THE RICHARDS LIBRARY



Board of Trustees Meeting Agenda

Tuesday, October 3, 2023 @ 10:00 AM In the Jeffrey M. Levine Community Room

- I Call to Order and Roll Call of Members
- II Consent Agenda
 - Approval of Mtg. Agenda
 - Approval of Prior Mtg. Minutes
 - Treasurer's Report: Financials
- III Period of Public Expression: 15 minutes total for comments
- IV Correspondence: Warrensburgh-Thurman Historical Society, Jeff Levine
- V Director's Report: *see attached*
- VI Committee Reports
 - a. Personnel: n/a
 - b. Budget & Finance: n/a
 - c. Building & Grounds: workshop w/Paul Mays
 - d. Ad Hoc: n/a
 - e. Outreach: John
 - f. Policy: n/a
- VII Old Business
 - Library Fines

VIII New Business

- Potential Stakeholders
- Green Jobs Green NY Energy Study Report
- Budget Planning
- IX Other Business
 - Town Board Meetings
 - Need volunteer for Thurman meeting (10/19 @ 4:30p).
 - Need volunteer for Warrensburg meeting (11/8 @ 7:00p).
- X Period of Public Expression: 15 minutes total for comments
- XI Next Committee Workshop: Tuesday, October 17, 2023 @ 10:00a with Paul Mays
- XII Next Board Meeting: Tuesday, November 7, 2023 @ 10:00a
- XIII Adjournment

The Richards Library Board of Trustees Meeting Minutes Tuesday, September 12, 2023

Present: John Schroeter, Sarah Gebbie-Measeck, Danielle Robichaud, Becky Lawler and Shelby Burkhardt, Library Director

Excused: Gina Colburn, Susan Matzner, Esther McTague and Mary Beadnell

Meeting called to order at 10:08 AM

Consent agenda approved. Motion made by John and seconded by Danielle and approved by board

Period of Public Expression:

- No public was present.
- The Board took this opportunity to review current Strategic Plan. Reviewed all 4 goals, what had been completed, what still needed to be addressed and what was still feasible. Also reviewed the most recent Book Club for the library trustee handbook on strategic planning. Sarah attended the webinar and gave a few suggestions from it, including asking the community more open ended questions and that a gap analysis is needed.

Correspondence:

• Shelby noted that a resident passed away and the family asked for donations to be made to the library in lieu of flowers. The family also asked if they could be notified of who donated. Becky said we will send a thank you to all donors as well as a card to the family to notify them of who donated.

Director's Report:

- Elevator repair complete and in working order
- Bev has finished with the artwork. Next step will be to assess the value of our art collection/archives with the leftover funds. Becky noted that the board should be prepared to start paying more in insurance after the assessment.
- The library received the state aid construction grant for our Accessibility improvements project of \$16,600 at a 75/25% match. Work has to be underway by 2/4/24.
- Programs offered and upcoming were discussed.

Committee Reports:

- Personnel Committee: n/a
- Ad Hoc: n/a
- Budget and Finance: n/a
- Buildings and Grounds: Sarah bought 4 more plants for the rain garden/native pollinator garden and planted them as a donation to the library.
- Outreach: John said it's going well and the building is still under construction.

Old Business:

- Cyber Insurance After discussion the board agreed to move forward with the Cowbell cyber insurance quote from Carpenter Insurance. Motion by Becky, seconded by Danielle to approve to exceed the 2023 budget by \$1,444 to pay for the additional insurance, approved by the board. Shelby will contact Jenna at Carpenter Insurance.
- Project Planning Prep board discussed which future workshop dates were needed for Paul Mays and which could be set aside for planning the next strategic plan and also the budget. The October workshop will be set aside for Paul Mays. The November workshop will be for the 2025 budget and the January workshop is tentatively set for strategic planning.

New Business:

• Library Fines - Shelby reported that we are one of very few libraries in SALS to not go fine free to some degree. It has deterred some patrons from using our library to return overdue items. Board agreed to leave the decrease and/or elimination of fines up to Shelby's discretion.

Other Business:

- Town Board meetings
 - Susan reported that the 8/9 Town of Warrensburg meeting was uneventful. She noted the library wifi usage numbers at the meeting.
 - Sarah reported that she introduced herself at the BOE 9/11 meeting and let them know the board has added their meetings to their schedule to visit every 3 months and also highlighted all the resources the library has for students and teachers.
 - Need a volunteer for Thurman meeting on 10/19, will ask at next regular meeting.

Period of Public Expression: none

Next Committee Workshop: Tuesday, September 19, 2023 @ 10:00 AM with Paul Mays

Next Board Meeting: Tuesday, October 3, 2023 at 10:00 AM

Motion to adjourn made by John, seconded by Danielle, approved by the board at 11:30 AM

Approved by The Richards Library on

Richards Library Monthly Statement of Revenues & Expenses September 2023

Accrual Basis

	Sep 23
Ordinary Income/Expense Income	
OPERATING RECEIPTS	236
NON-OPERATING RECEIPTS	275
Total Income	511
Gross Profit	511
Expense CYBER INSURANCE OPERATING EXPENSES	1,444 3,067
PAYROLL, WAGES, BENEFITS & EX	11,258
COLLECTION & OTHER CAPITAL EX	1,040
Total Expense	16,809
Net Ordinary Income	-16,298
Other Income/Expense Other Expense	
DESIGNATED FUNDS EXPENDED	534
Total Other Expense	534
Net Other Income	-534
Net Income	-16,833

Richards Library Monthly Funds Activity Report

September 2023

Accrual Basis

Туре	Date	Num	Name	Memo	Debit	Credit
GFNB #6131 -Opera	at & DF					
Operating Account	t - GFNB			Deposit	55.00	
Bill Pmt -Check	09/06/2023	6673	NEW YORK FIRE & SECURITY	9/2023 - 8/2024 ANNUAL ALARM MONITORING	00.00	252.00
Bill Pmt -Check	09/06/2023	6674	SOUTHERN ADIRONDACK LIBRARY SYSTEM	AUG 2023 AUTOMATION FEES		383.15
Deposit	09/10/2023	FAIROLL		Deposit	43.00	5,000.37
Bill Pmt -Check	09/13/2023	6675	BAKER & TAYLOR	PRINTED BOOKS	140.00	19.43
Credit Card Char Check	09/14/2023	219204304 A/W	SPECTRUM ENTERPRISE #142279801	8/25/23-9/24/23	149.90	95.05
Check	09/15/2023	A/W	SPECTRUM ENTERPRISE #143161701	09/04/2023-10/03/2023		129.98
Check	09/16/2023	A/W		8/22/23-9/21/23		33.94
Deposit	09/17/2023	7/11	NATIONAL GRID	Deposit	106.00	730.03
Check	09/20/2023	6676	COMMERCE BANK	#1705		947.86
Bill Pmt -Check Bill Pmt -Check	09/20/2023	6677 6678	BAKER & TAYLOR	PRINTED BOOKS		495.46
Check	09/21/2023	6679	RICHARDS LIBRARY	TRANSFER UNUSED BUDGETED FUNDS		2,975.80
General Journal	09/22/2023	PAYROLL		-MULTIPLE-		5,493.70
Deposit	09/27/2023	AW	COWBELLINS	Deposit 10-3-23-10-3-24	32.00	1 444 00
Bill Pmt -Check	09/27/2023	6680	BAKER & TAYLOR	PRINTED BOOKS		102.42
Bill Pmt -Check	09/27/2023	6681	CINTAS			49.93
Bill Pmt -Check Bill Pmt -Check	09/27/2023	6683	NEW YORK FIRE & SECURITY	GRAPHIC NOVELS FIRE ALARM SYSTEM INSPECTION		839.38
Total Operating Acc	ount - GFNB	0000			385.90	20,066.11
Director Discretion	ary Funds					
Credit Card Char	09/14/2023	219204304	ZOOM	TRANFER DF FUNDS TO OPERATING FOR CREDIT CARD PAYMENT		149.90
Total Director Discre	etionary Funds				0.00	149.90
General Journal	09/29/2023	OATS P/R		-MULTIPLE-		384.56
Total OATS Grant F	unds				0.00	384.56
Total GFNB #6131 -0	Operat & DF				385.90	20,600.57
RESERVE FUNDS	#40202707					
Reserve for Com	/ #40392/0/ nouters					
Check	09/21/2023	6679	RICHARDS LIBRARY	-MULTIPLE-	2,975.80	
Total Reserve for	Computers				2,975.80	0.00
Total GFNB Reserv	e Sav #4039270	17			2,975.80	0.00
Total RESERVE FUNI	DS				2,975.80	0.00
RESTRICTED FUNDS						
Special Acc't #59	976 - GFNB	JOARD				
Non-Designate	ed Funds - S/A			Deposit	75.00	
Total Non-Desi	anated Funds - :	5/A		Deposit	75.00	0.00
In Memory - Jo	oyce Frulla					
Deposit	09/27/2023			Deposit		
Total In Memor	y - Joyce Frulla				200.00	0.00
Regina Porter Bill Pmt -Check	Bequest Funds 09/13/2023	222	BJ'S ARTWORKS FRAMING GALLERY STUDIO	ARCHIVAL RESTORATION		1,566.36
Total Regina Po	orter Bequest Fu	inds			0.00	1,566.36
Total Special Acc	't #5976 - GFNE	l			275.00	1,566.36
Total TEMPORARY	- RESTRICTED	BY BOARD			275.00	1,566.36
Total RESTRICTED F	UNDS				275.00	1,566.36
TOTAL					3,636.70	22,166.93

THE RICHARDS LIBRARY



Director's Report

September 29, 2023

- NMS cleaned furnaces
- NYS Green Energy Study report received
- Visit and donation from Jeffrey M. Levine would like to set up meeting with trustees in May
- World's Largest Garage Sale vendors and porta-potty
- Programs:
 - The Richards Library Book Club
 - OATS: Zoom, Being News Savvy Online
 - o Read at Small Tales
 - Origami Day 1 session
 - Apple Festival face painting, hands on craft, and take home crafts
 - School Supplies Drive
 - \circ StoryWalk "The Moose and the Goose"
 - Felt Critters w/Filomena

Upcoming Events & Programs

** Events can be found on The Richards Library website, our Facebook page, or at the Library. **

- Tech Help, Tuesdays & Thursdays, 2:00-5:00p
- New *Take and Make Crafts* each Friday
- Reading at Small Tales (10/19)
- Technology Classes in Partnership with Senior Planet from AARP (see flyers attch.)
- o Riverside Farmers' Market 6 festivals June to October
- In the Zone program (10/18)
- Monster Balls Needle Felting w/Filomena (10/19)
- Educational Medicare Presentation (10/10)
- Film: The History of Plastic (10/12)
- Film: Childrens Halloween themed (10/27)

Full October Events Calendar attached

Statistics for the Year

See attached *2023 Monthly Statistics*. Statistics through 9/28. Will be updated after October 1, when full statistics are available.

Respectfully submitted,

Shelby Burkhardt

Library Director

THE RICHARDS LIBRARY UPCOMING EVENTS & PROGRAMS OCTOBER 2023

SUN	MON	TUE	WED	тни	FRI	S
	2	3 TRL Board Meeting @ 10:00a	4	5 TRL Book Club @ 4:00p Building Blocks, 3:00- 6:30p	6 Children's Craft at Riverside Farmers' Market, 3:00- 6:00p	7
8	9 Closed for Columbus Day	10 OATS: Chrome Essentials @ 2:00p Understanding Medicare Presentation @ 5:30p	11	12 OATS: Chrome Essentials @ 2:00p Building Blocks, 3:00- 6:30p	13	14 Sewini 10:00
15	16	17 OATS: Chrome Essentials @ 2:00p	18	1 9 DATS: Chrome Essentials @ 2:00p Building Blocks, 3:00- 6:30p Monster Balls w/Filomena, 3:30- 6:30p	20	21
22	23	24 OATS: Chrome Essentials @ 2:00p Sewing with Sarah 5:00-6:30p	25	26 OATS: Chrome Essentials @ 2:00p Building Blocks, 3:00- 6:30p	27 Children's Film @ 2:30p	28
29	30	31 OATS: Chrome Essentials @ 2:00p				

ΑT	 Building Blocks free build for any ages. Using Magna tiles, Keva planks, or Tegu magnetic blocks, to build solo or with others. In YA Room. Free Children's Craft, Oct. 6, Garlic Festival at Riverside Farmers' Market in Warrensburg, NY. Needle Felt Monster Balls w/Filomena for ages 14+. Limited to 8 participants, pre-registration required. Light spacks provided
ng with Sarah 00-11:30AM	 OATS: Chrome Essentials, 5 week Course, meets twice a week, 10/10 - 11/9. Limited to 6 participants, pre-registration required. Understanding Medicare Presentation w/ William Henderson. Free, information only. Light snacks provided.
	 Sewing with Sarah, hands on help with sewing machine projects. See flyer for more info. Children's Film, TBA, Halloween theme. Bring water and comfy blankets. Popcorn provided. Two outdoor StoryWalks at the library, <i>The Listening Walk</i> by Paul Showers, and then, <i>The Gruffalo</i> by Julia Donaldson. Self-guided. Story Time & Activity for ages 3-5 will resume
* *	Wednesdays in November. To pre-register for programs, contact the Circulation Desk at 518-623-3011.

MEDICARE EDUCATIONAL PRESENTATION



Here is what you will learn in this 30 minute presentation:

- What do Medicare Parts A, B, C and D mean?
- Is Original Medicare enough health coverage for me?
- If not, what is available for additional coverage?
- Will my doctors & prescriptions be covered?
- Can I get help to pay for premiums, copays and medications?
- Do I have deadlines for enrolling in a Medicare plan?
- What about all those Medicare commercials on TV?

October 10, 2023 5:30PM-6:30PM The Richards Library-Warrensburg



WILLIAM HENDERSON Licensed Agent Williamh6872@gmail.com (518) 222-4628

Disclaimer: If I do not offer every plan available in your area, any information that I provide is limited to those plans that I do offer in your area. You can contact Medicare.govor 1-800-Medicare to get information on all of your options. I am always happy to assistyou with this as well.

NEEDLE FELT MONSTER BALLS W/FILOMENA





THURSDAY, OCTOBER 19, 3:30PM TO 6:30PM IN THE JEFFREY M. LEVINE COMMUNITY ROOM AT THE RICHARDS LIBRARY, WARRENSBURG, NY

PARTICIPANTS WILL LEARN TO NEEDLE FELT HALLOWEEN THEMED CREATURES USING WOOL ROVING. DIFFERENT TECHNIQUES WILL BE TAUGHT AND PARTICIPANTS SHOULD BE ABLE TO COMPLETE ONE 2-3" CREATURE. DESIGNS WILL VARY. ALL MATERIALS PROVIDED AND PARTICIPANTS MAY TAKE HOME SOME BASIC FELTING SUPPLIES. WORKSHOP PAID FOR BY THE RICHARDS LIBRARY. LIGHT SNACKS WILL BE PROVIDED FOR THIS WORKSHOP. RECOMMENDED AGE IS 14 AND UP. LIMIT 8, PLEASE PRE-REGISTER WITH THE CIRCULATION DESK AT 518-623-3011. TO CONTACT FILOMENA, EMAIL, FOF058@YAHOO.COM

SEWING WITH SARAH

IN THE JEFFREY M. LEVINE COMMUNITY ROOM @THE RICHARDS LIBRARY

SATURDAY, OCTOBER 14, 10:00–11:30AM TUESDAY, OCTOBER 24, 5:00–6:30PM

Join Sarah of Seamingly Sarah, to learn the basics of a sewing machine. Use the one provided or bring your own. Sarah has over 20 years of experience sewing quilts, mending clothes, sewing clothes and toys. She will offer hands-on help with basic troubleshooting. This is not a presentation, but a drop-in time for people with questions about projects with sewing machines.

Sewing with Sarah will be offered on a regular basis, schedule variable. Stay tuned for future dates!



For Immediate Release Contact Tracy Frisch, 518-692-8242 landline or <u>tracy.frisch@gmail.com</u>

The Story of Plastic to be shown in Warrensburg on Thurs. Oct. 12th at 6:30 PM as part of Zero Waste Warren County's First Documentary Film Series

The acclaimed film — *The Story of Plastic*— will be shown at the Richards Library on Thursday, October 12 at 6:30 pm. A community discussion will follow. This event will be the second film screening in a documentary film series sponsored by Zero Waste Warren County, with generous support from the Touba Family Foundation. The Richards Library is located on 36 Elm Street in Warrensburg. This event is free and open to all.

The Story of Plastic is an Emmy-winning feature-length documentary about the global plastic pollution crisis. Original animations, interviews with experts and activists, and never-before-filmed scenes shot on three continents reveal the disastrous consequences of the flood of plastic smothering ecosystems and poisoning communities around the world.

The film presents a cohesive timeline of how this catastrophe has developed and how the oil and gas industry successfully manipulated the narrative around it. It also shows how people around the world are rising up to turn the tide on plastic waste.

Zero Waste Warren County is a 4-year-old citizens' group dedicated to reducing the amount of waste we throw away in order to conserve natural resources and protect public health and air, land, and water. Zero Waste Warren County aims to move the region toward Zero Waste by encouraging people to change their consumption habits; by promoting the composting of food scraps and yard and garden debris; by facilitating reuse, repair, and deconstruction; by increasing the recycling of materials that can be safely and effectively recycled; and by replacing single-use disposable products with durable, reusable items.

For further information about the film series or Zero Waste Warren County, please visit <u>www.zerowastewarrencounty.org</u>. You may contact the film series organizers and the Zero Waste Group at <u>zerowastewarrencounty@gmail.com</u> or by calling Tracy at 518-692-8242 landline.







Sign Up Today! Call: [518] 623-3011 Email: Ikeith@sals.edu

FREE Technology Classes!

The Richards Library is partnering with Senior Planet from AARP to help older adults use technology to learn new skills, save money, get in shape, and make new friends.

Classes are hosted in the Jeffrey M. Levine Community Room at the Richards Library in Warrensburg, NY, and are intended for adults 60 and over.

Upcoming Topics:

Chrome Essentials Course

Every Tuesday and Thursday at 2:00 PM, Weekly from 10/10 – 11/9 (pre-registration required)

This 5-week course will cover the essentials of how to use a Chromebook, which is a type of laptop that is great for beginners who just want to use the internet. Chromebooks are fast, secure and cost-effective computers that run the Google Chrome operating system. By the end of the course, you'll have a foundation for using the device to navigate the internet. You'll also learn to send and receive email.

Dates - 10/10, 10/12, 10/17, 10/19, 10/24, 10/26, 10/31, 11/2, 11/7, 11/9



2023 Monthly Statistics

Month	Att Adult	Att Juv	Comp Use Ad	Comp Use Juv	Circ.	Ref	Holds Placed	Holds Sat	Items W/D	Items Acc	WiFi Conn
January	592	112	112	30	1255	27	522	452	31	129	190
February	545	101	55	18	1201	14	286	329	2	94	199
March	683	112	89	22	1415	23	399	393	63	149	202
April	638	100	91	12	1224	13	292	256	6	86	248
May	690	95	116	14	1266	19	360	349	20	91	267
June	671	138	70	18	1474	17	408	397	11	234	327
July	782	138	73	6	1521	22	391	385	4	145	367
August	817	165	119	7	1757	17	398	391	10	127	306
September	668	108	96	12	1322	13	416	395	12	97	276
October											
November											
December											
2023 TOTALS	6086	1069	821	139	12435	165	3472	3347	159	1152	2382
	0/A Att 7155		O/A Comp 960		O/A Circ. 12435						

STAKEHOLDERS – Guilderland Public Library

AGING COMMUNITY MEMBERS Albany Guardian Society I independent in own homes Avila retirement community in Guilderland Community Caregivers local nonprofit – independent living – nonmedical support

NEIGHBORHOOD McKownville Improvement Association

STORY HOUR MOMS

LOCAL PERSONALITY Mark Grimm – author and ethics board and former school board and town board

ALTAMONT LIBRARY Library located within Guilderland's Chartered-to-serve area

TOWN Town supervisor Community Center Parks and Recreation Department Grant Writing

SCHOOL LIBRARIANS

VOLUNTEERS

REALTORS Commercial residential

TUTORING

GCSD (School District) Superintendent Chief Financial Officer Principal

RETIREES

LOCAL HISTORICAL SOCIETY

TEEN ADVISORY GROUP

PARENTING GROUP



Green Jobs Green New York Energy Study

Prepared for:

The Richards Library 36 Elm Street Warrensburg, NY 12885

Audit No: G-804-N-S-L

Submitted by:

L&S Energy Services 58 Clifton Country Road, Suite 203 Clifton Park, NY 12065

Date: 9/15/2023

For questions regarding this report, please contact <u>FlexTech@nyserda.ny.gov</u>.

We hope the findings of this report will assist you in making decisions about energy efficiency improvements in your facility. Thank you for your participation in this program.

NOTICE

This report was prepared pursuant to the Flexible Technical Assistance Program (Hereinafter "FlexTech") administered by the New York State Energy Research and Development Authority (hereinafter "NYSERDA"). The opinions expressed in this report do not necessarily reflect those of NYSERDA or the State of New York, and reference to any specific product, service, process, or method does not constitute an implied or expressed recommendation or endorsement of it by NYSERDA or the State of New York. Further, NYSERDA and the State of New York make no warranties or representations, expressed or implied, as to the fitness for a particular purpose or merchantability of any product, apparatus, or service, or the usefulness, completeness, or accuracy of any processes, methods, energy savings, or other information contained, described, disclosed, or referred to in this report. NYSERDA and the State of New York make no representation that the use of any product, apparatus, process, method, or other information will not infringe privately-owned rights and will assume no responsibility for any loss, injury, or damage resulting from, or occurring in connection with, the use of information contained, described, disclosed, disclosed, or referred to in this report.

State of New York

Kathy Hochul, Governor

New York State Energy Research and Development Authority



Consultant Disclaimer

The opinions expressed in this report do not necessarily reflect those of L&S Energy Services, C.J. Brown Energy P.C., The Daylight Savings Company, or Taitem Engineering P.C. (the Consultants), and reference to any specific product, service, process, or method does not constitute an implied or expressed recommendation or endorsement of it by the Consultants. Further, the Consultants make no warranties or representations, expressed or implied, as to the fitness for a particular purpose or merchantability of any product, apparatus, or service, or the usefulness, completeness, or accuracy of any processes, methods, energy savings, or other information contained, described, disclosed, or referred to in this report. The Consultants make no representation that the use of any product, apparatus, process, method, or other information will not infringe privately-owned rights and will assume no responsibility for any loss, injury, or damage resulting from, or occurring in connection with, the use of information contained, described, disclosed, or referred to in this report.

This report was prepared by:

L & S Energy 58 Clifton Country Road, Suite 203 Clifton Park, NY 12065 (518) 383-9405

Table of Contents

Executive Summary1
Present Energy Use and Cost2
Benchmarking Your Building
Note on Energy Project Implementation Casts
Greenhouse Gas Reductions for the Recommended Measures
Assistance for Implementation of Recommendations
COVID-19
Energy Efficiency Measure Descriptions7
EEM-1 Weather-Stripping And Caulking
EEM-2 Replace Air Conditioners
EEM-4 Install Energy Recovery Ventilators
Building Electrification Measures
BE-1 Install Clean Heating System - Air Source Heat Pump
BE-2 Install Clean Heating System - Ground Source Heat Pump
Existing Conditions
Lighting Systems
Water Heating System
Other Energy-using Systems
Appendix A16
Equipment Inventory
Litility Bill Data
Appendix C
EEM Calculations
Appendix D
Assumptions/Data Used to Develop Energy and Dollar Savings Figures
Clean Heating and Cooling Technology Overview
Energy Savings Summaries

Executive Summary

This study was performed to understand how your facility is currently using energy and identify ways to reduce energy use and operating expenses.

Specific areas of concern that were identified by the owner for evaluation include HVAC.

The following energy efficiency measures (EEMs) and observations to reduce energy use were identified during the site visit:

- Envelope Weatherstripping and sealing the vestibule.
- HVAC Replace air conditioning and furnaces with high efficiency units.
- HVAC Install energy recovery ventilators.
- Building Electrification Install air source or ground source heat pumps.

These Energy Efficiency Measures are summarized in the Project Summary Table below and discussed in more detail in the Energy Efficiency Measures section of this report.

Present Energy Use and Cost

The energy use for your facility has been compiled to calculate the Energy Cost Index and the Energy Use Intensity.

- The Energy Cost Index (ECI) is the total cost of energy divided by the conditioned floor area and is shown as dollars per square foot per year.
- The Energy Use Intensity (EUI) is the total heat content of energy divided by the conditioned floor area and is shown in units of one thousand Btus (kBtu) per square foot per year.

Energy Cost Index

Electricity	\$ 7,446	\$ 0.87	\$/sq.ft./year
Oil - No. 2	\$ 7,793	\$ 0.91	\$/sq.ft./year
Total Cost	\$ 15,240	\$ 1.79	\$/sq.ft./year

Energy Use Intensity

Electricity	81	mmBtu	9.5	kBtu/sq.ft./year
Oil - No. 2	252	mmBtu	29.6	kBtu/sq.ft./year
Total Energy Use	334	mmBtu	39.1	kBtu/sq.ft./year



Benchmarking Your Building

The EPA's ENERGY STAR Portfolio Manager website allows you to upload energy use information and compare your energy use to that of other buildings of similar use. Portfolio Manager generates a benchmark score that indicates your performance. A benchmark score of 50 indicates average performance while a score of 75 or higher would earn the Energy Star designation. You can use the website to track your energy use over time and document the success of your energy conservation efforts.

You can find the Portfolio Manager at:

https://www.energystar.gov/buildings/facility-owners-and-managers/existingbuildings/use-portfolio-manager

Project Summary Table

	Energy Efficiency Measures				\$ Savings & Cost			
EEM #	Measure Status	EEM Description	Reduction in Greenhouse Gas Emissions (Lbs. CO2e/Year)	Total Annual Savings	Install Costs	Simple Payback (years)		
EEM-1	R	Weather-Stripping And Caulking	380	\$ 72	\$ 184	2.5		
EEM-2	NR	Replace Air Conditioners	312	\$ 239	\$ 10,000	41.8		
EEM-3	NR	Install Condensing Furnaces	6,724	\$1,276	\$ 40,156	31.5		
EEM-4	R	Install Energy Recovery Ventilators	2,235	\$ 432	\$ 5,000	11.6		
		Total of Recommended Measures:	2,615	\$ 504	\$ 5,18 4	10.3		

Measure Status Explanation:

(I) - Implemented: Measure has been installed

(R) - Recommended: Energy saved with a reasonable payback (within measure life)

(NR) - Not Recommended: When payback exceeds measure life and equipment is not at end of life

(RME) - Recommended Mutually Exclusive: Energy is saved and recommended over other options for a particular measure

(ME) - Mutually Exclusive: Non-recommended option(s) to a Recommended Mutually Exclusive (RME) measure

(RNE) - Recommended Non-Energy: Recommended based on other, non-energy factors such as comfort, water savings or equipment at end of life

(RS) - Recommended for Further Study: For measures that require analysis beyond the scope of this program.

(BE) – Building Electrification: Measures that should be considered based on greenhouse gas reductions, eliminating on-site use of fossil fuels, or other sustainability factors

	Building Electrification Measures				\$ Savings & Cost				
EEM #	Measure Status	Building Electrification Measure Descriptions	Reduction in Greenhouse Gas Emissions (Lbs. CO2e/Year)	Total Annual Savings	Install Costs	Simple Payback (years)	Estimated Incentives	Simple Payback after incentives	
BE-1	RS	Install Clean Heating System - Air Source Heat Pump	12,435	\$ 1,590	\$ 29,994	18.9	\$ 13,479	10.4	
BE-2	RS	Install Clean Heating System - Ground Source Heat Pump	22,862	\$ 3,917	\$ 93,053	23.8	\$ 15,933	19.7	
		Total of Recommended Measures:	0	\$ 0	\$ O	0.0	\$0	0.0	

Simple Payback Period is the length of time it will take to recover the initial capital investment from the energy savings of the new equipment. The Simple Payback Period is calculated by dividing the initial installed cost by the annual energy cost savings. For example, an energy-saving measure that costs \$5,000 and saves \$2,500 per year has a Simple Payback Period of \$5,000 divided by \$2,500 or 2 years.

Note on Energy Project Implementation Costs

The "Project Costs" shown in this report for each Energy Efficiency Measure represent an initial estimate of the implementation cost. Unless otherwise noted in the Energy Efficiency Measure description, these costs reflect a preliminary estimate of material and labor. There may be other variables associated with your specific project that will impact the true project costs that the study may not capture. Other external factors that may impact true project costs and payback include material availability, vendor scheduling, access within the facility, general inflation, available measure incentives, and other unknown factors and conditions. For measures which significantly impact your building's usage, it is also important to determine any potential utility rate and/or tariff changes, those of which are beyond the scope of this report. We recommend that you seek several quotes from qualified vendors prior to implementation.

Greenhouse Gas Reductions for the Recommended Measures

Reducing your energy use will reduce the release of greenhouse gases associated with the use of fossil fuels and the production of electricity. If the measures recommended in this report are implemented, the following reductions of greenhouse gases can be expected:

Electricity	1 546	kWh =	1 793	pounds CO2 equivalent
Oil - No. 2	37	aal. =	822	pounds CO2 equivalent
		0	2,616	pounds CO2 equivalent
			3.8%	reduction

Emissions factors are used to translate the energy savings data from energy efficiency and renewable generation projects into annual GHG emissions reduction values. NYSERDA uses emission factors derived from U.S. Environmental Protection Agency (EPA) emission coefficients to calculate emissions from onsite fuel. The CO2e values represent aggregate CO2, CH4, and N2O emissions.

Assistance for Implementation of Recommendations

This study provides recommendation on specific actions to take to increase energy efficiency; the next step is implementing the recommendation(s). Complimentary assistance with implementing energy efficiency recommendations is available.

We can assist with identifying utility company incentives and various financing options available for energy efficiency improvements, such as GJGNY Loans or Commercial Property Assessed Clean Energy (CPACE) on bill Financing.

Please contact one of the Regional Clean Energy Hubs in your area for assistance:

Affordable Housing
Partnership
Susan Cotner
scotner@ahphome.org
518-275-4805

COVID-19

NYSERDA encourages study participants to review COVID-related building operation guidelines published by New York State, ASHRAE and other trusted sources, as applicable. Links to these resources are included below along with a link to the FlexTech Program Indoor Air Quality (IAQ) effort, which is focused on the evaluation of filtration, ventilation, and building operation optimization measures as well as Ultraviolet Germicidal Irradiation (UVGI) in response to the COVID-19 crisis.

- New York State: <u>https://forward.ny.gov/</u>
- ASHRAE: <u>https://www.ashrae.org/technical-resources/resources</u>
- FlexTech Program IAQ Effort: <u>https://www.nyserda.ny.gov/All-</u> Programs/Programs/FlexTech Program/Indoor-Air-Quality

Energy Efficiency Measure Descriptions

EEM-1 Weather-Stripping And Caulking

	* •		~	1.5.4
Electric Savings:	\$0		0	kWh per year
			0.0	kW demand
Fuel Savings:	\$ 72		2.3	MMBtu fuel per year Oil - No. 2
Total Annual Savings:	\$ 72			
Project Cost:	\$ 184			
Simple Payback:	2.5	years		

Introduction:

Sealing the cracks between windows and wall openings will reduce the amount of unwanted outside air infiltration into conditioned spaces. The elimination of infiltration or drafts makes occupants feel more comfortable and reduces heating and cooling costs. Caulking and weather-stripping are cost effective ways to reduce infiltration and to tighten the building envelope.

All windows and doors must be caulked and weather-stripped. Clean and inspect surfaces for damage or moisture, in order to ensure that they are in good enough condition to accept weather-stripping or caulk. Tighten door or window hardware. Remove old weather-stripping and caulk. Cut weather-stripping carefully to length and apply it to the surface. New weather-stripping should be snug, and should completely fill gaps without buckling or otherwise deforming. Open and close window or door and inspect for interference, weather-stripping damage, or other problems. Windows and doors should be able to close without excessive force.

Recommendation:

The original building vestibule leaks via the doors and windows. Install interior storms like with the other windows and commercial grade weather stripping and door sweeps like with the main entrance.

EEM-2 Replace Air Conditioners

Electric Savings:	\$ 239	2	269 2.7	kWh per year kW demand
Fuel Savings:	\$0	(0.0	MMBtu fuel per year
Total Annual Savings: Project Cost: Simple Payback:	\$ 239 \$ 10,000 41.8	years		

Introduction:

Air conditioning units that are over 15 years old may use reciprocating compressors and obsolete refrigerants. Current models use reliable scroll compressors and modern refrigerants to meet today's more stringent efficiency requirements. Replacement models are rated with an Energy Efficiency Ratio, commonly called EER. The higher the EER, the more efficient the unit. SEER is the Seasonal Energy Efficiency Ratio, which indicates the average EER over the course of a cooling season. The SEER will be higher than the EER for a given piece of equipment, so be sure to compare products using the same measurements.

The energy savings of a new air conditioning system is often not enough to warrant the purchase of a new unit. However, if the air conditioner requires repair or needs replacement for another reason, the highest EER rated equipment should be purchased.

Recommendation:

There are four legacy air conditioners. According to the mechanical specifications from 2012, there were supposed to be a 2-ton, 3-ton, 4-ton and 5-ton unit serving each of the four zones. The walkthrough observed one nameplate missing, and it was smaller than the 4-ton unit. Thus, it is estimated to be a 3-ton unit. (Each were from 2009 and have different make/model from the specifications.) A quote to replace the 13-SEER units (at the design sizes) for 14-SEER units was provided by Northern Mechanical Services for \$17,125.

Since the air conditioning units are used so infrequently for cooling the space due to high R-values, and a lack of need in the basement, this measure will not pay back and is not recommended even for just replacing the upstairs units with even higher efficiency 18 SEER units at an estimated cost of \$10,000.

EEM-3 Install Condensing Furnaces

Electric Savings:	\$ 45		202 0.0	kWh per year kW demand
Fuel Savings:	\$ 1,230		39.8	MMBtu fuel per year Oil - No. 2
Total Annual Savings: Project Cost: Simple Payback:	\$ 1,276 \$ 40,156 31.5	years		

Introduction:

Replacing your existing gas fired furnace with a high efficiency gas fired furnace will reduce your heating costs by improving the furnace combustion efficiency. Whereas noncondensing gas-fired furnaces are limited to combustion efficiencies of 80% to 85%, condensing gas fired furnaces are capable of combustion efficiencies of 90% to 95%. These furnaces achieve higher efficiencies through the use of a secondary heat exchanger that cools the combustion gases to the point where the water vapor in the gas condenses. This allows the combustion gases to be vented through inexpensive plastic pipe. Since the chimney is not used for the furnace, additional savings are realized by the reduction of offcycle energy losses due to the stack effect.

Recommendation:

Replace 4 non-condensing furnaces with (2) 123,750 Btu/hour and (2) 106,250 Btu/hour 95% AFUE condensing furnaces with variable speed bpm motor.

Be sure to install a properly sized furnace as operating efficiency suffers when too large a furnace is installed. Perform complete load sizing calculations for a building, prior to selecting replacement equipment, using standard methods. Size new equipment according to the load calculations and not according to the size of the equipment scheduled for removal.

Note that only three furnaces are currently used to heat the space. A proposal from Northern Mechanical Services for \$32,125 was submitted to the library to replace the existing furnaces with similar sized units with the same rated efficiency.

This measure provides an analysis of upgrading the furnaces from 80% to 95%. Despite the significant oil savings, the payback exceeds the effective useful life, and therefore, this measure is not recommended. Note that new exhausting is needed for condensing furnaces, which will be an additional cost in material and labor.

EEM-4 Install Energy Recovery Ventilators

Electric Savings:	\$ 348	1 <i>,</i> 54 0.	6 kW 0 kW	/h per year / demand
Fuel Savings:	\$ 84	2.	7 MN Oil	∧Btu fuel per year - No. 2
Total Annual Savings:	\$ 432			
Project Cost:	\$ 5,000			
Simple Payback:	11.6	years		

Introduction:

ERVs reduce heating and cooling loads while maintaining required ventilation rates by facilitating heat transfer between outgoing conditioned air and incoming outdoor air. ERVs employ air-to-air heat exchangers to recover energy from exhaust air for the purpose of pre-conditioning outdoor air prior to supplying the conditioned air to the space, either directly or as part of an air-conditioning system.

An outdoor air intake brings fresh air in when the blower motor is on for cooling or heating since the windows have been shuttered. Hot, wet air, and cold, dry air can be pre-cooled/heated to reduce the consumption on the existing systems.

Recommendation:

Install an ERV within the outside air intake chamber. Consult a qualified contractor to identify feasibility and costs. This measure uses the NYS Technical Review Manual algorithms to estimate the savings, but this has limited insight on the overall airflow that comes into the building for outside air. As such, the contractor should evaluate the potential for energy savings when sizing up the project.

Building Electrification Measures

The following measures evaluate the impact of replacing your existing fossil-fuel heating systems with clean heating and cooling systems powered by electricity. For space heating, air source heat pumps and ground source heat pumps are available in various system types to provide both heating and cooling to your building.

Fossil fuel-fired water heaters may also be replaced with heat pump water heaters to further reduce your use of fossil fuels.

When combined with renewable electricity, heat pump systems can eliminate the use of fossil fuels in your building.

See Appendix E - Benefits Of Clean Heating and Cooling (CHC) Technologies for more information on these system types.

BE-1 Install Clean Heating System - Air Source Heat Pump

Simple Payback:	18.9	years,	10.4	years after incentives
Total Annual Savings: Project Cost:	\$ 1,590 \$ 29,994			
Fuel Savings:	\$ 7,822		253.3	MMBtu fuel per year Oil - No. 2
Electric Savings:	(\$ 6,232)		(24,846) 0,9	kWh per year kW demand

Introduction:

Air source heat pumps (ASHP) provide both heating and cooling using electricity to exchange energy with the outdoor air.

At very cold outdoor air conditions, air source heat pumps may require supplemental heat to meet your building's heating load. Supplemental heat may be in the form of electric resistance heat or your existing fossil-fueled heating system, if it remains in service. The extent to which an ASHP system reduces your fossil fuel use will depend on the exact design and control of your new system.

Recommendation:

Replace your oil - no. 2 heating system with a central ducted air source heat pump system serving the entire building. The system type is: Central Ducted ASHP with Integrated/ Modulating controls sized to 100% of the building heating load.

The heat pumps are assumed to be rated at 15.66 EER full load cooling, 18 SEER. The heat pumps are assumed to be rated at 10 HSPF for heating, which may be adjusted to 2.41 COP. Be sure to specify heat pumps that meet NEEP requirements (Northeast Energy Efficiency Partnerships). See https://ashp.neep.org/#!/product_list/ for current models that meet these requirements. Cold climate rated heat pumps will be needed.

The previous two measures will improve the efficiency of the AC units, and the oil furnaces separately. Each unit will need to be replaced, and the estimated total cost would be around \$60,000. Further, condensing furnaces need new exhaust ducts that cannot use the existing chimney chase because the exhaust is corrosive. This measure, however, will replace the condensing units only (furnaces can be left in place as backup). The efficiency improvement for replacing oil at 80% with electricity around 240% (average heating), will save on annual energy use. However, the cost has a high payback relative to their effective useful lives. Thus, further consideration is recommended for when the furnaces start to reach the end of their lives, then incremental costs can be used. The library construction fund and state incentives can also help pay for their replacements.

BE-2 Install Clean Heating System - Ground Source Heat Pump

Simple Payback:	23.8	years,	19.7	years after incentives
Total Annual Savings: Project Cost:	\$ 3,917 \$93,053			
Fuel Savings:	\$ 7,822		253.3	MMBtu fuel per year Oil - No. 2
Electric Savings:	(\$ 3,905)		(15,857) 1.1	kWh per year kW demand

Introduction:

Smaller buildings can take advantage of water-to-air ground source heat pump technology by replacing furnaces and other ducted systems with heat pumps having either open or closed loop ground heat exchangers. Closed loop ground heat exchangers that are properly sized provide water between 32° and 77° for heat pumps to draw heat from or reject heat to. Open loop systems see water temperatures of ~50° throughout the year. This allows heat pumps to operate at higher efficiency than air-source heat pumps that must draw from more extreme outdoor air temperatures.

The heat pumps in this type of system each have a loop pump. The building may have multiple heat pumps, but every heat pump must have a dedicated ground source heat exchanger. The heat pumps should have two-stage or variable capacity compressors for the highest efficiency. The loop pump may be constant speed, but two-speed or variable speed pumps offer higher efficiency and are preferred.

Recommendation:

Consider replacing your present heating system with a clean heating and cooling system using ground source heat pumps.

Install a closed loop heat pump system with variable-speed compressors and variable pumping. The heat pumps are assumed to be rated at 17 EER full load cooling, 22 EER part load. The heat pumps are assumed to be rated at 3.6 COP full load heating, 4.1 COP part load.

This measure will save even more energy for electrifying the building compared to ASHPs. However, the costs are also higher. In addition to the construction fund and clean heat program incentives, the Federal Inflation Reduction Act will provide a 30% direct payout for non-taxed entities to install ground source heat pumps (not included in the analysis above). Further consideration is recommended for this measure as well.

Existing Conditions

The site is a library. It was originally built by the Richards sisters in 1901. There are two sections for the purpose of this report: the original section and the new section, which would have been constructed around 2005. The total building has an area of 8,530 ft² over two stories, which includes a full basement and an approximately 15' high first floor.

The original section has a poured concrete slab basement with a mixture of stone and brick tile walls. According to staff, the first floor is also poured concrete, but there appears to be wood joists as well in the basement mechanical spaces. This section likely has stone and brick tile walls along with 12" block local limestone exterior all the way up to the hipped steel roof. Interior walls appear to be plastered and painted, with no insulation. The attic has fiberglass insulation, estimated at R-38.

The addition has 5" of poured concrete floors. The 14" walls are reinforced concrete with 2" rigid exterior insulation and 1" rigid interior insulation behind the drywall. The dropped ceiling separating the first floor has an insulated mineral wool blanket (at least 2"). Above grade walls are wood framed with drywall interior. There is R-19 batt insulation between the joists. The exterior has local limestone up half the wall to match the old section. 1" of rigid insulation is between the stone and the exterior sheathing. Above the stone is a 2" exterior insulating finishing system (EIFS) adding even more R-Value to the walls. The attic cavity has an R-38 batt insulation above the deck and is covered with a standing seam metal hipped roof.

Windows and doors are all wood framed. They cannot be simply replaced as the building has historical status. Several studies have been commissioned by the library to identify deficiencies in the exterior building and windows. Window repairs are costly, and as a result, the library installed interior plexiglass that seal them permanently. This adds minimal R-value but restricts infiltration greatly as staff do not notice any infiltration in the Winter.

There is one main entrance door along the front of the building in the new section, which has double pane glass and good weather seals. The original entrance on the side of the building has an unheated vestibule with original doors that have no weatherstripping or door sweeps. There are also single pane glass windows in the vestibule. Right next to the vestibule is the zone thermostat and supply register, so when it is cold and windy, the furnace will cycle often.

There are three to four staff onsite, and patrons frequent the library during Monday, Wednesday, and Friday from 9-5pm, Tuesday and Thursday from 9-7pm, and Saturday from 9-12pm.

Lighting Systems

The basement consists mainly of surface wraps, while the first floor has mainly pendant 4' LED lamps consisting of 11.5 W. There are a few sconces and recessed lighting with a mixture of CFL & LED lamps as well as some track lights with MR16 type LED lamps. Most of the lighting in the basement has occupancy sensors, while the upstairs lights are in open spaces and do not need automated controls. Exterior LED lights are on a timer.

Heating Ventilating and Air Conditioning Systems

There are four zones for ducted heating, each with its own furnace. The ducts serve the first floor through floor registers and the basement through ceiling and wall registers. The ducts are sealed well despite their age. Oil fired Carrier and Bryant furnaces from 2007 provide the heating. Two have a capacity of 85 Mbh and the other two have a capacity of 99 Mbh. Each is rated for 80% efficiency. Evaporator coils are tied into the furnace to provide cooling. There are four Bryant, model 123 split system AC units, but only three nameplates were legible. It appears that there is a 4-ton unit, two 3-ton units, and a 2-ton unit each from 2009. According to specifications these units each have a 13 SEER.

Since the windows were sealed, the mechanical contractor installed an outside air intake, which provides fresh air when the fans operate. The four zones each have digital programmable thermostat. The old section basement unit is never used because it serves the area next to the furnace rooms and staff leave the doors open for auxiliary heating and cooling. The community room in the newer section of the basement does not have conditioning in the summer either. It has a winter setpoint of 68 degrees. The first floor thermostats also have winter setpoints of 68 degrees. No setback was observed in the schedules. The cooling setpoint for the first floor thermostats are set to 70/71 degrees each with a 2 degree setback. This minimal setback is to prevent humidity levels getting too high for the books.

There are two dehumidifiers in the basement. Both are small units with a 1-gallon tank that is flushed daily in the summer. They are Energy Star units.

There are three wall mounted electric heaters (1.5 kW, 2x 4 kW) in the stairwells, but according to the staff they are not used.

Water Heating System

There are two small hot water makers serving each of the bathrooms. A Rheem, 20-gallon electric unit with a 2-kW coil from 2017 serves the basement. No hot water was observed after 20 seconds. It must have a low hot water setting. The second unit is in the basement but serves the bathroom above it. It is an A.O. Smith 6-gallon unit with a 1.5 kW coil. The pipes are insulated, and the faucet has a timing push handle so there is minimal hot water usage.

Other Energy-using Systems

There is a small refrigerator and microwave in the basement along with a sump pump, and a 10-kW elevator. The first floor has about seven computers for the public and staff.

See Appendix D for further details regarding the energy calculations performed for this study.