

Energy Improvements Performance Contract



QUARTERLY REPORT

Statistics from February 1, 2013 to April 30, 2013

May 2013

Project at a Glance

The City of Dover, NH and Johnson Controls, Inc. entered into a performance contract in September in 2009. The purpose of this contract is to lessen the energy and energy related costs realized by the City of Dover moving forward. The guaranteed savings portion of the contract (ten years) started on November 1 of 2011 and will end on October 31, 2021.

The estimated savings for quarters one and two is \$158,192 includes \$135,802 in energy cost avoidance, \$7,114 in operations and maintenance (O&M) cost avoidance, and a future capital cost avoidance of \$16,920. The annual guaranteed energy savings amount escalates by 3% and the O&M savings escalates by 4% each year to compensate for inflation. Total term benefits are \$3,623,746.



New Calgon (odor) unit at WWTP

This report is designed based upon the quarterly and annual reports that JCI provided to the City, and documents the energy savings of this project. This report covers the second quarter of the second contract year, and runs February 2013 through April 2013.

What's Inside:

This quarterly report will summarize the cost savings realized as part of the infrastructure investments made. Data included:

- FIM* Comparisons by month
- Quarterly Cost Savings

- Savings Per Facility
- Savings by Facility and FIM*
- Aggregate Monthly FIM* Savings
- Energy Equivalent Savings

* FIM = Facility Improvement Measures

Contract Info:

CONTRACT #: 9236-0143
CONTRACT YEAR #: 2
ANNUAL GUARANTEED ENERGY SAVINGS: \$280,169
ANNUAL O&M SAVINGS: \$14,227
ANNUAL CAPITAL COST AVOIDANCE: \$33,840
ANNUAL GUARANTEE: \$328,236
CONTRACT TERM: 10-YEARS
TERM GUARANTEED SAVINGS: \$3,623,746
UTILITY COST AVOIDANCE ESCALATION RATE: 3.0%
OPERATIONS & MAINTENANCE (O&M) COST AVOIDANCE ESCALATION RATE: 4.0%
GUARANTEE START DATE: 11/1/2011
GUARANTEE END DATE: 10/31/2021

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Energy Improvements Performance Contract

Annual Cost Savings Summary

Guarantee Period	Guaranteed Energy Cost Avoidance	Guaranteed O&M Cost Avoidance	Guaranteed Future Capital Cost Avoidance	Total Guaranteed Cost Avoidance	Verified Annual Cost Avoidance	Variance
Year 1	\$271,943	\$13,680	\$33,840	\$319,463	\$317,642	(\$1,821)
Year 2	\$280,169	\$14,227	\$33,840	\$328,236		
Year 3	\$288,644	\$14,796	\$33,840	\$337,280		
Year 4	\$297,375	\$15,388	\$33,840	\$346,603		
Year 5	\$306,371	\$16,004	\$33,840	\$356,214		
Year 6	\$315,638	\$16,644	\$33,840	\$366,122		
Year 7	\$325,186	\$17,310	\$33,840	\$376,336		
Year 8	\$335,023	\$18,002	\$33,840	\$386,865		
Year 9	\$345,157	\$18,722	\$33,840	\$397,719		
Year 10	\$355,598	\$19,471	\$33,840	\$408,909		
Total	\$3,121,103	\$164,244	\$338,400	\$3,623,746	\$317,642	N/A

FIM #	FIM Description
1	Lighting Fixture Retrofit Lighting Fixtures
2	Lighting Fixture Control Lighting Controls (McConnell Ctr)
3	Building Envelope Weatherization
4.1	EMS Building Controls
4.2	EMS Building Controls/Optimal Start
4.3	AHU Upgrade VFD on fan
4.4	Pool Dehumidification EMS & VFDs
4.5	Repair Snow Melt Sensor
6	Water Conservation
9	Vending Machine Controllers
10	Pool Covers
11	Ice Arena Upgrades
12	Power Factor Correction
13	Energy Efficient Transformers E.E. Transformers (Ice Arena)
14	Aeration Blower Upgrade
15	Boiler Replacement

Savings are provided on a monthly basis for Quarter 1 of year two of the JCI Contract, in the adjacent table. The guaranteed savings per Facility Improvement Measure (FIM) represents the amount per FIM that adds up to the total overall annual guarantee. FIM savings are not guaranteed individually; the savings guarantee reflects the whole project. Therefore deficiencies from one FIM can be overcome by another FIM to result in overall project savings

Statistics from February 1, 2013 to April 30, 2013

FIM Comparisons by Month

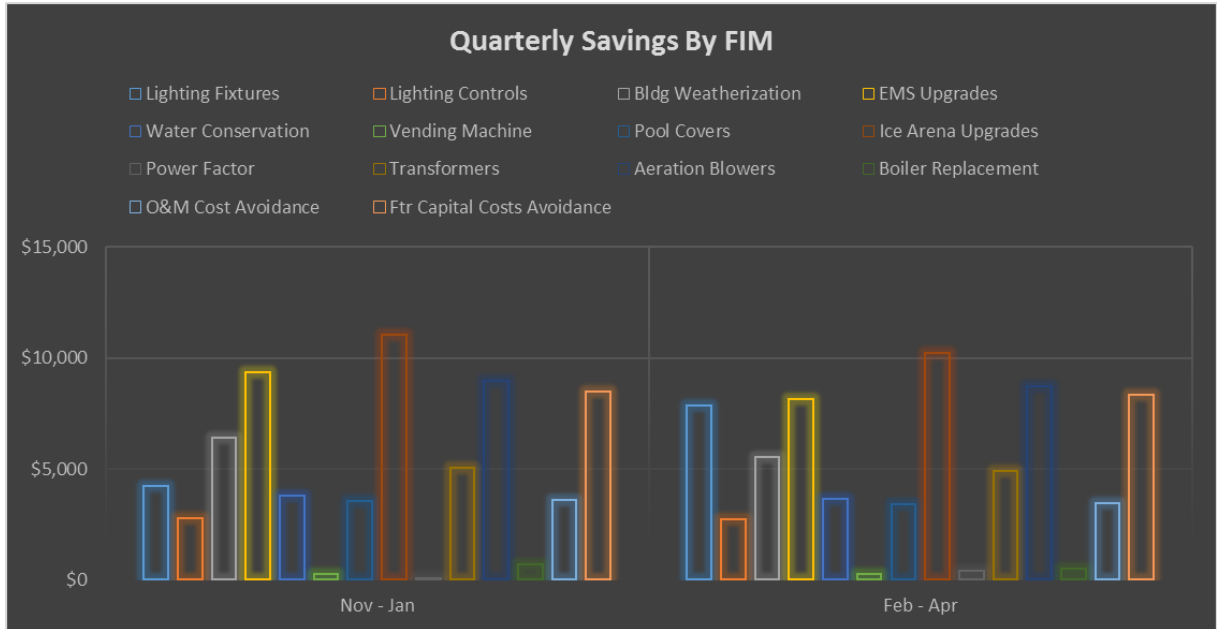
FIM #	Q1			Q2			Q3			Q4			Contract Year To Date Savings	
	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct		
Lighting Fixtures	\$2,663	\$2,643	\$2,544	\$2,381	\$2,687	\$2,771							\$15,689	\$34,088
Lighting Controls	\$912	\$942	\$942	\$851	\$942	\$912							\$5,501	\$10,556
Bldg Weatherization	\$1,771	\$2,142	\$2,483	\$2,132	\$1,994	\$1,394							\$11,916	\$14,899
EMS Upgrades	\$2,558	\$3,240	\$3,577	\$3,120	\$3,093	\$1,910							\$17,498	\$31,522
Water Conservation	\$1,236	\$1,277	\$1,277	\$1,153	\$1,277	\$1,236							\$7,456	\$14,550
Vending Machine	\$82	\$85	\$85	\$77	\$85	\$82							\$496	\$964
Pool Covers	\$1,154	\$1,193	\$1,193	\$1,077	\$1,193	\$1,154							\$6,964	\$13,623
Ice Arena Upgrades	\$4,365	\$1,769	\$4,934	\$2,486	\$4,521	\$3,232							\$21,307	\$97,890
Power Factor	\$0	\$0	\$21	\$123	\$133	\$130							\$407	\$7,405
Transformers	\$1,647	\$1,695	\$1,695	\$1,549	\$1,695	\$1,647							\$9,928	\$18,940
Aeration Blowers	\$2,936	\$3,019	\$3,019	\$2,769	\$3,019	\$2,936							\$17,698	\$34,444
Boiler Replacement	\$215	\$227	\$237	\$232	\$207	\$64							\$1,182	\$1,288
ENERGY COST SAVINGS	\$19,539	\$18,232	\$22,007	\$17,951	\$20,844	\$17,468							\$116,042	\$280,169
O&M Cost Avoidance	\$1,169	\$1,208	\$1,208	\$1,091	\$1,208	\$1,169							\$7,053	\$14,227
Future Capital Cost Avoidance	\$2,774	\$2,866	\$2,866	\$2,681	\$2,866	\$2,774							\$16,827	\$33,840
TOTAL COST SAVINGS	\$23,482	\$22,306	\$26,081	\$21,723	\$24,918	\$21,411							\$139,922	\$328,236

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Quarterly Cost Savings

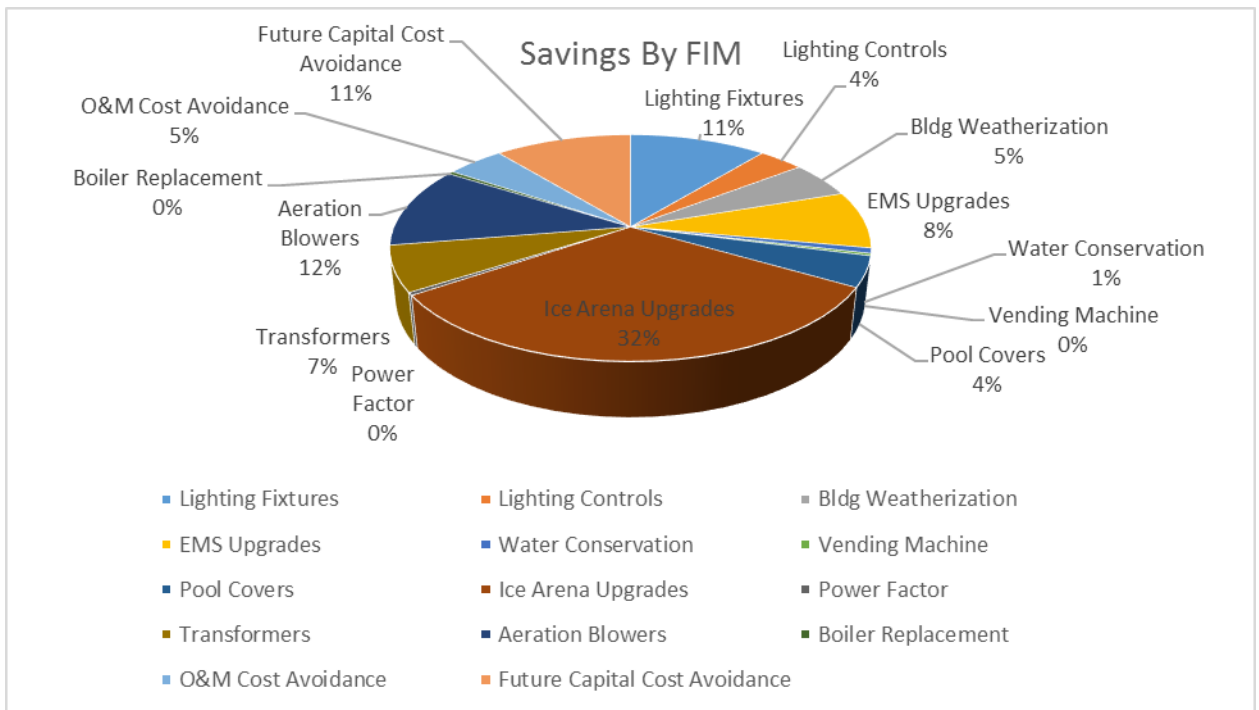
Savings realized by the project quarter 2 of year two totals 414,149 kWh & 904 kW (\$53,298), 5,707 MMBTU's (\$76,808) and 591 kGals of water/ sewer savings (\$6,719).

The total year 2, to date savings are broken down by FIM on this page and the next. They amount to \$158,192.



Thermal Savings consist of savings from Natural Gas (therms), Oil (gallons), and Propane (gallons). In order to provide a basis for comparison, these have all been reported in MMBtu. Conversion factors used in assembling this report are listed below:

- Natural Gas: 1 therm = 0.1 MMBtu
- Oil: 1 gallon = 0.139 MMBtu
- Propane: 1 gallon = 0.0916 MMBtu



Statistics from February 1, 2013 to April 30, 2013

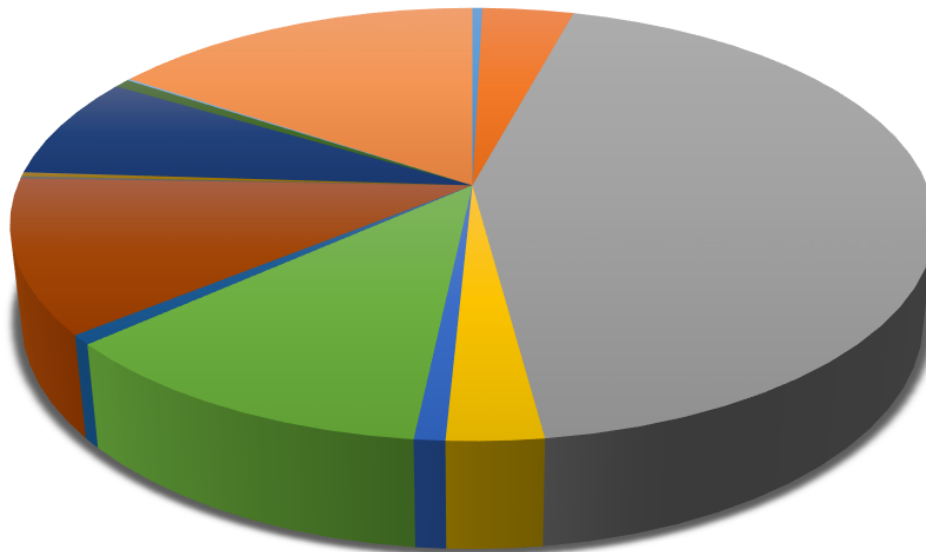
Quarterly Savings By FIM

FIM #	Description	Electrical Savings			Thermal Savings		Water Savings		Total Savings
		KW	kWh	\$	MMBtu	\$	kgal	\$	
1	Lighting Fixtures	713	125,728	\$18,483	-\$114	-\$1,572	\$0	\$0	\$16,911
2	Lighting Controls	155	46,560	\$5,547	\$0	\$0	\$0	\$0	\$5,547
3	Bldg Weatherization	0	2,472	\$281	\$540	\$7,732	\$0	\$0	\$8,013
4	EMS Upgrades	0	43,229	\$4,837	\$520	\$7,800	\$0	\$0	\$12,636
6	Water Conservation	0	0	\$0	\$67	\$1,165	\$559	\$6,353	\$1,165
9	Vending Machine	0	4,213	\$499	\$0	\$0	\$0	\$0	\$499
10	Pool Covers	0	23,328	\$2,512	\$280	\$4,145	\$32	\$366	\$6,657
11	Ice Arena Upgrades	-505	-35,157	-\$7,327	\$4,370	\$56,889	\$0	\$0	\$49,563
12	Power Factor	20	4,459	\$632	\$0	\$0	\$0	\$0	\$632
13	Transformers	159	75,314	\$10,001	\$0	\$0	\$0	\$0	\$10,001
14	Aeration Blowers	362	124,005	\$17,824	\$0	\$0	\$0	\$0	\$17,824
15	Boiler Replacement	0	0	\$0	\$45	\$650	\$0	\$0	\$650
Energy Totals		904	414,149	\$53,288	5,707	\$76,808	591	\$6,719	\$135,802
Ice Arena Ice Max Cost									-\$1,644
O&M Cost Avoidance									\$7,114
Future Capital Cost Avoidance									\$16,920
TOTAL COST SAVINGS		904	414,149	\$53,288	5,707	\$76,808	591	\$6,719	\$158,192

Energy Improvements Performance Contract

Savings Per Facility

Facility Location	Electrical Savings			Thermal Savings		Water Savings		Total \$ Savings
	KW	kWh	\$	MMBtu	\$	kgal	\$	
Central Fire Station	0	97	13	27	425	11	118	\$555
City Hall	75	12,359	1,856	94	1,618	151	1,719	\$5,193
Ice Arena	-356	16,785	-777	4,538	59,079	120	1,358	\$59,659
Public Library	51	17,129	1,844	92	1,344	64	724	\$3,912
Transportation Center	0	9,953	1,252	0	0	0	0	\$1,252
Indoor Pool	19	61,836	6,823	508	7,519	140	1,591	\$15,932
Jenny Thompson Pool	0	0	0	13	176	71	801	\$976
McConnell Center	411	84,390	12,331	229	3,325	0	0	\$15,656
Pine Hill Barn	0	0	0	13	218	0	0	\$218
Pine Hill Chapel	0	12	2	23	383	4	37	\$422
Public Works	286	68,113	8,978	96	1,117	28	321	\$10,415
South End Fire Station	0	47	6	47	853	5	51	\$910
Veterans Hall	0	0	0	9	167	0	0	\$167
WWTF	419	143,748	20,656	35	604	0	0	\$21,260
Total	904	414,467	3	5,722	\$76,825	591	\$6,718	\$136,526



- Central Fire Station
- City Hall
- Ice Arena
- Public Library
- Transportation Center
- Indoor Pool
- Jenny Thompson Pool
- McConnell Center
- Pine Hill Barn
- Pine Hill Chapel
- Public Works
- South End Fire Station
- Veterans Hall
- WWTF

Statistics from February 1, 2013 to April 30, 2013

Savings by Facility and FIM

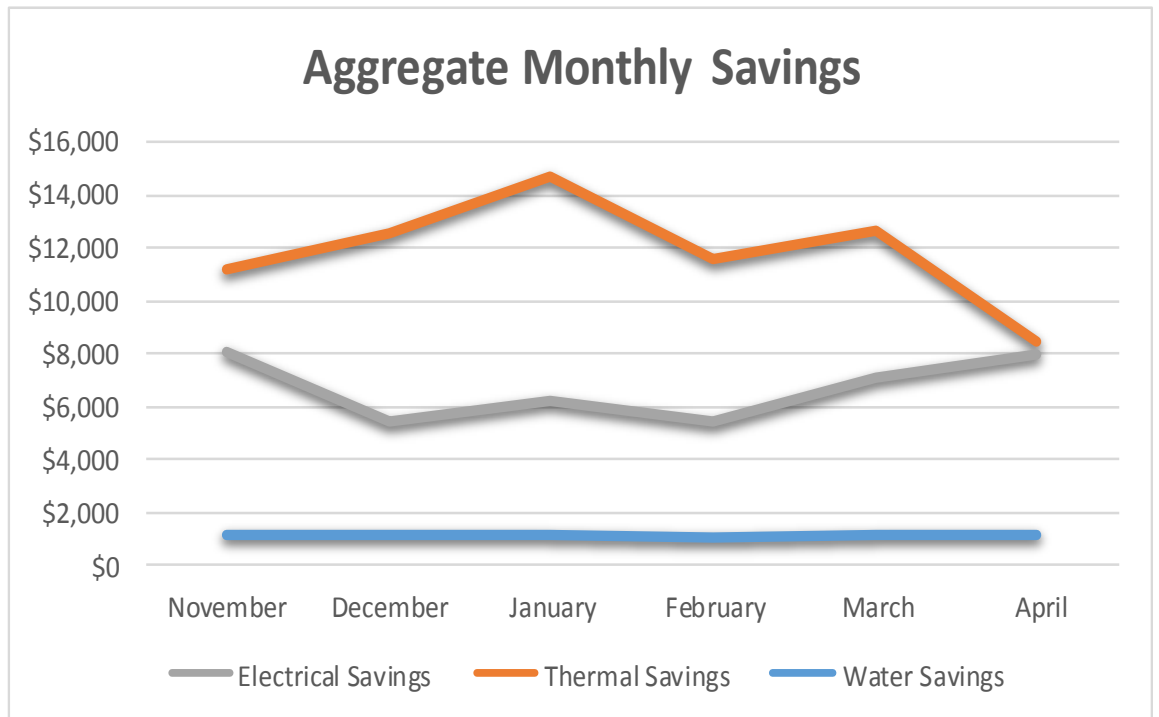
Facility Location	Lighting Fixtures	Lighting Controls	Bldg Weatherization	EMS Upgrades	Water Conservation	Vending Machine	Pool Covers	Ice Arena Upgrades	Power Factor	Transformers	Aeration Blowers	Boiler Replacement	Totals/ Building
Central Fire Station	\$0	\$0	\$411	\$0	\$144	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$555
City Hall	\$1,500	\$496	\$536	\$1,052	\$1,896	\$168	\$0	\$0	\$0	\$0	\$0	\$0	\$5,647
Ice Arena	\$2,907	\$710	\$2,522	\$0	\$1,701	\$164	\$0	\$49,568	\$632	\$1,457	\$0	\$0	\$59,660
Public Library	\$1,765	\$491	\$203	\$524	\$800	\$0	\$0	\$0	\$0	\$0	\$0	\$650	\$4,432
Transportation Center	\$0	\$0	\$0	\$1,252	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,252
Indoor Pool	\$619	\$14	\$644	\$6,056	\$1,497	\$81	\$7,022	\$0	\$0	\$0	\$0	\$0	\$15,932
Jenny Thompson Pool	\$0	\$0	\$0	\$0	\$976	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$976
McConnell Center	\$5,477	\$2,342	\$583	\$3,357	\$0	\$0	\$0	\$0	\$0	\$3,898	\$0	\$0	\$15,656
Pine Hill Barn	\$0	\$0	\$0	\$218	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$218
Pine Hill Chapel	\$0	\$0	\$267	\$115	\$41	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$422
Public Works	\$5,324	\$1,495	\$1,224	\$64	\$379	\$87	\$0	\$0	\$0	\$1,829	\$0	\$0	\$10,401
South End Fire Station	\$0	\$0	\$841	\$0	\$69	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$910
Veterans Hall	\$0	\$0	\$167	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$167
WWTF	\$0	\$0	\$618	\$0	\$0	\$0	\$0	\$0	\$0	\$2,818	\$17,824	\$0	\$21,260
Total FIM	\$17,591	\$5,547	\$8,013	\$12,636	\$7,503	\$499	\$7,022	\$49,568	\$632	\$10,001	\$17,824	\$650	\$137,484

Energy Improvements Performance Contract

Aggregate Monthly Savings

Month	Year	Electrical Savings			Thermal Savings		Water Savings		Total \$ Savings
		KW	kWh	\$	MMBtu	\$	kgal	\$	
November	2012	154	61,057	\$8,034	823	\$11,208	97	\$1,104	\$20,346
December	2012	132	37,968	\$5,414	915	\$12,511	100	\$1,141	\$19,066
January	2013	90	48,052	\$6,182	1,075	\$14,681	100	\$1,141	\$22,004
February	2013	66	42,769	\$5,379	841	\$11,542	91	\$1,031	\$17,952
March	2013	105	55,148	\$7,093	926	\$12,610	100	\$1,141	\$20,844
April	2013	133	61,769	\$7,922	618	\$8,441	97	\$1,104	\$17,467
May	2013								TBD
June	2013								TBD
July	2013								TBD
August	2013								TBD
September	2013								TBD
October	2013								TBD
Contract Year To Date		680	306,763	\$40,024	5,198	\$70,993	585	\$6,662	\$117,679

THIS PAGE CONTAINS THE TOTAL MONTHLY ENERGY UNIT SAVINGS AND ASSOCIATED DOLLAR COST SAVINGS FOR ALL FIMS.

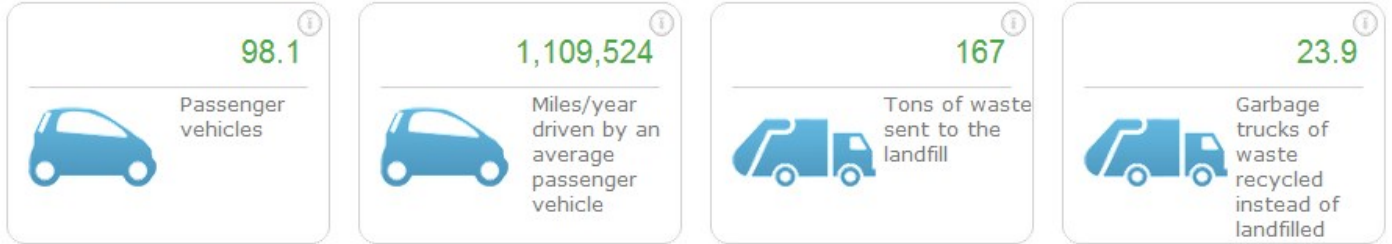


Statistics from February 1, 2013 to April 30, 2013

Contract Q1 Equivalency Savings

Based Upon 466 metric tons of CO₂, the following equivalencies have been developed:

Annual greenhouse gas emissions from



CO₂ emissions from



Carbon sequestered by





Dover: First in New Hampshire, First With You

QUARTERLY REPORT

Prepared By:

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Dover's Strategic Priorities: Dover's Focus Areas:

- Obtain a financially-and environmentally- reasonable permit for the wastewater treatment plant
- Increase non-property-tax revenue sources and control expenses
- Enhance communication to all stakeholders to engender public trust
- Foster Economic Development
- Public Education
- Economic Development
- Public Safety
- Public Infrastructure
- Fiscal Stewardship



Dover's Core Values:

- Customer-Focused Service – We engage our customers, with a focus on listening to and supporting their needs, anticipating and delivering high quality services and ensuring their satisfaction.
- Integrity – We conduct ourselves at all times in a manner that is ethical, legal and professional, with the highest degree of honesty, respect and fairness.
- Innovation – We develop creative solutions and share leading practices that enhance the value of services provided for our customers.
- Accountability – We promote openness and transparency in our operations ensuring that we are accountable for our actions at all times.
- Stewardship – We serve as trusted stewards of the public's financial, environmental, social and physical resources always seeking to responsibly utilize, conserve and sustain for current and future generations.

Dover Has:

- 30,168 People
- 28.87 square miles of land
- 50 miles of river frontage
- An average elevation of 80'
- 6 Wards
- Avg # of residents per ward: 5,000
- Over 900 fire hydrants
- Over 130 miles of public streets
- Over 70 acres of parkland
- Three elementary schools, one middle school, one high school
- Services: Full emergency services (police, fire and ambulance); city water and sewer; public and private solid waste disposal; a recycling program; electricity and natural gas through utilities.

