.33** | Other | 0 | N/A | 0.0 | 0.0 |

**'Buildings' Tab (Continued)**

*Columns were deleted that contained redundant information or had zero values.

| Building ID | Facility Name | Period Ending Date | Year | Original Electric Use (kWh) | Electric Use (kWh) | Original Natural Gas Use (therms) | Natural Gas Use (therms) | Original Site Energy Use (kBtu) | Site Energy Use (kBtu) | Non-kWh/therm Use (kBtu) | Original Annual Energy Cost (US Dollars ($)) | Annual Energy Cost (US Dollars ($)) | Facility Type | Current Total Floor space (Sq. Ft.) | Direct GHG Emissions (MtCO2e) | Site EUI (kBtu/Sq. Ft.) | Weather Normalized Site EUI (kBtu/Sq. Ft.) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2247707 | JF Remote Fire Alarm | 12/31/2002 | 2002 | N/A | **N/A** | N/A | **N/A** | N/A | **N/A** | 0.0 | 70.99 | **70.99** | Other | 0 | N/A | 0.0 | 0.0 |
| 2247707 | JF Remote Fire Alarm | 12/31/2003 | 2003 | 2,133.3 | **2,133.3** | 0.0 | **0.0** | 7,278.9 | **7,278.9** | 0.1 | 947.30 | **947.30** | Other | 0 | N/A | 0.0 | 0.0 |
| 2247707 | JF Remote Fire Alarm | 12/31/2004 | 2004 | 2,101.2 | **2,101.2** | 0.0 | **0.0** | 7,169.4 | **7,169.4** | 0.1 | 933.05 | **933.05** | Other | 0 | N/A | 0.0 | 0.0 |
| 2247707 | JF Remote Fire Alarm | 12/31/2005 | 2005 | 2,112.2 | **2,112.2** | 0.0 | **0.0** | 7,206.8 | **7,206.8** | 0.0 | 937.92 | **937.92** | Other | 0 | N/A | 0.0 | 0.0 |
| 2247707 | JF Remote Fire Alarm | 12/31/2006 | 2006 | 2,126.3 | **2,126.3** | 0.0 | **0.0** | 7,254.8 | **7,254.8** | -0.1 | 944.16 | **944.16** | Other | 0 | N/A | 0.0 | 0.0 |
| 2247707 | JF Remote Fire Alarm | 12/31/2007 | 2007 | 2,127.5 | **2,127.5** | 0.0 | **0.0** | 7,259.0 | **7,259.0** | 0.0 | 944.71 | **944.71** | Other | 0 | N/A | 0.0 | 0.0 |
| 2247707 | JF Remote Fire Alarm | 12/31/2008 | 2008 | 2,116.8 | **2,116.8** | 0.0 | **0.0** | 7,222.5 | **7,222.5** | 0.0 | 939.96 | **939.96** | Other | 0 | N/A | 0.0 | 0.0 |
| 2247707 | JF Remote Fire Alarm | 12/31/2009 | 2009 | 2,096.6 | **2,096.6** | 0.0 | **0.0** | 7,153.7 | **7,153.7** | 0.1 | 1,023.06 | **1,023.06** | Other | 0 | N/A | 0.0 | 0.0 |
| 2249998 | JF PD-Shooting Range/Compost Site | 12/31/2002 | 2002 | N/A | **N/A** | N/A | **N/A** | N/A | **N/A** | 0.0 | 6.34 | **6.34** | Other | 0 | N/A | 0.0 | 0.0 |
| 2249998 | JF PD-Shooting Range/Compost Site | 12/31/2003 | 2003 | N/A | **N/A** | N/A | **N/A** | N/A | **N/A** | 0.0 | 84.66 | **84.66** | Other | 0 | N/A | 0.0 | 0.0 |
| 2249998 | JF PD-Shooting Range/Compost Site | 12/31/2004 | 2004 | N/A | **N/A** | N/A | **N/A** | N/A | **N/A** | 0.0 | 83.38 | **83.38** | Other | 0 | N/A | 0.0 | 0.0 |
| 2249998 | JF PD-Shooting Range/Compost Site | 12/31/2005 | 2005 | N/A | **N/A** | N/A | **N/A** | N/A | **N/A** | 0.0 | 83.82 | **83.82** | Other | 0 | N/A | 0.0 | 0.0 |
| 2249998 | JF PD-Shooting Range/Compost Site | 12/31/2006 | 2006 | N/A | **N/A** | N/A | **N/A** | N/A | **N/A** | 0.0 | 84.38 | **84.38** | Other | 0 | N/A | 0.0 | 0.0 |
| 2249998 | JF PD-Shooting Range/Compost Site | 12/31/2007 | 2007 | N/A | **N/A** | N/A | **N/A** | N/A | **N/A** | 0.0 | 84.42 | **84.42** | Other | 0 | N/A | 0.0 | 0.0 |
| 2249998 | JF PD-Shooting Range/Compost Site | 12/31/2008 | 2008 | N/A | **N/A** | N/A | **N/A** | N/A | **N/A** | 0.0 | 84.00 | **84.00** | Other | 0 | N/A | 0.0 | 0.0 |
| 2249998 | JF PD-Shooting Range/Compost Site | 12/31/2009 | 2009 | N/A | **N/A** | N/A | **N/A** | N/A | **N/A** | 0.0 | 83.20 | **83.20** | Other | 0 | N/A | 0.0 | 0.0 |

**'Buildings pivot' Tab**

| City | (All) |
|---|---|

| | Values | | | |
|---|---|---|---|---|
| Row Labels | Sum of Electric Use (kWh) | Sum of Natural Gas Use (therms) | Sum of Non-kWh/therm Use (kBtu) | Sum of Annual Energy Cost (US Dollars ($)) |
| 2002 | 0 | 0 | 0 | 15564.805 |
| 2003 | 710193 | 69887.95 | -4483.166 | 98770.69 |
| 2004 | 692749.3 | 64872.6 | 4.2884 | 100115.96 |
| 2005 | 735786.9 | 55081.55 | -8.752800001 | 105632.89 |
| 2006 | 710052.5 | 49976.35 | 13.32 | 102748.57 |
| 2007 | 756058.6 | 57794.75 | -0.8432 | 116015.345 |
| 2008 | 738612.2 | 62946.65 | -1.3264 | 132214.275 |
| 2009 | 687532.9 | 64531.15 | -0.8548 | 116120.065 |
| Grand Total | 5030985.4 | 425091 | -4477.3348 | 787182.6 |

**'Water' Tab**

*Columns were deleted that contained redundant information or had zero values.

| Building ID | Facility Name | Period Ending Date | Year | Original Electric Use (kWh) | Electric Use (kWh) | Original Natural Gas Use -therms | Natural Gas Use (therms) | Original Site Energy Use (kBtu) | Site Energy Use (kBtu) | Non-kWh/therm Use (kBtu) | Original Annual Energy Cost (US Dollars ($)) | Annual Energy Cost (US Dollars ($)) | Facility Type | Current Total Floor space (Sq. Ft.) | Direct GHG Emissions (MtCO2e) | Site EUI (kBtu/Sq. Ft.) | Weather Normalized Site EUI (kBtu/Sq. Ft.) | Special Jefferson flag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2236072 | JF Wastewater Treatment Plant | 12/31/2002 | 2002 | N/A | **N/A** | N/A | **N/A** | N/A | **N/A** | 0.0 | 4,110.76 | **4,110.76** | Wastewater | 0 | N/A | 0.0 | 0.0 | WASTEWATER |
| 2236072 | JF Wastewater Treatment Plant | 12/31/2003 | 2003 | N/A | **N/A** | N/A | **N/A** | N/A | **N/A** | 0.0 | 74,886.69 | **74,886.69** | Wastewater | 0 | N/A | 0.0 | 0.0 | WASTEWATER |
| 2236072 | JF Wastewater Treatment Plant | 12/31/2004 | 2004 | 1,335,049.4 | **1,335,049.4** | 16,829.3 | **16,829.3** | 6,238,114.3 | **6,238,114.3** | -4.3 | 80,414.30 | **80,414.30** | Wastewater | 0 | 89.53 | 0.0 | 0.0 | WASTEWATER |
| 2236072 | JF Wastewater Treatment Plant | 12/31/2005 | 2005 | 1,173,636.3 | **1,173,636.3** | 15,150.0 | **15,150.0** | 5,519,451.7 | **5,519,451.7** | 4.6 | 83,337.30 | **83,337.30** | Wastewater | 0 | 80.60 | 0.0 | 0.0 | WASTEWATER |
| 2236072 | JF Wastewater Treatment Plant | 12/31/2006 | 2006 | 1,281,016.1 | **1,281,016.1** | 12,462.4 | **12,462.4** | 5,617,062.0 | **5,617,062.0** | -4.9 | 86,802.73 | **86,802.73** | Wastewater | 0 | 66.30 | 0.0 | 0.0 | WASTEWATER |
| 2236072 | JF Wastewater Treatment Plant | 12/31/2007 | 2007 | 1,254,138.2 | **1,254,138.2** | 14,878.8 | **14,878.8** | 5,766,995.4 | **5,766,995.4** | -4.1 | 95,152.45 | **95,152.45** | Wastewater | 0 | 79.16 | 0.0 | 0.0 | WASTEWATER |
| 2236072 | JF Wastewater Treatment Plant | 12/31/2008 | 2008 | 1,392,480.0 | **1,392,480.0** | 17,174.7 | **17,174.7** | 6,468,608.9 | **6,468,608.9** | -2.9 | 117,403.25 | **117,403.25** | Wastewater | 0 | 91.37 | 0.0 | 0.0 | WASTEWATER |
| 2236072 | JF Wastewater Treatment Plant | 12/31/2009 | 2009 | 1,253,746.3 | **1,253,746.3** | 15,138.8 | **15,138.8** | 5,791,664.5 | **5,791,664.5** | 2.1 | 104,894.90 | **104,894.90** | Wastewater | 0 | 80.54 | 0.0 | 0.0 | WASTEWATER |
| 2247673 | JF Lift Station #1 | 12/31/2002 | 2002 | N/A | **N/A** | N/A | **N/A** | N/A | **N/A** | 0.0 | 7.34 | **7.34** | Other | 28 | N/A | N/A | N/A | WASTEWATER |
| 2247673 | JF Lift Station #1 | 12/31/2003 | 2003 | 792.9 | **792.9** | 0.0 | **0.0** | 2,705.5 | **2,705.5** | 0.1 | 196.27 | **196.27** | Other | 28 | N/A | 96.6 | 96.6 | WASTEWATER |
| 2247673 | JF Lift Station #1 | 12/31/2004 | 2004 | 1,239.2 | **1,239.2** | 0.0 | **0.0** | 4,228.0 | **4,228.0** | -0.2 | 228.40 | **228.40** | Other | 28 | N/A | 151.0 | 151.0 | WASTEWATER |
| 2247673 | JF Lift Station #1 | 12/31/2005 | 2005 | 908.8 | **908.8** | 0.0 | **0.0** | 3,101.0 | **3,101.0** | 0.2 | 212.37 | **212.37** | Other | 28 | N/A | 110.7 | 110.7 | WASTEWATER |
| 2247673 | JF Lift Station #1 | 12/31/2006 | 2006 | 930.8 | **930.8** | 0.0 | **0.0** | 3,175.8 | **3,175.8** | -0.1 | 215.12 | **215.12** | Other | 28 | N/A | 113.4 | 113.4 | WASTEWATER |
| 2247673 | JF Lift Station #1 | 12/31/2007 | 2007 | 1,043.0 | **1,043.0** | 0.0 | **0.0** | 3,558.8 | **3,558.8** | 0.1 | 230.08 | **230.08** | Other | 28 | N/A | 127.1 | 127.1 | WASTEWATER |
| 2247673 | JF Lift Station #1 | 12/31/2008 | 2008 | 1,226.5 | **1,226.5** | 0.0 | **0.0** | 4,184.9 | **4,184.9** | 0.1 | 254.82 | **254.82** | Other | 28 | N/A | 149.5 | 149.5 | WASTEWATER |
| 2247673 | JF Lift Station #1 | 12/31/2009 | 2009 | 1,065.7 | **1,065.7** | 0.0 | **0.0** | 3,636.1 | **3,636.1** | -0.1 | 254.83 | **254.83** | Other | 28 | N/A | 129.9 | 129.9 | WASTEWATER |
| 2247676 | JF Lift Station #2 | 12/31/2002 | 2002 | N/A | **N/A** | N/A | **N/A** | N/A | **N/A** | 0.0 | 25.81 | **25.81** | Other | 28 | N/A | N/A | N/A | WASTEWATER |
| 2247676 | JF Lift Station #2 | 12/31/2003 | 2003 | 7,990.5 | **7,990.5** | 0.0 | **0.0** | 27,263.5 | **27,263.5** | -0.1 | 674.36 | **674.36** | Other | 28 | N/A | 973.7 | 973.7 | WASTEWATER |
| 2247676 | JF Lift Station #2 | 12/31/2004 | 2004 | 9,172.1 | **9,172.1** | 0.0 | **0.0** | 31,295.2 | **31,295.2** | 0.0 | 775.94 | **775.94** | Other | 28 | N/A | 1,117.7 | 1,112.0 | WASTEWATER |
| 2247676 | JF Lift Station #2 | 12/31/2005 | 2005 | 9,348.8 | **9,348.8** | 0.0 | **0.0** | 31,898.0 | **31,898.0** | -0.1 | 850.79 | **850.79** | Other | 28 | N/A | 1,139.2 | 1,139.2 | WASTEWATER |
| 2247676 | JF Lift Station #2 | 12/31/2006 | 2006 | 11,051.8 | **11,051.8** | 0.0 | **0.0** | 37,708.7 | **37,708.7** | 0.0 | 989.10 | **989.10** | Other | 28 | N/A | 1,346.7 | 1,320.1 | WASTEWATER |
| 2247676 | JF Lift Station #2 | 12/31/2007 | 2007 | 13,464.2 | **13,464.2** | 0.0 | **0.0** | 45,940.0 | **45,940.0** | 0.1 | 1,257.77 | **1,257.77** | Other | 28 | N/A | 1,640.7 | 1,618.6 | WASTEWATER |
| 2247676 | JF Lift Station #2 | 12/31/2008 | 2008 | 15,562.6 | **15,562.6** | 0.0 | **0.0** | 53,099.7 | **53,099.7** | 0.1 | 1,534.33 | **1,534.33** | Other | 28 | N/A | 1,896.4 | 1,889.0 | WASTEWATER |
| 2247676 | JF Lift Station #2 | 12/31/2009 | 2009 | 15,263.5 | **15,263.5** | 0.0 | **0.0** | 52,079.2 | **52,079.2** | 0.1 | 1,556.37 | **1,556.37** | Other | 28 | N/A | 1,860.0 | 1,860.0 | WASTEWATER |
| 2247678 | JF Lift Station #3 | 12/31/2002 | 2002 | N/A | **N/A** | N/A | **N/A** | N/A | **N/A** | 0.0 | 7.02 | **7.02** | Other | 144 | N/A | N/A | N/A | WASTEWATER |
| 2247678 | JF Lift Station #3 | 12/31/2003 | 2003 | 1,428.9 | **1,428.9** | 0.0 | **0.0** | 4,875.5 | **4,875.5** | 0.1 | 178.62 | **178.62** | Other | 144 | N/A | 33.9 | 33.9 | WASTEWATER |
| 2247678 | JF Lift Station #3 | 12/31/2004 | 2004 | 1,684.4 | **1,684.4** | 0.0 | **0.0** | 5,747.1 | **5,747.1** | -0.1 | 200.18 | **200.18** | Other | 144 | N/A | 39.9 | 40.1 | WASTEWATER |
| 2247678 | JF Lift Station #3 | 12/31/2005 | 2005 | 1,380.2 | **1,380.2** | 0.0 | **0.0** | 4,709.4 | **4,709.4** | 0.2 | 188.16 | **188.16** | Other | 144 | N/A | 32.7 | 32.7 | WASTEWATER |
| 2247678 | JF Lift Station #3 | 12/31/2006 | 2006 | 1,379.9 | **1,379.9** | 0.0 | **0.0** | 4,708.4 | **4,708.4** | 0.2 | 189.43 | **189.43** | Other | 144 | N/A | 32.7 | 31.9 | WASTEWATER |
| 2247678 | JF Lift Station #3 | 12/31/2007 | 2007 | 1,494.0 | **1,494.0** | 0.0 | **0.0** | 5,097.6 | **5,097.6** | 0.1 | 206.51 | **206.51** | Other | 144 | N/A | 35.4 | 36.0 | WASTEWATER |
| 2247678 | JF Lift Station #3 | 12/31/2008 | 2008 | 1,484.4 | **1,484.4** | 0.0 | **0.0** | 5,064.7 | **5,064.7** | -0.1 | 215.38 | **215.38** | Other | 144 | N/A | 35.2 | 35.2 | WASTEWATER |
| 2247678 | JF Lift Station #3 | 12/31/2009 | 2009 | 1,312.7 | **1,312.7** | 0.0 | **0.0** | 4,478.9 | **4,478.9** | 0.0 | 204.70 | **204.70** | Other | 144 | N/A | 31.1 | 31.1 | WASTEWATER |
| 2247680 | JF Lift Station #4 | 12/31/2002 | 2002 | N/A | **N/A** | N/A | **N/A** | N/A | **N/A** | 0.0 | 7.64 | **7.64** | Other | 28 | N/A | N/A | N/A | WASTEWATER |
| 2247680 | JF Lift Station #4 | 12/31/2003 | 2003 | 1,588.2 | **1,588.2** | 0.0 | **0.0** | 5,418.9 | **5,418.9** | 0.0 | 189.06 | **189.06** | Other | 28 | N/A | 193.5 | 193.5 | WASTEWATER |
| 2247680 | JF Lift Station #4 | 12/31/2004 | 2004 | 1,833.2 | **1,833.2** | 0.0 | **0.0** | 6,254.8 | **6,254.8** | -0.1 | 209.65 | **209.65** | Other | 28 | N/A | 223.4 | 223.4 | WASTEWATER |
| 2247680 | JF Lift Station #4 | 12/31/2005 | 2005 | 1,799.4 | **1,799.4** | 0.0 | **0.0** | 6,139.7 | **6,139.7** | 0.1 | 220.19 | **220.19** | Other | 28 | N/A | 219.3 | 221.5 | WASTEWATER |
| 2247680 | JF Lift Station #4 | 12/31/2006 | 2006 | 2,152.3 | **2,152.3** | 0.0 | **0.0** | 7,343.6 | **7,343.6** | 0.0 | 248.59 | **248.59** | Other | 28 | N/A | 262.3 | 262.3 | WASTEWATER |
| 2247680 | JF Lift Station #4 | 12/31/2007 | 2007 | 2,570.4 | **2,570.4** | 0.0 | **0.0** | 8,770.2 | **8,770.2** | 0.0 | 294.14 | **294.14** | Other | 28 | N/A | 313.2 | 317.1 | WASTEWATER |
| 2247680 | JF Lift Station #4 | 12/31/2008 | 2008 | 2,706.2 | **2,706.2** | 0.0 | **0.0** | 9,233.5 | **9,233.5** | -0.1 | 323.59 | **323.59** | Other | 28 | N/A | 329.8 | 329.8 | WASTEWATER |
| 2247680 | JF Lift Station #4 | 12/31/2009 | 2009 | 2,349.9 | **2,349.9** | 0.0 | **0.0** | 8,017.8 | **8,017.8** | -0.1 | 299.45 | **299.45** | Other | 28 | N/A | 286.4 | 286.1 | WASTEWATER |
| 2247681 | JF Lift Station #5 | 12/31/2002 | 2002 | N/A | **N/A** | N/A | **N/A** | N/A | **N/A** | 0.0 | 0.66 | **0.66** | Other | 28 | N/A | N/A | N/A | WASTEWATER |
| 2247681 | JF Lift Station #5 | 12/31/2003 | 2003 | 2,180.6 | **2,180.6** | 0.0 | **0.0** | 7,440.2 | **7,440.2** | 0.0 | 288.87 | **288.87** | Other | 28 | N/A | 265.7 | 265.7 | WASTEWATER |
| 2247681 | JF Lift Station #5 | 12/31/2004 | 2004 | 2,204.9 | **2,204.9** | 0.0 | **0.0** | 7,523.0 | **7,523.0** | -0.1 | 295.23 | **295.23** | Other | 28 | N/A | 268.7 | 271.5 | WASTEWATER |
| 2247681 | JF Lift Station #5 | 12/31/2005 | 2005 | 2,411.6 | **2,411.6** | 0.0 | **0.0** | 8,228.4 | **8,228.4** | 0.0 | 326.50 | **326.50** | Other | 28 | N/A | 293.9 | 293.9 | WASTEWATER |
| 2247681 | JF Lift Station #5 | 12/31/2006 | 2006 | 2,865.2 | **2,865.2** | 0.0 | **0.0** | 9,776.1 | **9,776.1** | 0.0 | 363.52 | **363.52** | Other | 28 | N/A | 349.1 | 349.1 | WASTEWATER |
| 2247681 | JF Lift Station #5 | 12/31/2007 | 2007 | 3,623.2 | **3,623.2** | 0.0 | **0.0** | 12,362.2 | **12,362.2** | -0.2 | 442.73 | **442.73** | Other | 28 | N/A | 441.5 | 441.5 | WASTEWATER |
| 2247681 | JF Lift Station #5 | 12/31/2008 | 2008 | 3,300.4 | **3,300.4** | 0.0 | **0.0** | 11,260.9 | **11,260.9** | -0.1 | 436.87 | **436.87** | Other | 28 | N/A | 402.2 | 402.2 | WASTEWATER |
| 2247681 | JF Lift Station #5 | 12/31/2009 | 2009 | 3,187.8 | **3,187.8** | 0.0 | **0.0** | 10,876.8 | **10,876.8** | 0.0 | 448.45 | **448.45** | Other | 28 | N/A | 388.5 | 388.5 | WASTEWATER |

**'Water' Tab (Continued)**

*Columns were deleted that contained redundant information or had zero values.

| Building ID | Facility Name | Period Ending Date | Year | Original Electric Use (kWh) | Electric Use (kWh) | Original Natural Gas Use -therms | Natural Gas Use (therms) | Original Site Energy Use (kBtu) | Site Energy Use (kBtu) | Non-kWh/therm Use (kBtu) | Original Annual Energy Cost (US Dollars ($)) | Annual Energy Cost (US Dollars ($)) | Facility Type | Current Total Floor space (Sq. Ft.) | Direct GHG Emissions (MtCO2e) | Site EUI (kBtu/Sq. Ft.) | Weather Normalized Site EUI (kBtu/Sq. Ft.) | Special Jefferson flag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2263929 | JF Well #2 | 12/31/2003 | 2003 | 198,528.0 | **198,528.0** | 0.0 | **0.0** | 677,377.5 | **677,377.5** | 0.0 | 14,589.88 | **14,589.88** | Water Treatment | 0 | N/A | 0.0 | 0.0 | WATER |
| 2263929 | JF Well #2 | 12/31/2004 | 2004 | 248,448.0 | **248,448.0** | 0.0 | **0.0** | 847,704.6 | **847,704.6** | 0.0 | 16,250.86 | **16,250.86** | Water Treatment | 0 | N/A | 0.0 | 0.0 | WATER |
| 2263929 | JF Well #2 | 12/31/2005 | 2005 | 248,064.0 | **248,064.0** | 0.0 | **0.0** | 846,394.4 | **846,394.4** | 0.0 | 16,292.78 | **16,292.78** | Water Treatment | 0 | N/A | 0.0 | 0.0 | WATER |
| 2263929 | JF Well #2 | 12/31/2006 | 2006 | 237,120.0 | **237,120.0** | 0.0 | **0.0** | 809,053.4 | **809,053.4** | 0.0 | 16,101.80 | **16,101.80** | Water Treatment | 0 | N/A | 0.0 | 0.0 | WATER |
| 2263929 | JF Well #2 | 12/31/2007 | 2007 | 236,544.0 | **236,544.0** | 0.0 | **0.0** | 807,088.1 | **807,088.1** | 0.0 | 15,408.43 | **15,408.43** | Water Treatment | 0 | N/A | 0.0 | 0.0 | WATER |
| 2263929 | JF Well #2 | 12/31/2008 | 2008 | 205,056.0 | **205,056.0** | 0.0 | **0.0** | 699,651.1 | **699,651.1** | 0.0 | 14,451.41 | **14,451.41** | Water Treatment | 0 | N/A | 0.0 | 0.0 | WATER |
| 2263929 | JF Well #2 | 12/31/2009 | 2009 | 141,504.0 | **141,504.0** | 0.0 | **0.0** | 482,811.6 | **482,811.6** | 0.0 | 11,909.08 | **11,909.08** | Water Treatment | 0 | N/A | 0.0 | 0.0 | WATER |
| 2263933 | JF Well #3 | 12/31/2003 | 2003 | 92,989.0 | **92,989.0** | 0.0 | **0.0** | 317,278.5 | **317,278.5** | 0.0 | 6,881.23 | **6,881.23** | Water Treatment | 0 | N/A | 0.0 | 0.0 | WATER |
| 2263933 | JF Well #3 | 12/31/2004 | 2004 | 90,010.0 | **90,010.0** | 0.0 | **0.0** | 307,114.1 | **307,114.1** | 0.0 | 6,672.70 | **6,672.70** | Water Treatment | 0 | N/A | 0.0 | 0.0 | WATER |
| 2263933 | JF Well #3 | 12/31/2005 | 2005 | 101,626.0 | **101,626.0** | 0.0 | **0.0** | 346,747.9 | **346,747.9** | 0.0 | 7,485.82 | **7,485.82** | Water Treatment | 0 | N/A | 0.0 | 0.0 | WATER |
| 2263933 | JF Well #3 | 12/31/2006 | 2006 | 102,665.0 | **102,665.0** | 0.0 | **0.0** | 350,293.0 | **350,293.0** | 0.0 | 7,558.55 | **7,558.55** | Water Treatment | 0 | N/A | 0.0 | 0.0 | WATER |
| 2263933 | JF Well #3 | 12/31/2007 | 2007 | 98,202.0 | **98,202.0** | 0.0 | **0.0** | 335,065.2 | **335,065.2** | 0.0 | 7,246.14 | **7,246.14** | Water Treatment | 0 | N/A | 0.0 | 0.0 | WATER |
| 2263933 | JF Well #3 | 12/31/2008 | 2008 | 95,712.0 | **95,712.0** | 0.0 | **0.0** | 326,569.3 | **326,569.3** | 0.0 | 7,071.84 | **7,071.84** | Water Treatment | 0 | N/A | 0.0 | 0.0 | WATER |
| 2263933 | JF Well #3 | 12/31/2009 | 2009 | 153,097.0 | **153,097.0** | 0.0 | **0.0** | 522,367.0 | **522,367.0** | 0.0 | 13,883.45 | **13,883.45** | Water Treatment | 0 | N/A | 0.0 | 0.0 | WATER |
| 2263940 | JF Well #4 | 12/31/2003 | 2003 | 202,485.0 | **202,485.0** | 0.0 | **0.0** | 690,878.8 | **690,878.8** | 0.0 | 14,290.56 | **14,290.56** | Water Treatment | 0 | N/A | 0.0 | 0.0 | WATER |
| 2263940 | JF Well #4 | 12/31/2004 | 2004 | 218,517.0 | **218,517.0** | 0.0 | **0.0** | 745,580.0 | **745,580.0** | 0.0 | 15,088.41 | **15,088.41** | Water Treatment | 0 | N/A | 0.0 | 0.0 | WATER |
| 2263940 | JF Well #4 | 12/31/2005 | 2005 | 212,520.0 | **212,520.0** | 0.0 | **0.0** | 725,118.2 | **725,118.2** | 0.0 | 14,572.44 | **14,572.44** | Water Treatment | 0 | N/A | 0.0 | 0.0 | WATER |
| 2263940 | JF Well #4 | 12/31/2006 | 2006 | 209,811.0 | **209,811.0** | 0.0 | **0.0** | 715,875.1 | **715,875.1** | 0.0 | 14,709.87 | **14,709.87** | Water Treatment | 0 | N/A | 0.0 | 0.0 | WATER |
| 2263940 | JF Well #4 | 12/31/2007 | 2007 | 209,705.0 | **209,705.0** | 0.0 | **0.0** | 715,513.5 | **715,513.5** | 0.0 | 15,155.38 | **15,155.38** | Water Treatment | 0 | N/A | 0.0 | 0.0 | WATER |
| 2263940 | JF Well #4 | 12/31/2008 | 2008 | 194,953.0 | **194,953.0** | 0.0 | **0.0** | 665,179.6 | **665,179.6** | 0.0 | 14,180.88 | **14,180.88** | Water Treatment | 0 | N/A | 0.0 | 0.0 | WATER |
| 2263940 | JF Well #4 | 12/31/2009 | 2009 | 151,011.0 | **151,011.0** | 0.0 | **0.0** | 515,249.5 | **515,249.5** | 0.0 | 14,976.43 | **14,976.43** | Water Treatment | 0 | N/A | 0.0 | 0.0 | WATER |
| 2263953 | JF Well #5 | 12/31/2003 | 2003 | 269,926.0 | **269,926.0** | 0.0 | **0.0** | 920,987.5 | **920,987.5** | 0.0 | 16,636.10 | **16,636.10** | Water Treatment | 0 | N/A | 0.0 | 0.0 | WATER |
| 2263953 | JF Well #5 | 12/31/2004 | 2004 | 236,671.0 | **236,671.0** | 0.0 | **0.0** | 807,521.5 | **807,521.5** | 0.0 | 15,703.18 | **15,703.18** | Water Treatment | 0 | N/A | 0.0 | 0.0 | WATER |
| 2263953 | JF Well #5 | 12/31/2005 | 2005 | 208,136.0 | **208,136.0** | 0.0 | **0.0** | 710,160.0 | **710,160.0** | 0.0 | 14,277.68 | **14,277.68** | Water Treatment | 0 | N/A | 0.0 | 0.0 | WATER |
| 2263953 | JF Well #5 | 12/31/2006 | 2006 | 197,931.0 | **197,931.0** | 0.0 | **0.0** | 675,340.6 | **675,340.6** | 0.0 | 14,195.71 | **14,195.71** | Water Treatment | 0 | N/A | 0.0 | 0.0 | WATER |
| 2263953 | JF Well #5 | 12/31/2007 | 2007 | 189,013.0 | **189,013.0** | 0.0 | **0.0** | 644,912.4 | **644,912.4** | 0.0 | 13,931.22 | **13,931.22** | Water Treatment | 0 | N/A | 0.0 | 0.0 | WATER |
| 2263953 | JF Well #5 | 12/31/2008 | 2008 | 202,742.0 | **202,742.0** | 0.0 | **0.0** | 691,755.7 | **691,755.7** | 0.0 | 14,429.25 | **14,429.25** | Water Treatment | 0 | N/A | 0.0 | 0.0 | WATER |
| 2263953 | JF Well #5 | 12/31/2009 | 2009 | 258,327.0 | **258,327.0** | 0.0 | **0.0** | 881,411.7 | **881,411.7** | 0.0 | 21,480.07 | **21,480.07** | Water Treatment | 0 | N/A | 0.0 | 0.0 | WATER |
| 2245854 | JF Jefferson Utilities/ Police Department | 12/31/2002 | 2002 | N/A | **N/A** | N/A | **N/A** | N/A | **N/A** | 0.0 | 0.00 | **0.00** | Office | 16,851 | N/A | N/A | N/A | WATER |
| 2245854 | JF Jefferson Utilities/ Police Department | 12/31/2003 | 2003 | 251,667.0 | **251,667.0** | 21,913.2 | **21,913.2** | 3,039,975.7 | **3,039,975.7** | -10,027.2 | 0.00 | **0.00** | Office | 16,851 | 233.16 | 360.8 | 362.6 | WATER |
| 2245854 | JF Jefferson Utilities/ Police Department | 12/31/2004 | 2004 | 252,336.0 | **252,336.0** | 19,717.5 | **19,717.5** | 2,832,722.1 | **2,832,722.1** | 1.7 | 0.00 | **0.00** | Office | 16,851 | 209.79 | 336.2 | 349.7 | WATER |
| 2245854 | JF Jefferson Utilities/ Police Department | 12/31/2005 | 2005 | 276,624.0 | **276,624.0** | 16,734.2 | **16,734.2** | 2,617,255.8 | **2,617,255.8** | -0.3 | 0.00 | **0.00** | Office | 16,851 | 178.05 | 310.6 | 315.0 | WATER |
| 2245854 | JF Jefferson Utilities/ Police Department | 12/31/2006 | 2006 | 251,808.0 | **251,808.0** | 14,360.4 | **14,360.4** | 2,295,205.7 | **2,295,205.7** | 1.8 | 0.00 | **0.00** | Office | 16,851 | 152.79 | 272.4 | 284.3 | WATER |
| 2245854 | JF Jefferson Utilities/ Police Department | 12/31/2007 | 2007 | 275,520.0 | **275,520.0** | 16,904.7 | **16,904.7** | 2,630,537.5 | **2,630,537.5** | -1.7 | 0.00 | **0.00** | Office | 16,851 | 179.87 | 312.2 | 311.6 | WATER |
| 2245854 | JF Jefferson Utilities/ Police Department | 12/31/2008 | 2008 | 263,712.0 | **263,712.0** | 16,506.8 | **16,506.8** | 2,550,461.2 | **2,550,461.2** | 0.9 | 0.00 | **0.00** | Office | 16,851 | 175.63 | 302.7 | 297.6 | WATER |
| 2245854 | JF Jefferson Utilities/ Police Department | 12/31/2009 | 2009 | 255,264.0 | **255,264.0** | 16,994.5 | **16,994.5** | 2,570,405.0 | **2,570,405.0** | -0.8 | 0.00 | **0.00** | Office | 16,851 | 180.82 | 305.1 | 306.4 | WATER |

**'Water pivot' Tab**

| | |
|---|---|
| Special Jefferson flag | (All) |

Values

| Row Labels | Sum of Electric Use (kWh) | Sum of Natural Gas Use (therms) | Sum of Non-kWh/therm Use (kBtu) | Sum of Annual Energy Cost (US Dollars ($)) |
|---|---|---|---|---|
| 2002 | 0 | 0 | 0 | 4159.23 |
| 2003 | 1029576.1 | 21913.15 | -10027.1032 | 128811.64 |
| 2004 | 2397165.2 | 36546.8 | -2.9624 | 135838.85 |
| 2005 | 2236455.1 | 31884.15 | 4.6488 | 137764.03 |
| 2006 | 2298731.1 | 26822.75 | -3.1632 | 141374.42 |
| 2007 | 2285317 | 31783.45 | -5.704 | 149324.85 |
| 2008 | 2378935.1 | 33681.45 | -2.061199999 | 170301.62 |
| 2009 | 2236128.9 | 32133.25 | 1.2932 | 169907.73 |
| Grand Total | 14862308.5 | 214765 | -10035.052 | 1037482.37 |

| | | kWh | therms | MMBTUs | % Wastewater | | |
|---|---|---|---|---|---|---|---|
| Wastewater | 2003 | **13981.1** | **0** | 48 | 1% | | |
| | 2004 | **1351183.2** | **16829.3** | 6293 | 53% | | |
| | 2005 | **1189485.1** | **15150** | 5574 | 52% | Ave. % Wastewater | |
| | 2006 | **1299396.1** | **12462.4** | 5680 | 54% | 54% | 2004-2009 |
| | 2007 | **1276333** | **14878.8** | 5843 | 53% | | |
| | 2008 | **1416760.1** | **17174.7** | 6552 | 57% | | |
| | 2009 | **1276925.9** | **15138.8** | 5871 | 54% | | |
| Water | 2003 | **1015595** | **21913.15** | 5657 | | | |
| | 2004 | **1045982** | **19717.5** | 5541 | | | |
| | 2005 | **1046970** | **16734.15** | 5246 | | | |
| | 2006 | **999335** | **14360.35** | 4846 | | | |
| | 2007 | **1008984** | **16904.65** | 5133 | | | |
| | 2008 | **962175** | **16506.75** | 4934 | | | |
| | 2009 | **959203** | **16994.45** | 4972 | | | |

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**'Lights' Tab**

*Columns were deleted that contained redundant information or had zero values.

| Building ID | Facility Name | Period Ending Date | Year | Electric Use (kWh) | Natural Gas Use (therms) | Site Energy Use (kBtu) | Non-kWh/therm Use (kBtu) | Annual Energy Cost (US Dollars ($)) | Facility Type | Current Total Floor space (Sq. Ft.) | Direct GHG Emissions (MtCO2e) | Facility Owner | Site EUI (kBtu/Sq. Ft.) | Weather Normalized Site EUI (kBtu/Sq. Ft.) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2245908 | JF North Street Bridge Lights | 12/31/2004 | 2004 | 2,696.9 | 0.0 | 9,201.8 | 0.0 | 277.98 | Other | 0 | N/A | N/A | 0.0 | 0.0 |
| 2245908 | JF North Street Bridge Lights | 12/31/2005 | 2005 | 2,371.6 | 0.0 | 8,091.8 | -0.1 | 263.81 | Other | 0 | N/A | N/A | 0.0 | 0.0 |
| 2245908 | JF North Street Bridge Lights | 12/31/2006 | 2006 | 2,048.6 | 0.0 | 6,989.7 | -0.1 | 240.95 | Other | 0 | N/A | N/A | 0.0 | 0.0 |
| 2245908 | JF North Street Bridge Lights | 12/31/2007 | 2007 | 2,246.7 | 0.0 | 7,665.8 | 0.1 | 267.59 | Other | 0 | N/A | N/A | 0.0 | 0.0 |
| 2245908 | JF North Street Bridge Lights | 12/31/2008 | 2008 | 1,386.8 | 0.0 | 4,731.9 | 0.1 | 205.82 | Other | 0 | N/A | N/A | 0.0 | 0.0 |
| 2245908 | JF North Street Bridge Lights | 12/31/2009 | 2009 | 1,291.0 | 0.0 | 4,404.9 | 0.0 | 202.51 | Other | 0 | N/A | N/A | 0.0 | 0.0 |
| 2245935 | JF Fischer Field Lights | 12/31/2002 | 2002 | N/A | N/A | N/A | 0.0 | 312.17 | Other | 1,675 | N/A | N/A | N/A | N/A |
| 2245935 | JF Fischer Field Lights | 12/31/2003 | 2003 | 7,603.8 | 0.0 | 25,944.0 | -0.2 | 576.24 | Other | 1,675 | N/A | N/A | 15.5 | 15.5 |
| 2245935 | JF Fischer Field Lights | 12/31/2004 | 2004 | 8,060.0 | 0.0 | 27,500.7 | 0.0 | 620.99 | Other | 1,675 | N/A | N/A | 16.4 | 16.4 |
| 2245935 | JF Fischer Field Lights | 12/31/2005 | 2005 | 10,948.0 | 0.0 | 37,354.6 | 0.0 | 963.53 | Other | 1,675 | N/A | N/A | 22.3 | 25.6 |
| 2245935 | JF Fischer Field Lights | 12/31/2006 | 2006 | 11,344.7 | 0.0 | 38,708.2 | 0.1 | 959.68 | Other | 1,675 | N/A | N/A | 23.1 | 23.1 |
| 2245935 | JF Fischer Field Lights | 12/31/2007 | 2007 | 12,527.3 | 0.0 | 42,743.1 | 0.0 | 1,098.67 | Other | 1,675 | N/A | N/A | 25.5 | 25.5 |
| 2245935 | JF Fischer Field Lights | 12/31/2008 | 2008 | 12,720.0 | 0.0 | 43,400.6 | 0.0 | 1,195.72 | Other | 1,675 | N/A | N/A | 25.9 | 25.9 |
| 2245935 | JF Fischer Field Lights | 12/31/2009 | 2009 | 11,195.4 | 0.0 | 38,198.8 | 0.1 | 1,168.04 | Other | 1,675 | N/A | N/A | 22.8 | 22.8 |
| 2246096 | JF Riverfront Park, Playground Security Lighting | 12/31/2006 | 2006 | N/A | N/A | N/A | 0.0 | 418.75 | Other | 0 | N/A | N/A | 0.0 | 0.0 |
| 2246096 | JF Riverfront Park, Playground Security Lighting | 12/31/2007 | 2007 | 6,701.9 | 0.0 | 22,867.0 | 0.1 | 630.09 | Other | 0 | N/A | N/A | 0.0 | 0.0 |
| 2246096 | JF Riverfront Park, Playground Security Lighting | 12/31/2008 | 2008 | 3,305.2 | 0.0 | 11,277.5 | 0.2 | 374.57 | Other | 0 | N/A | N/A | 0.0 | 0.0 |
| 2246096 | JF Riverfront Park, Playground Security Lighting | 12/31/2009 | 2009 | 5,348.5 | 0.0 | 18,249.2 | 0.1 | 577.11 | Other | 0 | N/A | N/A | 0.0 | 0.0 |
| CH-LO1 | Sodium Vapor Streets Lights (charges do not include maintenance charges) | 12/31/2003 | 2003 | 684,200 | | | | $77,622 | Other | | | N/A | | |
| CH-LO1 | Sodium Vapor Streets Lights (charges do not include maintenance charges) | 12/31/2004 | 2004 | 709,061 | | | | $82,344 | Other | | | N/A | | |
| CH-LO1 | Sodium Vapor Streets Lights (charges do not include maintenance charges) | 12/31/2005 | 2005 | 760,001 | | | | $91,085 | Other | | | N/A | | |
| CH-LO1 | Sodium Vapor Streets Lights (charges do not include maintenance charges) | 12/31/2006 | 2006 | 745,568 | | | | $91,048 | Other | | | N/A | | |
| CH-LO1 | Sodium Vapor Streets Lights (charges do not include maintenance charges) | 12/31/2007 | 2007 | 667,916 | | | | $91,633 | Other | | | N/A | | |
| CH-LO1 | Sodium Vapor Streets Lights (charges do not include maintenance charges) | 12/31/2008 | 2008 | 666,933 | | | | $95,537 | Other | | | N/A | | |
| CH-LO1 | Sodium Vapor Streets Lights (charges do not include maintenance charges) | 12/31/2009 | 2009 | 781,538 | | | | $110,436 | Other | | | N/A | | |

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**'Lights pivot' Tab**

City (All)

Values

| Row Labels | Sum of Electric Use (kWh) | Sum of Natural Gas Use (therms) | Sum of Non-kWh/therm Use (kBtu) | Sum of Annual Energy Cost (US Dollars ($)) |
|---|---|---|---|---|
| (blank) | | | | |
| 2003 | 691803.8 | 0 | -0.1656 | 78197.89 |
| 2004 | 719817.9 | 0 | -0.0428 | 83242.96 |
| 2005 | 773320.6 | 0 | -0.0752 | 92312.53 |
| 2006 | 758961.3 | 0 | -0.0396 | 92667.61 |
| 2007 | 689391.9 | 0 | 0.1292 | 93629.07 |
| 2008 | 684345 | 0 | 0.256 | 97313.23 |
| 2009 | 799372.9 | 0 | 0.2212 | 112383.2 |
| 2002 | 0 | 0 | 0 | 312.17 |
| Grand Total | 5117013.4 | 0 | 0.2832 | 650058.66 |

**'Fleet' Tab**

**Fleet information**

| Fleet ID | Vehicle type/ category | Category | Make | Model | Fuel type | Options | 2005 | 2006 | 2007 | 2008 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Diesel | Mileage | 0 | 0 | 0 | 0 | 0 |
| | Streets - Key 0001 | | | | Diesel | Vehicle hours | 0 | 42 | 33 | 105 | 68 |
| CH-F01 | (#1)/Off - Road | Stre | 1992 Case | Loader Backhoe | Diesel | Gallons or kWh | 54 | 78 | 154 | 168 | 93 |
| | | | | | Diesel | Fuel $ | $135 | $205 | $431 | $484 | $213 |
| | | | | | Diesel | Mileage | 0 | 4,161 | 3,489 | 5,722 | 3,700 |
| | Streets - Key 0002 | | 2002 Inter- | | Diesel | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH-F02 | (#3) | Stre | national | Dump Truck | Diesel | Gallons or kWh | 720 | 631 | 873 | 1,266 | 786 |
| | | | | | Diesel | Fuel $ | $1,736 | $1,668 | $2,400 | $1,266 | $1,724 |
| | | | | | Diesel | Mileage | 0 | 3,355 | 5,074 | 5,288 | 2,142 |
| | Streets - Key 0003 | | 1999 Inter- | | Diesel | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH-F03 | (#5) | Stre | national | Dump Truck | Diesel | Gallons or kWh | 395 | 503 | 1,171 | 1,199 | 549 |
| | | | | | Diesel | Fuel $ | $956 | $1,355 | $3,165 | $3,630 | $1,188 |
| | | | | | Diesel | Mileage | 0 | 2,639 | 2,218 | 3,175 | 2,768 |
| | Streets - Key 0004 | | | | Diesel | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH-F04 | (#6) | Stre | 1992 GMC | Top Kick | Diesel | Gallons or kWh | 408 | 421 | 411 | 563 | 511 |
| | | | | | Diesel | Fuel $ | $166 | $1,098 | $1,113 | $1,854 | $1,087 |
| | | | | | Diesel | Mileage | 0 | 3,983 | 7,917 | 7,741 | 6,059 |
| | Streets - Key 0005 | | 2006 Inter- | | Diesel | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH-F05 | (#7) | Stre | national | Dump Truck | Diesel | Gallons or kWh | 258 | 556 | 1,541 | 1,605 | 1,206 |
| | | | | | Diesel | Fuel $ | $619 | $1,435 | $4,255 | $5,162 | $2,640 |
| | | | | | Diesel | Mileage | 0 | 0 | 0 | 133 | 0 |
| | Streets - Key 0006 | | | | Diesel | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH-F06 | (#8) | Stre | 1988 GMC | Dump Truck | Diesel | Gallons or kWh | 31 | 0 | 0 | 28 | 0 |
| | | | | | Diesel | Fuel $ | $66 | $0 | $0 | $104 | $0 |

**'Fleet' Tab (Continued)**

| Fleet ID | Vehicle type/ category | Category | Make | Model | Fuel type | Options | 2005 | 2006 | 2007 | 2008 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Unleaded | Mileage | 0 | 3,456 | 3,766 | 3,189 | 3,667 |
| | Streets - Key 0007 | | 2005 | | Unleaded | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH-F07 | (#9) | Stre | Chev-rolet | Dump Truck | Unleaded | Gallons or kWh | 209 | 389 | 418 | 368 | 455 |
| | | | | | Unleaded | Fuel $ | $452 | $970 | $1,121 | $1,145 | $980 |
| | | | | | Unleaded | Mileage | 0 | 4,681 | 4,054 | 5,188 | 3,804 |
| | Streets - Key 0008 | | 1997 | | Unleaded | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH-F08 | (#10) | Stre | Chev-rolet | Pick Up Truck | Unleaded | Gallons or kWh | 144 | 399 | 394 | 462 | 371 |
| | | | | | Unleaded | Fuel $ | $329 | $986 | $1,022 | $1,408 | $830 |
| | | | | | OTHER | Mileage | 0 | 0 | 0 | 0 | 0 |
| | | | | | OTHER | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH-F09 | Key 0044 | Key | | | OTHER | Gallons or kWh | 0 | 0 | 0 | 0 | 0 |
| | | | | | OTHER | Fuel $ | $0 | $0 | $0 | $0 | $0 |
| | | | | | Diesel | Mileage | 0 | 5,166 | 6,209 | 5,879 | 3,132 |
| | Streets - Key 0010 | | 1997 | | Diesel | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH-F10 | (#12) | Stre | Inter-national | Dump Truck | Diesel | Gallons or kWh | 252 | 550 | 1,022 | 972 | 560 |
| | | | | | Diesel | Fuel $ | $628 | $1,451 | $2,834 | $2,967 | $1,198 |
| | | | | | Unleaded | Mileage | 0 | 3,433 | 3,576 | 3,968 | 3,400 |
| | Streets - Key 0011 | | 2000 | 1 Ton | Unleaded | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH-F11 | (#13) | Stre | Chev-rolet | Pick Up Truck | Unleaded | Gallons or kWh | 186 | 375 | 464 | 399 | 407 |
| | | | | | Unleaded | Fuel $ | $403 | $943 | $1,236 | $1,236 | $924 |
| | | | | | Diesel | Mileage | 0 | 0 | 0 | 0 | 0 |
| | Streets - Key 0012 | | 1987 | | Diesel | Vehicle hours | 0 | 151 | 139 | 99 | 75 |
| CH-F12 | (#14) Off - Road | Stre | John Deere | 672 B Grader | Diesel | Gallons or kWh | 208 | 207 | 288 | 206 | 149 |
| | | | | | Diesel | Fuel $ | $483 | $559 | $811 | $682 | $318 |
| | | | | | Diesel | Mileage | 0 | 0 | 0 | 0 | 0 |
| | Streets - Key 0013 | | | Tractor | Diesel | Vehicle hours | 0 | 385 | 312 | 373 | 337 |
| CH-F13 | (#15) Off - Road | Stre | John Deere | Loader Backhoe | Diesel | Gallons or kWh | 201 | 503 | 457 | 527 | 522 |
| | | | | | Diesel | Fuel $ | $476 | $1,311 | $1,239 | $1,873 | $1,151 |
| | | | | | Diesel | Mileage | 0 | 0 | 0 | 0 | 0 |
| | Streets - Key 0014 | | | | Diesel | Vehicle hours | 0 | 390 | 325 | 398 | 161 |
| CH-F14 | (#16) Off - Road | Stre | 1993 Elgin | Sweeper | Diesel | Gallons or kWh | 292 | 595 | 505 | 622 | 270 |
| | | | | | Diesel | Fuel $ | $701 | $1,564 | $1,394 | $2,478 | $534 |
| | | | | | Unleaded | Mileage | 0 | 6,947 | 7,508 | 6,330 | 3,591 |
| | Streets - Key 0015 | | 2000 | ¾ Ton | Unleaded | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH-F15 | (#17) | Stre | Chev-rolet | Pick Up Truck | Unleaded | Gallons or kWh | 265 | 504 | 597 | 481 | 328 |
| | | | | | Unleaded | Fuel $ | $578 | $1,250 | $1,578 | $1,494 | $672 |
| | Streets - Key 0016 (#22) Off - Road Truck - Gas Aux. Eng. - Diesel | | | Leaf Machine Built In-House Snuffy | OTHER | Mileage | 0 | 219 | 222 | 160 | 155 |
| | | | | | OTHER | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| | | | | | OTHER | Gallons or kWh | 403 | 1,014 | 926 | 794 | 799 |
| CH-F16 | | Stre | 1979 | | OTHER | Fuel $ | $1,014 | $2,275 | $2,634 | $2,496 | $1,843 |
| CH-F17 | Streets - Key 0017 (#25)Off | Stre | 1989 Ford | Tractor Mower | Diesel | Mileage | 0 | 0 | 0 | 0 | 0 |
| | | | | | Diesel | Vehicle hours | 0 | 258 | 252 | 185 | 136 |
| | | | | | Diesel | Gallons or kWh | 148 | 383 | 388 | 240 | 286 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | - Road | | | | Diesel | Fuel $ | $332 | $1,021 | $1,072 | $989 | $640 |

**'Fleet' Tab (Continued)**

| Fleet ID | Vehicle type/ category | Category | Make | Model | Fuel type | Options | 2005 | 2006 | 2007 | 2008 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Diesel | Mileage | 0 | 0 | 0 | 0 | 0 |
| | Streets - | | | | Diesel | Vehicle hours | 33 | 78 | 302 | 54 | 62 |
| CH- | Key 0018 | | | Snow | Diesel | Gallons or kWh | 12 | 49 | 378 | 114 | 165 |
| F18 | (#26) | Stre | Sincard | Blower | Diesel | Fuel $ | $27 | $135 | $983 | $355 | $368 |
| | | | | | Diesel | Mileage | 0 | 3,414 | 4,863 | 6,889 | 4,555 |
| | Streets - | | 2004 | | Diesel | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH- | Key 0019 | | Inter- | Dump | Diesel | Gallons or kWh | 586 | 423 | 994 | 1,285 | 884 |
| F19 | (#29) | Stre | national | Truck | Diesel | Fuel $ | $1,407 | $1,131 | $2,737 | $4,048 | $1,930 |
| | Streets - | | | | Diesel | Mileage | 0 | 0 | 0 | 0 | 0 |
| | Key 0021 | | | | Diesel | Vehicle hours | 0 | 133 | 230 | 210 | 0 |
| CH- | (#43)Off | | 1995 | Brush | Diesel | Gallons or kWh | 209 | 328 | 372 | 253 | 0 |
| F20 | - Road | Stre | Morbark | Chipper | Diesel | Fuel $ | $482 | $843 | $977 | $1,002 | $0 |
| | | | | | Unleaded | Mileage | 0 | 427 | 901 | 70 | 226 |
| | Streets - | | | | Unleaded | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH- | Key 0022 | | 1996 | | Unleaded | Gallons or kWh | 24 | 22 | 55 | 62 | 40 |
| F21 | (#44) | Stre | Dodge | Dakota | Unleaded | Fuel $ | $54 | $60 | $140 | $193 | $90 |
| | | | | | Unleaded | Mileage | 0 | 0 | 0 | 0 | 0 |
| | Streets - | | | Crack | Unleaded | Vehicle hours | 0 | 0 | 6 | 0 | 0 |
| CH- | Key 0023 | | | Sealer | Unleaded | Gallons or kWh | 0 | 0 | 20 | 0 | 0 |
| F22 | (#47) | Stre | | Router | Unleaded | Fuel $ | $0 | $0 | $54 | $0 | $0 |
| | Streets - | | | | Unleaded | Mileage | 0 | 0 | 0 | 0 | 0 |
| | Key 0024 | | | | Unleaded | Vehicle hours | 0 | 24 | 25 | 13 | 27 |
| CH- | (#50)Off | | 2001 | Concrete | Unleaded | Gallons or kWh | 17 | 49 | 47 | 13 | 39 |
| F23 | - Road | Stre | Clipper | Saw | Unleaded | Fuel $ | $42 | $127 | $127 | $45 | $90 |
| | | | | | Unleaded | Mileage | 0 | 2,328 | 2,788 | 2,098 | 2,131 |
| | Streets - | | | F-250 | Unleaded | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH- | Key 0025 | | 1994 | Pick Up | Unleaded | Gallons or kWh | 122 | 264 | 289 | 187 | 237 |
| F24 | (#55) | Stre | Ford | Truck | Unleaded | Fuel $ | $274 | $687 | $799 | $657 | $544 |
| | | | | | Diesel | Mileage | 0 | 4,083 | 5,197 | 5,638 | 2,688 |
| | Streets - | | 1995 | | Diesel | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH- | Key 0026 | | Inter- | 4700 | Diesel | Gallons or kWh | 583 | 637 | 1,118 | 1,298 | 651 |
| F25 | (#56) | Stre | national | Truck | Diesel | Fuel $ | $1,375 | $1,670 | $3,078 | $3,904 | $1,411 |
| | Streets - | | | 1840 | Diesel | Mileage | 0 | 0 | 0 | 0 | 0 |
| | Key 0027 | | | Skid | Diesel | Vehicle hours | 0 | 127 | 246 | 95 | 104 |
| CH- | (#58)Off | | 1994 | Steer | Diesel | Gallons or kWh | 51 | 108 | 209 | 77 | 86 |
| F26 | - Road | Stre | Case | Loader | Diesel | Fuel $ | $119 | $284 | $577 | $274 | $189 |
| | | | | | Diesel | Mileage | 0 | 0 | 0 | 0 | 0 |
| | Streets - | | | | Diesel | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH- | Key 0028 | | 2009 | Brush | Diesel | Gallons or kWh | 0 | 0 | 0 | 0 | 0 |
| F27 | (#4) | Stre | Bandit | Chipper | Diesel | Fuel $ | $0 | $0 | $0 | $0 | $0 |
| | Streets - | | | | Diesel | Mileage | 0 | 0 | 0 | 0 | 0 |
| | Key 0029 | | | | Diesel | Vehicle hours | 0 | 0 | 25 | 0 | 26 |
| CH- | (#66)Off | | 1996 | Leaf Vac | Diesel | Gallons or kWh | 153 | 0 | 53 | 0 | 42 |
| F28 | - Road | Stre | Giant | Machine | Diesel | Fuel $ | $438 | $0 | $160 | $0 | $104 |

**'Fleet' Tab (Continued)**

| Fleet ID | Vehicle type/ category | Category | Make | Model | Fuel type | Options | 2005 | 2006 | 2007 | 2008 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Streets - Key 0030 | | | | Unleaded | Mileage | 0 | 0 | 0 | 0 | 0 |
| | | | | | Unleaded | Vehicle hours | 0 | 29 | 58 | 24 | 39 |
| CH-F29 | (#70)/Off - Road | Stre | 1962 | Band Wagon | Unleaded | Gallons or kWh | 1 | 10 | 27 | 13 | 24 |
| | | | | | Unleaded | Fuel $ | $2 | $26 | $75 | $45 | $58 |
| | Parks - Key 0034 | | | | Unleaded | Mileage | 0 | 0 | 0 | 0 | 0 |
| | | | Massey | Mower | Unleaded | Vehicle hours | 0 | 8 | 0 | 2 | 0 |
| CH-F30 | (#PK1)/ Off - Road | Park | Fer-guson | & leaf mulcher | Unleaded | Gallons or kWh | 0 | 19 | 0 | 10 | 20 |
| | | | | | Unleaded | Fuel $ | $0 | $43 | $0 | $36 | $40 |
| | | | | | Unleaded | Mileage | 0 | 5,464 | 8,188 | 3,765 | 6,139 |
| | Parks - Key 0035 | | 2000 Chev- | ¾ Ton Pick Up | Unleaded | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH-F31 | (#PK8) | Park | rolet | Truck | Unleaded | Gallons or kWh | 270 | 461 | 622 | 563 | 655 |
| | | | | | Unleaded | Fuel $ | $587 | $1,149 | $1,626 | $1,674 | $1,414 |
| | Streets - Key 0036 | | | | Diesel | Mileage | 0 | 0 | 0 | 0 | 0 |
| | | | 2000 John | | Diesel | Vehicle hours | 0 | 555 | 587 | 803 | 512 |
| CH-F32 | (#40)/Off - Road | Stre | Deere | End-loader | Diesel | Gallons or kWh | 535 | 885 | 717 | 1,353 | 852 |
| | | | | | Diesel | Fuel $ | $1,273 | $2,293 | $2,030 | $4,309 | $1,818 |
| | Parks - Key 0037 | | | | Diesel | Mileage | 0 | 0 | 0 | 0 | 0 |
| | | | 1994 | 72" | Diesel | Vehicle hours | 0 | 115 | 48 | 0 | 0 |
| CH-F33 | (#PK5)/ Off - Road | Park | Ran-some | Deck Mower | Diesel | Gallons or kWh | 18 | 58 | 34 | 0 | 0 |
| | | | | | Diesel | Fuel $ | $39 | $157 | $93 | $0 | $0 |
| | | | | | Diesel | Mileage | 0 | 0 | 0 | 0 | 0 |
| | Streets - Key 0038 | | | Street Sweeper | Diesel | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH-F34 | (#2) | Stre | 2009 Elgin | Vacuum | Diesel | Gallons or kWh | 0 | 0 | 0 | 0 | 1,071 |
| | | | | | Diesel | Fuel $ | $0 | $0 | $0 | $0 | $2,344 |
| | | | | | Unleaded | Mileage | 0 | 800 | 0 | 1,400 | 2,471 |
| | Parks - Key 0039 | | | 1 Ton Pick Up | Unleaded | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH-F35 | (#PK7) | Park | 1997 GMC | Truck | Unleaded | Gallons or kWh | 161 | 79 | 31 | 179 | 268 |
| | | | | | Unleaded | Fuel $ | $350 | $198 | $81 | $594 | $582 |
| | | | | | Diesel | Mileage | 0 | 0 | 0 | 0 | 0 |
| | Parks - | | 2001 | 4 wheel | Diesel | Vehicle hours | 0 | 142 | 172 | 216 | 97 |
| CH-F36 | Key 0040 (#PK2) | Park | Jacob-son | drive Turfcat | Diesel | Gallons or kWh | 60 | 89 | 123 | 134 | 72 |
| | | | | | Diesel | Fuel $ | $139 | $235 | $335 | $421 | $146 |
| | Parks - | | | | Unleaded | Mileage | 0 | 0 | 0 | 0 | 0 |
| | Key 0041 | | | Ball Dia- | Unleaded | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH-F37 | (#PK39)/ Off - Road | Park | Smithco | mond Machine | Unleaded | Gallons or kWh | 11 | 17 | 38 | 31 | 7 |
| | | | | | Unleaded | Fuel $ | $23 | $45 | $111 | $92 | $15 |
| | | | | | Unleaded | Mileage | 0 | 0 | 0 | 0 | 0 |
| | Parks - | | 1989 | | Unleaded | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH-F38 | Key 0042 (#PK11) | Park | Chev-rolet | Truck | Unleaded | Gallons or kWh | 169 | 346 | 240 | 96 | 209 |
| | | | | | Unleaded | Fuel $ | $374 | $900 | $699 | $336 | $470 |
| | | | | XT 401D | Diesel | Mileage | 0 | 0 | 0 | 0 | 0 |
| | Parks - | | | Tractor | Diesel | Vehicle hours | 0 | 47 | 52 | 10 | 18 |
| | Key 0043 | | 1990 | & | Diesel | Gallons or kWh | 9 | 35 | 39 | 8 | 4 |
| CH-F39 | (#PK27)/ Off - Road | Park | Ran-some | Cutting Deck | Diesel | Fuel $ | $23 | $99 | $101 | $33 | $9 |

**'Fleet' Tab (Continued)**

| Fleet ID | Vehicle type/ category | Category | Make | Model | Fuel type | Options | 2005 | 2006 | 2007 | 2008 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | OTHER | Mileage | 0 | 0 | 0 | 0 | 0 |
| | | | | | OTHER | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH- | | | | | OTHER | Gallons or kWh | 0 | 0 | 0 | 0 | 0 |
| F40 | Key 0045 | Key | | | OTHER | Fuel $ | $0 | $0 | $0 | $0 | $0 |
| | | | | | Unleaded | Mileage | 0 | 800 | 4,498 | 3,695 | 3,374 |
| | WWTP - | | | | Unleaded | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH- | Key 0046 | | 2009 | | Unleaded | Gallons or kWh | 0 | 114 | 474 | 400 | 382 |
| F41 | (#TP1) | WWTP | Ford | Escape | Unleaded | Fuel $ | $0 | $240 | $1,249 | $1,241 | $814 |
| | | | | | Diesel | Mileage | 0 | 0 | 0 | 0 | 0 |
| | WWTP - | | 2000 | | Diesel | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH- | Key 0047 | | Inter- | | Diesel | Gallons or kWh | 134 | 419 | 154 | 352 | 342 |
| F42 | (#TP2) | WWTP | national | Jet/Vac | Diesel | Fuel $ | $312 | $1,090 | $397 | $1,412 | $723 |
| | | | | | Diesel | Mileage | 0 | 0 | 0 | 0 | 0 |
| | WWTP - | | | Filter | Diesel | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH- | Key 0048 | | 1999 | and | Diesel | Gallons or kWh | 0 | 10 | 5 | 0 | 4 |
| F43 | (#TP3) | WWTP | CH & E | Pump | Diesel | Fuel $ | $0 | $27 | $14 | $0 | $9 |
| | WWTP - | | | | Unleaded | Mileage | 0 | 0 | 0 | 0 | 0 |
| | Key 0049 | | 1985 | | Unleaded | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH- | (#TP6)/ | | Home- | 4" | Unleaded | Gallons or kWh | 0 | 0 | 0 | 0 | 0 |
| F44 | Off - Road | WWTP | lite | Pump | Unleaded | Fuel $ | $0 | $0 | $0 | $0 | $0 |
| | | | | Big | Diesel | Mileage | 0 | 0 | 0 | 0 | 0 |
| | WWTP | | | Wheel | Diesel | Vehicle hours | 0 | 376 | 141 | 197 | 178 |
| | Key 0050 | | | Sludge | Diesel | Gallons or kWh | 164 | 338 | 592 | 895 | 719 |
| CH- | (#TP7)/ | | | Inject- | | | | | | | |
| F45 | Off - Road | WWTP | 1985 | or | Diesel | Fuel $ | $421 | $875 | $1,711 | $3,552 | $1,465 |
| | | | | | Unleaded | Mileage | 0 | 1,999 | 0 | 2,128 | 0 |
| | WWTP - | | | | Unleaded | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH- | Key 0051 | | 1992 | Pick Up | Unleaded | Gallons or kWh | 144 | 321 | 424 | 387 | 358 |
| F46 | (#TP12) | WWTP | Dodge | Truck | Unleaded | Fuel $ | $325 | $793 | $1,132 | $1,212 | $789 |
| | | | | | Unleaded | Mileage | 0 | 0 | 0 | 0 | 0 |
| | WWTP - | | | Econo- | Unleaded | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH- | Key 0052 | | 2005 | line | Unleaded | Gallons or kWh | 30 | 72 | 68 | 60 | 59 |
| F47 | (#TP13) | WWTP | Ford | Van | Unleaded | Fuel $ | $61 | $171 | $176 | $215 | $138 |
| | WWTP - | | | | Diesel | Mileage | 0 | 0 | 0 | 0 | 0 |
| | Key 0053 | | | G25T | Diesel | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH- | (#TP14)/ | | 1997 | Gen- | Diesel | Gallons or kWh | 0 | 0 | 0 | 12 | 0 |
| F48 | Off - Road | WWTP | Wacker | erator | Diesel | Fuel $ | $0 | $0 | $0 | $43 | $0 |
| | | | | | Unleaded | Mileage | 0 | 4,109 | 2,488 | 3,201 | 4,130 |
| | WWTP - | | | | Unleaded | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH- | Key 0054 | | 1994 | Crown | Unleaded | Gallons or kWh | 73 | 211 | 178 | 156 | 369 |
| F49 | (#TP17) | WWTP | Ford | Victoria | Unleaded | Fuel $ | $168 | $510 | $451 | $495 | $929 |
| | | | | | Unleaded | Mileage | 0 | 6,851 | 6,791 | 6,240 | 5,100 |
| | Utilities - | | | | Unleaded | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH- | Key 0055 | | 2003 | | Unleaded | Gallons or kWh | 131 | 281 | 311 | 248 | 248 |
| F50 | (#WE1) | Util | Ford | Taurus | Unleaded | Fuel $ | $286 | $686 | $809 | $766 | $519 |

**'Fleet' Tab (Continued)**

| Fleet ID | Vehicle type/ category | Category | Make | Model | Fuel type | Options | 2005 | 2006 | 2007 | 2008 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Unleaded | Mileage | 0 | 2,382 | 2,990 | 4,769 | 5,264 |
| | Utilities - | | | F450 | Unleaded | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH- | Key 0056 | | 2003 | Pick Up/ | Unleaded | Gallons or kWh | 179 | 479 | 581 | 806 | 947 |
| F51 | (#WE10) | Util | Ford | Dump | Unleaded | Fuel $ | $370 | $1,151 | $1,505 | $2,341 | $1,973 |
| | | | | Cab/ | Diesel | Mileage | 0 | 4,448 | 4,214 | 4,697 | 4,943 |
| | Utilities - | | | Chassis | Diesel | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH- | Key 0057 | | 1999 | Small | Diesel | Gallons or kWh | 409 | 826 | 917 | 846 | 982 |
| F52 | (#WE3) | Util | Ford | Bucket | Diesel | Fuel $ | $987 | $2,137 | $2,474 | $3,039 | $2,129 |
| | | | | | Unleaded | Mileage | 0 | 7,973 | 8,190 | 8,481 | 6,832 |
| | Utilities - | | | | Unleaded | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH- | Key 0058 | | 2004 | | Unleaded | Gallons or kWh | 310 | 702 | 800 | 824 | 684 |
| F53 | (#WE4) | Util | Ford | Truck | Unleaded | Fuel $ | $673 | $1,711 | $2,113 | $2,570 | $1,458 |
| | | | | | Unleaded | Mileage | 0 | 0 | 0 | 0 | 4,582 |
| | Utilities - | | | F-250 | Unleaded | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH- | Key 0059 | | 2009 | Pick Up | Unleaded | Gallons or kWh | 0 | 0 | 0 | 0 | 519 |
| F54 | (#WE5) | Util | Ford | Truck | Unleaded | Fuel $ | $0 | $0 | $0 | $0 | $1,186 |
| | | | | | Unleaded | Mileage | 0 | 0 | 0 | 0 | 7,204 |
| | Utilities - | | | | Unleaded | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH- | Key 0060 | | 2009 | Ranger | Unleaded | Gallons or kWh | 0 | 0 | 0 | 0 | 539 |
| F55 | (#WE6) | Util | Ford | Truck | Unleaded | Fuel $ | $0 | $0 | $0 | $0 | $1,215 |
| | | | | | Unleaded | Mileage | 0 | 5,420 | 6,196 | 5,787 | 5,162 |
| | Utilities - | | 2003 | | Unleaded | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH- | Key 0061 | | Chev- | Pick Up | Unleaded | Gallons or kWh | 264 | 541 | 642 | 529 | 563 |
| F56 | (#WE7) | Util | rolet | Truck | Unleaded | Fuel $ | $590 | $1,325 | $1,678 | $1,699 | $1,192 |
| | | | | | Diesel | Mileage | 0 | 3,271 | 3,769 | 4,239 | 4,284 |
| | Utilities - | | 1995 | Navistar | Diesel | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH- | Key 0062 | | Inter- | Bucket | Diesel | Gallons or kWh | 388 | 693 | 899 | 859 | 989 |
| F57 | (#WE8) | Util | national | Truck | Diesel | Fuel $ | $931 | $1,789 | $2,420 | $3,088 | $2,149 |
| | | | | | Diesel | Mileage | 0 | 3,758 | 4,657 | 3,975 | 3,592 |
| | Utilities - | | 2002 | | Diesel | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH- | Key 0063 | | Inter- | Line | Diesel | Gallons or kWh | 570 | 1,086 | 1,297 | 1,045 | 1,136 |
| F58 | (#WE9) | Util | national | Truck | Diesel | Fuel $ | $1,369 | $2,795 | $3,492 | $3,830 | $2,412 |
| | | | | | Unleaded | Mileage | 0 | 2,130 | 7,918 | 6,006 | 6,227 |
| | Utilities - | | | | Unleaded | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH- | Key 0064 | | 2007 | | Unleaded | Gallons or kWh | 0 | 113 | 356 | 208 | 251 |
| F59 | (#WE2) | Util | Ford | Focus | Unleaded | Fuel $ | $0 | $254 | $942 | $650 | $553 |
| | Utilities - | | | Mower/ | Unleaded | Mileage | 0 | 0 | 0 | 0 | 0 |
| | Key 0065 | | 1994 | blower | Unleaded | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH- | (#WE12)/ | | John | & | Unleaded | Gallons or kWh | 0 | 0 | 15 | 14 | 0 |
| F60 | Off - Road | Util | Deere | sweeper | Unleaded | Fuel $ | $0 | $0 | $40 | $43 | $0 |
| | | | | | Unleaded | Mileage | 0 | 0 | 0 | 0 | 0 |
| | | | 1998 | | Unleaded | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH- | EMS - Key | | Chev- | | Unleaded | Gallons or kWh | 0 | 0 | 0 | 0 | 99 |
| F61 | 0066 (#41) | EMS | rolet | Lumina | Unleaded | Fuel $ | $0 | $0 | $0 | $0 | $235 |

**'Fleet' Tab (Continued)**

| Fleet ID | Vehicle type/ category | Category | Make | Model | Fuel type | Options | 2005 | 2006 | 2007 | 2008 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | OTHER | Mileage | 0 | 0 | 0 | 0 | 0 |
| | | | | | OTHER | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH- | | | | | OTHER | Gallons or kWh | 0 | 0 | 0 | 0 | 0 |
| F62 | Key 0067 | Key | | | OTHER | Fuel $ | $0 | $0 | $0 | $0 | $0 |
| | Utilities - | | | | Unleaded | Mileage | 0 | 0 | 0 | 0 | 0 |
| | Key 0068 | | | | Unleaded | Vehicle hours | 0 | 0 | 0 | 18 | 11 |
| CH- | (#WE15)/O | | | | Unleaded | Gallons or kWh | 0 | 0 | 0 | 44 | 10 |
| F63 | ff - Road | Util | | Chipper | Unleaded | Fuel $ | $0 | $0 | $0 | $135 | $25 |
| | Utilities - | | | | Unleaded | Mileage | 0 | 0 | 0 | 0 | 0 |
| | Key 0069 | | | | Unleaded | Vehicle hours | 0 | 68 | 74 | 65 | 97 |
| CH- | (#WE16)/O | | 1995 | | Unleaded | Gallons or kWh | 17 | 67 | 63 | 57 | 70 |
| F64 | ff - Road | Util | Melroe | Bobcat | Unleaded | Fuel $ | $43 | $160 | $179 | $185 | $156 |
| | Utilities - | | | | Diesel | Mileage | 0 | 0 | 0 | 0 | 0 |
| | Key 0070 | | | 860 | Diesel | Vehicle hours | 0 | 198 | 105 | 100 | 56 |
| CH- | (#WE11)/O | | 2001 | Trench- | Diesel | Gallons or kWh | 133 | 304 | 198 | 165 | 101 |
| F65 | ff - Road | Util | Case | er | Diesel | Fuel $ | $322 | $753 | $543 | $573 | $210 |
| | | | | | Unleaded | Mileage | 0 | 20,273 | 40,468 | 38,817 | 46,614 |
| | Police - Key | | | | Unleaded | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH- | 0009 | | 2006 | Crown | Unleaded | Gallons or kWh | 0 | 1,764 | 3,516 | 3,008 | 4,072 |
| F66 | (#652) | Poli | Ford | Victoria | Unleaded | Fuel $ | $0 | $4,218 | $9,239 | $8,751 | $8,706 |
| | | | | | Diesel | Mileage | 0 | 0 | 0 | 0 | 0 |
| | EMS - Key | | | 3-450 | Diesel | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH- | 0072 | | 2001 | Ambu- | Diesel | Gallons or kWh | 156 | 150 | 440 | 271 | 306 |
| F67 | (#756) | EMS | Ford | lance | Diesel | Fuel $ | $347 | $366 | $1,182 | $990 | $650 |
| | | | | | Unleaded | Mileage | 0 | 34,567 | 50,400 | 11,443 | 21,771 |
| | Police - Key | | | | Unleaded | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH- | 0073 | | 2009 | Crown | Unleaded | Gallons or kWh | 1,367 | 2,770 | 1,811 | 830 | 1,999 |
| F68 | (#645) | Poli | Ford | Victoria | Unleaded | Fuel $ | $3,049 | $6,840 | $4,449 | $2,964 | $4,614 |
| | | | | | Unleaded | Mileage | 0 | 4,139 | 4,362 | 4,547 | 2,747 |
| | Police - Key | | | | Unleaded | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH- | 0074 | | 2009 | Crown | Unleaded | Gallons or kWh | 257 | 304 | 290 | 309 | 431 |
| F69 | (#655) | Poli | Ford | Victoria | Unleaded | Fuel $ | $542 | $765 | $746 | $958 | $1,233 |
| | | | | | Unleaded | Mileage | 0 | 5,175 | 6,500 | 4,915 | 5,021 |
| | Police - Key | | | | Unleaded | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH- | 0075 | | 2000 | Crown | Unleaded | Gallons or kWh | 145 | 356 | 430 | 280 | 321 |
| F70 | (#647) | Poli | Ford | Victoria | Unleaded | Fuel $ | $315 | $879 | $1,122 | $910 | $677 |
| | | | | | Unleaded | Mileage | 0 | 26,102 | 3,584 | 3,667 | 4,326 |
| | Police - Key | | | | Unleaded | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH- | 0076 | | 2005 | Crown | Unleaded | Gallons or kWh | 1,552 | 1,939 | 279 | 138 | 204 |
| F71 | (#651) | Poli | Ford | Victoria | Unleaded | Fuel $ | $3,430 | $4,730 | $708 | $455 | $484 |
| | | | | | Unleaded | Mileage | 0 | 5,106 | 5,901 | 5,123 | 2,626 |
| | Police - Key | | | | Unleaded | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH- | 0077 | | 2003 | Crown | Unleaded | Gallons or kWh | 145 | 434 | 486 | 261 | 214 |
| F72 | (#649) | Poli | Ford | Victoria | Unleaded | Fuel $ | $311 | $1,032 | $1,311 | $836 | $469 |

**'Fleet' Tab (Continued)**

| Fleet ID | Vehicle type/ category | Category | Make | Model | Fuel type | Options | 2005 | 2006 | 2007 | 2008 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Fire - Key | | | | Diesel | Mileage | 0 | 717 | 1,113 | 739 | 1,026 |
| | | | | Fire | Diesel | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH- | 0078 | | 1981 | Truck | Diesel | Gallons or kWh | 59 | 120 | 186 | 126 | 166 |
| F73 | (#FD1) | Fire | Pierce | Engine | Diesel | Fuel $ | $137 | $335 | $507 | $440 | $345 |
| | Fire - Key | | | Fire | Diesel | Mileage | 0 | 717 | 1,113 | 739 | 1,026 |
| | | | | Truck | Diesel | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH- | 0079 | | | Rural | Diesel | Gallons or kWh | 59 | 120 | 186 | 126 | 166 |
| F74 | (#FD2) | Fire | 1996 Ford | Engine | Diesel | Fuel $ | $137 | $335 | $507 | $440 | $345 |
| | Fire - Key | | | | Diesel | Mileage | 0 | 479 | 423 | 523 | 295 |
| | | | | Fire | Diesel | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH- | 0080 | | | Truck | Diesel | Gallons or kWh | 11 | 54 | 43 | 88 | 39 |
| F75 | (#FD3) | Fire | 1989 Ford | Engine | Diesel | Fuel $ | $24 | $143 | $117 | $332 | $82 |
| | Fire - Key | | | | Unleaded | Mileage | 0 | 315 | 132 | 106 | 229 |
| | | | | | Unleaded | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH- | 0081 | | 1990 | | Unleaded | Gallons or kWh | 29 | 51 | 56 | 35 | 65 |
| F76 | (#FD4) | Fire | Chevrolet | Fire Van | Unleaded | Fuel $ | $60 | $118 | $136 | $127 | $123 |
| | Fire - Key | | | | Unleaded | Mileage | 0 | 419 | 331 | 555 | 322 |
| | | | | Pick Up | Unleaded | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH- | 0082 | | | 350 4x4 | Unleaded | Gallons or kWh | 42 | 104 | 68 | 91 | 69 |
| F77 | (#FD5) | Fire | 1994 Ford | Grass Rig | Unleaded | Fuel $ | $91 | $275 | $189 | $332 | $144 |
| | WWTP - Key | | | | Diesel | Mileage | 0 | 419 | 331 | 555 | 322 |
| | | | | | Diesel | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH- | 0083 | | 2002 | | Diesel | Gallons or kWh | 42 | 104 | 68 | 91 | 69 |
| F78 | (#TP15) | WWTP | Godwin | Pump | Diesel | Fuel $ | $91 | $275 | $189 | $332 | $144 |
| | Fire - Key | | | | Diesel | Mileage | 0 | 409 | 187 | 253 | 467 |
| | | | | | Diesel | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH- | 0084 | | 2003 | Fire | Diesel | Gallons or kWh | 21 | 83 | 91 | 57 | 115 |
| F79 | (#FD10) | Fire | Sterling | Truck | Diesel | Fuel $ | $47 | $229 | $249 | $226 | $237 |
| | Fire - Key | | | | Diesel | Mileage | 0 | 265 | 360 | 289 | 264 |
| | | | | | Diesel | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH- | 0085 | | 2002 | Fire | Diesel | Gallons or kWh | 43 | 62 | 79 | 57 | 56 |
| F80 | (#FD11) | Fire | Sterling | Truck | Diesel | Fuel $ | $93 | $172 | $208 | $203 | $119 |
| | Fire - Key | | | | Diesel | Mileage | 0 | 366 | 719 | 758 | 629 |
| | | | | | Diesel | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH- | 0086 | | 2000 | Pump/ | Diesel | Gallons or kWh | 81 | 63 | 188 | 193 | 186 |
| F81 | (#FD12) | Fire | Pierce | Ladder | Diesel | Fuel $ | $190 | $160 | $521 | $727 | $409 |
| | Fire - Key | | | | Diesel | Mileage | 0 | 871 | 558 | 541 | 514 |
| | | | | Heavy | Diesel | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH- | 0087 | | 2005 | Rescue | Diesel | Gallons or kWh | 63 | 200 | 197 | 188 | 190 |
| F82 | (#FD6) | Fire | Sterling | Truck | Diesel | Fuel $ | $153 | $660 | $533 | $701 | $408 |
| | Fire - Key | | | | Unleaded | Mileage | 2,503 | 3,826 | 3,976 | 3,893 | 830 |
| | | | | | Unleaded | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH- | 0088 | | | Crown | Unleaded | Gallons or kWh | 97 | 186 | 137 | 237 | 29 |
| F83 | (#FD20) | Fire | 2001 Ford | Victoria | Unleaded | Fuel $ | $221 | $458 | $371 | $808 | $52 |

**'Fleet' Tab (Continued)**

| Fleet ID | Vehicle type/ category | Category | Make | Model | Fuel type | Options | 2005 | 2006 | 2007 | 2008 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Unleaded | Mileage | 0 | 0 | 0 | 0 | 0 |
| | Fire - Key | | | | Unleaded | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH- | 0089 | | | | Unleaded | Gallons or kWh | 0 | 0 | 0 | 0 | 0 |
| F84 | (Boat) | Fire | | Boat | Unleaded | Fuel $ | $0 | $0 | $0 | $0 | $0 |
| | | | | | Diesel | Mileage | 0 | 0 | 0 | 0 | 0 |
| | WWTP - | | | | Diesel | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH- | Key 0091 | | 2002 | | Diesel | Gallons or kWh | 11 | 0 | 8 | 5 | 5 |
| F85 | (#TP16) | WWTP | Godwin | Pump | Diesel | Fuel $ | $11 | $0 | $21 | $19 | $13 |
| | | | | | Unleaded | Mileage | 0 | 0 | 0 | 0 | 0 |
| | Utilities - | | 2004 | | Unleaded | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH- | Key 0092 | | Vac- | #800 | Unleaded | Gallons or kWh | 14 | 31 | 33 | 23 | 40 |
| F86 | (#WE17) | Util | Tron | Flatbed | Unleaded | Fuel $ | $31 | $74 | $83 | $71 | $89 |
| | Streets - | | | | Unleaded | Mileage | 0 | 0 | 0 | 0 | 0 |
| | Key 0093 | | | | Unleaded | Vehicle hours | 0 | 20 | 28 | 36 | 24 |
| | (Air | | | | Unleaded | Gallons or kWh | 0 | 68 | 71 | 92 | 75 |
| CH- | Compress- | | | Air Com- | | | | | | | |
| F87 | or) | Stre | | pressor | Unleaded | Fuel $ | $0 | $169 | $183 | $314 | $137 |
| | Streets - | | | | Diesel | Mileage | 0 | 0 | 0 | 0 | 0 |
| | Key 0094 | | | | Diesel | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH- | (Army | | | Army | Diesel | Gallons or kWh | 25 | 80 | 152 | 93 | 98 |
| F88 | Truck) | Stre | | Truck | Diesel | Fuel $ | $62 | $208 | $420 | $320 | $219 |
| | | | | | Unleaded | Mileage | 0 | 0 | 0 | 0 | 0 |
| | Parks - | | 2005 | ¾ Ton | Unleaded | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH- | Key 0095 | | Chev- | Pick Up | Unleaded | Gallons or kWh | 0 | 246 | 219 | 188 | 64 |
| F89 | (#PK10) | Park | rolet | Truck | Unleaded | Fuel $ | $0 | $636 | $624 | $632 | $145 |
| | | | | | Diesel | Mileage | 0 | 0 | 0 | 0 | 0 |
| | Parks - | | 2005 | | Diesel | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH- | Key 0096 | | John | 997 ZT | Diesel | Gallons or kWh | 105 | 169 | 160 | 52 | 50 |
| F90 | (#PK6) | Park | Deere | Mower | Diesel | Fuel $ | $250 | $459 | $435 | $211 | $106 |
| | | | | | Diesel | Mileage | 0 | 0 | 0 | 0 | 0 |
| | Parks - | | 2007 | | Diesel | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH- | Key 0097 | | Jacob- | | Diesel | Gallons or kWh | 0 | 0 | 115 | 102 | 110 |
| F91 | (#PK15) | Park | sen | Turfcat | Diesel | Fuel $ | $0 | $0 | $320 | $351 | $253 |
| | | | | | Unleaded | Mileage | 0 | 0 | 20,672 | 36,615 | 11,343 |
| | Police - | | | | Unleaded | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH- | Key 0098 | | 2007 | Crown | Unleaded | Gallons or kWh | 0 | 0 | 2,135 | 3,258 | 2,078 |
| F92 | (#653) | Poli | Ford | Victoria | Unleaded | Fuel $ | $0 | $0 | $6,043 | $10,086 | $4,177 |
| | | | | | Diesel | Mileage | 0 | 0 | 4,967 | 12,084 | 13,473 |
| | EMS - Key | | | | Diesel | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH- | 0100 | | 2007 | Ambu- | Diesel | Gallons or kWh | 0 | 0 | 647 | 1,265 | 1,496 |
| F93 | (#757) | EMS | Horton | lance | Diesel | Fuel $ | $0 | $0 | $1,887 | $4,508 | $3,231 |
| | | | | | Unleaded | Mileage | 0 | 0 | 0 | 0 | 6,818 |
| | Police - | | | | Unleaded | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| CH- | Key 0071 | | 2009 | | Unleaded | Gallons or kWh | 0 | 0 | 0 | 0 | 293 |
| F94 | (#639) | Poli | Ford | Explorer | Unleaded | Fuel $ | $0 | $0 | $0 | $0 | $649 |

**'Fleet' Tab (Continued)**

| Fleet ID | Vehicle type/ category | Category | Make | Model | Fuel type | Options | 2005 | 2006 | 2007 | 2008 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Streets/Key 1000/Miscell-aneous Public Works gas needs for all Off-Road Equipment (ie Lawn Mowers, chain saws, | | | | | Mileage | 0 | 0 | 0 | 0 | 0 |
| | | | | | | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| | | | | | | Gallons or kWh | 28 | 84 | 108 | 175 | 505 |
| CH-F95 | etc) | Stre | | | OTHER | Fuel $ | $65 | $214 | $304 | $634 | $1,103 |
| | Parks/Key 1010/Miscell-aneous Parks gas needs for all Off-Road Equipment (ie Lawn Mowers, chain saws, | | | | | Mileage | 0 | 0 | 0 | 0 | 0 |
| | | | | | | Vehicle hours | 0 | 0 | 0 | 0 | 0 |
| | | | | | | Gallons or kWh | 13 | 47 | 68 | 105 | 236 |
| CH-F96 | etc) | Park | | | OTHER | Fuel $ | $26 | $123 | $200 | $342 | $533 |

**'Fleet pivot' Tab**

Column Labels
Fuel $
Diesel OTHER

| Row Labels | Sum of 2005 | Sum of 2006 | Sum of 2007 | Sum of 2008 | Sum of 2009 | Sum of 2005 | Sum of 2006 | Sum of 2007 | Sum of 2008 | Sum of 2009 |
|---|---|---|---|---|---|---|---|---|---|---|
| EMS | 347.31 | 365.51 | 3068.64 | 5498.22 | 3881.4 | | | | | |
| Fire | 781.35 | 2032.77 | 2640.66 | 3069.72 | 1945.04 | | | | | |
| key | | | | | | 0 | 0 | 0 | 0 | 0 |
| Parks | 450.74 | 951.53 | 1284.64 | 1015.34 | 515.27 | 26.47 | 122.66 | 199.78 | 341.6 | 532.52 |
| Police | | | | | | | | | | |
| Streets | 11480.5 | 18231.1 | 29674.1 | 35702 | 19074.5 | 1079.25 | 2488.94 | 2938.01 | 3129.53 | 2945.68 |
| Utilities | 3608.79 | 7475.03 | 8928.54 | 10529.7 | 6899.26 | | | | | |
| WWTP | 836.25 | 2267.38 | 2331.79 | 5358.47 | 2353.57 | | | | | |
| Grand Total | 17504.9 | 31323.4 | 47928.3 | 61173.4 | 34669.1 | 1105.72 | 2611.6 | 3137.79 | 3471.13 | 3478.2 |

**'Fleet pivot' Tab (Continued)**

Gallons or kWh

Unleaded | Diesel

| Row Labels | Sum of 2005 | Sum of 2006 | Sum of 2007 | Sum of 2008 | Sum of 2009 | Sum of 2005 | Sum of 2006 | Sum of 2007 | Sum of 2008 | Sum of 2009 |
|---|---|---|---|---|---|---|---|---|---|---|
| EMS | 0 | 0 | 0 | 0 | 235.1 | 156.4 | 149.7 | 1086.1 | 1536.5 | 1801.6 |
| Fire | 373.11 | 850.74 | 695.45 | 1267.25 | 319.29 | 335.7 | 700.6 | 967.9 | 833.9 | 918.4 |
| key | | | | | | | | | | |
| Parks | 1333.15 | 2971.9 | 3141.02 | 3363.83 | 2666.96 | 192.7 | 350.7 | 470.8 | 295.5 | 236 |
| Police | 7648.46 | 18462.7 | 23616.8 | 24960.1 | 21007.5 | | | | | |
| Streets | 2133.62 | 5216.49 | 6334.96 | 6536.49 | 4325.53 | 5121.04 | 6937 | 10803.5 | 11868 | 8781 |
| Utilities | 1993.22 | 5361.89 | 7350.12 | 8459.84 | 8366.71 | 1499.5 | 2907.7 | 3311.3 | 2915.2 | 3207.6 |
| WWTP | 553.5 | 1714.38 | 3008.58 | 3163.23 | 2670.16 | 351.2 | 871.3 | 825.9 | 1355 | 1139.1 |
| Grand Total | 14035.1 | 34578.1 | 44146.9 | 47750.7 | 39591.3 | 7656.54 | 11917 | 17465.5 | 18804.1 | 16083.7 |

OTHER | Unleaded

| Row Labels | Sum of 2005 | Sum of 2006 | Sum of 2007 | Sum of 2008 | Sum of 2009 | Sum of 2005 | Sum of 2006 | Sum of 2007 | Sum of 2008 | Sum of 2009 |
|---|---|---|---|---|---|---|---|---|---|---|
| EMS | | | | | | 0 | 0 | 0 | 0 | 98.9 |
| Fire | | | | | | 168.5 | 341.4 | 260.6 | 363.5 | 163.6 |
| key | 0 | 0 | 0 | 0 | 0 | | | | | |
| Parks | 13.4 | 46.5 | 67.9 | 105.4 | 236.3 | 611.4 | 1166.6 | 1149.3 | 1067.4 | 1222.4 |
| Police | | | | | | 3465.4 | 7566.4 | 8947.9 | 8083.3 | 9612.2 |
| Streets | 430.7 | 1097.9 | 1034.7 | 969.4 | 1304.2 | 968.8 | 2079.1 | 2380.6 | 2076 | 1976.9 |
| Utilities | | | | | | 915.2 | 2213.7 | 2800.8 | 2752.3 | 3870.8 |
| WWTP | | | | | | 247.1 | 717.3 | 1143.3 | 1003.1 | 1166.6 |
| Grand Total | 444.1 | 1144.4 | 1102.6 | 1074.8 | 1540.5 | 6376.4 | 14084.5 | 16682.5 | 15345.6 | 18111.4 |

MMBtu by department

| | Diesel | Unleaded | Total | |
|---|---|---|---|---|
| **EMS** | 158.943 | 3.0659 | 162.009 | 4% |
| **Fire** | 118.873 | 35.0021 | 153.875 | 4% |
| **Parks** | 47.0168 | 142.777 | 189.793 | 4% |
| **Police** | | 1060.5 | 1060.5 | 25% |
| **Street** | 1334.04 | 263.891 | 1597.93 | 38% |
| **Utility** | 428.878 | 360.766 | 789.643 | 19% |
| **WWTP** | 145.648 | 124.939 | 270.587 | 6% |
| | | | 4224.34 | |

**'Scratch' Tab**

*'Scratch' Tab contains all calculations related to the results ('Results' tab). Request a digital copy of excel spreadsheet to view complete information. Spreadsheet is too substantial to be placed in this document.

| | Baseline energy use (MMBtu) | Projected 2025 usage (MMBtu) | Projected goal (MMBtu) | Revised 2025 usage (MMBtu) | Revised goal (MMBtu) | Renewables (MMBtu) | lbs CO2 |
|---|---|---|---|---|---|---|---|
| 25% | | | 6899.2255 | | 5465.3932 | | |
| Electricity | 12801.47654 | 13217.326 | | 10962.641 | | 4,697 | 6348211.7 |
| Natural gas | 9429.023333 | 9735.3205 | | 7305.5205 | | 765.6 | 1103950.1 |
| Gasoline | 2072.432667 | 2139.7546 | | 1759.4466 | | 0 | 326,575 |
| Diesel | 2425.7029 | 2504.5007 | | 1833.9647 | | 0 | 390381.11 |
| Propane | 0 | 0 | | 0 | | 0 | 0 |

| MMBtu conversion factors | |
|---|---|
| kWh | 0.003412 |
| therms | 0.1 |
| gallons unleaded | 0.124 |
| gallons diesel | 0.139 |
| gallons propane | 0.0916 |

**'PV' Tab**

Real discount rate 3.00%
Tables A-1, A-2, Ba-2.

| | | | FEMP UPV* Discount Factors adjusted for fuel price escalation, by end-use sector and fuel type, census region 2. | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Year | SPV (nonfuel) | UPV (nonfuel) | kWh | Distillate oil | Residual oil | therms (nat gas) | Coal | unleaded fuel | propane |
| 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 0.971 | 0.97 | 0.91 | 0.97 | 1.06 | 1.05 | 0.98 | 1 | 1.05 |
| 2 | 0.943 | 1.91 | 1.79 | 1.96 | 2.15 | 2.12 | 1.94 | 2.02 | 2.12 |
| 3 | 0.915 | 2.83 | 2.64 | 3 | 3.26 | 3.17 | 2.87 | 3.08 | 3.17 |
| 4 | 0.888 | 3.72 | 3.48 | 4.05 | 4.4 | 4.17 | 3.78 | 4.18 | 4.17 |
| 5 | 0.863 | 4.58 | 4.29 | 5.1 | 5.53 | 5.16 | 4.66 | 5.26 | 5.16 |
| 6 | 0.837 | 5.42 | 5.09 | 6.18 | 6.66 | 6.12 | 5.52 | 6.33 | 6.12 |
| 7 | 0.813 | 6.23 | 5.87 | 7.26 | 7.78 | 7.07 | 6.36 | 7.39 | 7.07 |
| 8 | 0.789 | 7.02 | 6.62 | 8.34 | 8.89 | 7.98 | 7.16 | 8.44 | 7.98 |
| 9 | 0.766 | 7.79 | 7.36 | 9.42 | 9.98 | 8.88 | 7.94 | 9.48 | 8.88 |
| 10 | 0.744 | 8.53 | 8.08 | 10.48 | 11.04 | 9.76 | 8.69 | 10.49 | 9.76 |
| 11 | 0.722 | 9.25 | 8.79 | 11.52 | 12.09 | 10.62 | 9.41 | 11.49 | 10.62 |
| 12 | 0.701 | 9.95 | 9.48 | 12.55 | 13.11 | 11.48 | 10.11 | 12.47 | 11.48 |
| 13 | 0.681 | 10.63 | 10.16 | 13.55 | 14.11 | 12.31 | 10.79 | 13.43 | 12.31 |
| 14 | 0.661 | 11.3 | 10.82 | 14.54 | 15.09 | 13.12 | 11.45 | 14.37 | 13.12 |
| 15 | 0.642 | 11.94 | 11.47 | 15.5 | 16.06 | 13.91 | 12.09 | 15.29 | 13.91 |

## Appendix B – City of Jefferson Resolution, Document No 64.

CITY OF
317 S. MAIN ST.
JEFFERSON, WISCONSIN 53549
674-7700
Jefferson
A SPECIAL PLACE
WISCONSIN

**CERTIFIED COPY**

**CITY OF JEFFERSON**
**RESOLUTION NO. 64**

**BE IT RESOLVED** by the Common Council of the City of Jefferson, Wisconsin that the City of Jefferson is in support of the State of Wisconsin "25 x 25" goals for energy independence.

**WHEREAS,** Governor Doyle has created an Office of Energy Independence which as the following goals:

1. Generating 25% of electricity and transportation fuels from renewable resources by the year 2025 ("25 x 25"),
2. Capturing 10% of the emerging bio industry and renewable energy market; and
3. Wisconsin become a national leader in groundbreaking and affordable alternative energy; and

**WHEREAS,** by establishing a Renewable Energy Committee and adopting a Strategic Plan, the City of Jefferson will respond to climate change challenges by including sustainability as a guiding principle in its decision making processes, supporting projects that exemplify best practices in sustainability and supporting multi jurisdictional partnerships to promote and implement best practices; and

**WHEREAS,** the State Office of Energy Independence is seeking partnership with local units of government to further the state's efforts to achieve "25 x 25" goals; and

**WHEREAS,** the City of Jefferson will benefit from such a partnership with the State of Wisconsin.

**NOW, THEREFORE, BE IT RESOLVED,** that the Common Council does hereby declare itself a partner with the State of Wisconsin in pursuit of the "25 x 25" goals for energy independence.

**BE IT FURTHER RESOLVED THAT**, upon adoption the City Clerk-Treasurer is hereby directed to send a copy of this resolution to Governor Doyles's office and the Wisconsin Office of Energy Independence.

October 6, 2009
Approved by a vote of 6 to 0

**City Official Seal**

**State of Wisconsin**
**County of Jefferson**

I certify that this is a true and correct copy of a document in the possession of the City of Jefferson.

**Dated:** October 7, 2009

Tanya N. Parlow Stewart
City Clerk/Treasurer-City of Jefferson
Notary Public
Commission expires 9/16/2012

Please direct any questions electronically to:

Brian Driscoll
Community Relations Director
State of Wisconsin
Office of Energy Independence
17 West Main St. Room #429
Madison, WI 53702
brian.driscoll@wisconsin.gov

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