Local Government Energy Audit Report

Welsh Campus

August 11, 2020

Prepared for:

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Disclaimer

The goal of this audit report is to identify potential energy efficiency opportunities, help prioritize specific measures for implementation, and provide information about financial incentives that may be available. Most energy conservation measures have received preliminary analysis of feasibility that identifies expected ranges of savings and costs. This level of analysis is usually considered sufficient to establish a basis for further discussion and to help prioritize energy measures.

TRC reviewed the energy conservation measures and estimates of energy savings for technical accuracy. Actual, achieved energy savings depend on behavioral factors and other uncontrollable variables and, therefore, estimates of final energy savings are not guaranteed. TRC and the New Jersey Board of Public Utilities (NJBPU) shall in no event be liable should the actual energy savings vary.

TRC bases estimated installation costs on our experience at similar facilities, pricing from local contractors and vendors, and/or cost estimates from RS Means. Cost estimates include material and labor pricing associated with installation of primary recommended equipment only. Cost estimates do not include demolition or removal of hazardous waste. We encourage the owner of the facility to independently confirm these cost estimates and to obtain multiple estimates when considering measure installations. Actual installation costs can vary widely based on individual measures and conditions. TRC and NJBPU do not guarantee installed cost estimates and shall in no event be held liable should actual installed costs vary from estimates.

New Jersey's Clean Energy Program (NJCEP) incentive values provided in this report are estimates based on program information available at the time of the report. Incentive levels are not guaranteed. The NJBPU reserves the right to extend, modify, or terminate programs without prior notice. Please review all available program incentives and eligibility requirements prior to selecting and installing any energy conservation measures.

The customer and their respective contractor(s) are responsible to implement energy conservation measures in complete conformance with all applicable local, state and federal requirements.

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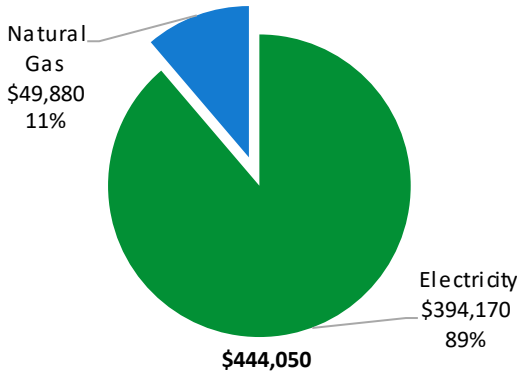
1 EXECUTIVE SUMMARY

The New Jersey Board of Public Utilities (NJBPU) has sponsored this Local Government Energy Audit (LGEA) report for Welsh Campus. This report provides you with information about your facility's energy use, identifies energy conservation measures (ECMs) that can reduce your energy use, and provides information and assistance to help make changes in your facility. TRC conducted this study as part of a comprehensive effort to assist New Jersey school districts and local governments in controlling their energy costs and to help protect our environment by reducing statewide energy consumption.

BUILDING PERFORMANCE REPORT

Annual Utilities	Costs: $444,050 Electricity: 3,717,558 kWh Natural Gas: 51,350 Therms	
ENERGY STAR® Benchmarking Score	N/A *(1-100 scale)*	A standard energy use benchmark is not available for this facility type. This report contains suggestions about how to improve building performance and reduce energy costs.

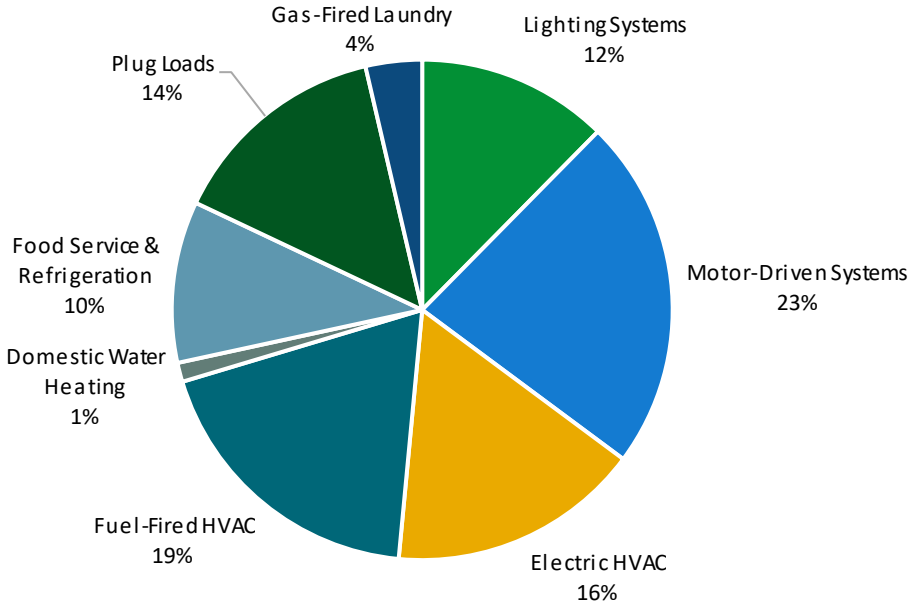


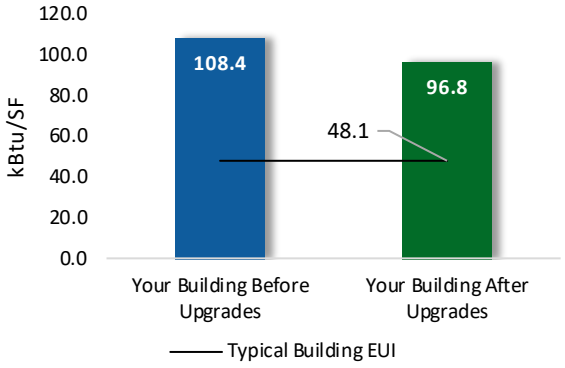
Figure 1 - Energy Use by System

POTENTIAL IMPROVEMENTS

This energy audit considered a range of potential energy improvements in your building. Costs and savings will vary between improvements. Presented below are two potential scopes of work for your consideration.

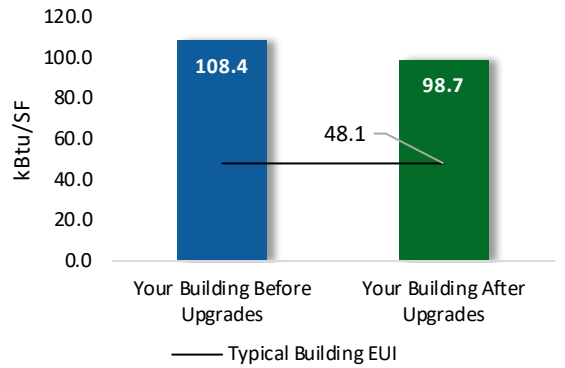
Scenario 1: Full Package (all evaluated measures)

Installation Cost	$360,658
Potential Rebates & Incentives[1]	$28,514
Annual Cost Savings	$52,264
Annual Energy Savings	Electricity: 484,285 kWh Natural Gas: 943 Therms
Greenhouse Gas Emission Savings	249 Tons
Simple Payback	6.4 Years
Site Energy Savings (all utilities)	10%



Scenario 2: Cost Effective Package[2]

Installation Cost	$220,930
Potential Rebates & Incentives	$26,364
Annual Cost Savings	$43,167
Annual Energy Savings	Electricity: 401,379 kWh Natural Gas: 628 Therms
Greenhouse Gas Emission Savings	206 Tons
Simple Payback	4.5 Years
Site Energy Savings (all utilities)	8%



On-site Generation Potential

Photovoltaic	High
Combined Heat and Power	None

[1] Incentives are based on current SmartStart Prescriptive incentives. Other program incentives may apply.

[2] A cost-effective measure is defined as one where the simple payback does not exceed two-thirds of the expected proposed equipment useful life. Simple payback is based on the net measure cost after potential incentives.

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings ($)	Estimated Install Cost ($)	Estimated Incentive ($)*	Estimated Net Cost ($)	Simple Payback Period (yrs)**	CO_2e Emissions Reduction (lbs)
Lighting Upgrades			**265,459**	**39.3**	**-54**	**$27,620**	**$94,437**	**$22,750**	**$71,687**	**2.6**	**260,972**
ECM 1	Install LED Fixtures	Yes	33,680	3.7	-5	$3,524	$22,888	$3,965	$18,923	5.4	33,352
ECM 2	Retrofit Fixtures with LED Lamps	Yes	231,779	35.7	-49	$24,096	$71,549	$18,785	$52,764	2.2	227,620
Lighting Control Measures			**9,687**	**1.4**	**-2**	**$1,007**	**$11,590**	**$1,720**	**$9,870**	**9.8**	**9,513**
ECM 3	Install Occupancy Sensor Lighting Controls	Yes	9,359	1.3	-2	$973	$11,340	$1,470	$9,870	10.1	9,191
ECM 4	Install Daylight Dimming Controls	Yes	328	0.0	0	$34	$250	$250	$0	0.0	322
Variable Frequency Drive (VFD) Measures			**87,592**	**7.0**	**65**	**$9,922**	**$130,602**	**$1,450**	**$129,152**	**13.0**	**95,861**
ECM 5	Install VFDs on Constant Volume (CV) Fans	No	31,879	4.1	0	$3,380	$55,859	$1,150	$54,709	16.2	32,102
ECM 6	Install VFDs on Pool Water Pumps	No	46,440	2.9	0	$4,924	$64,959	$0	$64,959	13.2	46,765
ECM 7	Install VFDs on Kitchen Hood Fan Motors	Yes	9,273	0.0	65	$1,618	$9,783	$300	$9,483	5.9	16,994
Gas Heating (HVAC/Process) Replacement			**0**	**0.0**	**39**	**$382**	**$12,731**	**$2,000**	**$10,731**	**28.1**	**4,602**
ECM 8	Install High Efficiency Hot Water Boilers	No	0	0.0	15	$149	$9,394	$1,000	$8,394	56.5	1,792
ECM 9	Install Infrared Heaters	Yes	0	0.0	24	$233	$3,337	$1,000	$2,337	10.0	2,810
HVAC System Improvements			**5,224**	**0.0**	**28**	**$824**	**$9,880**	**$12**	**$9,868**	**12.0**	**8,516**
ECM 10	Install Programmable Thermostats	Yes	0	0.0	12	$113	$330	$0	$330	2.9	1,359
ECM 11	Implement Demand Control Ventilation (DCV)	No	4,587	0.0	16	$644	$9,516	$0	$9,516	14.8	6,516
ECM 12	Install Pipe Insulation	Yes	636	0.0	0	$67	$35	$12	$23	0.3	641
Domestic Water Heating Upgrade			**4,796**	**0.0**	**18**	**$683**	**$1,418**	**$582**	**$836**	**1.2**	**6,938**
ECM 13	Install Low-Flow DHW Devices	Yes	4,796	0.0	18	$683	$1,418	$582	$836	1.2	6,938
Custom Measures			**111,527**	**0.0**	**0**	**$11,825**	**$100,000**	**$0**	**$100,000**	**8.5**	**112,307**
ECM 14	Electric Sub Metering	Yes	111,527	0.0	0	$11,825	$100,000	$0	$100,000	8.5	112,307
TOTALS (COST EFFECTIVE MEASURES)			**401,379**	**40.7**	**63**	**$43,167**	**$220,930**	**$26,364**	**$194,566**	**4.5**	**411,533**
TOTALS (ALL MEASURES)			**484,285**	**47.7**	**94**	**$52,264**	**$360,658**	**$28,514**	**$332,144**	**6.4**	**498,708**

* - All incentives presented in this table are based on NJ SmartStart equipment incentives and assume proposed equipment meets minimum performance criteria for that program.

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

Figure 2 – Evaluated Energy Improvements

For more detail on each evaluated energy improvement and a break out of cost-effective improvements, see **Section 4: Energy Conservation Measures**.

1.1 Planning Your Project

Careful planning makes for a successful energy project. When considering this scope of work, you will have some decisions to make, such as:

- How will the project be funded and/or financed?
- Is it best to pursue individual ECMs, groups of ECMs, or use a comprehensive approach where all ECMs are installed together?
- Are there other facility improvements that should happen at the same time?

Pick Your Installation Approach

New Jersey's Clean Energy Programs give you the flexibility to do a little or a lot. Rebates, incentives, and financing are available to help reduce both your installation costs and your energy bills. If you are planning to take advantage of these programs, make sure to review incentive program guidelines before proceeding. This is important because in most cases you will need to submit applications for the incentives before purchasing materials or starting installation.

The potential ECMs identified for this building likely qualify for multiple incentive and funding programs. Based on current program rules and requirements, your measures are likely to qualify for the following programs:

Energy Conservation Measure		SmartStart	Direct Install	Pay For Performance
ECM 1	Install LED Fixtures	x		
ECM 2	Retrofit Fixtures with LED Lamps	x		
ECM 3	Install Occupancy Sensor Lighting Controls	x		
ECM 4	Install Daylight Dimming Controls	x		
ECM 5	Install VFDs on Constant Volume (CV) Fans	x		
ECM 6	Install VFDs on Pool Water Pumps			
ECM 7	Install VFDs on Kitchen Hood Fan Motors	x		
ECM 8	Install High Efficiency Hot Water Boilers	x		
ECM 9	Install Infrared Heaters	x		
ECM 10	Install Programmable Thermostats			
ECM 11	Implement Demand Control Ventilation (DCV)			
ECM 12	Install Pipe Insulation	x		
ECM 13	Install Low-Flow DHW Devices	x		
ECM 14	Electric Sub Metering			

Figure 3 – Funding Options

New Jersey's Clean Energy Programs At-A-Glance

	SmartStart Flexibility to install at your own pace	**Direct Install** Turnkey installation	**Pay for Performance** Whole building upgrades
Who should use it?	Buildings installing individual measures or small group of measures.	Small to mid-size facilities that can bundle multiple measures together. Average peak demand should be below 200 kW. Not suitable for significant building shell issues.	Mid to large size facilities looking to implement as many measures as possible at one time. Peak demand should be over 200 kW.
How does it work?	Use in-house staff or your preferred contractor.	Pre-approved contractors pass savings along to you via reduced material and labor costs.	Whole-building approach to energy upgrades designed to reduce energy use by at least 15%. The more you save, the higher the incentives.
What are the Incentives?	Fixed incentives for specific energy efficiency measures.	Incentives pay up to 70% of eligible costs, up to $125,000 per project. You pay the remaining 30% directly to the contractor.	Up to 25% of installation cost, calculated based on level of energy savings per square foot.
How do I participate?	Submit an application for the specific equipment to be installed.	Contact a participating contractor in your region.	Contact a pre-qualified Partner to develop your Energy Reduction Plan and set your energy savings targets.

Take the next step by visiting **www.njcleanenergy.com** for program details, applications, and to contact a qualified contractor.

Individual Measures with SmartStart

For facilities wishing to pursue only selected individual measures (or planning to phase implementation of selected measures over multiple years), incentives are available through the SmartStart program. To participate, you can use internal resources or an outside firm or contractor to perform the final design of the ECM(s) and install the equipment. Program pre-approval is required for some SmartStart incentives, so only after receiving pre-approval should you proceed with ECM installation.

Turnkey Installation with Direct Install

The Direct Install program provides turnkey installation of multiple measures through an authorized network of participating contractors. This program can provide substantially higher incentives than SmartStart, up to 70% of the cost of selected measures. Direct Install contractors will assess and verify individual measure eligibility and, in most cases, they perform the installation work. The Direct Install program is available to sites with an average peak demand of less than 200 kW.

Whole Building Approach with Pay for Performance

Pay for Performance can be a good option for medium to large sized facilities to achieve deep energy savings. Pay for Performance allows you to install as many measures as possible under a single project as well as address measures that may not qualify for other programs. Many facilities pursuing an Energy Savings Improvement Program (ESIP) loan also use this program. Pay for Performance works for larger customers with a peak demand over 200 kW. The minimum installed scope of work must include at least two unique measures resulting in at least 15% energy savings, where lighting cannot make up the majority of the savings.

More Options from Around the State

Financing and Planning Support with the Energy Savings Improvement Program (ESIP)

For larger facilities with limited capital availability to implement ECMs, project financing may be available through the ESIP. Supported directly by the NJBPU, ESIP provides government agencies with project development, design, and implementation support services, as well as, attractive financing for implementing ECMs. You have already taken the first step as an LGEA customer, because this report is required to participate in ESIP.

Resiliency with Return on Investment through Combined Heat & Power (CHP)

The CHP program provides incentives for combined heat and power (aka cogeneration) and waste heat to power projects. Combined heat and power systems generate power on-site and recover heat from the generation system to meet on-site thermal loads. Waste heat to power systems use waste heat to generate power. You will work with a qualified developer who will design a system that meets your building's heating and cooling needs.

Ongoing Electric Savings with Demand Response

The Demand Response Energy Aggregator program reduces electric loads at commercial facilities when wholesale electricity prices are high or when the reliability of the electric grid is threatened due to peak power demand. By enabling commercial facilities to reduce electric demand during times of peak demand, the grid is made more reliable and overall transmission costs are reduced for all ratepayers. Curtailment service providers provide regular payments to medium and large consumers of electric power for their participation in demand response (DR) programs. Program participation is voluntary, and facilities receive payments regardless of whether they are called upon to curtail their load during times of peak demand.

2 EXISTING CONDITIONS

The New Jersey Board of Public Utilities (NJBPU) has sponsored this Local Government Energy Audit (LGEA) Report for Welsh Campus. This report provides information on how your facility uses energy, identifies energy conservation measures (ECMs) that can reduce your energy use, and provides information and assistance to help you implement the ECMs. This report also contains valuable information on financial incentives from New Jersey's Clean Energy Program (NJCEP) for implementing ECMs.

TRC conducted this study as part of a comprehensive effort to assist New Jersey educational and local government facilities in controlling energy costs and protecting our environment by offering a wide range of energy management options and advice.

2.1 Site Overview

From May 13th to May 28, 2020, TRC performed a series of energy audits at Welsh Campus located in Mount Laurel, New Jersey. TRC coordinated with Steven Hitzel to review the facility operations and help focus our investigation on specific energy-using systems.

Bancroft's Welsh Campus provides opportunities to children and young adults with diverse challenges to maximize their potential. Welsh Campus is an 11-building, 166,048-square foot campus built in 2017. Buildings include the Bancroft School/Activity Center, Linden Admin Building, Facilities Building, Residence Hall Linden 100, Residence Hall Linden 200, Residence Hall Linden 300, Residence Hall Transitional 400, Residence Hall Transitional 500, Residence Hall Transitional 600, Residence Hall Transitional 700, and the Greenhouse. Below details the square-footage break-down between each of the buildings on the campus.

Building Name	Square-Footage
Bancroft School/Activity Center	109,000
Linden Admin Building	6,900
Facilities Building	8,100
Residence Hall Linden 100	6,300
Residence Hall Linden 200	6,300
Residence Hall Linden 300	6,300
Residence Hall Transitional 400	6,300
Residence Hall Transitional 500	6,300
Residence Hall Transitional 600	6,300
Residence Hall Transitional 700	3,600
Greenhouse	648

Buildings are used for a variety of purposes. The Bancroft School/Activity Center has the most diverse use of space with areas that include a horticulture instructional area, a Wawa convenience store, an indoor recreation area, corridors, conference rooms, offices, classrooms, restrooms, hallways, storage rooms, mechanical rooms, custodial closets, IT closets, multi-purpose rooms, lobbies, vestibules, fitness rooms, a gymnasium, a dining hall, a commercial kitchen, an indoor recreation-sized pool, a Health Services Center, medical examination rooms, reception areas, laundry rooms, lounges, kitchenette areas, stairwells, main distribution frame (MDF) rooms, and work rooms.

The Linden Admin Building consists primarily of office space, with offices, observation rooms, vestibules, lobbies, corridors, hallways, session rooms, restrooms, waiting areas, conference rooms, storage closets, custodial closets, and mechanical rooms. The Facilities Building is comprised of storage spaces, a garage, a mechanical room, workshop rooms, a mail room, rest rooms, locker rooms, offices, vestibules, hallway, and custodial closets. All seven Residence Halls have similar floor plans which include restrooms, bed rooms, storage closets, laundry rooms, hallways, conference rooms, dining rooms, dens, living rooms, IT closets, attic spaces, nurse's offices, session rooms, kitchens, offices, staff break rooms, and mechanical rooms. The Greenhouse consists of an open area for plants to grow.

This site was built only 3 years ago and there have been no recent improvements to date.

Facility concerns include current energy consumption, lack of electrical sub-metering at the building level, and a desire to upgrade all campus lighting to LED. The current energy consumption and benchmarking through ENERGY STAR® Portfolio Manager® for Welsh Campus is outlined in Section 3. In Section 4, we recommend installing sub-meters at each campus building to provide visibility on building energy use and help pinpoint particular areas for energy use reduction. Section 4 also addresses upgrading the lighting systems around campus to LED.

2.2 Building Occupancy

All of the facilities on this campus are occupied year-round. Typical weekday occupancy is 360 staff and 265 students.

Bancroft School/Activity Center

The Bancroft School/Activity Center has various hours of operation, provided below:

Building Occupancy Schedule		
Building Name	**Weekday/Weekend**	**Operating Schedule**
Bancroft School and Activities Center (B-Wing and C-Wing)	Weekday	8:30 AM - 3:00 PM
	Weekend	Closed
Bancroft School and Activities Center (Health Center)	Weekday	24/7
	Weekend	24/7
Bancroft School and Activities Center (Pool)	Weekday	9:00 AM - 3:00 PM
	Weekend	Closed
Bancroft School and Activities Center (Gymnasium)	Weekday	8:30 AM - 3:30 PM
	Weekend	Various
Bancroft School and Activities Center (Wawa Store)	Weekday	8:30 AM - 4:00 PM
	Weekend	Closed
Bancroft School and Activities Center (A-Wing Administration)	Weekday	7:00 AM - 4:30 PM
	Weekend	Closed
Bancroft School and Activities Center (Kitchen)	Weekday	6:30 AM - 7:00 PM
	Weekend	10:00 AM - 7:00 PM
Bancroft School and Activities Center (Maintenance)	Weekday	7:00 AM - 5:00 PM
	Weekend	Closed

There is much diversity of operations within this building. For instance, the general class hours are from 8:30 AM to 3:00 PM Monday through Friday and the Health Center is open 24/7. The pool and gym are open during typical class hours, and then the gym is available for use after class hours and the weekend for the students that live on campus. The Wawa store is open during the week from 8:30 AM to 4:00 PM and is closed on the weekends. The A-Wing Administrative section is occupied during the week from 7:00 AM to 4:00 PM. The kitchen is open during the week from 6:30 AM to 7:00 PM and on the weekends from 10:00 AM to 7:00 PM. The custodial hours are typically from 7:00 AM to 5:00 PM and not on the weekend.

The range of occupancy requires strict attention to the equipment operating schedule. Operating and maintenance staff should confirm that mechanical equipment is operating as needed to meet the needs of each separate space

Linden Admin Building

The Linden Admin Building's occupancy schedule is as follows:

Building Occupancy Schedule		
Building Name	**Weekday/Weekend**	**Operating Schedule**
Linden Admin Building (Offices)	Weekday	8:00 AM - 5:00 PM
	Weekend	Closed
Linden Admin Building (Maintenance)	Weekday	8:00 AM - 4:30 PM
	Weekend	Closed

This building is a typical office building with weekday use from 8:00 AM to 5:00 PM and is closed on the weekend. The custodial hours are during the week from 8:00 AM to 4:30 PM.

Facilities Building

The Facilities Building is occupied as follows:

Building Occupancy Schedule		
Building Name	**Weekday/Weekend**	**Operating Schedule**
Facilities Building	Weekday	7:00 AM - 3:00 PM
	Weekend	Closed

This building is occupied from 7:00 AM to 3:00 PM during the week and closed during the weekends unless there is pressing work that needs to be taken care of.

Residence Halls 100-700

The Residence Halls occupancy schedules are the same for all seven buildings:

Building Occupancy Schedule		
Building Name	**Weekday/Weekend**	**Operating Schedule**
Residence Hall Linden/Transitional 100-700 (Residence)	Weekday	2:30 PM - 8:00 AM
	Weekend	24/7
Residence Hall Linden/Transitional 100-700 (Maintenance)	Weekday	8:00 AM - 3:00 PM
	Weekend	Closed

These buildings are all occupied when the students are not in classes during the week and all weekend. The custodial staff comes during the times the students are in class.

Greenhouse

The Greenhouse is occupied occasionally but varies through-out the year. The greenhouse is continuously conditioned as needed to support the plant growth.

Building Occupancy Schedule		
Building Name	**Weekday/Weekend**	**Operating Schedule**
Greenhouse	Weekday	Varies
	Weekend	Varies

Figure 4 - Building Occupancy Schedules

2.3 Building Envelope

Bancroft School/Activity Center

At the Bancroft School/Activity Center, the building walls are constructed of fiber cement Hardie board and are in excellent condition. The roof is flat with some areas having a textured roof. The roof is in excellent condition, supported by steel trusses, insulated, and covered by white EPDM membrane. Most of the windows are clear, operable, double pane, and have a mixture of metal and wood frames. Many of the windows have internal shading. The glass-to-frame seals are in good condition. The operable window weather seals are in good condition, showing no evidence of excessive wear. Exterior doors are made of steel and glass with metal frames and are in good condition with undamaged door seals.

Building Envelope

Building Roof

Exterior Windows

Linden Admin Building

At the Linden Admin Building, the building walls are Hardie board and are in excellent condition. The roof is pitched with some areas having a textured roof. The roof is in excellent condition, supported by steel trusses, insulated, and covered by white EPDM membrane. Most of the windows are clear, operable, double pane, and have a mixture of metal and wood frames. Many of the windows have internal shading. The glass-to-frame seals are in good condition. The operable window weather seals are also in good condition, showing no evidence of excessive wear. Exterior doors are made of steel with metal frames and are in good condition with undamaged door seals.

Building Envelope

Building Roof

Exterior Window with Wooden Frame

Facilities Building

At the Facilities Building, the building walls are Hardie board over structural wood and in excellent condition. The roof is flat, covered by white EPDM membrane and in excellent condition. Most of the windows are clear, fixed, double pane, and have metal frames. Many of the windows have internal shading. The glass-to-frame seals are in good condition. Exterior doors are made of steel with metal frames and are also in good condition with undamaged door seals. There is a motorized overhead garage door that is used infrequently.

Building Envelope

Overhead Door

Exterior Windows

Residence Halls 100-700

At the Residence Halls 100-700, the building walls are Hardie board over structural wood and in excellent condition. The roof is pitched, insulated, covered by shingles, and in excellent condition. Most of the windows are clear, operable, double pane, and have wooden frames. Many of the windows have internal shading. The glass-to-frame seals are in good condition. The operable window weather seals are also in good condition, showing no evidence of excessive wear. Exterior doors are made of steel with metal frames and are in good condition with undamaged door seals.

Residence Hall Transitional 500 Building Facade

Common Area Exterior Windows

Bedroom Exterior Windows

Greenhouse

At the Greenhouse, the walls and roof are made of a structural mix of glass and metal. There are metal dampers for outdoor air ventilation. Exterior doors are made of steel with metal frames and are in good condition with undamaged door seals.

Greenhouse Envelope

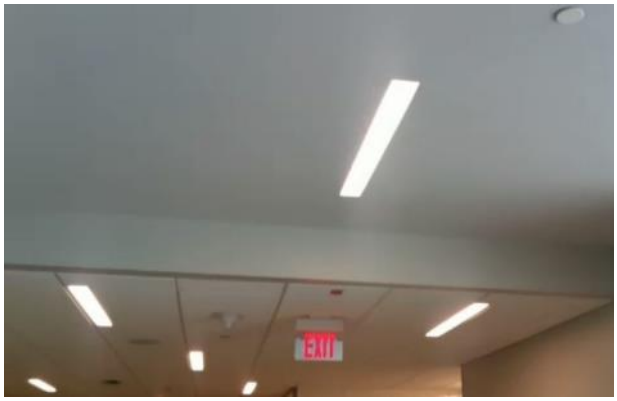
2.4 Lighting Systems

Bancroft School/Activity Center

At the Bancroft School/Activity Center, the primary interior lighting system uses 28-Watt linear fluorescent T8 and 28-Watt linear T5 lamps. Additionally, there are a significant number of compact fluorescent lamps (CFL) and a considerable quantity of LED fixtures and LED tube lamps. Metal halide fixtures are used to illuminate the pool and gymnasium area.

Fixture types include 1- 2- or 3-lamp, 2- or 4-foot long troffer, recessed, pendent mounted, and surface mounted fixtures. There are also various recessed can, surface mounted, direct/indirect, high bay, and wall-wash fixtures. Gymnasium fixtures have high bay metal halide lamps and are manually controlled by high/low controls. Pool fixtures have wall mounted metal halide lamps which are manually controlled by wall switches.

Most fixtures are in good condition. Interior lighting levels are assumed to be sufficient. All exit signs are LED.



Hallway Recessed Fixtures

Rest Room Recessed Can Fixtures

Direct/Indirect Recessed Fixtures

Gymnasium High Bay Fixtures

Most lighting fixtures are controlled by occupancy sensors and the remainder manually by wall switches. There are also many daylight dimming controls used to control fixture operations in well-lit areas, as well as high/low controls designed to supply partial illumination when areas are unoccupied. Some of the main areas are controlled by a timeclock.

Dining Hall Lighting Control

Kitchen Wall Switch

Ceiling Mounted Occupancy Sensor

Exterior fixtures include wall packs, flood lights, and under canopy lights with high intensity discharge (HID) and LED lamps. Exterior light fixtures are controlled by a time clock, photocell, or occupancy sensor, depending on the fixture.

The various parking lot and walk-way fixtures around campus are pole-mounted flood fixtures with LED lamps. These are controlled by a time clock or occupancy sensor, depending on the fixture.

LED Wall Pack

Pole-Mounted Fixture with Occupancy Sensor

Pole-Mounted Walk-Way Fixtures

Pole-Mounted Walk-Way Fixtures

Linden Admin Building

At the Linden Admin Building, the primary interior lighting system uses 28-Watt linear fluorescent T8 lamps. Additionally, some areas are illuminated by CFLs.

Fixture types include recessed can, 1- 2- or 3-lamp, 4-foot long troffer, recessed, pendent mounted, and surface mounted fixtures.

Most fixtures are in good condition. Interior lighting levels are assumed to be sufficient. All exit signs are LED.

Surface Mounted Fixture

Direct/Indirect Fixtures

Recessed Can

Pendent Mounted Fixture

Most lighting fixtures are controlled by occupancy sensors and the remainder manually by wall switches. Several other areas have daylight dimming controls as well as high-low controls. Some common and open areas are controlled by a timeclock.

Wall Mounted Occupancy Sensor

Conference Room Dimmer Controls

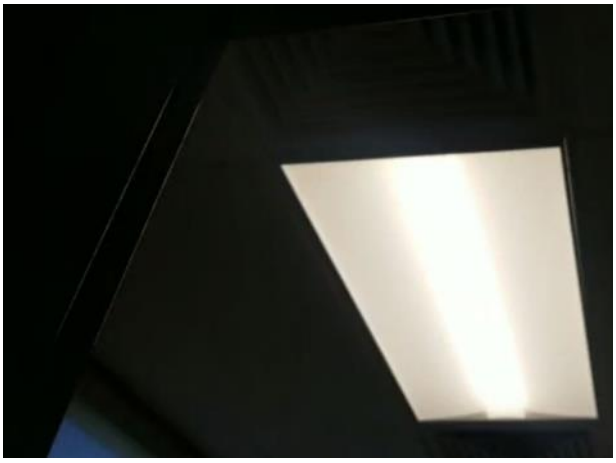
Exterior fixtures include wall packs with LED lamps. Exterior fixtures are photocell and occupancy sensor controlled.

Facilities Building

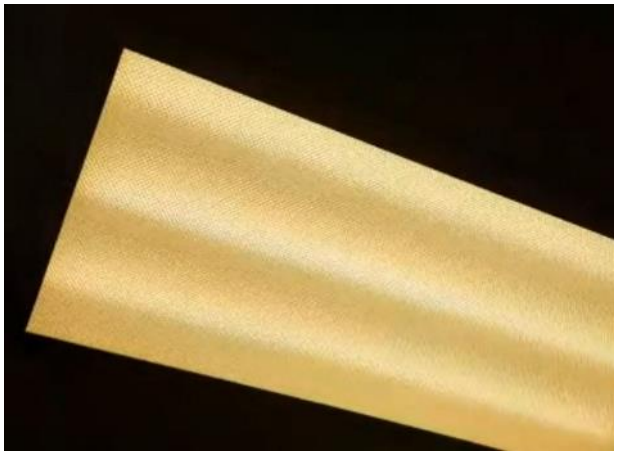
At the Facilities Building, the primary interior lighting system uses 28-Watt linear fluorescent T8 lamps. Fixture types include 1- 2- or 3-lamp, 4-foot long troffer, recessed, direct/indirect, and surface mounted fixtures.

Most fixtures are in good condition. Interior lighting levels are assumed to be sufficient. All exit signs are LED.

Surface Mounted Fixtures



Direct/Indirect Fixture



Recessed Troffer Fixture

Most lighting fixtures are controlled by occupancy sensors and the remainder manually by wall switches.

Ceiling Mounted Occupancy Sensor

Exterior fixtures include wall packs with LED lamps. Exterior fixtures are photocell and occupancy sensor controlled.

LED Wall Pack

Residence Halls 100-700

At the Residence Halls Linden 100-300 as well as Residence Halls Transitional 400-700, the primary interior lighting system uses various LED fixtures, as well as some 28-Watt linear fluorescent T8 lamps, and compact fluorescent lamps (CFL).

Fixture types include recessed, direct/indirect, wall mounted, ceiling mounted, bath vanity, and recessed can fixtures.

Most fixtures are in good condition. Interior lighting levels are assumed to be sufficient. All exit signs are LED.

LED Ceiling Mounted Fixtures

Direct/Indirect Fixture

Hallway Recessed Can Fixtures

LED Wall Mounted Fixture

Most lighting fixtures are controlled manually by wall switches and the remainder by occupancy sensors.

Ceiling Mounted Occupancy Sensor

Exterior fixtures include wall packs with LED lamps. Exterior fixtures are timeclock and occupancy sensor controlled.

LED Wall Pack with Occupancy Sensor

Greenhouse

At the Greenhouse, the only fixtures are 28-Watt linear fluorescent T8 lamps controlled manually by a wall switch. These fixtures are 2-lamp, 4-foot pendent mounted fixtures. These fixtures are in good condition. There are no exit signs or exterior fixtures.

Pendant Mounted Fixtures

2.5 Air Handling Systems

Terminal Unit Heaters

Bancroft School/Activity Center

At the Bancroft School/Activity Center, variable air volume (VAV) boxes are recessed in the ceiling throughout the building. These 119 VAV boxes are equipped with electric resistance reheat coils, ranging from 1.71 to 40.95-MBh. These units are used as supplemental heating during the cooling season to re-adjust the space temperature that call for warmer air than what the packaged ACs are providing. More information about these VAV boxes is provided in the table below:

Quantity	Heating Capacity (MBh)
3	1.71
14	3.41
25	5.12
6	6.82
7	8.53
6	10.24
10	11.94
27	13.65
14	15.35
1	17.06
1	18.77
2	22.18
1	30.71
1	40.95
1	29.00

Electric resistance heating units provide heat to other areas. There are three 6.82-MBh, 1.0-COP cabinet unit heaters in the building, each with an estimated 1/12 hp supply fan motor. There are also many electric resistance baseboard heaters, summarized in the table below:

Location	Quantity	Capacity (MBh)
Margaret House	2	5.12
Second Floor Hallway	2	5.12
TS Lounge 226	2	5.12
TS Lounge 211	2	5.12
Indoor Recreation 109	10	5.12
Multi-Purpose Room 119	2	4.09
Multi-Purpose Room 119	3	5.12
Entrance Lobby 105	7	5.12
Entrance Lobby 105	1	4.09
Corridor 85	5	5.12
Corridor 85	1	2.56
Main Entrance Lobby 40	2	5.12
Dining Hall 1	7	5.12
Dining Hall 1	1	2.56
Custodial Maintenance Instruction Area 56	1	3.41
Custodial Maintenance Instruction Area 56	2	5.12
HS Home Economics/Lounge 77	5	3.41
HS Lounge 57	3	3.41
El. Home Economics/Lounge 16	2	5.12
ES. Lounge 32	2	5.12
Corridor 38	1	5.12
Corridor 38	1	2.05
ES Lounge 23	1	5.12

Two gas-fired Reznor warm air heaters are serving Mechanical Room #12 in the Bancroft School/Activity Center, each with a 121.8-MBh heating capacity and operating at 93% efficiency. These units each have 1/4 hp supply fan motors.

Hallway Electric Baseboard Heater

Warm Air Unit Heater

Linden Admin Building

At the Linden Admin Building, three electric resistance cabinet unit heaters are equipped with fractional horsepower supply fan motors serving vestibules and hallways. Information about these units is provided below:

Unit Tag	Area Served	Heating Capacity (MBh)	Heating Efficiency (COP)	Supply Fan Motor (HP)
CUH-HA-1	Vestibule 0	6.83	1.0	1/15
CUH-HA-2	Hallway	6.83	1.0	1/15
CUH-HA-3	Hallway	6.83	1.0	1/15

There are also various sections of electric baseboard heating at the Linden Admin Building. Information about these various electric baseboard heaters is provided in the table below:

Unit Tag	Area Served	Quantity	Heating Capacity (MBh)	Heating Efficiency (COP)
EB-HA-1	Conference Room 16	2	3.58	1.00
EB-HA-1	Conference Room 17	2	3.58	1.00
EB-HA-2	Observation Room 6	1	2.05	1.00
EB-HA-3	Observation Room 6	3	2.56	1.00

Vestibule Electric Resistance Heater

Facilities Building

At the Facilities Building, there are three electric resistance cabinet unit heaters serving the vestibule and hallways, each equipped with a fractional horsepower, constant speed supply fan motor. These units all have a heating capacity of 6.83-MBh with 1.0 COP. There is also one gas-fired warm air unit heater serving Storage Room 56, equipped with a constant speed, 1/4 hp supply fan motor. This unit has an estimated heating capacity of 20.0-MBh, with an 80.0% efficiency. Serving the Garage and Mechanical Room #59 are three infrared unit heaters, each with a 48.0-MBh heating capacity, and 80.0% efficiency.

Gas-Fired Warm Air Unit Heater

Infrared Unit Heaters

Electric Cabinet Unit Heater

Greenhouse

The Greenhouse uses one Modine warm air unit heater to meet the heating needs of the space. This unit is equipped with a 1/12 hp, constant speed supply fan motor. The heating capacity of this unit is 60.0-MBh and the efficiency is 80%.

Packaged Units

Bancroft School/Activity Center

The Bancroft School/Activity Center is served by 12 packaged roof top units (RTUs). All 12 packaged ACs have direct expansion (DX) coils, and 11 of these units are equipped with gas-fired furnaces. One unit is equipped with electric resistance heating. All of these units are equipped with variable speed supply fan and exhaust fan motors. The units are all equipped with economizers that are in good condition. More information about these units and the areas served is provided below:

Unit Tag	Area Served	Cooling Capacity (Tons)	Cooling Efficiency (EER)	Heating Capacity (MBh)	Heating Efficiency	Supply Fan Motor Quantity/ HP	Exhaust Fan Motor Quantity/ HP
RTU-V-1	Activity Center	50.0	10.40	640.0	80.0%	1 (20.0 HP)	3 (1.0 HP)
RTU-G-1	Gymnasium Area	15.0	11.00	160.0	80.0%	1 (5.0 HP)	1 (2.0 HP)
RTU-O-1	Health Services & Offices	75.0	9.70	1,000.0	80.0%	1 (25.0 HP)	2 (5.0 HP)
DH-1	Pool	12.0	10.50*	136.5	1.0 COP	2 (3.0 HP)	1 (1.5 HP)
MAU-K-1	Kitchen	5.48	10.50*	160.0	80.0%	1 (1.5 HP)	-
RTU-K-1	Dining Hall	50.0	10.40	640.0	80.0%	1 (7.5 HP)	3 (1.0 HP)
RTU-E-1	B-Wing Left Section	40.0	10.30	640.0	80.0%	1 (15.0 HP)	3 (1.0 HP)
RTU-E-2	B-Wing Right Section	40.0	10.30	640.0	80.0%	1 (15.0 HP)	3 (1.0 HP)
RTU-HS-1	C-Wing Left Section	40.0	10.30	640.0	80.0%	1 (15.0 HP)	3 (1.0 HP)
RTU-HS-2	C-Wing Right Section	50.0	10.40	640.0	80.0%	1 (15.0 HP)	3 (1.0 HP)
RTU-T-1	Second Floor B-Wing	40.0	10.30	640.0	80.0%	1 (15.0 HP)	3 (1.0 HP)
RTU-T-2	Second Floor B-Wing	40.0	10.30	640.0	80.0%	1 (15.0 HP)	3 (1.0 HP)

*The cooling efficiencies for the DH-1 and MAU-K-1 have been estimated because the information was not available.

Serving the Kitchen/Dining Hall area is an Energy Recovery Ventilator (ERV) with a 1/3 hp supply fan motor and a 1/3 HP exhaust fan motor, these are both equipped with variable speed motors. This unit increases the efficiency of the associated packaged AC by pre-conditioning the intake air.

RTU Serving Activity Center

Greenheck MAU Serving Kitchen

Linden Admin Building

The Linden Admin Building uses two roof mounted packaged ACs to condition the space. These units are both equipped with variable speed supply fan motors, DX coils, and gas-fired furnaces. More information about these units is provided below:

Unit Tag	Area Served	Cooling Capacity (Tons)	Cooling Efficiency (EER)	Heating Capacity (MBh)	Heating Efficiency	Supply Fan Motor (HP)
Left Section	RTU-HA-1	20.0	10.0	384.0	80.0%	5.0 HP
Right Section	RTU-HA-2	12.0	11.0	204.0	81.0%	5.0 HP

Roof Top Unit

Facilities Building

Facilities Building is conditioned by one packaged AC unit equipped with a DX coil, a gas-fired furnace, and a variable speed 5.0 hp supply fan motor. This Daikin unit has a 16.0-Ton cooling capacity with a 11.1 rated EER. The heating capacity of this unit is 202.5-MBh, with an 81% efficiency.

Residence Halls 100 - 600

At Residence Halls Linden 100-300, as well as Residence Halls Transitional 400-600, there are three air handling units (AHUs) located in the crawlspace. These AHUs are equipped with constant speed supply fans, DX coils, a gas-fired furnace, and an associated energy recovery ventilator. The ERVs are equipped with constant speed, fractional horsepower supply and exhaust fan motors. The DX coils within each air handler are served by a split system air conditioner located outside. Below summarizes what the equipment specifications at each building:

Unit Tag	Cooling Capacity (Tons)	Cooling Efficiency (SEER)	Heating Capacity (MBh)	Heating Efficiency	Supply Fan Motor (HP)
AHU-1	3.0	16.50	77.60	97.0%	0.5
AHU-2	5.0	15.50	97.0	97.0%	1.0
AHU-3	3.0	16.50	77.6	97.0%	0.5

Gas-Fired Furnace Serving AHU

AHU Ductwork

Residence Hall 700

At the Residence Hall Transitional 700, there are two air handling units located in the crawlspace. Each of the two units are equipped with constant speed supply fan motors, DX coils, a gas-fired furnace, and an associated energy recovery ventilator. The ERV is equipped with constant speed, fractional horsepower supply and exhaust fan motors. The DX coils in each unit are served by split system ACs located outside. Below summarizes the AHU system for Residence Hall Transitional 700.

Unit Tag	Cooling Capacity (Tons)	Cooling Efficiency (SEER)	Heating Capacity (MBh)	Heating Efficiency	Supply Fan Motor (HP)
AHU-1	5.0	16.50	77.6	97.0%	$^{3}/_{4}$
AHU-2	3.0	19.50	58.2	97.0%	$^{1}/_{2}$

Gas-Fired Furnace Serving AHU

Refer to Appendix A for detailed information about each unit.

Air Conditioners

Bancroft School/Activity Center

At the Bancroft School/Activity Center, there are seven ductless mini-split system air conditioners (AC) and heat pumps (HP). These units serve various IDF rooms, vestibules, and a main distribution frame (MDF) room. Each of these units has a fractional horsepower, constant speed condensate pump. These units are set to supply temperatures at approximately 72°F year-round, and each unit has a dedicated programable thermostat. More information about these units is provided below:

Tag	Area Served	Unit Type	Cooling Capacity (Tons)	Cooling Efficiency (SEER)	Heating Capacity (MBh)	Heating Efficiency (COP)
AC-O-1	Vestibule 39	Heat Pump	1.50	18.60	20.0	4.00
AC-T-1	IDF Room 221	Air Conditioner	1.50	18.60	-	-
AC-E-1	IDF Room 31A	Air Conditioner	1.50	18.60	-	-
AC-V-1	IDF Room 120	Heat Pump	1.50	18.60	20.0	4.00
AC-V-2	Vestibule	Heat Pump	1.50	18.60	20.0	4.00
AC-HS-1	IDF Room 67	Air Conditioner	1.50	18.60	-	-
AC-HS-2	MDF Room 50B	Air Conditioner	3.50	16.00	-	-

IT Room Ductless Mini-Split System

IDF Room Ductless Mini-Split System

Heat Pump Outdoor Condensing Unit

Facilities Building

Room 51B is served by a ductless mini-split system heat pump with a fractional horsepower condensate pump. This unit has a cooling capacity of 1.0-ton, cooling efficiency of 15.0 SEER, heating capacity of 12.0-MBh, and heating efficiency of 3.88 COP. This unit is set to supply temperatures of approximately 72°F year-round and is scheduled by a dedicated programable thermostat.

IDF Room Ductless Mini-Split System Heat Pump

Residence Halls 100-700

Each of the seven residence halls has a ductless mini-split system HP that serves the IT room. This unit has a cooling capacity of 1.50-Tons, a cooling efficiency of 19.50 SEER, a heating capacity of 18.0-MBh, and a heating efficiency of 3.36 COP. These units are set to supply temperatures of approximately 72°F year-round, controlled by a dedicated programable thermostat.

IT Room Ductless Mini-Split System HP

2.6 Heating Hot Water Systems

Bancroft School/ Activity Center

A Lochinvar 240.0-MBh non-condensing hot water boiler serves the pool heating load. The burners are fully modulating with a nominal efficiency of 80%. Installed in 2017, this unit is in good condition. The boilers serve a primary only distribution system with one constant speed 10.0 hp pool filtration pump.

The pool temperature is typically kept at approximately 87°F year-round, while the indoor space temperature is kept at about 82°F.

Pool Overview

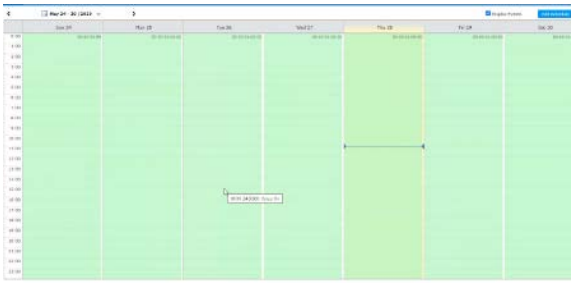
Pool Filtration Graphic

2.7 Building Energy Management Systems (EMS)

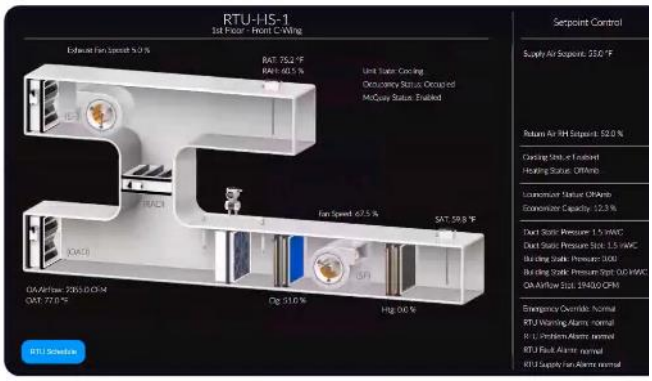
Bancroft School/Activity Center

An EMS controls the packaged AC units, exhaust fans, occupancy schedules, unit heaters, VAV boxes, cabinet unit heaters, and domestic hot water heaters. The EMS provides equipment scheduling control, interactive floor plans, monitors and controls space temperatures, set-point temperatures, supply air temperatures, return air temperatures, set-back temperatures, outside air temperature, current and desired CFM, percent heating in VAV boxes, percent heating and cooling in RTUs, economizer capacity, duct static pressure humidity, exhaust fan operation statuses, electric baseboard operation statuses, filter cleanliness statuses, supply fan operation statuses and speed, DHW set-point temperatures, DHW supply temperatures, DHW pump statuses, and DHW ignition statuses.

According to the EMS, the occupancy schedules for this building are generally from 5:00 AM to 6:00 PM, Monday through Friday. Some areas deviate from this general schedule for areas that are occupied for longer periods of time during the week, including the kitchen, the dining hall, the activity center, and the gymnasium. The RTU that serves the kitchen area has an occupancy schedule of 4:00 AM to 6:00 PM Monday and Wednesday through Friday, 4:00 AM to 10:00 PM on Tuesday, and 8:30 AM to 7:00 PM Saturday and Sunday. The RTU serving the Activity Center has an occupancy schedule of 5:00 AM to 6:00 PM Monday through Friday, and 10:00 AM to 6:00 PM Saturday and Sunday. The RTU serving the gym has an occupancy schedule of 24/7. It was noticed by facility personnel during the audit that this schedule was longer than needed for this area of the building and should be reduced.



Gymnasium RTU Occupancy Schedule



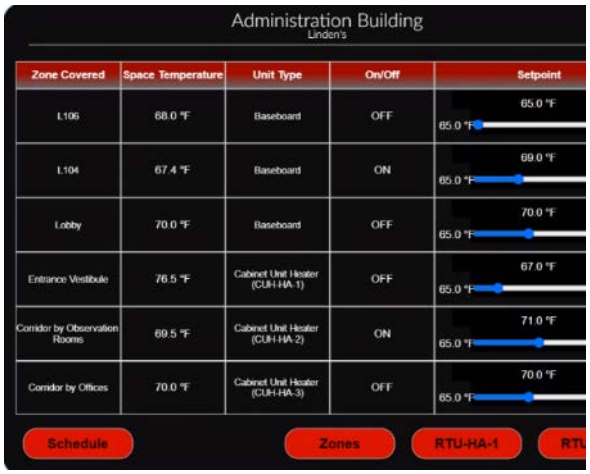
RTU-HS-1 EMS Display

DHW EMS Display

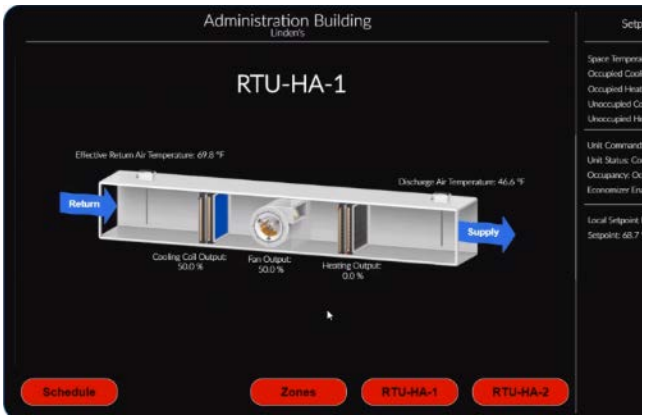
VAV-E-8 EMS Display

An EMS controls the occupancy schedules, electric baseboard heaters, cabinet unit heaters, packaged AC units, and exhaust fans. The EMS provides equipment scheduling control, monitors and controls space temperatures, set-point temperatures, supply air temperatures, return air temperatures, operation status of units, supply fan operation status and speed, percent heating and cooling, exhaust fan operation status, and exhaust fan damper status.

According to the BMS, the typical occupancy schedule is from 5:00 AM to 5:00 PM Monday through Friday and from 7:00 AM to 5:00 PM Saturday and Sunday.

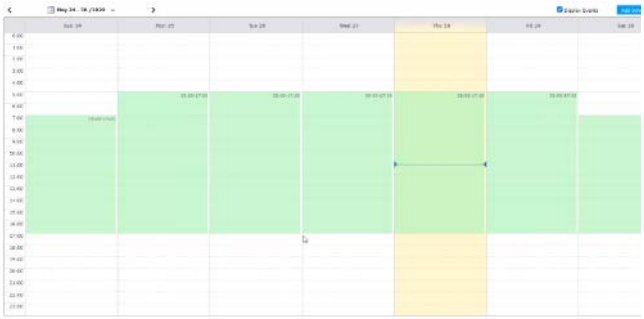


Baseboard and CUH EMS Display



RTU-HA-1 EMS Display

Exhaust Fan EMS Display



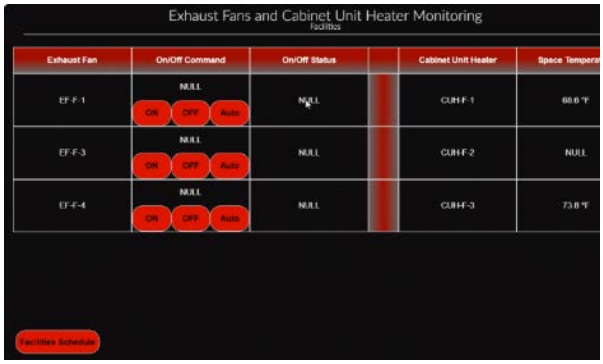
Building Occupancy Schedule

Facilities Building

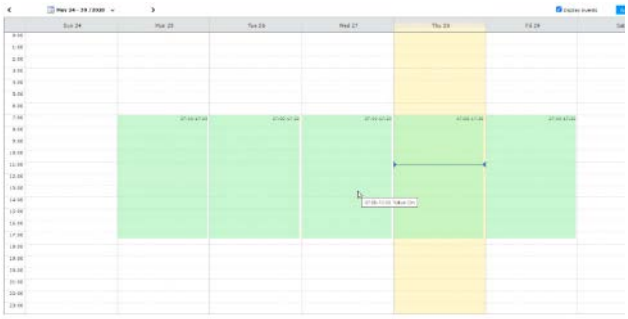
An EMS controls the occupancy schedule, exhaust fans, and cabinet unit heaters. The RTU serving the facilities building is not communicating with the BMS because it is missing a BACnet card. A thermostat is used to control this unit's temperature and occupancy schedule. We are recommending including the installation of a BACnet card for this equipment in your budget. The EMS provides equipment scheduling control, monitors and controls space temperatures, and exhaust fan operation statuses.

According to the BMS, the occupancy schedule for this building is from 7:00 AM to 5:30 PM Monday through Friday.

Facilities Building Space Temperatures



Exhaust Fan and CUH Display



Building Occupancy Schedule

Residence Halls 100-700

An EMS controls the air handling units at each of the residence halls. The EMS monitors and controls the space temperatures, occupied/unoccupied set-point temperatures, unit operation mode, ERV supply air temperatures, and outside air temperatures. These sites do not have occupancy schedules because they are residence halls, occupied 24/7.

Linden 100 AC/ ERV-1 EMS Display

Linden 300 AC/ ERV-2 EMS Display

Transitional 500 AC/ ERV-3 EMS Display

Transitional 700 AC/ EV-2 EMS Display

2.8 Domestic Hot Water

Bancroft School/Activity Center

Hot water is produced with seven different storage water heaters throughout the various sections of the building. Below summarizes these hot water heaters:

Location of Unit	Fuel Type	Input Capacity	Tank Capacity (Gallons)	System Efficiency
Janitorial Closet 215	Natural Gas	399.0 MBh	130.0	96.5%
Dishwash & Dry Storage 114A	Electric	6.0 kW	65.0	-
Janitorial Closet 85A	Natural Gas	399.0 MBh	130.0	96.5%
Men's Rest Room 42	Electric	4.5 kW	19.0	-
Mechanical Room 12	Natural Gas	199.9 MBh	100.0	96.0%
Mechanical Room 12	Natural Gas	199.9 MBh	100.0	96.0%
Janitorial Closet 82	Natural Gas	399.0 MBh	130.0	96.5%

Each of these seven hot water heaters has a fractional hp DHW circulation pump to distribute water to end uses, controlled by a 24-hour analog clock timer. At the time of the site visit, the domestic water heaters were set at 120°F and supplying at temperatures between 116-118°F.

The domestic hot water pipes are insulated, and the insulation is in good condition.

When the storage tank water heaters reach the end of their useful life, you may want to consider heating domestic hot water using heat pumps if you wish to reduce the facility carbon footprint.

PVI Domestic Hot Water Storage Tank Water Heater

DHW Circulation Pump

Mechanical Room 12: Multiple DHW Storage Tank Water Heaters

PVI DHW Supply Temperature

Linden Admin Building

Hot water is produced with a Bradford White 65-gallon, 4.0-kW electric storage water heater located in Mechanical Room 20. Additional hot water is produced by a Bradford White 30-gallon, 4.5-kW electric storage water heater located in Wash Closet Storage 14A. Two fractional hp circulation pumps distribute water to end uses. The circulation pumps operate based on a 24-hour analog clock timer.

The domestic hot water pipes are insulated, and the insulation is in good condition.

DHW Storage Tank Water Heater

DHW Circulation Pump

Facilities Building

Hot water is produced with an AO Smith 20-gallon, 6.0-kW electric storage water heater located in Janitorial Closet 58A. One fractional hp circulation pump distributes water to end uses. The circulation pump operates based on a 24-hour analog clock timer.

The domestic hot water pipes are not insulated and the missing insulation accounts for about 6-feet of the pipe length.

DHW Storage Tank Water Heater and Insulated Piping

Residence Halls 100-700

At each residence hall, hot water is produced by an AO Smith 119-gallon, 300.0-MBh gas-fired storage water heater operating at a 96% efficiency. One fractional hp circulation pump distributes water to end uses in each building. The circulation pumps operate based on a 24-hour analog clock timer.

Domestic hot water pipes are insulated, and the insulation is in good condition.

Transitional 500 DHW Storage Tank Water Heater

Transitional 700 DHW Storage Tank Water Heater

DHW Circulation Pump

2.9 Food Service Equipment

Bancroft School/Activity Center

The kitchen has a mix of gas and electric equipment that is used to prepare meals for students and staff. Most cooking is done using several gas-fired convection ovens. There is also a gas-fired steamer, a gas-fired large vat fryer, and a gas-fired combination oven. Bulk prepared foods are held in several electric holding cabinets. Most equipment is high efficiency and is in good condition.

There are also several lounges throughout the building that are used to teach the students how to cook, equipped with convection ovens and stove-top ranges.

The dishwasher is an ENERGY STAR® high temperature, multi-tank conveyor type unit. There is an electric booster water heater serving the dishwasher with an input capacity of 15.0-kW.

Visit https://www.energystar.gov/products/commercial_food_service_equipment for the latest information on high efficiency food service equipment.

Gas-Fired Range Oven

Gas-Fired Combination Oven/Steamer

Gas-Fired Large Vat Fryer

Lounge Oven & Stove-Top Range

Residence Halls 100-700

Each of the Residence Halls 100-700 has a kitchen with a mix of gas and electric equipment that is used to prepare meals for students that are residents of these buildings. Most cooking is done using the two electric convection ovens and one gas-fired stove-top located in Residence Halls 100-600. In Residence Hall Transitional 700, there is only one electric convection oven and one gas-fired stove-top. All equipment is high efficiency and is in good condition.

Visit https://www.energystar.gov/products/commercial_food_service_equipment for the latest information on high efficiency food service equipment.

Residential 500 Electric Convection Oven

2.10 Refrigeration

Bancroft School/Activity Center

The kitchen has several stand-up refrigerators with either solid or glass doors. There is also an energy efficient stand-up glass door freezer. There is a refrigerator chest as well. Most equipment is high efficiency and in good condition.

In the main kitchen there are two walk-in medium temperature freezers and one low temperature freezer. The two medium temperature freezers have a 0.57-ton compressor located on the roof and one 49.7-Watt fan evaporator. The low temperature freezer has a 0.58-ton compressor located on the roof and one 49.7-Watt fan evaporator. All three of these walk-ins have evaporator fan control, EC fan motors, and electric defrost control.

There is also a reach-in refrigerated deli case at the Wawa with an estimated 0.20-ton compressor capacity and two fan evaporators. In the main kitchen for the school there is also a Scotsman ice maker.

Visit https://www.energystar.gov/products/commercial_food_service_equipment for the latest information on high efficiency food service equipment.

Walk-In Freezer Temperature

Residence Halls 100-700

Each of the Residence Halls 100-600 has one stand-up solid door, standard efficiency freezer. At Residence Hall Transitional 700 there are two stand-up solid door, standard efficiency freezers.

Visit https://www.energystar.gov/products/commercial_food_service_equipment for the latest information on high efficiency food service equipment.

2.11 Plug Load & Vending Machines

You may wish to consider paying particular attention to minimizing your plug load usage. This report makes suggestions for ECMs in this area as well as Energy Efficient Best Practices.

Bancroft School/Activity Center

There are approximately 197 computer and laptop workstations throughout the facility. Plug loads throughout the building include general classroom, office, health care, exercise, and cafe equipment.

There are classroom typical loads such as smart boards, printers, TVs, paper shredders, sound systems, speakers, and projectors. There are café/kitchen typical loads such as microwaves, microwave ovens, coffee machines, espresso machines, a hot dog grill, a deli meat slicer, a hot dog bun warmer, hot wells, cold wells, mini fridges, undercounter dishwashers, residential refrigerators, toasters, and POS registers. There is also exercise/recreational equipment including trend mills, bikes, a motorized basketball backboard, and a scoreboard. There is various miscellaneous equipment such as squeeze machines, miscellaneous medical equipment, and an elevator motor. There are several electric washing machines as well as gas-fired dryers that are used about four times per day.

There are no vending machines on this campus.

Classroom Smart Board

Office Printer

Washing Machines

Mini Fridge

There are approximately 43 computer workstations throughout the facility. Plug loads throughout the building include general café and office equipment. There are typical loads such as printers, paper shredders, TVs, microwaves, and coffee machines. There is a residential style refrigerator that is used to store personal food and beverage items. This unit is in good condition.

Café Typical Loads

Office Typical Loads

Paper Shredder

Facilities Building

There are approximately 5 computer and laptop workstations throughout the facility. Plug loads throughout the building include general café, office, and shop equipment. There are café and office typical loads such as coffee machines, microwaves, toasters, and mini fridges. There are also shop typical loads such as motorized garage doors, chop saws, table saws, belt saws, drill presses, and bench grinders.

There is a residential style refrigerator that is used to store personal food and beverage items. This unit is in good condition.

Chop Saw

Table Saw

Residence Halls 100-700

At each of the seven residence halls, there are approximately two computer workstations. Plug loads throughout the building include general kitchen, residence, and office equipment. There are typical loads such as undercounter dishwashers, microwaves, toaster ovens, toasters, coffee machines, blenders, crockpots, TVs, iPads, printers, mini fridges, and any other plug loads a student may have in their rooms.

There are also electric washing machines as well as gas-fired dryers that are used on a daily basis.

There are several residential style refrigerators that are used to store personal food and beverage items. They are in good condition.

Washing Machines and Dryers

Residential Refrigerator

Toaster Oven

TV

Greenhouse

The Greenhouse has very minimal plug loads, including two fans that circulate air in the space and two exhaust fans for ventilation.

Greenhouse Overview

2.12 Water-Using Systems

Bancroft School/Activity Center

There are 73 restrooms with toilets, urinals, and sinks. Faucet flow rates range from 0.5 to 2.0 gallons per minute (gpm) or higher.

There are five restrooms with showers and showerheads are rated at 2.5 gpm and are not used often.

Rest Room Sink

Linden Admin Building

There are three restrooms with toilets, urinals, and sinks. Faucet flow rates are at 0.5 gallons per minute (gpm) or higher. There is one restroom with a shower and showerhead rated at 2.5 gpm.

Facilities Building

There are two restrooms with toilets, urinals, and sinks. Faucet flow rates are at 0.5 gallons per minute (gpm) or higher.

Residence Halls 100-700

At each residence hall, there are seven restrooms with toilets, urinals, and sinks. Faucet flow rates are at 0.5 gallons per minute (gpm) or higher.

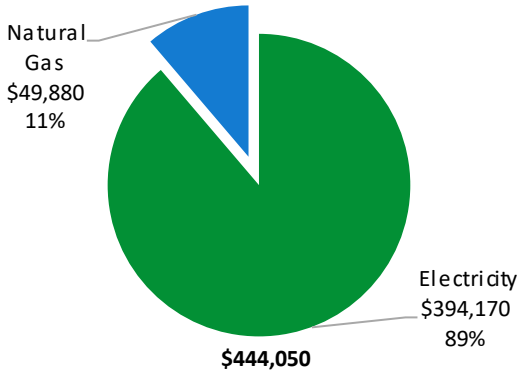
2.13 Process Equipment

At the Bancroft School, there are various pumps and motors involved in the pool heating, chemical treating, and filtration process. These various motors include: an air compressor with one 2.0 hp constant speed motor, a 10.0 hp constant speed pool filtration pump, a 15.0 hp constant speed pool spray features pump, a 5.0 hp constant speed pool activities pump, and three fractional hp pool chemical and chlorine feeder pumps. These pumps and motors all work to provide clean water to the indoor pool.

3 Energy Use and Costs

Twelve months of utility billing data are used to develop annual energy consumption and cost data. This information creates a profile of the annual energy consumption and energy costs.

Utility Summary		
Fuel	**Usage**	**Cost**
Electricity	3,717,558 kWh	$394,170
Natural Gas	51,350 Therms	$49,880
Total		**$444,050**



An energy balance identifies and quantifies energy use in your various building systems. This can highlight areas with the most potential for improvement. This energy balance was developed using calculated energy use for each of the end uses noted in the figure.

The energy auditor collects information regarding equipment operating hours, capacity, efficiency, and other operational parameters from facility staff, drawings, and on-site observations. This information is used as the inputs to calculate the existing conditions energy use for the site. The calculated energy use is then compared to the historical energy use and the initial inputs are revised, as necessary, to balance the calculated energy use to the historical energy use.

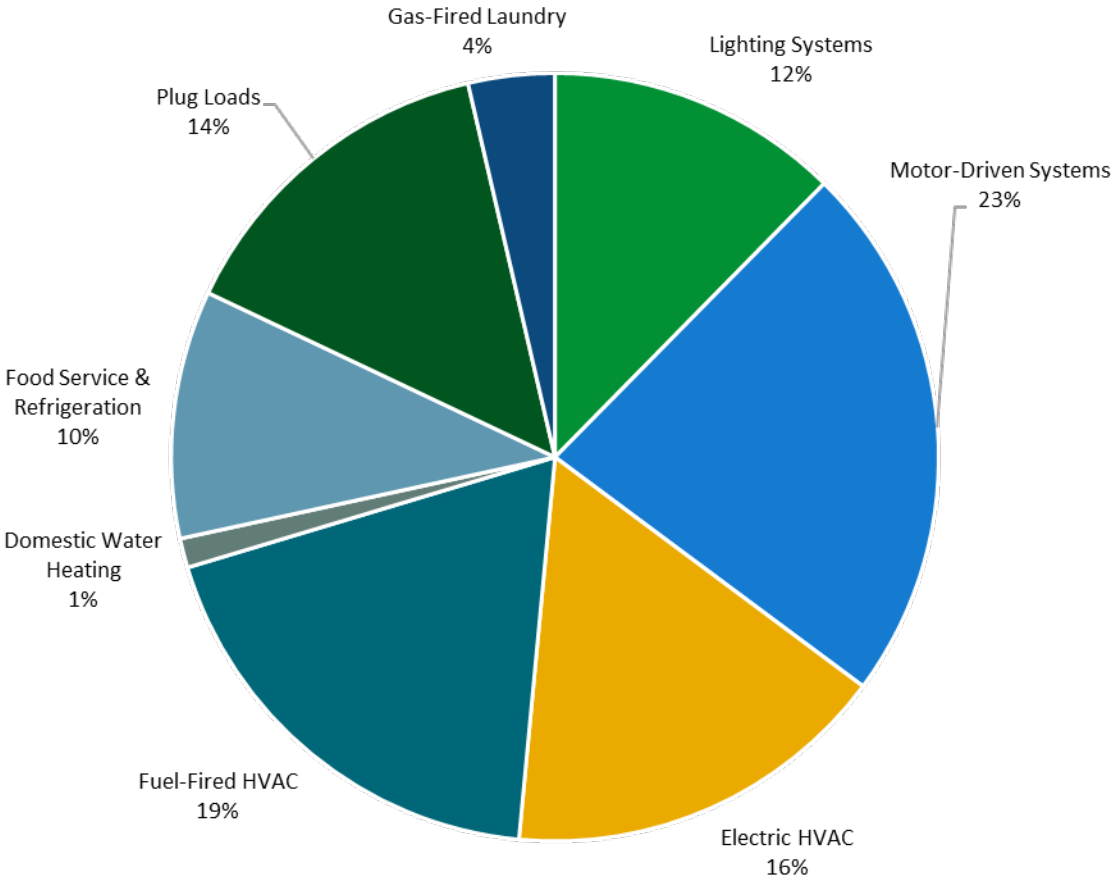
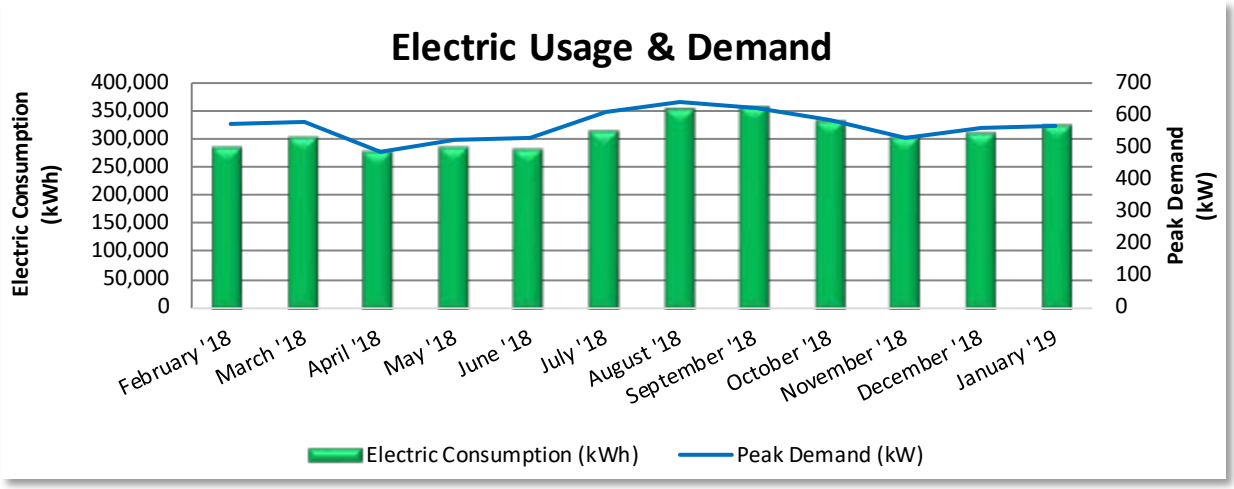


Figure 5 - Energy Balance

3.1 Electricity

PSE&G delivers electricity under rate class Large Power & Lighting, with electric production provided by Talen Energy, a third-party supplier.



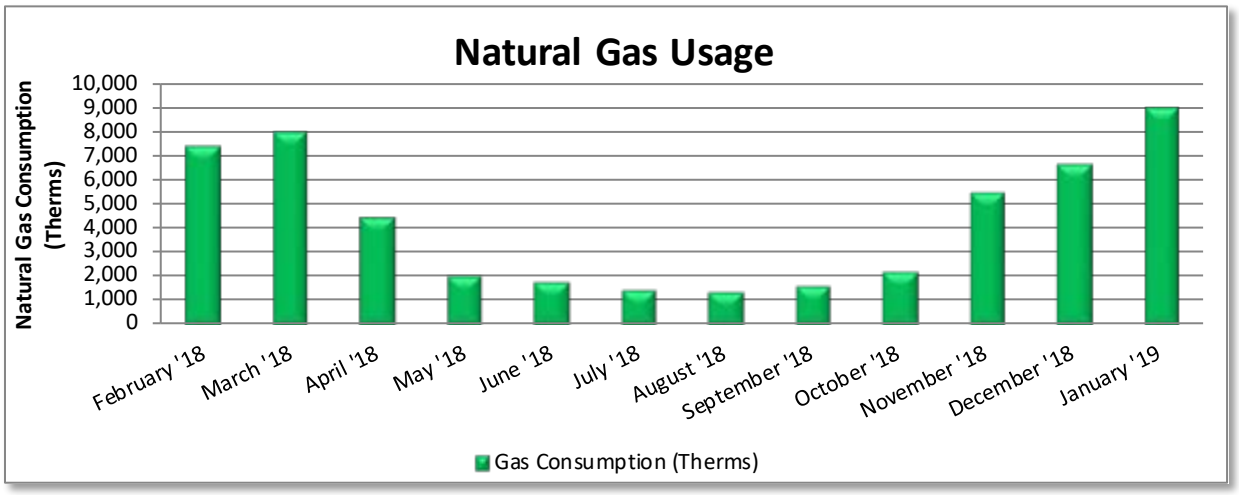
Electric Billing Data					
Period Ending	**Days in Period**	**Electric Usage (kWh)**	**Demand (kW)**	**Demand Cost**	**Total Electric Cost**
2/28/18	28	284,494	575	$1,034	$28,550
3/31/18	31	301,207	577	$1,047	$28,619
4/30/18	30	278,923	489	$818	$29,164
5/31/18	31	285,909	524	$877	$30,786
6/30/18	30	281,022	527	$5,770	$34,388
7/31/18	31	313,306	607	$6,653	$39,755
8/31/18	31	351,067	640	$7,013	$41,409
9/30/18	30	354,710	622	$6,823	$39,193
10/31/18	31	332,035	587	$983	$30,275
11/30/18	30	303,641	529	$925	$29,214
12/31/18	31	308,118	562	$982	$30,024
1/31/19	31	323,126	565	$986	$32,792
Totals	**365**	**3,717,558**	**640**	**$33,910**	**$394,170**
Annual	**365**	**3,717,558**	**640**	**$33,910**	**$394,170**

Notes:

- Peak demand of 640 kW occurred in August '18.
- Average demand over the past 12 months was 567 kW.
- The average electric cost over the past 12 months was $0.106/kWh, which is the blended rate that includes energy supply, distribution, demand, and other charges. This report uses this blended rate to estimate energy cost savings.

3.2 Natural Gas

PSE&G delivers and supplies natural gas to eleven different meters under rate class Large Volume Gas & General Service Gas, depending on the meter.

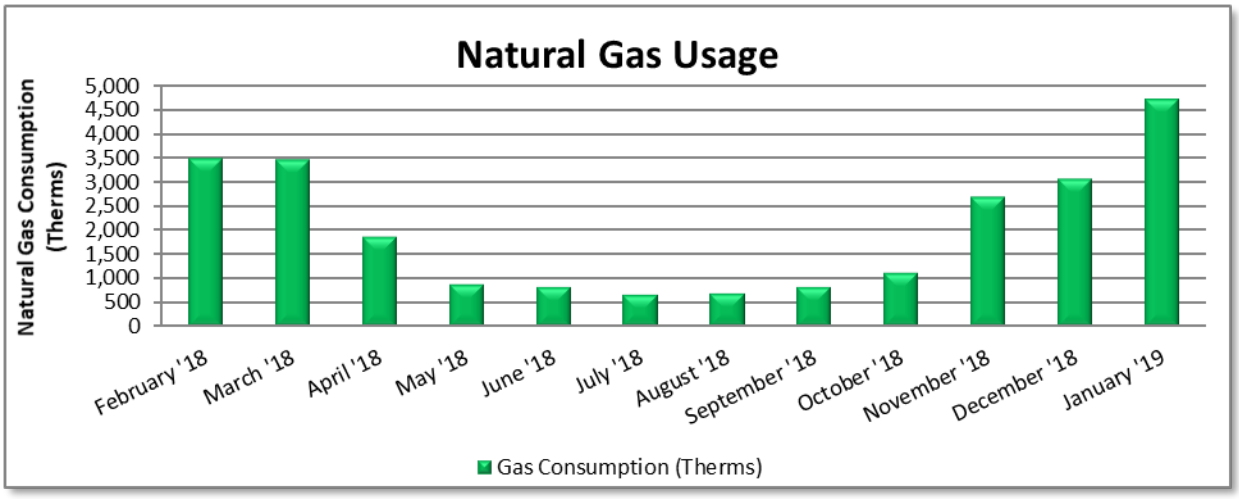


Gas Billing Data			
Period Ending	**Days in Period**	**Natural Gas Usage (Therms)**	**Natural Gas Cost**
2/26/18	32	7,416	$7,807
3/27/18	29	7,997	$7,756
4/26/18	30	4,439	$3,448
5/24/18	28	2,013	$1,700
6/26/18	33	1,775	$1,527
7/26/18	30	1,439	$1,299
8/24/18	29	1,405	$1,243
9/25/18	32	1,580	$1,367
10/24/18	29	2,245	$1,885
11/26/18	33	5,458	$5,380
12/26/18	30	6,636	$7,409
1/25/19	30	8,947	$9,061
Totals	**365**	**51,350**	**$49,880**
Annual	**365**	**51,350**	**$49,880**

Notes:

- The average gas cost for all of these meters over the past 12 months is $0.971/therm, which is the blended rate used throughout the analysis.

PSE&G delivers and supplies natural gas to this meter 4019333 under rate class Large Volume Gas.

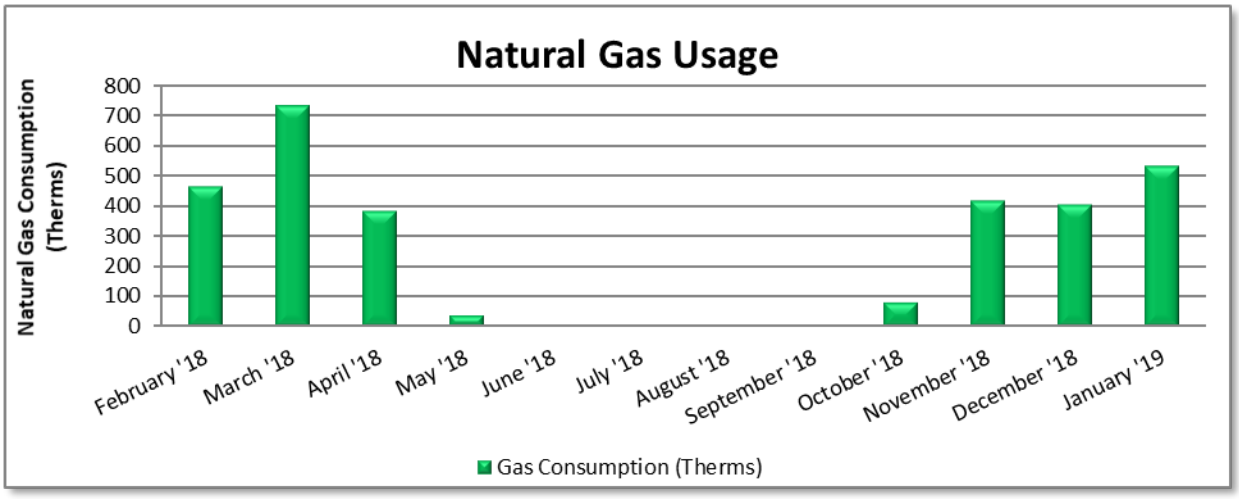


Gas Billing Data			
Period Ending	**Days in Period**	**Natural Gas Usage (Therms)**	**Natural Gas Cost**
2/26/18	32	3,518	$3,702
3/27/18	29	3,471	$3,379
4/26/18	30	1,868	$1,222
5/24/18	28	897	$654
6/26/18	33	840	$625
7/26/18	30	683	$537
8/24/18	29	715	$547
9/25/18	32	839	$625
10/24/18	29	1,138	$823
11/26/18	33	2,714	$2,763
12/26/18	30	3,085	$3,505
1/25/19	30	4,746	$4,623
Totals	**365**	**24,514**	**$23,004**
Annual	**365**	**24,514**	**$23,004**

Notes:

- The average gas cost for this meter over the past 12 months is $0.938/therm.

PSE&G delivers and supplies natural gas to this meter 4023732 under rate class General Service Gas.

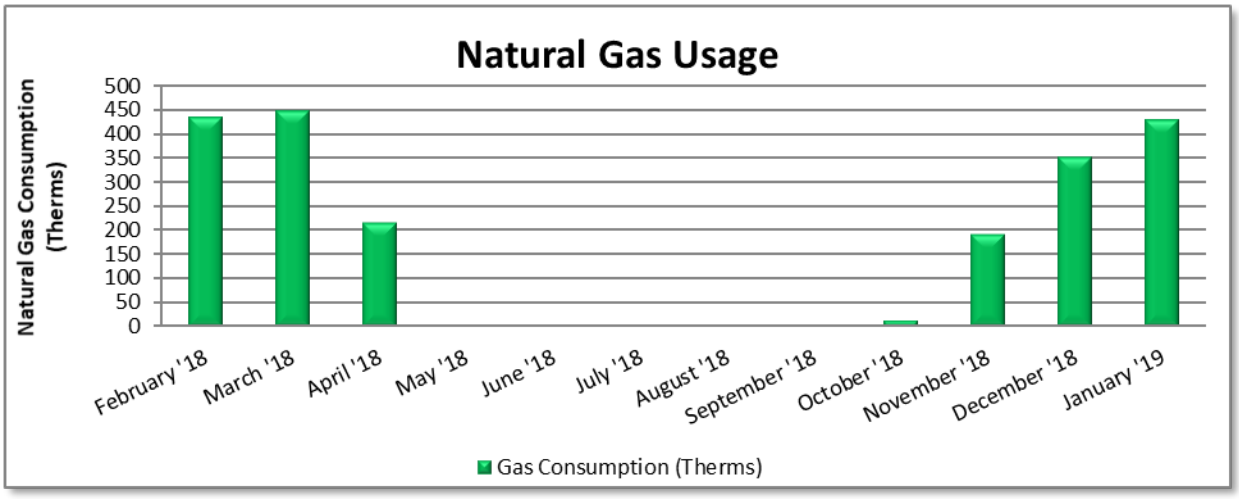


Gas Billing Data			
Period Ending	**Days in Period**	**Natural Gas Usage (Therms)**	**Natural Gas Cost**
2/26/18	32	467	$493
3/27/18	29	737	$710
4/26/18	30	384	$327
5/24/18	28	40	$45
6/26/18	33	1	$13
7/26/18	30	2	$14
8/24/18	29	0	$12
9/25/18	32	1	$13
10/24/18	29	83	$82
11/26/18	33	421	$408
12/26/18	30	406	$454
1/25/19	30	534	$570
Totals	**365**	**3,077**	**$3,142**
Annual	**365**	**3,077**	**$3,142**

Notes:

- The average gas cost for this meter over the past 12 months is $1.021/therm.

PSE&G delivers and supplies natural gas to this meter 3927519 under rate class General Service Gas.

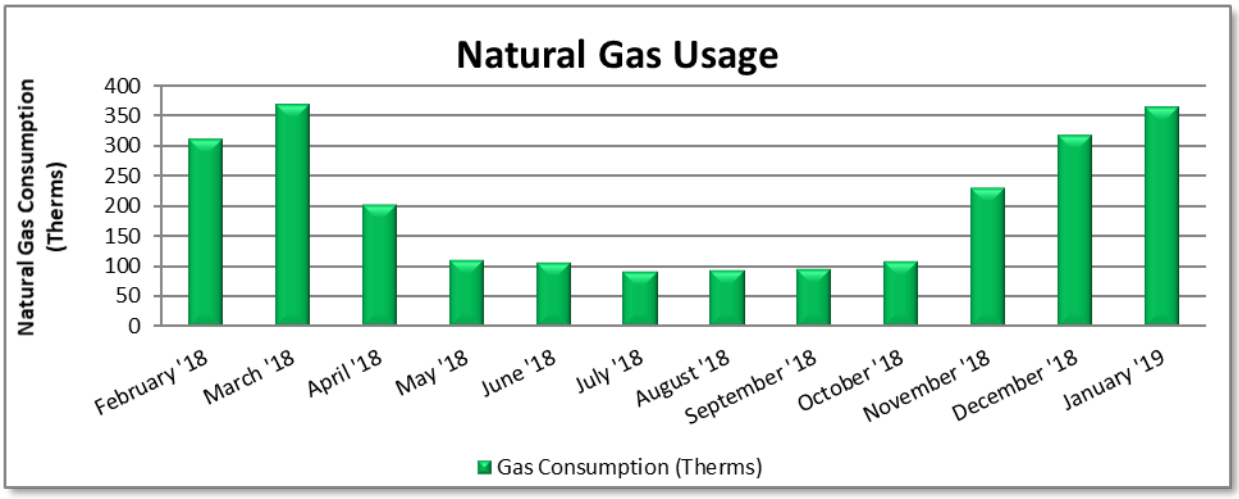


Gas Billing Data			
Period Ending	**Days in Period**	**Natural Gas Usage (Therms)**	**Natural Gas Cost**
2/26/18	32	437	$463
3/27/18	29	450	$438
4/26/18	30	217	$190
5/24/18	28	1	$13
6/26/18	33	1	$13
7/26/18	30	7	$18
8/24/18	29	0	$12
9/25/18	32	4	$16
10/24/18	29	15	$24
11/26/18	33	194	$196
12/26/18	30	353	$396
1/25/19	30	430	$462
Totals	**365**	**2,109**	**$2,241**
Annual	**365**	**2,109**	**$2,241**

Notes:

- The average gas cost for this meter over the past 12 months is $1.062/therm.

PSE&G delivers and supplies natural gas to this meter 4247042 under rate class General Service Gas.

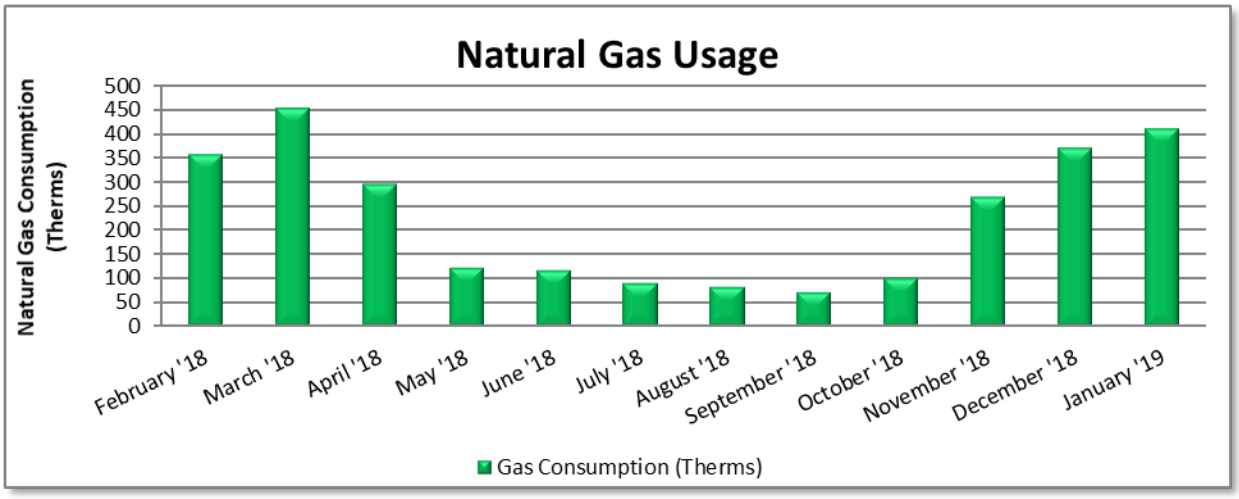


Gas Billing Data			
Period Ending	**Days in Period**	**Natural Gas Usage (Therms)**	**Natural Gas Cost**
2/26/18	32	312	$334
3/27/18	29	371	$363
4/26/18	30	203	$178
5/24/18	28	111	$104
6/26/18	33	107	$101
7/26/18	30	93	$91
8/24/18	29	95	$91
9/25/18	32	96	$93
10/24/18	29	109	$105
11/26/18	33	231	$219
12/26/18	30	319	$350
1/25/19	30	366	$385
Totals	**365**	**2,413**	**$2,414**
Annual	**365**	**2,413**	**$2,414**

Notes:

- The average gas cost for this meter over the past 12 months is $1.000/therm.

PSE&G delivers and supplies natural gas to this meter 4247041 under rate class General Service Gas.

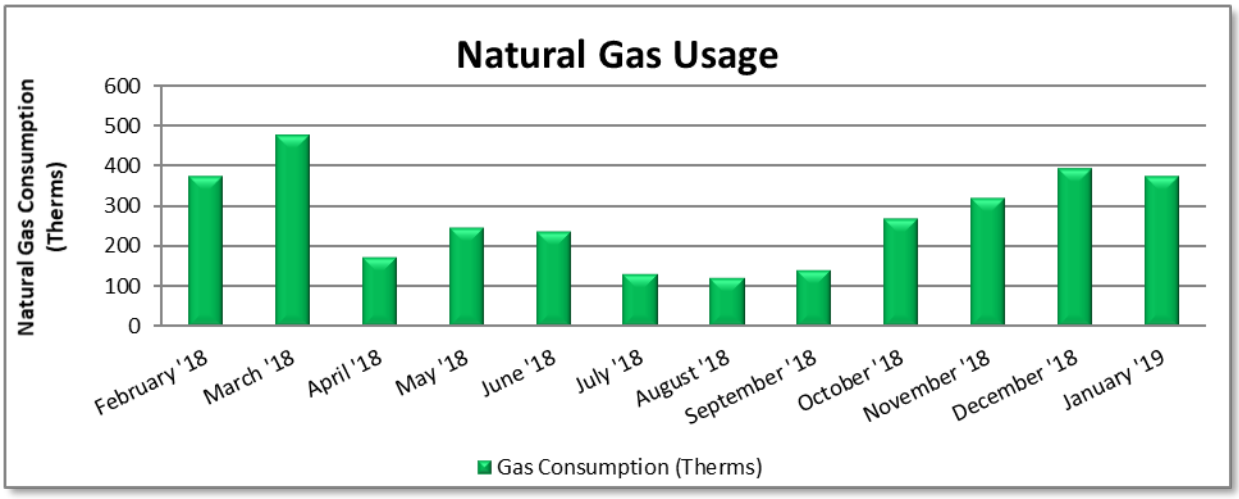


Gas Billing Data			
Period Ending	**Days in Period**	**Natural Gas Usage (Therms)**	**Natural Gas Cost**
2/26/18	32	360	$383
3/27/18	29	454	$442
4/26/18	30	297	$256
5/24/18	28	123	$114
6/26/18	33	119	$112
7/26/18	30	92	$90
8/24/18	29	82	$81
9/25/18	32	73	$73
10/24/18	29	103	$99
11/26/18	33	270	$256
12/26/18	30	371	$406
1/25/19	30	413	$435
Totals	**365**	**2,756**	**$2,746**
Annual	**365**	**2,756**	**$2,746**

Notes:

- The average gas cost for this meter over the past 12 months is $0.996/therm.

PSE&G delivers and supplies natural gas to this meter 4247047 under rate class General Service Gas.

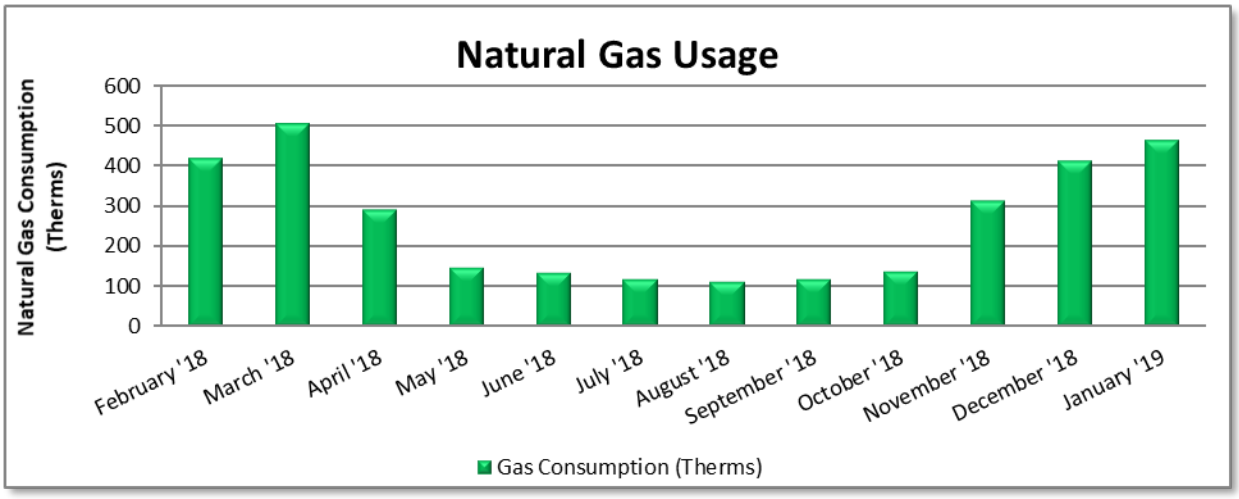


Gas Billing Data			
Period Ending	**Days in Period**	**Natural Gas Usage (Therms)**	**Natural Gas Cost**
2/26/18	32	377	$401
3/27/18	29	478	$465
4/26/18	30	173	$154
5/24/18	28	248	$217
6/26/18	33	237	$210
7/26/18	30	131	$124
8/24/18	29	122	$114
9/25/18	32	141	$130
10/24/18	29	271	$242
11/26/18	33	322	$297
12/26/18	30	394	$423
1/25/19	30	375	$388
Totals	**365**	**3,269**	**$3,166**
Annual	**365**	**3,269**	**$3,166**

Notes:

- The average gas cost for this meter over the past 12 months is $0.968/therm.

PSE&G delivers and supplies natural gas to this meter 4016011 under rate class General Service Gas.

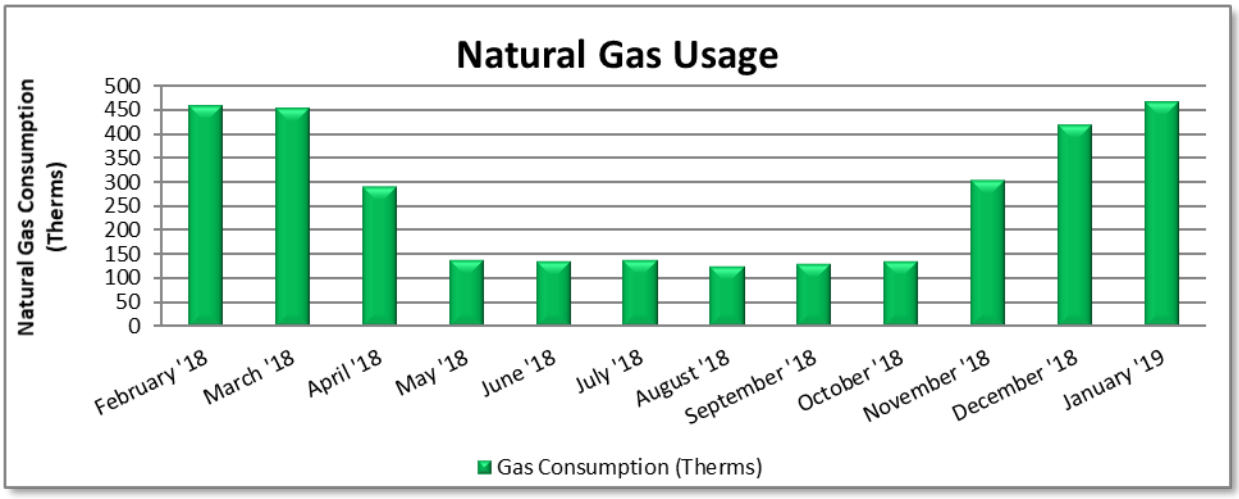


Gas Billing Data			
Period Ending	**Days in Period**	**Natural Gas Usage (Therms)**	**Natural Gas Cost**
2/26/18	32	422	$444
3/27/18	29	508	$492
4/26/18	30	293	$252
5/24/18	28	147	$134
6/26/18	33	137	$127
7/26/18	30	120	$114
8/24/18	29	115	$108
9/25/18	32	119	$112
10/24/18	29	138	$129
11/26/18	33	314	$293
12/26/18	30	415	$450
1/25/19	30	465	$486
Totals	**365**	**3,193**	**$3,141**
Annual	**365**	**3,193**	**$3,141**

Notes:

- The average gas cost for this meter over the past 12 months is $0.984/therm.

PSE&G delivers and supplies natural gas to this meter 4023647 under rate class General Service Gas.

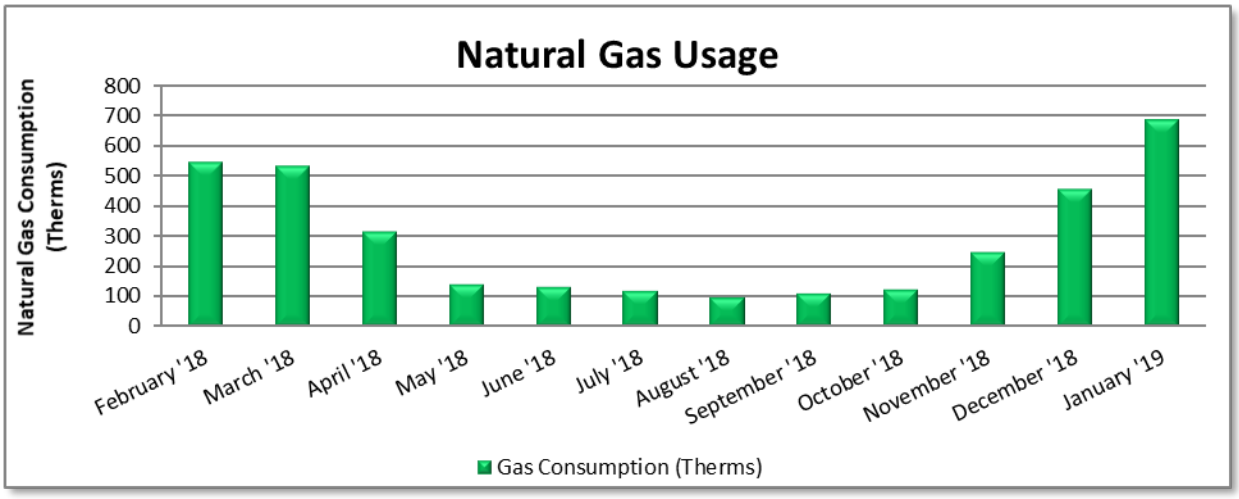


Gas Billing Data			
Period Ending	**Days in Period**	**Natural Gas Usage (Therms)**	**Natural Gas Cost**
2/26/18	32	459	$483
3/27/18	29	456	$442
4/26/18	30	292	$251
5/24/18	28	141	$129
6/26/18	33	137	$127
7/26/18	30	141	$132
8/24/18	29	127	$118
9/25/18	32	131	$122
10/24/18	29	136	$128
11/26/18	33	304	$283
12/26/18	30	421	$456
1/25/19	30	467	$487
Totals	**365**	**3,213**	**$3,157**
Annual	**365**	**3,213**	**$3,157**

Notes:

- The average gas cost for this meter over the past 12 months is $0.983/therm.

PSE&G delivers and supplies natural gas to this meter 4016382 under rate class General Service Gas.

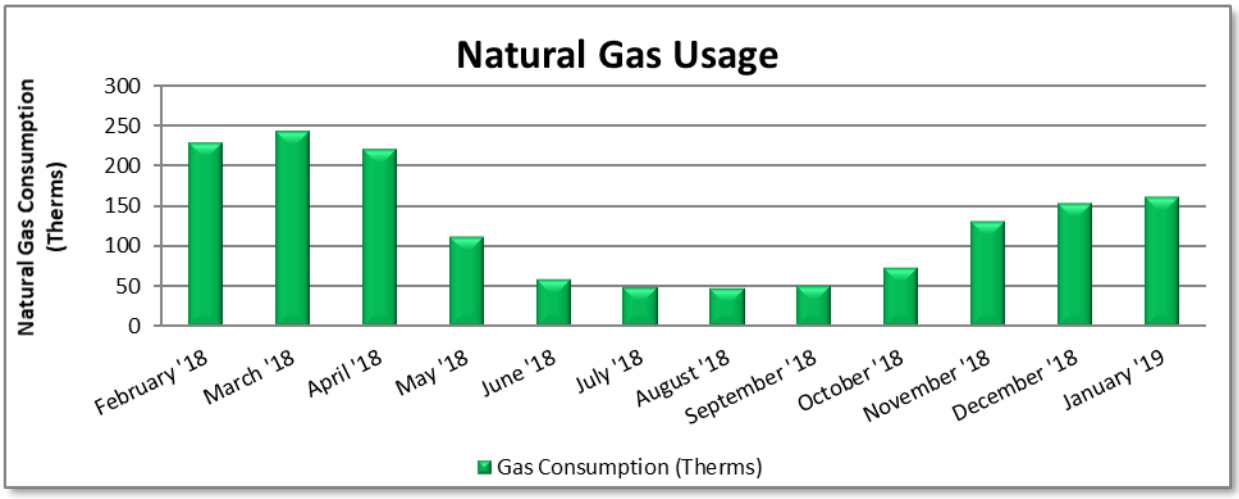


Gas Billing Data			
Period Ending	**Days in Period**	**Natural Gas Usage (Therms)**	**Natural Gas Cost**
2/26/18	32	550	$576
3/27/18	29	537	$519
4/26/18	30	316	$271
5/24/18	28	141	$129
6/26/18	33	135	$125
7/26/18	30	120	$114
8/24/18	29	100	$96
9/25/18	32	114	$108
10/24/18	29	125	$118
11/26/18	33	250	$234
12/26/18	30	458	$497
1/25/19	30	690	$720
Totals	**365**	**3,535**	**$3,506**
Annual	**365**	**3,535**	**$3,506**

Notes:

- The average gas cost for this meter over the past 12 months is $0.992/therm.

PSE&G delivers and supplies natural gas to this meter 4016379 under rate class General Service Gas.

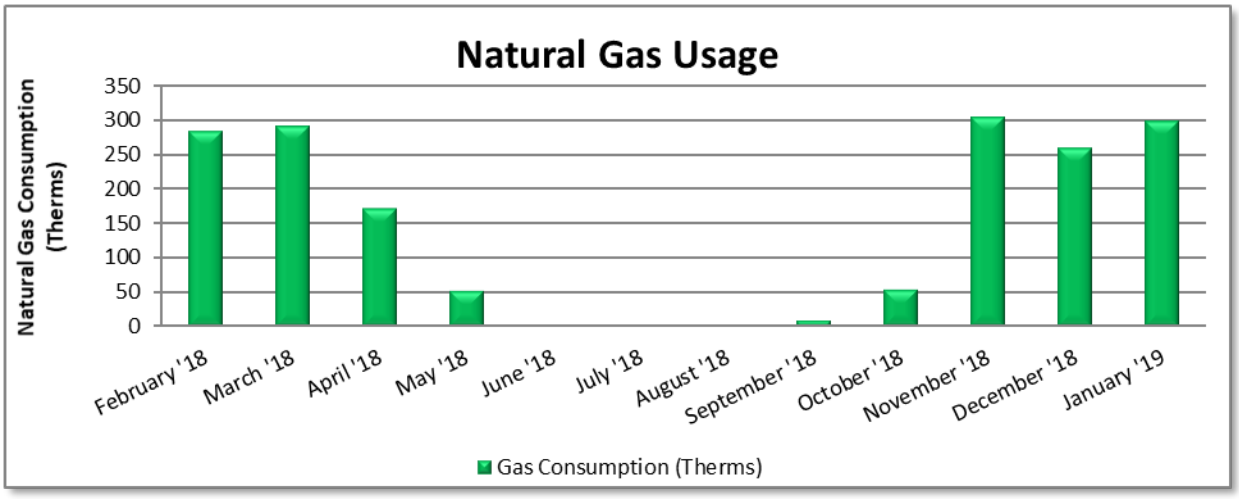


Gas Billing Data			
Period Ending	**Days in Period**	**Natural Gas Usage (Therms)**	**Natural Gas Cost**
2/26/18	32	229	$223
3/27/18	29	244	$216
4/26/18	30	222	$194
5/24/18	28	112	$105
6/26/18	33	60	$62
7/26/18	30	50	$55
8/24/18	29	49	$53
9/25/18	32	52	$56
10/24/18	29	74	$75
11/26/18	33	132	$131
12/26/18	30	155	$177
1/25/19	30	163	$179
Totals	**365**	**1,542**	**$1,525**
Annual	**365**	**1,542**	**$1,525**

Notes:

- The average gas cost for this meter over the past 12 months is $0.989/therm.

PSE&G delivers and supplies natural gas to this meter 4314057 under rate class General Service Gas.



Gas Billing Data			
Period Ending	**Days in Period**	**Natural Gas Usage (Therms)**	**Natural Gas Cost**
2/26/18	32	284	$305
3/27/18	29	292	$289
4/26/18	30	172	$153
5/24/18	28	52	$56
6/26/18	33	0	$12
7/26/18	30	0	$12
8/24/18	29	0	$12
9/25/18	32	9	$20
10/24/18	29	54	$58
11/26/18	33	305	$300
12/26/18	30	260	$295
1/25/19	30	299	$327
Totals	**365**	**1,728**	**$1,838**
Annual	**365**	**1,728**	**$1,838**

Notes:

- The average gas cost for this meter over the past 12 months is $1.064/therm.

3.3 Benchmarking

Your building was benchmarked using the United States Environmental Protection Agency's (EPA) *Portfolio Manager®* software. Benchmarking compares your building's energy use to that of similar buildings across the country, while neutralizing variations due to location, occupancy and operating hours. Some building types can be scored with a 1-100 ranking of a building's energy performance relative to the national building market. A score of 50 represents the national average and a score of 100 is best.

This ENERGY STAR® benchmarking score provides a comprehensive snapshot of your building's energy performance. It assesses the building's physical assets, operations, and occupant behavior, which is compiled into a quick and easy-to-understand score.

Benchmarking Score	**N/A**

Due to its unique characteristics, this building type is not able to receive a benchmarking score. This report contains suggestions about how to improve building performance and reduce energy costs.

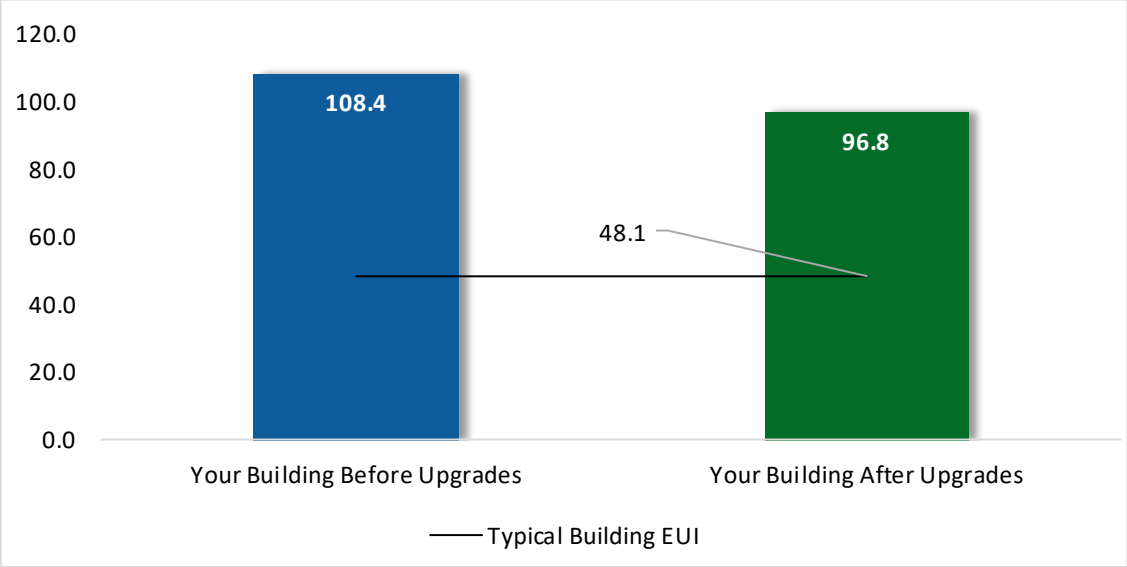


Figure 6 - Energy Use Intensity Comparison[3]

Energy use intensity (EUI) measures energy consumption per square foot and is the standard metric for comparing buildings' energy performance. A lower EUI means better performance and less energy consumed. A number of factors can cause a building to vary from the "typical" energy usage. Local weather conditions, building age and insulation levels, equipment efficiency, daily occupancy hours, changes in occupancy throughout the year, equipment operating hours, and occupant behavior all contribute to a building's energy use and the benchmarking score.

[3] Based on all evaluated ECMs

Tracking Your Energy Performance

Keeping track of your energy use on a monthly basis is one of the best ways to keep energy costs in check. Update your utility information in Portfolio Manager® regularly, so that you can keep track of your building's performance.

We have created a Portfolio Manager® account for your facility and we have already entered the monthly utility data shown above for you. Account login information for your account will be sent via email.

Free online training is available to help you use ENERGY STAR® Portfolio Manager® to track your building's performance at: https://www.energystar.gov/buildings/training.

For more information on ENERGY STAR® and Portfolio Manager®, visit their website[4].

[4] https://www.energystar.gov/buildings/facility-owners-and-managers/existing-buildings/earn-recognition/energy-star-certification/how-app-1.

4 ENERGY CONSERVATION MEASURES

The goal of this audit report is to identify and evaluate potential energy efficiency improvements, provide information about the cost effectiveness of those improvements, and recognize potential financial incentives from NJBPU. Most energy conservation measures have received preliminary analysis of feasibility which identifies expected ranges of savings and costs. This level of analysis is typically sufficient to demonstrate project cost-effectiveness and help prioritize energy measures.

Calculations of energy use and savings are based on the current version of the *New Jersey's Clean Energy Program Protocols to Measure Resource Savings*, which is approved by the NJBPU. Further analysis or investigation may be required to calculate more precise savings based on specific circumstances.

Operation and maintenance costs for the proposed new equipment will generally be lower than the current costs for the existing equipment—especially if the existing equipment is at or past its normal useful life. We have conservatively assumed there to be no impact on overall maintenance costs over the life of the equipment.

Financial incentives are based on the current NJCEP prescriptive SmartStart program. A higher level of investigation may be necessary to support any SmartStart Custom, Pay for Performance, or Direct Install incentive applications. Some measures and proposed upgrades may be eligible for higher incentives than those shown below through other NJCEP programs described in a following section of this report.

For a detailed list of the locations and recommended energy conservation measures for all inventoried equipment, see **Appendix A: Equipment Inventory & Recommendations.**

#	Energy Conservation Measure	Cost Effective?	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings ($)	Estimated Install Cost ($)	Estimated Incentive ($)*	Estimated Net Cost ($)	Simple Payback Period (yrs)**	CO_2e Emissions Reduction (lbs)
Lighting Upgrades			**265,459**	**39.3**	**-54**	**$27,620**	**$94,437**	**$22,750**	**$71,687**	**2.6**	**260,972**
ECM 1	Install LED Fixtures	Yes	33,680	3.7	-5	$3,524	$22,888	$3,965	$18,923	5.4	33,352
ECM 2	Retrofit Fixtures with LED Lamps	Yes	231,779	35.7	-49	$24,096	$71,549	$18,785	$52,764	2.2	227,620
Lighting Control Measures			**9,687**	**1.4**	**-2**	**$1,007**	**$11,590**	**$1,720**	**$9,870**	**9.8**	**9,513**
ECM 3	Install Occupancy Sensor Lighting Controls	Yes	9,359	1.3	-2	$973	$11,340	$1,470	$9,870	10.1	9,191
ECM 4	Install Daylight Dimming Controls	Yes	328	0.0	0	$34	$250	$250	$0	0.0	322
Variable Frequency Drive (VFD) Measures			**87,592**	**7.0**	**65**	**$9,922**	**$130,602**	**$1,450**	**$129,152**	**13.0**	**95,861**
ECM 5	Install VFDs on Constant Volume (CV) Fans	No	31,879	4.1	0	$3,380	$55,859	$1,150	$54,709	16.2	32,102
ECM 6	Install VFDs on Pool Water Pumps	No	46,440	2.9	0	$4,924	$64,959	$0	$64,959	13.2	46,765
ECM 7	Install VFDs on Kitchen Hood Fan Motors	Yes	9,273	0.0	65	$1,618	$9,783	$300	$9,483	5.9	16,994
Gas Heating (HVAC/Process) Replacement			**0**	**0.0**	**39**	**$382**	**$12,731**	**$2,000**	**$10,731**	**28.1**	**4,602**
ECM 8	Install High Efficiency Hot Water Boilers	No	0	0.0	15	$149	$9,394	$1,000	$8,394	56.5	1,792
ECM 9	Install Infrared Heaters	Yes	0	0.0	24	$233	$3,337	$1,000	$2,337	10.0	2,810
HVAC System Improvements			**5,224**	**0.0**	**28**	**$824**	**$9,880**	**$12**	**$9,868**	**12.0**	**8,516**
ECM 10	Install Programmable Thermostats	Yes	0	0.0	12	$113	$330	$0	$330	2.9	1,359
ECM 11	Implement Demand Control Ventilation (DCV)	No	4,587	0.0	16	$644	$9,516	$0	$9,516	14.8	6,516
ECM 12	Install Pipe Insulation	Yes	636	0.0	0	$67	$35	$12	$23	0.3	641
Domestic Water Heating Upgrade			**4,796**	**0.0**	**18**	**$683**	**$1,418**	**$582**	**$836**	**1.2**	**6,938**
ECM 13	Install Low-Flow DHW Devices	Yes	4,796	0.0	18	$683	$1,418	$582	$836	1.2	6,938
Custom Measures			**111,527**	**0.0**	**0**	**$11,825**	**$100,000**	**$0**	**$100,000**	**8.5**	**112,307**
ECM 14	Electric Sub Metering	Yes	111,527	0.0	0	$11,825	$100,000	$0	$100,000	8.5	112,307
TOTALS			**484,285**	**47.7**	**94**	**$52,264**	**$360,658**	**$28,514**	**$332,144**	**6.4**	**498,708**

* - All incentives presented in this table are based on NJ SmartStart equipment incentives and assume proposed equipment meets minimum performance criteria for that program.

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

Figure 7 – All Evaluated ECMs

#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings ($)	Estimated Install Cost ($)	Estimated Incentive ($)*	Estimated Net Cost ($)	Simple Payback Period (yrs)**	CO_2e Emissions Reduction (lbs)
Lighting Upgrades		**265,459**	**39.3**	**-54**	**$27,620**	**$94,437**	**$22,750**	**$71,687**	**2.6**	**260,972**
ECM 1	Install LED Fixtures	33,680	3.7	-5	$3,524	$22,888	$3,965	$18,923	5.4	33,352
ECM 2	Retrofit Fixtures with LED Lamps	231,779	35.7	-49	$24,096	$71,549	$18,785	$52,764	2.2	227,620
Lighting Control Measures		**9,687**	**1.4**	**-2**	**$1,007**	**$11,590**	**$1,720**	**$9,870**	**9.8**	**9,513**
ECM 3	Install Occupancy Sensor Lighting Controls	9,359	1.3	-2	$973	$11,340	$1,470	$9,870	10.1	9,191
ECM 4	Install Daylight Dimming Controls	328	0.0	0	$34	$250	$250	$0	0.0	322
Variable Frequency Drive (VFD) Measures		**9,273**	**0.0**	**65**	**$1,618**	**$9,783**	**$300**	**$9,483**	**5.9**	**16,994**
ECM 7	Install VFDs on Kitchen Hood Fan Motors	9,273	0.0	65	$1,618	$9,783	$300	$9,483	5.9	16,994
Gas Heating (HVAC/Process) Replacement		**0**	**0.0**	**24**	**$233**	**$3,337**	**$1,000**	**$2,337**	**10.0**	**2,810**
ECM 9	Install Infrared Heaters	0	0.0	24	$233	$3,337	$1,000	$2,337	10.0	2,810
HVAC System Improvements		**636**	**0.0**	**12**	**$180**	**$364**	**$12**	**$352**	**2.0**	**1,999**
ECM 10	Install Programmable Thermostats	0	0.0	12	$113	$330	$0	$330	2.9	1,359
ECM 12	Install Pipe Insulation	636	0.0	0	$67	$35	$12	$23	0.3	641
Domestic Water Heating Upgrade		**4,796**	**0.0**	**18**	**$683**	**$1,418**	**$582**	**$836**	**1.2**	**6,938**
ECM 13	Install Low-Flow DHW Devices	4,796	0.0	18	$683	$1,418	$582	$836	1.2	6,938
Custom Measures		**111,527**	**0.0**	**0**	**$11,825**	**$100,000**	**$0**	**$100,000**	**8.5**	**112,307**
ECM 14	Electric Sub Metering	111,527	0.0	0	$11,825	$100,000	$0	$100,000	8.5	112,307
TOTALS		**401,379**	**40.7**	**63**	**$43,167**	**$220,930**	**$26,364**	**$194,566**	**4.5**	**411,533**

* - All incentives presented in this table are based on NJ SmartStart equipment incentives and assume proposed equipment meets minimum performance criteria for that program.

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

Figure 8 – Cost Effective ECMs

4.1 Lighting

#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings ($)	Estimated Install Cost ($)	Estimated Incentive ($)*	Estimated Net Cost ($)	Simple Payback Period (yrs)**	CO_2e Emissions Reduction (lbs)
Lighting Upgrades		**265,459**	**39.3**	**-54**	**$27,620**	**$94,437**	**$22,750**	**$71,687**	**2.6**	**260,972**
ECM 1	Install LED Fixtures	33,680	3.7	-5	$3,524	$22,888	$3,965	$18,923	5.4	33,352
ECM 2	Retrofit Fixtures with LED Lamps	231,779	35.7	-49	$24,096	$71,549	$18,785	$52,764	2.2	227,620

When considering lighting upgrades, we suggest using a comprehensive design approach that simultaneously upgrades lighting fixtures and controls to maximize energy savings and improve occupant lighting. Comprehensive design will also consider appropriate lighting levels for different space types to make sure that the right amount of light is delivered where needed. If conversion to LED light sources are proposed, we suggest converting all of a specific lighting type (e.g. linear fluorescent) to LED lamps to minimize the number of lamp types in use at the facility, which should help reduce future maintenance costs.

ECM 1: Install LED Fixtures

Replace existing fixtures containing HID lamps with new LED light fixtures. This measure saves energy by installing LEDs which use less power than other technologies with a comparable light output.

In some cases, HID fixtures can be retrofit with screw-based LED lamps. Replacing an existing HID fixture with a new LED fixture will generally provide better overall lighting optics; however, replacing the HID lamp with a LED screw-in lamp is typically a less expensive retrofit. We recommend you work with your lighting contractor to determine which retrofit solution is best suited to your needs and will be compatible with the existing fixtures.

Maintenance savings may also be achieved since LED lamps last longer than other light sources and therefore do not need to be replaced as often.

Affected building areas:

Bancroft School/Activity Center: Pool room, Gymnasium, and under canopy exterior fixtures

ECM 2: Retrofit Fixtures with LED Lamps

Replace fluorescent lamps with LED lamps. Many LED tubes are direct replacements for existing fluorescent tubes and can be installed while leaving the fluorescent fixture ballast in place. LED lamps can be used in existing fixtures as a direct replacement for most other lighting technologies.

This measure saves energy by installing LEDs which use less power than other lighting technologies yet provide equivalent lighting output for the space. Maintenance savings may also be available, as longer-lasting LEDs lamps will not need to be replaced as often as the existing lamps.

Affected building areas:

Bancroft School/Activity Center: Custodial Maintenance Instructional Area 56, rest rooms, Multi-Purpose Room 119, HS Lounge 57, Hallway, ES Lounge 32, TS Lounge 226 & 221, and all areas with fluorescent fixtures with T8 tubes.

Linden Admin Building: Storage Room 17A & 16A, Rest Room 10, and all areas with fluorescent fixtures with T8 tubes.

Facilities Building: all areas with fluorescent fixtures with T8 tubes.

Residence Halls 100-600: Bathrooms 111-113 & 117-119, Den 7 & 23, hallways, the kitchen, Mechanical Room 17, IT Room 13, Session rooms 6 & 20, and all areas with fluorescent fixtures with T8 tubes

Residence Hall 700: Bathrooms 112, 108, 208, & 203, Mechanical Room 113, Nurse's Room 111, Closet 110A, hallways, Den 106, the kitchen, Dining Room 104, and all areas with fluorescent fixtures with T8 tubes.

Greenhouse: all areas with fluorescent fixtures with T8 tubes.

4.2 Lighting Controls

#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings ($)	Estimated Install Cost ($)	Estimated Incentive ($)*	Estimated Net Cost ($)	Simple Payback Period (yrs)**	CO_2e Emissions Reduction (lbs)
Lighting Control Measures		**9,687**	**1.4**	**-2**	**$1,007**	**$11,590**	**$1,720**	**$9,870**	**9.8**	**9,513**
ECM 3	Install Occupancy Sensor Lighting Controls	9,359	1.3	-2	$973	$11,340	$1,470	$9,870	10.1	9,191
ECM 4	Install Daylight Dimming Controls	328	0.0	0	$34	$250	$250	$0	0.0	322

Lighting controls reduce energy use by turning off or lowering lighting fixture power levels when not in use. A comprehensive approach to lighting design should upgrade the lighting fixtures and the controls together for maximum energy savings and improved lighting for occupants.

ECM 3: Install Occupancy Sensor Lighting Controls

Install occupancy sensors to control lighting fixtures in areas that are frequently unoccupied, even for short periods. For most spaces, we recommend that lighting controls use dual technology sensors, which reduce the possibility of lights turning off unexpectedly.

Occupancy sensors detect occupancy using ultrasonic and/or infrared sensors. When an occupant enters the space, the lighting fixtures switch to full lighting levels. Most occupancy sensor lighting controls allow users to manually turn fixtures on/off, as needed. Some controls can also provide dimming options.

Occupancy sensors can be mounted on the wall at existing switch locations, mounted on the ceiling, or in remote locations. In general, wall switch replacement sensors are best suited to single occupant offices and other small rooms. Ceiling-mounted or remote mounted sensors are used in large spaces, locations without local switching, and where wall switches are not in the line-of-sight of the main work area.

This measure provides energy savings by reducing the lighting operating hours.

Affected building areas:

Bancroft School/Activity Center: Kitchen 4 and Servery 2.

Residence Halls 100-700: restrooms.

ECM 4: Install Daylight Dimming Controls

Install daylight dimming controls that use photosensors to reduce electric lighting in areas when ample daylight lighting is present. Use photosensor controls for fixtures serving areas that are lit by sunlight. As sunlight levels increase in the room, artificial lighting decreases or turns off.

This measure reduces energy use in spaces where ambient daylight provides sufficient lighting levels. Optimum light levels and the method of dimming should be determined during lighting design.

Affected building areas:

Facilities Building: Garage 60.

4.3 Variable Frequency Drives (VFD)

#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings ($)	Estimated Install Cost ($)	Estimated Incentive ($)*	Estimated Net Cost ($)	Simple Payback Period (yrs)**	CO_2e Emissions Reduction (lbs)
Variable Frequency Drive (VFD) Measures		**87,592**	**7.0**	**65**	**$9,922**	**$130,602**	**$1,450**	**$129,152**	**13.0**	**95,861**
ECM 5	Install VFDs on Constant Volume (CV) Fans	31,879	4.1	0	$3,380	$55,859	$1,150	$54,709	16.2	32,102
ECM 6	Install VFDs on Pool Water Pumps	46,440	2.9	0	$4,924	$64,959	$0	$64,959	13.2	46,765
ECM 7	Install VFDs on Kitchen Hood Fan Motors	9,273	0.0	65	$1,618	$9,783	$300	$9,483	5.9	16,994

Variable frequency drives control motors for fans, pumps, and process equipment based on the actual output required of the driven equipment. Energy savings result from more efficient control of motor energy usage when equipment operates at partial load. The magnitude of energy savings depends on the estimated amount of time that the motor would operate at partial load. For equipment with proposed VFDs, we have included replacing the controlled motor with a new inverter duty rated motor to conservatively account for the cost of an inverter duty rated motor.

ECM 5: Install VFDs on Constant Volume (CV) Fans

We evaluated installing VFDs to control constant volume fan motor speeds. This converts a constant-volume, single-zone air handling system into a variable-air-volume (VAV) system. A separate VFD is usually required to control the return fan motor or dedicated exhaust fan motor, if the air handler has one.

Zone thermostats signal the VFD to adjust fan speed to maintain the appropriate temperature in the zone, while maintaining a constant supply air temperature.

For air handlers with direct expansion (DX) cooling systems, the minimum air flow across the cooling coil required to prevent the coil from freezing must be determined during the final project design. The control system programming should maintain the minimum air flow whenever the compressor is operating. Prior to implementation, verify minimum fan speed in cooling mode with the manufacturer. Note that savings will vary depending on the operating characteristics of each AHU.

Energy savings result from reducing the fan speed (and power) when conditions allow for reduced air flow.

Affected air handlers:

Residence Halls 100-700: all air handling unit's supply fan motors.

ECM 6: Install VFDs on Pool Water Pumps

We evaluated installing variable frequency drives (VFD) to control pool process pumps. The pool's hot water loop must have a differential pressure sensor installed. As the hot water valves close, the differential pressure increases and the VFD modulates the pump speed to maintain a differential pressure setpoint. We recommend investigating the compatibility of the filter system with reduced flow and determining the minimal acceptable turnover rate base on your jurisdiction.

Energy savings result from reducing pump motor speed (and power) as hot water valves close. The magnitude of energy savings is based on the estimated amount of time that the system will operate at reduced load.

Affected pumps:

Bancroft School/Activity Center: (1) 10.0 hp pool filtration pump, (1) 15.0 hp pool spray features pump, and (1) 5.0 hp pool activity pump.

ECM 7: Install VFDs on Kitchen Hood Fan Motors

Install VFDs and sensors to control the kitchen hood fan motors. The air flow of the hood is varied based on two key inputs: temperature and smoke/cooking fumes. The VFD controls the amount of exhaust (and kitchen make-up air) based on temperature—the lower the temperature the lower the flow. If the optic sensor is triggered by smoke or cooking fumes, the speed of the fan ramps up to 100%.

Energy savings result from reducing the hood fan speed (and power) when conditions allow for reduced air flow.

Affected kitchen hood fans:

Bancroft School/Activity Center: (2) 2.0 hp kitchen hood fans in Kitchen 4 and (1) 2.0 hp kitchen hood fan in Kitchen Classroom 14.

4.4 Gas-Fired Heating

#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings ($)	Estimated Install Cost ($)	Estimated Incentive ($)*	Estimated Net Cost ($)	Simple Payback Period (yrs)**	CO_2e Emissions Reduction (lbs)
Gas Heating (HVAC/Process) Replacement		**0**	**0.0**	**39**	**$382**	**$12,731**	**$2,000**	**$10,731**	**28.1**	**4,602**
ECM 8	Install High Efficiency Hot Water Boilers	0	0.0	15	$149	$9,394	$1,000	$8,394	56.5	1,792
ECM 9	Install Infrared Heaters	0	0.0	24	$233	$3,337	$1,000	$2,337	10.0	2,810

ECM 8: Install High Efficiency Hot Water Boiler

We evaluated replacing the current inefficient hot water boiler serving the pool with a high efficiency hot water boiler. Energy savings results from improved combustion efficiency and reduced standby losses at low loads.

The most notable efficiency improvement is condensing hydronic boilers which can achieve over 90% efficiency under the proper conditions. Condensing hydronic boilers typically operate at efficiencies between 85% and 87% (comparable to other high efficiency boilers) when the return water temperature is above 130°F. The boiler efficiency increases as the return water temperature drops below 130°F. Therefore, condensing hydronic boilers are evaluated when the return water temperature is less than 130°F during most of the operating hours.

For the purposes of this analysis, we evaluated the replacement of boilers on a one-for-one basis with equipment of the same capacity. We recommend that you work with your mechanical design team to select boilers that are sized appropriately for the heating load at this facility. In many cases installing multiple modular boilers rather than one or two large boilers will result in higher overall plant efficiency while providing additional system redundancy.

Affected boiler:

Bancroft School/Activity Center: Replacing (1) 240.0-MBh non-condensing hot water boiler serving the pool.

ECM 9: Install Infrared Heaters

Replace forced air heating equipment with low-intensity infrared heating units with an enclosed flame, rather than an open flame on a ceramic or metal surface.

Forced air furnaces heat all of the air in the space served, which is inefficient for large volume spaces with relatively few occupants, areas with high ceilings, or areas with high outside air infiltration. Infrared heaters heat objects and surfaces directly, including the occupants of the space, rather than heating large volumes of air. Infrared heaters also heat the floor which then re-radiates the heat. As a result, infrared heaters are more effective and efficient at maintaining occupant comfort at significantly lower cost for certain space types.

Affected building areas:

Bancroft School/Activity Center: (2) 121.8-MBh warm air unit heaters in Mechanical Room 12

Facilities Building: (1) 20.0-MBh warm air unit heater in Storage Room 56.

4.5 HVAC Improvements

#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings ($)	Estimated Install Cost ($)	Estimated Incentive ($)*	Estimated Net Cost ($)	Simple Payback Period (yrs)**	CO_2e Emissions Reduction (lbs)
HVAC System Improvements		**5,224**	**0.0**	**28**	**$824**	**$9,880**	**$12**	**$9,868**	**12.0**	**8,516**
ECM 10	Install Programmable Thermostats	0	0.0	12	$113	$330	$0	$330	2.9	1,359
ECM 11	Implement Demand Control Ventilation (DCV)	4,587	0.0	16	$644	$9,516	$0	$9,516	14.8	6,516
ECM 12	Install Pipe Insulation	636	0.0	0	$67	$35	$12	$23	0.3	641

ECM 10: Install Programmable Thermostats

Replace manual thermostats with programmable thermostats which provide energy savings by reducing heating and cooling energy usage when a room is unoccupied. Manual thermostats are generally adjusted to a single heating and cooling setpoint and left at that setting regardless of occupancy and they provide the same level of heating and cooling regardless of whether the space is being used. Programmable thermostats can maintain different temperature settings for different times of day and for different days of the week. By reducing heating temperature setpoints and raising cooling temperature setpoints when spaces are unoccupied, the operation of the HVAC equipment is reduced while maintaining comfortable space temperatures for building usage.

Affected building areas:

Greenhouse: one non-programmable thermostat.

ECM 11: Implement Demand Control Ventilation (DCV)

We evaluated installing demand control ventilation (DCV) monitors the indoor air's carbon dioxide (CO_2) content to measure room occupancy. This data is used to regulate the amount of outdoor air provided to the space for ventilation.

Standard ventilation systems often provide outside air based on a space's estimated maximum occupancy but not actual occupancy. During low occupancy periods, the space may then be over ventilated. This wastes energy through heating and cooling the excess outside air flow. DCV reduces unnecessary outdoor air intake by regulating ventilation based on actual occupancy levels. DCV is most suited for facilities where occupancy levels vary significantly from hour to hour and day to day.

Energy savings associated with DCV are based on hours of operation, space occupancy, outside air reduction, and other factors. Energy savings results from eliminating unnecessary ventilation and space conditioning.

Affected building areas:

Bancroft School/Activity Center: Gym Area (RTU-G-1), Dining Hall (RTU-K-1), and Activity Center (RTU-V-1).

ECM 12: Install Pipe Insulation

Install insulation on domestic hot water system piping. Distribution system losses are dependent on system fluid temperature, the size of the distribution system, and the level of insulation of the piping. Significant energy savings can be achieved when insulation has not been well maintained. When the insulation is exposed to water, when the insulation has been removed from some areas of the pipe, or when valves have not been properly insulated system efficiency can be significantly reduced. This measure saves energy by reducing heat transfer in the distribution system.

Affected building areas:

Facilities Building: 6.0-feet of 1.0-inch uninsulated piping serving the DHW Storage Tank.

4.6 Domestic Water Heating

#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings ($)	Estimated Install Cost ($)	Estimated Incentive ($)*	Estimated Net Cost ($)	Simple Payback Period (yrs)**	CO_2e Emissions Reduction (lbs)
Domestic Water Heating Upgrade		**4,796**	**0.0**	**18**	**$683**	**$1,418**	**$582**	**$836**	**1.2**	**6,938**
ECM 13	Install Low-Flow DHW Devices	4,796	0.0	18	$683	$1,418	$582	$836	1.2	6,938

ECM 13: Install Low-Flow DHW Devices

Install low-flow devices to reduce overall hot water demand. The following low flow devices are recommended to reduce hot water usage:

Device	Flow Rate
Faucet aerators (lavatory)	0.5 gpm
Showerhead	2.0 gpm

Low-flow devices reduce the overall water flow from the fixture, while still providing adequate pressure for washing. Additional cost savings may result from reduced water usage.

Affected buildings:

Bancroft School/Activity Center: rest room faucets and showerheads.

Linden Admin Building: rest room showerhead.

4.7 Custom Measures

#	Energy Conservation Measure	Annual Electric Savings (kWh)	Peak Demand Savings (kW)	Annual Fuel Savings (MMBtu)	Annual Energy Cost Savings ($)	Estimated Install Cost ($)	Estimated Incentive ($)*	Estimated Net Cost ($)	Simple Payback Period (yrs)**	CO_2e Emissions Reduction (lbs)
Custom Measures		**111,527**	**0.0**	**0**	**$11,825**	**$100,000**	**$0**	**$100,000**	**8.5**	**112,307**
ECM 14	Electric Sub Metering	111,527	0.0	0	$11,825	$100,000	$0	$100,000	8.5	112,307

ECM 14: Electric Sub Metering

Facility staff expressed interest in sub metering key buildings which are currently served by a master meter. Electric submeters alone do not save energy, but they are a useful tool under the right circumstances. Electric sub-meters can provide facility staff with real-time energy use data for specific buildings, information that enhances the potential for greater energy management activities. Revenue grade submeters are a tool that allow owners to bill tenants or departments for the energy consumed in the spaces they occupy. Better resolution on building system performance can lead to occupant behavioral changes which often result in reduced energy use.

A high-level evaluation of potential savings and costs is provided for demonstration purposes only. Based on industry standards and case studies, the potential energy savings may be up to 5% of existing electrical usage. For the purposes of this report, a conservative assumed savings of 3.0% was applied to the estimated electrical consumption of the sub metered buildings based on the premise of occupant behavioral changes. A cost of $10,000 per submeter was applied to the candidate buildings/spaces. The actual scope of work and implementation costs must be provided by a contractor in the future. This measure is recommended for implementation based on the initial energy and economic results but primarily for enhancing the potential for greater energy management activities.

4.8 Measures for Future Consideration

There are additional opportunities for improvement that Bancroft may wish to consider. These potential upgrades typically require further analysis, involve substantial capital investment and/or include significant system reconfiguration. These measures are therefore beyond the scope of this energy audit. These measures are described here to support a whole building approach to energy efficiency and sustainability.

Bancroft may wish to consider the Energy Savings Improvement Program (ESIP) using a whole building approach. With interest in implementing comprehensive, largescale and/or complex system wide projects, these measures may be pursued during development of a future energy savings plan. We recommend that you work with your energy service company (ESCO) and/or design team to:

- evaluate these measures further
- develop firm costs
- determine measure savings
- prepare detailed implementation plans.

Other modernization or capital improvement funds may be leveraged for these types of refurbishments. As you plan for capital upgrades, be sure to consider the energy impact of the building systems and controls being specified.

Retro-Commissioning Study

Due to the complexity of today's HVAC systems and controls a thorough analysis and rebalance of heating, ventilation, and cooling systems should periodically be conducted. There are indications at this site that systems may be not be operating correctly or as efficiently as they could be. One important tool available to building operators to ensure proper system operation is retro-commissioning.

Retro-commissioning is a common practice recommended by the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) to be implemented every few years. We recommend that you contact a reputable engineering firm that specializes in energy control systems and retro-commissioning. Ask them to propose a scope of work and an outline of the procedures and processes to be implemented, including a schedule and the roles of all responsible parties.

Once goals and responsibilities are established, the objective of the investigation process is to understand how the building is currently operating, identify the issues, and determine the most cost-effective way to improve performance. The retro-commissioning agent will review building documentation, interview building occupants, and inspect and test the equipment. Information is then compiled into a report and shared with facility staff, who will select which recommendations to implement after reviewing the findings.

The implementation phase puts the selected processes into place. Typical measures may include sensor calibration, equipment schedule changes, damper linkage repair and similar relatively low-cost adjustments -- although more expensive sophisticated programming and building control system upgrades may be warranted. Approved measures may be implemented by the agent, the building staff, or by subcontractors. Typically, a combination of these individuals makes up the retro-commissioning team.

After the approved measures are implemented, the team will verify that the changes are working as expected. Baseline and post-case measurements will allow building staff to monitor equipment and ensure that the benefits are maintained.

Ozone Laundry System

The facility includes laundry rooms with clothes washers and dryers. There may be an opportunity for energy savings by installing an ozone laundry system. An ozone system utilizes O3 and cold water to purify and clean clothes. Cleaning clothes without the use of hot water saves on energy consumption required to produce domestic hot water, water and chemical cost savings and increases the life of the clothes being cleaned. The actual frequency and use of the laundry machines should be investigated further to determine the cost effectiveness and feasibility of this measure.

Automatic Pool Cover Installation

The facility includes a pool for which an energy saving option could be further investigated. In general, there is one option to improve the pool water heating system. This measure is beyond the scope of this LGEA report and it is recommended that a contractor who specializes in pool water heating systems be consulted.

Installing a pool cover will reduce the energy use associated with conditioning the natatorium space as well as heating the pool water. Consider installing a retractable pool cover which will reduce pool water evaporation during unoccupied periods of time. Evaporation occurs when the pool water is heated to a temperature above the temperature of the air. Natatorium's have high ventilation loads to control humidity. Reducing evaporation from the pool surface will result in water savings, reduced chemical treatment, pool water heating energy and ventilation savings due to lower humidity levels when the cover is in place. Implementation of this measure would require installation of pool cover, reel system and control system. Based on a high-level screening of this, the payback would be about 30 years.

5 ENERGY EFFICIENT BEST PRACTICES

A whole building maintenance plan will extend equipment life; improve occupant comfort, health, and safety; and reduce energy and maintenance costs.

Operation and maintenance (O&M) plans enhance the operational efficiency of HVAC and other energy intensive systems and could save between 5 to 20 percent of the energy usage in your building without substantial capital investment. A successful plan includes your records of energy usage trends and costs, building equipment lists, current maintenance practices, planned capital upgrades, and incorporates your ideas for improved building operation. Your plan will address goals for energy-efficient operation, provide detail on how to reach the goals, and will outline procedures for measuring and reporting whether goals have been achieved.

You may already be doing some of these things— see our list below for potential additions to your maintenance plan. Be sure to consult with qualified equipment specialists for details on proper maintenance and system operation.

Energy Tracking with ENERGY STAR® Portfolio Manager®

You've heard it before - you can't manage what you don't measure. ENERGY STAR® Portfolio Manager® is an online tool that you can use to measure and track energy and water consumption, as well as greenhouse gas emissions[5] . Your account has already been established. Now you can continue to keep tabs on your energy performance every month.

Lighting Maintenance

Clean lamps, reflectors and lenses of dirt, dust, oil, and smoke buildup every six to twelve months. Light levels decrease over time due to lamp aging, lamp and ballast failure, and buildup of dirt and dust. Together, this can reduce total light output by up to 60% while still drawing full power.

In addition to routine cleaning, developing a maintenance schedule can ensure that maintenance is performed regularly, and it can reduce the overall cost of fixture re-lamping and re-ballasting. Group re-lamping and re-ballasting maintains lighting levels and minimizes the number of site visits by a lighting technician or contractor, decreasing the overall cost of maintenance.

Lighting Controls

As part of a lighting maintenance schedule, test lighting controls to ensure proper functioning. For occupancy sensors, this requires triggering the sensor and verifying that the sensor's timer settings are correct. For daylight and photocell sensors, maintenance involves cleaning sensor lenses and confirming that setpoints and sensitivity are configured properly. Adjust exterior lighting time clock controls seasonally as needed to match your lighting requirements.

[5] https://www.energystar.gov/buildings/facility-owners-and-managers/existing-buildings/use-portfolio-manager.

Motor Maintenance

Motors have many moving parts. As these parts degrade over time, the efficiency of the motor is reduced. Routine maintenance prevents damage to motor components. Routine maintenance should include cleaning surfaces and ventilation openings on motors to prevent overheating, lubricating moving parts to reduce friction, inspecting belts and pulleys for wear and to ensure they are at proper alignment and tension, and cleaning and lubricating bearings. Consult a licensed technician to assess these and other motor maintenance strategies.

Thermostat Schedules and Temperature Resets

Use thermostat setback temperatures and schedules to reduce heating and cooling energy use during periods of low or no occupancy. Thermostats should be programmed for a setback of 5-10°F during low occupancy hours (reduce heating setpoints and increase cooling setpoints). Cooling load can be reduced by increasing the facility's occupied setpoint temperature. In general, during the cooling season, thermostats should be set as high as possible without sacrificing occupant comfort.

Economizer Maintenance

Economizers can significantly reduce cooling system load. A malfunctioning economizer can increase the amount of heating and mechanical cooling required by introducing excess amounts of cold or hot outside air. Common economizer malfunctions include broken outdoor thermostat or enthalpy control, or dampers that are stuck or improperly adjusted.

Periodic inspection and maintenance will keep economizers working in sync with the heating and cooling system. This maintenance should be part of annual system maintenance, and it should include proper setting of the outdoor thermostat/enthalpy control, inspection of control and damper operation, lubrication of damper connections, and adjustment of minimum damper position.

AC System Evaporator/Condenser Coil Cleaning

Dirty evaporator and condenser coils restrict air flow and restrict heat transfer. This increases the loads on the evaporator and condenser fan and decreases overall cooling system performance. Keeping the coils clean allows the fans and cooling system to operate more efficiently.

HVAC Filter Cleaning and Replacement

Air filters should be checked regularly (often monthly) and cleaned or replaced when appropriate. Air filters reduce indoor air pollution, increase occupant comfort, and help keep equipment operating efficiently. If the building has a building management system, consider installing a differential pressure switch across filters to send an alarm about premature fouling or overdue filter replacement. Over time, filters become less and less effective as particulate buildup increases. Dirty filters also restrict air flow through the air conditioning or heat pump system, which increases the load on the distribution fans.

Boiler Maintenance

Many boiler problems develop slowly over time, so regular inspection and maintenance is essential to keeping the heating system running efficiently and preventing expensive repairs. Annual tune-ups should include a combustion analysis to analyze the exhaust from the boilers and to ensure the boiler is operating safely and efficiently. Boilers should be cleaned according to the manufacturer's instructions to remove soot and scale from the boiler tubes to improve heat transfer.

Furnace Maintenance

Preventative maintenance can extend the life of the system, maintain energy efficiency, and ensure safe operation. Following the manufacturer's instructions, a yearly tune-up should: check for gas / carbon monoxide leaks; change the air and fuel filters; check components for cracks, corrosion, dirt, or debris build-up; ensure the ignition system is working properly; test and adjust operation and safety controls; inspect electrical connections; and lubricate motors and bearings.

Label HVAC Equipment

For improved coordination in maintenance practices, we recommend labeling or re-labeling the site HVAC equipment. Maintain continuity in labeling by following labeling conventions as indicated in the facility drawings or EMS building equipment list. Use weatherproof or heatproof labeling or stickers for permanence, but do not cover over original equipment nameplates, which should be kept clean and readable whenever possible. Besides equipment, label piping for service and direction of flow when possible. Ideally, maintain a log of HVAC equipment, including nameplate information, asset tag designation, areas served, installation year, service dates, and other pertinent information.

This investment in your equipment will enhance collaboration and communication between your staff and your contracted service providers and may help you with regulatory compliance.

Optimize HVAC Equipment Schedules

Energy Management Systems (EMS) typically provide advanced controls for building HVAC systems, including chillers, boilers, air handling units, rooftop units and exhaust fans. The EMS monitors and reports operational status, schedules equipment 'start' and 'stop' times, locks out equipment operation based on outside air or space temperature, and often optimizes damper and valve operation based on complex algorithms. These EMS features, when in proper adjustment, can improve comfort for building occupants and save substantial energy.

Know your EMS scheduling capabilities. Regularly monitor HVAC equipment operating schedules and match them to building operating hours in order to eliminate unnecessary equipment operation and save energy. Monitoring should be performed often at sites with frequently changing usage patterns – daily in some cases. We recommend using the 'Optimal Start' feature of the EMS, if available, to optimize the building warmup sequence. Most EMS scheduling programs provide for "Holiday" schedules which can be used during reduced use or shutdown periods. Finally, many systems are equipped with a one-time override function which can be used to provide additional space conditioning due to a one-time, special event. When available this override feature should be used rather than changing the base operating schedule.

Water Heater Maintenance

The lower the supply water temperature that is used for hand washing sinks, the less energy is needed to heat the water. Reducing the temperature results in energy savings and the change is often unnoticeable to users. Be sure to review the domestic water temperature requirements for sterilizers and dishwashers as you investigate reducing the supply water temperature.

Also, preventative maintenance can extend the life of the system, maintain energy efficiency, and ensure safe operation. At least once a year, follow manufacturer instructions to drain a few gallons out of the water heater using the drain valve. If there is a lot of sediment or debris, then a full flush is recommended. Turn the temperature down and then completely drain the tank. Annual checks should include checks for:

- Leaks or heavy corrosion on the pipes and valves.
- Corrosion or wear on the gas line and on the piping. If you noticed any black residue, soot, or charred metal, this is a sign you may be having combustion issues and you should have the unit serviced by a professional.
- For electric water heaters, look for signs of leaking such as rust streaks or residue around the upper and lower panels covering the electrical components on the tank.
- For water heaters more than three years old, have a technician inspect the sacrificial anode annually.

Compressed Air System Maintenance

Compressed air systems require periodic maintenance to operate at peak efficiency. A maintenance plan for compressed air systems should include:

- Inspection, cleaning, and replacement of inlet filter cartridges
- Cleaning of drain traps
- Daily inspection of lubricant levels to reduce unwanted friction
- Inspection of belt condition and tension
- Check for leaks and adjust loose connections
- Overall system cleaning

Contact a qualified technician for help with setting up periodic maintenance schedule.

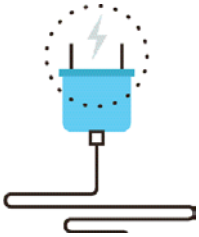
Refrigeration Equipment Maintenance

Preventative maintenance keeps commercial refrigeration equipment running reliably and efficiently. Commercial refrigerators and freezers are mission-critical equipment that can cost a fortune when they go down. Even when they appear to be working properly, refrigeration units can be consuming too much energy. Have walk-in refrigeration and freezer and other commercial systems serviced at least annually. This practice will allow systems to perform to their highest capabilities and will help identify system issues if they exist.

Maintaining your commercial refrigeration equipment can save between 5 and 10 percent on energy costs. When condenser coils are dirty, your commercial refrigerators and freezers work harder to maintain the temperature inside. Worn gaskets, hinges, door handles or faulty seals cause cold air to leak from the unit, forcing the unit to run longer and use more electricity.

Regular cleaning and maintenance also help your commercial refrigeration equipment to last longer.

Plug Load Controls



Reducing plug loads is a common way to decrease your electrical use. Limiting the energy use of plug loads can include increasing occupant awareness, removing under-used equipment, installing hardware controls, and using software controls. Consider enabling the most aggressive power settings on existing devices or install load sensing or occupancy sensing (advanced) power strips[6]. Your local utility may offer incentives or rebates for this equipment.

Computer Power Management Software

Many computers consume power during nights, weekends, and holidays. Screen savers are commonly confused as a power management strategy. This contributes to avoidable, excessive electrical energy consumption. There are innovative power management software packages available that are designed to deliver significant energy saving and provide ongoing tracking measurements. A central power management platform helps enforce energy savings policies as well as identify and eliminate underutilized devices.

Water Conservation

Installing dual flush or low-flow toilets and low-flow/waterless urinals are ways to reduce water use. The EPA WaterSense® ratings for urinals is 0.5 gallons per flush (gpf) and for flush valve toilets is 1.28 gpf (this is lower than the current 1.6 gpf federal standard).

For more information regarding water conservation go to the EPA's WaterSense® website[7] or download a copy of EPA's "WaterSense® at Work: Best Management Practices for Commercial and Institutional Facilities"[8] to get ideas for creating a water management plan and best practices for a wide range of water using systems.

Water conservation devices that do not reduce hot water consumption will not provide energy savings at the site level, but they may significantly affect your water and sewer usage costs. Any reduction in water use does however ultimately reduce grid-level electricity use since a significant amount of electricity is used to deliver water from reservoirs to end users.

If the facility has detached buildings with a master water meter for the entire campus, check for unnatural wet areas in the lawn or water seeping in the foundation at water pipe penetrations through the foundation. Periodically check overnight meter readings when the facility is unoccupied, and there is no other scheduled water usage.

[6] For additional information refer to "Assessing and Reducing Plug and Process Loads in Office Buildings" http://www.nrel.gov/docs/fy13osti/54175.pdf, or "Plug Load Best Practices Guide" http://www.advancedbuildings.net/plug-load-best-practices-guide-offices.

[7] https://www.epa.gov/watersense.

[8] https://www.epa.gov/watersense/watersense-work-0.

Manage irrigation systems to use water more effectively outside the building. Adjust spray patterns so that water lands on intended lawns and plantings and not on pavement and walls. Consider installing an evapotranspiration irrigation controller that will prevent over-watering.

Procurement Strategies

Purchasing efficient products reduces energy costs without compromising quality. Consider modifying your procurement policies and language to require ENERGY STAR® or WaterSense® products where available.

6 On-site Generation

You don't have to look far in New Jersey to see one of the thousands of solar electric systems providing clean power to homes, businesses, schools, and government buildings. On-site generation includes both renewable (e.g., solar, wind) and non-renewable (e.g., fuel cells) technologies that generate power to meet all or a portion of the facility's electric energy needs. Also referred to as distributed generation, these systems contribute to greenhouse gas (GHG) emission reductions, demand reductions and reduced customer electricity purchases, which results in improved electric grid reliability through better use of transmission and distribution systems.

Preliminary screenings were performed to determine if an on-site generation measure could be a cost-effective solution for your facility. Before deciding to install an on-site generation system, we recommend conducting a feasibility study to analyze existing energy profiles, siting, interconnection, and the costs associated with the generation project including interconnection costs, departing load charges, and any additional special facilities charges.

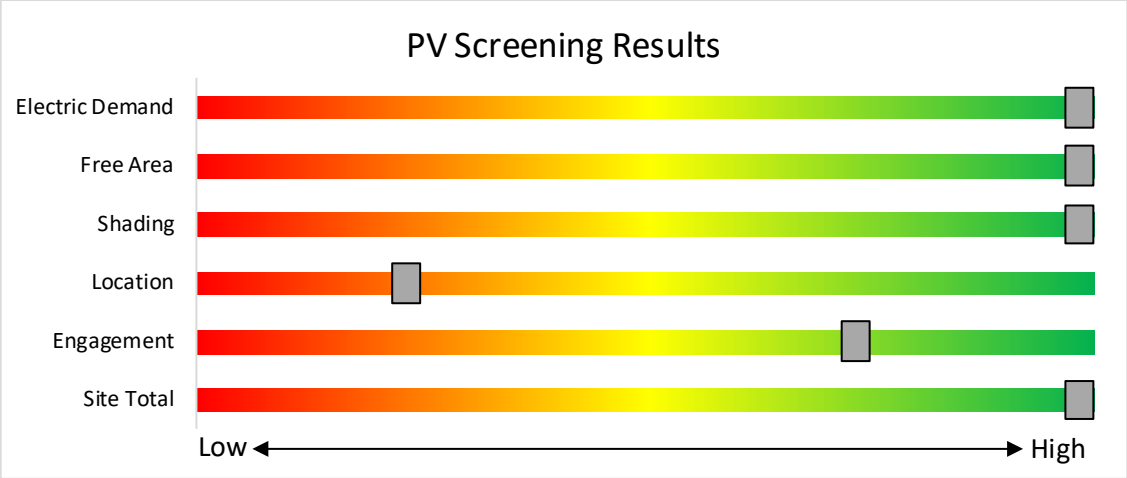
6.1 Solar Photovoltaic

Photovoltaic (PV) panels convert sunlight into electricity. Individual panels are combined into an array that produces direct current (DC) electricity. The DC current is converted to alternating current (AC) through an inverter. The inverter is then connected to the building's electrical distribution system.

A preliminary screening based on the facility's electric demand, size and location of free area, and shading elements shows that the facility has **high** potential for installing a PV array.

The amount of free area, ease of installation (location), and the lack of shading elements contribute to the **high** potential. A PV array located in the parking lot be feasible. If you are interested in pursuing the installation of PV, we recommend conducting a full feasibility study.

The graphic below displays the results of the PV potential screening conducted as a part of this audit. The position of each slider indicates the potential (potential increases to the right) that each factor contributes to the overall site potential.



Potential	High	
System Potential	450	kW DC STC
Electric Generation	536,116	kWh/yr
Displaced Cost	$56,840	/yr
Installed Cost	$1,521,000	

Figure 9 - Photovoltaic Screening

Transition Incentive (TI) Program

The TI program is a bridge between the Legacy SREC Program and a to-be determined Successor Incentive Program. The program is used to register the intent to install solar projects in New Jersey. Rebates are not available for solar projects, but owners of solar projects *must* register their projects prior to the start of construction to establish the project's eligibility to earn TRECs (Transition Incentive Renewable Energy Certificates). The Transition Incentive is structured as a factorized renewable energy certificate. The factors allow the TI Program to provide differentiated financial incentives for different types of solar installation.

Get more information about solar power in New Jersey or find a qualified solar installer who can help you decide if solar is right for your building:

Transition Incentive (TI) Program: https://www.njcleanenergy.com/renewable-energy/programs/transition-incentive-program

- **Basic Info on Solar PV in NJ**: www.njcleanenergy.com/whysolar.
- **NJ Solar Market FAQs**: www.njcleanenergy.com/renewable-energy/program-updates-and-background-information/solar-transition/solar-market-faqs.
- **Approved Solar Installers in the NJ Market**: www.njcleanenergy.com/commercial-industrial/programs/nj-smartstart-buildings/tools-and-resources/tradeally/approved_vendorsearch/?id=60&start=1.

6.2 Combined Heat and Power

Combined heat and power (CHP) generates electricity at the facility and puts waste heat energy to good use. Common types of CHP systems are reciprocating engines, microturbines, fuel cells, backpressure steam turbines, and (at large facilities) gas turbines.

CHP systems typically produce a portion of the electric power used on-site, with the balance of electric power needs supplied by the local utility company. The heat is used to supplement (or replace) existing boilers and provide space heating and/or domestic hot water heating. Waste heat can also be routed through absorption chillers for space cooling.

The key criteria used for screening is the amount of time that the CHP system would operate at full load and the facility's ability to use the recovered heat. Facilities with a continuous need for large quantities of waste heat are the best candidates for CHP.

A preliminary screening based on heating and electrical demand, siting, and interconnection shows that the facility has **no** potential for installing a cost-effective CHP system.

Based on a preliminary analysis, the facility does **not** appear to meet the minimum requirements for a cost-effective CHP installation. The lack of gas service, low or infrequent thermal load, and lack of space for siting the equipment are the most significant factors contributing to the lack of CHP potential.

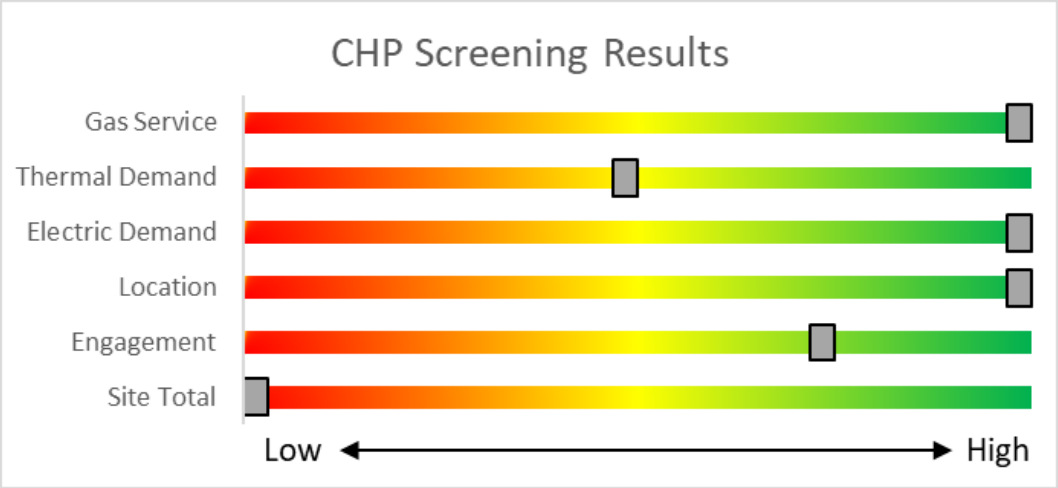


Figure 10 – Combined Heat & Power Screening

Find a qualified firm that specializes in commercial CHP cost assessment and installation:
http://www.njcleanenergy.com/commercial-industrial/programs/nj-smartstart-buildings/tools-and-resources/tradeally/approved_vendorsearch/

7 PROJECT FUNDING AND INCENTIVES

Ready to improve your building's performance? New Jersey's Clean Energy Programs can help. Pick the program that works best for you. Incentive programs that may apply to this facility are identified in the Executive Summary. This section provides an overview of currently available New Jersey's Clean Energy Programs.

	SmartStart *Flexibility to install at your own pace*	**Direct Install** *Turnkey installation*	**Pay for Performance** *Whole building upgrades*
Who should use it?	Buildings installing individual measures or small group of measures.	Small to mid-size facilities that can bundle multiple measures together. Average peak demand should be below 200 kW. Not suitable for significant building shell issues.	Mid to large size facilities looking to implement as many measures as possible at one time. Peak demand should be over 200 kW.
How does it work?	Use in-house staff or your preferred contractor.	Pre-approved contractors pass savings along to you via reduced material and labor costs.	Whole-building approach to energy upgrades designed to reduce energy use by at least 15%. The more you save, the higher the incentives.
What are the Incentives?	Fixed incentives for specific energy efficiency measures.	Incentives pay up to 70% of eligible costs, up to $125,000 per project. You pay the remaining 30% directly to the contractor.	Up to 25% of installation cost, calculated based on level of energy savings per square foot.
How do I participate?	Submit an application for the specific equipment to be installed.	Contact a participating contractor in your region.	Contact a pre-qualified Partner to develop your Energy Reduction Plan and set your energy savings targets.
Take the next step by visiting **www.njcleanenergy.com** for program details, applications, and to contact a qualified contractor.			

7.1 SmartStart

SmartStart offers incentives for installing prescriptive and custom energy efficiency measures at your facility. This program provides an effective mechanism for securing incentives for energy efficiency measures installed individually or as part of a package of energy upgrades. This program serves most common equipment types and sizes.

SmartStart routinely adds, removes, or modifies incentives from year-to-year for various energy efficient equipment based on market trends and new technologies.

Equipment with Prescriptive Incentives Currently Available:

Electric Chillers
Electric Unitary HVAC
Gas Cooling
Gas Heating
Gas Water Heating
Ground Source Heat Pumps
Lighting
Lighting Controls
Refrigeration Doors
Refrigeration Controls
Refrigerator/Freezer Motors
Food Service Equipment
Variable Frequency Drives

Incentives

The SmartStart Prescriptive program provides fixed incentives for specific energy efficiency measures. Prescriptive incentives vary by equipment type.

SmartStart Custom provides incentives for more unique or specialized technologies or systems that are not addressed through prescriptive incentives. Custom incentives are calculated at $0.16/kWh and $1.60/therm based on estimated annual savings. Incentives are capped at 50% of the total installed incremental project cost, or a project cost buy down to a one-year payback (whichever is less). Program incentives are capped at $500,000 per electric account and $500,000 per natural gas account, per fiscal year.

How to Participate

Submit an application for the specific equipment to be installed. Many applications are designed as rebates, although others require application approval prior to installation. You can work with your preferred contractor or use internal staff to install measures.

Visit www.njcleanenergy.com/SSB for a detailed program description, instructions for applying, and applications.

7.2 Direct Install

Direct Install is a turnkey program available to existing small to medium-sized facilities with an average peak electric demand that does not exceed 200 kW over the recent 12-month period. You work directly with a pre-approved contractor who will perform a free energy assessment at your facility, identify specific eligible measures, and provide a clear scope of work for installation of selected measures. Energy efficiency measures may include lighting and lighting controls, refrigeration, HVAC, motors, variable speed drives, and controls.

Based on the site building and utility data provided, the facility does not meet the requirements of the current DI program.

Incentives

The program pays up to 70% of the total installed cost of eligible measures, up to $125,000 per project. Each entity is limited to incentives up to $250,000 per fiscal year.

How to Participate

To participate in Direct Install, you will need to contact the participating contractor assigned to the region of the state where your facility is located. A complete list of Direct Install program partners is provided on the Direct Install website linked below. The contractor will be paid the measure incentives directly by the program, which will pass on to you in the form of reduced material and implementation costs. This means up to 70% of eligible costs are covered by the program, subject to program caps and eligibility, while the remaining 30% of the cost is paid to the contractor by the customer.

Detailed program descriptions and applications can be found at: www.njcleanenergy.com/DI.

7.3 Pay for Performance - Existing Buildings

Pay for Performance works for larger customers with a peak demand over 200 kW. The minimum installed scope of work must include at least two unique measures that results in at least 15% source energy savings, and lighting cannot make up the majority of the savings.

P4P is a generally a good option for medium-to-large sized facilities looking to implement as many measures as possible under a single project to achieve deep energy savings. This program has an added benefit of addressing measures that may not qualify for other programs. Many facilities pursuing an Energy Savings Improvement Program loan also use this program.

The scope of work presented in this audit report does not quite meet the requirements of the current P4P program. However, due to the size of the facility and existing conditions, should additional measures be identified at a later point in time, for example through further evaluation or the Energy Savings Improvement Program process, this facility could potentially meet the requirements necessary to participate in the P4P program.

Incentives

Incentives are based on estimated and achieved energy savings ranging from $0.18-$0.22/kWh and $1.80-$2.50/therm, capped at the lesser of 50% total project cost, or $1 million per electric account and $1 million per natural gas account, per fiscal year, not to exceed $2 million per project. An incentive of $0.15/square foot is also available to offset the cost of developing the Energy Reduction Plan (see below) contingent on the project moving forward with measure installation.

How to Participate

Contact one of the pre-approved consultants and contractors (“Partners”). Under direct contract to you, they will help further evaluate the measures identified in this report through development of the energy reduction plan), assist you in implementing selected measures, and verify actual savings one year after the installation. Your Partner will also help you apply for incentives.

Approval of the final scope of work is required by the program prior to installation. Installation can be done by the contractor of your choice (some P4P Partners are also contractors) or by internal staff, but the Partner remains involved throughout construction to ensure compliance with the program requirements.

Detailed program descriptions, instructions for applying, applications and list of Partners can be found at: www.njcleanenergy.com/P4P.

7.4 Combined Heat and Power

The Combined Heat & Power (CHP) program provides incentives for eligible CHP or waste heat to power (WHP) projects. Eligible CHP or WHP projects must achieve an annual system efficiency of at least 65% (lower heating value, or LHV), based on total energy input and total utilized energy output. Mechanical energy may be included in the efficiency evaluation.

Incentives

Eligible Technologies	Size (Installed Rated Capacity)[1]	Incentive ($/kW)	% of Total Cost Cap per Project[3]	$ Cap per Project[3]
Powered by non-renewable or renewable fuel source[4]	≤500 kW	$2,000	30-40%[2]	$2 million
Gas Internal Combustion Engine	>500 kW - 1 MW	$1,000		
Gas Combustion Turbine	> 1 MW - 3 MW	$550	30%	$3 million
Microturbine Fuel Cells with Heat Recovery	>3 MW	$350		
Waste Heat to Power*	<1 MW	$1,000	30%	$2 million
	> 1MW	$500		$3 million

*Waste Heat to Power: Powered by non-renewable fuel source, heat recovery or other mechanical recovery from existing equipment utilizing new electric generation equipment (e.g. steam turbine).

Check the NJCEP website for details on program availability, current incentive levels, and requirements.

How to Participate

You work with a qualified developer or consulting firm to complete the CHP application. Once the application is approved the project can be installed. Information about the CHP program can be found at: www.njcleanenergy.com/CHP.

7.5 Energy Savings Improvement Program

The Energy Savings Improvement Program (ESIP) serves New Jersey's government agencies by financing energy projects. An ESIP is a type of performance contract, whereby school districts, counties, municipalities, housing authorities and other public and state entities enter in to contracts to help finance building energy upgrades. Annual payments are lower than the savings projected from the ECMs, ensuring that ESIP projects are cash flow positive for the life of the contract.

ESIP provides government agencies in New Jersey with a flexible tool to improve and reduce energy usage with minimal expenditure of new financial resources. NJCEP incentive programs described above can also be used to help further reduce the total project cost of eligible measures.

How to Participate

This LGEA report is the first step to participating in ESIP. Next, you will need to select an approach for implementing the desired ECMs:

(1) Use an energy services company or "ESCO."

(2) Use independent engineers and other specialists, or your own qualified staff, to provide and manage the requirements of the program through bonds or lease obligations.

(3) Use a hybrid approach of the two options described above where the ESCO is used for some services and independent engineers, or other specialists or qualified staff, are used to deliver other requirements of the program.

After adopting a resolution with a chosen implementation approach, the development of the energy savings plan (ESP) can begin. The ESP demonstrates that the total project costs of the ECMs are offset by the energy savings over the financing term, not to exceed 15 years. The verified savings will then be used to pay for the financing.

The ESIP approach may not be appropriate for all energy conservation and energy efficiency improvements. Carefully consider all alternatives to develop an approach that best meets your needs. A detailed program descriptions and application can be found at: www.njcleanenergy.com/ESIP.

ESIP is a program delivered directly by the NJBPU and is not an NJCEP incentive program. As mentioned above, you can use NJCEP incentive programs to help further reduce costs when developing the energy savings plan. Refer to the ESIP guidelines at the link above for further information and guidance on next steps.

7.6 Transition Incentive (TI) Program

The TI program is a bridge between the Legacy SREC Program and a to-be determined Successor Incentive Program. The program is used to register the intent to install solar projects in New Jersey. Rebates are not available for solar projects, but owners of solar projects *must* register their projects prior to the start of construction to establish the project's eligibility to earn TRECs (Transition Incentive Renewable Energy Certificates). The Transition Incentive is structured as a factorized renewable energy certificate. The factors allow the TI Program to provide differentiated financial incentives for different types of solar installations.

NJBPU calculates the value of a Transition Renewable Energy Certificate (TREC) by multiplying the base compensation rate ($152/MWh) by the project's assigned factor (i.e. $152 x 0.85 = $129.20/MWh).

The TREC factors are defined based on the chart below:

Project Type	Factor
Subsection (t): landfill, brownfield, areas of historic fill	1.00
Grid supply (Subsection (r)) rooftop	1.00
Net metered non-residential rooftop and carport	1.00
Community solar	0.85
Grid supply (Subsection (r)) ground mount	0.60
Net metered residential ground mount	0.60
Net metered residential rooftop and carport	0.60
Net metered non-residential ground mount	0.60

After the registration is accepted, construction is complete, and final paperwork has been submitted and is deemed complete, the project is issued a New Jersey certification number, which enables it to generate New Jersey TRECs.

Eligible projects may generate TRECs for 15 years following the commencement of commercial operations (also referred to as the "Transition Incentive Qualification Life"). After 15 years, projects may be eligible for a NJ Class I REC.

TRECs will be used by the identified compliance entities to satisfy a compliance obligation tied to a new Transition Incentive Renewable Portfolio Standard ("TI-RPS"), which will exist in parallel with, and completely separate from, the existing Solar RPS for Legacy SRECs. The TI-RPS is a carve-out of the current Class I RPS requirement. The creation of TRECs is based upon metered generation supplied to PJM-EIS General Attribute Tracking System ("GATS") by the owners of eligible facilities or their agents. GATS would create one TREC for each MWh of energy produced from a qualified facility.

TRECs will be purchased monthly by a TREC Administrator who will allocate the TRECs to the Load Serving Entities (BGS Providers and Third-Party Suppliers) annually based on their market share of retail electricity sold during the relevant Energy Year.

Solar projects help the State of New Jersey reach renewable energy goals outlined in the state's Energy Master Plan. The Transition Incentive Program online portal is now open to new applications effective May 1, 2020. There are instructions on "How and When to Transfer my SRP Registration to the Transition Incentive Program". If you are considering installing solar photovoltaics on your building, visit the following link for more information:https://www.njcleanenergy.com/renewable-energy/programs/transition-incentive-program.

8 Energy Purchasing and Procurement Strategies

8.1 Retail Electric Supply Options

Energy deregulation in New Jersey has increased energy buyers' options by separating the function of electricity distribution from that of electricity supply. So, though you may choose a different company from which to buy your electric power, responsibility for your facility's interconnection to the grid and repair to local power distribution will still reside with the traditional utility company serving your region.

If your facility is not purchasing electricity from a third-party supplier, consider shopping for a reduced rate from third-party electric suppliers. If your facility already buys electricity from a third-party supplier, review and compare prices at the end of each contract year.

A list of licensed third-party electric suppliers is available at the NJBPU website[9].

8.2 Retail Natural Gas Supply Options

The natural gas market in New Jersey is also deregulated. Most customers that remain with the utility for natural gas service pay rates that are market-based and that fluctuate monthly. The utility provides basic gas supply service (BGSS) to customers who choose not to buy from a third-party supplier for natural gas commodity.

A customer's decision about whether to buy natural gas from a retail supplier typically depends on whether a customer prefers budget certainty and/or longer-term rate stability. Customers can secure longer-term fixed prices by signing up for service through a third-party retail natural gas supplier. Many larger natural gas customers may seek the assistance of a professional consultant to assist in their procurement process.

If your facility does not already purchase natural gas from a third-party supplier, consider shopping for a reduced rate from third-party natural gas suppliers. If your facility already purchases natural gas from a third-party supplier, review and compare prices at the end of each contract year.

A list of licensed third-party natural gas suppliers is available at the NJBPU website[10].

[9] www.state.nj.us/bpu/commercial/shopping.html.

[10] www.state.nj.us/bpu/commercial/shopping.html.

APPENDIX A: EQUIPMENT INVENTORY & RECOMMENDATIONS

Lighting Inventory & Recommendations

	Existing Conditions						Proposed Conditions								Energy Impact & Financial Analysis						
Location	Fixture Quantity	Fixture Description	Control System	Light Level	Watts per Fixture	Annual Operating Hours	ECM #	Fixture Recommendation	Add Controls?	Fixture Quantity	Fixture Description	Control System	Watts per Fixture	Annual Operating Hours	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Exterior Entrance Undercanopy	1	LED - Fixtures: Linear Strip	Timeclock		975	4,368		None	No	1	LED - Fixtures: Linear Strip	Timeclock	975	4,368	0.0	0	0	$0	$0	$0	0.0
Corridor 85	11	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Daylight Dimming	S	28	8,760	2	Relamp	No	11	LED - Linear Tubes: (1) 4' Lamp	Daylight Dimming	15	8,760	0.1	1,405	0	$146	$201	$55	1.0
Quiet Work Room 87C	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Unit Director 87C	2	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	2	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	176	0	$18	$73	$20	2.9
Rest Room 87E	1	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Occupancy Sensor	S	84	3,014	2	Relamp	No	1	LED - Linear Tubes: (3) 4' Lamps	Occupancy Sensor	44	3,014	0.0	132	0	$14	$55	$15	2.9
Rest Room 87F	1	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Occupancy Sensor	S	84	3,014	2	Relamp	No	1	LED - Linear Tubes: (3) 4' Lamps	Occupancy Sensor	44	3,014	0.0	132	0	$14	$55	$15	2.9
Storage 87G	2	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	2	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	176	0	$18	$73	$20	2.9
Office 87H	2	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	2	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	176	0	$18	$73	$20	2.9
Work Room 87A	10	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	8,760	2	Relamp	No	10	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	8,760	0.2	2,554	-1	$266	$365	$100	1.0
Med. Disp. 87B	2	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	8,760	2	Relamp	No	2	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	8,760	0.0	511	0	$53	$73	$20	1.0
Waiting 87	4	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	8,760	2	Relamp	No	4	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	8,760	0.1	1,022	0	$106	$146	$40	1.0
Hallway by Waiting 87	2	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	8,760	2	Relamp	No	2	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	8,760	0.0	255	0	$27	$37	$10	1.0
Occ. Health 87R	2	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	8,760	2	Relamp	No	2	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	8,760	0.0	511	0	$53	$73	$20	1.0
Nurse Screening 87Q	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	8,760	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	8,760	0.0	255	0	$27	$37	$10	1.0
Exam Room 3 87P	2	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	8,760	2	Relamp	No	2	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	8,760	0.0	511	0	$53	$73	$20	1.0
Nurse Pract. 87N	4	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Daylight Dimming	S	56	8,760	2	Relamp	No	4	LED - Linear Tubes: (2) 4' Lamps	Daylight Dimming	29	8,760	0.1	1,022	0	$106	$146	$40	1.0
Hallway	9	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	8,760	2	Relamp	No	9	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	8,760	0.2	2,299	0	$239	$329	$90	1.0
Conference Room 87L	2	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	8,760	2	Relamp	No	2	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	8,760	0.0	511	0	$53	$73	$20	1.0
Exam Room 2 87S	2	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	8,760	2	Relamp	No	2	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	8,760	0.0	511	0	$53	$73	$20	1.0
Exam Room 1 87T	2	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	8,760	2	Relamp	No	2	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	8,760	0.0	511	0	$53	$73	$20	1.0
Nutritionist 87K	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	8,760	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	8,760	0.0	255	0	$27	$37	$10	1.0
Nurse Director 87J	2	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	2	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	176	0	$18	$73	$20	2.9
Quiet Rest 87U	2	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	2	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	176	0	$18	$73	$20	2.9
Corridor 44	23	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	8,760	2	Relamp	No	23	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	8,760	0.2	2,938	-1	$305	$420	$115	1.0
Alt. Work Room 46	2	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Occupancy Sensor	S	84	3,014	2	Relamp	No	2	LED - Linear Tubes: (3) 4' Lamps	Occupancy Sensor	44	3,014	0.1	264	0	$27	$110	$30	2.9

	Existing Conditions						Proposed Conditions								Energy Impact & Financial Analysis						
Location	Fixture Quantity	Fixture Description	Control System	Light Level	Watts per Fixture	Annual Operating Hours	ECM #	Fixture Recommendation	Add Controls?	Fixture Quantity	Fixture Description	Control System	Watts per Fixture	Annual Operating Hours	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
PSY 45F	4	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Occupancy Sensor	S	84	3,014	2	Relamp	No	4	LED - Linear Tubes: (3) 4' Lamps	Occupancy Sensor	44	3,014	0.1	527	0	$55	$219	$60	2.9
SVR 45E	2	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	2	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	176	0	$18	$73	$20	2.9
Conference Room 41G	4	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Daylight Dimming	S	84	2,621	2	Relamp	No	4	LED - Linear Tubes: (3) 4' Lamps	Daylight Dimming	44	2,621	0.1	459	0	$48	$219	$60	3.3
HS Office 45	8	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Occupancy Sensor	S	84	3,014	2	Relamp	No	8	LED - Linear Tubes: (3) 4' Lamps	Occupancy Sensor	44	3,014	0.2	1,055	0	$110	$438	$120	2.9
Storage 41A	3	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	3	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.1	264	0	$27	$110	$30	2.9
Conference Room 41F	2	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Occupancy Sensor	S	84	3,014	2	Relamp	No	2	LED - Linear Tubes: (3) 4' Lamps	Occupancy Sensor	44	3,014	0.1	264	0	$27	$110	$30	2.9
Hallway	3	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Occupancy Sensor	S	84	8,760	2	Relamp	No	3	LED - Linear Tubes: (3) 4' Lamps	Occupancy Sensor	44	8,760	0.1	1,149	0	$120	$164	$45	1.0
HS Office Room	2	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Occupancy Sensor	S	84	3,014	2	Relamp	No	2	LED - Linear Tubes: (3) 4' Lamps	Occupancy Sensor	44	3,014	0.1	264	0	$27	$110	$30	2.9
HS Office Room	2	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Occupancy Sensor	S	84	3,014	2	Relamp	No	2	LED - Linear Tubes: (3) 4' Lamps	Occupancy Sensor	44	3,014	0.1	264	0	$27	$110	$30	2.9
Director 45A	4	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Occupancy Sensor	S	84	3,014	2	Relamp	No	4	LED - Linear Tubes: (3) 4' Lamps	Occupancy Sensor	44	3,014	0.1	527	0	$55	$219	$60	2.9
Executive Director 41E	2	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Daylight Dimming	S	84	2,621	2	Relamp	No	2	LED - Linear Tubes: (3) 4' Lamps	Daylight Dimming	44	2,621	0.1	229	0	$24	$110	$30	3.3
Rest Room Entrance	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Women's Rest Room 43	2	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	2	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	176	0	$18	$73	$20	2.9
Women's Rest Room 43	2	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	2	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	88	0	$9	$37	$10	2.9
Men's Rest Room 42	2	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	2	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	176	0	$18	$73	$20	2.9
Men's Rest Room 42	2	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	2	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	88	0	$9	$37	$10	2.9
SR PSY 41	2	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Occupancy Sensor	S	84	3,014	2	Relamp	No	2	LED - Linear Tubes: (3) 4' Lamps	Occupancy Sensor	44	3,014	0.1	264	0	$27	$110	$30	2.9
HR/Talent 41C	2	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Occupancy Sensor	S	84	3,014	2	Relamp	No	2	LED - Linear Tubes: (3) 4' Lamps	Occupancy Sensor	44	3,014	0.1	264	0	$27	$110	$30	2.9
SR SW 41H	2	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Occupancy Sensor	S	84	3,014	2	Relamp	No	2	LED - Linear Tubes: (3) 4' Lamps	Occupancy Sensor	44	3,014	0.1	264	0	$27	$110	$30	2.9
SR Director 41D	2	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Daylight Dimming	S	84	2,621	2	Relamp	No	2	LED - Linear Tubes: (3) 4' Lamps	Daylight Dimming	44	2,621	0.1	229	0	$24	$110	$30	3.3
Open Office/Off-Site Admin 41	13	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Occupancy Sensor	S	84	3,014	2	Relamp	No	13	LED - Linear Tubes: (3) 4' Lamps	Occupancy Sensor	44	3,014	0.4	1,714	0	$178	$712	$195	2.9
Open Office/Off-Site Admin 41	2	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	2	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	176	0	$18	$73	$20	2.9
BSN MNG 41B	2	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Daylight Dimming	S	84	2,621	2	Relamp	No	2	LED - Linear Tubes: (3) 4' Lamps	Daylight Dimming	44	2,621	0.1	229	0	$24	$110	$30	3.3
Hallway	2	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	8,760	2	Relamp	No	2	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	8,760	0.0	511	0	$53	$73	$20	1.0
Flex Classroom 51 Entrance	1	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	1	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	44	0	$5	$18	$5	2.9

	Existing Conditions						Proposed Conditions								Energy Impact & Financial Analysis						
Location	Fixture Quantity	Fixture Description	Control System	Light Level	Watts per Fixture	Annual Operating Hours	ECM #	Fixture Recommendation	Add Controls?	Fixture Quantity	Fixture Description	Control System	Watts per Fixture	Annual Operating Hours	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Flex Classroom 51	9	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Daylight Dimming	S	84	2,621	2	Relamp	No	9	LED - Linear Tubes: (3) 4' Lamps	Daylight Dimming	44	2,621	0.2	1,032	0	$107	$493	$135	3.3
Rest Room 51A	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 51B	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 51C	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
TW 51D	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Music Classroom 47	9	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Daylight Dimming	S	84	2,621	2	Relamp	No	9	LED - Linear Tubes: (3) 4' Lamps	Daylight Dimming	44	2,621	0.2	1,032	0	$107	$493	$135	3.3
TW 47B	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Storage 47A	2	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	2	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	176	0	$18	$73	$20	2.9
Storage 49	3	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	3	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.1	264	0	$27	$110	$30	2.9
Corridor 79	8	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	8,760	2	Relamp	No	8	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	8,760	0.1	1,022	0	$106	$146	$40	1.0
Skills Classroom	9	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Daylight Dimming	S	84	2,621	2	Relamp	No	9	LED - Linear Tubes: (3) 4' Lamps	Daylight Dimming	44	2,621	0.2	1,032	0	$107	$493	$135	3.3
Skills Classroom	1	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	1	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	44	0	$5	$18	$5	2.9
TW 54D	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 54C	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 54B	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Rest Room 54A	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Girl's Rest Room 52	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Laundry Room 50A	3	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	3	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.1	264	0	$27	$110	$30	2.9
MDF Room 50B	6	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Wall Switch	S	28	4,368	2	Relamp	No	6	LED - Linear Tubes: (1) 4' Lamp	Wall Switch	15	4,368	0.1	382	0	$40	$110	$30	2.0
Kiln 48A	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Storage 48B	2	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	2	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	176	0	$18	$73	$20	2.9
TW 48C	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Art Classroom 48	9	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Daylight Dimming	S	84	2,621	2	Relamp	No	9	LED - Linear Tubes: (3) 4' Lamps	Daylight Dimming	44	2,621	0.2	1,032	0	$107	$493	$135	3.3
Vestibule 39	2	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Timeclock	S	56	8,760	2	Relamp	No	2	LED - Linear Tubes: (2) 4' Lamps	Timeclock	29	8,760	0.0	511	0	$53	$73	$20	1.0
Vestibule 39	2	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Timeclock	S	28	8,760	2	Relamp	No	2	LED - Linear Tubes: (1) 4' Lamp	Timeclock	15	8,760	0.0	255	0	$27	$37	$10	1.0

	Existing Conditions						Proposed Conditions								Energy Impact & Financial Analysis						
Location	Fixture Quantity	Fixture Description	Control System	Light Level	Watts per Fixture	Annual Operating Hours	ECM #	Fixture Recommendation	Add Controls?	Fixture Quantity	Fixture Description	Control System	Watts per Fixture	Annual Operating Hours	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Main Entrance Lobby 40	4	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Timeclock	S	56	8,760	2	Relamp	No	4	LED - Linear Tubes: (2) 4' Lamps	Timeclock	29	8,760	0.1	1,022	0	$106	$146	$40	1.0
Main Entrance Lobby 40	1	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Timeclock	S	28	8,760	2	Relamp	No	1	LED - Linear Tubes: (1) 4' Lamp	Timeclock	15	8,760	0.0	128	0	$13	$18	$5	1.0
Main Entrance Lobby 40	6	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	6	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.1	264	0	$27	$110	$30	2.9
Stair 1	4	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	4	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	176	0	$18	$73	$20	2.9
PSY 15E	4	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Daylight Dimming	S	56	2,621	2	Relamp	No	4	LED - Linear Tubes: (2) 4' Lamps	Daylight Dimming	29	2,621	0.1	306	0	$32	$146	$40	3.3
Alt. Work Room 17	1	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Occupancy Sensor	S	84	3,014	2	Relamp	No	1	LED - Linear Tubes: (3) 4' Lamps	Occupancy Sensor	44	3,014	0.0	132	0	$14	$55	$15	2.9
SW 15D	1	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Occupancy Sensor	S	84	3,014	2	Relamp	No	1	LED - Linear Tubes: (3) 4' Lamps	Occupancy Sensor	44	3,014	0.0	132	0	$14	$55	$15	2.9
SW 15C	1	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Occupancy Sensor	S	84	3,014	2	Relamp	No	1	LED - Linear Tubes: (3) 4' Lamps	Occupancy Sensor	44	3,014	0.0	132	0	$14	$55	$15	2.9
ES Office 15	6	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Occupancy Sensor	S	84	3,014	2	Relamp	No	6	LED - Linear Tubes: (3) 4' Lamps	Occupancy Sensor	44	3,014	0.2	791	0	$82	$329	$90	2.9
SVR 15B	2	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	2	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	176	0	$18	$73	$20	2.9
Director 15A	2	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	2	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	176	0	$18	$73	$20	2.9
Hallway	4	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	8,760	2	Relamp	No	4	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	8,760	0.0	511	0	$53	$73	$20	1.0
Kitchen Area	4	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	4	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	176	0	$18	$73	$20	2.9
Building (Middle Section)	26	Exit Signs: LED - 2 W Lamp	None		6	8,760		None	No	26	Exit Signs: LED - 2 W Lamp	None	6	8,760	0.0	0	0	$0	$0	$0	0.0
Building (C-Wing)	4	Exit Signs: LED - 2 W Lamp	None		6	8,760		None	No	4	Exit Signs: LED - 2 W Lamp	None	6	8,760	0.0	0	0	$0	$0	$0	0.0
HS Classroom 6 (53)	9	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Daylight Dimming	S	84	2,621	2	Relamp	No	9	LED - Linear Tubes: (3) 4' Lamps	Daylight Dimming	44	2,621	0.2	1,032	0	$107	$493	$135	3.3
HS Classroom 6 (53)	1	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	1	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	44	0	$5	$18	$5	2.9
TW 53D	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 53C	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 53B	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Rest Room 53A	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
HS Classroom 5 (55)	9	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Daylight Dimming	S	84	2,621	2	Relamp	No	9	LED - Linear Tubes: (3) 4' Lamps	Daylight Dimming	44	2,621	0.2	1,032	0	$107	$493	$135	3.3
HS Classroom 5 (55)	1	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	1	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	44	0	$5	$18	$5	2.9
TW 55D	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 55C	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9

	Existing Conditions						Proposed Conditions								Energy Impact & Financial Analysis						
Location	Fixture Quantity	Fixture Description	Control System	Light Level	Watts per Fixture	Annual Operating Hours	ECM #	Fixture Recommendation	Add Controls?	Fixture Quantity	Fixture Description	Control System	Watts per Fixture	Annual Operating Hours	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Session 55B	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Rest Room 55A	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Storage 3 (59)	4	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Wall Switch	S	56	4,368	2	Relamp	No	4	LED - Linear Tubes: (2) 4' Lamps	Wall Switch	29	4,368	0.1	509	0	$53	$146	$40	2.0
HS Classroom 4 (63)	9	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Daylight Dimming	S	84	2,621	2	Relamp	No	9	LED - Linear Tubes: (3) 4' Lamps	Daylight Dimming	44	2,621	0.2	1,032	0	$107	$493	$135	3.3
HS Classroom 4 (63)	1	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	1	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	44	0	$5	$18	$5	2.9
TW 63C	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 63A	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 63B	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Staff Rest Room 61	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
HS Classroom 3 (65)	9	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Daylight Dimming	S	84	2,621	2	Relamp	No	9	LED - Linear Tubes: (3) 4' Lamps	Daylight Dimming	44	2,621	0.2	1,032	0	$107	$493	$135	3.3
HS Classroom 3 (65)	1	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	1	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	44	0	$5	$18	$5	2.9
IDF Closet 67	2	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Wall Switch	S	56	4,368	2	Relamp	No	2	LED - Linear Tubes: (2) 4' Lamps	Wall Switch	29	4,368	0.0	255	0	$26	$73	$20	2.0
Session 65A	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 65B	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
TW 65C	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
HS Classroom 2 (71)	9	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Daylight Dimming	S	84	2,621	2	Relamp	No	9	LED - Linear Tubes: (3) 4' Lamps	Daylight Dimming	44	2,621	0.2	1,032	0	$107	$493	$135	3.3
HS Classroom 2 (71)	1	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	1	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	44	0	$5	$18	$5	2.9
TW 71C	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 71B	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 71A	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Alt. Work Room 69	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
HS Classroom 1 (75)	9	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Daylight Dimming	S	84	2,621	2	Relamp	No	9	LED - Linear Tubes: (3) 4' Lamps	Daylight Dimming	44	2,621	0.2	1,032	0	$107	$493	$135	3.3
HS Classroom 1 (75)	1	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	1	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	44	0	$5	$18	$5	2.9
TW 75C	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 75B	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9

	Existing Conditions						Proposed Conditions								Energy Impact & Financial Analysis						
Location	Fixture Quantity	Fixture Description	Control System	Light Level	Watts per Fixture	Annual Operating Hours	ECM #	Fixture Recommendation	Add Controls?	Fixture Quantity	Fixture Description	Control System	Watts per Fixture	Annual Operating Hours	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Session 75A	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Electrical Room 73	1	LED - Linear Tubes: (2) 4' Lamps	Wall Switch	S	29	4,368		None	No	1	LED - Linear Tubes: (2) 4' Lamps	Wall Switch	29	4,368	0.0	0	0	$0	$0	$0	0.0
HS Home Ec./Lounge 77	8	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	8	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.1	352	0	$37	$146	$40	2.9
Hallway C-Wing	19	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	8,760	2	Relamp	No	19	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	8,760	0.2	2,427	-1	$252	$347	$95	1.0
HS Lounge 57	6	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Daylight Dimming	S	28	2,621	2	Relamp	No	6	LED - Linear Tubes: (1) 4' Lamp	Daylight Dimming	15	2,621	0.1	229	0	$24	$110	$30	3.3
HS Lounge 57	3	Linear Fluorescent - T5: 4' T5 (28W) - 1L	Daylight Dimming	S	30	2,621	2	Relamp	No	3	LED - Linear Tubes: (1) 4' Lamp	Daylight Dimming	15	2,621	0.0	132	0	$14	$55	$15	2.9
Hallway C-Wing	9	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	8,760	2	Relamp	No	9	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	8,760	0.1	1,149	0	$120	$164	$45	1.0
Custodial Maintenance Instruction Area 56	4	Compact Fluorescent: (1) 32W Plug-In Lamp	Occupancy Sensor	S	32	3,014	2	Relamp	No	4	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	3,014	0.0	130	0	$14	$50	$4	3.4
Custodial Maintenance Instruction Area 56	1	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	1	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	44	0	$5	$18	$5	2.9
Custodial Maintenance Instruction Area 56	6	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Daylight Dimming	S	84	2,621	2	Relamp	No	6	LED - Linear Tubes: (3) 4' Lamps	Daylight Dimming	44	2,621	0.2	688	0	$72	$329	$90	3.3
Alt. Work Room 60	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
HS Classroom 13 (62)	9	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Daylight Dimming	S	84	2,621	2	Relamp	No	9	LED - Linear Tubes: (3) 4' Lamps	Daylight Dimming	44	2,621	0.2	1,032	0	$107	$493	$135	3.3
HS Classroom 13 (62)	1	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	1	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	44	0	$5	$18	$5	2.9
Rest Room 62A	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 62B	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 62C	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
TW 62D	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
HS Classroom 12 (66)	9	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Daylight Dimming	S	84	2,621	2	Relamp	No	9	LED - Linear Tubes: (3) 4' Lamps	Daylight Dimming	44	2,621	0.2	1,032	0	$107	$493	$135	3.3
HS Classroom 12 (66)	1	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	1	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	44	0	$5	$18	$5	2.9
Girl's Rest Room 64	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 66A	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 66B	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
TW 66C	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
HS Classroom 11 (68)	9	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Daylight Dimming	S	84	2,621	2	Relamp	No	9	LED - Linear Tubes: (3) 4' Lamps	Daylight Dimming	44	2,621	0.2	1,032	0	$107	$493	$135	3.3
HS Classroom 11 (68)	1	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	1	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	44	0	$5	$18	$5	2.9

	Existing Conditions						Proposed Conditions								Energy Impact & Financial Analysis						
Location	Fixture Quantity	Fixture Description	Control System	Light Level	Watts per Fixture	Annual Operating Hours	ECM #	Fixture Recommendation	Add Controls?	Fixture Quantity	Fixture Description	Control System	Watts per Fixture	Annual Operating Hours	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Session 68A	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 68B	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
TW 68C	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Rest Room 70	4	Compact Fluorescent: (1) 32W Plug-In Lamp	Occupancy Sensor	S	32	3,014	2	Relamp	No	4	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	3,014	0.0	130	0	$14	$50	$4	3.4
HS Classroom 10 (72)	9	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Daylight Dimming	S	84	2,621	2	Relamp	No	9	LED - Linear Tubes: (3) 4' Lamps	Daylight Dimming	44	2,621	0.2	1,032	0	$107	$493	$135	3.3
HS Classroom 10 (72)	1	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	1	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	44	0	$5	$18	$5	2.9
Session 72A	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 72B	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
TW 72C	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Sensory 74	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
HS Classroom 9 (76)	9	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Daylight Dimming	S	84	2,621	2	Relamp	No	9	LED - Linear Tubes: (3) 4' Lamps	Daylight Dimming	44	2,621	0.2	1,032	0	$107	$493	$135	3.3
HS Classroom 9 (76)	1	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	1	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	44	0	$5	$18	$5	2.9
Session 76A	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 76B	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
TW 76C	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Boy's Rest Room 78	2	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	2	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	176	0	$18	$73	$20	2.9
HS Classroom 8 (80)	9	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Daylight Dimming	S	84	2,621	2	Relamp	No	9	LED - Linear Tubes: (3) 4' Lamps	Daylight Dimming	44	2,621	0.2	1,032	0	$107	$493	$135	3.3
HS Classroom 8 (80)	1	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	1	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	44	0	$5	$18	$5	2.9
Session 80A	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 80B	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
TW 80C	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
HS Classroom 7 (84)	9	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Daylight Dimming	S	84	2,621	2	Relamp	No	9	LED - Linear Tubes: (3) 4' Lamps	Daylight Dimming	44	2,621	0.2	1,032	0	$107	$493	$135	3.3
HS Classroom 7 (84)	1	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	1	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	44	0	$5	$18	$5	2.9
Session 84A	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 84B	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9

	Existing Conditions						Proposed Conditions								Energy Impact & Financial Analysis						
Location	Fixture Quantity	Fixture Description	Control System	Light Level	Watts per Fixture	Annual Operating Hours	ECM #	Fixture Recommendation	Add Controls?	Fixture Quantity	Fixture Description	Control System	Watts per Fixture	Annual Operating Hours	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
TW 84C	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
JC 82	1	LED - Linear Tubes: (2) 4' Lamps	Wall Switch	S	29	4,368		None	No	1	LED - Linear Tubes: (2) 4' Lamps	Wall Switch	29	4,368	0.0	0	0	$0	$0	$0	0.0
Elementary Home Ec. Lounge 16	5	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	5	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	220	0	$23	$91	$25	2.9
El Classroom 6 (19)	9	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Daylight Dimming	S	84	2,621	2	Relamp	No	9	LED - Linear Tubes: (3) 4' Lamps	Daylight Dimming	44	2,621	0.2	1,032	0	$107	$493	$135	3.3
El Classroom 6 (19)	1	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	1	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	44	0	$5	$18	$5	2.9
TW 19D	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 19C	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 19B	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Rest Room 19A	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
El Classroom 5 (21)	9	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Daylight Dimming	S	84	2,621	2	Relamp	No	9	LED - Linear Tubes: (3) 4' Lamps	Daylight Dimming	44	2,621	0.2	1,032	0	$107	$493	$135	3.3
El Classroom 5 (21)	1	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	1	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	44	0	$5	$18	$5	2.9
TW 21D	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 21C	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 21B	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Rest Room 21A	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Corridor 38	11	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	8,760	2	Relamp	No	11	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	8,760	0.1	1,405	0	$146	$201	$55	1.0
Storage 18	2	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Wall Switch	S	56	4,368	2	Relamp	No	2	LED - Linear Tubes: (2) 4' Lamps	Wall Switch	29	4,368	0.0	255	0	$26	$73	$20	2.0
El Classroom 12 (20)	9	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Daylight Dimming	S	84	2,621	2	Relamp	No	9	LED - Linear Tubes: (3) 4' Lamps	Daylight Dimming	44	2,621	0.2	1,032	0	$107	$493	$135	3.3
El Classroom 12 (20)	1	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	1	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	44	0	$5	$18	$5	2.9
TW 20D	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 20C	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 20B	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Rest Room 20A	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
El Classroom 11 (22)	9	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Daylight Dimming	S	84	2,621	2	Relamp	No	9	LED - Linear Tubes: (3) 4' Lamps	Daylight Dimming	44	2,621	0.2	1,032	0	$107	$493	$135	3.3
El Classroom 11 (22)	1	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	1	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	44	0	$5	$18	$5	2.9

	Existing Conditions						Proposed Conditions								Energy Impact & Financial Analysis						
Location	Fixture Quantity	Fixture Description	Control System	Light Level	Watts per Fixture	Annual Operating Hours	ECM #	Fixture Recommendation	Add Controls?	Fixture Quantity	Fixture Description	Control System	Watts per Fixture	Annual Operating Hours	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
TW 22D	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 22C	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 22B	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Rest Room 22A	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Sensor 25	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
JC 107B	1	LED - Linear Tubes: (2) 4' Lamps	Wall Switch	S	29	4,368		None	No	1	LED - Linear Tubes: (2) 4' Lamps	Wall Switch	29	4,368	0.0	0	0	$0	$0	$0	0.0
Staff Rest Room 27	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Hallway	6	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Daylight Dimming	S	28	8,760	2	Relamp	No	6	LED - Linear Tubes: (1) 4' Lamp	Daylight Dimming	15	8,760	0.1	766	0	$80	$110	$30	1.0
Hallway	3	Linear Fluorescent - T5: 4' T5 (28W) - 1L	Daylight Dimming	S	30	8,760	2	Relamp	No	3	LED - Linear Tubes: (1) 4' Lamp	Daylight Dimming	15	8,760	0.0	440	0	$46	$55	$15	0.9
El Classroom 10 (24)	9	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Daylight Dimming	S	84	2,621	2	Relamp	No	9	LED - Linear Tubes: (3) 4' Lamps	Daylight Dimming	44	2,621	0.2	1,032	0	$107	$493	$135	3.3
El Classroom 10 (24)	1	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	1	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	44	0	$5	$18	$5	2.9
TW 24D	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 24C	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 24B	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Rest Room 24A	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
El Classroom 9 (26)	9	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Daylight Dimming	S	84	2,621	2	Relamp	No	9	LED - Linear Tubes: (3) 4' Lamps	Daylight Dimming	44	2,621	0.2	1,032	0	$107	$493	$135	3.3
El Classroom 9 (26)	1	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	1	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	44	0	$5	$18	$5	2.9
TW 26D	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 26C	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 26B	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Rest Room 26A	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
El Classroom 4 (29)	9	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Daylight Dimming	S	84	2,621	2	Relamp	No	9	LED - Linear Tubes: (3) 4' Lamps	Daylight Dimming	44	2,621	0.2	1,032	0	$107	$493	$135	3.3
El Classroom 4 (29)	1	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	1	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	44	0	$5	$18	$5	2.9
TW 29D	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 29C	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9

	Existing Conditions						Proposed Conditions								Energy Impact & Financial Analysis						
Location	Fixture Quantity	Fixture Description	Control System	Light Level	Watts per Fixture	Annual Operating Hours	ECM #	Fixture Recommendation	Add Controls?	Fixture Quantity	Fixture Description	Control System	Watts per Fixture	Annual Operating Hours	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Session 29B	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Electrical Room 29A	1	LED - Linear Tubes: (2) 4' Lamps	Wall Switch	S	29	4,368		None	No	1	LED - Linear Tubes: (2) 4' Lamps	Wall Switch	29	4,368	0.0	0	0	$0	$0	$0	0.0
Corridor 38	10	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	8,760	2	Relamp	No	10	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	8,760	0.1	1,277	0	$133	$183	$50	1.0
Work Room 30	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
El Classroom 3 (31)	9	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Daylight Dimming	S	84	2,621	2	Relamp	No	9	LED - Linear Tubes: (3) 4' Lamps	Daylight Dimming	44	2,621	0.2	1,032	0	$107	$493	$135	3.3
El Classroom 3 (31)	1	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	1	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	44	0	$5	$18	$5	2.9
TW 31D	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 31C	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 31B	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
IDF Room 31A	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Wall Switch	S	56	4,368	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Wall Switch	29	4,368	0.0	127	0	$13	$37	$10	2.0
ES Lounge 32	5	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Daylight Dimming	S	28	2,621	2	Relamp	No	5	LED - Linear Tubes: (1) 4' Lamp	Daylight Dimming	15	2,621	0.0	191	0	$20	$91	$25	3.3
ES Lounge 32	3	Linear Fluorescent - T5: 4' T5 (28W) - 1L	Daylight Dimming	S	30	2,621	2	Relamp	No	3	LED - Linear Tubes: (1) 4' Lamp	Daylight Dimming	15	2,621	0.0	132	0	$14	$55	$15	2.9
El Classroom 2 (33)	9	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Daylight Dimming	S	84	2,621	2	Relamp	No	9	LED - Linear Tubes: (3) 4' Lamps	Daylight Dimming	44	2,621	0.2	1,032	0	$107	$493	$135	3.3
El Classroom 2 (33)	1	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	1	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	44	0	$5	$18	$5	2.9
TW 33D	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 33C	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 33B	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Rest Room 33A	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
El Classroom 8 (34)	9	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Daylight Dimming	S	84	2,621	2	Relamp	No	9	LED - Linear Tubes: (3) 4' Lamps	Daylight Dimming	44	2,621	0.2	1,032	0	$107	$493	$135	3.3
El Classroom 8 (34)	1	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	1	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	44	0	$5	$18	$5	2.9
TW 34D	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 34C	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 34B	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Rest Room 34A	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
El Classroom 1 (35)	9	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Daylight Dimming	S	84	2,621	2	Relamp	No	9	LED - Linear Tubes: (3) 4' Lamps	Daylight Dimming	44	2,621	0.2	1,032	0	$107	$493	$135	3.3

	Existing Conditions						Proposed Conditions								Energy Impact & Financial Analysis						
Location	Fixture Quantity	Fixture Description	Control System	Light Level	Watts per Fixture	Annual Operating Hours	ECM #	Fixture Recommendation	Add Controls?	Fixture Quantity	Fixture Description	Control System	Watts per Fixture	Annual Operating Hours	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
El Classroom 1 (35)	1	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	1	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	44	0	$5	$18	$5	2.9
TW 35D	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 35C	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 35B	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Rest Room 35A	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
El Classroom 7 (36)	9	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Daylight Dimming	S	84	2,621	2	Relamp	No	9	LED - Linear Tubes: (3) 4' Lamps	Daylight Dimming	44	2,621	0.2	1,032	0	$107	$493	$135	3.3
El Classroom 7 (36)	1	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	1	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	44	0	$5	$18	$5	2.9
TW 36D	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 36C	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 36B	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Rest Room 36A	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Corridor 38	13	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	8,760	2	Relamp	No	13	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	8,760	0.1	1,660	0	$173	$237	$65	1.0
Stair 2	3	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	3	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	132	0	$14	$55	$15	2.9
Building (B-Wing)	8	Exit Signs: LED - 2 W Lamp	None		6	8,760		None	No	8	Exit Signs: LED - 2 W Lamp	None	6	8,760	0.0	0	0	$0	$0	$0	0.0
Testing Coord. 200E	2	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	2	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	176	0	$18	$73	$20	2.9
Job Coaches 204	4	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Occupancy Sensor	S	84	3,014	2	Relamp	No	4	LED - Linear Tubes: (3) 4' Lamps	Occupancy Sensor	44	3,014	0.1	527	0	$55	$219	$60	2.9
Work Room (SP&L/OT) 200	13	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Daylight Dimming	S	84	2,621	2	Relamp	No	13	LED - Linear Tubes: (3) 4' Lamps	Daylight Dimming	44	2,621	0.4	1,490	0	$155	$712	$195	3.3
Electrical Room 202	1	LED - Linear Tubes: (2) 4' Lamps	Wall Switch	S	29	4,368		None	No	1	LED - Linear Tubes: (2) 4' Lamps	Wall Switch	29	4,368	0.0	0	0	$0	$0	$0	0.0
PT 200D	2	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	2	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	176	0	$18	$73	$20	2.9
SR SP&L 200C	2	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	2	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	176	0	$18	$73	$20	2.9
SR OT 200B	2	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	2	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	176	0	$18	$73	$20	2.9
Storage 200A	2	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	2	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	176	0	$18	$73	$20	2.9
Hallway	15	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	8,760	2	Relamp	No	15	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	8,760	0.1	1,916	0	$199	$274	$75	1.0
Alt. Work Room 205	2	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Occupancy Sensor	S	84	3,014	2	Relamp	No	2	LED - Linear Tubes: (3) 4' Lamps	Occupancy Sensor	44	3,014	0.1	264	0	$27	$110	$30	2.9
PSY 203E	4	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Daylight Dimming	S	56	2,621	2	Relamp	No	4	LED - Linear Tubes: (2) 4' Lamps	Daylight Dimming	29	2,621	0.1	306	0	$32	$146	$40	3.3

	Existing Conditions						Proposed Conditions								Energy Impact & Financial Analysis						
Location	Fixture Quantity	Fixture Description	Control System	Light Level	Watts per Fixture	Annual Operating Hours	ECM #	Fixture Recommendation	Add Controls?	Fixture Quantity	Fixture Description	Control System	Watts per Fixture	Annual Operating Hours	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
SW 203D	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
SW 203C	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Trans Office 203	6	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Occupancy Sensor	S	84	3,014	2	Relamp	No	6	LED - Linear Tubes: (3) 4' Lamps	Occupancy Sensor	44	3,014	0.2	791	0	$82	$329	$90	2.9
SVR 203B	2	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	2	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	176	0	$18	$73	$20	2.9
Director 203A	2	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	2	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	176	0	$18	$73	$20	2.9
Stair 1	4	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	4	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.1	352	0	$37	$146	$40	2.9
Stair 1	1	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	1	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	44	0	$5	$18	$5	2.9
Conference Room 201	4	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	4	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	176	0	$18	$73	$20	2.9
Building (Second Floor)	11	Exit Signs: LED - 2 W Lamp	None		6	8,760		None	No	11	Exit Signs: LED - 2 W Lamp	None	6	8,760	0.0	0	0	$0	$0	$0	0.0
Stair 2	6	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Occupancy Sensor	S	84	3,014	2	Relamp	No	6	LED - Linear Tubes: (3) 4' Lamps	Occupancy Sensor	44	3,014	0.2	791	0	$82	$329	$90	2.9
Stair 2	1	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	1	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	44	0	$5	$18	$5	2.9
Tran. Classroom 1 (229)	9	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Daylight Dimming	S	84	2,621	2	Relamp	No	9	LED - Linear Tubes: (3) 4' Lamps	Daylight Dimming	44	2,621	0.2	1,032	0	$107	$493	$135	3.3
Tran. Classroom 1 (229)	1	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	1	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	44	0	$5	$18	$5	2.9
TW 229C	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 229B	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 229A	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Rest Room 227	2	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	2	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	176	0	$18	$73	$20	2.9
Tran. Classroom 7 (232)	9	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Daylight Dimming	S	84	2,621	2	Relamp	No	9	LED - Linear Tubes: (3) 4' Lamps	Daylight Dimming	44	2,621	0.2	1,032	0	$107	$493	$135	3.3
Tran. Classroom 7 (232)	1	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	1	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	44	0	$5	$18	$5	2.9
TW 232C	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 323B	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 323A	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Staff Rest Room 230	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Hallway (Second Floor)	13	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	8,760	2	Relamp	No	13	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	8,760	0.1	1,660	0	$173	$237	$65	1.0
Tran. Classroom 2 (225)	9	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Daylight Dimming	S	84	2,621	2	Relamp	No	9	LED - Linear Tubes: (3) 4' Lamps	Daylight Dimming	44	2,621	0.2	1,032	0	$107	$493	$135	3.3

	Existing Conditions						Proposed Conditions								Energy Impact & Financial Analysis						
Location	Fixture Quantity	Fixture Description	Control System	Light Level	Watts per Fixture	Annual Operating Hours	ECM #	Fixture Recommendation	Add Controls?	Fixture Quantity	Fixture Description	Control System	Watts per Fixture	Annual Operating Hours	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Tran. Classroom 2 (225)	1	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	1	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	44	0	$5	$18	$5	2.9
TW 225C	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 225B	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 225A	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Tran. Classroom 8 (228)	9	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Daylight Dimming	S	84	2,621	2	Relamp	No	9	LED - Linear Tubes: (3) 4' Lamps	Daylight Dimming	44	2,621	0.2	1,032	0	$107	$493	$135	3.3
TW 228D	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 228C	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 228B	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Storage 228A	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
TS Lounge 226	5	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Daylight Dimming	S	28	2,621	2	Relamp	No	5	LED - Linear Tubes: (1) 4' Lamp	Daylight Dimming	15	2,621	0.0	191	0	$20	$91	$25	3.3
TS Lounge 226	3	Linear Fluorescent - T5: 4' T5 (28W) - 1L	Daylight Dimming	S	30	2,621	2	Relamp	No	3	LED - Linear Tubes: (1) 4' Lamp	Daylight Dimming	15	2,621	0.0	132	0	$14	$55	$15	2.9
Alt. Work Room 224	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Hallway (Second Floor)	10	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	8,760	2	Relamp	No	10	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	8,760	0.1	1,277	0	$133	$183	$50	1.0
Tran. Classroom 3 (223)	9	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Daylight Dimming	S	84	2,621	2	Relamp	No	9	LED - Linear Tubes: (3) 4' Lamps	Daylight Dimming	44	2,621	0.2	1,032	0	$107	$493	$135	3.3
Tran. Classroom 3 (223)	1	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	1	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	44	0	$5	$18	$5	2.9
TW 223C	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 223B	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 223A	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
IDF Room 221	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Wall Switch	S	56	4,368	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Wall Switch	29	4,368	0.0	127	0	$13	$37	$10	2.0
Tran. Classroom 9 (220)	9	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Daylight Dimming	S	84	2,621	2	Relamp	No	9	LED - Linear Tubes: (3) 4' Lamps	Daylight Dimming	44	2,621	0.2	1,032	0	$107	$493	$135	3.3
Tran. Classroom 9 (220)	1	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	1	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	44	0	$5	$18	$5	2.9
TW 220C	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 220B	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 220A	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Girl's Rest Room 218B	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9

	Existing Conditions						Proposed Conditions								Energy Impact & Financial Analysis						
Location	Fixture Quantity	Fixture Description	Control System	Light Level	Watts per Fixture	Annual Operating Hours	ECM #	Fixture Recommendation	Add Controls?	Fixture Quantity	Fixture Description	Control System	Watts per Fixture	Annual Operating Hours	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Tran. Classroom 4 (217)	9	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Daylight Dimming	S	84	2,621	2	Relamp	No	9	LED - Linear Tubes: (3) 4' Lamps	Daylight Dimming	44	2,621	0.2	1,032	0	$107	$493	$135	3.3
Tran. Classroom 4 (217)	1	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	1	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	44	0	$5	$18	$5	2.9
TW 217C	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 217B	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 217A	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Electrical Room 219	1	LED - Linear Tubes: (2) 4' Lamps	Wall Switch	S	29	4,368		None	No	1	LED - Linear Tubes: (2) 4' Lamps	Wall Switch	29	4,368	0.0	0	0	$0	$0	$0	0.0
Sensory 213	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
JC 215	2	LED - Linear Tubes: (2) 4' Lamps	Wall Switch	S	29	4,368		None	No	2	LED - Linear Tubes: (2) 4' Lamps	Wall Switch	29	4,368	0.0	0	0	$0	$0	$0	0.0
Tran. Classroom 10 (216)	9	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Daylight Dimming	S	84	2,621	2	Relamp	No	9	LED - Linear Tubes: (3) 4' Lamps	Daylight Dimming	44	2,621	0.2	1,032	0	$107	$493	$135	3.3
Tran. Classroom 10 (216)	1	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	1	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	44	0	$5	$18	$5	2.9
TW 216C	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 216A	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 216B	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Rest Room 218A	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
TS Lounge 211	5	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	5	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	220	0	$23	$91	$25	2.9
TS Lounge 211	2	Linear Fluorescent - T5: 4' T5 (28W) - 1L	Occupancy Sensor	S	30	3,014	2	Relamp	No	2	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	101	0	$10	$37	$10	2.5
Tran. Classroom 11 (214)	9	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Daylight Dimming	S	84	2,621	2	Relamp	No	9	LED - Linear Tubes: (3) 4' Lamps	Daylight Dimming	44	2,621	0.2	1,032	0	$107	$493	$135	3.3
Tran. Classroom 11 (214)	1	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	1	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	44	0	$5	$18	$5	2.9
TW 214C	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 214B	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 214A	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Rest Room 212	4	Compact Fluorescent: (1) 32W Plug-In Lamp	Occupancy Sensor	S	32	3,014	2	Relamp	No	4	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	3,014	0.0	130	0	$14	$50	$4	3.4
Tran. Classroom 12 (210)	9	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Daylight Dimming	S	84	2,621	2	Relamp	No	9	LED - Linear Tubes: (3) 4' Lamps	Daylight Dimming	44	2,621	0.2	1,032	0	$107	$493	$135	3.3
Tran. Classroom 12 (210)	1	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	1	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	44	0	$5	$18	$5	2.9
TW 210C	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9

	Existing Conditions						Proposed Conditions								Energy Impact & Financial Analysis						
Location	Fixture Quantity	Fixture Description	Control System	Light Level	Watts per Fixture	Annual Operating Hours	ECM #	Fixture Recommendation	Add Controls?	Fixture Quantity	Fixture Description	Control System	Watts per Fixture	Annual Operating Hours	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Session 210B	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 210A	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Hallway (Second Floor)	9	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	8,760	2	Relamp	No	9	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	8,760	0.1	1,149	0	$120	$164	$45	1.0
Storage 208	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
The Margaret House 206	5	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	5	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	220	0	$23	$91	$25	2.9
Tran. Classroom 5 (209)	9	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Daylight Dimming	S	84	2,621	2	Relamp	No	9	LED - Linear Tubes: (3) 4' Lamps	Daylight Dimming	44	2,621	0.2	1,032	0	$107	$493	$135	3.3
Tran. Classroom 5 (209)	1	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	1	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	44	0	$5	$18	$5	2.9
TW 209D	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 209C	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 209B	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Rest Room 209A	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Tran. Classroom 6 (207)	9	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Daylight Dimming	S	84	2,621	2	Relamp	No	9	LED - Linear Tubes: (3) 4' Lamps	Daylight Dimming	44	2,621	0.2	1,032	0	$107	$493	$135	3.3
Tran. Classroom 6 (207)	1	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	1	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	44	0	$5	$18	$5	2.9
TW 107D	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 207C	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Session 207B	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Rest Room 207A	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Gross Motor Room 88	4	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Daylight Dimming	S	84	2,621	2	Relamp	No	4	LED - Linear Tubes: (3) 4' Lamps	Daylight Dimming	44	2,621	0.1	459	0	$48	$219	$60	3.3
Gross Motor Room 88	1	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Daylight Dimming	S	28	2,621	2	Relamp	No	1	LED - Linear Tubes: (1) 4' Lamp	Daylight Dimming	15	2,621	0.0	38	0	$4	$18	$5	3.3
Building (Activities Center Area)	16	Exit Signs: LED - 2 W Lamp	None		6	8,760		None	No	16	Exit Signs: LED - 2 W Lamp	None	6	8,760	0.0	0	0	$0	$0	$0	0.0
Gross Motor 90	4	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Daylight Dimming	S	84	2,621	2	Relamp	No	4	LED - Linear Tubes: (3) 4' Lamps	Daylight Dimming	44	2,621	0.1	459	0	$48	$219	$60	3.3
Gross Motor 90	1	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Daylight Dimming	S	28	2,621	2	Relamp	No	1	LED - Linear Tubes: (1) 4' Lamp	Daylight Dimming	15	2,621	0.0	38	0	$4	$18	$5	3.3
Gross Motor 92	4	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Daylight Dimming	S	84	2,621	2	Relamp	No	4	LED - Linear Tubes: (3) 4' Lamps	Daylight Dimming	44	2,621	0.1	459	0	$48	$219	$60	3.3
Gross Motor 92	1	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Daylight Dimming	S	28	2,621	2	Relamp	No	1	LED - Linear Tubes: (1) 4' Lamp	Daylight Dimming	15	2,621	0.0	38	0	$4	$18	$5	3.3
Fitness Room 94	6	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Daylight Dimming	S	84	2,621	2	Relamp	No	6	LED - Linear Tubes: (3) 4' Lamps	Daylight Dimming	44	2,621	0.2	688	0	$72	$329	$90	3.3

	Existing Conditions						Proposed Conditions								Energy Impact & Financial Analysis						
Location	Fixture Quantity	Fixture Description	Control System	Light Level	Watts per Fixture	Annual Operating Hours	ECM #	Fixture Recommendation	Add Controls?	Fixture Quantity	Fixture Description	Control System	Watts per Fixture	Annual Operating Hours	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Corridor 85	14	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	8,760	2	Relamp	No	14	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	8,760	0.1	1,788	0	$186	$256	$70	1.0
Rest Room 97A	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Rest Room 97B	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Changing 97	2	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	2	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	176	0	$18	$73	$20	2.9
Changing 97	4	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	4	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	176	0	$18	$73	$20	2.9
Rest Room Entrance	2	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	2	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	176	0	$18	$73	$20	2.9
Women's Rest Room 93	3	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	3	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.1	264	0	$27	$110	$30	2.9
Women's Rest Room 93	4	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	4	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	176	0	$18	$73	$20	2.9
Men's Rest Room 95	2	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	2	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	176	0	$18	$73	$20	2.9
Men's Rest Room 95	3	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	3	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	132	0	$14	$55	$15	2.9
Shower 101D	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Shower 101D	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2	Relamp	No	1	LED Lamps: (1) 22W Lamp	Wall Switch	22	4,368	0.0	47	0	$5	$13	$1	2.3
Hallway (Activities Center Area)	4	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	8,760	2	Relamp	No	4	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	8,760	0.1	1,022	0	$106	$146	$40	1.0
Gym Storage 91A	4	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	4	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.1	352	0	$37	$146	$40	2.9
JC 85A	1	LED - Linear Tubes: (2) 4' Lamps	Wall Switch	S	29	4,368		None	No	1	LED - Linear Tubes: (2) 4' Lamps	Wall Switch	29	4,368	0.0	0	0	$0	$0	$0	0.0
PE Office 91B	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Pool 101	25	Metal Halide: (1) 150W Lamp	Wall Switch	S	190	4,368	1	Fixture Replacement	No	25	LED - Fixtures: Wall-Wash Lights	Wall Switch	57	4,368	2.2	15,685	-3	$1,631	$4,846	$1,375	2.1
Pool 101	5	LED - Fixtures: Architectural Flood/Spot Luminaire	Wall Switch	S	70	4,368		None	No	5	LED - Fixtures: Architectural Flood/Spot Luminaire	Wall Switch	70	4,368	0.0	0	0	$0	$0	$0	0.0
Gym 91	16	Metal Halide: (1) 150W Lamp	High/Low Control	S	190	3,014	1	Fixture Replacement	No	16	LED - Fixtures: High-Bay	High/Low Control	57	3,014	1.4	6,927	-1	$720	$12,398	$2,400	13.9
Pool Equipment 99	3	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Wall Switch	S	56	4,368	2	Relamp	No	3	LED - Linear Tubes: (2) 4' Lamps	Wall Switch	29	4,368	0.1	382	0	$40	$110	$30	2.0
Pool Equipment 99	2	Linear Fluorescent - T8: 2' T8 (17W) - 1L	Wall Switch	S	22	4,368	2	Relamp	No	2	LED - Linear Tubes: (1) 2' Lamp	Wall Switch	9	4,368	0.0	127	0	$13	$33	$6	2.0
Pool Storage 101C	2	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Wall Switch	S	56	4,368	2	Relamp	No	2	LED - Linear Tubes: (2) 4' Lamps	Wall Switch	29	4,368	0.0	255	0	$26	$73	$20	2.0
At Specialties 103	4	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	4	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.1	352	0	$37	$146	$40	2.9
Electrical Room 103A	1	LED - Linear Tubes: (2) 4' Lamps	Wall Switch	S	29	4,368		None	No	1	LED - Linear Tubes: (2) 4' Lamps	Wall Switch	29	4,368	0.0	0	0	$0	$0	$0	0.0
PE Office 101D	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9

	Existing Conditions						Proposed Conditions								Energy Impact & Financial Analysis						
Location	Fixture Quantity	Fixture Description	Control System	Light Level	Watts per Fixture	Annual Operating Hours	ECM #	Fixture Recommendation	Add Controls?	Fixture Quantity	Fixture Description	Control System	Watts per Fixture	Annual Operating Hours	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Vestibule	2	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Timeclock	S	28	8,760	2	Relamp	No	2	LED - Linear Tubes: (1) 4' Lamp	Timeclock	15	8,760	0.0	255	0	$27	$37	$10	1.0
Vestibule	1	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	1	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	44	0	$5	$18	$5	2.9
Multi Purpose Room 119	6	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Daylight Dimming	S	84	2,621	2	Relamp	No	6	LED - Linear Tubes: (3) 4' Lamps	Daylight Dimming	44	2,621	0.2	688	0	$72	$329	$90	3.3
Multi Purpose Room 119	10	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Daylight Dimming	S	56	2,621	2	Relamp	No	10	LED - Linear Tubes: (2) 4' Lamps	Daylight Dimming	29	2,621	0.2	764	0	$79	$365	$100	3.3
Multi Purpose Room 119	5	Compact Fluorescent: (1) 32W Plug-In Lamp	Daylight Dimming	S	32	2,621	2	Relamp	No	5	LED Lamps: (1) 22W Lamp	Daylight Dimming	22	2,621	0.0	142	0	$15	$63	$5	3.9
Multi Purpose Room 119	2	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Daylight Dimming	S	56	2,621	2	Relamp	No	2	LED - Linear Tubes: (2) 4' Lamps	Daylight Dimming	29	2,621	0.0	153	0	$16	$73	$20	3.3
Multi Purpose Room 119	2	Linear Fluorescent - T8: 2' T8 (17W) - 2L	Daylight Dimming	S	33	2,621	2	Relamp	No	2	LED - Linear Tubes: (2) 2' Lamps	Daylight Dimming	17	2,621	0.0	91	0	$9	$65	$12	5.6
Multi Purpose Room 119	2	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Daylight Dimming	S	56	2,621	2	Relamp	No	2	LED - Linear Tubes: (2) 4' Lamps	Daylight Dimming	29	2,621	0.0	153	0	$16	$73	$20	3.3
Multi Purpose Room 119	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Daylight Dimming	S	56	2,621	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Daylight Dimming	29	2,621	0.0	76	0	$8	$37	$10	3.3
Chair/Table Storage 121	3	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	3	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.1	264	0	$27	$110	$30	2.9
Electrical Room 118A	1	LED - Linear Tubes: (2) 4' Lamps	Wall Switch	S	29	4,368		None	No	1	LED - Linear Tubes: (2) 4' Lamps	Wall Switch	29	4,368	0.0	0	0	$0	$0	$0	0.0
Conference Room 118	4	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	4	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.1	352	0	$37	$146	$40	2.9
Conference Room 117	4	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	4	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.1	352	0	$37	$146	$40	2.9
Distr Ed. 115	6	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Occupancy Sensor	S	84	3,014	2	Relamp	No	6	LED - Linear Tubes: (3) 4' Lamps	Occupancy Sensor	44	3,014	0.2	791	0	$82	$329	$90	2.9
Conference Room 116	4	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	4	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.1	352	0	$37	$146	$40	2.9
C-Store 114	9	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Occupancy Sensor	S	84	3,014	2	Relamp	No	9	LED - Linear Tubes: (3) 4' Lamps	Occupancy Sensor	44	3,014	0.2	1,186	0	$123	$493	$135	2.9
Dishwasher and Dry Storage 114A	2	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	2	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	176	0	$18	$73	$20	2.9
Repro 112	4	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	4	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.1	352	0	$37	$146	$40	2.9
Mat. Handling 113	8	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Daylight Dimming	S	84	2,621	2	Relamp	No	8	LED - Linear Tubes: (3) 4' Lamps	Daylight Dimming	44	2,621	0.2	917	0	$95	$438	$120	3.3
Flower Shop 110	4	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Daylight Dimming	S	56	2,621	2	Relamp	No	4	LED - Linear Tubes: (2) 4' Lamps	Daylight Dimming	29	2,621	0.1	306	0	$32	$146	$40	3.3
Hort. Instructional Area 111	8	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Daylight Dimming	S	84	2,621	2	Relamp	No	8	LED - Linear Tubes: (3) 4' Lamps	Daylight Dimming	44	2,621	0.2	917	0	$95	$438	$120	3.3
Undercanopy Fixtures	9	Metal Halide: (1) 150W Lamp	Photocell		190	4,380	1	Fixture Replacement	No	9	LED - Fixtures: Ceiling Mount	Photocell	57	4,380	0.0	5,243	0	$556	$2,674	$90	4.6
Entrance Lobby 105	42	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Daylight Dimming	S	28	2,621	2	Relamp	No	42	LED - Linear Tubes: (1) 4' Lamp	Daylight Dimming	15	2,621	0.4	1,605	0	$167	$767	$210	3.3
Entrance Lobby 105	20	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Daylight Dimming	S	56	2,621	2	Relamp	No	20	LED - Linear Tubes: (2) 4' Lamps	Daylight Dimming	29	2,621	0.4	1,528	0	$159	$730	$200	3.3
Undercanopy Fixtures	4	LED - Fixtures: Ceiling Mount	Photocell		40	4,380		None	No	4	LED - Fixtures: Ceiling Mount	Photocell	40	4,380	0.0	0	0	$0	$0	$0	0.0

	Existing Conditions						Proposed Conditions								Energy Impact & Financial Analysis						
Location	Fixture Quantity	Fixture Description	Control System	Light Level	Watts per Fixture	Annual Operating Hours	ECM #	Fixture Recommendation	Add Controls?	Fixture Quantity	Fixture Description	Control System	Watts per Fixture	Annual Operating Hours	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Indoor Rec 109	21	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Daylight Dimming	S	28	2,621	2	Relamp	No	21	LED - Linear Tubes: (1) 4' Lamp	Daylight Dimming	15	2,621	0.2	802	0	$83	$383	$105	3.3
Main Entrance Lobby 40	13	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Daylight Dimming	S	28	2,621	2	Relamp	No	13	LED - Linear Tubes: (1) 4' Lamp	Daylight Dimming	15	2,621	0.1	497	0	$52	$237	$65	3.3
Main Entrance Lobby 40	12	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Daylight Dimming	S	56	2,621	2	Relamp	No	12	LED - Linear Tubes: (2) 4' Lamps	Daylight Dimming	29	2,621	0.2	917	0	$95	$438	$120	3.3
Vestibule 39	2	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Daylight Dimming	S	28	2,621	2	Relamp	No	2	LED - Linear Tubes: (1) 4' Lamp	Daylight Dimming	15	2,621	0.0	76	0	$8	$37	$10	3.3
Undercanopy Fixtures	10	Metal Halide: (1) 150W Lamp	Photocell		190	4,380	1	Fixture Replacement	No	10	LED - Fixtures: Ceiling Mount	Photocell	57	4,380	0.0	5,825	0	$618	$2,971	$100	4.6
Dining Hall 1	21	Linear Fluorescent - T8: 4' T8 (32W) - 1L	High/Low Control	S	28	3,014	2	Relamp	No	21	LED - Linear Tubes: (1) 4' Lamp	High/Low Control	15	3,014	0.2	923	0	$96	$383	$105	2.9
Dining Hall 1	16	Linear Fluorescent - T8: 4' T8 (32W) - 2L	High/Low Control	S	56	3,014	2	Relamp	No	16	LED - Linear Tubes: (2) 4' Lamps	High/Low Control	29	3,014	0.3	1,406	0	$146	$584	$160	2.9
Exit Door Fixture	8	LED - Fixtures: Outdoor Wall-Mounted Area Fixture	Occupancy Sensor		53	3,014		None	No	8	LED - Fixtures: Outdoor Wall-Mounted Area Fixture	Occupancy Sensor	53	3,014	0.0	0	0	$0	$0	$0	0.0
Exterior Fixtures	16	LED - Fixtures: Outdoor Wall-Mounted Area Fixture	Photocell		53	4,380		None	No	16	LED - Fixtures: Outdoor Wall-Mounted Area Fixture	Photocell	53	4,380	0.0	0	0	$0	$0	$0	0.0
Kitchen Classroom 14	7	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Occupancy Sensor	S	84	3,014	2	Relamp	No	7	LED - Linear Tubes: (3) 4' Lamps	Occupancy Sensor	44	3,014	0.2	923	0	$96	$383	$105	2.9
TW 14A	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Pantry 14B	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Rest Room 13	2	Compact Fluorescent: (1) 32W Plug-In Lamp	Occupancy Sensor	S	32	3,014	2	Relamp	No	2	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	3,014	0.0	65	0	$7	$25	$2	3.4
Rest Room 13	2	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2	Relamp	No	2	LED Lamps: (1) 22W Lamp	Wall Switch	22	4,368	0.0	94	0	$10	$25	$2	2.3
Mechanical/Electrical Room 12	8	LED - Linear Tubes: (2) 4' Lamps	Wall Switch	S	29	4,368		None	No	8	LED - Linear Tubes: (2) 4' Lamps	Wall Switch	29	4,368	0.0	0	0	$0	$0	$0	0.0
Generator 11	1	LED - Linear Tubes: (2) 4' Lamps	Wall Switch	S	56	4,368		None	No	1	LED - Linear Tubes: (2) 4' Lamps	Wall Switch	56	4,368	0.0	0	0	$0	$0	$0	0.0
Dry Storage 9	2	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	2	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	176	0	$18	$73	$20	2.9
JC 10	1	LED - Linear Tubes: (2) 4' Lamps	Wall Switch	S	29	4,368		None	No	1	LED - Linear Tubes: (2) 4' Lamps	Wall Switch	29	4,368	0.0	0	0	$0	$0	$0	0.0
Rest Room 8	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Office 7	2	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	2	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	176	0	$18	$73	$20	2.9
Kitchen 4	11	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Wall Switch	S	56	4,368	2, 3	Relamp	Yes	11	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.3	1,868	0	$194	$672	$145	2.7
Kitchen 4	3	Linear Fluorescent - T8: 2' T8 (17W) - 3L	Wall Switch	S	53	4,368	2, 3	Relamp	Yes	3	LED - Linear Tubes: (3) 2' Lamps	Occupancy Sensor	26	3,014	0.1	501	0	$52	$416	$62	6.8
Dry Storage 5	5	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	5	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.1	439	0	$46	$183	$50	2.9
Dishwasher Room 3	5	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	5	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.1	439	0	$46	$183	$50	2.9
Servery 2	8	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Wall Switch	S	56	4,368	2, 3	Relamp	Yes	8	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.2	1,358	0	$141	$562	$115	3.2

	Existing Conditions						Proposed Conditions								Energy Impact & Financial Analysis						
Location	Fixture Quantity	Fixture Description	Control System	Light Level	Watts per Fixture	Annual Operating Hours	ECM #	Fixture Recommendation	Add Controls?	Fixture Quantity	Fixture Description	Control System	Watts per Fixture	Annual Operating Hours	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Building (Kitchen Area)	3	Exit Signs: LED - 2 W Lamp	None		6	8,760		None	No	3	Exit Signs: LED - 2 W Lamp	None	6	8,760	0.0	0	0	$0	$0	$0	0.0
Building (Ktichen Area)	3	LED - Fixtures: Outdoor Wall-Mounted Area Fixture	Occupancy Sensor		53	3,014		None	No	3	LED - Fixtures: Outdoor Wall-Mounted Area Fixture	Occupancy Sensor	53	3,014	0.0	0	0	$0	$0	$0	0.0
Educational Director 25	1	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Occupancy Sensor	S	84	3,014	2	Relamp	No	1	LED - Linear Tubes: (3) 4' Lamps	Occupancy Sensor	44	3,014	0.0	132	0	$14	$55	$15	2.9
Trans. Clinical Director 24	1	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Occupancy Sensor	S	84	3,014	2	Relamp	No	1	LED - Linear Tubes: (3) 4' Lamps	Occupancy Sensor	44	3,014	0.0	132	0	$14	$55	$15	2.9
Lindens Clinical Director 23	1	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Occupancy Sensor	S	84	3,014	2	Relamp	No	1	LED - Linear Tubes: (3) 4' Lamps	Occupancy Sensor	44	3,014	0.0	132	0	$14	$55	$15	2.9
Lindens Social Worker 22	1	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Occupancy Sensor	S	84	3,014	2	Relamp	No	1	LED - Linear Tubes: (3) 4' Lamps	Occupancy Sensor	44	3,014	0.0	132	0	$14	$55	$15	2.9
Psych. Office 21	1	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Occupancy Sensor	S	84	3,014	2	Relamp	No	1	LED - Linear Tubes: (3) 4' Lamps	Occupancy Sensor	44	3,014	0.0	132	0	$14	$55	$15	2.9
Linden Administration Building	6	Exit Signs: LED - 2 W Lamp	None		6	8,760		None	No	6	Exit Signs: LED - 2 W Lamp	None	6	8,760	0.0	0	0	$0	$0	$0	0.0
Hallway	5	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	8,760	2	Relamp	No	5	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	8,760	0.0	639	0	$66	$91	$25	1.0
JC/Mechanical Room 20	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Wall Switch	S	56	4,368	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Wall Switch	29	4,368	0.0	127	0	$13	$37	$10	2.0
Hallway	5	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	8,760	2	Relamp	No	5	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	8,760	0.0	639	0	$66	$91	$25	1.0
Executive Director 26	2	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Occupancy Sensor	S	84	3,014	2	Relamp	No	2	LED - Linear Tubes: (3) 4' Lamps	Occupancy Sensor	44	3,014	0.1	264	0	$27	$110	$30	2.9
Open Office 19	4	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Daylight Dimming	S	84	2,621	2	Relamp	No	4	LED - Linear Tubes: (3) 4' Lamps	Daylight Dimming	44	2,621	0.1	459	0	$48	$219	$60	3.3
Lindens & Transitional Beh. Analyst 18	4	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Daylight Dimming	S	84	2,621	2	Relamp	No	4	LED - Linear Tubes: (3) 4' Lamps	Daylight Dimming	44	2,621	0.1	459	0	$48	$219	$60	3.3
Senior Clinical Director 27	2	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Occupancy Sensor	S	84	3,014	2	Relamp	No	2	LED - Linear Tubes: (3) 4' Lamps	Occupancy Sensor	44	3,014	0.1	264	0	$27	$110	$30	2.9
Operations Director 28	2	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Occupancy Sensor	S	84	3,014	2	Relamp	No	2	LED - Linear Tubes: (3) 4' Lamps	Occupancy Sensor	44	3,014	0.1	264	0	$27	$110	$30	2.9
Conference Room 29	2	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Occupancy Sensor	S	84	3,014	2	Relamp	No	2	LED - Linear Tubes: (3) 4' Lamps	Occupancy Sensor	44	3,014	0.1	264	0	$27	$110	$30	2.9
Conference Room 30	2	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Occupancy Sensor	S	84	3,014	2	Relamp	No	2	LED - Linear Tubes: (3) 4' Lamps	Occupancy Sensor	44	3,014	0.1	264	0	$27	$110	$30	2.9
Women's Rest Room 31	2	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	2	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	176	0	$18	$73	$20	2.9
Corridor 15	4	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	8,760	2	Relamp	No	4	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	8,760	0.1	1,022	0	$106	$146	$40	1.0
Conference Room 17	8	Linear Fluorescent - T8: 4' T8 (32W) - 1L	High/Low Control	S	28	3,014	2	Relamp	No	8	LED - Linear Tubes: (1) 4' Lamp	High/Low Control	15	3,014	0.1	352	0	$37	$146	$40	2.9
Conference Room 16	8	Linear Fluorescent - T8: 4' T8 (32W) - 1L	High/Low Control	S	28	3,014	2	Relamp	No	8	LED - Linear Tubes: (1) 4' Lamp	High/Low Control	15	3,014	0.1	352	0	$37	$146	$40	2.9
Men's Rest Room 32	2	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	2	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	176	0	$18	$73	$20	2.9
Storage Room 17A	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2	Relamp	No	1	LED Lamps: (1) 22W Lamp	Wall Switch	22	4,368	0.0	47	0	$5	$13	$1	2.3

	Existing Conditions						Proposed Conditions								Energy Impact & Financial Analysis						
Location	Fixture Quantity	Fixture Description	Control System	Light Level	Watts per Fixture	Annual Operating Hours	ECM #	Fixture Recommendation	Add Controls?	Fixture Quantity	Fixture Description	Control System	Watts per Fixture	Annual Operating Hours	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Storage Room 16A	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2	Relamp	No	1	LED Lamps: (1) 22W Lamp	Wall Switch	22	4,368	0.0	47	0	$5	$13	$1	2.3
Lobby 1	9	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Daylight Dimming	S	56	8,760	2	Relamp	No	9	LED - Linear Tubes: (2) 4' Lamps	Daylight Dimming	29	8,760	0.2	2,299	0	$239	$329	$90	1.0
Vestibule 0	2	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Timeclock	S	56	8,760	2	Relamp	No	2	LED - Linear Tubes: (2) 4' Lamps	Timeclock	29	8,760	0.0	511	0	$53	$73	$20	1.0
Admissions 33	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Exam 13	2	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	2	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	176	0	$18	$73	$20	2.9
Waiting 14	3	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	3	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	132	0	$14	$55	$15	2.9
Session Room 12	2	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	2	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	176	0	$18	$73	$20	2.9
Observation Room 11	3	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	3	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.1	264	0	$27	$110	$30	2.9
Rest Room 10	2	Compact Fluorescent: (1) 32W Plug-In Lamp	Occupancy Sensor	S	32	3,014	2	Relamp	No	2	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	3,014	0.0	65	0	$7	$25	$2	3.4
Corridor 2	5	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	8,760	2	Relamp	No	5	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	8,760	0.0	639	0	$66	$91	$25	1.0
Session Room 8	2	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	2	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	176	0	$18	$73	$20	2.9
Observation Room 6	2	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	2	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	176	0	$18	$73	$20	2.9
Session Room 4	2	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	2	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	176	0	$18	$73	$20	2.9
Session Room 3	2	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	2	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	176	0	$18	$73	$20	2.9
Observation Room 5	2	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	2	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	176	0	$18	$73	$20	2.9
Session Room 7	2	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	2	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	176	0	$18	$73	$20	2.9
Session Room 9	2	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	2	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	176	0	$18	$73	$20	2.9
Linden Administration Building	3	LED - Fixtures: Outdoor Wall-Mounted Area Fixture	Occupancy Sensor		35	3,014		None	No	3	LED - Fixtures: Outdoor Wall-Mounted Area Fixture	Occupancy Sensor	35	3,014	0.0	0	0	$0	$0	$0	0.0
Linden Administration Building	2	LED - Fixtures: Outdoor Wall-Mounted Area Fixture	Photocell		22	4,380		None	No	2	LED - Fixtures: Outdoor Wall-Mounted Area Fixture	Photocell	22	4,380	0.0	0	0	$0	$0	$0	0.0
Garage 60	6	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Wall Switch	S	56	4,368	2, 4	Relamp	Yes	6	LED - Linear Tubes: (2) 4' Lamps	Daylight Dimming	29	2,621	0.2	1,093	0	$114	$469	$310	1.4
Storage 58	28	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	28	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.5	2,461	-1	$256	$1,022	$280	2.9
Facilities Building	6	Exit Signs: LED - 2 W Lamp	None		6	8,760		None	No	6	Exit Signs: LED - 2 W Lamp	None	6	8,760	0.0	0	0	$0	$0	$0	0.0
Mechanical/Electrical Room 59	6	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Wall Switch	S	56	4,368	2	Relamp	No	6	LED - Linear Tubes: (2) 4' Lamps	Wall Switch	29	4,368	0.1	764	0	$79	$219	$60	2.0
Sprinkler Room 59A	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Wall Switch	S	56	4,368	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Wall Switch	29	4,368	0.0	127	0	$13	$37	$10	2.0

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Location	Fixture Quantity	Fixture Description	Control System	Light Level	Watts per Fixture	Annual Operating Hours	ECM #	Fixture Recommendation	Add Controls?	Fixture Quantity	Fixture Description	Control System	Watts per Fixture	Annual Operating Hours	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Tool Storage 58C	2	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Wall Switch	S	56	4,368	2	Relamp	No	2	LED - Linear Tubes: (2) 4' Lamps	Wall Switch	29	4,368	0.0	255	0	$26	$73	$20	2.0
Paint Storage 58B	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Mt Work Area	18	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	18	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.3	1,582	0	$164	$657	$180	2.9
JC 58A	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Wall Switch	S	56	4,368	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Wall Switch	29	4,368	0.0	127	0	$13	$37	$10	2.0
Rest Room 57	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Vestibule 50A	1	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	3,014	2	Relamp	No	1	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	3,014	0.0	44	0	$5	$18	$5	2.9
Corridor 50	6	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	8,760	2	Relamp	No	6	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	8,760	0.1	766	0	$80	$110	$30	1.0
Vocational Workshop 55	6	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Wall Switch	S	84	4,368	2	Relamp	No	6	LED - Linear Tubes: (3) 4' Lamps	Wall Switch	44	4,368	0.2	1,146	0	$119	$329	$90	2.0
Mail Room 54	3	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Occupancy Sensor	S	84	3,014	2	Relamp	No	3	LED - Linear Tubes: (3) 4' Lamps	Occupancy Sensor	44	3,014	0.1	395	0	$41	$164	$45	2.9
Piecework 53	3	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Occupancy Sensor	S	84	3,014	2	Relamp	No	3	LED - Linear Tubes: (3) 4' Lamps	Occupancy Sensor	44	3,014	0.1	395	0	$41	$164	$45	2.9
Maintenance & Transportation Open Office 51	9	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	9	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.2	791	0	$82	$329	$90	2.9
Rest Room 52	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Lockers 51C	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
IT 51B	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Wall Switch	S	56	4,368	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Wall Switch	29	4,368	0.0	127	0	$13	$37	$10	2.0
Office 51A	1	Linear Fluorescent - T8: 4' T8 (32W) - 3L	Occupancy Sensor	S	84	3,014	2	Relamp	No	1	LED - Linear Tubes: (3) 4' Lamps	Occupancy Sensor	44	3,014	0.0	132	0	$14	$55	$15	2.9
Facilities Building	3	LED - Fixtures: Outdoor Wall-Mounted Area Fixture	Occupancy Sensor		35	3,014		None	No	3	LED - Fixtures: Outdoor Wall-Mounted Area Fixture	Occupancy Sensor	35	3,014	0.0	0	0	$0	$0	$0	0.0
Facilities Building	1	LED - Fixtures: Outdoor Wall-Mounted Area Fixture	Photocell		35	4,380		None	No	1	LED - Fixtures: Outdoor Wall-Mounted Area Fixture	Photocell	35	4,380	0.0	0	0	$0	$0	$0	0.0
Greenhouse	12	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Wall Switch	S	56	200	2	Relamp	No	12	LED - Linear Tubes: (2) 4' Lamps	Wall Switch	29	200	0.2	70	0	$7	$438	$120	43.7
Bedroom 101	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 101	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 101A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 102	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 102	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0

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Bedroom Closet 102A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 103	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 103	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 103A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bathroom 111	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368	3	None	Yes	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	73	0	$8	$0	$0	0.0
Bathroom 111	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2, 3	Relamp	Yes	1	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	3,014	0.0	79	0	$8	$13	$1	1.4
Bathroom 111	1	LED - Fixtures: Bath Vanity	Wall Switch	S	76	4,368	3	None	Yes	1	LED - Fixtures: Bath Vanity	Occupancy Sensor	76	3,014	0.0	111	0	$12	$270	$35	20.3
Bedroom 104	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 104	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 104A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 104B	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Living Room 1	6	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	8,760	2	Relamp	No	6	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	8,760	0.1	766	0	$80	$110	$30	1.0
Den 7	2	Compact Fluorescent: (1) 32W Plug-In Lamp	Occupancy Sensor	S	32	8,760	2	Relamp	No	2	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	8,760	0.0	189	0	$20	$25	$2	1.2
Den 7	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	S	50	8,760		None	No	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	8,760	0.0	0	0	$0	$0	$0	0.0
Dining Room 3	12	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	8,760	2	Relamp	No	12	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	8,760	0.1	1,533	0	$159	$219	$60	1.0
Bathroom 113	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368	3	None	Yes	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	73	0	$8	$0	$0	0.0
Bathroom 113	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2, 3	Relamp	Yes	1	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	3,014	0.0	79	0	$8	$13	$1	1.4
Bathroom 113	1	LED - Fixtures: Bath Vanity	Wall Switch	S	76	4,368	3	None	Yes	1	LED - Fixtures: Bath Vanity	Occupancy Sensor	76	3,014	0.0	111	0	$12	$270	$35	20.3
Hallway by Bedrooms	8	Compact Fluorescent: (1) 32W Plug-In Lamp	Occupancy Sensor	S	32	8,760	2	Relamp	No	8	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	8,760	0.1	757	0	$79	$100	$8	1.2
Laundry 114	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	S	50	3,014		None	No	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	0	0	$0	$0	$0	0.0
Bathroom 112	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368	3	None	Yes	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	73	0	$8	$0	$0	0.0
Bathroom 112	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2, 3	Relamp	Yes	1	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	3,014	0.0	79	0	$8	$13	$1	1.4
Bathroom 112	1	LED - Fixtures: Bath Vanity	Wall Switch	S	76	4,368	3	None	Yes	1	LED - Fixtures: Bath Vanity	Occupancy Sensor	76	3,014	0.0	111	0	$12	$270	$35	20.3
Bedroom 105	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 105	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0

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Bedroom Closet 105A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 105B	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Kitchen 18	13	Compact Fluorescent: (1) 32W Plug-In Lamp	Occupancy Sensor	S	32	8,760	2	Relamp	No	13	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	8,760	0.1	1,230	0	$128	$163	$13	1.2
Kitchen 18	2	Linear Fluorescent - T8: 3' T8 (25W) - 1L	Occupancy Sensor	S	27	8,760	2	Relamp	No	2	LED - Linear Tubes: (1) 3' Lamp	Occupancy Sensor	11	8,760	0.0	312	0	$32	$37	$10	0.8
Kitchen 18	2	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	8,760	2	Relamp	No	2	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	8,760	0.0	255	0	$27	$37	$10	1.0
Mechanical Room 17	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2	Relamp	No	1	LED Lamps: (1) 22W Lamp	Wall Switch	22	4,368	0.0	47	0	$5	$13	$1	2.3
IT Room 13	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2	Relamp	No	1	LED Lamps: (1) 22W Lamp	Wall Switch	22	4,368	0.0	47	0	$5	$13	$1	2.3
Break Room 12	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Staff Rest Room 14	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Conference Room 15	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Nurse's Room 16	3	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	3	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.1	264	0	$27	$110	$30	2.9
Office 19	4	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	4	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.1	352	0	$37	$146	$40	2.9
Session 20	2	Compact Fluorescent: (1) 32W Plug-In Lamp	Occupancy Sensor	S	32	3,014	2	Relamp	No	2	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	3,014	0.0	65	0	$7	$25	$2	3.4
Session 20	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	S	50	3,014		None	No	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	0	0	$0	$0	$0	0.0
Session 6	2	Compact Fluorescent: (1) 32W Plug-In Lamp	Occupancy Sensor	S	32	3,014	2	Relamp	No	2	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	3,014	0.0	65	0	$7	$25	$2	3.4
Session 6	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	S	50	3,014		None	No	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	0	0	$0	$0	$0	0.0
Den 23	2	Compact Fluorescent: (1) 32W Plug-In Lamp	Occupancy Sensor	S	32	8,760	2	Relamp	No	2	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	8,760	0.0	189	0	$20	$25	$2	1.2
Den 23	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	S	50	8,760		None	No	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	8,760	0.0	0	0	$0	$0	$0	0.0
Living Room 2	6	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	8,760	2	Relamp	No	6	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	8,760	0.1	766	0	$80	$110	$30	1.0
Dining Room 13	12	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	8,760	2	Relamp	No	12	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	8,760	0.1	1,533	0	$159	$219	$60	1.0
Bedroom 110	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 110	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 110A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 110B	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bathroom 118	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368	3	None	Yes	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	73	0	$8	$0	$0	0.0

	Existing Conditions						Proposed Conditions								Energy Impact & Financial Analysis						
Location	Fixture Quantity	Fixture Description	Control System	Light Level	Watts per Fixture	Annual Operating Hours	ECM #	Fixture Recommendation	Add Controls?	Fixture Quantity	Fixture Description	Control System	Watts per Fixture	Annual Operating Hours	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Bathroom 118	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2, 3	Relamp	Yes	1	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	3,014	0.0	79	0	$8	$13	$1	1.4
Bathroom 118	1	LED - Fixtures: Bath Vanity	Wall Switch	S	76	4,368	3	None	Yes	1	LED - Fixtures: Bath Vanity	Occupancy Sensor	76	3,014	0.0	111	0	$12	$270	$35	20.3
Bathroom 119	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368	3	None	Yes	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	73	0	$8	$0	$0	0.0
Bathroom 119	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2, 3	Relamp	Yes	1	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	3,014	0.0	79	0	$8	$13	$1	1.4
Bathroom 119	1	LED - Fixtures: Bath Vanity	Wall Switch	S	76	4,368	3	None	Yes	1	LED - Fixtures: Bath Vanity	Occupancy Sensor	76	3,014	0.0	111	0	$12	$270	$35	20.3
Hallway by Bedrooms	8	Compact Fluorescent: (1) 32W Plug-In Lamp	Occupancy Sensor	S	32	8,760	2	Relamp	No	8	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	8,760	0.1	757	0	$79	$100	$8	1.2
Laundry 120	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	S	50	3,014		None	No	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	0	0	$0	$0	$0	0.0
Bedroom 108	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 108	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 108A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bathroom 117	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368	3	None	Yes	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	73	0	$8	$0	$0	0.0
Bathroom 117	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2, 3	Relamp	Yes	1	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	3,014	0.0	79	0	$8	$13	$1	1.4
Bathroom 117	1	LED - Fixtures: Bath Vanity	Wall Switch	S	76	4,368	3	None	Yes	1	LED - Fixtures: Bath Vanity	Occupancy Sensor	76	3,014	0.0	111	0	$12	$270	$35	20.3
Bedroom 107	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 107	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 107A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 106	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 106	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 106A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 109	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 109	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 109A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 109B	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Residence Hall Linden 100	10	Exit Signs: LED - 2 W Lamp	None		6	8,760		None	No	10	Exit Signs: LED - 2 W Lamp	None	6	8,760	0.0	0	0	$0	$0	$0	0.0
Residence Hall Linden 100 Exterior	3	LED - Fixtures: Outdoor Wall-Mounted Area Fixture	Timeclock		53	4,368		None	No	3	LED - Fixtures: Outdoor Wall-Mounted Area Fixture	Timeclock	53	4,368	0.0	0	0	$0	$0	$0	0.0

	Existing Conditions						Proposed Conditions								Energy Impact & Financial Analysis						
Location	Fixture Quantity	Fixture Description	Control System	Light Level	Watts per Fixture	Annual Operating Hours	ECM #	Fixture Recommendation	Add Controls?	Fixture Quantity	Fixture Description	Control System	Watts per Fixture	Annual Operating Hours	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Residence Hall Linden 100 Exterior by Exit	4	LED - Fixtures: Outdoor Wall-Mounted Area Fixture	Occupancy Sensor		53	3,014		None	No	4	LED - Fixtures: Outdoor Wall-Mounted Area Fixture	Occupancy Sensor	53	3,014	0.0	0	0	$0	$0	$0	0.0
Bedroom 101	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 101	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 101A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 102	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 102	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 102A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 103	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 103	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 103A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bathroom 111	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368	3	None	Yes	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	73	0	$8	$0	$0	0.0
Bathroom 111	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2, 3	Relamp	Yes	1	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	3,014	0.0	79	0	$8	$13	$1	1.4
Bathroom 111	1	LED - Fixtures: Bath Vanity	Wall Switch	S	76	4,368	3	None	Yes	1	LED - Fixtures: Bath Vanity	Occupancy Sensor	76	3,014	0.0	111	0	$12	$270	$35	20.3
Bedroom 104	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 104	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 104A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 104B	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Living Room 1	6	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	8,760	2	Relamp	No	6	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	8,760	0.1	766	0	$80	$110	$30	1.0
Den 7	2	Compact Fluorescent: (1) 32W Plug-In Lamp	Occupancy Sensor	S	32	8,760	2	Relamp	No	2	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	8,760	0.0	189	0	$20	$25	$2	1.2
Den 7	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	S	50	8,760		None	No	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	8,760	0.0	0	0	$0	$0	$0	0.0
Dining Room 3	12	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	8,760	2	Relamp	No	12	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	8,760	0.1	1,533	0	$159	$219	$60	1.0
Bathroom 113	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368	3	None	Yes	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	73	0	$8	$0	$0	0.0
Bathroom 113	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2, 3	Relamp	Yes	1	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	3,014	0.0	79	0	$8	$13	$1	1.4
Bathroom 113	1	LED - Fixtures: Bath Vanity	Wall Switch	S	76	4,368	3	None	Yes	1	LED - Fixtures: Bath Vanity	Occupancy Sensor	76	3,014	0.0	111	0	$12	$270	$35	20.3

	Existing Conditions						Proposed Conditions								Energy Impact & Financial Analysis						
Location	Fixture Quantity	Fixture Description	Control System	Light Level	Watts per Fixture	Annual Operating Hours	ECM #	Fixture Recommendation	Add Controls?	Fixture Quantity	Fixture Description	Control System	Watts per Fixture	Annual Operating Hours	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Hallway by Bedrooms	8	Compact Fluorescent: (1) 32W Plug-In Lamp	Occupancy Sensor	S	32	8,760	2	Relamp	No	8	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	8,760	0.1	757	0	$79	$100	$8	1.2
Laundry 114	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	S	50	3,014		None	No	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	0	0	$0	$0	$0	0.0
Bathroom 112	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368	3	None	Yes	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	73	0	$8	$0	$0	0.0
Bathroom 112	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2, 3	Relamp	Yes	1	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	3,014	0.0	79	0	$8	$13	$1	1.4
Bathroom 112	1	LED - Fixtures: Bath Vanity	Wall Switch	S	76	4,368	3	None	Yes	1	LED - Fixtures: Bath Vanity	Occupancy Sensor	76	3,014	0.0	111	0	$12	$270	$35	20.3
Bedroom 105	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 105	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 105A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 105B	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Kitchen 18	13	Compact Fluorescent: (1) 32W Plug-In Lamp	Occupancy Sensor	S	32	8,760	2	Relamp	No	13	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	8,760	0.1	1,230	0	$128	$163	$13	1.2
Kitchen 18	2	Linear Fluorescent - T8: 3' T8 (25W) - 1L	Occupancy Sensor	S	27	8,760	2	Relamp	No	2	LED - Linear Tubes: (1) 3' Lamp	Occupancy Sensor	11	8,760	0.0	312	0	$32	$37	$10	0.8
Kitchen 18	2	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	8,760	2	Relamp	No	2	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	8,760	0.0	255	0	$27	$37	$10	1.0
Mechanical Room 17	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2	Relamp	No	1	LED Lamps: (1) 22W Lamp	Wall Switch	22	4,368	0.0	47	0	$5	$13	$1	2.3
IT Room 13	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2	Relamp	No	1	LED Lamps: (1) 22W Lamp	Wall Switch	22	4,368	0.0	47	0	$5	$13	$1	2.3
Break Room 12	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Staff Rest Room 14	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Conference Room 15	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Nurse's Room 16	3	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	3	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.1	264	0	$27	$110	$30	2.9
Office 19	4	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	4	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.1	352	0	$37	$146	$40	2.9
Session 20	2	Compact Fluorescent: (1) 32W Plug-In Lamp	Occupancy Sensor	S	32	3,014	2	Relamp	No	2	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	3,014	0.0	65	0	$7	$25	$2	3.4
Session 20	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	S	50	3,014		None	No	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	0	0	$0	$0	$0	0.0
Session 6	2	Compact Fluorescent: (1) 32W Plug-In Lamp	Occupancy Sensor	S	32	3,014	2	Relamp	No	2	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	3,014	0.0	65	0	$7	$25	$2	3.4
Session 6	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	S	50	3,014		None	No	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	0	0	$0	$0	$0	0.0
Den 23	2	Compact Fluorescent: (1) 32W Plug-In Lamp	Occupancy Sensor	S	32	8,760	2	Relamp	No	2	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	8,760	0.0	189	0	$20	$25	$2	1.2
Den 23	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	S	50	8,760		None	No	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	8,760	0.0	0	0	$0	$0	$0	0.0

	Existing Conditions						Proposed Conditions								Energy Impact & Financial Analysis						
Location	Fixture Quantity	Fixture Description	Control System	Light Level	Watts per Fixture	Annual Operating Hours	ECM #	Fixture Recommendation	Add Controls?	Fixture Quantity	Fixture Description	Control System	Watts per Fixture	Annual Operating Hours	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Living Room 2	6	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	8,760	2	Relamp	No	6	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	8,760	0.1	766	0	$80	$110	$30	1.0
Dining Room 13	12	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	8,760	2	Relamp	No	12	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	8,760	0.1	1,533	0	$159	$219	$60	1.0
Bedroom 110	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 110	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 110A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 110B	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bathroom 118	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368	3	None	Yes	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	73	0	$8	$0	$0	0.0
Bathroom 118	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2, 3	Relamp	Yes	1	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	3,014	0.0	79	0	$8	$13	$1	1.4
Bathroom 118	1	LED - Fixtures: Bath Vanity	Wall Switch	S	76	4,368	3	None	Yes	1	LED - Fixtures: Bath Vanity	Occupancy Sensor	76	3,014	0.0	111	0	$12	$270	$35	20.3
Bathroom 119	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368	3	None	Yes	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	73	0	$8	$0	$0	0.0
Bathroom 119	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2, 3	Relamp	Yes	1	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	3,014	0.0	79	0	$8	$13	$1	1.4
Bathroom 119	1	LED - Fixtures: Bath Vanity	Wall Switch	S	76	4,368	3	None	Yes	1	LED - Fixtures: Bath Vanity	Occupancy Sensor	76	3,014	0.0	111	0	$12	$270	$35	20.3
Hallway by Bedrooms	8	Compact Fluorescent: (1) 32W Plug-In Lamp	Occupancy Sensor	S	32	8,760	2	Relamp	No	8	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	8,760	0.1	757	0	$79	$100	$8	1.2
Laundry 120	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	S	50	3,014		None	No	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	0	0	$0	$0	$0	0.0
Bedroom 108	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 108	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 108A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bathroom 117	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368	3	None	Yes	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	73	0	$8	$0	$0	0.0
Bathroom 117	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2, 3	Relamp	Yes	1	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	3,014	0.0	79	0	$8	$13	$1	1.4
Bathroom 117	1	LED - Fixtures: Bath Vanity	Wall Switch	S	76	4,368	3	None	Yes	1	LED - Fixtures: Bath Vanity	Occupancy Sensor	76	3,014	0.0	111	0	$12	$270	$35	20.3
Bedroom 107	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 107	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 107A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 106	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 106	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0

	Existing Conditions						Proposed Conditions								Energy Impact & Financial Analysis						
Location	Fixture Quantity	Fixture Description	Control System	Light Level	Watts per Fixture	Annual Operating Hours	ECM #	Fixture Recommendation	Add Controls?	Fixture Quantity	Fixture Description	Control System	Watts per Fixture	Annual Operating Hours	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Bedroom Closet 106A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 109	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 109	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 109A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 109B	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Residence Hall Linden 200	10	Exit Signs: LED - 2 W Lamp	None		6	8,760		None	No	10	Exit Signs: LED - 2 W Lamp	None	6	8,760	0.0	0	0	$0	$0	$0	0.0
Residence Hall Linden 200 Exterior	3	LED - Fixtures: Outdoor Wall-Mounted Area Fixture	Timeclock		53	4,368		None	No	3	LED - Fixtures: Outdoor Wall-Mounted Area Fixture	Timeclock	53	4,368	0.0	0	0	$0	$0	$0	0.0
Residence Hall Linden 200 Exterior by Exit	4	LED - Fixtures: Outdoor Wall-Mounted Area Fixture	Occupancy Sensor		53	3,014		None	No	4	LED - Fixtures: Outdoor Wall-Mounted Area Fixture	Occupancy Sensor	53	3,014	0.0	0	0	$0	$0	$0	0.0
Bedroom 101	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 101	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 101A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 102	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 102	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 102A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 103	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 103	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 103A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bathroom 111	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368	3	None	Yes	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	73	0	$8	$0	$0	0.0
Bathroom 111	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2, 3	Relamp	Yes	1	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	3,014	0.0	79	0	$8	$13	$1	1.4
Bathroom 111	1	LED - Fixtures: Bath Vanity	Wall Switch	S	76	4,368	3	None	Yes	1	LED - Fixtures: Bath Vanity	Occupancy Sensor	76	3,014	0.0	111	0	$12	$270	$35	20.3
Bedroom 104	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 104	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 104A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 104B	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0

	Existing Conditions						Proposed Conditions								Energy Impact & Financial Analysis						
Location	Fixture Quantity	Fixture Description	Control System	Light Level	Watts per Fixture	Annual Operating Hours	ECM #	Fixture Recommendation	Add Controls?	Fixture Quantity	Fixture Description	Control System	Watts per Fixture	Annual Operating Hours	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Living Room 1	6	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	8,760	2	Relamp	No	6	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	8,760	0.1	766	0	$80	$110	$30	1.0
Den 7	2	Compact Fluorescent: (1) 32W Plug-In Lamp	Occupancy Sensor	S	32	8,760	2	Relamp	No	2	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	8,760	0.0	189	0	$20	$25	$2	1.2
Den 7	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	S	50	8,760		None	No	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	8,760	0.0	0	0	$0	$0	$0	0.0
Dining Room 3	12	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	8,760	2	Relamp	No	12	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	8,760	0.1	1,533	0	$159	$219	$60	1.0
Bathroom 113	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368	3	None	Yes	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	73	0	$8	$0	$0	0.0
Bathroom 113	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2, 3	Relamp	Yes	1	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	3,014	0.0	79	0	$8	$13	$1	1.4
Bathroom 113	1	LED - Fixtures: Bath Vanity	Wall Switch	S	76	4,368	3	None	Yes	1	LED - Fixtures: Bath Vanity	Occupancy Sensor	76	3,014	0.0	111	0	$12	$270	$35	20.3
Hallway by Bedrooms	8	Compact Fluorescent: (1) 32W Plug-In Lamp	Occupancy Sensor	S	32	8,760	2	Relamp	No	8	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	8,760	0.1	757	0	$79	$100	$8	1.2
Laundry 114	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	S	50	3,014		None	No	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	0	0	$0	$0	$0	0.0
Bathroom 112	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368	3	None	Yes	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	73	0	$8	$0	$0	0.0
Bathroom 112	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2, 3	Relamp	Yes	1	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	3,014	0.0	79	0	$8	$13	$1	1.4
Bathroom 112	1	LED - Fixtures: Bath Vanity	Wall Switch	S	76	4,368	3	None	Yes	1	LED - Fixtures: Bath Vanity	Occupancy Sensor	76	3,014	0.0	111	0	$12	$270	$35	20.3
Bedroom 105	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 105	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 105A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 105B	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Kitchen 18	13	Compact Fluorescent: (1) 32W Plug-In Lamp	Occupancy Sensor	S	32	8,760	2	Relamp	No	13	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	8,760	0.1	1,230	0	$128	$163	$13	1.2
Kitchen 18	2	Linear Fluorescent - T8: 3' T8 (25W) - 1L	Occupancy Sensor	S	27	8,760	2	Relamp	No	2	LED - Linear Tubes: (1) 3' Lamp	Occupancy Sensor	11	8,760	0.0	312	0	$32	$37	$10	0.8
Kitchen 18	2	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	8,760	2	Relamp	No	2	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	8,760	0.0	255	0	$27	$37	$10	1.0
Mechanical Room 17	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2	Relamp	No	1	LED Lamps: (1) 22W Lamp	Wall Switch	22	4,368	0.0	47	0	$5	$13	$1	2.3
IT Room 13	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2	Relamp	No	1	LED Lamps: (1) 22W Lamp	Wall Switch	22	4,368	0.0	47	0	$5	$13	$1	2.3
Break Room 12	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Staff Rest Room 14	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Conference Room 15	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Nurse's Room 16	3	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	3	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.1	264	0	$27	$110	$30	2.9

	Existing Conditions						Proposed Conditions								Energy Impact & Financial Analysis						
Location	Fixture Quantity	Fixture Description	Control System	Light Level	Watts per Fixture	Annual Operating Hours	ECM #	Fixture Recommendation	Add Controls?	Fixture Quantity	Fixture Description	Control System	Watts per Fixture	Annual Operating Hours	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Office 19	4	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	4	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.1	352	0	$37	$146	$40	2.9
Session 20	2	Compact Fluorescent: (1) 32W Plug-In Lamp	Occupancy Sensor	S	32	3,014	2	Relamp	No	2	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	3,014	0.0	65	0	$7	$25	$2	3.4
Session 20	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	S	50	3,014		None	No	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	0	0	$0	$0	$0	0.0
Session 6	2	Compact Fluorescent: (1) 32W Plug-In Lamp	Occupancy Sensor	S	32	3,014	2	Relamp	No	2	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	3,014	0.0	65	0	$7	$25	$2	3.4
Session 6	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	S	50	3,014		None	No	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	0	0	$0	$0	$0	0.0
Den 23	2	Compact Fluorescent: (1) 32W Plug-In Lamp	Occupancy Sensor	S	32	8,760	2	Relamp	No	2	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	8,760	0.0	189	0	$20	$25	$2	1.2
Den 23	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	S	50	8,760		None	No	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	8,760	0.0	0	0	$0	$0	$0	0.0
Living Room 2	6	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	8,760	2	Relamp	No	6	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	8,760	0.1	766	0	$80	$110	$30	1.0
Dining Room 13	12	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	8,760	2	Relamp	No	12	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	8,760	0.1	1,533	0	$159	$219	$60	1.0
Bedroom 110	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 110	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 110A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 110B	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bathroom 118	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368	3	None	Yes	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	73	0	$8	$0	$0	0.0
Bathroom 118	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2, 3	Relamp	Yes	1	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	3,014	0.0	79	0	$8	$13	$1	1.4
Bathroom 118	1	LED - Fixtures: Bath Vanity	Wall Switch	S	76	4,368	3	None	Yes	1	LED - Fixtures: Bath Vanity	Occupancy Sensor	76	3,014	0.0	111	0	$12	$270	$35	20.3
Bathroom 119	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368	3	None	Yes	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	73	0	$8	$0	$0	0.0
Bathroom 119	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2, 3	Relamp	Yes	1	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	3,014	0.0	79	0	$8	$13	$1	1.4
Bathroom 119	1	LED - Fixtures: Bath Vanity	Wall Switch	S	76	4,368	3	None	Yes	1	LED - Fixtures: Bath Vanity	Occupancy Sensor	76	3,014	0.0	111	0	$12	$270	$35	20.3
Hallway by Bedrooms	8	Compact Fluorescent: (1) 32W Plug-In Lamp	Occupancy Sensor	S	32	8,760	2	Relamp	No	8	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	8,760	0.1	757	0	$79	$100	$8	1.2
Laundry 120	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	S	50	3,014		None	No	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	0	0	$0	$0	$0	0.0
Bedroom 108	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 108	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 108A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bathroom 117	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368	3	None	Yes	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	73	0	$8	$0	$0	0.0

	Existing Conditions						Proposed Conditions								Energy Impact & Financial Analysis						
Location	Fixture Quantity	Fixture Description	Control System	Light Level	Watts per Fixture	Annual Operating Hours	ECM #	Fixture Recommendation	Add Controls?	Fixture Quantity	Fixture Description	Control System	Watts per Fixture	Annual Operating Hours	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Bathroom 117	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2, 3	Relamp	Yes	1	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	3,014	0.0	79	0	$8	$13	$1	1.4
Bathroom 117	1	LED - Fixtures: Bath Vanity	Wall Switch	S	76	4,368	3	None	Yes	1	LED - Fixtures: Bath Vanity	Occupancy Sensor	76	3,014	0.0	111	0	$12	$270	$35	20.3
Bedroom 107	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 107	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 107A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 106	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 106	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 106A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 109	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 109	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 109A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 109B	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Residence Hall Linden 300	10	Exit Signs: LED - 2 W Lamp	None		6	8,760		None	No	10	Exit Signs: LED - 2 W Lamp	None	6	8,760	0.0	0	0	$0	$0	$0	0.0
Residence Hall Linden 300 Exterior	3	LED - Fixtures: Outdoor Wall-Mounted Area Fixture	Timeclock		53	4,368		None	No	3	LED - Fixtures: Outdoor Wall-Mounted Area Fixture	Timeclock	53	4,368	0.0	0	0	$0	$0	$0	0.0
Residence Hall Linden 300 Exterior by Exit	4	LED - Fixtures: Outdoor Wall-Mounted Area Fixture	Occupancy Sensor		53	3,014		None	No	4	LED - Fixtures: Outdoor Wall-Mounted Area Fixture	Occupancy Sensor	53	3,014	0.0	0	0	$0	$0	$0	0.0
Bedroom 101	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 101	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 101A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 102	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 102	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 102A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 103	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 103	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 103A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0

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Location	Fixture Quantity	Fixture Description	Control System	Light Level	Watts per Fixture	Annual Operating Hours	ECM #	Fixture Recommendation	Add Controls?	Fixture Quantity	Fixture Description	Control System	Watts per Fixture	Annual Operating Hours	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Bathroom 111	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368	3	None	Yes	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	73	0	$8	$0	$0	0.0
Bathroom 111	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2, 3	Relamp	Yes	1	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	3,014	0.0	79	0	$8	$13	$1	1.4
Bathroom 111	1	LED - Fixtures: Bath Vanity	Wall Switch	S	76	4,368	3	None	Yes	1	LED - Fixtures: Bath Vanity	Occupancy Sensor	76	3,014	0.0	111	0	$12	$270	$35	20.3
Bedroom 104	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 104	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 104A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 104B	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Living Room 1	10	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	8,760	2	Relamp	No	10	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	8,760	0.1	1,277	0	$133	$183	$50	1.0
Den 9	2	Compact Fluorescent: (1) 32W Plug-In Lamp	Occupancy Sensor	S	32	8,760	2	Relamp	No	2	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	8,760	0.0	189	0	$20	$25	$2	1.2
Den 9	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	S	50	8,760		None	No	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	8,760	0.0	0	0	$0	$0	$0	0.0
Dining Room 3	10	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	8,760	2	Relamp	No	10	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	8,760	0.1	1,277	0	$133	$183	$50	1.0
Bathroom 113	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368	3	None	Yes	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	73	0	$8	$0	$0	0.0
Bathroom 113	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2, 3	Relamp	Yes	1	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	3,014	0.0	79	0	$8	$13	$1	1.4
Bathroom 113	1	LED - Fixtures: Bath Vanity	Wall Switch	S	76	4,368	3	None	Yes	1	LED - Fixtures: Bath Vanity	Occupancy Sensor	76	3,014	0.0	111	0	$12	$270	$35	20.3
Hallway by Bedrooms	8	Compact Fluorescent: (1) 32W Plug-In Lamp	Occupancy Sensor	S	32	8,760	2	Relamp	No	8	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	8,760	0.1	757	0	$79	$100	$8	1.2
Laundry 114	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	S	50	3,014		None	No	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	0	0	$0	$0	$0	0.0
Bathroom 112	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368	3	None	Yes	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	73	0	$8	$0	$0	0.0
Bathroom 112	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2, 3	Relamp	Yes	1	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	3,014	0.0	79	0	$8	$13	$1	1.4
Bathroom 112	1	LED - Fixtures: Bath Vanity	Wall Switch	S	76	4,368	3	None	Yes	1	LED - Fixtures: Bath Vanity	Occupancy Sensor	76	3,014	0.0	111	0	$12	$270	$35	20.3
Bedroom 105	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 105	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 105A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 105B	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Kitchen 18	13	Compact Fluorescent: (1) 32W Plug-In Lamp	Occupancy Sensor	S	32	8,760	2	Relamp	No	13	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	8,760	0.1	1,230	0	$128	$163	$13	1.2
Kitchen 18	2	Linear Fluorescent - T8: 3' T8 (25W) - 1L	Occupancy Sensor	S	27	8,760	2	Relamp	No	2	LED - Linear Tubes: (1) 3' Lamp	Occupancy Sensor	11	8,760	0.0	312	0	$32	$37	$10	0.8

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Location	Fixture Quantity	Fixture Description	Control System	Light Level	Watts per Fixture	Annual Operating Hours	ECM #	Fixture Recommendation	Add Controls?	Fixture Quantity	Fixture Description	Control System	Watts per Fixture	Annual Operating Hours	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Kitchen 18	2	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	8,760	2	Relamp	No	2	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	8,760	0.0	255	0	$27	$37	$10	1.0
Mechanical Room 16	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2	Relamp	No	1	LED Lamps: (1) 22W Lamp	Wall Switch	22	4,368	0.0	47	0	$5	$13	$1	2.3
IT Room 12	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2	Relamp	No	1	LED Lamps: (1) 22W Lamp	Wall Switch	22	4,368	0.0	47	0	$5	$13	$1	2.3
Break Room 11	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Staff Rest Room 13	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Conference Room 14	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Nurse's Room 15	3	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	3	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.1	264	0	$27	$110	$30	2.9
Office 19	4	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	4	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.1	352	0	$37	$146	$40	2.9
Session 20	2	Compact Fluorescent: (1) 32W Plug-In Lamp	Occupancy Sensor	S	32	3,014	2	Relamp	No	2	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	3,014	0.0	65	0	$7	$25	$2	3.4
Session 20	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	S	50	3,014		None	No	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	0	0	$0	$0	$0	0.0
Den 22	2	Compact Fluorescent: (1) 32W Plug-In Lamp	Occupancy Sensor	S	32	8,760	2	Relamp	No	2	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	8,760	0.0	189	0	$20	$25	$2	1.2
Den 22	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	S	50	8,760		None	No	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	8,760	0.0	0	0	$0	$0	$0	0.0
Living Room 2	6	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	8,760	2	Relamp	No	6	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	8,760	0.1	766	0	$80	$110	$30	1.0
Dining Room 13	10	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	8,760	2	Relamp	No	10	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	8,760	0.1	1,277	0	$133	$183	$50	1.0
Bedroom 110	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 110	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 110A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 110B	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bathroom 118	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368	3	None	Yes	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	73	0	$8	$0	$0	0.0
Bathroom 118	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2, 3	Relamp	Yes	1	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	3,014	0.0	79	0	$8	$13	$1	1.4
Bathroom 118	1	LED - Fixtures: Bath Vanity	Wall Switch	S	76	4,368	3	None	Yes	1	LED - Fixtures: Bath Vanity	Occupancy Sensor	76	3,014	0.0	111	0	$12	$270	$35	20.3
Bathroom 119	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368	3	None	Yes	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	73	0	$8	$0	$0	0.0
Bathroom 119	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2, 3	Relamp	Yes	1	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	3,014	0.0	79	0	$8	$13	$1	1.4
Bathroom 119	1	LED - Fixtures: Bath Vanity	Wall Switch	S	76	4,368	3	None	Yes	1	LED - Fixtures: Bath Vanity	Occupancy Sensor	76	3,014	0.0	111	0	$12	$270	$35	20.3
Hallway by Bedrooms	8	Compact Fluorescent: (1) 32W Plug-In Lamp	Occupancy Sensor	S	32	8,760	2	Relamp	No	8	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	8,760	0.1	757	0	$79	$100	$8	1.2

	Existing Conditions						Proposed Conditions								Energy Impact & Financial Analysis						
Location	Fixture Quantity	Fixture Description	Control System	Light Level	Watts per Fixture	Annual Operating Hours	ECM #	Fixture Recommendation	Add Controls?	Fixture Quantity	Fixture Description	Control System	Watts per Fixture	Annual Operating Hours	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Laundry 120	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	S	50	3,014		None	No	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	0	0	$0	$0	$0	0.0
Bedroom 108	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 108	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 108A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bathroom 117	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368	3	None	Yes	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	73	0	$8	$0	$0	0.0
Bathroom 117	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2, 3	Relamp	Yes	1	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	3,014	0.0	79	0	$8	$13	$1	1.4
Bathroom 117	1	LED - Fixtures: Bath Vanity	Wall Switch	S	76	4,368	3	None	Yes	1	LED - Fixtures: Bath Vanity	Occupancy Sensor	76	3,014	0.0	111	0	$12	$270	$35	20.3
Bedroom 107	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 107	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 107A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 106	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 106	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 106A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 109	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 109	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 109A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 109B	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 400	10	Exit Signs: LED - 2 W Lamp	None	S	6	8,760		None	No	10	Exit Signs: LED - 2 W Lamp	None	6	8,760	0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 400 Exterior	5	LED - Fixtures: Outdoor Wall-Mounted Area Fixture	Timeclock	S	53	4,368		None	No	5	LED - Fixtures: Outdoor Wall-Mounted Area Fixture	Timeclock	53	4,368	0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 400 Exterior by Exit	5	LED - Fixtures: Outdoor Wall-Mounted Area Fixture	Occupancy Sensor		53	3,014		None	No	5	LED - Fixtures: Outdoor Wall-Mounted Area Fixture	Occupancy Sensor	53	3,014	0.0	0	0	$0	$0	$0	0.0
Bedroom 101	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 101	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 101A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 102	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0

	Existing Conditions						Proposed Conditions								Energy Impact & Financial Analysis						
Location	Fixture Quantity	Fixture Description	Control System	Light Level	Watts per Fixture	Annual Operating Hours	ECM #	Fixture Recommendation	Add Controls?	Fixture Quantity	Fixture Description	Control System	Watts per Fixture	Annual Operating Hours	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Bedroom 102	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 102A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 103	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 103	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 103A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bathroom 111	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368	3	None	Yes	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	73	0	$8	$0	$0	0.0
Bathroom 111	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2, 3	Relamp	Yes	1	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	3,014	0.0	79	0	$8	$13	$1	1.4
Bathroom 111	1	LED - Fixtures: Bath Vanity	Wall Switch	S	76	4,368	3	None	Yes	1	LED - Fixtures: Bath Vanity	Occupancy Sensor	76	3,014	0.0	111	0	$12	$270	$35	20.3
Bedroom 104	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 104	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 104A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 104B	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Living Room 1	10	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	8,760	2	Relamp	No	10	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	8,760	0.1	1,277	0	$133	$183	$50	1.0
Den 9	2	Compact Fluorescent: (1) 32W Plug-In Lamp	Occupancy Sensor	S	32	8,760	2	Relamp	No	2	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	8,760	0.0	189	0	$20	$25	$2	1.2
Den 9	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	S	50	8,760		None	No	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	8,760	0.0	0	0	$0	$0	$0	0.0
Dining Room 3	10	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	8,760	2	Relamp	No	10	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	8,760	0.1	1,277	0	$133	$183	$50	1.0
Bathroom 113	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368	3	None	Yes	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	73	0	$8	$0	$0	0.0
Bathroom 113	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2, 3	Relamp	Yes	1	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	3,014	0.0	79	0	$8	$13	$1	1.4
Bathroom 113	1	LED - Fixtures: Bath Vanity	Wall Switch	S	76	4,368	3	None	Yes	1	LED - Fixtures: Bath Vanity	Occupancy Sensor	76	3,014	0.0	111	0	$12	$270	$35	20.3
Hallway by Bedrooms	8	Compact Fluorescent: (1) 32W Plug-In Lamp	Occupancy Sensor	S	32	8,760	2	Relamp	No	8	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	8,760	0.1	757	0	$79	$100	$8	1.2
Laundry 114	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	S	50	3,014		None	No	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	0	0	$0	$0	$0	0.0
Bathroom 112	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368	3	None	Yes	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	73	0	$8	$0	$0	0.0
Bathroom 112	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2, 3	Relamp	Yes	1	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	3,014	0.0	79	0	$8	$13	$1	1.4
Bathroom 112	1	LED - Fixtures: Bath Vanity	Wall Switch	S	76	4,368	3	None	Yes	1	LED - Fixtures: Bath Vanity	Occupancy Sensor	76	3,014	0.0	111	0	$12	$270	$35	20.3
Bedroom 105	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0

	Existing Conditions						Proposed Conditions								Energy Impact & Financial Analysis						
Location	Fixture Quantity	Fixture Description	Control System	Light Level	Watts per Fixture	Annual Operating Hours	ECM #	Fixture Recommendation	Add Controls?	Fixture Quantity	Fixture Description	Control System	Watts per Fixture	Annual Operating Hours	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Bedroom 105	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 105A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 105B	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Kitchen 18	13	Compact Fluorescent: (1) 32W Plug-In Lamp	Occupancy Sensor	S	32	8,760	2	Relamp	No	13	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	8,760	0.1	1,230	0	$128	$163	$13	1.2
Kitchen 18	2	Linear Fluorescent - T8: 3' T8 (25W) - 1L	Occupancy Sensor	S	27	8,760	2	Relamp	No	2	LED - Linear Tubes: (1) 3' Lamp	Occupancy Sensor	11	8,760	0.0	312	0	$32	$37	$10	0.8
Kitchen 18	2	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	8,760	2	Relamp	No	2	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	8,760	0.0	255	0	$27	$37	$10	1.0
Mechanical Room 16	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2	Relamp	No	1	LED Lamps: (1) 22W Lamp	Wall Switch	22	4,368	0.0	47	0	$5	$13	$1	2.3
IT Room 12	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2	Relamp	No	1	LED Lamps: (1) 22W Lamp	Wall Switch	22	4,368	0.0	47	0	$5	$13	$1	2.3
Break Room 11	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Staff Rest Room 13	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Conference Room 14	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Nurse's Room 15	3	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	3	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.1	264	0	$27	$110	$30	2.9
Office 19	4	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	4	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.1	352	0	$37	$146	$40	2.9
Session 20	2	Compact Fluorescent: (1) 32W Plug-In Lamp	Occupancy Sensor	S	32	3,014	2	Relamp	No	2	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	3,014	0.0	65	0	$7	$25	$2	3.4
Session 20	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	S	50	3,014		None	No	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	0	0	$0	$0	$0	0.0
Den 22	2	Compact Fluorescent: (1) 32W Plug-In Lamp	Occupancy Sensor	S	32	8,760	2	Relamp	No	2	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	8,760	0.0	189	0	$20	$25	$2	1.2
Den 22	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	S	50	8,760		None	No	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	8,760	0.0	0	0	$0	$0	$0	0.0
Living Room 2	6	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	8,760	2	Relamp	No	6	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	8,760	0.1	766	0	$80	$110	$30	1.0
Dining Room 13	10	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	8,760	2	Relamp	No	10	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	8,760	0.1	1,277	0	$133	$183	$50	1.0
Bedroom 110	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 110	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 110A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 110B	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bathroom 118	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368	3	None	Yes	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	73	0	$8	$0	$0	0.0
Bathroom 118	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2, 3	Relamp	Yes	1	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	3,014	0.0	79	0	$8	$13	$1	1.4

	Existing Conditions						Proposed Conditions								Energy Impact & Financial Analysis						
Location	Fixture Quantity	Fixture Description	Control System	Light Level	Watts per Fixture	Annual Operating Hours	ECM #	Fixture Recommendation	Add Controls?	Fixture Quantity	Fixture Description	Control System	Watts per Fixture	Annual Operating Hours	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Bathroom 118	1	LED - Fixtures: Bath Vanity	Wall Switch	S	76	4,368	3	None	Yes	1	LED - Fixtures: Bath Vanity	Occupancy Sensor	76	3,014	0.0	111	0	$12	$270	$35	20.3
Bathroom 119	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368	3	None	Yes	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	73	0	$8	$0	$0	0.0
Bathroom 119	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2, 3	Relamp	Yes	1	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	3,014	0.0	79	0	$8	$13	$1	1.4
Bathroom 119	1	LED - Fixtures: Bath Vanity	Wall Switch	S	76	4,368	3	None	Yes	1	LED - Fixtures: Bath Vanity	Occupancy Sensor	76	3,014	0.0	111	0	$12	$270	$35	20.3
Hallway by Bedrooms	8	Compact Fluorescent: (1) 32W Plug-In Lamp	Occupancy Sensor	S	32	8,760	2	Relamp	No	8	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	8,760	0.1	757	0	$79	$100	$8	1.2
Laundry 120	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	S	50	3,014		None	No	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	0	0	$0	$0	$0	0.0
Bedroom 108	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 108	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 108A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bathroom 117	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368	3	None	Yes	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	73	0	$8	$0	$0	0.0
Bathroom 117	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2, 3	Relamp	Yes	1	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	3,014	0.0	79	0	$8	$13	$1	1.4
Bathroom 117	1	LED - Fixtures: Bath Vanity	Wall Switch	S	76	4,368	3	None	Yes	1	LED - Fixtures: Bath Vanity	Occupancy Sensor	76	3,014	0.0	111	0	$12	$270	$35	20.3
Bedroom 107	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 107	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 107A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 106	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 106	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 106A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 109	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 109	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 109A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 109B	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 500	10	Exit Signs: LED - 2 W Lamp	None	S	6	8,760		None	No	10	Exit Signs: LED - 2 W Lamp	None	6	8,760	0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 500 Exterior	5	LED - Fixtures: Outdoor Wall-Mounted Area Fixture	Timeclock	S	53	4,368		None	No	5	LED - Fixtures: Outdoor Wall-Mounted Area Fixture	Timeclock	53	4,368	0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 500 Exterior by Exit	5	LED - Fixtures: Outdoor Wall-Mounted Area Fixture	Occupancy Sensor		53	3,014		None	No	5	LED - Fixtures: Outdoor Wall-Mounted Area Fixture	Occupancy Sensor	53	3,014	0.0	0	0	$0	$0	$0	0.0

	Existing Conditions						Proposed Conditions								Energy Impact & Financial Analysis						
Location	Fixture Quantity	Fixture Description	Control System	Light Level	Watts per Fixture	Annual Operating Hours	ECM #	Fixture Recommendation	Add Controls?	Fixture Quantity	Fixture Description	Control System	Watts per Fixture	Annual Operating Hours	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Bedroom 101	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 101	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 101A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 102	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 102	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 102A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 103	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 103	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 103A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bathroom 111	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368	3	None	Yes	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	73	0	$8	$0	$0	0.0
Bathroom 111	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2, 3	Relamp	Yes	1	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	3,014	0.0	79	0	$8	$13	$1	1.4
Bathroom 111	1	LED - Fixtures: Bath Vanity	Wall Switch	S	76	4,368	3	None	Yes	1	LED - Fixtures: Bath Vanity	Occupancy Sensor	76	3,014	0.0	111	0	$12	$270	$35	20.3
Bedroom 104	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 104	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 104A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 104B	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Living Room 1	10	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	8,760	2	Relamp	No	10	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	8,760	0.1	1,277	0	$133	$183	$50	1.0
Den 9	2	Compact Fluorescent: (1) 32W Plug-In Lamp	Occupancy Sensor	S	32	8,760	2	Relamp	No	2	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	8,760	0.0	189	0	$20	$25	$2	1.2
Den 9	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	S	50	8,760		None	No	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	8,760	0.0	0	0	$0	$0	$0	0.0
Dining Room 3	10	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	8,760	2	Relamp	No	10	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	8,760	0.1	1,277	0	$133	$183	$50	1.0
Bathroom 113	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368	3	None	Yes	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	73	0	$8	$0	$0	0.0
Bathroom 113	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2, 3	Relamp	Yes	1	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	3,014	0.0	79	0	$8	$13	$1	1.4
Bathroom 113	1	LED - Fixtures: Bath Vanity	Wall Switch	S	76	4,368	3	None	Yes	1	LED - Fixtures: Bath Vanity	Occupancy Sensor	76	3,014	0.0	111	0	$12	$270	$35	20.3
Hallway by Bedrooms	8	Compact Fluorescent: (1) 32W Plug-In Lamp	Occupancy Sensor	S	32	8,760	2	Relamp	No	8	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	8,760	0.1	757	0	$79	$100	$8	1.2

	Existing Conditions						Proposed Conditions								Energy Impact & Financial Analysis						
Location	Fixture Quantity	Fixture Description	Control System	Light Level	Watts per Fixture	Annual Operating Hours	ECM #	Fixture Recommendation	Add Controls?	Fixture Quantity	Fixture Description	Control System	Watts per Fixture	Annual Operating Hours	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Laundry 114	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	S	50	3,014		None	No	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	0	0	$0	$0	$0	0.0
Bathroom 112	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368	3	None	Yes	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	73	0	$8	$0	$0	0.0
Bathroom 112	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2, 3	Relamp	Yes	1	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	3,014	0.0	79	0	$8	$13	$1	1.4
Bathroom 112	1	LED - Fixtures: Bath Vanity	Wall Switch	S	76	4,368	3	None	Yes	1	LED - Fixtures: Bath Vanity	Occupancy Sensor	76	3,014	0.0	111	0	$12	$270	$35	20.3
Bedroom 105	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 105	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 105A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 105B	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Kitchen 18	13	Compact Fluorescent: (1) 32W Plug-In Lamp	Occupancy Sensor	S	32	8,760	2	Relamp	No	13	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	8,760	0.1	1,230	0	$128	$163	$13	1.2
Kitchen 18	2	Linear Fluorescent - T8: 3' T8 (25W) - 1L	Occupancy Sensor	S	27	8,760	2	Relamp	No	2	LED - Linear Tubes: (1) 3' Lamp	Occupancy Sensor	11	8,760	0.0	312	0	$32	$37	$10	0.8
Kitchen 18	2	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	8,760	2	Relamp	No	2	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	8,760	0.0	255	0	$27	$37	$10	1.0
Mechanical Room 16	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2	Relamp	No	1	LED Lamps: (1) 22W Lamp	Wall Switch	22	4,368	0.0	47	0	$5	$13	$1	2.3
IT Room 12	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2	Relamp	No	1	LED Lamps: (1) 22W Lamp	Wall Switch	22	4,368	0.0	47	0	$5	$13	$1	2.3
Break Room 11	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Staff Rest Room 13	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Conference Room 14	1	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	1	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	88	0	$9	$37	$10	2.9
Nurse's Room 15	3	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	3	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.1	264	0	$27	$110	$30	2.9
Office 19	4	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	4	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.1	352	0	$37	$146	$40	2.9
Session 20	2	Compact Fluorescent: (1) 32W Plug-In Lamp	Occupancy Sensor	S	32	3,014	2	Relamp	No	2	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	3,014	0.0	65	0	$7	$25	$2	3.4
Session 20	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	S	50	3,014		None	No	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	0	0	$0	$0	$0	0.0
Den 22	2	Compact Fluorescent: (1) 32W Plug-In Lamp	Occupancy Sensor	S	32	8,760	2	Relamp	No	2	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	8,760	0.0	189	0	$20	$25	$2	1.2
Den 22	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	S	50	8,760		None	No	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	8,760	0.0	0	0	$0	$0	$0	0.0
Living Room 2	6	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	8,760	2	Relamp	No	6	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	8,760	0.1	766	0	$80	$110	$30	1.0
Dining Room 13	10	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	28	8,760	2	Relamp	No	10	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	8,760	0.1	1,277	0	$133	$183	$50	1.0
Bedroom 110	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0

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Location	Fixture Quantity	Fixture Description	Control System	Light Level	Watts per Fixture	Annual Operating Hours	ECM #	Fixture Recommendation	Add Controls?	Fixture Quantity	Fixture Description	Control System	Watts per Fixture	Annual Operating Hours	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Bedroom 110	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 110A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 110B	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bathroom 118	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368	3	None	Yes	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	73	0	$8	$0	$0	0.0
Bathroom 118	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2, 3	Relamp	Yes	1	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	3,014	0.0	79	0	$8	$13	$1	1.4
Bathroom 118	1	LED - Fixtures: Bath Vanity	Wall Switch	S	76	4,368	3	None	Yes	1	LED - Fixtures: Bath Vanity	Occupancy Sensor	76	3,014	0.0	111	0	$12	$270	$35	20.3
Bathroom 119	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368	3	None	Yes	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	73	0	$8	$0	$0	0.0
Bathroom 119	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2, 3	Relamp	Yes	1	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	3,014	0.0	79	0	$8	$13	$1	1.4
Bathroom 119	1	LED - Fixtures: Bath Vanity	Wall Switch	S	76	4,368	3	None	Yes	1	LED - Fixtures: Bath Vanity	Occupancy Sensor	76	3,014	0.0	111	0	$12	$270	$35	20.3
Hallway by Bedrooms	8	Compact Fluorescent: (1) 32W Plug-In Lamp	Occupancy Sensor	S	32	8,760	2	Relamp	No	8	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	8,760	0.1	757	0	$79	$100	$8	1.2
Laundry 120	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	S	50	3,014		None	No	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	0	0	$0	$0	$0	0.0
Bedroom 108	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 108	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 108A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bathroom 117	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368	3	None	Yes	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	73	0	$8	$0	$0	0.0
Bathroom 117	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2, 3	Relamp	Yes	1	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	3,014	0.0	79	0	$8	$13	$1	1.4
Bathroom 117	1	LED - Fixtures: Bath Vanity	Wall Switch	S	76	4,368	3	None	Yes	1	LED - Fixtures: Bath Vanity	Occupancy Sensor	76	3,014	0.0	111	0	$12	$270	$35	20.3
Bedroom 107	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 107	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 107A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 106	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 106	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 106A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 109	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 109	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0

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Location	Fixture Quantity	Fixture Description	Control System	Light Level	Watts per Fixture	Annual Operating Hours	ECM #	Fixture Recommendation	Add Controls?	Fixture Quantity	Fixture Description	Control System	Watts per Fixture	Annual Operating Hours	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Bedroom Closet 109A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 109B	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 600	10	Exit Signs: LED - 2 W Lamp	None	S	6	8,760		None	No	10	Exit Signs: LED - 2 W Lamp	None	6	8,760	0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 600	5	LED - Fixtures: Outdoor Wall-Mounted Area Fixture	Timeclock	S	53	4,368		None	No	5	LED - Fixtures: Outdoor Wall-Mounted Area Fixture	Timeclock	53	4,368	0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 600	5	LED - Fixtures: Outdoor Wall-Mounted Area Fixture	Occupancy Sensor		53	3,014		None	No	5	LED - Fixtures: Outdoor Wall-Mounted Area Fixture	Occupancy Sensor	53	3,014	0.0	0	0	$0	$0	$0	0.0
Mechanical Room 113	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2	Relamp	No	1	LED Lamps: (1) 22W Lamp	Wall Switch	22	4,368	0.0	47	0	$5	$13	$1	2.3
Staff Rest Room 112	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Occupancy Sensor	S	32	3,014	2	Relamp	No	1	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	3,014	0.0	33	0	$3	$13	$1	3.4
Nurse's Room 111	3	Compact Fluorescent: (1) 32W Plug-In Lamp	Occupancy Sensor	S	32	3,014	2	Relamp	No	3	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	3,014	0.0	98	0	$10	$38	$3	3.4
Bedroom 109	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 109	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 109A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Office 110	2	Linear Fluorescent - T8: 4' T8 (32W) - 2L	Occupancy Sensor	S	56	3,014	2	Relamp	No	2	LED - Linear Tubes: (2) 4' Lamps	Occupancy Sensor	29	3,014	0.0	176	0	$18	$73	$20	2.9
Closet 110A	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2	Relamp	No	1	LED Lamps: (1) 22W Lamp	Wall Switch	22	4,368	0.0	47	0	$5	$13	$1	2.3
Rest Room 108	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368	3	None	Yes	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	73	0	$8	$0	$0	0.0
Rest Room 108	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2, 3	Relamp	Yes	1	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	3,014	0.0	79	0	$8	$13	$1	1.4
Rest Room 108	1	LED - Fixtures: Bath Vanity	Wall Switch	S	76	4,368	3	None	Yes	1	LED - Fixtures: Bath Vanity	Occupancy Sensor	76	3,014	0.0	111	0	$12	$270	$35	20.3
Den 106	2	Compact Fluorescent: (1) 32W Plug-In Lamp	Occupancy Sensor	S	32	8,760	2	Relamp	No	2	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	8,760	0.0	189	0	$20	$25	$2	1.2
Den 106	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	S	50	8,760		None	No	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	8,760	0.0	0	0	$0	$0	$0	0.0
Hallway 102	5	Compact Fluorescent: (1) 32W Plug-In Lamp	Occupancy Sensor	S	32	8,760	2	Relamp	No	5	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	8,760	0.0	473	0	$49	$63	$5	1.2
Kitchen 105	7	Compact Fluorescent: (1) 32W Plug-In Lamp	Occupancy Sensor	S	32	8,760	2	Relamp	No	7	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	8,760	0.0	662	0	$69	$88	$7	1.2
Kitchen 105	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	S	50	8,760		None	No	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	8,760	0.0	0	0	$0	$0	$0	0.0
Dining Room 104	3	Compact Fluorescent: (1) 32W Plug-In Lamp	Occupancy Sensor	S	32	8,760	2	Relamp	No	3	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	8,760	0.0	284	0	$30	$38	$3	1.2
Dining Room 104	2	LED - Fixtures: Ceiling Mount	Occupancy Sensor	S	50	8,760		None	No	2	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	8,760	0.0	0	0	$0	$0	$0	0.0
Living Room 101	12	Linear Fluorescent - T8: 4' T8 (32W) - 1L	Occupancy Sensor	S	32	8,760	2	Relamp	No	12	LED - Linear Tubes: (1) 4' Lamp	Occupancy Sensor	15	8,760	0.1	1,987	0	$207	$219	$60	0.8
Bedroom 205	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0

	Existing Conditions						Proposed Conditions								Energy Impact & Financial Analysis						
Location	Fixture Quantity	Fixture Description	Control System	Light Level	Watts per Fixture	Annual Operating Hours	ECM #	Fixture Recommendation	Add Controls?	Fixture Quantity	Fixture Description	Control System	Watts per Fixture	Annual Operating Hours	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Bedroom 205	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 205A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 206	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 206	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 206A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Rest Room 208	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368	3	None	Yes	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	73	0	$8	$0	$0	0.0
Rest Room 208	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2, 3	Relamp	Yes	1	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	3,014	0.0	79	0	$8	$13	$1	1.4
Rest Room 208	1	LED - Fixtures: Bath Vanity	Wall Switch	S	76	4,368	3	None	Yes	1	LED - Fixtures: Bath Vanity	Occupancy Sensor	76	3,014	0.0	111	0	$12	$270	$35	20.3
Rest Room 203	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368	3	None	Yes	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	73	0	$8	$0	$0	0.0
Rest Room 203	1	Compact Fluorescent: (1) 32W Plug-In Lamp	Wall Switch	S	32	4,368	2, 3	Relamp	Yes	1	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	3,014	0.0	79	0	$8	$13	$1	1.4
Rest Room 203	1	LED - Fixtures: Bath Vanity	Wall Switch	S	76	4,368	3	None	Yes	1	LED - Fixtures: Bath Vanity	Occupancy Sensor	76	3,014	0.0	111	0	$12	$270	$35	20.3
Hallway 210	9	Compact Fluorescent: (1) 32W Plug-In Lamp	Occupancy Sensor	S	32	8,760	2	Relamp	No	9	LED Lamps: (1) 22W Lamp	Occupancy Sensor	22	8,760	0.1	851	0	$89	$113	$9	1.2
Laundry 202	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	S	50	3,014		None	No	1	LED - Fixtures: Ceiling Mount	Occupancy Sensor	50	3,014	0.0	0	0	$0	$0	$0	0.0
Bedroom 209	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 209	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 209A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 201	1	LED - Fixtures: Ceiling Mount	Wall Switch	S	50	4,368		None	No	1	LED - Fixtures: Ceiling Mount	Wall Switch	50	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom 201	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	S	2	4,368		None	No	1	LED - Fixtures: Semi-Recessed Wall Mount Steplight	Wall Switch	2	4,368	0.0	0	0	$0	$0	$0	0.0
Bedroom Closet 201A	1	LED - Fixtures: Wall Mounted	Wall Switch	S	3	4,368		None	No	1	LED - Fixtures: Wall Mounted	Wall Switch	3	4,368	0.0	0	0	$0	$0	$0	0.0
Residence Transitional Housing	5	Exit Signs: LED - 2 W Lamp	None		6	8,760		None	No	5	Exit Signs: LED - 2 W Lamp	None	6	8,760	0.0	0	0	$0	$0	$0	0.0
Exterior Fixtures	3	LED - Fixtures: Outdoor Wall-Mounted Area Fixture	Timeclock		53	4,368		None	No	3	LED - Fixtures: Outdoor Wall-Mounted Area Fixture	Timeclock	53	4,368	0.0	0	0	$0	$0	$0	0.0
Exterior Fixtures by Exit	1	LED - Fixtures: Outdoor Wall-Mounted Area Fixture	Occupancy Sensor		53	3,014		None	No	1	LED - Fixtures: Outdoor Wall-Mounted Area Fixture	Occupancy Sensor	53	3,014	0.0	0	0	$0	$0	$0	0.0
Facilities Building Parking Lot	6	LED - Fixtures: Outdoor Pole/Arm-Mounted Area/Roadway Fixture	Timeclock		58	4,368		None	No	6	LED - Fixtures: Outdoor Pole/Arm-Mounted Area/Roadway Fixture	Timeclock	58	4,368	0.0	0	0	$0	$0	$0	0.0
Facilities Building Parking Lot	12	LED - Fixtures: Outdoor Pole/Arm-Mounted Area/Roadway Fixture	Occupancy Sensor		58	3,014		None	No	12	LED - Fixtures: Outdoor Pole/Arm-Mounted Area/Roadway Fixture	Occupancy Sensor	58	3,014	0.0	0	0	$0	$0	$0	0.0

	Existing Conditions						Proposed Conditions								Energy Impact & Financial Analysis						
Location	Fixture Quantity	Fixture Description	Control System	Light Level	Watts per Fixture	Annual Operating Hours	ECM #	Fixture Recommendation	Add Controls?	Fixture Quantity	Fixture Description	Control System	Watts per Fixture	Annual Operating Hours	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Facilities Building Parking Lot	3	LED - Fixtures: Large Pole/Arm-Mounted Area/Roadway Fixture	Timeclock		81	4,368		None	No	3	LED - Fixtures: Large Pole/Arm-Mounted Area/Roadway Fixture	Timeclock	81	4,368	0.0	0	0	$0	$0	$0	0.0
Facilities Building Parking Lot	3	LED - Fixtures: Large Pole/Arm-Mounted Area/Roadway Fixture	Occupancy Sensor		81	3,014		None	No	3	LED - Fixtures: Large Pole/Arm-Mounted Area/Roadway Fixture	Occupancy Sensor	81	3,014	0.0	0	0	$0	$0	$0	0.0
Facilities Building Parking Lot	9	LED - Fixtures: Large Pole/Arm-Mounted Area/Roadway Fixture	Timeclock		81	4,368		None	No	9	LED - Fixtures: Large Pole/Arm-Mounted Area/Roadway Fixture	Timeclock	81	4,368	0.0	0	0	$0	$0	$0	0.0
Facilities Building Parking Lot	3	LED - Fixtures: Large Pole/Arm-Mounted Area/Roadway Fixture	Occupancy Sensor		81	3,014		None	No	3	LED - Fixtures: Large Pole/Arm-Mounted Area/Roadway Fixture	Occupancy Sensor	81	3,014	0.0	0	0	$0	$0	$0	0.0
Facilities Building Parking Lot	3	LED - Fixtures: Large Pole/Arm-Mounted Area/Roadway Fixture	Timeclock		134	4,368		None	No	3	LED - Fixtures: Large Pole/Arm-Mounted Area/Roadway Fixture	Timeclock	134	4,368	0.0	0	0	$0	$0	$0	0.0
Facilities Building Parking Lot	3	LED - Fixtures: Large Pole/Arm-Mounted Area/Roadway Fixture	Occupancy Sensor		134	3,014		None	No	3	LED - Fixtures: Large Pole/Arm-Mounted Area/Roadway Fixture	Occupancy Sensor	134	3,014	0.0	0	0	$0	$0	$0	0.0
Facilities Building Parking Lot	6	LED - Fixtures: Large Pole/Arm-Mounted Area/Roadway Fixture	Timeclock		134	4,368		None	No	6	LED - Fixtures: Large Pole/Arm-Mounted Area/Roadway Fixture	Timeclock	134	4,368	0.0	0	0	$0	$0	$0	0.0
Facilities Building Parking Lot	1	LED - Fixtures: Large Pole/Arm-Mounted Area/Roadway Fixture	Occupancy Sensor		266	3,014		None	No	1	LED - Fixtures: Large Pole/Arm-Mounted Area/Roadway Fixture	Occupancy Sensor	266	3,014	0.0	0	0	$0	$0	$0	0.0
Facilities Building Parking Lot	1	LED - Fixtures: Large Pole/Arm-Mounted Area/Roadway Fixture	Timeclock		134	4,368		None	No	1	LED - Fixtures: Large Pole/Arm-Mounted Area/Roadway Fixture	Timeclock	134	4,368	0.0	0	0	$0	$0	$0	0.0
Bancroft School Area	3	LED - Fixtures: Large Pole/Arm-Mounted Area/Roadway Fixture	Occupancy Sensor		81	3,014		None	No	3	LED - Fixtures: Large Pole/Arm-Mounted Area/Roadway Fixture	Occupancy Sensor	81	3,014	0.0	0	0	$0	$0	$0	0.0
Bancroft School Area	8	LED - Fixtures: Large Pole/Arm-Mounted Area/Roadway Fixture	Timeclock		81	4,368		None	No	8	LED - Fixtures: Large Pole/Arm-Mounted Area/Roadway Fixture	Timeclock	81	4,368	0.0	0	0	$0	$0	$0	0.0
Bancroft School Area	16	LED - Fixtures: Outdoor Pole/Arm-Mounted Area/Roadway Fixture	Occupancy Sensor		58	3,014		None	No	16	LED - Fixtures: Outdoor Pole/Arm-Mounted Area/Roadway Fixture	Occupancy Sensor	58	3,014	0.0	0	0	$0	$0	$0	0.0
Bancroft School Area	5	LED - Fixtures: Large Pole/Arm-Mounted Area/Roadway Fixture	Timeclock		81	4,368		None	No	5	LED - Fixtures: Large Pole/Arm-Mounted Area/Roadway Fixture	Timeclock	81	4,368	0.0	0	0	$0	$0	$0	0.0
Bancroft School Area	1	LED - Fixtures: Large Pole/Arm-Mounted Area/Roadway Fixture	Occupancy Sensor		81	3,014		None	No	1	LED - Fixtures: Large Pole/Arm-Mounted Area/Roadway Fixture	Occupancy Sensor	81	3,014	0.0	0	0	$0	$0	$0	0.0
Bancroft School Area	6	LED - Fixtures: Outdoor Pole/Arm-Mounted Area/Roadway Fixture	Timeclock		58	4,368		None	No	6	LED - Fixtures: Outdoor Pole/Arm-Mounted Area/Roadway Fixture	Timeclock	58	4,368	0.0	0	0	$0	$0	$0	0.0
Bancroft School Area	3	LED - Fixtures: Outdoor Pole/Arm-Mounted Area/Roadway Fixture	Occupancy Sensor		58	3,014		None	No	3	LED - Fixtures: Outdoor Pole/Arm-Mounted Area/Roadway Fixture	Occupancy Sensor	58	3,014	0.0	0	0	$0	$0	$0	0.0
Bancroft School Area	24	LED - Fixtures: Outdoor Pole/Arm-Mounted Area/Roadway Fixture	Timeclock		58	4,368		None	No	24	LED - Fixtures: Outdoor Pole/Arm-Mounted Area/Roadway Fixture	Timeclock	58	4,368	0.0	0	0	$0	$0	$0	0.0
Bancroft School Area	4	LED - Fixtures: Large Pole/Arm-Mounted Area/Roadway Fixture	Timeclock		134	4,368		None	No	4	LED - Fixtures: Large Pole/Arm-Mounted Area/Roadway Fixture	Timeclock	134	4,368	0.0	0	0	$0	$0	$0	0.0
Bancroft School Area	2	LED - Fixtures: Large Pole/Arm-Mounted Area/Roadway Fixture	Occupancy Sensor		134	3,014		None	No	2	LED - Fixtures: Large Pole/Arm-Mounted Area/Roadway Fixture	Occupancy Sensor	134	3,014	0.0	0	0	$0	$0	$0	0.0
Bancroft School Area	2	LED - Fixtures: Large Pole/Arm-Mounted Area/Roadway Fixture	Timeclock		134	4,368		None	No	2	LED - Fixtures: Large Pole/Arm-Mounted Area/Roadway Fixture	Timeclock	134	4,368	0.0	0	0	$0	$0	$0	0.0
Bancroft School Area	2	LED - Fixtures: Large Pole/Arm-Mounted Area/Roadway Fixture	Occupancy Sensor		134	3,014		None	No	2	LED - Fixtures: Large Pole/Arm-Mounted Area/Roadway Fixture	Occupancy Sensor	134	3,014	0.0	0	0	$0	$0	$0	0.0
Bancroft School Area	3	LED - Fixtures: Large Pole/Arm-Mounted Area/Roadway Fixture	Timeclock		87	4,368		None	No	3	LED - Fixtures: Large Pole/Arm-Mounted Area/Roadway Fixture	Timeclock	87	4,368	0.0	0	0	$0	$0	$0	0.0
Bancroft School Area	1	LED - Fixtures: Large Pole/Arm-Mounted Area/Roadway Fixture	Occupancy Sensor		87	3,014		None	No	1	LED - Fixtures: Large Pole/Arm-Mounted Area/Roadway Fixture	Occupancy Sensor	87	3,014	0.0	0	0	$0	$0	$0	0.0
Bancroft School Area	4	LED - Fixtures: Large Pole/Arm-Mounted Area/Roadway Fixture	Timeclock		90	4,368		None	No	4	LED - Fixtures: Large Pole/Arm-Mounted Area/Roadway Fixture	Timeclock	90	4,368	0.0	0	0	$0	$0	$0	0.0
Bancroft School Area	1	LED - Fixtures: Large Pole/Arm-Mounted Area/Roadway Fixture	Occupancy Sensor		90	3,014		None	No	1	LED - Fixtures: Large Pole/Arm-Mounted Area/Roadway Fixture	Occupancy Sensor	90	3,014	0.0	0	0	$0	$0	$0	0.0

	Existing Conditions						Proposed Conditions								Energy Impact & Financial Analysis						
Location	Fixture Quantity	Fixture Description	Control System	Light Level	Watts per Fixture	Annual Operating Hours	ECM #	Fixture Recommendation	Add Controls?	Fixture Quantity	Fixture Description	Control System	Watts per Fixture	Annual Operating Hours	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Bancroft School Area	2	LED - Fixtures: Large Pole/Arm-Mounted Area/Roadway Fixture	Timeclock		134	4,368		None	No	2	LED - Fixtures: Large Pole/Arm-Mounted Area/Roadway Fixture	Timeclock	134	4,368	0.0	0	0	$0	$0	$0	0.0
Bancroft School Area	20	LED - Fixtures: Wall-Wash Lights	Timeclock		45	4,368		None	No	20	LED - Fixtures: Wall-Wash Lights	Timeclock	45	4,368	0.0	0	0	$0	$0	$0	0.0

Motor Inventory & Recommendations

		Existing Conditions							Proposed Conditions					Energy Impact & Financial Analysis						
Location	Area(s)/System(s) Served	Motor Quantity	Motor Application	HP Per Motor	Full Load Efficiency	VFD Control?	Remaining Useful Life	Annual Operating Hours	ECM #	Install High Efficiency Motors?	Full Load Efficiency	Install VFDs?	Number of VFDs	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Bancroft School JC	Janitorial Closet 215	1	DHW Circulation Pump	0.2	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Bancroft School Dishwash & Dry Storage	Dishwash & Dry Storage 114A	1	DHW Circulation Pump	0.2	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Bancroft School JC	Janitorial Closet 85A	1	DHW Circulation Pump	0.2	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Bancroft School Mechanical Room	Mechanical Room 12	2	Supply Fan	0.3	65.0%	No	W	2,745		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Bancroft School Mechanical Room	Mechanical Room 12	2	DHW Circulation Pump	0.2	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Bancroft School Mechanical Room	Mechanical Room 12	1	DHW Circulation Pump	0.4	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Bancroft School JC	Janitorial Closet 82	1	DHW Circulation Pump	0.2	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Bancroft School	AC Condensate	7	Condensate Pump	0.1	65.0%	No	W	2,745		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	Building Ventilation (EF-V-2)	1	Exhaust Fan	0.3	65.0%	No	W	4,380		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	Activity Center (RTU-V-1)	1	Supply Fan	20.0	93.0%	Yes	W	8,424		No	93.0%	No		0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	Activity Center (RTU-V-1)	3	Exhaust Fan	1.0	82.5%	Yes	W	8,424		No	82.5%	No		0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	Building Ventilation (EF-O-1)	1	Exhaust Fan	0.3	65.0%	No	W	4,380		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	Building Ventilation (EF-O-2)	1	Exhaust Fan	0.3	65.0%	No	W	4,380		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	Building Ventilation (EF-O-3)	1	Exhaust Fan	0.3	65.0%	No	W	4,380		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	Building Ventilation (EF-O-5)	1	Exhaust Fan	0.3	65.0%	No	W	4,380		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	Building Ventilation (EF-O-6)	1	Exhaust Fan	0.3	65.0%	No	W	4,380		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	Gym Area (RTU-G-1)	1	Supply Fan	5.0	89.5%	Yes	W	8,760		No	89.5%	No		0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	Gym Area (RTU-G-1)	1	Exhaust Fan	2.0	87.5%	Yes	W	8,760		No	87.5%	No		0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	Health Services & Offices (RTU-O-1)	1	Supply Fan	25.0	93.6%	Yes	W	8,760		No	93.6%	No		0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	Health Services & Offices (RTU-O-1)	2	Exhaust Fan	5.0	89.5%	Yes	W	8,760		No	89.5%	No		0.0	0	0	$0	$0	$0	0.0

		Existing Conditions							Proposed Conditions					Energy Impact & Financial Analysis						
Location	Area(s)/System(s) Served	Motor Quantity	Motor Application	HP Per Motor	Full Load Efficiency	VFD Control?	Remaining Useful Life	Annual Operating Hours	ECM #	Install High Efficiency Motors?	Full Load Efficiency	Install VFDs?	Number of VFDs	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Bancroft School Roof	Pool (DH-1)	2	Supply Fan	3.0	89.5%	Yes	W	6,000		No	89.5%	No		0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	Pool (DH-1)	1	Exhaust Fan	1.5	86.5%	Yes	W	6,000		No	86.5%	No		0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	Building Ventilation (EF-O-4)	1	Exhaust Fan	0.3	65.0%	No	W	6,000		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	Building Ventilation (EF-HS-4)	1	Exhaust Fan	0.3	65.0%	No	W	6,000		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	Building Ventilation (EF-T-1)	1	Exhaust Fan	0.3	65.0%	No	W	6,000		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	B-Wing Right Section (RTU-E-2)	1	Supply Fan	15.0	91.7%	Yes	W	6,760		No	91.7%	No		0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	B-Wing Right Section (RTU-E-2)	3	Exhaust Fan	1.0	82.5%	Yes	W	6,760		No	82.5%	No		0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	Second Floor B-Wing (RTU-T-2)	1	Supply Fan	15.0	91.7%	Yes	W	6,760		No	91.7%	No		0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	Second Floor B-Wing (RTU-T-2)	3	Exhaust Fan	1.0	82.5%	Yes	W	6,760		No	82.5%	No		0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	Kitchen/Dining Hall Area (ERV-1)	1	Supply Fan	0.3	65.0%	Yes	W	6,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	Kitchen/Dining Hall Area (ERV-1)	1	Exhaust Fan	0.3	65.0%	Yes	W	6,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	Building Ventilation (EF-K-1)	1	Exhaust Fan	5.0	89.5%	No	W	6,000		No	89.5%	No		0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	Dishwasher Ventilation (EF-K-2)	1	Exhaust Fan	0.3	65.0%	No	W	6,000		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	Building Ventilation (EF-K-3)	1	Exhaust Fan	0.3	65.0%	No	W	6,000		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	Building Ventilation (EF-K-4)	1	Exhaust Fan	0.3	65.0%	No	W	6,000		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	Building Ventilation (EF-K-5)	1	Exhaust Fan	0.3	65.0%	No	W	6,000		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	Building Ventilation (EF-K-6)	1	Exhaust Fan	1.5	86.5%	No	W	6,000		No	86.5%	No		0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	Kitchen (MAU-K-1)	1	Supply Fan	1.5	86.5%	Yes	W	6,000		No	86.5%	No		0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	Dining Hall (RTU-K-1)	1	Supply Fan	7.5	91.0%	Yes	W	9,464		No	91.0%	No		0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	Dining Hall (RTU-K-1)	3	Exhaust Fan	1.0	82.5%	Yes	W	9,464		No	82.5%	No		0.0	0	0	$0	$0	$0	0.0

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Bancroft School Roof	C-Wing Left Section (RTU-HS-1)	1	Supply Fan	15.0	91.7%	Yes	W	6,760		No	91.7%	No		0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	C-Wing Left Section (RTU-HS-1)	3	Exhaust Fan	1.0	82.5%	Yes	W	6,760		No	82.5%	No		0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	C-Wing Right Section (RTU-HS-2)	1	Supply Fan	15.0	93.0%	Yes	W	6,760		No	93.0%	No		0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	C-Wing Right Section (RTU-HS-2)	3	Exhaust Fan	1.0	82.5%	Yes	W	6,760		No	82.5%	No		0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	Building Ventilation (EF-HS-1)	1	Exhaust Fan	0.3	65.0%	No	W	6,000		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	Building Ventilation (EF-HS-2)	1	Exhaust Fan	0.3	65.0%	No	W	6,000		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	Building Ventilation (EF-HS-3)	1	Exhaust Fan	0.3	65.0%	No	W	6,000		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	Building Ventilation (EF-V-1)	1	Exhaust Fan	0.3	65.0%	No	W	6,000		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	Building Ventilation (EF-E-1)	1	Exhaust Fan	0.5	70.0%	No	W	6,000		No	70.0%	No		0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	Building Ventilation (EF-E-2)	1	Exhaust Fan	0.3	65.0%	No	W	6,000		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	B-Wing Left Section (RTU-E-1)	1	Supply Fan	15.0	91.7%	Yes	W	6,760		No	91.7%	No		0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	B-Wing Left Section (RTU-E-1)	3	Exhaust Fan	1.0	82.5%	Yes	W	6,760		No	82.5%	No		0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	Second Floor B-Wing (RTU-T-1)	1	Supply Fan	15.0	91.7%	Yes	W	6,760		No	91.7%	No		0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	Second Floor B-Wing (RTU-T-1)	3	Exhaust Fan	1.0	82.5%	Yes	W	6,760		No	82.5%	No		0.0	0	0	$0	$0	$0	0.0
Bancroft School	CUH Supply Fan	3	Supply Fan	0.1	65.0%	No	W	2,745		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Bancroft School Pool Mechanical Room	Pool Mechanical Room	1	Air Compressor	2.0	85.5%	No	W	2,190		No	85.5%	No		0.0	0	0	$0	$0	$0	0.0
Bancroft School Pool Mechanical Room	Pool Mechanical Room	1	Process Pump	10.0	92.4%	No	W	8,760	6	No	92.4%	Yes	1	1.0	15,480	0	$1,641	$20,281	$0	12.4
Bancroft School Pool Mechanical Room	Pool Mechanical Room	1	Process Pump	15.0	91.0%	No	W	8,760	6	No	91.0%	Yes	1	1.4	23,220	0	$2,462	$27,588	$0	11.2
Bancroft School Pool Mechanical Room	Pool Mechanical Room	1	Process Pump	5.0	88.5%	No	W	8,760	6	No	88.5%	Yes	1	0.5	7,740	0	$821	$17,090	$0	20.8
Bancroft School Pool Mechanical Room	Pool Mechanical Room	3	Process Pump	0.0	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0

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Bancroft School Kitchen	Kitchen 4	2	Kitchen Hood Exhaust Fan	2.0	86.5%	No	W	2,839	7	No	86.5%	Yes	2	0.0	6,362	51	$1,172	$6,522	$200	5.4
Bancroft School Kitchen	Kitchen Classroom 14	1	Kitchen Hood Exhaust Fan	2.0	86.5%	No	W	2,839	7	No	86.5%	Yes	1	0.0	2,911	14	$447	$3,261	$100	7.1
Bancroft School	Bancroft School	1	Air Compressor	0.3	65.0%	No	W	104		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Bancroft School	Elevator Room	1	Other	20.0	91.7%	No	W	182		No	91.7%	No		0.0	0	0	$0	$0	$0	0.0
Linden Administration Building	Left Section (RTU-HA-1)	1	Supply Fan	5.0	89.5%	Yes	W	8,320		No	89.5%	No		0.0	0	0	$0	$0	$0	0.0
Linden Administration Building	Right Section (RTU-HA-2)	1	Supply Fan	5.0	89.5%	Yes	W	8,320		No	89.5%	No		0.0	0	0	$0	$0	$0	0.0
Linden Administration Building	Hallway (CUH-HA-3)	1	Supply Fan	0.1	65.0%	No	W	2,745		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Linden Administration Building	Vestibule 0 (CUH-HA-1)	1	Supply Fan	0.1	65.0%	No	W	2,745		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Linden Administration Building	Building Ventilation (TF-HA-6)	1	Exhaust Fan	0.1	65.0%	No	W	8,320		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Linden Administration Building	Building Ventilation (TF-HA-5)	1	Exhaust Fan	0.1	65.0%	No	W	8,320		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Linden Administration Building	Building Ventilation (TF-HA-4)	1	Exhaust Fan	0.1	65.0%	No	W	8,320		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Linden Administration Building	Building Ventilation (TF-HA-3)	1	Exhaust Fan	0.1	65.0%	No	W	8,320		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Linden Administration Building	Building Ventilation (TF-HA-2)	1	Exhaust Fan	0.1	65.0%	No	W	8,320		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Linden Administration Building	Building Ventilation (TF-HA-1)	1	Exhaust Fan	0.2	65.0%	No	W	8,320		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Linden Administration Building	Hallway (CUH-HA-2)	1	Supply Fan	0.1	65.0%	No	W	2,745		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Linden Administration Building	Building Ventilation (EF-HA-1)	1	Exhaust Fan	0.2	65.0%	No	W	8,320		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Linden Administration Building	Building Ventilation (EF-HA-2)	1	Exhaust Fan	0.2	65.0%	No	W	8,320		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Linden Administration Building	JC/Mechanical Room 20 (DHW System)	1	DHW Circulation Pump	0.2	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Linden Administration Building	Wash Closet Storage 14A (DHW System)	1	DHW Circulation Pump	0.0	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Facilities Building	Facilities Building (RTU-F-1)	1	Supply Fan	5.0	89.5%	Yes	W	5,460		No	89.5%	No		0.0	0	0	$0	$0	$0	0.0

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Facilities Building	Hallway (CUH-F-3)	1	Supply Fan	0.1	65.0%	No	W	2,745		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Facilities Building	Vestibule 50A (CUH-F-2)	1	Supply Fan	0.1	65.0%	No	W	2,745		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Facilities Building	Building Ventilation (EF-F-2)	1	Exhaust Fan	0.5	70.0%	No	W	4,380		No	70.0%	No		0.0	0	0	$0	$0	$0	0.0
Facilities Building	IT Room (CP-1)	1	Condensate Pump	0.1	65.0%	No	W	2,745		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Facilities Building	Hallway (CUH-F-1)	1	Supply Fan	0.1	65.0%	No	W	2,745		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Facilities Building	Building Ventilation (EF-F-1)	1	Exhaust Fan	0.3	65.0%	No	W	4,380		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Facilities Building	Building Ventilation (EF-F-3)	1	Exhaust Fan	0.3	65.0%	No	W	4,380		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Facilities Building	Building Ventilation (EF-F-4)	1	Exhaust Fan	0.3	65.0%	No	W	4,380		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Facilities Building	Janitorial Closet 58A	1	DHW Circulation Pump	0.0	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Facilities Building	Facilities Building	1	Air Compressor	2.0	85.5%	No	W	1,460		No	85.5%	No		0.0	0	0	$0	$0	$0	0.0
Facilities Building	Storage 56 (RH-F-3)	1	Supply Fan	0.3	65.0%	No	W	2,745		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Greenhouse	Greenhouse	2	Supply Fan	0.1	65.0%	No	W	1,373		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Greenhouse	Greenhouse	1	Supply Fan	0.1	65.0%	No	W	5,242		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Greenhouse	Greenhouse	2	Exhaust Fan	0.5	70.0%	No	W	5,242		No	70.0%	No		0.0	0	0	$0	$0	$0	0.0
Residence Hall Linden 100	Domestic Hot Water System	1	DHW Circulation Pump	0.0	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Residence Hall Linden 100	Sewer Pump	1	Other	2.0	86.5%	No	W	2,745		No	86.5%	No		0.0	0	0	$0	$0	$0	0.0
Residence Hall Linden 100	ERV-HL-1	1	Supply Fan	0.1	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Residence Hall Linden 100	ERV-HL-2	1	Supply Fan	0.1	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Residence Hall Linden 100	ERV-HL-3	1	Supply Fan	0.1	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Residence Hall Linden 100	ERV-HL-1	1	Exhaust Fan	0.1	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0

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Residence Hall Linden 100	ERV-HL-2	1	Exhaust Fan	0.1	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Residence Hall Linden 100	ERV-HL-3	1	Exhaust Fan	0.1	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Residence Hall Linden 100	AHU-1 Supply Fan	1	Supply Fan	0.5	70.0%	No	W	8,760	5	No	78.2%	Yes	1	0.2	1,347	0	$143	$2,696	$50	18.5
Residence Hall Linden 100	AHU-2 Supply Fan	1	Supply Fan	1.0	85.5%	No	W	8,760	5	No	85.5%	Yes	1	0.3	2,033	0	$216	$3,010	$75	13.6
Residence Hall Linden 100	AHU-3 Supply Fan	1	Supply Fan	0.5	70.0%	No	W	8,760	5	No	78.2%	Yes	1	0.2	1,347	0	$143	$2,696	$50	18.5
Residence Hall Linden 200	Domestic Hot Water System	1	DHW Circulation Pump	0.0	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Residence Hall Linden 200	Sewer Pump	1	Other	2.0	86.5%	No	W	2,745		No	86.5%	No		0.0	0	0	$0	$0	$0	0.0
Residence Hall Linden 200	ERV-HL-1	1	Supply Fan	0.1	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Residence Hall Linden 200	ERV-HL-2	1	Supply Fan	0.1	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Residence Hall Linden 200	ERV-HL-3	1	Supply Fan	0.1	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Residence Hall Linden 200	ERV-HL-1	1	Exhaust Fan	0.1	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Residence Hall Linden 200	ERV-HL-2	1	Exhaust Fan	0.1	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Residence Hall Linden 200	ERV-HL-3	1	Exhaust Fan	0.1	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Residence Hall Linden 200	AHU-1 Supply Fan	1	Supply Fan	0.5	70.0%	No	W	8,760	5	No	78.2%	Yes	1	0.2	1,347	0	$143	$2,696	$50	18.5
Residence Hall Linden 200	AHU-2 Supply Fan	1	Supply Fan	1.0	85.5%	No	W	8,760	5	No	85.5%	Yes	1	0.3	2,033	0	$216	$3,010	$75	13.6
Residence Hall Linden 200	AHU-3 Supply Fan	1	Supply Fan	0.5	70.0%	No	W	8,760	5	No	78.2%	Yes	1	0.2	1,347	0	$143	$2,696	$50	18.5
Residence Hall Linden 300	Domestic Hot Water System	1	DHW Circulation Pump	0.0	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Residence Hall Linden 300	Sewer Pump	1	Other	2.0	86.5%	No	W	2,745		No	86.5%	No		0.0	0	0	$0	$0	$0	0.0
Residence Hall Linden 300	ERV-HL-1	1	Supply Fan	0.1	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Residence Hall Linden 300	ERV-HL-2	1	Supply Fan	0.1	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0

		Existing Conditions							Proposed Conditions					Energy Impact & Financial Analysis						
Location	Area(s)/System(s) Served	Motor Quantity	Motor Application	HP Per Motor	Full Load Efficiency	VFD Control?	Remaining Useful Life	Annual Operating Hours	ECM #	Install High Efficiency Motors?	Full Load Efficiency	Install VFDs?	Number of VFDs	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Residence Hall Linden 300	ERV-HL-3	1	Supply Fan	0.1	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Residence Hall Linden 300	ERV-HL-1	1	Exhaust Fan	0.1	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Residence Hall Linden 300	ERV-HL-2	1	Exhaust Fan	0.1	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Residence Hall Linden 300	ERV-HL-3	1	Exhaust Fan	0.1	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Residence Hall Linden 300	AHU-1 Supply Fan	1	Supply Fan	0.5	70.0%	No	W	8,760	5	No	78.2%	Yes	1	0.2	1,347	0	$143	$2,696	$50	18.5
Residence Hall Linden 300	AHU-2 Supply Fan	1	Supply Fan	1.0	85.5%	No	W	8,760	5	No	85.5%	Yes	1	0.3	2,033	0	$216	$3,010	$75	13.6
Residence Hall Linden 300	AHU-3 Supply Fan	1	Supply Fan	0.5	70.0%	No	W	8,760	5	No	78.2%	Yes	1	0.2	1,347	0	$143	$2,696	$50	18.5
Residence Hall Transitional 400	Domestic Hot Water System	1	DHW Circulation Pump	0.0	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 400	Sewer Pump	1	Other	2.0	86.5%	No	W	2,745		No	86.5%	No		0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 400	ERV-HL-1	1	Supply Fan	0.1	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 400	ERV-HL-2	1	Supply Fan	0.1	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 400	ERV-HL-3	1	Supply Fan	0.1	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 400	ERV-HL-1	1	Exhaust Fan	0.1	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 400	ERV-HL-2	1	Exhaust Fan	0.1	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 400	ERV-HL-3	1	Exhaust Fan	0.1	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 400	AHU-1 Supply Fan	1	Supply Fan	0.5	70.0%	No	W	8,760	5	No	78.2%	Yes	1	0.2	1,347	0	$143	$2,696	$50	18.5
Residence Hall Transitional 400	AHU-2 Supply Fan	1	Supply Fan	1.0	85.5%	No	W	8,760	5	No	85.5%	Yes	1	0.3	2,033	0	$216	$3,010	$75	13.6
Residence Hall Transitional 400	AHU-3 Supply Fan	1	Supply Fan	0.5	70.0%	No	W	8,760	5	No	78.2%	Yes	1	0.2	1,347	0	$143	$2,696	$50	18.5
Residence Hall Transitional 500	Domestic Hot Water System	1	DHW Circulation Pump	0.0	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 500	Sewer Pump	1	Other	2.0	86.5%	No	W	2,745		No	86.5%	No		0.0	0	0	$0	$0	$0	0.0

		Existing Conditions							Proposed Conditions					Energy Impact & Financial Analysis						
Location	Area(s)/System(s) Served	Motor Quantity	Motor Application	HP Per Motor	Full Load Efficiency	VFD Control?	Remaining Useful Life	Annual Operating Hours	ECM #	Install High Efficiency Motors?	Full Load Efficiency	Install VFDs?	Number of VFDs	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Residence Hall Transitional 500	ERV-HL-1	1	Supply Fan	0.1	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 500	ERV-HL-2	1	Supply Fan	0.1	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 500	ERV-HL-3	1	Supply Fan	0.1	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 500	ERV-HL-1	1	Exhaust Fan	0.1	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 500	ERV-HL-2	1	Exhaust Fan	0.1	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 500	ERV-HL-3	1	Exhaust Fan	0.1	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 500	AHU-1 Supply Fan	1	Supply Fan	0.5	70.0%	No	W	8,760	5	No	78.2%	Yes	1	0.2	1,347	0	$143	$2,696	$50	18.5
Residence Hall Transitional 500	AHU-2 Supply Fan	1	Supply Fan	1.0	85.5%	No	W	8,760	5	No	85.5%	Yes	1	0.3	2,033	0	$216	$3,010	$75	13.6
Residence Hall Transitional 500	AHU-3 Supply Fan	1	Supply Fan	0.5	70.0%	No	W	8,760	5	No	78.2%	Yes	1	0.2	1,347	0	$143	$2,696	$50	18.5
Residence Hall Transitional 600	Domestic Hot Water System	1	DHW Circulation Pump	0.0	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 600	Sewer Pump	1	Other	2.0	86.5%	No	W	2,745		No	86.5%	No		0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 600	ERV-HL-1	1	Supply Fan	0.1	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 600	ERV-HL-2	1	Supply Fan	0.1	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 600	ERV-HL-3	1	Supply Fan	0.1	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 600	ERV-HL-1	1	Exhaust Fan	0.1	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 600	ERV-HL-2	1	Exhaust Fan	0.1	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 600	ERV-HL-3	1	Exhaust Fan	0.1	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 600	AHU-1 Supply Fan	1	Supply Fan	0.5	70.0%	No	W	8,760	5	No	78.2%	Yes	1	0.2	1,347	0	$143	$2,696	$50	18.5
Residence Hall Transitional 600	AHU-2 Supply Fan	1	Supply Fan	1.0	85.5%	No	W	8,760	5	No	85.5%	Yes	1	0.3	2,033	0	$216	$3,010	$75	13.6
Residence Hall Transitional 600	AHU-3 Supply Fan	1	Supply Fan	0.5	70.0%	No	W	8,760	5	No	78.2%	Yes	1	0.2	1,347	0	$143	$2,696	$50	18.5

		Existing Conditions							Proposed Conditions					Energy Impact & Financial Analysis						
Location	Area(s)/System(s) Served	Motor Quantity	Motor Application	HP Per Motor	Full Load Efficiency	VFD Control?	Remaining Useful Life	Annual Operating Hours	ECM #	Install High Efficiency Motors?	Full Load Efficiency	Install VFDs?	Number of VFDs	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Residence Hall Transitional 700	Domestic Hot Water System	1	DHW Circulation Pump	0.0	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 700	Sewer Pump	1	Other	2.0	86.5%	No	W	2,745		No	86.5%	No		0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 700	ERV-SH-1	1	Supply Fan	0.1	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 700	ERV-SH-1	1	Exhaust Fan	0.1	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 700	ERV-SH-2	1	Supply Fan	0.1	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 700	ERV-SH-2	1	Exhaust Fan	0.1	65.0%	No	W	8,760		No	65.0%	No		0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 700	AHU-1 Supply Fan	1	Supply Fan	0.8	70.0%	No	W	8,760	5	No	81.1%	Yes	1	0.3	2,172	0	$230	$2,756	$50	11.8
Residence Hall Transitional 700	AHU-2 Supply Fan	1	Supply Fan	0.5	70.0%	No	W	8,760	5	No	78.2%	Yes	1	0.2	1,347	0	$143	$2,696	$50	18.5

Electric HVAC Inventory & Recommendations

		Existing Conditions					Proposed Conditions								Energy Impact & Financial Analysis						
Location	Area(s)/System(s) Served	System Quantity	System Type	Cooling Capacity per Unit (Tons)	Heating Capacity per Unit (MBh)	Remaining Useful Life	ECM #	Install High Efficiency System?	System Quantity	System Type	Cooling Capacity per Unit (Tons)	Heating Capacity per Unit (MBh)	Cooling Mode Efficiency (SEER/EER)	Heating Mode Efficiency (COP)	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Bancroft School	VAV Re-Heat	3	Electric Resistance Heat		1.71	W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School	VAV Re-Heat	14	Electric Resistance Heat		3.41	W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School	VAV Re-Heat	25	Electric Resistance Heat		5.12	W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School	VAV Re-Heat	6	Electric Resistance Heat		6.82	W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School	VAV Re-Heat	7	Electric Resistance Heat		8.53	W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School	VAV Re-Heat	6	Electric Resistance Heat		10.24	W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School	VAV Re-Heat	10	Electric Resistance Heat		11.94	W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School	VAV Re-Heat	27	Electric Resistance Heat		13.65	W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School	VAV Re-Heat	14	Electric Resistance Heat		15.35	W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School	VAV Re-Heat	1	Electric Resistance Heat		17.06	W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School	VAV Re-Heat	1	Electric Resistance Heat		18.77	W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School	VAV Re-Heat	2	Electric Resistance Heat		22.18	W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School	VAV Re-Heat	1	Electric Resistance Heat		30.71	W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School	VAV Re-Heat	1	Electric Resistance Heat		40.95	W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School	VAV Re-Heat	1	Electric Resistance Heat		29.00	W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School Margaret House	Margaret House	2	Electric Resistance Heat		5.12	W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School Second Floor Hallway	Second Floor Hallway	2	Electric Resistance Heat		5.12	W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School TS Lounge	TS Lounge 226	2	Electric Resistance Heat		5.12	W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School IDF Room	IDF Room 221 (AC-T-1)	1	Ductless Mini-Split AC	1.50		W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School TS Lounge	TS Lounge 211	2	Electric Resistance Heat		5.12	W		No							0.0	0	0	$0	$0	$0	0.0

		Existing Conditions					Proposed Conditions								Energy Impact & Financial Analysis						
Location	Area(s)/System(s) Served	System Quantity	System Type	Cooling Capacity per Unit (Tons)	Heating Capacity per Unit (kBtu/hr)	Remaining Useful Life	ECM #	Install High Efficiency System?	System Quantity	System Type	Cooling Capacity per Unit (Tons)	Heating Capacity per Unit (kBtu/hr)	Cooling Mode Efficiency (SEER/EER)	Heating Mode Efficiency (COP)	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Bancroft School Indoor Recreation Area	Indoor Recreation 109	10	Electric Resistance Heat		5.12	W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School IDF Room	IDF Room 120 (AC-V 1)	1	Ductless Mini-Split HP	1.50	20.00	W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School Multi-Purpose Room	Multi-Purpose Room 119	2	Electric Resistance Heat		4.09	W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School Multi-Purpose Room	Multi-Purpose Room 119	3	Electric Resistance Heat		5.12	W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School Entrance Lobby	Entrance Lobby 105	7	Electric Resistance Heat		5.12	W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School Entrance Lobby	Entrance Lobby 105	1	Electric Resistance Heat		4.09	W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School Vestibule	Vestibule (AC-V-2)	1	Ductless Mini-Split HP	1.50	20.00	W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School Corridor	Corridor 85	5	Electric Resistance Heat		5.12	W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School Corridor	Corridor 85	1	Electric Resistance Heat		2.56	W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School Vestibule	Vestibule 39 (AC-0-1)	1	Ductless Mini-Split HP	1.50	20.00	W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School Entrance Lobby	Main Entrance Lobby 40	2	Electric Resistance Heat		5.12	W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School Stairwell	Stairwell 1 (S001)	1	Electric Resistance Heat		6.82	W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School MDF Room	MDF Room 50B (AC-HS-2)	1	Ductless Mini-Split AC	3.50		W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School Dining Hall	Dining Hall 1	7	Electric Resistance Heat		5.12	W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School Dining Hall	Dining Hall 1	1	Electric Resistance Heat		2.56	W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School Kitchen	Kitchen 4	1	Electric Resistance Heat		6.82	W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School Custodian Instruction Area	Custodial Maintenance Instruction Area 56	1	Electric Resistance Heat		3.41	W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School Custodian Instruction Area	Custodial Maintenance Instruction Area 56	2	Electric Resistance Heat		5.12	W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School HS Lounge	HS Home Ec./ Lounge 77	5	Electric Resistance Heat		3.41	W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School HS Lounge	HS Lounge 57	3	Electric Resistance Heat		3.41	W		No							0.0	0	0	$0	$0	$0	0.0

		Existing Conditions					Proposed Conditions								Energy Impact & Financial Analysis						
Location	Area(s)/System(s) Served	System Quantity	System Type	Cooling Capacity per Unit (Tons)	Heating Capacity per Unit (kBtu/hr)	Remaining Useful Life	ECM #	Install High Efficiency System?	System Quantity	System Type	Cooling Capacity per Unit (Tons)	Heating Capacity per Unit (kBtu/hr)	Cooling Mode Efficiency (SEER/EER)	Heating Mode Efficiency (COP)	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Bancroft School IDF Room	IDF Room 67 (AC-HS-1)	1	Ductless Mini-Split AC	1.50		W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School El Home Ec/Lounge	El Home Ec/ Lounge 16	2	Electric Resistance Heat		5.12	W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School ES Lounge	ES Lounge 32	2	Electric Resistance Heat		5.12	W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School Corridor	Corridor 38	1	Electric Resistance Heat		5.12	W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School Corridor	Corridor 38	1	Electric Resistance Heat		2.05	W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School Stairwell	Stairwell 2 (S002)	1	Electric Resistance Heat		6.82	W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School ES Lounge	ES Lounge 23	1	Electric Resistance Heat		5.12	W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School IDF Room	IDF Room 31A (AC-E 1)	1	Ductless Mini-Split AC	1.50		W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	Activity Center (RTU V-1)	1	Packaged AC	50.00		W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	Gym Area (RTU-G-1)	1	Packaged AC	15.00		W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	Health Services & Offices (RTU-O-1)	1	Packaged AC	75.00		W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	Pool (DH-1)	1	Packaged AC	12.00		W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	B-Wing Right Section (RTU-E-2)	1	Packaged AC	40.00		W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	Second Floor B-Wing (RTU-T-2)	1	Packaged AC	40.00		W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	Kitchen (MAU-K-1)	1	Packaged AC	5.48		W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	Dining Hall (RTU-K-1)	1	Packaged AC	50.00		W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	C-Wing Left Section (RTU-HS-1)	1	Packaged AC	40.00		W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	C-Wing Right Section (RTU-HS-2)	1	Packaged AC	50.00		W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	B-Wing Left Section (RTU-E-1)	1	Packaged AC	40.00		W		No							0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	Second Floor B-Wing (RTU-T-1)	1	Packaged AC	40.00		W		No							0.0	0	0	$0	$0	$0	0.0

		Existing Conditions					Proposed Conditions								Energy Impact & Financial Analysis						
Location	Area(s)/System(s) Served	System Quantity	System Type	Cooling Capacity per Unit (Tons)	Heating Capacity per Unit (kBtu/hr)	Remaining Useful Life	ECM #	Install High Efficiency System?	System Quantity	System Type	Cooling Capacity per Unit (Tons)	Heating Capacity per Unit (kBtu/hr)	Cooling Mode Efficiency (SEER/EER)	Heating Mode Efficiency (COP)	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Bancroft School Roof	Pool (DH-1)	1	Electric Resistance Heat		136.49	W		No							0.0	0	0	$0	$0	$0	0.0
Linden Administration Building	Left Section (RTU-HA-1)	1	Packaged AC	20.00		W		No							0.0	0	0	$0	$0	$0	0.0
Linden Administration Building	Right Section (RTU-HA-2)	1	Packaged AC	12.00		W		No							0.0	0	0	$0	$0	$0	0.0
Linden Administration Building	Hallway (CUH-HA-3)	1	Electric Resistance Heat		6.83	W		No							0.0	0	0	$0	$0	$0	0.0
Linden Administration Building	Conference Room 17 (EB-HA-1)	2	Electric Resistance Heat		3.58	W		No							0.0	0	0	$0	$0	$0	0.0
Linden Administration Building	Conference Room 16 (EB-HA-1)	2	Electric Resistance Heat		3.58	W		No							0.0	0	0	$0	$0	$0	0.0
Linden Administration Building	Observation Room 6 (EB-HA-3)	3	Electric Resistance Heat		2.56	W		No							0.0	0	0	$0	$0	$0	0.0
Linden Administration Building	Observation Room 6 (EB-HA-2)	1	Electric Resistance Heat		2.05	W		No							0.0	0	0	$0	$0	$0	0.0
Linden Administration Building	Vestibule 0 (CUH-HA-1)	1	Electric Resistance Heat		6.83	W		No							0.0	0	0	$0	$0	$0	0.0
Linden Administration Building	Hallway (CUH-HA-2)	1	Electric Resistance Heat		6.83	W		No							0.0	0	0	$0	$0	$0	0.0
Facilities Building	Facilities Building (RTU-F-1)	1	Packaged AC	16.00		W		No							0.0	0	0	$0	$0	$0	0.0
Facilities Building	Hallway (CUH-F-3)	1	Electric Resistance Heat		6.83	W		No							0.0	0	0	$0	$0	$0	0.0
Facilities Building	Vestibule 50A (CUH F-2)	1	Electric Resistance Heat		6.83	W		No							0.0	0	0	$0	$0	$0	0.0
Facilities Building	IT Room 51B (AC-F-1)	1	Ductless Mini-Split HP	1.00	12.00	W		No							0.0	0	0	$0	$0	$0	0.0
Facilities Building	Hallway (CUH-F-1)	1	Electric Resistance Heat		6.83	W		No							0.0	0	0	$0	$0	$0	0.0
Residence Hall Linden 100	CU-HL-1	1	Split-System AC	3.00		W		No							0.0	0	0	$0	$0	$0	0.0
Residence Hall Linden 100	CU-HL-2	1	Split-System AC	5.00		W		No							0.0	0	0	$0	$0	$0	0.0
Residence Hall Linden 100	CU-HL-3	1	Split-System AC	3.00		W		No							0.0	0	0	$0	$0	$0	0.0
Residence Hall Linden 100	IT Room	1	Ductless Mini-Split HP	1.50	18.00	W		No							0.0	0	0	$0	$0	$0	0.0
Residence Hall Linden 200	CU-HL-1	1	Split-System AC	3.00		W		No							0.0	0	0	$0	$0	$0	0.0

		Existing Conditions					Proposed Conditions								Energy Impact & Financial Analysis						
Location	Area(s)/System(s) Served	System Quantity	System Type	Cooling Capacity per Unit (Tons)	Heating Capacity per Unit (kBtu/hr)	Remaining Useful Life	ECM #	Install High Efficiency System?	System Quantity	System Type	Cooling Capacity per Unit (Tons)	Heating Capacity per Unit (kBtu/hr)	Cooling Mode Efficiency (SEER/EER)	Heating Mode Efficiency (COP)	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Residence Hall Linden 200	CU-HL-2	1	Split-System AC	5.00		W		No							0.0	0	0	$0	$0	$0	0.0
Residence Hall Linden 200	CU-HL-3	1	Split-System AC	3.00		W		No							0.0	0	0	$0	$0	$0	0.0
Residence Hall Linden 200	IT Room	1	Ductless Mini-Split HP	1.50	18.00	W		No							0.0	0	0	$0	$0	$0	0.0
Residence Hall Linden 300	CU-HL-1	1	Split-System AC	3.00		W		No							0.0	0	0	$0	$0	$0	0.0
Residence Hall Linden 300	CU-HL-2	1	Split-System AC	5.00		W		No							0.0	0	0	$0	$0	$0	0.0
Residence Hall Linden 300	CU-HL-3	1	Split-System AC	3.00		W		No							0.0	0	0	$0	$0	$0	0.0
Residence Hall Linden 300	IT Room	1	Ductless Mini-Split HP	1.50	18.00	W		No							0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 400	CU-HT-1	1	Split-System AC	3.00		W		No							0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 400	CU-HT-2	1	Split-System AC	5.00		W		No							0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 400	CU-HT-3	1	Split-System AC	3.00		W		No							0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 400	IT Room	1	Ductless Mini-Split HP	1.50	18.00	W		No							0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 500	CU-HT-1	1	Split-System AC	3.00		W		No							0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 500	CU-HT-2	1	Split-System AC	5.00		W		No							0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 500	CU-HT-3	1	Split-System AC	3.00		W		No							0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 500	IT Room	1	Ductless Mini-Split HP	1.50	18.00	W		No							0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 600	CU-HT-1	1	Split-System AC	3.00		W		No							0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 600	CU-HT-2	1	Split-System AC	5.00		W		No							0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 600	CU-HT-3	1	Split-System AC	3.00		W		No							0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 600	IT Room	1	Ductless Mini-Split HP	1.50	18.00	W		No							0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 700	CU-SH-1	1	Split-System AC	5.00		W		No							0.0	0	0	$0	$0	$0	0.0

		Existing Conditions					Proposed Conditions								Energy Impact & Financial Analysis						
Location	Area(s)/System(s) Served	System Quantity	System Type	Cooling Capacity per Unit (Tons)	Heating Capacity per Unit (kBtu/hr)	Remaining Useful Life	ECM #	Install High Efficiency System?	System Quantity	System Type	Cooling Capacity per Unit (Tons)	Heating Capacity per Unit (kBtu/hr)	Cooling Mode Efficiency (SEER/EER)	Heating Mode Efficiency (COP)	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Residence Hall Transitional 700	CU-SH-2	1	Split-System AC	3.00		W		No							0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 700	IT Room	1	Ductless Mini-Split HP	1.50	18.00	W		No							0.0	0	0	$0	$0	$0	0.0

Fuel Heating Inventory & Recommendations

		Existing Conditions				Proposed Conditions							Energy Impact & Financial Analysis						
Location	Area(s)/System(s) Served	System Quantity	System Type	Output Capacity per Unit (MBh)	Remaining Useful Life	ECM #	Install High Efficiency System?	System Quantity	System Type	Output Capacity per Unit (MBh)	Heating Efficiency	Heating Efficiency Units	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Bancroft School Mechanical Room	Mechanical Room 12 (UH-K-1 & 2)	2	Warm Air Unit Heater	122	W	9	Yes	1	Infrared Unit Heater	97	93.00%	Et	0.0	0	12	$117	$2,867	$500	20.3
Bancroft School Roof	Activity Center (RTU V-1)	1	Furnace	640	W		No						0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	Gym Area (RTU-G-1)	1	Furnace	160	W		No						0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	Health Services & Offices (RTU-O-1)	1	Furnace	1,000	W		No						0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	B-Wing Right Section (RTU-E-2)	1	Furnace	640	W		No						0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	Second Floor B-Wing (RTU-T-2)	1	Furnace	640	W		No						0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	Kitchen (MAU-K-1)	1	Furnace	160	W		No						0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	Dining Hall (RTU-K-1)	1	Furnace	640	W		No						0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	C-Wing Left Section (RTU-HS-1)	1	Furnace	640	W		No						0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	C-Wing Right Section (RTU-HS-2)	1	Furnace	640	W		No						0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	B-Wing Left Section (RTU-E-1)	1	Furnace	640	W		No						0.0	0	0	$0	$0	$0	0.0
Bancroft School Roof	Second Floor B-Wing (RTU-T-1)	1	Furnace	640	W		No						0.0	0	0	$0	$0	$0	0.0
Bancroft School Pool Mechanical Room	Pool Heating	1	Non-Condensing Hot Water Boiler	240	W	8	Yes	1	Condensing Hot Water Boiler	240	93.00%	AFUE	0.0	0	15	$149	$9,394	$1,000	56.5
Linden Administration Building	Left Section (RTU-HA-1)	1	Furnace	384	W		No						0.0	0	0	$0	$0	$0	0.0
Linden Administration Building	Right Section (RTU-HA-2)	1	Furnace	204	W		No						0.0	0	0	$0	$0	$0	0.0
Facilities Building	Facilities Building (RTU-F-1)	1	Furnace	203	W		No						0.0	0	0	$0	$0	$0	0.0
Facilities Building	Garage 60 (RH-F-1)	1	Infrared Unit Heater	48	W		No						0.0	0	0	$0	$0	$0	0.0
Facilities Building	Garage 60 (RH-F-2)	1	Infrared Unit Heater	48	W		No						0.0	0	0	$0	$0	$0	0.0
Facilities Building	Mechanical/Electrical Room 59 (RH-F-4)	1	Infrared Unit Heater	48	W		No						0.0	0	0	$0	$0	$0	0.0
Facilities Building	Storage 56 (RH-F-3)	1	Warm Air Unit Heater	20	W	9	Yes	1	Infrared Unit Heater	16	93.00%	Et	0.0	0	12	$117	$471	$500	-0.3

		Existing Conditions				Proposed Conditions							Energy Impact & Financial Analysis						
Location	Area(s)/System(s) Served	System Quantity	System Type	Output Capacity per Unit (MBh)	Remaining Useful Life	ECM #	Install High Efficiency System?	System Quantity	System Type	Output Capacity per Unit (MBh)	Heating Efficiency	Heating Efficiency Units	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Greenhouse	Greenhouse	1	Warm Air Unit Heater	60	W		No						0.0	0	0	$0	$0	$0	0.0
Residence Hall Linden 100	CU-HL-1	1	Furnace	78	W		No						0.0	0	0	$0	$0	$0	0.0
Residence Hall Linden 100	CU-HL-2	1	Furnace	97	W		No						0.0	0	0	$0	$0	$0	0.0
Residence Hall Linden 100	CU-HL-3	1	Furnace	78	W		No						0.0	0	0	$0	$0	$0	0.0
Residence Hall Linden 200	CU-HL-1	1	Furnace	78	W		No						0.0	0	0	$0	$0	$0	0.0
Residence Hall Linden 200	CU-HL-2	1	Furnace	97	W		No						0.0	0	0	$0	$0	$0	0.0
Residence Hall Linden 200	CU-HL-3	1	Furnace	78	W		No						0.0	0	0	$0	$0	$0	0.0
Residence Hall Linden 300	CU-HL-1	1	Furnace	78	W		No						0.0	0	0	$0	$0	$0	0.0
Residence Hall Linden 300	CU-HL-2	1	Furnace	97	W		No						0.0	0	0	$0	$0	$0	0.0
Residence Hall Linden 300	CU-HL-3	1	Furnace	78	W		No						0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 400	CU-HT-1	1	Furnace	78	W		No						0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 400	CU-HT-2	1	Furnace	97	W		No						0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 400	CU-HT-3	1	Furnace	78	W		No						0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 500	CU-HT-1	1	Furnace	78	W		No						0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 500	CU-HT-2	1	Furnace	97	W		No						0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 500	CU-HT-3	1	Furnace	78	W		No						0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 600	CU-HT-1	1	Furnace	78	W		No						0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 600	CU-HT-2	1	Furnace	97	W		No						0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 600	CU-HT-3	1	Furnace	78	W		No						0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 700	CU-SH-1	1	Furnace	78	W		No						0.0	0	0	$0	$0	$0	0.0

		Existing Conditions				Proposed Conditions							Energy Impact & Financial Analysis						
Location	Area(s)/System(s) Served	System Quantity	System Type	Output Capacity per Unit (MBh)	Remaining Useful Life	ECM #	Install High Efficiency System?	System Quantity	System Type	Output Capacity per Unit (MBh)	Heating Efficiency	Heating Efficiency Units	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Residence Hall Transitional 700	CU-SH-2	1	Furnace	58	W		No						0.0	0	0	$0	$0	$0	0.0

Programmable Thermostat Recommendations

		Recommendation Inputs					Energy Impact & Financial Analysis						
Location	Area(s)/System(s) Affected	ECM #	Thermostat Quantity	Cooling Capacity of Controlled System (Tons)	Electric Heating Capacity of Controlled System (kBtu/hr)	Output Heating Capacity of Controlled System (MBh)	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Greenhouse	Greenhouse	10	1.00	0.00		60.00	0.0	0	12	$113	$330	$0	2.9

Demand Control Ventilation Recommendations

		Recommendation Inputs					Energy Impact & Financial Analysis						
Location	Area(s)/System(s) Affected	ECM #	Number of Zones	Cooling Capacity of Controlled System (Tons)	Electric Heating Capacity of Controlled System (kBtu/hr)	Output Heating Capacity of Controlled System (MBh)	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Bancroft School Roof	Gym Area (RTU-G-1)	11	2.00	15.00		160.00	0.0	729	2	$95	$2,719	$0	28.7
Bancroft School Roof	Dining Hall (RTU-K-1)	11	2.00	50.00		640.00	0.0	2,572	7	$343	$2,719	$0	7.9
Bancroft School Roof	Activity Center (RTU V-1)	11	3.00	50.00		640.00	0.0	1,286	7	$206	$4,078	$0	19.8

Pipe Insulation Recommendations

		Recommendation Inputs			Energy Impact & Financial Analysis						
Location	Area(s)/System(s) Affected	ECM #	Length of Uninsulated Pipe (ft)	Pipe Diameter (in)	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Facilities Building JC	JC DHW	12	6	1.00	0.0	636	0	$67	$35	$12	0.3

DHW Inventory & Recommendations

		Existing Conditions			Proposed Conditions							Energy Impact & Financial Analysis						
Location	Area(s)/System(s) Served	System Quantity	System Type	Remaining Useful Life	ECM #	Replace?	System Quantity	System Type	Fuel Type	System Efficiency	Efficiency Units	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Bancroft School JC	Janitorial Closet 215	1	Storage Tank Water Heater (> 50 Gal)	W		No						0.0	0	0	$0	$0	$0	0.0
Bancroft School Dishwash & Dry Storage	Dishwash & Dry Storage 114A	1	Storage Tank Water Heater (> 50 Gal)	W		No						0.0	0	0	$0	$0	$0	0.0
Bancroft School JC	Janitorial Closet 85A	1	Storage Tank Water Heater (> 50 Gal)	W		No						0.0	0	0	$0	$0	$0	0.0
Bancroft School Rest Room	Men's Rest Room 42	1	Storage Tank Water Heater (≤ 50 Gal)	W		No						0.0	0	0	$0	$0	$0	0.0
Bancroft School Mechanical Room	Mechanical Room 12	2	Storage Tank Water Heater (> 50 Gal)	W		No						0.0	0	0	$0	$0	$0	0.0
Bancroft School JC	Janitorial Closet 82	1	Storage Tank Water Heater (> 50 Gal)	W		No						0.0	0	0	$0	$0	$0	0.0
Bancroft School Kitchen	Dishwasher	1	Booster Water Heater	W		No						0.0	0	0	$0	$0	$0	0.0
Linden Administration Building	JC/Mechanical Room 20	1	Storage Tank Water Heater (> 50 Gal)	W		No						0.0	0	0	$0	$0	$0	0.0
Linden Administration Building	Wash Closet Storage 14A	1	Storage Tank Water Heater (≤ 50 Gal)	W		No						0.0	0	0	$0	$0	$0	0.0
Facilities Building	Janitorial Closet 58A	1	Storage Tank Water Heater (≤ 50 Gal)	W		No						0.0	0	0	$0	$0	$0	0.0
Residence Hall Linden 100	Domestic Hot Water System	1	Storage Tank Water Heater (> 50 Gal)	W		No						0.0	0	0	$0	$0	$0	0.0
Residence Hall Linden 200	Domestic Hot Water System	1	Storage Tank Water Heater (> 50 Gal)	W		No						0.0	0	0	$0	$0	$0	0.0
Residence Hall Linden 300	Domestic Hot Water System	1	Storage Tank Water Heater (> 50 Gal)	W		No						0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 400	Domestic Hot Water System	1	Storage Tank Water Heater (> 50 Gal)	W		No						0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 500	Domestic Hot Water System	1	Storage Tank Water Heater (> 50 Gal)	W		No						0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 600	Domestic Hot Water System	1	Storage Tank Water Heater (> 50 Gal)	W		No						0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 700	Domestic Hot Water System	1	Storage Tank Water Heater (> 50 Gal)	W		No						0.0	0	0	$0	$0	$0	0.0

Low-Flow Device Recommendations

	Recommedation Inputs					Energy Impact & Financial Analysis						
Location	ECM #	Device Quantity	Device Type	Existing Flow Rate (gpm)	Proposed Flow Rate (gpm)	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Bancroft School	13	43	Faucet Aerator (Lavatory)	0.50	0.50	0.0	0	0	$0	$308	$172	0.0
Bancroft School	13	43	Faucet Aerator (Lavatory)	2.00	0.50	0.0	0	18	$175	$308	$172	0.8
Bancroft School	13	17	Faucet Aerator (Lavatory)	0.50	0.50	0.0	0	0	$0	$122	$68	0.0
Bancroft School	13	5	Showerhead	2.50	1.50	0.0	1,148	0	$122	$447	$75	3.1
Bancroft School	13	13	Faucet Aerator (Lavatory)	2.00	0.50	0.0	3,189	0	$338	$93	$52	0.1
Facilities Building	13	2	Faucet Aerator (Lavatory)	0.50	0.50	0.0	0	0	$0	$14	$8	0.0
Linden Admin	13	5	Faucet Aerator (Lavatory)	0.50	0.50	0.0	0	0	$0	$36	$20	0.0
Linden Admin	13	1	Showerhead	2.50	1.50	0.0	459	0	$49	$89	$15	1.5

Reach-In Cooler/Freezer Inventory & Recommendations

	Existing Conditions		Proposed Conditions						Energy Impact & Financial Analysis						
Location	Cooler/ Freezer Quantity	Case Type/Temperature	ECM #	Install EC Evaporator Fan Motors?	Install Electric Defrost Control?	Install Energy Efficient Doors?	Install Door Heater Control?	Install Aluminum Night Covers?	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Bancroft School Wawa Store	1	Cooler (35F to 55F)		No	No	No	No	No	0.0	0	0	$0	$0	$0	0.0

Walk-In Cooler/Freezer Inventory & Recommendations

	Existing Conditions		Proposed Conditions				Energy Impact & Financial Analysis						
Location	Cooler/ Freezer Quantity	Case Type/Temperature	ECM #	Install EC Evaporator Fan Motors?	Install Electric Defrost Control?	Install Evaporator Fan Control?	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Bancroft School Kitchen	1	Low Temp Freezer (-35F to -5F)		No	No	No	0.0	0	0	$0	$0	$0	0.0
Bancroft School Kitchen	1	Medium Temp Freezer (0F to 30F)		No	No	No	0.0	0	0	$0	$0	$0	0.0
Bancroft School Kitchen	1	Medium Temp Freezer (0F to 30F)		No	No	No	0.0	0	0	$0	$0	$0	0.0

Commercial Refrigerator/Freezer Inventory & Recommendations

	Existing Conditions			Proposed Conditions		Energy Impact & Financial Analysis						
Location	Quantity	Refrigerator/ Freezer Type	ENERGY STAR Qualified?	ECM #	Install ENERGY STAR Equipment?	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Bancroft School Wawa Store	1	Stand-Up Freezer, Glass Door (≤15 cu. ft.)	Yes		No	0.0	0	0	$0	$0	$0	0.0
Bancroft School Wawa Store	1	Stand-Up Refrigerator, Glass Door (31 - 50 cu. ft.)	Yes		No	0.0	0	0	$0	$0	$0	0.0
Bancroft School Wawa Store	1	Stand-Up Refrigerator, Solid Door (>50 cu. ft.)	Yes		No	0.0	0	0	$0	$0	$0	0.0
Bancroft School Kitchen	1	Stand-Up Refrigerator, Solid Door (16 - 30 cu. ft.)	Yes		No	0.0	0	0	$0	$0	$0	0.0
Bancroft School Kitchen	1	Refrigerator Chest	Yes		No	0.0	0	0	$0	$0	$0	0.0
Bancroft School Kitchen Classroom	1	Stand-Up Refrigerator, Solid Door (16 - 30 cu. ft.)	No		No	0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 100	1	Stand-Up Freezer, Solid Door (16 - 30 cu. ft.)	No		No	0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 200	1	Stand-Up Freezer, Solid Door (16 - 30 cu. ft.)	No		No	0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 300	1	Stand-Up Freezer, Solid Door (16 - 30 cu. ft.)	No		No	0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 400	1	Stand-Up Freezer, Solid Door (16 - 30 cu. ft.)	No		No	0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 500	1	Stand-Up Freezer, Solid Door (16 - 30 cu. ft.)	No		No	0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 600	1	Stand-Up Freezer, Solid Door (16 - 30 cu. ft.)	No		No	0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 700	2	Stand-Up Freezer, Solid Door (≤15 cu. ft.)	No		No	0.0	0	0	$0	$0	$0	0.0

Commercial Ice Maker Inventory & Recommendations

	Existing Conditions			Proposed Conditions		Energy Impact & Financial Analysis						
Location	Quantity	Ice Maker Type	ENERGY STAR Qualified?	ECM #	Install ENERGY STAR Equipment?	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Bancroft School Kitchen	1	Ice Making Head (<450 lbs/day), Continuous	No		No	0.0	0	0	$0	$0	$0	0.0

Cooking Equipment Inventory & Recommendations

	Existing Conditions			Proposed Conditions		Energy Impact & Financial Analysis						
Location	Quantity	Equipment Type	High Efficiency Equipement?	ECM #	Install High Efficiency Equipment?	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Simple Payback w/ Incentives in Years
Bancroft School Kitchen	1	Gas Convection Oven (Full Size)	Yes		No	0.0	0	0	$0	$0	$0	0.0
Bancroft School Kitchen	1	Gas Steamer	Yes		No	0.0	0	0	$0	$0	$0	0.0
Bancroft School Kitchen	1	Gas Convection Oven (Full Size)	Yes		No	0.0	0	0	$0	$0	$0	0.0
Bancroft School Kitchen	2	Gas Convection Oven (Full Size)	Yes		No	0.0	0	0	$0	$0	$0	0.0
Bancroft School Kitchen	1	Gas Convection Oven (Full Size)	Yes		No	0.0	0	0	$0	$0	$0	0.0
Bancroft School Kitchen	1	Gas Convection Oven (Full Size)	Yes		No	0.0	0	0	$0	$0	$0	0.0
Bancroft School Kitchen	1	Gas Large Vat Fryer	Yes		No	0.0	0	0	$0	$0	$0	0.0
Bancroft School Kitchen	1	Insulated Food Holding Cabinet (Full Size)	Yes		No	0.0	0	0	$0	$0	$0	0.0
Bancroft School Kitchen	2	Gas Convection Oven (Full Size)	Yes		No	0.0	0	0	$0	$0	$0	0.0
Bancroft School Kitchen Lounges	3	Gas Convection Oven (Half Size)	Yes		No	0.0	0	0	$0	$0	$0	0.0
Bancroft School Kitchen	1	Insulated Food Holding Cabinet (Full Size)	No		No	0.0	0	0	$0	$0	$0	0.0
Bancroft School Kitchen	1	Gas Combination Oven/Steam Cooker (<15 Pans)	Yes		No	0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 100	1	Gas Griddle (3 Feet Width)	Yes		No	0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 100	2	Electric Convection Oven (Half Size)	Yes		No	0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 200	1	Gas Griddle (3 Feet Width)	Yes		No	0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 200	2	Electric Convection Oven (Half Size)	Yes		No	0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 300	1	Gas Griddle (3 Feet Width)	Yes		No	0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 300	2	Electric Convection Oven (Half Size)	Yes		No	0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 400	1	Gas Griddle (3 Feet Width)	Yes		No	0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 400	2	Electric Convection Oven (Half Size)	Yes		No	0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 500	1	Gas Griddle (3 Feet Width)	Yes		No	0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 500	2	Electric Convection Oven (Half Size)	Yes		No	0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 600	1	Gas Griddle (3 Feet Width)	Yes		No	0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 600	2	Electric Convection Oven (Half Size)	Yes		No	0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 700	1	Gas Griddle (3 Feet Width)	Yes		No	0.0	0	0	$0	$0	$0	0.0
Residence Hall Transitional 700	1	Electric Convection Oven (Half Size)	Yes		No	0.0	0	0	$0	$0	$0	0.0

Dishwasher Inventory & Recommendations

	Existing Conditions					Proposed Conditions		Energy Impact & Financial Analysis						
Location	Quantity	Dishwasher Type	Water Heater Fuel Type	Booster Heater Fuel Type	ENERGY STAR Qualified?	ECM #	Install ENERGY STAR Equipment?	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total Incentives	Payback w/ Incentives in Years
Bancroft School Kitchen	1	Multi-Tank Conveyor (High Temp)	Natural Gas	Electric	Yes		No	0.0	0	0	$0	$0	$0	0.0

Plug Load Inventory

	Existing Conditions			
Location	Quantity	Equipment Description	Energy Rate (W)	ENERGY STAR Qualified?
Bancroft School Wawa Store	1	Microwave Oven	1,000	
Bancroft School Wawa Store	1	Coffee Machine	5,200	
Bancroft School Wawa Store	1	Espresso Machine	2,300	
Bancroft School Wawa Store	1	Microwave Oven Convection	6,200	
Bancroft School Wawa Store	1	Hot Dog Grill	300	
Bancroft School Wawa Store	1	Bun Warmer	400	
Bancroft School Kitchen	1	Food Slicer	648	
Bancroft School Kitchen	1	Hot Well	3,700	
Bancroft School Kitchen	1	Hot Well	5,000	
Bancroft School Kitchen	1	Cold Well	800	
Bancroft School Kitchen	1	Cold Well	800	
Bancroft School Kitchen	1	Hot Well	2,500	
Bancroft School	10	Microwave	800	
Bancroft School	16	Mini Fridge	260	
Bancroft School	4	Undercounter Dishwasher	800	
Bancroft School	48	SmartBoard	175	
Bancroft School	76	Computers	125	
Bancroft School	44	Laptop	50	
Bancroft School	3	Squeeze Machine	370	
Bancroft School	7	Medium Printer	150	
Bancroft School	20	Small Printer	100	
Bancroft School	77	Laptop	50	
Bancroft School	16	TV	100	
Bancroft School	6	Coffee Machine	700	
Bancroft School	1	Paper Shredder	150	
Bancroft School Music Room	1	Sound System	350	
Bancroft School	1	Large Speakers	300	
Bancroft School	1	Laptop Cart	350	
Bancroft School	1	Residential Refrigerator	1,000	
Bancroft School	1	Toaster	1,200	
Bancroft School Health Services	2	Misc. Medical Equipment	1,500	
Bancroft School Fitness Center	3	Trendmills	650	
Bancroft School Fitness Center	3	Bikes	100	
Bancroft School Gym	2	Basketball Back Board	560	
Bancroft School Gym	1	Score Board	300	

	Existing Conditions			
Location	Quantity	Equipment Description	Energy Rate (W)	ENERGY STAR Qualified?
Bancroft School	2	Projector	175	
Bancroft School Wawa Store	2	POS Registers	125	
Bancroft School Laundry Room	3	Washing Machines	540	
Facilities Building	1	Coffee Machine	800	
Facilities Building	2	Microwave	700	
Facilities Building	1	Residential Refrigerator	1,000	
Facilities Building	1	Toaster	1,200	
Facilities Building	3	Computers	125	
Facilities Building	1	Mini Fridge	260	
Facilities Building	2	Laptop	50	
Facilities Building	1	Bench Grinder	560	
Facilities Building	1	Drill Press	370	
Facilities Building	1	Belt Saw	745	
Facilities Building	1	Table Saw	1,300	
Facilities Building	2	Chop Saw	2,500	
Facilities Building	3	Various Shop Equipment	700	
Facilities Building	3	Motorized Doors	400	
Linden Admin	1	Small Printer	100	
Linden Admin	43	Laptop	50	
Linden Admin	1	Paper Shredder	150	
Linden Admin	7	TV	100	
Linden Admin	2	Microwave	700	
Linden Admin	1	Residential Refrigerator	1,000	
Linden Admin	1	Coffee Machine	800	
Linden Admin	1	Medium Printer	150	
Residence Hall Transitional 100	2	Residential Refrigerator	800	
Residence Hall Transitional 100	1	Undercounter Dishwasher	800	
Residence Hall Transitional 100	2	Microwave	800	
Residence Hall Transitional 100	2	Toaster Oven	1,400	
Residence Hall Transitional 100	1	Toaster	1,200	
Residence Hall Transitional 100	1	Coffee Machine	700	
Residence Hall Transitional 100	3	Blenders	650	
Residence Hall Transitional 100	1	Crock Pot	200	
Residence Hall Transitional 100	4	Washing Machine	400	
Residence Hall Transitional 100	4	TV	100	

	Existing Conditions			
Location	Quantity	Equipment Description	Energy Rate (W)	ENERGY STAR Qualified?
Residence Hall Transitional 600	1	Coffee Machine	700	
Residence Hall Transitional 600	3	Blenders	650	
Residence Hall Transitional 600	1	Crock Pot	200	
Residence Hall Transitional 600	4	Washing Machine	400	
Residence Hall Transitional 600	4	TV	100	
Residence Hall Transitional 600	2	Computers	125	
Residence Hall Transitional 600	10	iPads	15	
Residence Hall Transitional 600	1	Medium Printer	150	
Residence Hall Transitional 600	1	Mini Fridge	260	
Residence Hall Transitional 600	5	Misc. Equipment	150	
Residence Hall Transitional 700	10	TV	100	
Residence Hall Transitional 700	1	Undercounter Diswasher	800	
Residence Hall Transitional 700	1	Coffee Machine	700	
Residence Hall Transitional 700	2	Blenders	650	
Residence Hall Transitional 700	1	Microwave	800	
Residence Hall Transitional 700	1	Residential Refrigerator	1,000	
Residence Hall Transitional 700	1	Medium Printer	150	
Residence Hall Transitional 700	1	Computer	125	
Residence Hall Transitional 700	2	Laptop	50	
Residence Hall Transitional 700	4	Washing Machine	400	

Miscellaneous Fuel-Fired Equipment Inventory

	Existing Conditions								
Location	Quantity	Equipment Description	Fuel Type	Input Capacity per Unit (MBh)	Equip Efficiency	Annual Run Hours	ENERGY STAR Qualified?	Manufacturer	Model
Bancroft School Laundry Room	3	Gas-Fired Dryer	Natural Gas	31.5	90.0%	780	No	Maytag	MDGQ8PRCWW1
Residence Hall Transitional 100	4	Gas-Fired Dryer	Natural Gas	24.0	90.0%	1,050	Yes	Maytag	MLG20PRCWW2
Residence Hall Transitional 200	4	Gas-Fired Dryer	Natural Gas	24.0	90.0%	1,000	Yes	Maytag	MLG20PRCWW2
Residence Hall Transitional 300	4	Gas-Fired Dryer	Natural Gas	24.0	90.0%	1,700	Yes	Maytag	MLG20PRCWW2
Residence Hall Transitional 400	4	Gas-Fired Dryer	Natural Gas	24.0	90.0%	600	Yes	Maytag	MLG20PRCWW2
Residence Hall Transitional 500	4	Gas-Fired Dryer	Natural Gas	24.0	90.0%	700	Yes	Maytag	MLG20PRCWW2
Residence Hall Transitional 600	4	Gas-Fired Dryer	Natural Gas	24.0	90.0%	560	Yes	Maytag	MLG20PRCWW2
Residence Hall Transitional 700	4	Gas-Fired Dryer	Natural Gas	24.0	90.0%	140	Yes	Maytag	MLG20PRCWW2

Custom (High Level) Measure Analysis

Electric Sub Metering

Existing Conditions		Proposed Conditions				Energy Impact & Financial Analysis						
Description	Existing Main Meter Annual kWh	Description	% Electric Savings	Number of Meters	Estimated Unit Cost	Total Peak kW Savings	Total Annual kWh Savings	Total Annual MMBtu Savings	Total Annual Energy Cost Savings	Total Installation Cost	Total NJCEP Incentives	Payback w/ Incentives in Years
Campus Wide Metering	3,717,558	Electric Smart Sub Meters	3.0%	10	$10,000.00	0.00	111,527	0	$11,825	$100,000	$0	8.46

APPENDIX B: ENERGY STAR® STATEMENT OF ENERGY PERFORMANCE

EUI is presented in terms of *site energy* and *source energy*. Site energy is the amount of fuel and electricity consumed by a building as reflected in utility bills. Source energy includes fuel consumed to generate electricity consumed at the site, factoring in electric production and distribution losses for the region.

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ENERGY STAR® Statement of Energy Performance

N/A

ENERGY STAR® Score[1]

Bancroft School - Welsh Campus

Primary Property Type: Other - Education
Gross Floor Area (ft²): 166,048
Built: 2017

For Year Ending: December 31, 2018
Date Generated: May 14, 2020

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
Bancroft School - Welsh Campus 311 Walton Avenue Mount Laurel, New Jersey 08054	Bancroft 1255 Caldwell Road Cherry Hill, NJ 08034 (856) 216-8243	Merrie Winston 1255 Caldwell Road Cherry Hill, NJ 08034 (856) 216-8243 merrie.winston@bancroft.org

Property ID: 10789015

Energy Consumption and Energy Use Intensity (EUI)

Site EUI
108.4 kBtu/ft²

Source EUI
248.4 kBtu/ft²

Annual Energy by Fuel		
Electric - Grid (kBtu)	12,773,992 (71%)	
Natural Gas (kBtu)	5,222,735 (29%)	

National Median Comparison	
National Median Site EUI (kBtu/ft²)	48.1
National Median Source EUI (kBtu/ft²)	110.4
% Diff from National Median Source EUI	125%
Annual Emissions	
Greenhouse Gas Emissions (Metric Tons CO2e/year)	1,572

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)

APPENDIX C: GLOSSARY

TERM	DEFINITION
Blended Rate	Used to calculate fiscal savings associated with measures. The blended rate is calculated by dividing the amount of your bill by the total energy use. For example, if your bill is $22,217.22, and you used 266,400 kilowatt-hours, your blended rate is 8.3 cents per kilowatt-hour.
Btu	*British thermal unit*: a unit of energy equal to the amount of heat required to increase the temperature of one pound of water by one-degree Fahrenheit.
CHP	*Combined heat and power*. Also referred to as cogeneration.
COP	*Coefficient of performance*: a measure of efficiency in terms of useful energy delivered divided by total energy input.
Demand Response	Demand response reduces or shifts electricity usage at or among participating buildings/sites during peak energy use periods in response to time-based rates or other forms of financial incentives.
DCV	*Demand control ventilation*: a control strategy to limit the amount of outside air introduced to the conditioned space based on actual occupancy need.
US DOE	*United States Department of Energy*
EC Motor	*Electronically commutated motor*
ECM	*Energy conservation measure*
EER	*Energy efficiency ratio*: a measure of efficiency in terms of cooling energy provided divided by electric input.
EUI	*Energy Use Intensity:* measures energy consumption per square foot and is a standard metric for comparing buildings' energy performance.
Energy Efficiency	Reducing the amount of energy necessary to provide comfort and service to a building/area. Achieved through the installation of new equipment and/or optimizing the operation of energy use systems. Unlike conservation, which involves some reduction of service, energy efficiency provides energy reductions without sacrifice of service.
ENERGY STAR®	ENERGY STAR® is the government-backed symbol for energy efficiency. The ENERGY STAR® program is managed by the EPA.
EPA	*United States Environmental Protection Agency*
Generation	The process of generating electric power from sources of primary energy (e.g., natural gas, the sun, oil).
GHG	*Greenhouse gas* gases that are transparent to solar (short-wave) radiation but opaque to long-wave (infrared) radiation, thus preventing long-wave radiant energy from leaving Earth's atmosphere. The net effect is a trapping of absorbed radiation and a tendency to warm the planet's surface.
gpf	*Gallons per flush*

gpm	*Gallon per minute*
HID	*High intensity discharge:* high-output lighting lamps such as high-pressure sodium, metal halide, and mercury vapor.
hp	*Horsepower*
HPS	*High-pressure sodium*: a type of HID lamp
HSPF	*Heating seasonal performance factor:* a measure of efficiency typically applied to heat pumps. Heating energy provided divided by seasonal energy input.
HVAC	*Heating, ventilating, and air conditioning*
IHP 2014	US DOE Integral Horsepower rule. The current ruling regarding required electric motor efficiency.
IPLV	*Integrated part load value:* a measure of the part load efficiency usually applied to chillers.
kBtu	One thousand British thermal units
kW	*Kilowatt*: equal to 1,000 Watts.
kWh	*Kilowatt-hour*: 1,000 Watts of power expended over one hour.
LED	*Light emitting diode*: a high-efficiency source of light with a long lamp life.
LGEA	*Local Government Energy Audit*
Load	The total power a building or system is using at any given time.
Measure	A single activity, or installation of a single type of equipment, that is implemented in a building system to reduce total energy consumption.
MH	*Metal halide*: a type of HID lamp
MBh	*Thousand Btu per hour*
MBtu	*One thousand British thermal units*
MMBtu	*One million British thermal units*
MV	*Mercury Vapor:* a type of HID lamp
NJBPU	*New Jersey Board of Public Utilities*
NJCEP	*New Jersey's Clean Energy Program:* NJCEP is a statewide program that offers financial incentives, programs and services for New Jersey residents, business owners and local governments to help them save energy, money and the environment.
psig	Pounds per square inch gauge
Plug Load	Refers to the amount of power used in a space by products that are powered by means of an ordinary AC plug.
PV	*Photovoltaic:* refers to an electronic device capable of converting incident light directly into electricity (direct current).

SEER	*Seasonal energy efficiency ratio:* a measure of efficiency in terms of annual cooling energy provided divided by total electric input.
SEP	*Statement of energy performance:* a summary document from the ENERGY STAR® Portfolio Manager®.
Simple Payback	The amount of time needed to recoup the funds expended in an investment or to reach the break-even point between investment and savings.
SREC	*Solar renewable energy credit*: a credit you can earn from the state for energy produced from a photovoltaic array.
TREC	*Transition Incentive Renewable Energy Certificate:* a factorized renewable energy certificate you can earn from the state for energy produced from a photovoltaic array.
T5, T8, T12	A reference to a linear lamp diameter. The number represents increments of 1/8th of an inch.
Temperature Setpoint	The temperature at which a temperature regulating device (thermostat, for example) has been set.
therm	100,000 Btu. Typically used as a measure of natural gas consumption.
tons	A unit of cooling capacity equal to 12,000 Btu/hr.
Turnkey	Provision of a complete product or service that is ready for immediate use
VAV	*Variable air volume*
VFD	*Variable frequency drive*: a controller used to vary the speed of an electric motor.
WaterSense®	The symbol for water efficiency. The WaterSense® program is managed by the EPA.
Watt (W)	Unit of power commonly used to measure electricity use.