

Village of Bayside

Green Practices, Sensible Solutions

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PIONEER INSTITUTE - PUBLIC POLICY RESEARCH: Better Government Competition



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The Village of Bayside is a quiet, predominately residential community located on the shores of Lake Michigan. Just ten miles north of downtown Milwaukee, Bayside offers residents the opportunities of “big city” living while remaining a safe, family-orientated place to live, work and play.

Bayside, a community of just over 4,100 residents, is one of the seven communities that comprise the North Shore. With beautiful Lake views, historic presence and a high quality of life, Village residents have come to expect the highest form of service delivery. Unfortunately, the Village was not immune to the same financial struggles suffered by many as the global economy faltered in 2009. The reduction in Wisconsin state shared revenue, interest rate shortcomings and increasing health care costs, and other adverse financial factors impacted the ability to achieve those expectations.

Strategic Values

The Village has adopted five long term strategic initiatives that serve as the foundation for service to the residents of Bayside. They include:

Fiscally Sound: Maintain the Village’s strong fiscal condition, enhance organizational operating efficiencies, and continue to provide high-quality services in the most cost effective manner.

Aesthetic Appeal: Enhance the aesthetic character; curb appeal and community-wide events to promote property values, high standards, and connection within the Village.

Quality Service Delivery: Provide for the health, safety, and welfare of the community with respect and courtesy at all times; solicit and listen to citizen feedback to improve the quality of services performed, and strive for continued excellence. Promote organizational development through individual leadership, teamwork and valuing our human assets as ambassadors of the Village.

Communications: Facilitate effective communications, both internally and externally, to provide vested parties with relevant, timely, and necessary information.

Environmentally Responsible: To lead the way in providing environmentally friendly or “green” initiatives to promote a healthy, desirable place to live and enjoy.

All five areas of emphasis are naturally linked; quality services must also be delivered in a cost-effective manner, and services often can’t be delivered satisfactorily without significant, sustained communications efforts, all of which are sought to be done in an environmentally friendly manner. The Village was recently recognized by the International City/County Management Association as the *2010 Sustainable Community of the Year (<10,000)*. The following outlines the strategies and operational implementation taken to achieve this designation.

Measuring Green

With intertwined areas of emphasis, the Village implemented several core “Green” initiatives to reduce the Village overall carbon footprint, enhance energy efficiency, promote environmental stewardship in the community, and provide leadership in enhancing our environmental friendliness. The approach was multi-faceted and included green Building, Village Operational and Procedural, Community, Regulatory and Communication initiatives.

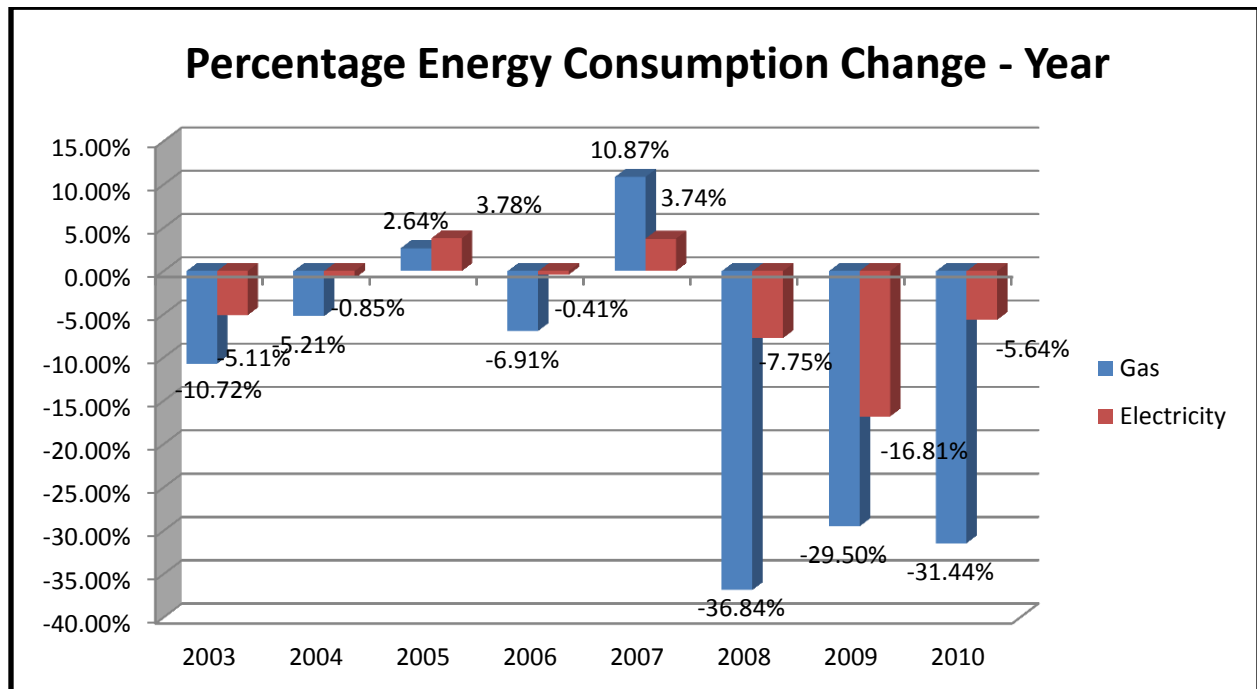
The Village aggressively pursued each initiative and implemented measurements and benchmarks to identify the successes and areas of opportunity. Two areas of most significant focus were the Village’s facility energy consumption reduction initiative and collection services efficiency enhancement initiative.

Facility Energy Consumption Reduction Initiative

Beginning in 2008, the Village established a performance benchmark of reducing total Village building and facility energy (gas and electric) consumption by 10 percent in year 1 and 2% for the next three years. To help reach these goals, the following initiatives were implemented:

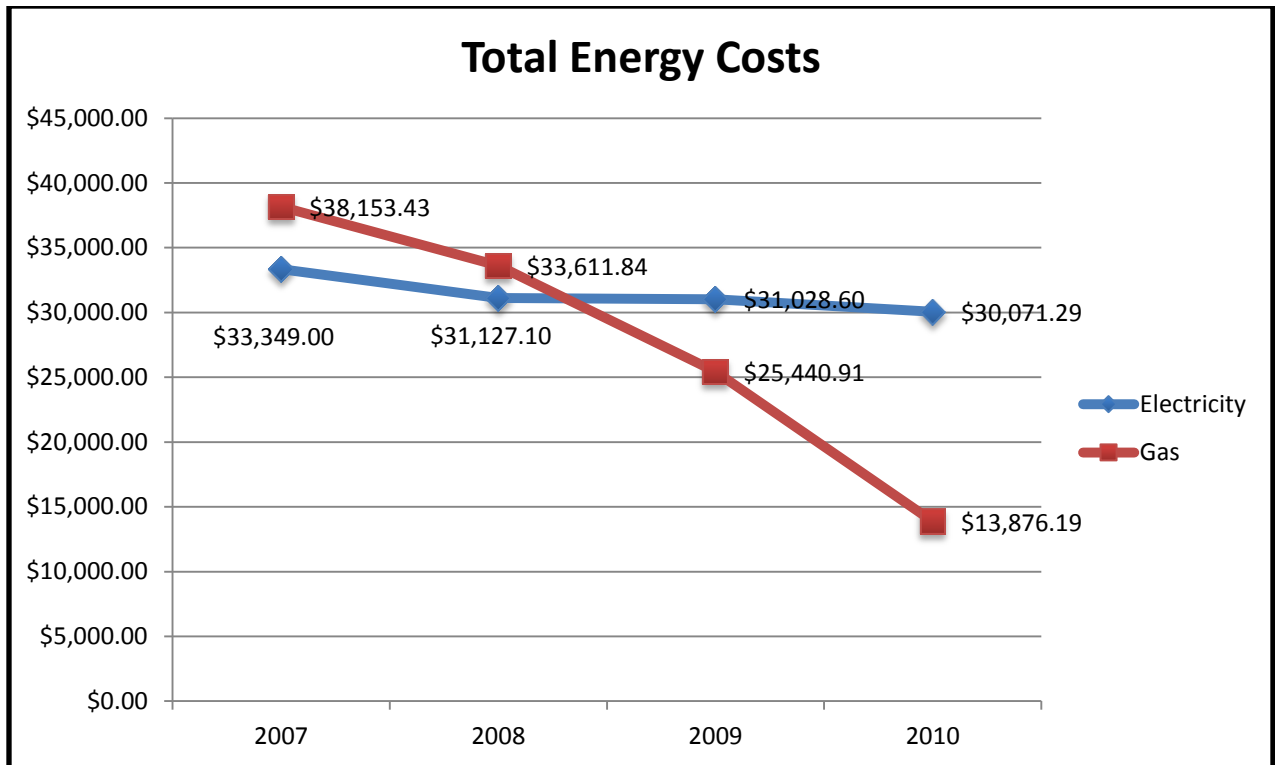
- Enrolled in the Energy Star for Local Governments program through the US EPA.
- Adopted Wisconsin Office of Energy Independence 25x25 Resolution.
- Conducted audit of energy efficiency identifying additional areas of opportunity to conserve energy.
- Installed energy efficient HVAC system in Village Hall/Police Department facility with 6.6 year payback.
- Installed energy efficient lighting in public works maintenance facilities.
- Installed motion sensor and zone lighting in common areas and large areas.
- Adjusted thermostat temperatures and timing of their operation to reflect building usage patterns.
- Relocated thermostats to more accurately reflect actual temperatures.
- Reduced facility vending machines from 4 to 1 multi-function machine.

For 2010, the Village's goal was to continue this reduction by reducing overall consumption by an additional 3 percent across the board. As the charts below indicate, that number was met and passed. Overall, energy consumption has reduced consistently for the past three years for both gas and electricity.



Since 2007, Village electrical consumption has reduced by 32.9% on average, annually. Village gas consumption has reduced by 10% on average, annual.

While the major goal was to reduce overall consumption, utility cost reduction have proved to be an added bonus. As the next chart indicates, the Villages total energy costs have decreased dramatically over the past three years. Another important factor to weigh when examining cost is per unit costs. While the Village has continually reduced electricity consumption annually, the costs don't necessarily emulate that fact, with just minor variation between the years. The Village's ability to cut natural gas spending by 66% is an added benefit to reducing our carbon footprint.



The Village continues to work toward new ways to reduce overall energy consumption. Through Energy Efficiency Community Block Grant funding, the Village has applied for funding on projects that include:

- Replacement of two boilers for VH & PD – 92% efficiency;
- Solar Light Tubes which require no electricity for DPW garage;
- LED lights for outdoor lighting of Village facilities.

Collection Services Efficiency Enhancement Initiative

Another component of the Village’s efforts to deliver quality services in a cost-effective manner was the implementation of a comprehensive collection efficiency measurement initiative. Part of this program benchmarked the number of hours the Village’s Department of Public Works (now Department of Community & Utility Services (DCUS)) spent annually on collection-oriented services (garbage, recycling and yard waste). The initial results showed that DCUS spent a large portion of its time on collections. As a result, crews had little time left over to spend on infrastructure maintenance on Village-owned vehicles, machinery and roadways.

The Village revised, reprioritized and placed new emphasis on the work allocation of the Department and its operations. It took a major effort to refocus the staff on the new collections efficiency model, then communicate that refocused effort to residents on how to comply with the changes and actually get their garbage, recyclables and yard waste out on the appropriate days.

In making these service adjustments, the Village modified collections schedules and switched to a more demand-based service, based on the results of the performance measurement system. The DCUS initiative also included setting collections benchmarks for DCUS workers to ensure a consistently high level of effort. All of this was done successfully, while maintaining the same level of service to the residents. The revised collections involved:

Phase I

For phase I of the overall transition, the Village modified collections schedules and switched to a more demand-based service, based on the results of the performance measurement system. The DCUS initiative also included setting collections benchmarks for DCUS workers to ensure a consistently high level of effort. All of this was done successfully, while maintaining the same level of service to the residents. The revised collections involved:

- Analyzing volume and tonnage by month and season and scheduling accordingly;
 1. Consolidating collection days from three to two;
 2. Reducing the number of labor shifts from 10 to 5 on garbage and recycling collections;
 3. Implementing several operational changes, which reduced the amount of time spent collecting these materials by 2,745.5 hours, reducing additional vehicle emissions by that same amount of hours.
- Instituting single-stream recycling;
 1. Developing benchmarking standards for each employee, route, and collection function;
 2. With enhanced communications and educational efforts, recycling tonnage increased 100 tons from the implementation of single-stream recycling in April through December 2008, versus all of 2007.
- Developing strategic collection schedules and standards for yard waste;
 1. Collected 520 tons of yard waste. Instead of taking materials to the landfill, yard waste was stored at the DCUS facility and eventually was tub ground. This created a high-quality mulch/compost material, which was then used on Village lands and made available for free to residents.
 2. Offered special Christmas tree collection and created mulch, providing additional mulch for residents.
 3. Collected 471 tons of loose leaves in the fall, and then transported them to a nearby farm for application and soil enhancement purposes.
- Monitoring standards and performance measurement on a consistent basis.

	Labor hours	Savings
Reduced collections hours	2,745.5	\$96,670

The shift in resources and manpower resulted in a reduction in hours spent on collections 30 percent and a savings of almost \$97,000. Due to that time savings, DCUS workers are able to spend more time doing preventive maintenance work, including infrastructure maintenance work such as road shouldering, stormwater ditching, asphalt repairs, sanitary sewer maintenance, building and equipment maintenance, etc. Those efforts serve to prolong the life spans of village roads, tools and heavy equipment, which saves taxpayers money and frees up budgetary resources to be spent on other projects.

Phase II

The idea of automated service delivery is not necessarily a new one, but in the high expectation, high service delivery North Shore suburbs of Milwaukee, it is one that has been discussed and vetoed several times over. To help make sure the Village's efforts were fully vetted, staff commissioned an independent graduate level study of the future options available. Taking all the collected information (studies, internal discussion, community survey, employee feedback) into account, Village staff recommended to the Board of Trustees to implement a new automated garbage and recycling collection method. The plan was to be fully implemented on May 3, 2010.



Phase III

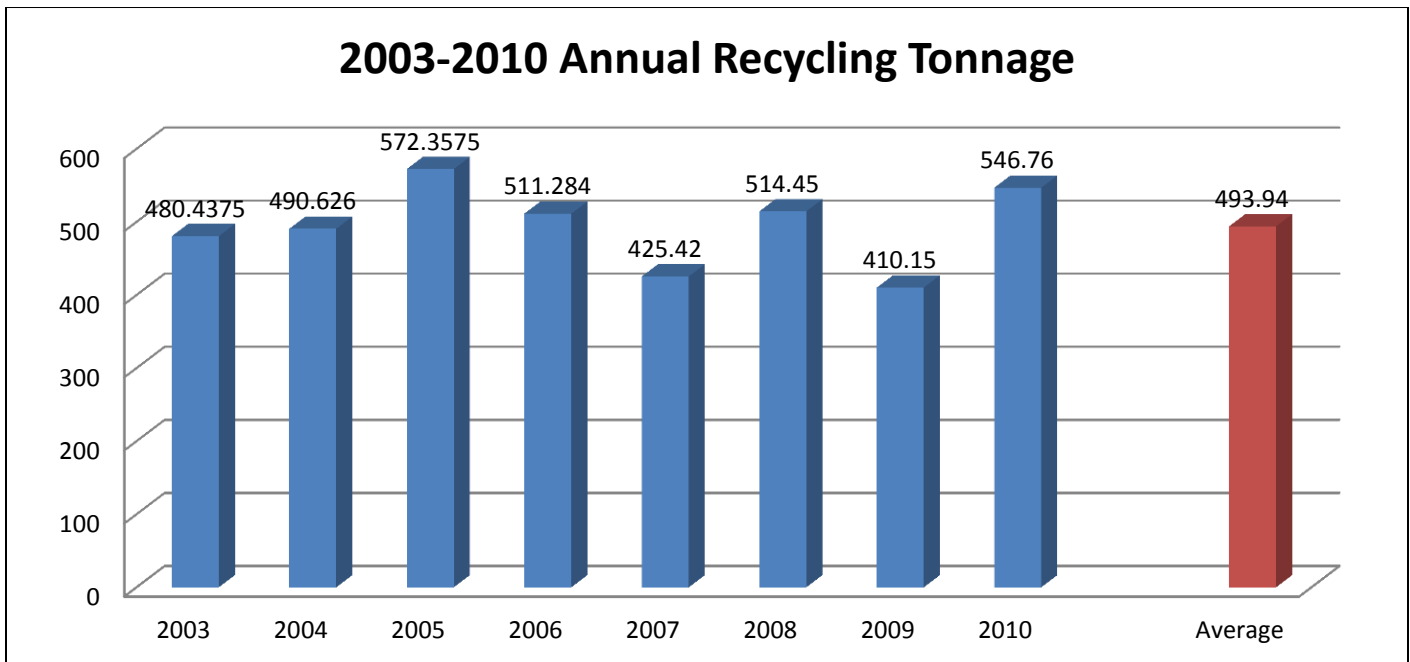
With the approval in place, the most important step was still ahead, to educate the public on the upcoming transition, while accepting that not everyone would be happy with the perceived change in service. To help insure that we reached as large of an audience as possible, we incorporated several methods of communication, including social media. To help avoid miscommunication, the Village inundated residents with consistent, pertinent information, from why the transition was needed to the color of the new collection carts. The following communication methods were used:

1. Hand delivered fliers;
2. Specific village mailings;
3. Inserts included with the delivery of the new collection containers;
4. Articles in the quarterly newsletter delivered to homes;
5. Several documents placed on the village's website;
6. Village's weekly email notification distribution (reaches over 2,000 subscribers);
7. Facebook;
8. Twitter feeds

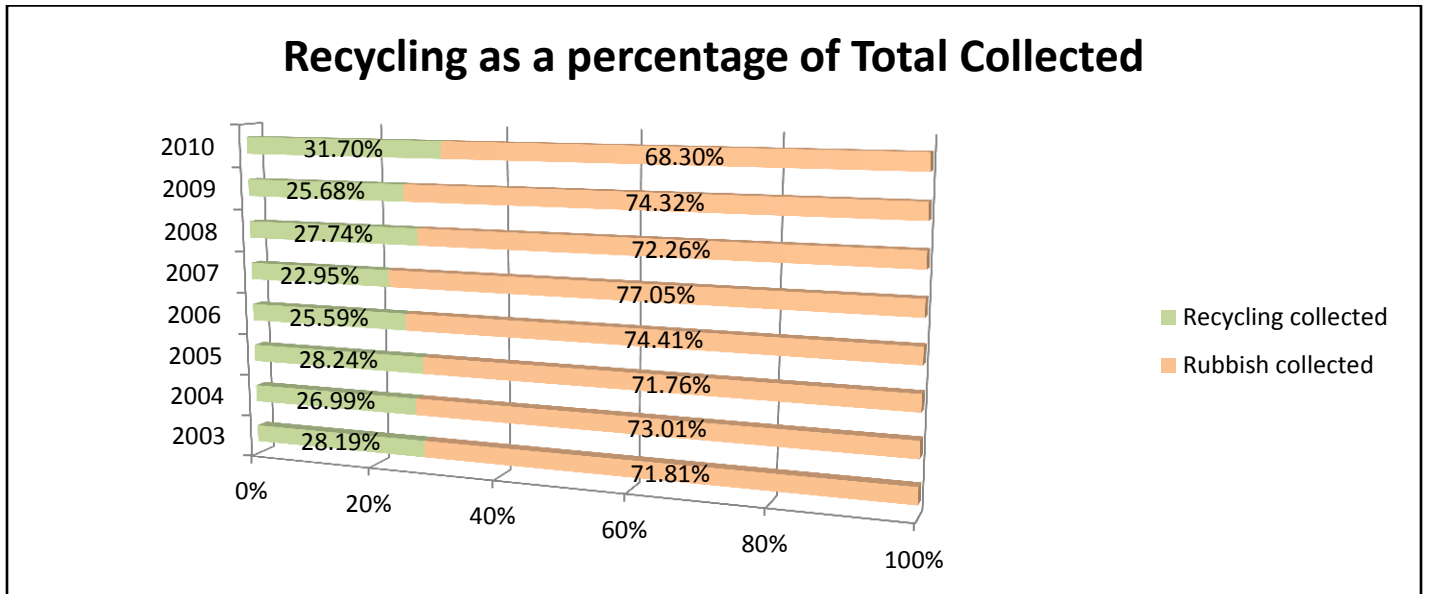
To help ease the transition, the Village Board decided to provide one garbage and one recycling container (64 or 96 gallon) to each resident, giving them the option to purchase additional if necessary. In addition, any resident was offered the opportunity to participate in a Pilot program, which began in April, 2010. With over 150 participants, residents were able to get used to the new system, while DCUS employees were given the chance to operate the new machinery on a regular basis prior to full implementation. The overall transition could be described as uneventful (a good thing), which exemplifies the hard work, dedication, and innovative thinking that helped guide the entire decision making and implementation process.

Results

As mentioned, the Village tracks performance measurement data from several metrics. Since implantation of the new automated service, the following improvements have been noted. As the chart indicates, since the transition in May, overall recycling tonnage rose (every month), including over 50 total tons compared to 2009. The recycling increase turned out to be a fortunate benefit of the move, providing additional cost savings to the Village (refuse costs nearly \$50/ton to landfill).



Below is a chart that illustrates the impact the new transition has had on recycling, with the Village's overall diversion rate up 6% for 2010. For 2011, the Village has challenged residents to raise this amount to 40% of overall disposal.



Other Community, Infrastructure, Regulatory, & Communication Initiatives

- Two-time Tree City USA.
- Held Spring/Fall clean up days, an event to bring community together to clean yards, ditches, streets, collect yard waste, recycle materials, computer and electronic recycling program to reduce landfill impacts.
- Formed environmentally focused Greenscape Bayside Committee, whose mission is to “to educate and encourage a sustainable relationship with the environment while promoting an aesthetically pleasing community”.
- Members of the Committee and community also participated in an eight week Sustainable Living class.
- Became model community for Milwaukee Metropolitan Sewerage District rain barrel program.
- Installed pet waste collection stations in Municipal Park.
- Implemented ink jet cartridge and cell phone recycling programs at Village Hall.
- Established sediment filtering drainage area with natural plantings at Lake Drive & Brown Deer Road. Planted water absorbing plants to absorb additional stormwater.
- Established tree farm for future tree planting.
- Enhanced environmental corridor collection site, now providing residents the opportunity to recycle used oil and dispose of yard waste in addition to single stream recycling drop off site.
- Implemented a prescription drug drop off program.
- Establish e-notify, an electronic mail notification system, to keep residents informed of Village activities. To date, the Village has over 1,200 participants.
- Distribute Bayside Buzz via email weekly as way to keep community up-to-date in lieu of printing publications and mailing/sending deliveries to 1,625 homes.
- Include in newsletters, Bayside Buzz, and other communication venues information on environmental initiatives, best practices, reminders, and events.
- Purchase recycled office supplies when possible.
- Transitioned to new cleaning supply vendor, reducing number of cleaning agents used in Village operations and enhancing environmental friendliness of cleaning supplies.

Take-Aways

Who has benefited from the innovation?

The Village's efforts have proven to be extremely important in building community, as well as providing a feasible cost-benefit. The program is defined by ethical behavior, and was integrated with professional management. Benefactors include:

- Environment
- Village residents
- Village facilities
- Village staff

How was the innovation initiated and implemented?

Initially, the Village Board adopted "Environmentally Responsible" as one of five long-term strategic initiatives. Future steps included departmental research to reduce spending, implement new energy efficient technology, and consistent and persistent performance measurement to achieve organizational efficiency and excellence.

What risks were associated with planning and developing the innovation?

Overall risk depended upon Public Buy-In. Some challenges include:

1. Employee buy-in
2. Communicating with the public (Acceptance)
3. Initial investment costs

What was the environment in which the innovation was created and sustained?

The initial environment was extremely against the organizational change (continual failure to implement in previous years). However, the ability to think "outside the box" in order to achieve the best outcome for future years and possible cuts outweighed the fear of change.

What were the execution costs and savings?

Total costs savings will be realized over time, with many of the savings listed below experienced on an annual basis (including the ability to permanently reduce DCUS staff). Some of the costs associated include:

<u>Expenditures</u>		<u>Savings</u>		
1.	HVAC System Rehab	\$48,500	1. Personnel Costs	\$97,000
2.	Motion Sensor Lighting	\$10,000	2. Reduced Landfill Costs	\$3,000
3.	Thermostat Reconfiguration	\$1,500	3. Reduced Equipment Costs	\$120,000
4.	Building Insulation	\$500	4. Electricity/Gas Reduction	\$25,000
5.	Automated Truck	\$210,000	5. Yard Waste Recycle Program	\$23,400
6.	Collection Containers	\$160,000	6. Leaf disposal	\$19,000
7.	Communications	\$1,000	7. Road Salt Reduction	\$9,000
			8. Fuel Usage	\$3,000

What lessons were learned that could be shared with other local governments (Massachusetts)?

It's our belief that these changes can be made not only in government, but anywhere.

- Measurement and accountability can lead to significant enhancements without any loss in service.
- Several small changes can make a very large impact.
- While the implementation and effect may not occur quickly, patience and resolve can lead to a positive outcome.
- This type of change is beneficial not only fiscally and environmentally, but also as a public relations tool.
- In our case, the municipality has taken the lead to exemplify the benefits of efficiency.