

New Jersey's Clean Energy Program

LGEA Presentation
Jersey City Public Schools

September 23, 2021



INTRODUCTIONS

- *Jersey City Public Schools*

- Regina Robinson
- Henry Bednarski
- Gilbert Moore
- Samantha Moore

- *NJ Clean Energy Program*

- Sarah Walters
- Nauman Khurshid
- Nicholas Nocco
- Michelle Rossi – ESIP Coordinator (BPU)
- Moussa Traore
- Arif Welcher – Government/Business Manager (BPU)

AGENDA

- The audit process overview
- Energy use & existing conditions
- Review of **E**nergy **C**onservation **M**easures (ECMs) identified & other recommendations
- Energy Savings Improvement Program (ESIP)
- C&I Transition of EE Programs
- Applicable NJCEP Incentives
- Questions regarding the draft audit report
- Next steps for Jersey City Public Schools



LGEA PROCESS

- Application Approval
- Initial Call
- Facility Interviews
- Audit
- Benchmarking & Analysis
- Draft Reports
- LGEA Presentation
- Final Reports



SITE VISIT & UTILITY ANALYSIS

Overview of Systems, Baseline & Existing Conditions:

- Lighting System
- HVAC and Mechanical Systems
- Plug Load Equipment
- Kitchen & Cooking Equipment
- Refrigeration Equipment
- Pool Systems

Utility Consumption:

- Electric Consumption and Costs
- Natural Gas Consumption and Costs
- Fuel Oil Consumptions and Costs
- Solar PV Systems

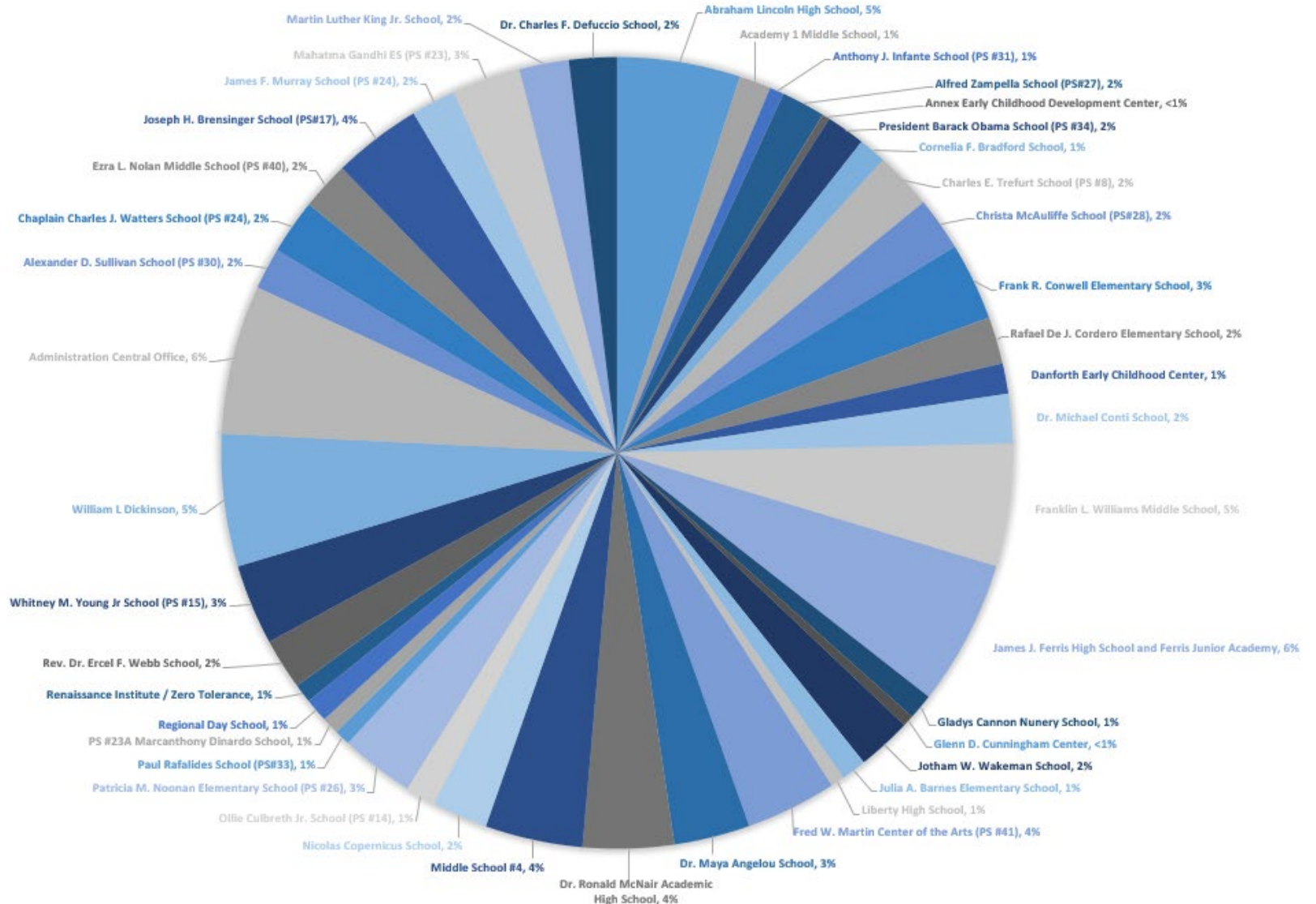
Sites Visited/Analyzed

- Admin – Central Office
- William L. Dickinson
- James J Ferris & Ferris Jr. Academy
- Mahatma K Gandhi & West Side Annex
- Joseph H. Brensinger
- Alfred E. Zampella
- Abraham Lincoln
- Christ McAuliffe
- James F. Murray
- Chaplain Charles Watters
- Jotham W. Wakeman
- Middle School #4
- Nicholas Copernicus
- Alexander D. Sullivan
- Martin Luther King Jr.
- Charles E. Tretfurt
- Franklin I. Williams MS
- Rafael D J. Cordero
- Dr. Ronald McNair HS
- Dr. Michael J Conti
- Whitney M. Young
- Frank R. Conwell School
- Rev. Dr. Ercel F. Webb
- Danforth ECC
- President Barak Obama
- Gladys Cannon Nunery
- Ezra L. Nolan School
- Julia A. Barnes
- Ollie Culbreth Jr. School
- Fred W. Martin School
- Academy 1
- Dr. Paul Rafalides
- Dr. Charles F. Deffuccio
- Cornelia F. Bradford
- Anthony J. Infante
- Liberty High School
- Regional Day School
- Dr. Maya Angelou
- Patricia Noonan
- MarcAnthony Dinardo (Duncan)
- PS#23A Annex Early CDC
- Renaissance Institute-Zero Tolerance
- Glenn D. Cunningham Center



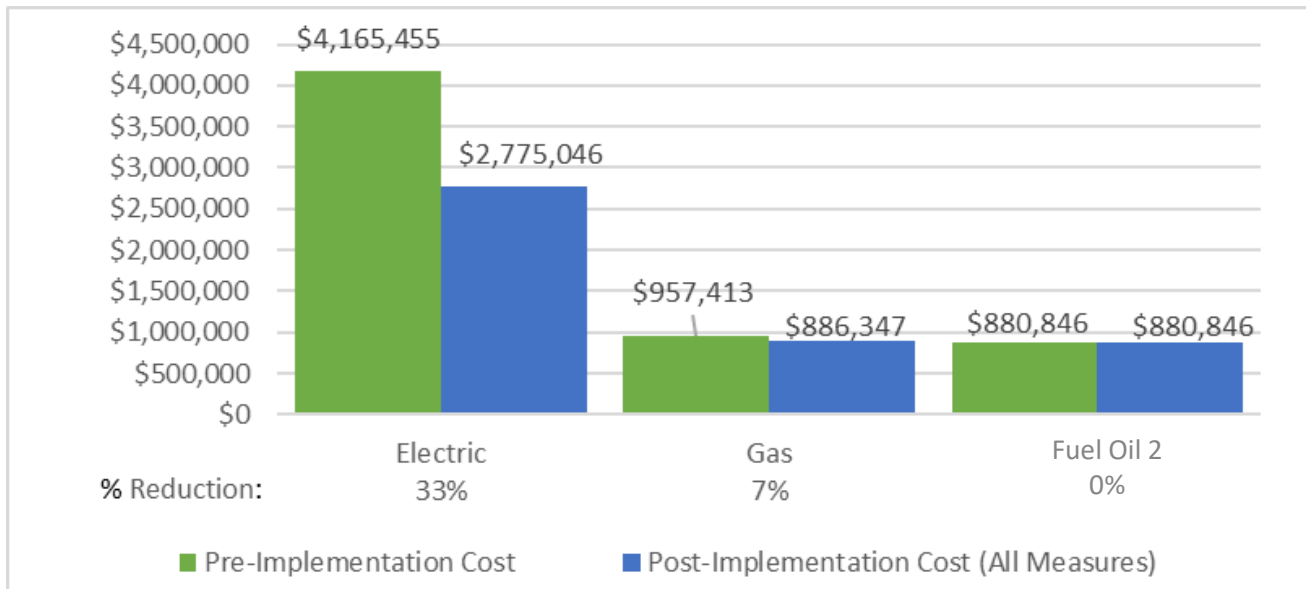
UTILITY BREAKOUT

Percent of Total Annual Energy Costs




UTILITY BREAKOUT

Pre & Post Implementation Costs



BENCHMARKING



ENERGY STAR® Statement of Energy Performance

43
ENERGY STAR® Score¹

Martin Luther King Jr. School (PS #11)
Primary Property Type: K-12 School
Gross Floor Area (ft²): 104,509
Built: 1968
For Year Ending: January 31, 2020
Date Generated: February 25, 2021

1. The ENERGY STAR score is a 1-100 assessment of a building's energy efficiency as compared with similar buildings nationwide, adjusting for climate and business activity.

Property & Contact Information

Property Address	Property Owner	Primary Contact
Martin Luther King Jr. School (PS #11) 886 Bergen Avenue Jersey City, New Jersey 07306	Jersey City Public Schools 346 Claremont Avenue Jersey City, NJ 07305 (201) 915-8074	Regina Robinson 346 Claremont Avenue Jersey City, NJ 07305 (201) 915-8074 robinson@joboe.org

Property ID: 13080840

Energy Consumption and Energy Use Intensity (EUI)

Site EUI 59.1 kBtu/ft ²	Annual Energy by Fuel	National Median Comparison
	Natural Gas (kBtu) 3,737,783 (60%)	National Median Site EUI (kBtu/ft ²) 55.5
	Electric - Grid (kBtu) 2,438,700 (40%)	National Median Source EUI (kBtu/ft ²) 96.6
		% Diff from National Median Source EUI 0%
Source EUI 102.9 kBtu/ft ²		Annual Emissions
		Greenhouse Gas Emissions (Metric Tons CO2e/year) 432

Site EUI
59.1 kBtu/ft²

Source EUI
102.9 kBtu/ft²

National Median Comparison

National Median Site EUI (kBtu/ft ²)	55.5
National Median Source EUI (kBtu/ft ²)	96.6
% Diff from National Median Source EUI	0%

Signature & Stamp of Verifying Professional

I _____ (Name) verify that the above information is true and correct to the best of my knowledge.

LP Signature: _____ Date: _____

Licensed Professional

() _____

Professional Engineer or Registered Architect Stamp (if applicable)

ENERGY STAR® scores are percentile ranking from 1 (least efficient) to 100 (most efficient). It compares your building's energy performance to similar buildings nationwide.

BENCHMARKING

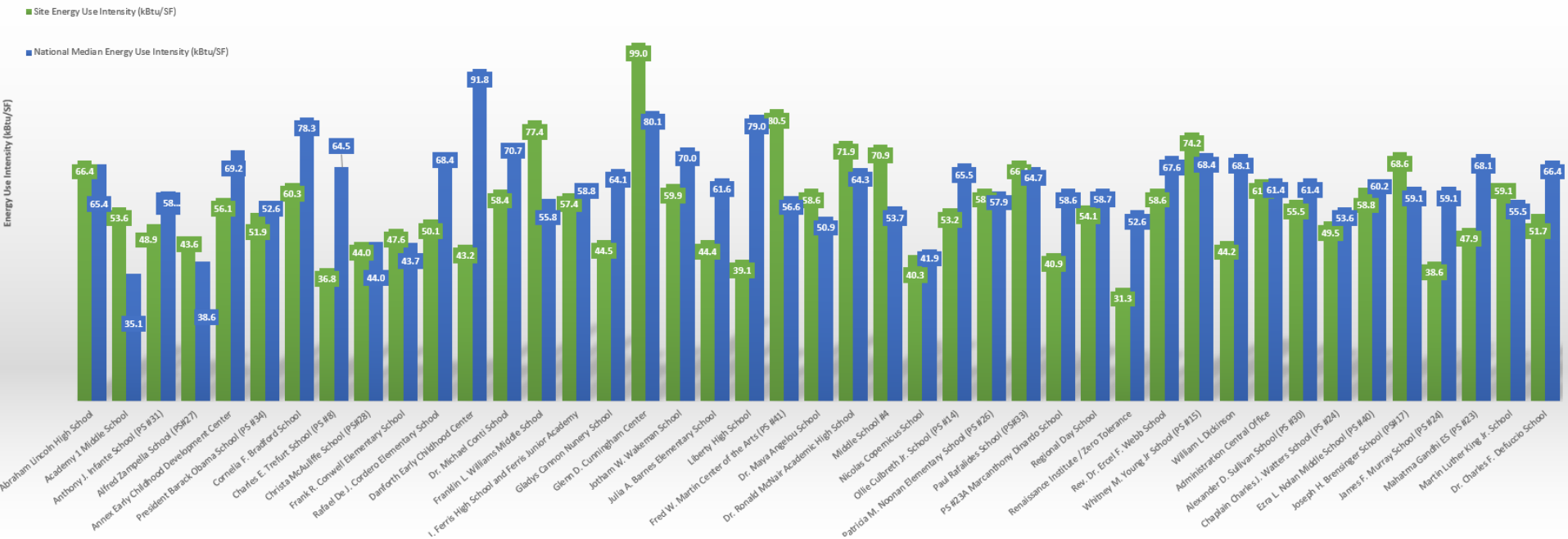
ENERGY STAR® Scores

Site Name	Energy Star Score
Abraham Lincoln High School	48
Academy 1 Middle School	13
Anthony J. Infante School (PS #31)	66
Alfred Zampella School (PS#27)	36
Annex Early Childhood Development Center	69
President Barack Obama School (PS #34)	51
Cornelia F. Bradford School	78
Charles E. Trefurt School (PS #8)	90
Christa McAuliffe School (PS#28)	49
Frank R. Conwell Elementary School	41
Rafael De J. Cordero Elementary School	77
Danforth Early Childhood Center	N/A
Dr. Michael Conti School	67
Franklin L. Williams Middle School	19
James J. Ferris High School and Ferris Junior Academy	52
Gladys Cannon Nunery School	80
Glenn D. Cunningham Center	N/A
Jotham W. Wakeman School	66
Julia A. Barnes Elementary School	78
Liberty High School	94
Fred W. Martin Center of the Arts (PS #41)	15
Dr. Maya Angelou School	35

Site Name	Energy Star Score
Dr. Ronald McNair Academic High School	38
Middle School #4	23
Nicolas Copernicus School	53
Ollie Culbreth Jr. School (PS #14)	69
Patricia M. Noonan Elementary School (PS #26)	48
Paul Rafalides School (PS#33)	47
PS #23A Marcanthony Dinardo School	80
Regional Day School	58
Renaissance Institute / Zero Tolerance	88
Rev. Dr. Ercel F. Webb School	64
Whitney M. Young Jr School (PS #15)	41
William L Dickinson	86*
Administration Central Office	50
Alexander D. Sullivan School (PS #30)	59
Chaplain Charles J. Watters School (PS #24)	58
Ezra L. Nolan Middle School (PS #40)	52
Joseph H. Brensinger School (PS#17)	35
James F. Murray School (PS #24)	84
Mahatma Gandhi ES (PS #23)	83
Martin Luther King Jr. School	43
Dr. Charles F. Defuccio School	75



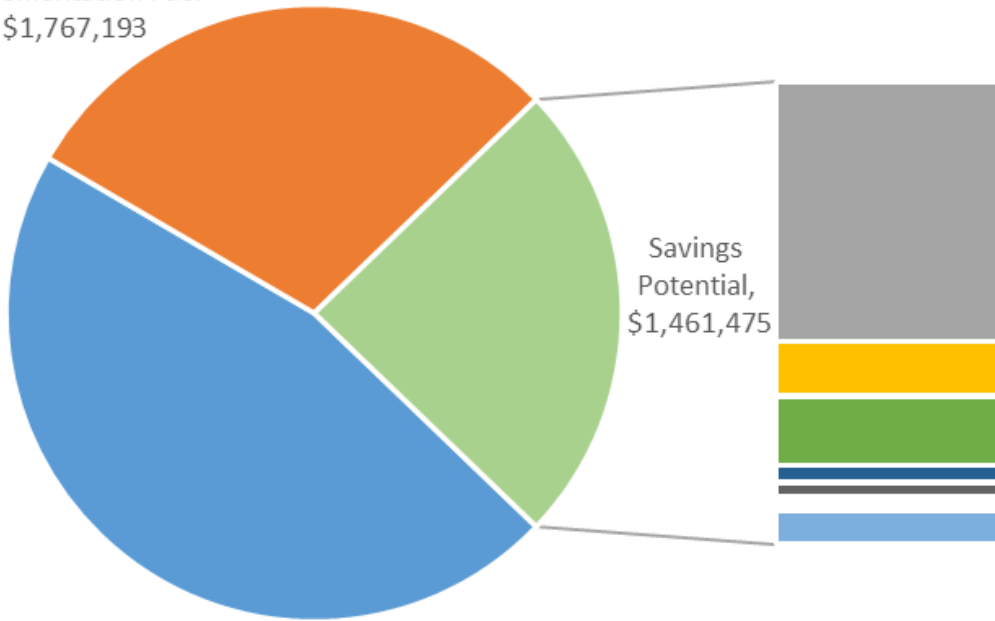
BENCHMARKING



ALL OPPORTUNITIES

Savings Potential

Post-Implementation Fuel
Cost, \$1,767,193



- Lighting Upgrades
- Lighting Control Measures
- Motor Upgrades
- Variable Frequency Drive (VFD) Measures
- Electric Unitary HVAC Measures
- Electric Chiller Replacement
- Gas Heating (HVAC/Process) Replacement
- HVAC System Improvements
- Domestic Water Heating Upgrade
- Food Service & Refrigeration Measures
- Custom Measures

Post-Implementation Electric
Cost, \$2,775,046



ALL OPPORTUNITIES

#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades		7,478,116	1,511.0	-1,831.5	\$821,554	\$2,887,238	\$709,321	\$2,177,917	2.7	7,274,005
ECM 1	Install LED Fixtures	519,346	34.5	-33.6	\$57,485	\$279,579	\$34,685	\$244,894	4.3	518,702
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	80,029	19.0	-20.4	\$7,646	\$37,666	\$6,401	\$31,265	4.1	77,407
ECM 3	Retrofit Fixtures with LED Lamps	6,878,742	1,457.4	-1,777.5	\$756,423	\$2,569,993	\$668,235	\$1,901,758	2.5	6,677,896
Lighting Control Measures		1,582,278	313.5	-435.0	\$169,819	\$1,344,169	\$367,340	\$976,829	5.8	1,530,227
ECM 4	Install Occupancy Sensor Lighting Controls	1,315,595	265.2	-365.4	\$140,830	\$1,053,694	\$134,290	\$919,404	6.5	1,271,750
ECM 5	Install High/Low Lighting Controls	266,683	48.2	-69.6	\$28,988	\$290,475	\$233,050	\$57,425	2.0	258,477
Motor Upgrades		27,208	4.8	0.0	\$2,620	\$185,839	\$0	\$185,839	70.9	27,398
ECM 6	Premium Efficiency Motors	27,208	4.8	0.0	\$2,620	\$185,839	\$0	\$185,839	70.9	27,398
Variable Frequency Drive (VFD) Measures		1,817,973	433.9	493.2	\$215,613	\$1,767,805	\$327,450	\$1,440,355	6.7	1,889,787
ECM 7	Install VFD on Variable Air Volume (VAV) Fans	203,682	55.3	0.0	\$21,123	\$89,341	\$25,350	\$63,991	3.0	205,106
ECM 8	Install VFDs on Constant Volume (CV) Fans	982,695	265.7	0.0	\$119,256	\$716,589	\$190,550	\$526,039	4.4	989,566
ECM 9	Install VFDs on Chilled Water Pumps	30,265	11.3	0.0	\$3,470	\$101,736	\$9,200	\$92,536	26.7	30,477
ECM 10	Install VFDs on Heating Water Pumps	324,946	40.2	0.0	\$35,631	\$626,213	\$44,050	\$582,163	16.3	327,218
ECM 11	Install Boiler Draft Fan VFDs	116,294	52.6	0.0	\$12,931	\$118,393	\$37,300	\$81,093	6.3	117,108
ECM 12	Install VFDs on Boiler Feedwater Pumps	1,632	0.8	0.0	\$265	\$6,415	\$200	\$6,215	23.5	1,643
ECM 13	Install VFDs on Kitchen Hood Fan Motors	78,141	0.5	493.2	\$13,832	\$51,979	\$5,400	\$46,579	3.4	137,791
ECM 14	Install VFDs on Condensate Pumps	949	0.1	0.0	\$97	\$5,717	\$200	\$5,517	57.0	956
ECM 15	Install VFDs on Process Pumps	79,367	7.5	0.0	\$9,008	\$51,420	\$15,200	\$36,220	4.0	79,922
Electric Unitary HVAC Measures		524,760	370.7	38.6	\$55,153	\$1,418,229	\$170,012	\$1,248,217	22.6	533,174
ECM 16	Install High Efficiency Air Conditioning Units	360,821	224.4	38.6	\$34,512	\$1,244,300	\$155,482	\$1,088,818	31.5	368,089
ECM 17	Install High Efficiency Heat Pumps	163,940	146.3	0.0	\$20,640	\$173,929	\$14,531	\$159,398	7.7	165,086
Electric Chiller Replacement		35,730	-12.2	0.0	\$4,133	\$346,351	\$56,400	\$289,951	70.1	35,980
ECM 18	Install High Efficiency Chillers	35,730	-12.2	0.0	\$4,133	\$346,351	\$56,400	\$289,951	70.1	35,980

ALL OPPORTUNITIES

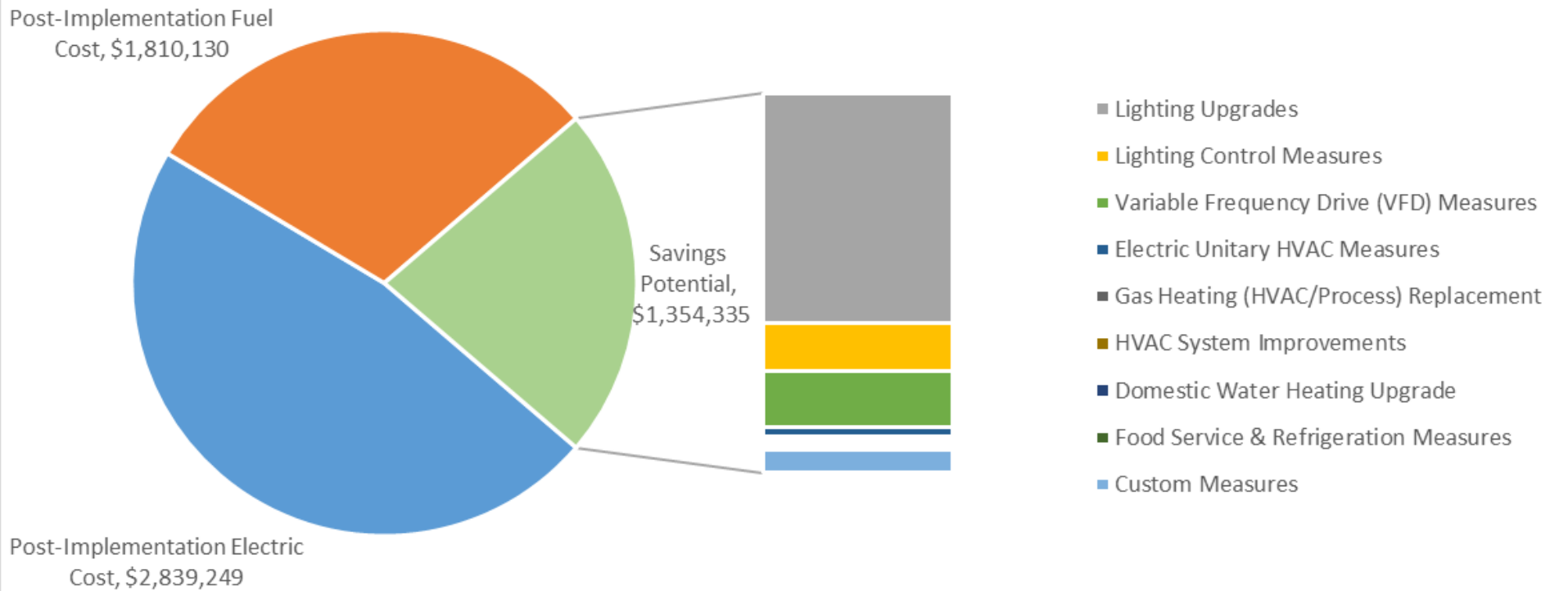
#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Gas Heating (HVAC/Process) Replacement		0	0.0	4,794.9	\$42,006	\$2,189,645	\$145,612	\$2,044,033	48.7	591,377
ECM 19	Install High Efficiency Hot Water Boilers	0	0.0	3,859.5	\$30,402	\$780,089	\$51,760	\$728,329	24.0	454,660
ECM 20	Install High Efficiency Steam Boilers	0	0.0	874.3	\$11,130	\$1,390,534	\$90,852	\$1,299,682	116.8	129,560
ECM 21	Install High Efficiency Furnaces	0	0.0	61.1	\$475	\$19,022	\$3,000	\$16,022	33.7	7,156
HVAC System Improvements		64,509	0.0	825.3	\$15,968	\$56,312	\$2,976	\$53,336	3.3	171,297
ECM 22	Install Programmable Thermostats	37,106	0.0	212.0	\$6,360	\$27,049	\$0	\$27,049	4.3	62,188
ECM 23	Implement Demand Control Ventilation (DCV)	8,235	0.0	109.2	\$1,941	\$23,110	\$0	\$23,110	11.9	21,082
ECM 24	Install Pipe Insulation	19,168	0.0	504.0	\$7,667	\$6,153	\$2,976	\$3,177	0.4	88,026
Domestic Water Heating Upgrade		19,969	0.0	963.5	\$12,281	\$398,091	\$31,471	\$366,620	29.9	147,823
ECM 25	Install High Efficiency Gas-Fired Water Heater	0	0.0	325.3	\$3,886	\$382,965	\$20,090	\$362,875	93.4	47,854
ECM 26	Install Low-Flow DHW Devices	19,969	0.0	638.2	\$8,395	\$15,126	\$11,381	\$3,745	0.4	99,969
Food Service & Refrigeration Measures		170,155	17.5	20.0	\$19,355	\$123,326	\$19,530	\$103,796	5.4	173,682
ECM 27	Food Service Equipment Replacement	0	0.0	20.0	\$181	\$14,238	\$2,000	\$12,238	67.7	2,337
ECM 28	Refrigerator/Freezer Case Electrically Commutated Motors	30,814	3.3	0.0	\$3,379	\$20,018	\$5,280	\$14,738	4.4	31,029
ECM 29	Refrigeration Controls	17,109	0.2	0.0	\$1,961	\$16,904	\$2,050	\$14,854	7.6	17,228
ECM 30	Replace Refrigeration Equipment	29,854	3.4	0.0	\$3,641	\$53,767	\$4,700	\$49,067	13.5	30,063
ECM 31	Vending Machine Control	92,379	10.5	0.0	\$10,193	\$18,400	\$5,500	\$12,900	1.3	93,024
Custom Measures		761,174	0.0	3,849.9	\$102,973	\$1,233,347	\$0	\$1,233,347	12.0	1,217,678
ECM 32	Optimize HVAC Schedule	14,688	0.0	84.5	\$2,643	\$2,646	\$0	\$2,646	1.0	24,688
ECM 33	Retro-Commissioning Study	62,647	0.0	1,181.5	\$17,077	\$121,240	\$0	\$121,240	7.1	201,430
ECM 34	Upgrade/Replace Energy Management System	44,218	0.0	292.3	\$7,774	\$196,176	\$0	\$196,176	25.2	78,749
ECM 35	Installation of an Energy Management System	469,454	0.0	478.6	\$43,664	\$691,039	\$0	\$691,039	15.8	528,779
ECM 36	Install Heat Pump Water Heater	170,166	0.0	0.0	\$16,749	\$41,056	\$0	\$41,056	2.5	171,356
ECM 37	Semi/Automatic Cover for Swimming Pool	0	0.0	1,812.9	\$15,066	\$181,190	\$0	\$181,190	12.0	212,677
TOTALS		12,481,874	2,639.1	8,718.7	\$1,461,475	\$11,950,352	\$1,830,112	\$10,120,239	6.9	13,592,430

* - All incentives presented in this table are included as placeholders and are based on previously run state rebate programs. Contact your utility provider for details on current programs

** - Simple Payback Period is based on net measure costs (i.e. after incentives).

COST EFFECTIVE OPPORTUNITIES

Savings Potential



COST EFFECTIVE OPPORTUNITIES

#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades		7,478,033	1,510.9	-1,831.5	\$821,545	\$2,887,109	\$709,301	\$2,177,808	2.7	7,273,923
ECM 1	Install LED Fixtures	519,346	34.5	-33.6	\$57,485	\$279,579	\$34,685	\$244,894	4.3	518,702
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	79,945	19.0	-20.4	\$7,637	\$37,537	\$6,381	\$31,156	4.1	77,325
ECM 3	Retrofit Fixtures with LED Lamps	6,878,742	1,457.4	-1,777.5	\$756,423	\$2,569,993	\$668,235	\$1,901,758	2.5	6,677,896
Lighting Control Measures		1,582,278	313.5	-435.0	\$169,819	\$1,344,169	\$367,340	\$976,829	5.8	1,530,227
ECM 4	Install Occupancy Sensor Lighting Controls	1,315,595	265.2	-365.4	\$140,830	\$1,053,694	\$134,290	\$919,404	6.5	1,271,750
ECM 5	Install High/Low Lighting Controls	266,683	48.2	-69.6	\$28,988	\$290,475	\$233,050	\$57,425	2.0	258,477
Variable Frequency Drive (VFD) Measures		1,678,218	400.3	493.2	\$199,784	\$1,098,969	\$292,850	\$806,119	4.0	1,749,055
ECM 7	Install VFD on Variable Air Volume (VAV) Fans	203,682	55.3	0.0	\$21,123	\$89,341	\$25,350	\$63,991	3.0	205,106
ECM 8	Install VFDs on Constant Volume (CV) Fans	972,389	262.5	0.0	\$118,043	\$699,232	\$189,100	\$510,132	4.3	979,188
ECM 10	Install VFDs on Heating Water Pumps	234,677	27.3	0.0	\$25,705	\$116,919	\$22,800	\$94,119	3.7	236,317
ECM 11	Install Boiler Draft Fan VFDs	109,962	47.1	0.0	\$12,073	\$90,078	\$35,000	\$55,078	4.6	110,731
ECM 13	Install VFDs on Kitchen Hood Fan Motors	78,141	0.5	493.2	\$13,832	\$51,979	\$5,400	\$46,579	3.4	137,791
ECM 15	Install VFDs on Process Pumps	79,367	7.5	0.0	\$9,008	\$51,420	\$15,200	\$36,220	4.0	79,922
Electric Unitary HVAC Measures		352,614	216.9	0.0	\$36,315	\$341,392	\$53,900	\$287,492	7.9	355,080
ECM 16	Install High Efficiency Air Conditioning Units	200,387	74.3	0.0	\$16,571	\$186,155	\$40,800	\$145,355	8.8	201,788
ECM 17	Install High Efficiency Heat Pumps	152,227	142.6	0.0	\$19,744	\$155,237	\$13,100	\$142,137	7.2	153,291

COST EFFECTIVE OPPORTUNITIES

#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Gas Heating (HVAC/Process) Replacement		0	0.0	526.1	\$5,986	\$120,961	\$18,368	\$102,593	17.1	73,424
ECM 19	Install High Efficiency Hot Water Boilers	0	0.0	331.2	\$3,135	\$33,685	\$8,000	\$25,685	8.2	41,542
ECM 20	Install High Efficiency Steam Boilers	0	0.0	194.9	\$2,851	\$87,276	\$10,368	\$76,908	27.0	31,882
HVAC System Improvements		57,900	0.0	733.5	\$14,362	\$35,921	\$2,976	\$32,945	2.3	153,896
ECM 22	Install Programmable Thermostats	37,106	0.0	212.0	\$6,360	\$27,049	\$0	\$27,049	4.3	62,188
ECM 23	Implement Demand Control Ventilation (DCV)	1,625	0.0	17.5	\$335	\$2,719	\$0	\$2,719	8.1	3,681
ECM 24	Install Pipe Insulation	19,168	0.0	504.0	\$7,667	\$6,153	\$2,976	\$3,177	0.4	88,026
Domestic Water Heating Upgrade		19,969	0.0	715.3	\$9,052	\$28,159	\$12,781	\$15,378	1.7	108,996
ECM 25	Install High Efficiency Gas-Fired Water Heater	0	0.0	77.1	\$658	\$13,033	\$1,400	\$11,633	17.7	9,027
ECM 26	Install Low-Flow DHW Devices	19,969	0.0	638.2	\$8,395	\$15,126	\$11,381	\$3,745	0.4	99,969
Food Service & Refrigeration Measures		146,427	15.0	0.0	\$16,615	\$66,657	\$13,780	\$52,877	3.2	147,451
ECM 28	Refrigerator/Freezer Case Electrically Commutated Motors	30,814	3.3	0.0	\$3,379	\$20,018	\$5,280	\$14,738	4.4	31,029
ECM 29	Refrigeration Controls	14,756	0.2	0.0	\$1,708	\$12,519	\$1,550	\$10,969	6.4	14,859
ECM 30	Replace Refrigeration Equipment	8,479	1.0	0.0	\$1,335	\$15,720	\$1,450	\$14,270	10.7	8,538
ECM 31	Vending Machine Control	92,379	10.5	0.0	\$10,193	\$18,400	\$5,500	\$12,900	1.3	93,024
Custom Measures		640,873	0.0	2,682.1	\$80,857	\$722,385	\$0	\$722,385	8.9	959,391
ECM 32	Optimize HVAC Schedule	14,688	0.0	84.5	\$2,643	\$2,646	\$0	\$2,646	1.0	24,688
ECM 33	Retro-Commissioning Study	62,647	0.0	1,181.5	\$17,077	\$121,240	\$0	\$121,240	7.1	201,430
ECM 35	Installation of an Energy Management System	394,602	0.0	0.0	\$32,609	\$439,613	\$0	\$439,613	13.5	397,361
ECM 36	Install Heat Pump Water Heater	168,935	0.0	0.0	\$16,615	\$38,986	\$0	\$38,986	2.3	170,116
ECM 37	Semi/Automatic Cover for Swimming Pool	0	0.0	1,416.0	\$11,913	\$119,900	\$0	\$119,900	10.1	165,796
TOTALS		11,956,312	2,456.5	2,883.7	\$1,354,335	\$6,645,722	\$1,471,296	\$5,174,426	3.8	12,351,444

* - All incentives presented in this table are included as placeholders and are based on previously run state rebate programs. Contact your utility provider for details on current programs

** - Simple Payback Period is based on net measure costs (i.e. after incentives).

ADMIN-CENTRAL OFFICE

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			305,664	74.1	0	\$25,259	\$105,890	\$50,898	\$54,992	2.2	307,801
ECM 1	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	Yes	20,057	5.0	0	\$1,657	\$6,697	\$2,010	\$4,687	2.8	20,197
ECM 2	Retrofit Fixtures with LED Lamps	Yes	285,607	69.1	0	\$23,602	\$99,193	\$48,888	\$50,305	2.1	287,604
Lighting Control Measures			92,632	22.4	0	\$7,655	\$82,344	\$41,310	\$41,034	5.4	93,280
ECM 3	Install Occupancy Sensor Lighting Controls	Yes	62,851	15.4	0	\$5,194	\$54,894	\$14,260	\$40,634	7.8	63,291
ECM 4	Install High/Low Lighting Controls	Yes	29,781	7.0	0	\$2,461	\$27,450	\$27,050	\$400	0.2	29,989
Motor Upgrades			10,850	0.9	0	\$897	\$11,370	\$0	\$11,370	12.7	10,925
ECM 5	Premium Efficiency Motors	No	10,850	0.9	0	\$897	\$11,370	\$0	\$11,370	12.7	10,925
Unitary HVAC Measures			200,131	74.1	0	\$16,538	\$185,600	\$40,800	\$144,800	8.8	201,530
ECM 6	Install High Efficiency Air Conditioning Units	Yes	200,131	74.1	0	\$16,538	\$185,600	\$40,800	\$144,800	8.8	201,530
HVAC System Improvements			2,817	0.0	0	\$233	\$156	\$108	\$48	0.2	2,837
ECM 7	Install Pipe Insulation	Yes	2,817	0.0	0	\$233	\$156	\$108	\$48	0.2	2,837
Domestic Water Heating Upgrade			2,085	0.0	0	\$172	\$108	\$108	\$0	0.0	2,100
ECM 8	Install Low-Flow DHW Devices	Yes	2,085	0.0	0	\$172	\$108	\$108	\$0	0.0	2,100
Food Service & Refrigeration Measures			10,074	1.2	0	\$832	\$1,610	\$700	\$910	1.1	10,144
ECM 9	Vending Machine Control	Yes	10,074	1.2	0	\$832	\$1,610	\$700	\$910	1.1	10,144
Custom Measures			394,602	0.0	0	\$32,609	\$439,613	\$0	\$439,613	13.5	397,361
ECM 10	Installation of an Energy Management System	Yes	394,602	0.0	0	\$32,609	\$439,613	\$0	\$439,613	13.5	397,361
TOTALS (COST EFFECTIVE MEASURES)			1,008,005	171.8	0	\$83,299	\$815,320	\$133,924	\$681,397	8.2	1,015,053
TOTALS (ALL MEASURES)			1,018,855	172.7	0	\$84,196	\$826,691	\$133,924	\$692,767	8.2	1,025,979

WILLIAM L. DICKINSON

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			475,313	63.7	-217	\$40,152	\$163,905	\$39,888	\$124,017	3.1	443,082
ECM 1	Install LED Fixtures	Yes	7,446	0.6	-2	\$648	\$4,090	\$405	\$3,685	5.7	7,155
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	Yes	13,521	2.0	-6	\$1,142	\$6,679	\$838	\$5,841	5.1	12,598
ECM 3	Retrofit Fixtures with LED Lamps	Yes	454,346	61.1	-209	\$38,362	\$153,136	\$38,645	\$114,491	3.0	423,329
Lighting Control Measures			131,919	17.8	-61	\$11,138	\$92,501	\$28,920	\$63,581	5.7	122,913
ECM 4	Install Occupancy Sensor Lighting Controls	Yes	111,125	15.2	-51	\$9,383	\$69,776	\$8,950	\$60,826	6.5	103,539
ECM 5	Install High/Low Lighting Controls	Yes	20,793	2.6	-10	\$1,756	\$22,725	\$19,970	\$2,755	1.6	19,374
Variable Frequency Drive (VFD) Measures			105,120	23.3	0	\$9,594	\$82,712	\$18,250	\$64,462	6.7	105,855
ECM 6	Install VFDs on Constant Volume (CV) Fans	Yes	92,880	22.6	0	\$8,477	\$78,052	\$16,250	\$61,802	7.3	93,530
ECM 7	Install VFDs on Process Pumps	Yes	12,240	0.8	0	\$1,117	\$4,660	\$2,000	\$2,660	2.4	12,326
Unitary HVAC Measures			14,205	17.9	0	\$1,296	\$114,981	\$18,050	\$96,931	74.8	14,305
ECM 8	Install High Efficiency Air Conditioning Units	No	14,205	17.9	0	\$1,296	\$114,981	\$18,050	\$96,931	74.8	14,305
HVAC System Improvements			0	0.0	9	\$132	\$158	\$60	\$98	0.7	1,448
ECM 9	Install Pipe Insulation	Yes	0	0.0	9	\$132	\$158	\$60	\$98	0.7	1,448
Domestic Water Heating Upgrade			0	0.0	97	\$2,515	\$68,813	\$6,380	\$62,434	24.8	24,193
ECM 10	Install High Efficiency Gas-Fired Water Heater	No	0	0.0	29	\$1,518	\$67,144	\$5,600	\$61,544	40.5	13,206
ECM 11	Install Low-Flow DHW Devices	Yes	0	0.0	67	\$998	\$1,669	\$780	\$890	0.9	10,988
Food Service & Refrigeration Measures			8,933	0.7	10	\$904	\$14,986	\$2,190	\$12,796	14.2	10,164
ECM 12	Food Service Equipment Replacement	No	0	0.0	10	\$89	\$7,119	\$1,000	\$6,119	69.1	1,169
ECM 13	Refrigerator/Freezer Case Electrically Commutated Motors	Yes	1,666	0.2	0	\$152	\$910	\$240	\$670	4.4	1,677
ECM 14	Refrigeration Controls	Yes	3,963	0.1	0	\$362	\$4,385	\$500	\$3,885	10.7	3,990
ECM 15	Replace Refrigeration Equipment	No	887	0.1	0	\$81	\$2,112	\$250	\$1,862	23.0	893
ECM 16	Vending Machine Control	Yes	2,418	0.3	0	\$221	\$460	\$200	\$260	1.2	2,435
TOTALS (COST EFFECTIVE MEASURES)			720,397	105.3	-202	\$62,747	\$346,701	\$88,838	\$257,863	4.1	692,389
TOTALS (ALL MEASURES)			735,490	123.3	-163	\$65,731	\$538,057	\$113,738	\$424,320	6.5	721,961

JAMES J. FERRIS & JR. ACADEMY

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			694,309	108.3	-153	\$73,949	\$1,109,231	\$255,172	\$53,773	\$201,399	2.7	681,298
ECM 1	Install LED Fixtures	Yes	29,688	0.0	0	\$3,213	\$48,192	\$26,440	\$4,200	\$22,240	6.9	29,895
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	Yes	4,503	0.6	-1	\$479	\$7,189	\$1,802	\$280	\$1,522	3.2	4,413
ECM 3	Retrofit Fixtures with LED Lamps	Yes	660,119	107.7	-152	\$70,257	\$1,053,850	\$226,930	\$49,293	\$177,637	2.5	646,990
Lighting Control Measures			107,964	14.9	-25	\$11,490	\$91,922	\$85,716	\$12,345	\$73,371	6.4	105,811
ECM 4	Install Occupancy Sensor Lighting Controls	Yes	105,191	14.6	-24	\$11,195	\$89,562	\$83,016	\$10,455	\$72,561	6.5	103,094
ECM 5	Install High/Low Lighting Controls	Yes	2,773	0.4	-1	\$295	\$2,361	\$2,700	\$1,890	\$810	2.7	2,717
Variable Frequency Drive (VFD) Measures			157,464	18.5	126	\$18,019	\$270,287	\$72,992	\$7,400	\$65,592	3.6	173,265
ECM 6	Install VFDs on Heating Water Pumps	Yes	136,421	17.3	0	\$14,763	\$221,451	\$61,237	\$4,800	\$56,437	3.8	137,374
ECM 7	Install VFDs on Kitchen Hood Fan Motors	Yes	16,496	0.0	126	\$2,764	\$41,453	\$7,625	\$800	\$6,825	2.5	31,311
ECM 8	Install VFDs on Process Pumps	Yes	4,548	1.2	0	\$492	\$7,383	\$4,130	\$1,800	\$2,330	4.7	4,580
Unitary HVAC Measures			1,524	4.7	0	\$165	\$2,473	\$11,976	\$1,030	\$10,946	66.4	1,534
ECM 9	Install High Efficiency Air Conditioning Units	No	1,524	4.7	0	\$165	\$2,473	\$11,976	\$1,030	\$10,946	66.4	1,534
Gas Heating (HVAC/Process) Replacement			0	0.0	87	\$677	\$13,544	\$19,443	\$3,564	\$15,879	23.4	10,175
ECM 10	Install High Efficiency Hot Water Boilers	No	0	0.0	87	\$677	\$13,544	\$19,443	\$3,564	\$15,879	23.4	10,175
Domestic Water Heating Upgrade			0	0.0	68	\$529	\$5,288	\$1,025	\$1,025	\$0	0.0	7,944
ECM 11	Install Low-Flow DHW Devices	Yes	0	0.0	68	\$529	\$5,288	\$1,025	\$1,025	\$0	0.0	7,944
Food Service & Refrigeration Measures			14,013	1.6	0	\$1,517	\$16,329	\$9,605	\$620	\$8,985	5.9	14,111
ECM 12	Refrigerator/Freezer Case Electrically Commutated Motors	Yes	5,243	0.6	0	\$567	\$8,510	\$1,213	\$320	\$893	1.6	5,279
ECM 13	Replace Refrigeration Equipment	No	4,056	0.5	0	\$439	\$5,267	\$7,242	\$0	\$7,242	16.5	4,084
ECM 14	Vending Machine Control	Yes	4,715	0.5	0	\$510	\$2,551	\$1,150	\$300	\$850	1.7	4,748
Custom Measures			0	0.0	388	\$3,024	\$0	\$58,000	\$0	\$58,000	19.2	45,430
ECM 15	Automatic Pool Cover	No	0	0.0	388	\$3,024	\$0	\$58,000	\$0	\$58,000	19.2	45,430
TOTALS (COST EFFECTIVE MEASURES)			969,695	142.9	16	\$105,064	\$1,487,789	\$417,268	\$75,163	\$342,105	3.3	978,345
TOTALS (ALL MEASURES)			975,274	148.0	491	\$109,369	\$1,509,073	\$513,929	\$79,757	\$434,172	4.0	1,039,568

MAHATMA K. GANDHI (PS #23)

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			259,190	36.6	-108	\$28,972	\$55,899	\$14,551	\$41,348	1.4	243,269
ECM 1	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	Yes	675	0.6	0	\$75	\$894	\$130	\$764	10.1	634
ECM 2	Retrofit Fixtures with LED Lamps	Yes	258,515	36.1	-108	\$28,897	\$55,005	\$14,421	\$40,584	1.4	242,636
Lighting Control Measures			55,699	8.7	-23	\$6,226	\$29,295	\$4,270	\$25,025	4.0	52,278
ECM 3	Install Occupancy Sensor Lighting Controls	Yes	53,987	8.4	-23	\$6,035	\$27,495	\$3,290	\$24,205	4.0	50,671
ECM 4	Install High/Low Lighting Controls	Yes	1,712	0.3	-1	\$191	\$1,800	\$980	\$820	4.3	1,607
Variable Frequency Drive (VFD) Measures			27,044	7.6	0	\$3,190	\$29,033	\$6,000	\$23,033	7.2	27,233
ECM 5	Install VFDs on Constant Volume (CV) Fans	Yes	12,659	2.6	0	\$1,493	\$11,652	\$1,200	\$10,452	7.0	12,748
ECM 6	Install Boiler Draft Fan VFDs	Yes	6,171	4.5	0	\$728	\$9,819	\$4,000	\$5,819	8.0	6,214
ECM 7	Install VFDs on Process Pumps	Yes	8,214	0.6	0	\$969	\$7,562	\$800	\$6,762	7.0	8,272
Gas Heating (HVAC/Process) Replacement			0	0.0	105	\$1,548	\$167,738	\$0	\$167,738	108.3	17,172
ECM 8	Install High Efficiency Steam Boilers	No	0	0.0	105	\$1,548	\$167,738	\$0	\$167,738	108.3	17,172
HVAC System Improvements			0	0.0	40	\$364	\$260	\$140	\$120	0.3	4,872
ECM 9	Install Pipe Insulation	Yes	0	0.0	40	\$364	\$260	\$140	\$120	0.3	4,872
Domestic Water Heating Upgrade			0	0.0	4	\$36	\$108	\$108	\$0	0.0	490
ECM 10	Install Low-Flow DHW Devices	Yes	0	0.0	4	\$36	\$108	\$108	\$0	0.0	490
Food Service & Refrigeration Measures			15,240	1.6	0	\$1,798	\$24,608	\$2,060	\$22,548	12.5	15,347
ECM 11	Refrigerator/Freezer Case Electrically Commutated Motors	Yes	525	0.1	0	\$62	\$607	\$160	\$447	7.2	528
ECM 12	Refrigeration Controls	No	1,517	0.0	0	\$179	\$2,193	\$250	\$1,943	10.9	1,527
ECM 13	Replace Refrigeration Equipment	No	11,587	1.3	0	\$1,367	\$21,579	\$1,550	\$20,029	14.7	11,668
ECM 14	Vending Machine Control	Yes	1,612	0.2	0	\$190	\$230	\$100	\$130	0.7	1,623
TOTALS (COST EFFECTIVE MEASURES)			344,069	53.1	-87	\$39,040	\$115,432	\$25,329	\$90,103	2.3	330,293
TOTALS (ALL MEASURES)			357,173	54.5	18	\$42,134	\$306,941	\$27,129	\$279,812	6.6	360,660

JOSEPH H. BRENSINGER (PS #17)

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			328,364	57.1	-67	\$37,554	\$91,894	\$22,110	\$69,784	1.9	322,782
ECM 1	Install LED Fixtures	Yes	5,453	0.0	0	\$634	\$3,577	\$800	\$2,777	4.4	5,491
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	Yes	2,492	0.5	-1	\$285	\$710	\$120	\$590	2.1	2,449
ECM 3	Retrofit Fixtures with LED Lamps	Yes	320,419	56.6	-67	\$36,635	\$87,607	\$21,190	\$66,417	1.8	314,842
Lighting Control Measures			83,474	14.6	-17	\$9,544	\$59,230	\$18,020	\$41,210	4.3	82,014
ECM 4	Install Occupancy Sensor Lighting Controls	Yes	64,580	12.0	-14	\$7,383	\$44,380	\$5,530	\$38,850	5.3	63,450
ECM 5	Install High/Low Lighting Controls	Yes	18,894	2.6	-4	\$2,160	\$14,850	\$12,490	\$2,360	1.1	18,564
Variable Frequency Drive (VFD) Measures			113,906	27.9	0	\$13,237	\$236,902	\$18,600	\$218,302	16.5	114,702
ECM 6	Install VFDs on Constant Volume (CV) Fans	Yes	73,766	16.9	0	\$8,573	\$73,988	\$9,000	\$64,988	7.6	74,282
ECM 7	Install VFDs on Chilled Water Pumps	No	23,347	8.4	0	\$2,713	\$77,164	\$5,200	\$71,964	26.5	23,511
ECM 8	Install VFDs on Heating Water Pumps	No	16,792	2.7	0	\$1,951	\$85,750	\$4,400	\$81,350	41.7	16,909
Unitary HVAC Measures			2,475	1.2	0	\$288	\$12,572	\$1,260	\$11,312	39.3	2,492
ECM 9	Install High Efficiency Air Conditioning Units	No	2,475	1.2	0	\$288	\$12,572	\$1,260	\$11,312	39.3	2,492
Electric Chiller Replacement			18,662	-21.1	0	\$2,169	\$204,764	\$43,200	\$161,564	74.5	18,792
ECM 10	Install High Efficiency Chillers	No	18,662	-21.1	0	\$2,169	\$204,764	\$43,200	\$161,564	74.5	18,792
Gas Heating (HVAC/Process) Replacement			0	0.0	619	\$5,578	\$114,704	\$0	\$114,704	20.6	72,433
ECM 11	Install High Efficiency Hot Water Boilers	No	0	0.0	619	\$5,578	\$114,704	\$0	\$114,704	20.6	72,433
HVAC System Improvements			0	0.0	25	\$222	\$144	\$80	\$64	0.3	2,883
ECM 12	Install Pipe Insulation	Yes	0	0.0	25	\$222	\$144	\$80	\$64	0.3	2,883
Domestic Water Heating Upgrade			0	0.0	48	\$431	\$154,488	\$330	\$154,158	357.3	5,603
ECM 13	Install High Efficiency Gas-Fired Water Heater	No	0	0.0	32	\$286	\$154,158	\$0	\$154,158	539.5	3,710
ECM 14	Install Low-Flow DHW Devices	Yes	0	0.0	16	\$146	\$330	\$330	\$0	0.0	1,892
Food Service & Refrigeration Measures			5,205	0.5	0	\$605	\$1,903	\$520	\$1,383	2.3	5,242
ECM 15	Refrigerator/Freezer Case Electrically Commutated Motors	Yes	1,639	0.1	0	\$190	\$1,213	\$320	\$893	4.7	1,651
ECM 16	Vending Machine Control	Yes	3,566	0.4	0	\$414	\$690	\$200	\$490	1.2	3,591
Custom Measures			44,218	0.0	292	\$7,774	\$196,176	\$0	\$196,176	25.2	78,749
ECM 17	Upgrade/Replace Energy Management System	No	44,218	0.0	292	\$7,774	\$196,176	\$0	\$196,176	25.2	78,749
TOTALS (COST EFFECTIVE MEASURES)			490,810	89.1	-44	\$56,643	\$227,490	\$50,060	\$177,430	3.1	489,095
TOTALS (ALL MEASURES)			596,303	80.3	899	\$77,401	\$1,072,778	\$104,120	\$968,658	12.5	705,691

ALFRED E. ZAMPELLA

#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades		103,023	23.0	0	\$9,123	\$57,830	\$14,635	\$43,195	4.7	103,743
ECM 1	Install LED Fixtures	11,121	0.0	0	\$985	\$4,889	\$550	\$4,339	4.4	11,199
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	5,253	1.3	0	\$465	\$2,008	\$310	\$1,698	3.7	5,290
ECM 3	Retrofit Fixtures with LED Lamps	86,649	21.7	0	\$7,673	\$50,933	\$13,775	\$37,158	4.8	87,255
Lighting Control Measures		24,864	6.2	0	\$2,202	\$27,990	\$7,875	\$20,115	9.1	25,038
ECM 4	Install Occupancy Sensor Lighting Controls	22,001	5.5	0	\$1,948	\$22,140	\$2,835	\$19,305	9.9	22,155
ECM 5	Install High/Low Lighting Controls	2,864	0.7	0	\$254	\$5,850	\$5,040	\$810	3.2	2,884
HVAC System Improvements		5,743	0.0	0	\$509	\$216	\$120	\$96	0.2	5,783
ECM 7	Install Pipe Insulation	5,743	0.0	0	\$509	\$216	\$120	\$96	0.2	5,783
Domestic Water Heating Upgrade		278	0.0	0	\$25	\$7	\$7	\$0	0.0	280
ECM 8	Install Low-Flow DHW Devices	278	0.0	0	\$25	\$7	\$7	\$0	0.0	280
Food Service & Refrigeration Measures		4,433	0.5	0	\$393	\$1,527	\$360	\$1,167	3.0	4,464
ECM 9	Refrigerator/Freezer Case Electrically Commutated Motors	524	0.1	0	\$46	\$607	\$160	\$447	9.6	528
ECM 11	Vending Machine Control	3,909	0.4	0	\$346	\$920	\$200	\$720	2.1	3,936
Custom Measures		46,585	0.0	0	\$4,125	\$4,576	\$0	\$4,576	1.1	46,911
ECM 12	Install Heat Pump Water Heater	46,585	0.0	0	\$4,125	\$4,576	\$0	\$4,576	1.1	46,911
TOTALS		184,926	29.7	0	\$16,375	\$92,146	\$22,997	\$69,148	4.2	186,219

ABRAHAM LINCOLN

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			433,057	93.3	-85	\$46,380	\$169,444	\$41,527	\$127,917	2.8	426,126
ECM 1	Install LED Fixtures	Yes	29,364	0.8	-1	\$3,188	\$15,753	\$1,675	\$14,078	4.4	29,485
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	No	83	0.1	0	\$9	\$129	\$20	\$109	12.2	82
ECM 3	Retrofit Fixtures with LED Lamps	Yes	403,611	92.4	-84	\$43,183	\$153,562	\$39,832	\$113,730	2.6	396,560
Lighting Control Measures			103,870	22.7	-22	\$11,113	\$75,714	\$23,305	\$52,409	4.7	102,053
ECM 4	Install Occupancy Sensor Lighting Controls	Yes	83,107	19.6	-17	\$8,892	\$53,664	\$6,715	\$46,949	5.3	81,654
ECM 5	Install High/Low Lighting Controls	Yes	20,762	3.1	-4	\$2,221	\$22,050	\$16,590	\$5,460	2.5	20,399
Motor Upgrades			392	0.1	0	\$43	\$1,842	\$0	\$1,842	43.2	395
ECM 6	Premium Efficiency Motors	No	392	0.1	0	\$43	\$1,842	\$0	\$1,842	43.2	395
Variable Frequency Drive (VFD) Measures			186,446	45.1	39	\$20,614	\$119,233	\$36,500	\$82,733	4.0	192,328
ECM 7	Install VFDs on Constant Volume (CV) Fans	Yes	73,013	21.7	0	\$7,942	\$55,763	\$20,200	\$35,563	4.5	73,524
ECM 8	Install VFDs on Heating Water Pumps	Yes	75,014	7.6	0	\$8,159	\$31,993	\$10,000	\$21,993	2.7	75,538
ECM 9	Install Boiler Draft Fan VFDs	Yes	26,738	15.3	0	\$2,908	\$20,883	\$5,600	\$15,283	5.3	26,925
ECM 10	Install VFDs on Kitchen Hood Fan Motors	Yes	8,252	0.0	39	\$1,231	\$6,781	\$300	\$6,481	5.3	12,888
ECM 11	Install VFDs on Process Pumps	Yes	3,430	0.4	0	\$373	\$3,812	\$400	\$3,412	9.1	3,454
Unitary HVAC Measures			2,550	2.5	0	\$277	\$28,385	\$420	\$27,965	100.8	2,568
ECM 12	Install High Efficiency Air Conditioning Units	No	2,550	2.5	0	\$277	\$28,385	\$420	\$27,965	100.8	2,568
HVAC System Improvements			205	0.0	36	\$330	\$337	\$176	\$161	0.5	4,431
ECM 13	Install Pipe Insulation	Yes	205	0.0	36	\$330	\$337	\$176	\$161	0.5	4,431
Domestic Water Heating Upgrade			0	0.0	32	\$271	\$13,219	\$1,586	\$11,633	43.0	3,718
ECM 14	Install High Efficiency Gas-Fired Water Heater	No	0	0.0	20	\$174	\$13,033	\$1,400	\$11,633	66.9	2,388
ECM 15	Install Low-Flow DHW Devices	Yes	0	0.0	11	\$97	\$186	\$186	\$0	0.0	1,330
Food Service & Refrigeration Measures			8,794	0.7	0	\$957	\$2,417	\$600	\$1,817	1.9	8,856
ECM 16	Refrigeration Controls	Yes	2,468	0.0	0	\$268	\$1,037	\$200	\$837	3.1	2,485
ECM 17	Vending Machine Control	Yes	6,326	0.7	0	\$688	\$1,380	\$400	\$980	1.4	6,371
Custom Measures			53,580	0.0	880	\$13,328	\$83,950	\$0	\$83,950	6.3	156,941
ECM 18	Retro-Commissioning Study	Yes	52,349	0.0	880	\$13,194	\$81,880	\$0	\$81,880	6.2	155,701
ECM 19	Install Heat Pump Water Heater	No	1,231	0.0	0	\$134	\$2,070	\$0	\$2,070	15.4	1,240
TOTALS (COST EFFECTIVE MEASURES)			784,638	161.7	859	\$92,675	\$449,084	\$102,274	\$346,809	3.7	890,743
TOTALS (ALL MEASURES)			788,895	164.4	880	\$93,312	\$494,542	\$104,114	\$390,428	4.2	897,415

CHRISTA MCAULIFFE (PS #28)

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Lifetime Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			151,438	43.9	0	\$11,797	\$176,957	\$88,280	\$18,775	\$69,505	5.9	152,497
ECM 1	Install LED Fixtures	Yes	23,710	4.9	0	\$1,847	\$27,706	\$26,296	\$2,560	\$23,736	12.9	23,876
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	Yes	1,195	0.4	0	\$93	\$1,396	\$619	\$90	\$529	5.7	1,203
ECM 3	Retrofit Fixtures with LED Lamps	Yes	126,533	38.6	0	\$9,857	\$147,856	\$61,365	\$16,125	\$45,240	4.6	127,418
Lighting Control Measures			36,103	10.8	0	\$2,812	\$22,499	\$42,060	\$9,480	\$32,580	11.6	36,355
ECM 4	Install Occupancy Sensor Lighting Controls	Yes	31,471	9.4	0	\$2,452	\$19,613	\$34,410	\$4,130	\$30,280	12.4	31,691
ECM 5	Install High/Low Lighting Controls	Yes	4,631	1.4	0	\$361	\$2,886	\$7,650	\$5,350	\$2,300	6.4	4,664
Unitary HVAC Measures			42,716	50.9	0	\$3,328	\$49,914	\$319,101	\$52,105	\$266,996	80.2	43,015
ECM 6	Install High Efficiency Air Conditioning Units	No	42,716	50.9	0	\$3,328	\$49,914	\$319,101	\$52,105	\$266,996	80.2	43,015
HVAC System Improvements			1,914	0.0	0	\$149	\$1,640	\$72	\$40	\$32	0.2	1,928
ECM 7	Install Pipe Insulation	Yes	1,914	0.0	0	\$149	\$1,640	\$72	\$40	\$32	0.2	1,928
Domestic Water Heating Upgrade			409	0.0	0	\$32	\$319	\$36	\$36	\$0	0.0	412
ECM 8	Install Low-Flow DHW Devices	Yes	409	0.0	0	\$32	\$319	\$36	\$36	\$0	0.0	412
Food Service & Refrigeration Measures			6,093	0.6	0	\$475	\$4,608	\$2,583	\$760	\$1,823	3.8	6,135
ECM 9	Refrigerator/Freezer Case Electrically Commutated Motors	Yes	2,869	0.2	0	\$224	\$3,353	\$2,123	\$560	\$1,563	7.0	2,889
ECM 10	Vending Machine Control	Yes	3,224	0.4	0	\$251	\$1,256	\$460	\$200	\$260	1.0	3,246
TOTALS (COST EFFECTIVE MEASURES)			195,956	55.3	0	\$15,265	\$206,024	\$133,031	\$29,091	\$103,940	6.8	197,326
TOTALS (ALL MEASURES)			238,672	106.2	0	\$18,593	\$255,938	\$452,132	\$81,196	\$370,936	20.0	240,341

JAMES F. MURRAY (PS #38)

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			137,874	33.4	-57	\$16,507	\$56,458	\$14,992	\$41,466	2.5	129,516
ECM 1	Install LED Fixtures	Yes	1,621	0.0	0	\$204	\$1,030	\$250	\$780	3.8	1,632
ECM 2	Retrofit Fixtures with LED Lamps	Yes	136,254	33.4	-57	\$16,303	\$55,428	\$14,742	\$40,686	2.5	127,885
Lighting Control Measures			44,487	10.8	-19	\$5,323	\$27,843	\$8,165	\$19,678	3.7	41,755
ECM 3	Install Occupancy Sensor Lighting Controls	Yes	37,712	9.2	-16	\$4,512	\$20,868	\$2,650	\$18,218	4.0	35,396
ECM 4	Install High/Low Lighting Controls	Yes	6,775	1.6	-3	\$811	\$6,975	\$5,515	\$1,460	1.8	6,359
Domestic Water Heating Upgrade			0	0.0	29	\$262	\$445	\$445	\$0	0.0	3,444
ECM 5	Install Low-Flow DHW Devices	Yes	0	0.0	29	\$262	\$445	\$445	\$0	0.0	3,444
TOTALS (COST EFFECTIVE MEASURES)			182,362	44.2	-46	\$22,092	\$84,746	\$23,602	\$61,144	2.8	174,716
TOTALS (ALL MEASURES)			182,362	44.2	-46	\$22,092	\$84,746	\$23,602	\$61,144	2.8	174,716

CHAPLAIN CHARLES WATTERS (PS #24)

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			223,337	38.3	-92	\$24,081	\$59,970	\$15,190	\$44,780	1.9	209,825
ECM 1	Install LED Fixtures	Yes	3,022	0.0	0	\$344	\$1,109	\$100	\$1,009	2.9	3,043
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	Yes	114	0.1	0	\$12	\$129	\$20	\$109	8.9	107
ECM 3	Retrofit Fixtures with LED Lamps	Yes	220,201	38.3	-92	\$23,725	\$58,732	\$15,070	\$43,662	1.8	206,675
Lighting Control Measures			57,174	10.0	-24	\$6,160	\$48,107	\$10,940	\$37,167	6.0	53,662
ECM 4	Install Occupancy Sensor Lighting Controls	Yes	49,337	8.6	-21	\$5,316	\$38,882	\$4,850	\$34,032	6.4	46,307
ECM 5	Install High/Low Lighting Controls	Yes	7,837	1.3	-3	\$844	\$9,225	\$6,090	\$3,135	3.7	7,356
Variable Frequency Drive (VFD) Measures			24,201	4.2	0	\$2,754	\$27,848	\$4,750	\$23,098	8.4	24,370
ECM 6	Install VFDs on Constant Volume (CV) Fans	Yes	15,621	3.3	0	\$1,778	\$19,696	\$1,150	\$18,546	10.4	15,730
ECM 7	Install VFDs on Heating Water Pumps	Yes	8,580	1.0	0	\$976	\$8,152	\$3,600	\$4,552	4.7	8,640
Unitary HVAC Measures			5,439	3.4	0	\$619	\$34,227	\$1,074	\$33,153	53.6	5,477
ECM 8	Install High Efficiency Air Conditioning Units	No	5,439	3.4	0	\$619	\$34,227	\$1,074	\$33,153	53.6	5,477
HVAC System Improvements			531	0.0	67	\$1,020	\$1,344	\$320	\$1,024	1.0	11,273
ECM 9	Install Programmable Thermostats	Yes	531	0.0	2	\$85	\$660	\$0	\$660	7.8	764
ECM 10	Install Pipe Insulation	Yes	0	0.0	65	\$935	\$684	\$320	\$364	0.4	10,509
Domestic Water Heating Upgrade			0	0.0	1	\$9	\$14	\$14	\$0	0.0	88
ECM 11	Install Low-Flow DHW Devices	Yes	0	0.0	1	\$9	\$14	\$14	\$0	0.0	88
Custom Measures			0	0.0	9	\$129	\$3,290	\$0	\$3,290	25.6	1,451
ECM 12	Insulate Feedwater Tank	No	0	0.0	9	\$129	\$3,290	\$0	\$3,290	25.6	1,451
TOTALS (COST EFFECTIVE MEASURES)			305,243	52.5	-49	\$34,025	\$137,283	\$31,214	\$106,069	3.1	299,218
TOTALS (ALL MEASURES)			310,682	55.9	-40	\$34,773	\$174,800	\$32,289	\$142,511	4.1	306,147

JOTHAM W. WAKEMAN (PS #6)

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			139,489	29.9	-61	\$14,445	\$67,925	\$15,583	\$52,342	3.6	130,438
ECM 1	Install LED Fixtures	Yes	6,950	0.2	0	\$757	\$6,021	\$700	\$5,321	7.0	6,947
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	Yes	1,378	0.5	-1	\$142	\$1,100	\$160	\$940	6.6	1,284
ECM 3	Retrofit Fixtures with LED Lamps	Yes	131,161	29.3	-60	\$13,545	\$60,804	\$14,723	\$46,081	3.4	122,207
Lighting Control Measures			31,225	6.8	-14	\$3,225	\$34,967	\$8,970	\$25,997	8.1	29,093
ECM 4	Install Occupancy Sensor Lighting Controls	Yes	27,861	6.1	-13	\$2,877	\$27,542	\$3,430	\$24,112	8.4	25,959
ECM 5	Install High/Low Lighting Controls	Yes	3,364	0.7	-2	\$347	\$7,425	\$5,540	\$1,885	5.4	3,134
Variable Frequency Drive (VFD) Measures			60,183	18.3	0	\$6,595	\$58,833	\$21,000	\$37,833	5.7	60,604
ECM 6	Install VFDs on Constant Volume (CV) Fans	Yes	51,443	17.7	0	\$5,637	\$51,271	\$20,200	\$31,071	5.5	51,802
ECM 7	Install VFDs on Process Pumps	Yes	8,740	0.6	0	\$958	\$7,562	\$800	\$6,762	7.1	8,801
Unitary HVAC Measures			2,671	4.5	4	\$318	\$26,517	\$3,055	\$23,462	73.7	3,111
ECM 8	Install High Efficiency Air Conditioning Units	No	2,671	4.5	4	\$318	\$26,517	\$3,055	\$23,462	73.7	3,111
HVAC System Improvements			0	0.0	13	\$173	\$88	\$40	\$48	0.3	2,067
ECM 9	Install Pipe Insulation	Yes	0	0.0	13	\$173	\$88	\$40	\$48	0.3	2,067
Domestic Water Heating Upgrade			0	0.0	5	\$37	\$93	\$93	\$0	0.0	608
ECM 10	Install Low-Flow DHW Devices	Yes	0	0.0	5	\$37	\$93	\$93	\$0	0.0	608
Food Service & Refrigeration Measures			5,178	0.6	0	\$567	\$920	\$300	\$620	1.1	5,214
ECM 11	Vending Machine Control	Yes	5,178	0.6	0	\$567	\$920	\$300	\$620	1.1	5,214
TOTALS (COST EFFECTIVE MEASURES)			236,075	55.6	-58	\$25,041	\$162,827	\$45,986	\$116,841	4.7	228,023
TOTALS (ALL MEASURES)			238,746	60.1	-54	\$25,360	\$189,344	\$49,041	\$140,303	5.5	231,134

MIDDLE SCHOOL #4

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			447,092	89.0	-78	\$43,195	\$183,361	\$36,915	\$146,446	3.4	441,038
ECM 1	Install LED Fixtures	Yes	108,186	7.3	-8	\$10,528	\$48,780	\$7,700	\$41,080	3.9	107,978
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	Yes	250	0.2	0	\$24	\$386	\$60	\$326	13.5	245
ECM 3	Retrofit Fixtures with LED Lamps	Yes	338,655	81.5	-70	\$32,643	\$134,195	\$29,155	\$105,040	3.2	332,815
Lighting Control Measures			48,650	9.5	-10	\$4,689	\$25,298	\$7,180	\$18,118	3.9	47,799
ECM 4	Install Occupancy Sensor Lighting Controls	Yes	36,993	7.3	-8	\$3,565	\$20,348	\$3,050	\$17,298	4.9	36,346
ECM 5	Install High/Low Lighting Controls	Yes	11,656	2.2	-2	\$1,123	\$4,950	\$4,130	\$820	0.7	11,452
Variable Frequency Drive (VFD) Measures			207,918	53.7	56	\$20,741	\$112,371	\$26,550	\$85,821	4.1	215,922
ECM 6	Install VFD on Variable Air Volume (VAV) Fans	Yes	167,291	45.9	0	\$16,370	\$73,990	\$20,550	\$53,440	3.3	168,461
ECM 7	Install VFDs on Constant Volume (CV) Fans	Yes	27,660	7.4	0	\$2,707	\$24,397	\$5,150	\$19,247	7.1	27,853
ECM 8	Install VFDs on Heating Water Pumps	No	4,890	0.4	0	\$478	\$10,172	\$450	\$9,722	20.3	4,924
ECM 9	Install VFDs on Kitchen Hood Fan Motors	Yes	8,077	0.0	56	\$1,186	\$3,812	\$400	\$3,412	2.9	14,683
Unitary HVAC Measures			14,656	3.7	0	\$1,434	\$40,389	\$1,680	\$38,709	27.0	14,758
ECM 10	Install High Efficiency Air Conditioning Units	No	14,656	3.7	0	\$1,434	\$40,389	\$1,680	\$38,709	27.0	14,758
Gas Heating (HVAC/Process) Replacement			0	0.0	314	\$2,224	\$149,206	\$22,561	\$126,645	56.9	36,808
ECM 11	Install High Efficiency Hot Water Boilers	No	0	0.0	285	\$2,016	\$137,545	\$20,561	\$116,984	58.0	33,361
ECM 12	Install High Efficiency Furnaces	No	0	0.0	29	\$208	\$11,661	\$2,000	\$9,661	46.4	3,447
HVAC System Improvements			0	0.0	5	\$35	\$61	\$36	\$25	0.7	572
ECM 13	Install Pipe Insulation	Yes	0	0.0	5	\$35	\$61	\$36	\$25	0.7	572
Food Service & Refrigeration Measures			6,451	0.8	0	\$631	\$1,443	\$420	\$1,023	1.6	6,497
ECM 14	Refrigerator/Freezer Case Electrically Commutated Motors	Yes	5,243	0.6	0	\$513	\$1,213	\$320	\$893	1.7	5,279
ECM 15	Vending Machine Control	Yes	1,209	0.1	0	\$118	\$230	\$100	\$130	1.1	1,217
TOTALS (COST EFFECTIVE MEASURES)			705,220	152.5	-28	\$68,812	\$312,362	\$70,651	\$241,711	3.5	706,903
TOTALS (ALL MEASURES)			724,766	156.6	287	\$72,949	\$512,128	\$95,342	\$416,786	5.7	763,393

NICHOLAS COPERNICUS (PS #25)

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			147,720	28.1	-67	\$14,008	\$65,757	\$17,299	\$48,458	3.5	137,777
ECM 1	Install LED Fixtures	Yes	1,261	0.0	0	\$128	\$788	\$150	\$638	5.0	1,270
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	Yes	1,033	0.2	0	\$98	\$481	\$70	\$411	4.2	962
ECM 3	Retrofit Fixtures with LED Lamps	Yes	145,427	27.9	-67	\$13,783	\$64,488	\$17,079	\$47,409	3.4	135,545
Lighting Control Measures			38,929	7.6	-18	\$3,688	\$41,883	\$11,210	\$30,673	8.3	36,272
ECM 4	Install Occupancy Sensor Lighting Controls	Yes	32,262	6.6	-15	\$3,057	\$32,208	\$3,805	\$28,403	9.3	30,060
ECM 5	Install High/Low Lighting Controls	Yes	6,667	1.0	-3	\$632	\$9,675	\$7,405	\$2,270	3.6	6,212
Variable Frequency Drive (VFD) Measures			37,852	13.5	0	\$3,840	\$28,983	\$9,400	\$19,583	5.1	38,117
ECM 6	Install VFDs on Constant Volume (CV) Fans	Yes	34,703	11.6	0	\$3,521	\$21,420	\$8,600	\$12,820	3.6	34,945
ECM 7	Install Boiler Draft Fan VFDs	No	3,149	1.9	0	\$320	\$7,562	\$800	\$6,762	21.2	3,171
Gas Heating (HVAC/Process) Replacement			0	0.0	76	\$1,107	\$121,314	\$13,054	\$108,260	97.8	12,423
ECM 8	Install High Efficiency Steam Boilers	No	0	0.0	76	\$1,107	\$121,314	\$13,054	\$108,260	97.8	12,423
HVAC System Improvements			4,708	0.0	0	\$478	\$144	\$80	\$64	0.1	4,741
ECM 9	Install Pipe Insulation	Yes	4,708	0.0	0	\$478	\$144	\$80	\$64	0.1	4,741
Domestic Water Heating Upgrade			1,635	0.0	0	\$166	\$143	\$143	\$0	0.0	1,647
ECM 10	Install Low-Flow DHW Devices	Yes	1,635	0.0	0	\$166	\$143	\$143	\$0	0.0	1,647
Food Service & Refrigeration Measures			3,117	0.3	0	\$316	\$1,297	\$260	\$1,037	3.3	3,139
ECM 11	Refrigerator/Freezer Case Electrically Commutated Motors	Yes	820	0.1	0	\$83	\$607	\$160	\$447	5.4	826
ECM 12	Vending Machine Control	Yes	2,297	0.3	0	\$233	\$690	\$100	\$590	2.5	2,313
Custom Measures			65,486	0.0	0	\$6,644	\$11,470	\$0	\$11,470	1.7	65,944
ECM 13	Install Heat Pump Water Heater	Yes	65,486	0.0	0	\$6,644	\$11,470	\$0	\$11,470	1.7	65,944
TOTALS (COST EFFECTIVE MEASURES)			296,299	47.7	-85	\$28,821	\$142,115	\$37,592	\$104,522	3.6	284,465
TOTALS (ALL MEASURES)			299,448	49.5	-9	\$30,247	\$270,991	\$51,446	\$219,544	7.3	300,059

ALEXANDER D. SULLIVAN (PS #30)

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			22,198	12.0	-9	\$2,477	\$8,888	\$1,323	\$7,565	3.1	20,834
ECM 1	Install LED Fixtures	Yes	11,514	2.7	-5	\$1,285	\$2,732	\$90	\$2,642	2.1	10,807
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	Yes	316	0.1	0	\$35	\$266	\$40	\$226	6.4	297
ECM 3	Retrofit Fixtures with LED Lamps	Yes	10,368	9.2	-4	\$1,157	\$5,890	\$1,193	\$4,697	4.1	9,731
Lighting Control Measures			12,564	3.0	-5	\$1,402	\$16,515	\$7,175	\$9,340	6.7	11,793
ECM 4	Install Occupancy Sensor Lighting Controls	Yes	7,593	1.8	-3	\$847	\$8,640	\$980	\$7,660	9.0	7,127
ECM 5	Install High/Low Lighting Controls	Yes	4,971	1.2	-2	\$555	\$7,875	\$6,195	\$1,680	3.0	4,666
Motor Upgrades			254	0.1	0	\$30	\$948	\$0	\$948	31.7	256
ECM 6	Premium Efficiency Motors	No	254	0.1	0	\$30	\$948	\$0	\$948	31.7	256
Variable Frequency Drive (VFD) Measures			20,519	6.2	0	\$2,415	\$25,331	\$5,050	\$20,281	8.4	20,662
ECM 7	Install VFDs on Constant Volume (CV) Fans	No	10,307	3.2	0	\$1,213	\$17,358	\$1,450	\$15,908	13.1	10,379
ECM 8	Install Boiler Draft Fan VFDs	Yes	10,212	3.0	0	\$1,202	\$7,974	\$3,600	\$4,374	3.6	10,284
Unitary HVAC Measures			1,472	1.2	2	\$190	\$13,310	\$824	\$12,486	65.5	1,710
ECM 9	Install High Efficiency Air Conditioning Units	No	1,472	1.2	2	\$190	\$13,310	\$824	\$12,486	65.5	1,710
HVAC System Improvements			215	0.0	2	\$45	\$330	\$0	\$330	7.4	474
ECM 10	Install Programmable Thermostats	Yes	215	0.0	2	\$45	\$330	\$0	\$330	7.4	474
Domestic Water Heating Upgrade			0	0.0	21	\$187	\$158	\$155	\$3	0.0	2,471
ECM 11	Install Low-Flow DHW Devices	Yes	0	0.0	21	\$187	\$158	\$155	\$3	0.0	2,471
TOTALS (COST EFFECTIVE MEASURES)			45,190	18.0	9	\$5,312	\$33,864	\$12,253	\$21,612	4.1	45,855
TOTALS (ALL MEASURES)			57,222	22.5	11	\$6,746	\$65,480	\$14,527	\$50,953	7.6	58,200

MARTIN LUTHER KING JR. (PS #11)

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			162,533	39.0	-34	\$20,220	\$61,742	\$16,657	\$45,085	2.2	159,744
ECM 1	Install LED Fixtures	Yes	1,419	0.0	0	\$179	\$788	\$150	\$638	3.6	1,429
ECM 2	Retrofit Fixtures with LED Lamps	Yes	161,114	39.0	-34	\$20,041	\$60,954	\$16,507	\$44,447	2.2	158,315
Lighting Control Measures			39,054	9.2	-8	\$4,858	\$52,766	\$16,755	\$36,011	7.4	38,371
ECM 3	Install Occupancy Sensor Lighting Controls	Yes	31,454	8.0	-7	\$3,912	\$39,266	\$4,955	\$34,311	8.8	30,903
ECM 4	Install High/Low Lighting Controls	Yes	7,601	1.2	-2	\$945	\$13,500	\$11,800	\$1,700	1.8	7,468
Variable Frequency Drive (VFD) Measures			15,589	1.9	0	\$1,966	\$85,546	\$4,400	\$81,146	41.3	15,698
ECM 5	Install VFDs on Heating Water Pumps	No	15,589	1.9	0	\$1,966	\$85,546	\$4,400	\$81,146	41.3	15,698
Unitary HVAC Measures			256	0.1	0	\$32	\$555	\$0	\$555	17.2	258
ECM 6	Install High Efficiency Air Conditioning Units	Yes	256	0.1	0	\$32	\$555	\$0	\$555	17.2	258
Gas Heating (HVAC/Process) Replacement			0	0.0	195	\$1,615	\$116,882	\$17,472	\$99,410	61.6	22,853
ECM 7	Install High Efficiency Hot Water Boilers	No	0	0.0	195	\$1,615	\$116,882	\$17,472	\$99,410	61.6	22,853
HVAC System Improvements			8,182	0.0	41	\$1,375	\$1,047	\$40	\$1,007	0.7	13,092
ECM 8	Install Programmable Thermostats	Yes	8,182	0.0	38	\$1,346	\$990	\$0	\$990	0.7	12,691
ECM 9	Install Pipe Insulation	Yes	0	0.0	3	\$28	\$58	\$40	\$18	0.6	401
Domestic Water Heating Upgrade			0	0.0	68	\$561	\$55,750	\$5,020	\$50,730	90.4	7,944
ECM 10	Install High Efficiency Gas-Fired Water Heater	No	0	0.0	46	\$381	\$55,420	\$4,690	\$50,730	133.2	5,388
ECM 11	Install Low-Flow DHW Devices	Yes	0	0.0	22	\$181	\$330	\$330	\$0	0.0	2,555
Food Service & Refrigeration Measures			3,570	0.4	0	\$450	\$1,673	\$420	\$1,253	2.8	3,595
ECM 12	Refrigerator/Freezer Case Electrically Commutated Motors	Yes	1,616	0.1	0	\$204	\$1,213	\$320	\$893	4.4	1,627
ECM 13	Vending Machine Control	Yes	1,954	0.2	0	\$246	\$460	\$100	\$360	1.5	1,968
TOTALS (COST EFFECTIVE MEASURES)			213,596	48.6	22	\$27,116	\$118,113	\$34,202	\$83,911	3.1	217,617
TOTALS (ALL MEASURES)			229,185	50.5	263	\$31,078	\$375,961	\$60,764	\$315,197	10.1	261,556

CHARLES E. TREFURT (PS #8)

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			193,288	49.9	-79	\$18,552	\$70,488	\$16,126	\$54,362	2.9	181,654
ECM 1	Install LED Fixtures	Yes	3,241	0.0	0	\$331	\$2,061	\$500	\$1,561	4.7	3,264
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	Yes	12,859	3.4	-5	\$1,233	\$5,461	\$840	\$4,621	3.7	12,069
ECM 3	Retrofit Fixtures with LED Lamps	Yes	177,187	46.5	-74	\$16,988	\$62,966	\$14,786	\$48,180	2.8	166,321
Lighting Control Measures			46,221	12.2	-19	\$4,431	\$46,660	\$11,100	\$35,560	8.0	43,382
ECM 4	Install Occupancy Sensor Lighting Controls	Yes	40,609	10.7	-17	\$3,893	\$35,410	\$3,805	\$31,605	8.1	38,114
ECM 5	Install High/Low Lighting Controls	Yes	5,612	1.5	-2	\$538	\$11,250	\$7,295	\$3,955	7.4	5,267
Variable Frequency Drive (VFD) Measures			18,855	4.0	0	\$1,923	\$15,947	\$7,200	\$8,747	4.5	18,987
ECM 6	Install VFDs on Heating Water Pumps	Yes	9,336	1.0	0	\$952	\$7,974	\$3,600	\$4,374	4.6	9,401
ECM 7	Install Boiler Draft Fan VFDs	Yes	9,519	3.0	0	\$971	\$7,974	\$3,600	\$4,374	4.5	9,586
Gas Heating (HVAC/Process) Replacement			0	0.0	195	\$2,851	\$87,276	\$10,368	\$76,908	27.0	31,882
ECM 8	Install High Efficiency Steam Boilers	Yes	0	0.0	195	\$2,851	\$87,276	\$10,368	\$76,908	27.0	31,882
HVAC System Improvements			0	0.0	3	\$30	\$58	\$40	\$18	0.6	401
ECM 9	Install Pipe Insulation	Yes	0	0.0	3	\$30	\$58	\$40	\$18	0.6	401
Domestic Water Heating Upgrade			0	0.0	10	\$89	\$208	\$208	\$0	0.0	1,199
ECM 10	Install Low-Flow DHW Devices	Yes	0	0.0	10	\$89	\$208	\$208	\$0	0.0	1,199
Food Service & Refrigeration Measures			2,297	0.3	0	\$234	\$690	\$100	\$590	2.5	2,313
ECM 11	Vending Machine Control	Yes	2,297	0.3	0	\$234	\$690	\$100	\$590	2.5	2,313
TOTALS (COST EFFECTIVE MEASURES)			260,660	66.3	110	\$28,110	\$221,326	\$45,142	\$176,184	6.3	279,817
TOTALS (ALL MEASURES)			260,660	66.3	110	\$28,110	\$221,326	\$45,142	\$176,184	6.3	279,817

FRANKLIN I. WILLIAMS (PS #7)

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			244,991	63.3	-51	\$33,278	\$102,590	\$24,513	\$78,077	2.3	240,714
ECM 1	Install LED Fixtures	Yes	2,806	0.5	-1	\$382	\$3,311	\$350	\$2,961	7.8	2,764
ECM 2	Retrofit Fixtures with LED Lamps	Yes	242,185	62.8	-51	\$32,896	\$99,279	\$24,163	\$75,116	2.3	237,949
Lighting Control Measures			19,372	3.7	-4	\$2,631	\$8,114	\$2,400	\$5,714	2.2	19,034
ECM 3	Install Occupancy Sensor Lighting Controls	Yes	17,555	3.4	-4	\$2,385	\$5,864	\$580	\$5,284	2.2	17,248
ECM 4	Install High/Low Lighting Controls	Yes	1,817	0.3	0	\$247	\$2,250	\$1,820	\$430	1.7	1,786
Motor Upgrades			159	0.0	0	\$22	\$1,495	\$0	\$1,495	68.6	160
ECM 5	Premium Efficiency Motors	No	159	0.0	0	\$22	\$1,495	\$0	\$1,495	68.6	160
Variable Frequency Drive (VFD) Measures			196,407	52.9	26	\$27,186	\$91,812	\$29,800	\$62,012	2.3	200,833
ECM 6	Install VFDs on Constant Volume (CV) Fans	Yes	175,649	48.4	0	\$24,136	\$77,917	\$24,000	\$53,917	2.2	176,877
ECM 7	Install Boiler Draft Fan VFDs	Yes	8,514	4.5	0	\$1,170	\$9,819	\$4,000	\$5,819	5.0	8,574
ECM 8	Install VFDs on Kitchen Hood Fan Motors	Yes	12,244	0.1	26	\$1,880	\$4,076	\$1,800	\$2,276	1.2	15,382
HVAC System Improvements			6,160	0.0	95	\$1,565	\$17,780	\$60	\$17,720	11.3	17,340
ECM 9	Implement Demand Control Ventilation (DCV)	No	6,160	0.0	83	\$1,476	\$17,672	\$0	\$17,672	12.0	15,949
ECM 10	Install Pipe Insulation	Yes	0	0.0	12	\$90	\$108	\$60	\$48	0.5	1,391
Domestic Water Heating Upgrade			0	0.0	33	\$251	\$49,164	\$4,257	\$44,907	179.2	3,882
ECM 11	Install High Efficiency Gas-Fired Water Heater	No	0	0.0	29	\$222	\$49,107	\$4,200	\$44,907	202.4	3,437
ECM 12	Install Low-Flow DHW Devices	Yes	0	0.0	4	\$29	\$57	\$57	\$0	0.0	444
Food Service & Refrigeration Measures			7,968	0.8	0	\$1,095	\$3,792	\$960	\$2,832	2.6	8,024
ECM 13	Refrigerator/Freezer Case Electrically Commutated Motors	Yes	1,376	0.2	0	\$189	\$2,123	\$560	\$1,563	8.3	1,386
ECM 14	Refrigeration Controls	Yes	1,474	0.0	0	\$203	\$519	\$100	\$419	2.1	1,484
ECM 15	Vending Machine Control	Yes	5,118	0.6	0	\$703	\$1,150	\$300	\$850	1.2	5,153
TOTALS (COST EFFECTIVE MEASURES)			468,739	120.7	-13	\$64,309	\$206,473	\$57,790	\$148,683	2.3	470,439
TOTALS (ALL MEASURES)			475,057	120.7	99	\$66,028	\$274,748	\$61,990	\$212,758	3.2	489,984

RAFAEL DE J. CORDERO (PS #37)

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			5,318	1.2	-2	\$455	\$2,578	\$392	\$2,186	4.8	5,048
ECM 1	Install LED Fixtures	Yes	1,234	0.0	0	\$112	\$555	\$50	\$505	4.5	1,242
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	Yes	1,665	0.5	-1	\$140	\$1,416	\$220	\$1,196	8.6	1,551
ECM 3	Retrofit Fixtures with LED Lamps	Yes	2,420	0.7	-1	\$203	\$608	\$122	\$486	2.4	2,254
Lighting Control Measures			23,900	3.9	-11	\$2,007	\$18,298	\$6,420	\$11,878	5.9	22,269
ECM 4	Install Occupancy Sensor Lighting Controls	Yes	17,257	3.0	-8	\$1,449	\$11,998	\$1,455	\$10,543	7.3	16,079
ECM 5	Install High/Low Lighting Controls	Yes	6,643	0.9	-3	\$558	\$6,300	\$4,965	\$1,335	2.4	6,189
Motor Upgrades			1,805	0.5	0	\$164	\$8,051	\$0	\$8,051	49.2	1,818
ECM 6	Premium Efficiency Motors	No	1,805	0.5	0	\$164	\$8,051	\$0	\$8,051	49.2	1,818
Variable Frequency Drive (VFD) Measures			2,069	0.2	29	\$613	\$3,884	\$400	\$3,484	5.7	6,860
ECM 7	Install VFDs on Kitchen Hood Fan Motors	Yes	2,069	0.2	29	\$613	\$3,884	\$400	\$3,484	5.7	6,860
Unitary HVAC Measures			1,351	1.7	5	\$195	\$23,654	\$2,528	\$21,126	108.6	2,170
ECM 8	Install High Efficiency Air Conditioning Units	No	1,351	1.7	5	\$195	\$23,654	\$2,528	\$21,126	108.6	2,170
HVAC System Improvements			0	0.0	2	\$28	\$22	\$12	\$10	0.3	315
ECM 9	Install Pipe Insulation	Yes	0	0.0	2	\$28	\$22	\$12	\$10	0.3	315
Domestic Water Heating Upgrade			0	0.0	20	\$290	\$301	\$301	\$0	0.0	3,260
ECM 10	Install Low-Flow DHW Devices	Yes	0	0.0	20	\$290	\$301	\$301	\$0	0.0	3,260
Food Service & Refrigeration Measures			3,566	0.4	0	\$323	\$690	\$200	\$490	1.5	3,591
ECM 11	Vending Machine Control	Yes	3,566	0.4	0	\$323	\$690	\$200	\$490	1.5	3,591
TOTALS (COST EFFECTIVE MEASURES)			34,853	5.7	38	\$3,716	\$25,773	\$7,725	\$18,048	4.9	41,343
TOTALS (ALL MEASURES)			38,010	7.9	43	\$4,074	\$57,478	\$10,253	\$47,225	11.6	45,331

DR. RONALD MCNAIR

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Reduction (lbs)
Lighting Upgrades			256,334	48.2	-53	\$33,408	\$94,470	\$23,176	\$71,294	2.1	251,905
ECM 1	Install LED Fixtures	Yes	2,192	0.0	0	\$289	\$1,037	\$150	\$887	3.1	2,208
ECM 2	Retrofit Fixtures with LED Lamps	Yes	254,142	48.2	-53	\$33,118	\$93,432	\$23,026	\$70,406	2.1	249,697
Lighting Control Measures			23,879	3.9	-5	\$3,112	\$21,646	\$4,505	\$17,141	5.5	23,461
ECM 3	Install Occupancy Sensor Lighting Controls	Yes	19,892	3.4	-4	\$2,592	\$17,596	\$1,725	\$15,871	6.1	19,544
ECM 4	Install High/Low Lighting Controls	Yes	3,987	0.6	-1	\$520	\$4,050	\$2,780	\$1,270	2.4	3,917
Motor Upgrades			1,281	0.4	0	\$169	\$4,961	\$0	\$4,961	29.3	1,290
ECM 5	Premium Efficiency Motors	No	1,281	0.4	0	\$169	\$4,961	\$0	\$4,961	29.3	1,290
Variable Frequency Drive (VFD) Measures			111,196	16.7	163	\$16,044	\$47,566	\$14,500	\$33,066	2.1	131,111
ECM 6	Install VFDs on Constant Volume (CV) Fans	Yes	96,647	16.5	0	\$12,763	\$33,168	\$14,000	\$19,168	1.5	97,322
ECM 7	Install VFDs on Kitchen Hood Fan Motors	Yes	14,550	0.2	163	\$3,282	\$14,399	\$500	\$13,899	4.2	33,789
Unitary HVAC Measures			12,704	3.2	0	\$1,678	\$41,543	\$0	\$41,543	24.8	12,793
ECM 8	Install High Efficiency Air Conditioning Units	No	12,704	3.2	0	\$1,678	\$41,543	\$0	\$41,543	24.8	12,793
Gas Heating (HVAC/Process) Replacement			0	0.0	591	\$4,917	\$147,581	\$0	\$147,581	30.0	69,171
ECM 9	Install High Efficiency Hot Water Boilers	No	0	0.0	591	\$4,917	\$147,581	\$0	\$147,581	30.0	69,171
HVAC System Improvements			0	0.0	10	\$80	\$101	\$56	\$45	0.6	1,123
ECM 10	Install Pipe Insulation	Yes	0	0.0	10	\$80	\$101	\$56	\$45	0.6	1,123
Domestic Water Heating Upgrade			0	0.0	21	\$178	\$323	\$323	\$0	0.0	2,500
ECM 11	Install Low-Flow DHW Devices	Yes	0	0.0	21	\$178	\$323	\$323	\$0	0.0	2,500
Food Service & Refrigeration Measures			9,408	0.6	0	\$1,242	\$7,844	\$1,170	\$6,674	5.4	9,474
ECM 12	Refrigerator/Freezer Case Electrically Commutated Motors	Yes	1,945	0.2	0	\$257	\$1,213	\$320	\$893	3.5	1,958
ECM 13	Refrigeration Controls	Yes	5,013	0.1	0	\$662	\$4,385	\$500	\$3,885	5.9	5,048
ECM 14	Replace Refrigeration Equipment	Yes	838	0.1	0	\$111	\$2,016	\$250	\$1,766	16.0	844
ECM 15	Vending Machine Control	Yes	1,612	0.2	0	\$213	\$230	\$100	\$130	0.6	1,623
Custom Measures			14,688	0.0	85	\$2,643	\$2,646	\$0	\$2,646	1.0	24,688
ECM 16	Optimize HVAC Schedule	Yes	14,688	0.0	85	\$2,643	\$2,646	\$0	\$2,646	1.0	24,688
TOTALS (COST EFFECTIVE MEASURES)			415,506	69.4	221	\$56,707	\$174,596	\$43,730	\$130,866	2.3	444,262
TOTALS (ALL MEASURES)			429,492	73.0	812	\$63,471	\$368,681	\$43,730	\$324,951	5.1	527,517

DR. MICHAEL J. CONTI (PS #5)

#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades		201,122	36.7	-46	\$20,145	\$88,547	\$22,167	\$66,380	3.3	197,112
ECM 1	Install LED Fixtures	6,389	2.0	-1	\$640	\$8,653	\$765	\$7,888	12.3	6,261
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	908	0.3	0	\$91	\$772	\$120	\$652	7.2	890
ECM 3	Retrofit Fixtures with LED Lamps	193,825	34.4	-45	\$19,414	\$79,122	\$21,282	\$57,840	3.0	189,960
Lighting Control Measures		47,411	8.5	-11	\$4,749	\$32,146	\$4,635	\$27,511	5.8	46,466
ECM 4	Install Occupancy Sensor Lighting Controls	45,487	8.3	-10	\$4,556	\$30,796	\$3,330	\$27,466	6.0	44,580
ECM 5	Install High/Low Lighting Controls	1,924	0.2	0	\$193	\$1,350	\$1,305	\$45	0.2	1,886
Domestic Water Heating Upgrade		0	0.0	14	\$113	\$208	\$208	\$0	0.0	1,611
ECM 8	Install Low-Flow DHW Devices	0	0.0	14	\$113	\$208	\$208	\$0	0.0	1,611
Food Service & Refrigeration Measures		5,702	0.7	0	\$582	\$1,527	\$460	\$1,067	1.8	5,742
ECM 9	Refrigerator/Freezer Case Electrically Commutated Motors	524	0.1	0	\$54	\$607	\$160	\$447	8.3	528
ECM 10	Vending Machine Control	5,178	0.6	0	\$528	\$920	\$300	\$620	1.2	5,214
TOTALS		254,235	45.8	-43	\$25,589	\$122,428	\$27,470	\$94,958	3.7	250,931

WHITNEY M. YOUNG (PS #15)

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			342,579	48.8	-73	\$34,520	\$114,879	\$26,115	\$88,764	2.6	336,466
ECM 1	Install LED Fixtures	Yes	41,005	2.7	-4	\$4,163	\$23,473	\$2,400	\$21,073	5.1	40,784
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	Yes	2,350	0.3	-1	\$237	\$1,077	\$120	\$957	4.0	2,303
ECM 3	Retrofit Fixtures with LED Lamps	Yes	299,224	45.7	-68	\$30,121	\$90,330	\$23,595	\$66,735	2.2	293,378
Lighting Control Measures			74,582	10.8	-17	\$7,506	\$49,496	\$14,530	\$34,966	4.7	73,095
ECM 4	Install Occupancy Sensor Lighting Controls	Yes	58,387	8.5	-13	\$5,876	\$37,346	\$4,520	\$32,826	5.6	57,223
ECM 5	Install High/Low Lighting Controls	Yes	16,196	2.3	-4	\$1,630	\$12,150	\$10,010	\$2,140	1.3	15,873
Motor Upgrades			8,353	1.7	0	\$854	\$139,763	\$0	\$139,763	163.6	8,412
ECM 6	Premium Efficiency Motors	No	8,353	1.7	0	\$854	\$139,763	\$0	\$139,763	163.6	8,412
Variable Frequency Drive (VFD) Measures			124,432	25.5	0	\$12,726	\$264,913	\$24,600	\$240,313	18.9	125,302
ECM 7	Install VFDs on Constant Volume (CV) Fans	Yes	42,597	10.8	0	\$4,357	\$35,917	\$10,600	\$25,317	5.8	42,895
ECM 8	Install VFDs on Heating Water Pumps	No	34,626	5.2	0	\$3,541	\$209,190	\$5,600	\$203,590	57.5	34,868
ECM 9	Install Boiler Draft Fan VFDs	Yes	39,469	9.1	0	\$4,037	\$15,818	\$6,600	\$9,218	2.3	39,745
ECM 10	Install VFDs on Process Pumps	Yes	7,740	0.5	0	\$792	\$3,987	\$1,800	\$2,187	2.8	7,794
Unitary HVAC Measures			10,260	10.3	0	\$1,049	\$70,921	\$8,788	\$62,133	59.2	10,332
ECM 11	Install High Efficiency Air Conditioning Units	No	10,260	10.3	0	\$1,049	\$70,921	\$8,788	\$62,133	59.2	10,332
Gas Heating (HVAC/Process) Replacement			0	0.0	1,740	\$12,359	\$196,384	\$0	\$196,384	15.9	203,756
ECM 12	Install High Efficiency Hot Water Boilers	No	0	0.0	1,740	\$12,359	\$196,384	\$0	\$196,384	15.9	203,756
HVAC System Improvements			2,762	0.0	37	\$543	\$1,348	\$16	\$1,332	2.5	7,078
ECM 13	Install Programmable Thermostats	Yes	2,762	0.0	34	\$525	\$1,319	\$0	\$1,319	2.5	6,777
ECM 14	Install Pipe Insulation	Yes	0	0.0	3	\$18	\$29	\$16	\$13	0.7	301
Domestic Water Heating Upgrade			0	0.0	147	\$1,041	\$32,565	\$3,699	\$28,866	27.7	17,167
ECM 15	Install High Efficiency Gas-Fired Water Heater	No	0	0.0	91	\$649	\$31,070	\$2,800	\$28,270	43.6	10,698
ECM 16	Install Low-Flow DHW Devices	Yes	0	0.0	55	\$392	\$1,495	\$899	\$596	1.5	6,469
Food Service & Refrigeration Measures			2,467	0.3	0	\$252	\$763	\$180	\$583	2.3	2,484
ECM 17	Refrigerator/Freezer Case Electrically Commutated Motors	Yes	513	0.0	0	\$52	\$303	\$80	\$223	4.3	516
ECM 18	Vending Machine Control	Yes	1,954	0.2	0	\$200	\$460	\$100	\$360	1.8	1,968
Custom Measures			74,852	0.0	479	\$11,055	\$251,426	\$0	\$251,426	22.7	131,418
ECM 19	Installation of an Energy Management System	No	74,852	0.0	479	\$11,055	\$251,426	\$0	\$251,426	22.7	131,418
TOTALS (COST EFFECTIVE MEASURES)			512,196	80.2	2	\$52,399	\$223,705	\$60,740	\$162,965	3.1	516,026
TOTALS (ALL MEASURES)			640,287	97.4	2,312	\$81,906	\$1,122,459	\$77,928	\$1,044,531	12.8	915,508

FRANK R. CONWELL SCHOOL (PS #3)

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			249,189	60.5	-49	\$32,021	\$114,210	\$24,319	\$89,891	2.8	245,148
ECM 1	Install LED Fixtures	Yes	36,879	5.8	-5	\$4,761	\$23,671	\$2,800	\$20,871	4.4	36,517
ECM 2	Retrofit Fixtures with LED Lamps	Yes	212,310	54.7	-44	\$27,260	\$90,539	\$21,519	\$69,020	2.5	208,631
Lighting Control Measures			16,376	3.3	-3	\$2,102	\$10,377	\$1,150	\$9,227	4.4	16,090
ECM 3	Install Occupancy Sensor Lighting Controls	Yes	16,175	3.3	-3	\$2,077	\$10,152	\$1,150	\$9,002	4.3	15,892
ECM 4	Install High/Low Lighting Controls	Yes	202	0.0	0	\$26	\$225	\$0	\$225	8.7	198
Variable Frequency Drive (VFD) Measures			169,316	41.2	20	\$22,331	\$91,328	\$24,500	\$66,828	3.0	172,875
ECM 5	Install VFD on Variable Air Volume (VAV) Fans	Yes	36,391	9.4	0	\$4,753	\$15,351	\$4,800	\$10,551	2.2	36,645
ECM 6	Install VFDs on Constant Volume (CV) Fans	Yes	124,393	31.8	0	\$16,247	\$68,460	\$18,900	\$49,560	3.1	125,262
ECM 7	Install VFDs on Kitchen Hood Fan Motors	Yes	8,532	0.0	20	\$1,330	\$7,518	\$800	\$6,718	5.0	10,967
Unitary HVAC Measures			5,676	1.4	0	\$741	\$21,633	\$0	\$21,633	29.2	5,715
ECM 8	Install High Efficiency Air Conditioning Units	No	5,676	1.4	0	\$741	\$21,633	\$0	\$21,633	29.2	5,715
HVAC System Improvements			0	0.0	25	\$266	\$238	\$132	\$106	0.4	2,923
ECM 9	Install Pipe Insulation	Yes	0	0.0	25	\$266	\$238	\$132	\$106	0.4	2,923
Food Service & Refrigeration Measures			4,353	0.5	0	\$569	\$2,207	\$600	\$1,607	2.8	4,383
ECM 10	Refrigerator/Freezer Case Electrically Commutated Motors	Yes	786	0.1	0	\$103	\$1,517	\$400	\$1,117	10.9	792
ECM 11	Vending Machine Control	Yes	3,566	0.4	0	\$466	\$690	\$200	\$490	1.1	3,591
TOTALS (COST EFFECTIVE MEASURES)			439,234	105.5	-8	\$57,289	\$218,360	\$50,701	\$167,659	2.9	441,419
TOTALS (ALL MEASURES)			444,910	107.0	-8	\$58,030	\$239,993	\$50,701	\$189,292	3.3	447,134

REV. DR. ERCEL F. WEBB (PS #22)

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			155,713	37.8	-36	\$17,792	\$82,444	\$21,885	\$60,559	3.4	152,609
ECM 1	Install LED Fixtures	Yes	3,485	0.7	-1	\$398	\$1,782	\$30	\$1,752	4.4	3,415
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	Yes	1,400	0.4	0	\$160	\$1,158	\$180	\$978	6.1	1,372
ECM 3	Retrofit Fixtures with LED Lamps	Yes	150,828	36.7	-35	\$17,233	\$79,504	\$21,675	\$57,829	3.4	147,821
Lighting Control Measures			27,934	6.4	-6	\$3,192	\$36,482	\$5,015	\$31,467	9.9	27,377
ECM 4	Install Occupancy Sensor Lighting Controls	Yes	26,383	6.2	-6	\$3,015	\$34,232	\$3,485	\$30,747	10.2	25,857
ECM 5	Install High/Low Lighting Controls	Yes	1,551	0.2	0	\$177	\$2,250	\$1,530	\$720	4.1	1,520
Motor Upgrades			289	0.1	0	\$34	\$532	\$0	\$532	15.9	291
ECM 6	Premium Efficiency Motors	No	289	0.1	0	\$34	\$532	\$0	\$532	15.9	291
Variable Frequency Drive (VFD) Measures			5,481	1.7	0	\$637	\$7,956	\$2,200	\$5,756	9.0	5,519
ECM 7	Install VFDs on Chilled Water Pumps	No	1,061	1.0	0	\$123	\$4,197	\$1,800	\$2,397	19.5	1,068
ECM 8	Install VFDs on Process Pumps	Yes	4,420	0.7	0	\$513	\$3,759	\$400	\$3,359	6.5	4,451
Unitary HVAC Measures			1,278	1.6	0	\$148	\$6,530	\$1,185	\$5,345	36.0	1,287
ECM 9	Install High Efficiency Air Conditioning Units	No	1,278	1.6	0	\$148	\$6,530	\$1,185	\$5,345	36.0	1,287
Gas Heating (HVAC/Process) Replacement			0	0.0	106	\$870	\$7,828	\$2,000	\$5,828	6.7	12,398
ECM 10	Install High Efficiency Hot Water Boilers	Yes	0	0.0	106	\$870	\$7,828	\$2,000	\$5,828	6.7	12,398
Domestic Water Heating Upgrade			0	0.0	17	\$140	\$258	\$258	\$0	0.0	2,000
ECM 11	Install Low-Flow DHW Devices	Yes	0	0.0	17	\$140	\$258	\$258	\$0	0.0	2,000
Food Service & Refrigeration Measures			6,271	0.5	0	\$728	\$3,719	\$610	\$3,109	4.3	6,315
ECM 12	Refrigerator/Freezer Case Electrically Commutated Motors	Yes	524	0.1	0	\$61	\$607	\$160	\$447	7.3	528
ECM 13	Refrigeration Controls	Yes	1,838	0.0	0	\$213	\$2,193	\$250	\$1,943	9.1	1,851
ECM 14	Vending Machine Control	Yes	3,909	0.4	0	\$454	\$920	\$200	\$720	1.6	3,936
Custom Measures			0	0.0	320	\$2,629	\$23,000	\$0	\$23,000	8.7	37,468
ECM 15	Semi-automatic Cover for Swimming Pool	Yes	0	0.0	320	\$2,629	\$23,000	\$0	\$23,000	8.7	37,468
TOTALS (COST EFFECTIVE MEASURES)			194,338	45.4	401	\$25,864	\$157,491	\$30,168	\$127,323	4.9	242,617
TOTALS (ALL MEASURES)			196,965	48.1	401	\$26,169	\$168,749	\$33,153	\$135,596	5.2	245,263

DANFORTH EARLY CHILDHOOD CENTER

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			54,600	7.7	-23	\$7,839	\$18,727	\$4,728	\$13,999	1.8	51,162
ECM 1	Install LED Fixtures	Yes	3,854	0.0	0	\$578	\$1,883	\$200	\$1,683	2.9	3,881
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	Yes	208	0.0	0	\$30	\$69	\$10	\$59	2.0	194
ECM 3	Retrofit Fixtures with LED Lamps	Yes	50,538	7.7	-23	\$7,231	\$16,776	\$4,518	\$12,258	1.7	47,088
Lighting Control Measures			24,708	3.6	-11	\$3,535	\$21,277	\$5,130	\$16,147	4.6	23,021
ECM 4	Install Occupancy Sensor Lighting Controls	Yes	20,695	3.0	-10	\$2,961	\$17,902	\$2,105	\$15,797	5.3	19,282
ECM 5	Install High/Low Lighting Controls	Yes	4,013	0.6	-2	\$574	\$3,375	\$3,025	\$350	0.6	3,739
Unitary HVAC Measures			290	0.1	0	\$43	\$703	\$0	\$703	16.2	292
ECM 6	Install High Efficiency Air Conditioning Units	No	290	0.1	0	\$43	\$703	\$0	\$703	16.2	292
HVAC System Improvements			122	0.0	57	\$854	\$775	\$268	\$507	0.6	9,456
ECM 7	Install Pipe Insulation	Yes	122	0.0	57	\$854	\$775	\$268	\$507	0.6	9,456
Domestic Water Heating Upgrade			0	0.0	7	\$157	\$100	\$100	\$0	0.0	778
ECM 8	Install Low-Flow DHW Devices	Yes	0	0.0	7	\$157	\$100	\$100	\$0	0.0	778
Food Service & Refrigeration Measures			871	0.1	0	\$130	\$2,080	\$250	\$1,830	14.0	877
ECM 9	Replace Refrigeration Equipment	No	871	0.1	0	\$130	\$2,080	\$250	\$1,830	14.0	877
TOTALS (COST EFFECTIVE MEASURES)			79,429	11.3	29	\$12,386	\$40,879	\$10,226	\$30,653	2.5	84,417
TOTALS (ALL MEASURES)			80,590	11.6	29	\$12,560	\$43,662	\$10,476	\$33,186	2.6	85,586

PRESIDENT BARACK OBAMA (PS #34)

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			166,252	24.8	-38	\$18,423	\$56,909	\$14,973	\$41,936	2.3	162,943
ECM 1	Install LED Fixtures	Yes	8,618	1.3	-2	\$955	\$4,029	\$600	\$3,429	3.6	8,446
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	Yes	425	0.1	0	\$47	\$258	\$23	\$235	5.0	417
ECM 3	Retrofit Fixtures with LED Lamps	Yes	157,209	23.5	-36	\$17,421	\$52,622	\$14,350	\$38,272	2.2	154,080
Lighting Control Measures			43,882	6.5	-10	\$4,863	\$40,665	\$8,980	\$31,685	6.5	43,007
ECM 4	Install Occupancy Sensor Lighting Controls	Yes	38,832	5.9	-9	\$4,303	\$34,140	\$3,905	\$30,235	7.0	38,057
ECM 5	Install High/Low Lighting Controls	Yes	5,051	0.7	-1	\$560	\$6,525	\$5,075	\$1,450	2.6	4,950
Variable Frequency Drive (VFD) Measures			9,986	4.2	0	\$1,127	\$11,858	\$4,000	\$7,858	7.0	10,056
ECM 6	Install VFDs on Constant Volume (CV) Fans	Yes	3,539	0.9	0	\$399	\$3,884	\$400	\$3,484	8.7	3,564
ECM 7	Install Boiler Draft Fan VFDs	Yes	6,447	3.3	0	\$727	\$7,974	\$3,600	\$4,374	6.0	6,492
Unitary HVAC Measures			1,634	1.0	0	\$184	\$11,848	\$0	\$11,848	64.3	1,645
ECM 8	Install High Efficiency Air Conditioning Units	No	542	0.5	0	\$61	\$6,655	\$0	\$6,655	108.8	546
ECM 9	Install High Efficiency Heat Pumps	No	1,091	0.6	0	\$123	\$5,193	\$0	\$5,193	42.2	1,099
Electric Chiller Replacement			2,429	5.4	0	\$274	\$82,504	\$2,400	\$80,104	292.3	2,446
ECM 10	Install High Efficiency Chillers	No	2,429	5.4	0	\$274	\$82,504	\$2,400	\$80,104	292.3	2,446
Gas Heating (HVAC/Process) Replacement			0	0.0	192	\$1,675	\$133,598	\$14,376	\$119,222	71.2	22,444
ECM 11	Install High Efficiency Steam Boilers	No	0	0.0	192	\$1,675	\$133,598	\$14,376	\$119,222	71.2	22,444
HVAC System Improvements			0	0.0	10	\$88	\$132	\$60	\$72	0.8	1,175
ECM 12	Install Pipe Insulation	Yes	0	0.0	10	\$88	\$132	\$60	\$72	0.8	1,175
Domestic Water Heating Upgrade			695	0.0	8	\$149	\$158	\$158	\$0	0.0	1,644
ECM 13	Install Low-Flow DHW Devices	Yes	695	0.0	8	\$149	\$158	\$158	\$0	0.0	1,644
Food Service & Refrigeration Measures			1,954	0.2	0	\$220	\$460	\$100	\$360	1.6	1,968
ECM 14	Vending Machine Control	Yes	1,954	0.2	0	\$220	\$460	\$100	\$360	1.6	1,968
Custom Measures			11,995	0.0	0	\$1,353	\$2,070	\$0	\$2,070	1.5	12,079
ECM 15	Install Heat Pump Water Heater	Yes	11,995	0.0	0	\$1,353	\$2,070	\$0	\$2,070	1.5	12,079
TOTALS (COST EFFECTIVE MEASURES)			234,764	35.7	-30	\$26,223	\$112,251	\$28,271	\$83,980	3.2	232,872
TOTALS (ALL MEASURES)			238,827	42.2	162	\$28,355	\$340,201	\$45,047	\$295,154	10.4	259,407

GLADYS CANNON NUNERY (PS #29)

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			2,642	0.4	-1	\$379	\$1,098	\$231	\$867	2.3	2,462
ECM 1	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	Yes	776	0.2	0	\$111	\$515	\$80	\$435	3.9	723
ECM 2	Retrofit Fixtures with LED Lamps	Yes	1,866	0.3	-1	\$268	\$583	\$151	\$432	1.6	1,739
Lighting Control Measures			7,942	1.1	-4	\$1,140	\$8,613	\$2,580	\$6,033	5.3	7,400
ECM 3	Install Occupancy Sensor Lighting Controls	Yes	4,061	0.7	-2	\$583	\$6,138	\$565	\$5,573	9.6	3,784
ECM 4	Install High/Low Lighting Controls	Yes	3,881	0.4	-2	\$557	\$2,475	\$2,015	\$460	0.8	3,616
Gas Heating (HVAC/Process) Replacement			0	0.0	96	\$1,400	\$147,650	\$15,888	\$131,762	94.1	15,737
ECM 5	Install High Efficiency Steam Boilers	No	0	0.0	96	\$1,400	\$147,650	\$15,888	\$131,762	94.1	15,737
Domestic Water Heating Upgrade			2,290	0.0	0	\$344	\$100	\$100	\$0	0.0	2,306
ECM 6	Install Low-Flow DHW Devices	Yes	2,290	0.0	0	\$344	\$100	\$100	\$0	0.0	2,306
Food Service & Refrigeration Measures			1,612	0.2	0	\$242	\$230	\$100	\$130	0.5	1,623
ECM 7	Vending Machine Control	Yes	1,612	0.2	0	\$242	\$230	\$100	\$130	0.5	1,623
TOTALS (COST EFFECTIVE MEASURES)			14,485	1.7	-5	\$2,105	\$10,041	\$3,011	\$7,030	3.3	13,790
TOTALS (ALL MEASURES)			14,485	1.7	91	\$3,505	\$157,691	\$18,899	\$138,791	39.6	29,527

EZRA L. NOLAN SCHOOL (PS #40)

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			220,680	51.8	-43	\$25,124	\$75,158	\$16,395	\$58,763	2.3	217,217
ECM 1	Install LED Fixtures	Yes	22,684	2.2	-2	\$2,601	\$11,551	\$1,500	\$10,051	3.9	22,583
ECM 2	Retrofit Fixtures with LED Lamps	Yes	197,996	49.6	-41	\$22,523	\$63,606	\$14,895	\$48,711	2.2	194,634
Lighting Control Measures			44,553	11.1	-9	\$5,066	\$41,833	\$9,170	\$32,663	6.4	43,773
ECM 3	Install Occupancy Sensor Lighting Controls	Yes	38,663	9.7	-8	\$4,397	\$34,408	\$4,305	\$30,103	6.8	37,987
ECM 4	Install High/Low Lighting Controls	Yes	5,889	1.4	-1	\$670	\$7,425	\$4,865	\$2,560	3.8	5,786
Motor Upgrades			337	0.1	0	\$39	\$876	\$0	\$876	22.5	339
ECM 5	Premium Efficiency Motors	No	337	0.1	0	\$39	\$876	\$0	\$876	22.5	339
Variable Frequency Drive (VFD) Measures			45,355	10.7	0	\$5,238	\$39,815	\$12,400	\$27,415	5.2	45,672
ECM 6	Install VFDs on Constant Volume (CV) Fans	Yes	30,726	9.7	0	\$3,548	\$31,841	\$8,800	\$23,041	6.5	30,941
ECM 7	Install VFDs on Process Pumps	Yes	14,629	1.0	0	\$1,689	\$7,974	\$3,600	\$4,374	2.6	14,732
Unitary HVAC Measures			1,492	1.8	0	\$172	\$20,373	\$1,185	\$19,188	111.4	1,502
ECM 8	Install High Efficiency Air Conditioning Units	No	1,492	1.8	0	\$172	\$20,373	\$1,185	\$19,188	111.4	1,502
Electric Chiller Replacement			14,640	3.4	0	\$1,691	\$59,084	\$10,800	\$48,284	28.6	14,742
ECM 9	Install High Efficiency Chillers	No	14,640	3.4	0	\$1,691	\$59,084	\$10,800	\$48,284	28.6	14,742
Gas Heating (HVAC/Process) Replacement			0	0.0	32	\$266	\$7,361	\$1,000	\$6,361	23.9	3,709
ECM 10	Install High Efficiency Furnaces	No	0	0.0	32	\$266	\$7,361	\$1,000	\$6,361	23.9	3,709
HVAC System Improvements			1,625	0.0	59	\$687	\$3,130	\$180	\$2,950	4.3	8,584
ECM 11	Implement Demand Control Ventilation (DCV)	Yes	1,625	0.0	17	\$335	\$2,719	\$0	\$2,719	8.1	3,681
ECM 12	Install Pipe Insulation	Yes	0	0.0	42	\$352	\$411	\$180	\$231	0.7	4,903
Domestic Water Heating Upgrade			0	0.0	59	\$493	\$2,978	\$1,376	\$1,601	3.2	6,866
ECM 13	Install Low-Flow DHW Devices	Yes	0	0.0	59	\$493	\$2,978	\$1,376	\$1,601	3.2	6,866
Food Service & Refrigeration Measures			2,234	0.2	0	\$258	\$837	\$260	\$577	2.2	2,250
ECM 14	Refrigerator/Freezer Case Electrically Commutated Motors	Yes	1,025	0.1	0	\$118	\$607	\$160	\$447	3.8	1,032
ECM 15	Vending Machine Control	Yes	1,209	0.1	0	\$140	\$230	\$100	\$130	0.9	1,217
TOTALS (COST EFFECTIVE MEASURES)			314,447	73.9	66	\$36,866	\$163,749	\$39,781	\$123,967	3.4	324,363
TOTALS (ALL MEASURES)			330,916	79.2	98	\$39,034	\$251,443	\$52,766	\$198,676	5.1	344,656

JULIA A. BARNES (PS #12)

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			14,924	1.3	-2	\$2,376	\$7,076	\$1,152	\$5,924	2.5	14,817
ECM 1	Install LED Fixtures	Yes	7,069	0.0	0	\$1,133	\$3,501	\$400	\$3,101	2.7	7,119
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	Yes	1,067	0.2	0	\$169	\$856	\$45	\$811	4.8	1,046
ECM 3	Retrofit Fixtures with LED Lamps	Yes	6,788	1.1	-2	\$1,074	\$2,719	\$707	\$2,012	1.9	6,652
Lighting Control Measures			10,706	1.7	-2	\$1,694	\$14,769	\$4,910	\$9,859	5.8	10,492
ECM 4	Install Occupancy Sensor Lighting Controls	Yes	7,111	1.2	-2	\$1,125	\$10,494	\$895	\$9,599	8.5	6,969
ECM 5	Install High/Low Lighting Controls	Yes	3,595	0.5	-1	\$569	\$4,275	\$4,015	\$260	0.5	3,523
ECM 6	Install VFDs on Heating Water Pumps	Yes	5,327	0.6	0	\$853	\$7,562	\$800	\$6,762	7.9	5,364
ECM 7	Install Boiler Draft Fan VFDs	No	1,552	1.2	0	\$249	\$6,987	\$400	\$6,587	26.5	1,563
Domestic Water Heating Upgrade			0	0.0	6	\$52	\$93	\$93	\$0	0.0	722
ECM 8	Install Low-Flow DHW Devices	Yes	0	0.0	6	\$52	\$93	\$93	\$0	0.0	722
Food Service & Refrigeration Measures			7,641	0.9	0	\$1,224	\$13,704	\$1,200	\$12,504	10.2	7,694
ECM 9	Replace Refrigeration Equipment	Yes	7,641	0.9	0	\$1,224	\$13,704	\$1,200	\$12,504	10.2	7,694
TOTALS (COST EFFECTIVE MEASURES)			38,597	4.4	2	\$6,200	\$43,205	\$8,155	\$35,050	5.7	39,089
TOTALS (ALL MEASURES)			40,150	5.6	2	\$6,449	\$50,192	\$8,555	\$41,637	6.5	40,653

OLLIE CULBRETH JR SCHOOL (PS #14)

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			67,410	21.5	-11	\$8,761	\$47,092	\$11,422	\$35,670	4.1	66,554
ECM 1	Install LED Fixtures	Yes	18,142	0.0	0	\$2,384	\$5,859	\$545	\$5,314	2.2	18,269
ECM 2	Retrofit Fixtures with LED Lamps	Yes	49,268	21.5	-11	\$6,378	\$41,233	\$10,877	\$30,356	4.8	48,285
Lighting Control Measures			13,395	5.1	-3	\$1,734	\$29,924	\$8,415	\$21,509	12.4	13,128
ECM 3	Install Occupancy Sensor Lighting Controls	Yes	11,044	4.2	-3	\$1,430	\$22,724	\$2,715	\$20,009	14.0	10,824
ECM 4	Install High/Low Lighting Controls	Yes	2,351	0.9	-1	\$304	\$7,200	\$5,700	\$1,500	4.9	2,304
Unitary HVAC Measures			593	1.1	0	\$78	\$9,029	\$0	\$9,029	115.9	597
ECM 5	Install High Efficiency Air Conditioning Units	No	593	1.1	0	\$78	\$9,029	\$0	\$9,029	115.9	597
HVAC System Improvements			450	0.0	153	\$1,344	\$19,370	\$60	\$19,310	14.4	18,377
ECM 6	Install Programmable Thermostats	Yes	0	0.0	136	\$1,139	\$16,494	\$0	\$16,494	14.5	15,888
ECM 7	Implement Demand Control Ventilation (DCV)	No	450	0.0	9	\$131	\$2,719	\$0	\$2,719	20.8	1,453
ECM 8	Install Pipe Insulation	Yes	0	0.0	9	\$74	\$158	\$60	\$98	1.3	1,037
Domestic Water Heating Upgrade			0	0.0	36	\$304	\$552	\$549	\$3	0.0	4,245
ECM 9	Install Low-Flow DHW Devices	Yes	0	0.0	36	\$304	\$552	\$549	\$3	0.0	4,245
Food Service & Refrigeration Measures			6,790	0.8	0	\$892	\$1,150	\$400	\$750	0.8	6,837
ECM 10	Vending Machine Control	Yes	6,790	0.8	0	\$892	\$1,150	\$400	\$750	0.8	6,837
TOTALS (COST EFFECTIVE MEASURES)			87,594	27.3	166	\$12,905	\$95,369	\$20,846	\$74,524	5.8	107,689
TOTALS (ALL MEASURES)			88,637	28.4	175	\$13,114	\$107,117	\$20,846	\$86,271	6.6	109,739

FRED W. MARTIN (PS #41)

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			353,319	62.2	-116	\$36,554	\$127,901	\$30,901	\$97,000	2.7	336,887
ECM 1	Install LED Fixtures	Yes	77,046	0.0	0	\$8,339	\$22,970	\$2,595	\$20,375	2.4	77,584
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	Yes	152	0.1	0	\$16	\$119	\$15	\$104	6.7	143
ECM 3	Retrofit Fixtures with LED Lamps	Yes	276,121	62.1	-115	\$28,200	\$104,811	\$28,291	\$76,520	2.7	259,160
Lighting Control Measures			83,151	17.9	-35	\$8,492	\$45,394	\$15,780	\$29,614	3.5	78,044
ECM 4	Install Occupancy Sensor Lighting Controls	Yes	64,825	14.1	-27	\$6,621	\$31,444	\$3,810	\$27,634	4.2	60,844
ECM 5	Install High/Low Lighting Controls	Yes	18,326	3.9	-8	\$1,872	\$13,950	\$11,970	\$1,980	1.1	17,200
Motor Upgrades			1,711	0.5	0	\$185	\$9,002	\$0	\$9,002	48.6	1,723
ECM 6	Premium Efficiency Motors	No	1,711	0.5	0	\$185	\$9,002	\$0	\$9,002	48.6	1,723
Variable Frequency Drive (VFD) Measures			54,981	13.5	0	\$5,951	\$163,468	\$19,400	\$144,068	24.2	55,366
ECM 7	Install VFDs on Constant Volume (CV) Fans	Yes	30,751	9.0	0	\$3,328	\$24,457	\$10,800	\$13,657	4.1	30,966
ECM 8	Install VFDs on Chilled Water Pumps	No	5,857	1.9	0	\$634	\$20,375	\$2,200	\$18,175	28.7	5,898
ECM 9	Install VFDs on Heating Water Pumps	No	18,373	2.6	0	\$1,988	\$118,636	\$6,400	\$112,236	56.4	18,501
Unitary HVAC Measures			9,349	6.7	0	\$1,012	\$60,274	\$4,727	\$55,547	54.9	9,414
ECM 10	Install High Efficiency Air Conditioning Units	No	9,349	6.7	0	\$1,012	\$60,274	\$4,727	\$55,547	54.9	9,414
Gas Heating (HVAC/Process) Replacement			0	0.0	134	\$1,958	\$406,036	\$2,000	\$404,036	206.3	21,956
ECM 11	Install High Efficiency Hot Water Boilers	Yes	0	0.0	59	\$866	\$10,201	\$2,000	\$8,201	9.5	9,708
ECM 12	Install High Efficiency Steam Boilers	No	0	0.0	75	\$1,092	\$395,835	\$0	\$395,835	362.4	12,248
HVAC System Improvements			0	0.0	34	\$287	\$274	\$160	\$114	0.4	3,936
ECM 13	Install Pipe Insulation	Yes	0	0.0	34	\$287	\$274	\$160	\$114	0.4	3,936
Domestic Water Heating Upgrade			0	0.0	145	\$1,237	\$14,912	\$2,626	\$12,285	9.9	16,981
ECM 14	Install High Efficiency Gas-Fired Water Heater	Yes	0	0.0	77	\$657	\$13,033	\$1,400	\$11,633	17.7	9,027
ECM 15	Install Low-Flow DHW Devices	Yes	0	0.0	68	\$579	\$1,879	\$1,226	\$652	1.1	7,954
Food Service & Refrigeration Measures			4,005	0.4	0	\$433	\$1,673	\$420	\$1,253	2.9	4,033
ECM 16	Refrigerator/Freezer Case Electrically Commutated Motors	Yes	2,050	0.2	0	\$222	\$1,213	\$320	\$893	4.0	2,065
ECM 17	Vending Machine Control	Yes	1,954	0.2	0	\$212	\$460	\$100	\$360	1.7	1,968
Custom Measures			0	0.0	460	\$3,923	\$35,300	\$0	\$35,300	9.0	53,860
ECM 18	Automatic Pool Cover	Yes	0	0.0	460	\$3,923	\$35,300	\$0	\$35,300	4.0	53,860
TOTALS (COST EFFECTIVE MEASURES)			471,226	89.5	548	\$55,120	\$260,112	\$62,687	\$197,425	3.6	534,415

ACADEMY 1

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			171,810	35.6	0	\$12,504	\$39,596	\$9,339	\$30,257	2.4	173,011
ECM 1	Install LED Fixtures	Yes	5,446	0.7	0	\$396	\$1,833	\$115	\$1,718	4.3	5,484
ECM 2	Retrofit Fixtures with LED Lamps	Yes	166,364	34.9	0	\$12,107	\$37,763	\$9,224	\$28,539	2.4	167,527
Lighting Control Measures			31,299	6.6	0	\$2,278	\$25,799	\$6,110	\$19,689	8.6	31,517
ECM 3	Install Occupancy Sensor Lighting Controls	Yes	28,713	6.0	0	\$2,090	\$21,524	\$2,670	\$18,854	9.0	28,914
ECM 4	Install High/Low Lighting Controls	Yes	2,586	0.5	0	\$188	\$4,275	\$3,440	\$835	4.4	2,604
Unitary HVAC Measures			12,946	5.1	0	\$942	\$30,524	\$1,431	\$29,094	30.9	13,037
ECM 5	Install High Efficiency Air Conditioning Units	No	2,325	1.9	0	\$169	\$17,025	\$0	\$17,025	100.6	2,341
ECM 6	Install High Efficiency Heat Pumps	No	10,621	3.1	0	\$773	\$13,499	\$1,431	\$12,069	15.6	10,696
HVAC System Improvements			1,352	0.0	0	\$98	\$330	\$0	\$330	3.4	1,361
ECM 7	Install Programmable Thermostats	Yes	1,352	0.0	0	\$98	\$330	\$0	\$330	3.4	1,361
Domestic Water Heating Upgrade			5,978	0.0	0	\$435	\$308	\$308	\$0	0.0	6,020
ECM 8	Install Low-Flow DHW Devices	Yes	5,978	0.0	0	\$435	\$308	\$308	\$0	0.0	6,020
Food Service & Refrigeration Measures			3,976	0.5	0	\$289	\$5,034	\$1,200	\$3,834	13.3	4,003
ECM 9	Replace Refrigeration Equipment	No	3,976	0.5	0	\$289	\$5,034	\$1,200	\$3,834	13.3	4,003
Custom Measures			27,943	0.0	0	\$2,034	\$9,400	\$0	\$9,400	4.6	28,138
ECM 10	Install Heat Pump Water Heater	Yes	27,943	0.0	0	\$2,034	\$9,400	\$0	\$9,400	4.6	28,138
TOTALS (COST EFFECTIVE MEASURES)			238,381	42.2	0	\$17,349	\$75,433	\$15,757	\$59,675	3.4	240,048
TOTALS (ALL MEASURES)			255,303	47.7	0	\$18,580	\$110,991	\$18,388	\$92,603	5.0	257,088

DR. PAUL RAFALIDES (PS #33)

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			39,281	8.8	-8	\$6,058	\$14,355	\$3,814	\$10,541	1.7	38,615
ECM 1	Install LED Fixtures	Yes	858	0.0	0	\$134	\$525	\$100	\$425	3.2	864
ECM 2	Retrofit Fixtures with LED Lamps	Yes	38,423	8.8	-8	\$5,924	\$13,829	\$3,714	\$10,115	1.7	37,751
Lighting Control Measures			11,353	2.6	-2	\$1,750	\$13,829	\$2,670	\$11,159	6.4	11,154
ECM 3	Install Occupancy Sensor Lighting Controls	Yes	9,631	2.3	-2	\$1,485	\$11,804	\$1,445	\$10,359	7.0	9,462
ECM 4	Install High/Low Lighting Controls	Yes	1,722	0.2	0	\$265	\$2,025	\$1,225	\$800	3.0	1,692
Variable Frequency Drive (VFD) Measures			844	0.6	0	\$132	\$6,204	\$300	\$5,904	44.8	850
ECM 5	Install Boiler Draft Fan VFDs	No	844	0.6	0	\$132	\$6,204	\$300	\$5,904	44.8	850
Gas Heating (HVAC/Process) Replacement			0	0.0	51	\$491	\$112,930	\$12,152	\$100,778	205.2	6,013
ECM 6	Install High Efficiency Steam Boilers	No	0	0.0	51	\$491	\$112,930	\$12,152	\$100,778	205.2	6,013
HVAC System Improvements			0	0.0	2	\$20	\$35	\$24	\$11	0.5	241
ECM 7	Install Pipe Insulation	Yes	0	0.0	2	\$20	\$35	\$24	\$11	0.5	241
Domestic Water Heating Upgrade			0	0.0	1	\$5	\$14	\$14	\$0	0.0	65
ECM 8	Install Low-Flow DHW Devices	Yes	0	0.0	1	\$5	\$14	\$14	\$0	0.0	65
TOTALS (COST EFFECTIVE MEASURES)			50,634	11.3	-8	\$7,833	\$28,233	\$6,522	\$21,710	2.8	50,075
TOTALS (ALL MEASURES)			51,478	11.9	44	\$8,456	\$147,367	\$18,974	\$128,392	15.2	56,938

DR. CHARLES F DEFFUCCION (PS #39)

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			103,769	28.3	-43	\$11,198	\$43,184	\$11,037	\$32,147	2.9	97,413
ECM 1	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	Yes	5,545	1.6	-2	\$598	\$2,613	\$380	\$2,233	3.7	5,204
ECM 2	Retrofit Fixtures with LED Lamps	Yes	98,224	26.6	-41	\$10,599	\$40,570	\$10,657	\$29,913	2.8	92,209
Lighting Control Measures			29,170	8.0	-12	\$3,147	\$29,636	\$5,795	\$23,841	7.6	27,378
ECM 3	Install Occupancy Sensor Lighting Controls	Yes	26,828	7.4	-11	\$2,895	\$26,036	\$2,785	\$23,251	8.0	25,180
ECM 4	Install High/Low Lighting Controls	Yes	2,342	0.6	-1	\$253	\$3,600	\$3,010	\$590	2.3	2,198
Variable Frequency Drive (VFD) Measures			13,821	5.9	0	\$1,577	\$17,690	\$6,200	\$11,490	7.3	13,918
ECM 5	Install VFDs on Constant Volume (CV) Fans	Yes	2,739	0.9	0	\$312	\$3,884	\$400	\$3,484	11.2	2,758
ECM 6	Install Boiler Draft Fan VFDs	Yes	2,892	4.5	0	\$330	\$9,819	\$4,000	\$5,819	17.6	2,913
ECM 7	Install VFDs on Process Pumps	Yes	8,190	0.5	0	\$934	\$3,987	\$1,800	\$2,187	2.3	8,247
Unitary HVAC Measures			509	0.3	0	\$58	\$4,559	\$0	\$4,559	78.5	513
ECM 8	Install High Efficiency Air Conditioning Units	No	509	0.3	0	\$58	\$4,559	\$0	\$4,559	78.5	513
Gas Heating (HVAC/Process) Replacement			0	0.0	103	\$874	\$7,828	\$2,000	\$5,828	6.7	12,071
ECM 9	Install High Efficiency Hot Water Boilers	Yes	0	0.0	103	\$874	\$7,828	\$2,000	\$5,828	6.7	12,071
HVAC System Improvements			0	0.0	20	\$293	\$176	\$80	\$96	0.3	3,240
ECM 10	Install Pipe Insulation	Yes	0	0.0	20	\$293	\$176	\$80	\$96	0.3	3,240
Domestic Water Heating Upgrade			0	0.0	23	\$344	\$351	\$351	\$0	0.0	3,804
ECM 11	Install Low-Flow DHW Devices	Yes	0	0.0	23	\$344	\$351	\$351	\$0	0.0	3,804
Food Service & Refrigeration Measures			3,839	0.4	0	\$438	\$1,067	\$360	\$707	1.6	3,866
ECM 12	Refrigerator/Freezer Case Electrically Commutated Motors	Yes	615	0.0	0	\$70	\$607	\$160	\$447	6.4	619
ECM 13	Vending Machine Control	Yes	3,224	0.4	0	\$368	\$460	\$200	\$260	0.7	3,246
Custom Measures			0	0.0	385	\$3,265	\$38,600	\$0	\$38,600	11.8	45,079
ECM 14	Semi-automatic Cover for Swimming Pool	Yes	0	0.0	385	\$3,265	\$38,600	\$0	\$38,600	11.8	45,079
TOTALS (COST EFFECTIVE MEASURES)			150,599	42.5	476	\$21,135	\$138,531	\$25,823	\$112,708	5.3	206,767
TOTALS (ALL MEASURES)			151,108	42.8	476	\$21,193	\$143,090	\$25,823	\$117,267	5.5	207,280

CORNELIA F. BRADFORD (PS #16)

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			28,021	4.3	-6	\$4,493	\$8,747	\$1,804	\$6,943	1.5	27,463
ECM 1	Install LED Fixtures	Yes	1,823	0.3	0	\$292	\$1,586	\$0	\$1,586	5.4	1,787
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	Yes	189	0.1	0	\$30	\$257	\$40	\$217	7.2	185
ECM 3	Retrofit Fixtures with LED Lamps	Yes	26,009	4.0	-6	\$4,171	\$6,904	\$1,764	\$5,140	1.2	25,490
Lighting Control Measures			9,275	1.3	-2	\$1,487	\$7,441	\$1,000	\$6,441	4.3	9,090
ECM 4	Install Occupancy Sensor Lighting Controls	Yes	9,275	1.3	-2	\$1,487	\$7,441	\$1,000	\$6,441	4.3	9,090
Motor Upgrades			48	0.0	0	\$8	\$774	\$0	\$774	100.0	48
ECM 5	Premium Efficiency Motors	No	48	0.0	0	\$8	\$774	\$0	\$774	100.0	48
Variable Frequency Drive (VFD) Measures			8,847	2.0	0	\$1,436	\$10,402	\$2,000	\$8,402	5.9	8,909
ECM 6	Install VFDs on Boiler Feedwater Pumps	No	1,632	0.8	0	\$265	\$6,415	\$200	\$6,215	23.5	1,643
ECM 7	Install VFDs on Process Pumps	Yes	7,215	1.2	0	\$1,171	\$3,987	\$1,800	\$2,187	1.9	7,265
Gas Heating (HVAC/Process) Replacement			0	0.0	74	\$620	\$51,466	\$7,184	\$44,282	71.4	8,692
ECM 8	Install High Efficiency Hot Water Boilers	Yes	0	0.0	63	\$525	\$7,828	\$2,000	\$5,828	11.1	7,365
ECM 9	Install High Efficiency Steam Boilers	No	0	0.0	11	\$95	\$43,638	\$5,184	\$38,454	406.2	1,327
HVAC System Improvements			0	0.0	10	\$80	\$63	\$20	\$43	0.5	1,127
ECM 10	Install Pipe Insulation	Yes	0	0.0	10	\$80	\$63	\$20	\$43	0.5	1,127
Domestic Water Heating Upgrade			0	0.0	7	\$55	\$100	\$100	\$0	0.0	778
ECM 11	Install Low-Flow DHW Devices	Yes	0	0.0	7	\$55	\$100	\$100	\$0	0.0	778
Food Service & Refrigeration Measures			343	0.0	0	\$56	\$230	\$0	\$230	4.1	345
ECM 12	Vending Machine Control	Yes	343	0.0	0	\$56	\$230	\$0	\$230	4.1	345
Custom Measures			0	0.0	251	\$2,096	\$23,000	\$0	\$23,000	11.0	29,389
ECM 13	Semi-automatic Cover for Swimming Pool	Yes	0	0.0	251	\$2,096	\$23,000	\$0	\$23,000	11.0	29,389
TOTALS (COST EFFECTIVE MEASURES)			44,854	6.9	322	\$9,964	\$51,396	\$6,724	\$44,672	4.5	82,822
TOTALS (ALL MEASURES)			46,534	7.7	333	\$10,331	\$102,223	\$12,108	\$90,115	8.7	85,841

ANTHONY J INFANTE (PS #31)

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			28,281	7.2	-7	\$4,819	\$17,554	\$4,607	\$12,947	2.7	27,717
ECM 1	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	Yes	935	0.2	0	\$159	\$550	\$80	\$470	3.0	916
ECM 2	Retrofit Fixtures with LED Lamps	Yes	27,346	7.0	-6	\$4,660	\$17,004	\$4,527	\$12,477	2.7	26,801
Lighting Control Measures			7,734	2.0	-2	\$1,318	\$11,216	\$2,370	\$8,846	6.7	7,580
ECM 3	Install Occupancy Sensor Lighting Controls	Yes	6,330	1.7	-1	\$1,079	\$9,416	\$965	\$8,451	7.8	6,204
ECM 4	Install High/Low Lighting Controls	Yes	1,404	0.3	0	\$239	\$1,800	\$1,405	\$395	1.7	1,376
Unitary HVAC Measures			8,518	7.1	0	\$1,470	\$20,628	\$0	\$20,628	14.0	8,578
ECM 5	Install High Efficiency Air Conditioning Units	No	8,518	7.1	0	\$1,470	\$20,628	\$0	\$20,628	14.0	8,578
Gas Heating (HVAC/Process) Replacement			0	0.0	35	\$327	\$35,880	\$4,262	\$31,618	96.7	4,147
ECM 6	Install High Efficiency Steam Boilers	No	0	0.0	35	\$327	\$35,880	\$4,262	\$31,618	96.7	4,147
HVAC System Improvements			1,210	0.0	20	\$390	\$287	\$124	\$163	0.4	3,515
ECM 7	Install Pipe Insulation	Yes	1,210	0.0	20	\$390	\$287	\$124	\$163	0.4	3,515
Domestic Water Heating Upgrade			2,502	0.0	0	\$432	\$129	\$129	\$0	0.0	2,520
ECM 8	Install Low-Flow DHW Devices	Yes	2,502	0.0	0	\$432	\$129	\$129	\$0	0.0	2,520
Food Service & Refrigeration Measures			0	0.0	10	\$92	\$7,119	\$1,000	\$6,119	66.4	1,169
ECM 9	Food Service Equipment Replacement	No	0	0.0	10	\$92	\$7,119	\$1,000	\$6,119	66.4	1,169
TOTALS (COST EFFECTIVE MEASURES)			45,882	9.2	11	\$8,021	\$31,256	\$7,230	\$24,026	3.0	47,530
TOTALS (ALL MEASURES)			54,401	16.3	57	\$9,910	\$94,883	\$12,492	\$82,390	8.3	61,423

LIBERTY HIGH SCHOOL

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			19,800	6.3	-8	\$3,857	\$9,617	\$2,550	\$7,067	1.8	18,584
ECM 1	Retrofit Fixtures with LED Lamps	Yes	19,800	6.3	-8	\$3,857	\$9,617	\$2,550	\$7,067	1.8	18,584
Lighting Control Measures			5,118	1.6	-2	\$997	\$9,708	\$2,035	\$7,673	7.7	4,804
ECM 2	Install Occupancy Sensor Lighting Controls	Yes	4,200	1.3	-2	\$818	\$7,908	\$985	\$6,923	8.5	3,942
ECM 3	Install High/Low Lighting Controls	Yes	918	0.3	0	\$179	\$1,800	\$1,050	\$750	4.2	861
Variable Frequency Drive (VFD) Measures			786	1.8	0	\$158	\$7,562	\$800	\$6,762	42.8	792
ECM 4	Install Boiler Draft Fan VFDs	No	786	1.8	0	\$158	\$7,562	\$800	\$6,762	42.8	792
Unitary HVAC Measures			2,780	2.1	0	\$558	\$14,198	\$0	\$14,198	25.4	2,800
ECM 5	Install High Efficiency Air Conditioning Units	No	2,780	2.1	0	\$558	\$14,198	\$0	\$14,198	25.4	2,800
Gas Heating (HVAC/Process) Replacement			0	0.0	38	\$544	\$144,676	\$15,568	\$129,108	237.2	6,168
ECM 6	Install High Efficiency Steam Boilers	No	0	0.0	38	\$544	\$144,676	\$15,568	\$129,108	237.2	6,168
Domestic Water Heating Upgrade			0	0.0	3	\$76	\$72	\$72	\$0	0.0	400
ECM 7	Install Low-Flow DHW Devices	Yes	0	0.0	3	\$76	\$72	\$72	\$0	0.0	400
Food Service & Refrigeration Measures			1,612	0.2	0	\$324	\$230	\$100	\$130	0.4	1,623
ECM 8	Vending Machine Control	Yes	1,612	0.2	0	\$324	\$230	\$100	\$130	0.4	1,623
TOTALS (COST EFFECTIVE MEASURES)			26,530	8.0	-7	\$5,254	\$19,627	\$4,757	\$14,870	2.8	25,411
TOTALS (ALL MEASURES)			30,097	11.9	31	\$6,514	\$186,063	\$21,125	\$164,939	25.3	35,170

REGIONAL DAY SCHOOL

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			43,098	11.2	0	\$5,590	\$22,016	\$5,370	\$16,646	3.0	43,399
ECM 1	Install LED Fixtures	Yes	9,308	0.0	0	\$1,207	\$3,837	\$650	\$3,187	2.6	9,373
ECM 2	Retrofit Fixtures with LED Lamps	Yes	33,790	11.2	0	\$4,383	\$18,179	\$4,720	\$13,459	3.1	34,027
Lighting Control Measures			5,813	1.8	0	\$754	\$7,716	\$1,830	\$5,886	7.8	5,854
ECM 3	Install Occupancy Sensor Lighting Controls	Yes	4,937	1.5	0	\$640	\$6,366	\$815	\$5,551	8.7	4,971
ECM 4	Install High/Low Lighting Controls	Yes	876	0.3	0	\$114	\$1,350	\$1,015	\$335	2.9	882
Variable Frequency Drive (VFD) Measures			3,552	0.9	0	\$461	\$3,812	\$400	\$3,412	7.4	3,576
ECM 5	Install VFDs on Constant Volume (CV) Fans	Yes	3,552	0.9	0	\$461	\$3,812	\$400	\$3,412	7.4	3,576
Unitary HVAC Measures			154,873	145.9	0	\$20,087	\$170,701	\$16,587	\$154,114	7.7	155,956
ECM 6	Install High Efficiency Air Conditioning Units	No	2,646	3.3	0	\$343	\$15,465	\$3,487	\$11,978	34.9	2,665
ECM 7	Install High Efficiency Heat Pumps	Yes	152,227	142.6	0	\$19,744	\$155,237	\$13,100	\$142,137	7.2	153,291
HVAC System Improvements			25,487	0.0	0	\$3,306	\$6,991	\$44	\$6,947	2.1	25,666
ECM 8	Install Programmable Thermostats	Yes	24,065	0.0	0	\$3,121	\$6,927	\$0	\$6,927	2.2	24,233
ECM 9	Install Pipe Insulation	Yes	1,423	0.0	0	\$185	\$63	\$44	\$19	0.1	1,433
Domestic Water Heating Upgrade			2,985	0.0	0	\$387	\$186	\$186	\$0	0.0	3,006
ECM 10	Install Low-Flow DHW Devices	Yes	2,985	0.0	0	\$387	\$186	\$186	\$0	0.0	3,006
Custom Measures			10,771	0.0	0	\$1,397	\$9,400	\$0	\$9,400	6.7	10,846
ECM 11	Install Heat Pump Water Heater	Yes	10,771	0.0	0	\$1,397	\$9,400	\$0	\$9,400	6.7	10,846
TOTALS (COST EFFECTIVE MEASURES)			243,933	156.6	0	\$31,638	\$205,358	\$20,930	\$184,428	5.8	245,638
TOTALS (ALL MEASURES)			246,579	159.9	0	\$31,982	\$220,823	\$24,417	\$196,406	6.1	248,303

DR. MAYA ANGELOU (PS #20)

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			176,218	41.2	-34	\$28,166	\$71,190	\$17,144	\$54,046	1.9	173,447
ECM 1	Install LED Fixtures	Yes	11,611	2.0	0	\$1,870	\$7,467	\$500	\$6,967	3.7	11,644
ECM 2	Retrofit Fixtures with LED Lamps	Yes	164,608	39.2	-34	\$26,295	\$63,723	\$16,644	\$47,079	1.8	161,804
Lighting Control Measures			16,761	3.0	-4	\$2,677	\$13,047	\$7,380	\$5,667	2.1	16,468
ECM 3	Install Occupancy Sensor Lighting Controls	Yes	7,694	1.5	-2	\$1,229	\$5,172	\$595	\$4,577	3.7	7,560
ECM 4	Install High/Low Lighting Controls	Yes	9,067	1.4	-2	\$1,448	\$7,875	\$6,785	\$1,090	0.8	8,908
Variable Frequency Drive (VFD) Measures			10,865	1.0	34	\$2,022	\$7,768	\$800	\$6,968	3.4	14,875
ECM 5	Install VFDs on Constant Volume (CV) Fans	Yes	2,942	0.9	0	\$475	\$3,884	\$400	\$3,484	7.3	2,963
ECM 6	Install VFDs on Kitchen Hood Fan Motors	Yes	7,922	0.1	34	\$1,547	\$3,884	\$400	\$3,484	2.3	11,912
Domestic Water Heating Upgrade			0	0.0	19	\$155	\$294	\$294	\$0	0.0	2,278
ECM 7	Install Low-Flow DHW Devices	Yes	0	0.0	19	\$155	\$294	\$294	\$0	0.0	2,278
Food Service & Refrigeration Measures			1,311	0.2	0	\$212	\$1,517	\$400	\$1,117	5.3	1,320
ECM 8	Refrigerator/Freezer Case Electrically Commutated Motors	Yes	1,311	0.2	0	\$212	\$1,517	\$400	\$1,117	5.3	1,320
TOTALS (COST EFFECTIVE MEASURES)			205,155	45.3	15	\$33,231	\$93,816	\$26,018	\$67,798	2.0	208,388
TOTALS (ALL MEASURES)			205,155	45.3	15	\$33,231	\$93,816	\$26,018	\$67,798	2.0	208,388

PATRICIA NOONAN (PS #26)

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			163,180	45.3	-34	\$23,599	\$76,206	\$19,129	\$57,077	2.4	160,326
ECM 1	Retrofit Fixtures with LED Lamps	Yes	163,180	45.3	-34	\$23,599	\$76,206	\$19,129	\$57,077	2.4	160,326
Lighting Control Measures			14,001	2.5	-3	\$2,025	\$13,031	\$8,435	\$4,596	2.3	13,756
ECM 2	Install Occupancy Sensor Lighting Controls	Yes	3,222	0.6	-1	\$466	\$2,006	\$265	\$1,741	3.7	3,166
ECM 3	Install High/Low Lighting Controls	Yes	10,779	1.8	-2	\$1,559	\$11,025	\$8,170	\$2,855	1.8	10,590
Variable Frequency Drive (VFD) Measures			55,345	20.2	0	\$8,095	\$28,758	\$12,400	\$16,358	2.0	55,732
ECM 4	Install VFDs on Constant Volume (CV) Fans	Yes	55,345	20.2	0	\$8,095	\$28,758	\$12,400	\$16,358	2.0	55,732
Custom Measures			10,298	0.0	302	\$3,883	\$39,360	\$0	\$39,360	10.1	45,729
ECM 5	Retro-Commissioning Study	Yes	10,298	0.0	302	\$3,883	\$39,360	\$0	\$39,360	10.1	45,729
TOTALS (COST EFFECTIVE MEASURES)			242,825	68.0	265	\$37,601	\$157,356	\$39,964	\$117,392	3.1	275,543
TOTALS (ALL MEASURES)			242,825	68.0	265	\$37,601	\$157,356	\$39,964	\$117,392	3.1	275,543

MARCANTHONY DINARO (DUNCAN)

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			58,028	14.2	-13	\$8,775	\$37,218	\$9,809	\$27,409	3.1	56,871
ECM 1	Retrofit Fixtures with LED Lamps	Yes	58,028	14.2	-13	\$8,775	\$37,218	\$9,809	\$27,409	3.1	56,871
Lighting Control Measures			17,938	4.4	-4	\$2,712	\$16,635	\$3,490	\$13,145	4.8	17,580
ECM 2	Install Occupancy Sensor Lighting Controls	Yes	15,661	3.9	-4	\$2,368	\$14,160	\$1,750	\$12,410	5.2	15,349
ECM 3	Install High/Low Lighting Controls	Yes	2,277	0.5	-1	\$344	\$2,475	\$1,740	\$735	2.1	2,231
HVAC System Improvements			0	0.0	7	\$63	\$173	\$120	\$53	0.8	820
ECM 4	Install Pipe Insulation	Yes	0	0.0	7	\$63	\$173	\$120	\$53	0.8	820
Domestic Water Heating Upgrade			0	0.0	7	\$64	\$108	\$108	\$0	0.0	833
ECM 5	Install Low-Flow DHW Devices	Yes	0	0.0	7	\$64	\$108	\$108	\$0	0.0	833
TOTALS (COST EFFECTIVE MEASURES)			75,965	18.6	-3	\$11,614	\$54,134	\$13,527	\$40,607	3.5	76,104
TOTALS (ALL MEASURES)			75,965	18.6	-3	\$11,614	\$54,134	\$13,527	\$40,607	3.5	76,104

PS# 23 ANNEX EARLY CDC

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			20,901	5.6	-4	\$3,763	\$10,847	\$2,580	\$8,267	2.2	20,585
ECM 1	Install LED Fixtures	Yes	2,013	0.0	0	\$366	\$1,348	\$205	\$1,143	3.1	2,027
ECM 2	Retrofit Fixtures with LED Lamps	Yes	18,888	5.6	-4	\$3,397	\$9,499	\$2,375	\$7,124	2.1	18,558
Lighting Control Measures			5,016	1.4	-1	\$902	\$5,625	\$1,815	\$3,810	4.2	4,928
ECM 3	Install Occupancy Sensor Lighting Controls	Yes	3,992	1.1	-1	\$718	\$4,050	\$525	\$3,525	4.9	3,922
ECM 4	Install High/Low Lighting Controls	Yes	1,024	0.3	0	\$184	\$1,575	\$1,290	\$285	1.5	1,006
Variable Frequency Drive (VFD) Measures			3,965	2.0	0	\$720	\$10,778	\$950	\$9,828	13.6	3,992
ECM 5	Install VFDs on Constant Volume (CV) Fans	Yes	3,965	2.0	0	\$720	\$10,778	\$950	\$9,828	13.6	3,992
Unitary HVAC Measures			5,830	7.5	0	\$1,059	\$39,203	\$5,911	\$33,292	31.4	5,871
ECM 6	Install High Efficiency Air Conditioning Units	No	5,830	7.5	0	\$1,059	\$39,203	\$5,911	\$33,292	31.4	5,871
Gas Heating (HVAC/Process) Replacement			0	0.0	12	\$105	\$13,865	\$2,163	\$11,702	111.9	1,370
ECM 7	Install High Efficiency Hot Water Boilers	No	0	0.0	12	\$105	\$13,865	\$2,163	\$11,702	111.9	1,370
Domestic Water Heating Upgrade			0	0.0	2	\$13	\$50	\$50	\$0	0.0	176
ECM 8	Install Low-Flow DHW Devices	Yes	0	0.0	2	\$13	\$50	\$50	\$0	0.0	176
TOTALS (COST EFFECTIVE MEASURES)			29,882	9.0	-3	\$5,399	\$27,300	\$5,395	\$21,905	4.1	29,682
TOTALS (ALL MEASURES)			35,712	16.5	8	\$6,563	\$80,368	\$13,469	\$66,899	10.2	36,923

RENAISSANCE ZERO TOLERANCE

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			37,415	11.3	-16	\$5,951	\$25,004	\$6,537	\$18,467	3.1	34,980
ECM 1	Install LED Fixtures	Yes	1,588	0.0	0	\$264	\$1,037	\$150	\$887	3.4	1,599
ECM 2	Retrofit Fluorescent Fixtures with LED Lamps and Drivers	Yes	681	0.2	0	\$108	\$643	\$100	\$543	5.0	635
ECM 3	Retrofit Fixtures with LED Lamps	Yes	35,146	11.1	-16	\$5,579	\$23,323	\$6,287	\$17,036	3.1	32,747
Lighting Control Measures			7,375	2.2	-3	\$1,171	\$15,761	\$1,970	\$13,791	11.8	6,872
ECM 4	Install Occupancy Sensor Lighting Controls	Yes	7,104	2.2	-3	\$1,128	\$15,086	\$1,655	\$13,431	11.9	6,619
ECM 5	Install High/Low Lighting Controls	Yes	272	0.0	0	\$43	\$675	\$315	\$360	8.3	253
HVAC System Improvements			1,026	0.0	42	\$858	\$588	\$220	\$368	0.4	7,893
ECM 6	Install Pipe Insulation	Yes	1,026	0.0	42	\$858	\$588	\$220	\$368	0.4	7,893
Domestic Water Heating Upgrade			1,112	0.0	0	\$185	\$57	\$57	\$0	0.0	1,120
ECM 7	Install Low-Flow DHW Devices	Yes	1,112	0.0	0	\$185	\$57	\$57	\$0	0.0	1,120
TOTALS (COST EFFECTIVE MEASURES)			46,929	13.5	22	\$8,165	\$41,411	\$8,784	\$32,627	4.0	50,865
TOTALS (ALL MEASURES)			46,929	13.5	22	\$8,165	\$41,411	\$8,784	\$32,627	4.0	50,865

CUNNINGHAM CENTER

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings (\$)	Estimated M&L Cost (\$)	Estimated Incentive (\$)*	Estimated Net M&L Cost (\$)	Simple Payback Period (yrs)**	CO ₂ e Emissions Reduction (lbs)
Lighting Upgrades			29,353	5.9	-4	\$5,038	\$15,121	\$2,990	\$12,131	2.4	29,127
ECM 1	Install LED Fixtures	Yes	11,300	0.0	0	\$1,952	\$5,315	\$750	\$4,565	2.3	11,379
ECM 2	Retrofit Fixtures with LED Lamps	Yes	18,053	5.9	-4	\$3,086	\$9,806	\$2,240	\$7,566	2.5	17,747
Lighting Control Measures			4,804	1.6	-1	\$821	\$6,802	\$1,800	\$5,002	6.1	4,720
ECM 3	Install Occupancy Sensor Lighting Controls	Yes	3,506	1.2	-1	\$599	\$4,552	\$600	\$3,952	6.6	3,445
ECM 4	Install High/Low Lighting Controls	Yes	1,298	0.4	0	\$222	\$2,250	\$1,200	\$1,050	4.7	1,275
Variable Frequency Drive (VFD) Measures			17,800	6.9	0	\$3,075	\$36,230	\$5,300	\$30,930	10.1	17,924
ECM 5	Install VFDs on Constant Volume (CV) Fans	Yes	17,800	6.9	0	\$3,075	\$36,230	\$5,300	\$30,930	10.1	17,924
Unitary HVAC Measures			4,194	8.1	28	\$978	\$61,542	\$7,373	\$54,170	55.4	7,509
ECM 6	Install High Efficiency Air Conditioning Units	No	4,194	8.1	28	\$978	\$61,542	\$7,373	\$54,170	55.4	7,509
HVAC System Improvements			0	0.0	3	\$25	\$87	\$60	\$27	1.0	328
ECM 7	Install Pipe Insulation	Yes	0	0.0	3	\$25	\$87	\$60	\$27	1.0	328
Domestic Water Heating Upgrade			0	0.0	6	\$56	\$93	\$93	\$0	0.0	722
ECM 8	Install Low-Flow DHW Devices	Yes	0	0.0	6	\$56	\$93	\$93	\$0	0.0	722
TOTALS (COST EFFECTIVE MEASURES)			51,957	14.4	4	\$9,016	\$58,333	\$10,243	\$48,089	5.3	52,821
TOTALS (ALL MEASURES)			56,151	22.5	32	\$9,994	\$119,875	\$17,616	\$102,259	10.2	60,330

ENERGY EFFICIENT BEST PRACTICES

- Reduce Air Leakage
- Close Doors and Windows
- Develop a Lighting Maintenance Schedule
- Ensure Lighting Controls Are Operating Properly
- Use Fans to Reduce Cooling Load
- Use Window Treatments/Coverings
- Clean and/or Replace HVAC filters
- Check and Seal Duct Leakage
- Perform Proper Boiler Maintenance
- Perform Proper Water Heater Maintenance
- Plug Load Controls
- Water Conservation

See individual reports for specific EE practices by building



MEASURES FOR FUTURE CONSIDERATION

- Disaggregate Boiler System
- Replace Smooth V-Belts with Notched or Synchronous Belts
- Pool Heating System Upgrades
- Window Replacement
- Heating System Conversion from Steam to Hot Water
- Upgrade to Heat Pump System
- Installation of an Energy Management System
- Replace Fuel Oil Fired Equipment with Natural Gas Equipment
- Retro-Commissioning Study

SOLAR ENERGY GENERATION POTENTIAL

	Admin	Dickinson HS	Ferris	PS #23	PS #17	PS #27	Lincoln	PS #28	
<i>Potential:</i>	Medium	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	
<i>System Potential: (kW)</i>	86	268	460	86	268	226	161	82	
<i>Electric Generation: (kWh per year)</i>	64,710	319,287	548,030	102,458	319,287	269,250	191,811	97,692	
<i>Displaced Cost: (per year)</i>	\$5,350	\$29,140	\$59,310	\$12,080	\$37,110	\$23,840	\$20,860	\$7,610	
	PS #38	PS #24	Wakeman	PS #25	PS #30	PS #11	PS #7	PS #37	PS #5
<i>Potential:</i>	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH
<i>System Potential: (kW)</i>	107	135	182	161	110	161	483	54	183
<i>Electric Generation: (kWh per year)</i>	127,477	160,835	216,829	191,811	131,051	191,811	575,432	64,334	218,021
<i>Displaced Cost: (per year)</i>	\$16,030	\$18,300	\$23,760	\$19,460	\$15,420	\$24,190	\$79,070	\$5,830	\$22,250
	Ps #15	PS #22	Danforth ECC	PS #34	PS #40	PS #12	PS #14	PS #41	
<i>Potential:</i>	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	
<i>System Potential: (kW)</i>	218	132	59	126	123	74	88	236	
<i>Electric Generation: (kWh per year)</i>	259,719	157,261	70,291	150,112	146,538	88,161	104,841	281,163	
<i>Displaced Cost: (per year)</i>	\$26,560	\$18,270	\$10,530	\$16,940	\$16,920	\$14,120	\$13,770	\$30,430	

SOLAR ENERGY GENERATION POTENTIAL

	PS #39	PS #16	PS #31	Maya Angelou	PS #26	Duncan
<i>Potential:</i>	HIGH	HIGH	MEDIUM	HIGH	HIGH	MEDIUM
<i>System Potential: (kW)</i>	106	76	52	286	259	54
<i>Electric Generation: (kWh per year)</i>	126,285	90,545	61,951	340,732	308,565	64,334
<i>Displaced Cost: (per year)</i>	\$14,410	\$14,690	\$10,690	\$54,990	\$45,130	\$9,860

Transition Incentive (TI) Program:

<https://www.njcleanenergy.com/renewable-energy/programs/transition-incentive-program>

Community Solar Energy Pilot Program:

<http://www.NJCleanEnergy.com/CommunitySolar>

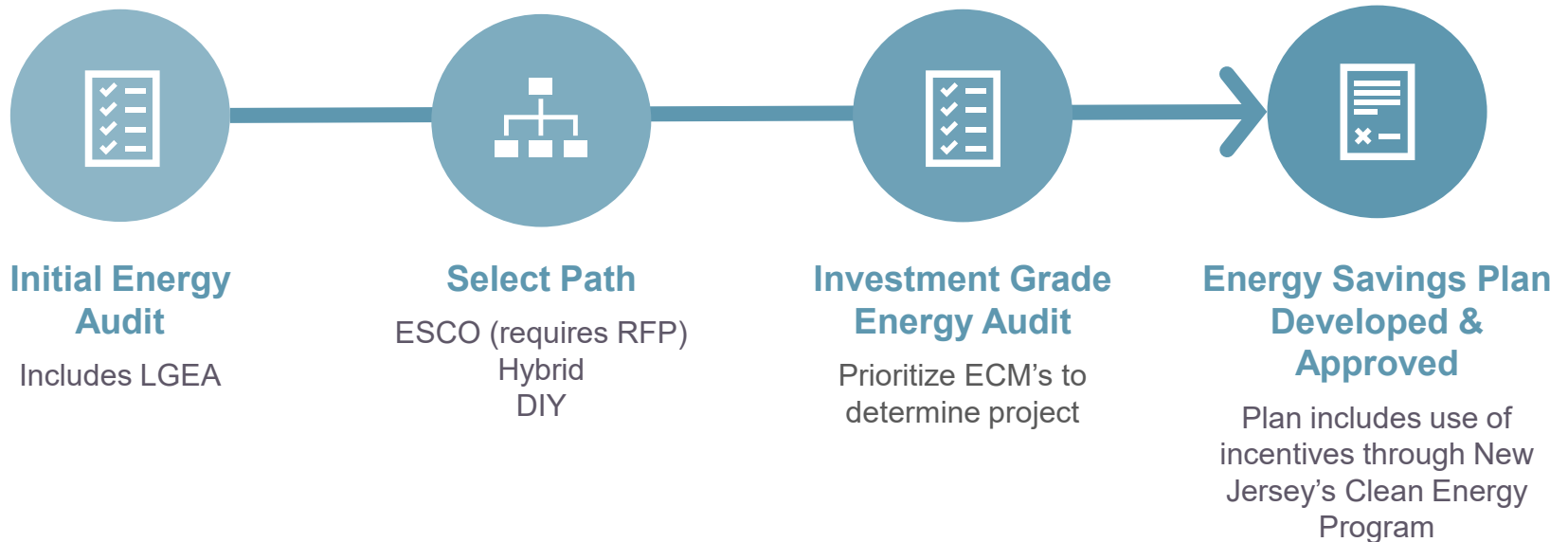
FINANCING MECHANISM: ESIP

ENERGY SAVINGS IMPROVEMENT PROGRAM (ESIP)

- Provides alternative financing for energy savings projects at public institutions
- Administered directly by the NJBPU
- Project is paid for with the value of its own energy savings
- 15 or 20-year repayment term
- NJCEP incentives/rebates are layered within an ESIP
- No upfront capital expenses
- Doesn't require voter approval



FINANCING MECHANISM: ESIP



ENERGY SAVINGS IMPROVEMENT PROGRAM (ESIP)

FOR MORE INFORMATION

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COMMERCIAL & INDUSTRIAL PROGRAMS

<https://www.njcleanenergy.com/transition>

LOCAL
GOVERNMENT
CUSTOMERS

COMMERCIAL &
INSTITUTIONAL
CUSTOMERS

LARGE
ENERGY
CUSTOMERS

EXISTING BUILDINGS

MEASUREMENT & AUDITS

FREE Energy Audits



RETROFITS

Prescriptive &
Custom Rebates

Direct Install

Engineered Solutions

And more from
your local utility!



Incentives up
to \$4 million
for eligible projects



NEW CONSTRUCTION

Prescriptive & Custom
Rebates for New
Construction and
Gut Rehabs

Pay for Performance
incentives for
buildings over
50,000 sq. ft.



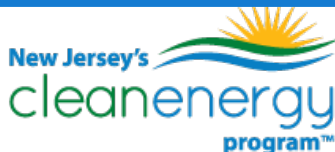
DISTRIBUTED ENERGY RESOURCES

Combined Heat & Power
and Fuel Cell Installation
Incentives

Microgrid Development

Battery Storage

Muni EV Fleets



Key:

Programs run by NJCEP



Programs run by investor-owned utility companies



LARGE ENERGY USERS

NJCleanEnergy.com/LEUP

What is LEUP: The Large Energy Users Program (LEUP) encourages large C&I utility customers to self-invest in energy efficiency and combined heat & power projects and fuel cells.

Qualifications:

- Applicants qualify into the program as an entity (not specific buildings)
- The average peak demand of all facilities submitted $\geq 400\text{kW}$ and/or 4,000 DTh
- For applicants who have not used LEUP in the prior fiscal year, and additional years' worth of energy can be utilized to increase their overall incentive cap.

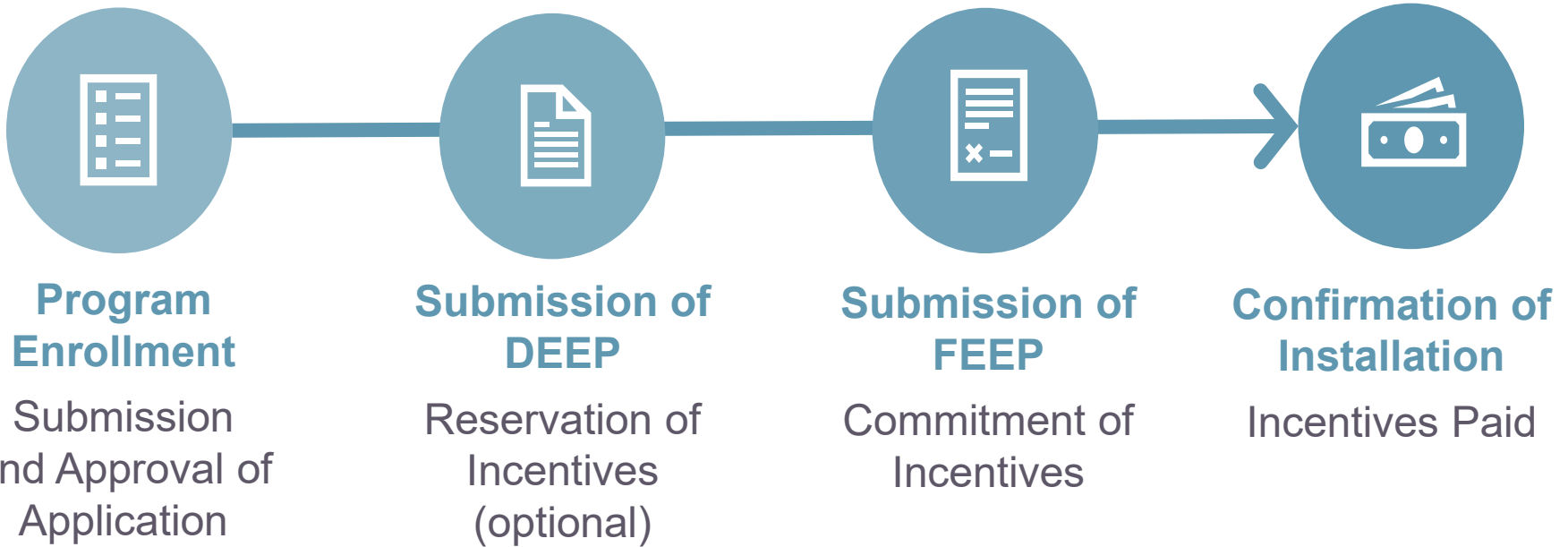
Incentive Cap: Maximum incentive per entity is the lesser of is:

- \$4 million
- 75% of total project
- 90% of NJCEP contribution or annual energy savings cap (\$0.33/kWh and \$3.75/therm)



LARGE ENERGY USERS

NJCleanEnergy.com/LEUP



Customers may submit up to three Draft Energy Efficiency Plans (DEEPs) or Final Energy Efficiency Plans (FEEDs) within the fiscal year enrolled



FOR MORE INFORMATION

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QUESTIONS

