Westlake Reed Leskosky

CLEVELAND PUBLIC LIBRARY

Facilities Assessment Presentation

Board Meeting March 13, 2012

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CLEVELAND PUBLIC LIBRARY

Authorization - Goals

Authorization-

On May 19, 2011 the Cleveland Public Library authorized Westlake Reed Leskosky to conduct assessment of all branch facilities. That work was substantially complete in September 2011 and a report was issued.

Objective

Provide an objective analysis of the physical needs of 26 branches of the Cleveland Public Library with associated costs categorized into priorities to be used as a guide for planning and implementation

PROJECT TEAM

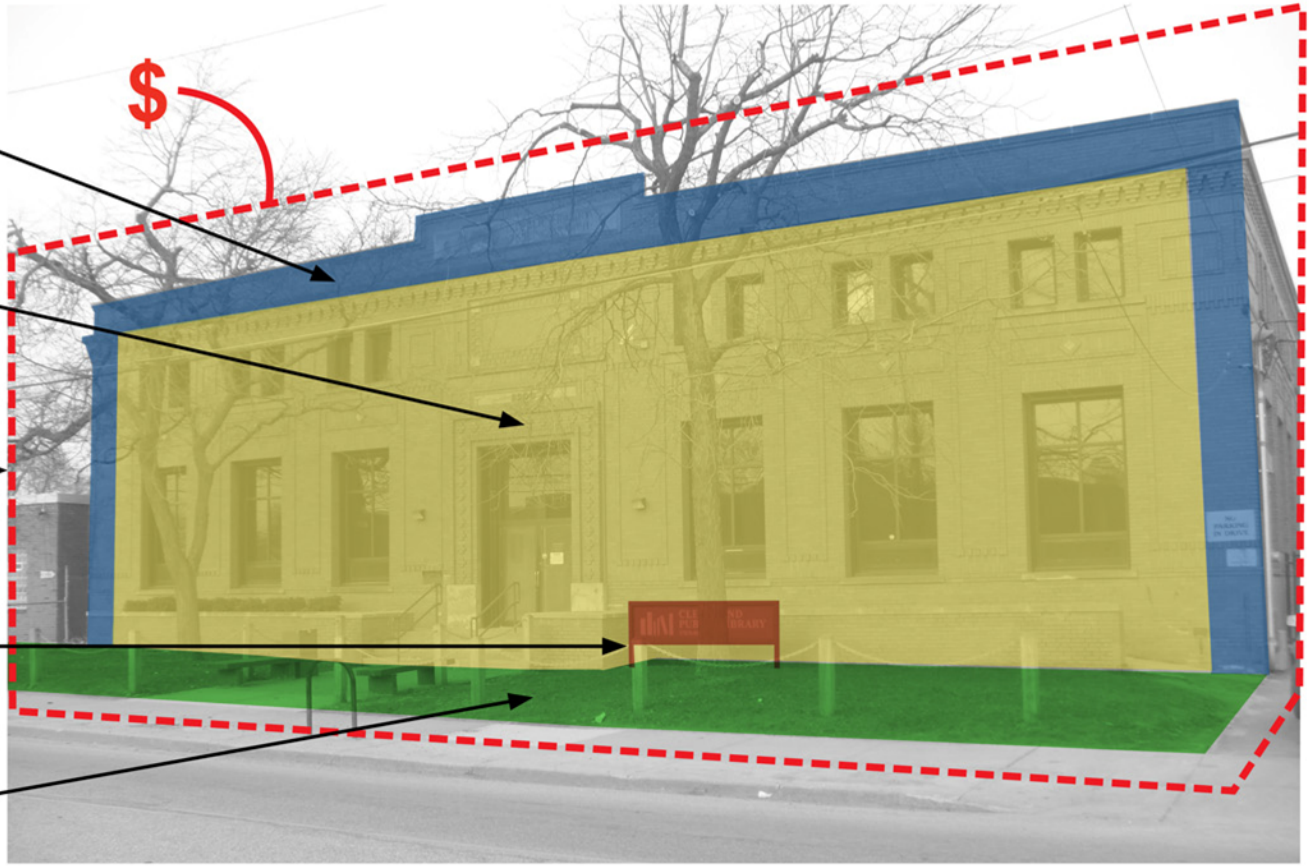
Westlake Reed Leskosky
ASSESSMENT OF BUILDING ENVELOPE
ASSESSMENT OF BUILDING SYSTEMS

designLAB architects
LIBRARY PROGRAMMING
FLOOR PLAN ASSESSMENT

ozanne
COST ESTIMATING

STUDIO GRAPHIQUE
GRAPHICS, WAYFINDING AND SIGNAGE

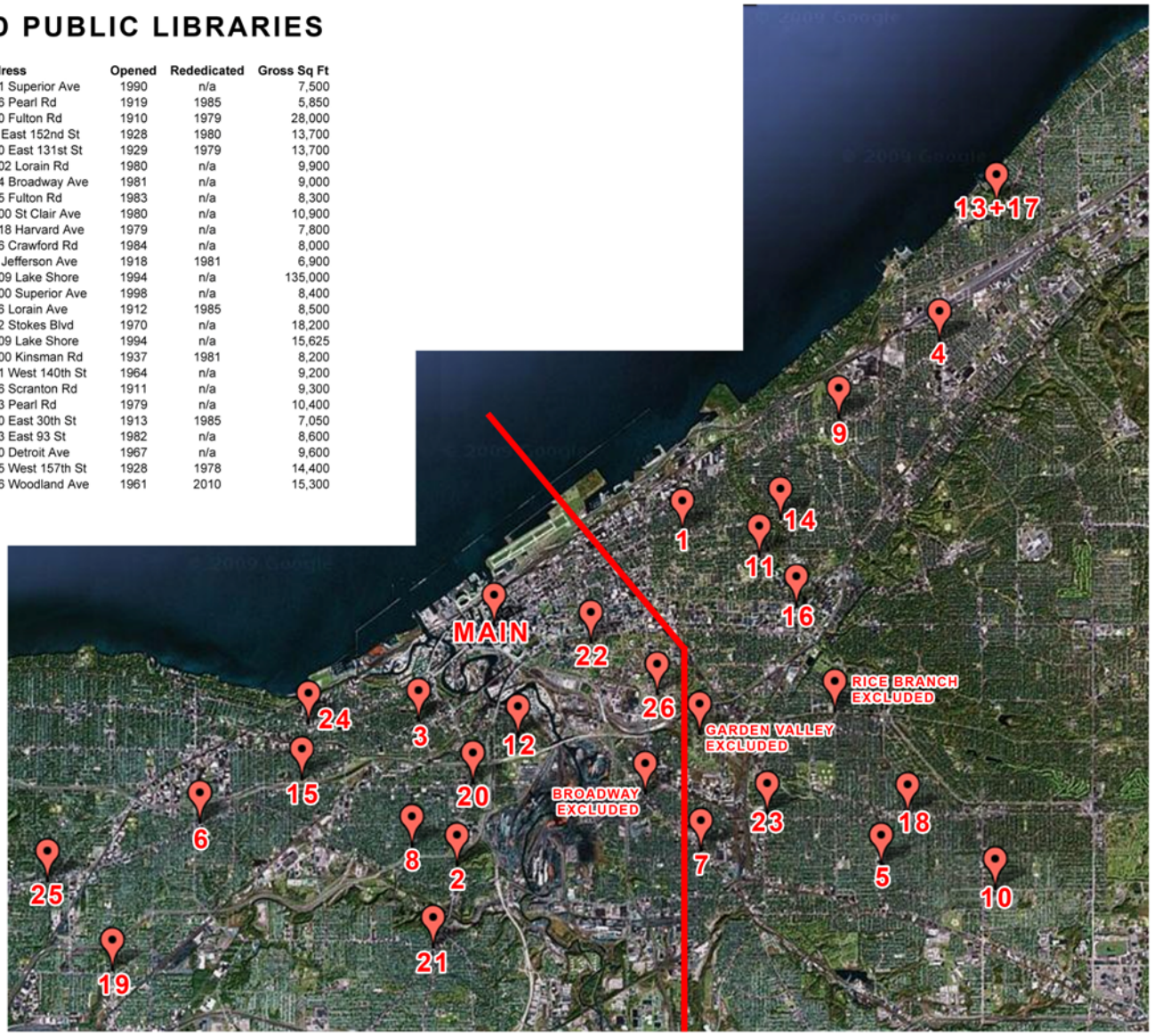
KNIGHT & STOLAR, INC.
Planning Consultants / Landscape Architects
LANDSCAPE ARCHITECTURE



Process

CLEVELAND PUBLIC LIBRARIES

	Branch	Address	Opened	Rededicated	Gross Sq Ft
1	Addison	6901 Superior Ave	1990	n/a	7,500
2	Brooklyn	3706 Pearl Rd	1919	1985	5,850
3	Carnegie West	1900 Fulton Rd	1910	1979	28,000
4	Collinwood	856 East 152nd St	1928	1980	13,700
5	East 131st St	3830 East 131st St	1929	1979	13,700
6	Eastman	11602 Lorain Rd	1980	n/a	9,900
7	Fleet	7224 Broadway Ave	1981	n/a	9,000
8	Fulton	3545 Fulton Rd	1983	n/a	8,300
9	Glenville	11900 St Clair Ave	1980	n/a	10,900
10	Harvard-Lee	16918 Harvard Ave	1979	n/a	7,800
11	Hough	1566 Crawford Rd	1984	n/a	8,000
12	Jefferson	850 Jefferson Ave	1918	1981	6,900
13	Lakeshore Facility	17109 Lake Shore	1994	n/a	135,000
14	Langston Hughes	10200 Superior Ave	1998	n/a	8,400
15	Lorain	8216 Lorain Ave	1912	1985	8,500
16	Martin Luther King, Jr.	1962 Stokes Blvd	1970	n/a	18,200
17	Memorial-Nottingham	17109 Lake Shore	1994	n/a	15,625
18	Mt Pleasant	14000 Kinsman Rd	1937	1981	8,200
19	Rockport	4421 West 140th St	1964	n/a	9,200
20	South	3096 Scranton Rd	1911	n/a	9,300
21	South Brooklyn	4303 Pearl Rd	1979	n/a	10,400
22	Sterling	2200 East 30th St	1913	1985	7,050
23	Union	3463 East 93 St	1982	n/a	8,600
24	Walz	7910 Detroit Ave	1967	n/a	9,600
25	West Park	3805 West 157th St	1928	1978	14,400
26	Woodland	5806 Woodland Ave	1961	2010	15,300



Establishing Priorities

Priority 1- Critical conditions

Examples include life safety, accessibility or critical structural Concerns.

- Fire alarm system in disrepair
- Non-accessible restrooms
- Critical structural concerns

Priority 2- Serious concerns

Examples include building envelope conditions, energy consumption issues or failing systems requiring high maintenance

- Leaking roof or parapet
- Single glazed windows
- Frequent mechanical unit failures

Establishing Priorities

Priority 3- Moderate conditions

Examples include moderate building envelope conditions, recommended repairs or old but functioning systems.

- Minor masonry tuck pointing
- Replace corroded door frames
- 20 year old Roof Top Unit still works with normal maint.

Priority 4- Minor concerns

Examples include minor repairs, or replacement of worn finishes

- Replace worn carpet, stained ceiling tiles and painting
- Replace worn millwork or window treatments
- Replace old fixtures

Cost Estimating- “Opinion of Probable Cost”

Ozanne Construction Co.

Costs are based on preliminary assessment
Solutions are not designed, items not specified
2011 dollars-expect escalation
Expect volatility in the construction market
Class 4-5 estimate- good for concept screening and strategic Planning
Class 4-5 estimate accuracy is +/- 30%
Overhead and profit included but no contingency
Environmental hazard abatement was not included

Executive Summary

Cleveland Public Library branches are well maintained and operated and offer a clean, comfortable resource for the community. The most notable deficiencies are lack of handicapped accessibility and old mechanical systems.

System wide cost by priority-

Priority 1- Critical	$ 2,442,791
Priority 2- Serious	$ 3,097,069
Priority 3- Moderate	$ 8,591,227
Priority 4- Minor	$ 867,944

Estimate of all system wide upgrades $ 14,999,031

(Does not include contingency or hazardous abatement)

Executive Summary- continued

Average projected cost per site is $576,000
(plus contingency, environmental and accuracy factor)

Highest cost sites:	Cost	Cost/ SF
Lakeshore	$ 2.5M	$ 160
MLK	$ 1.2M	$ 65
South	$ 1.4M	$ 120

New construction for Library (range $180-$240 SF +/-)

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Key Findings – Site Improvements

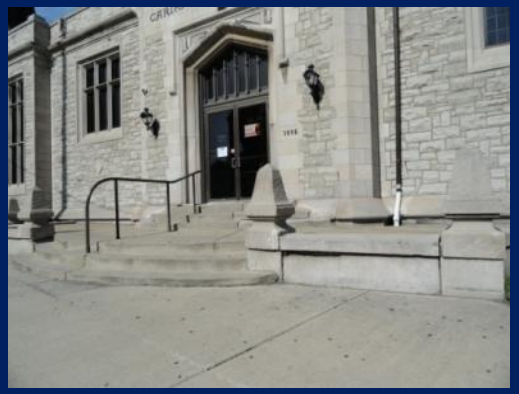
Common Site Findings

Need ADA compliant entry ramps:
- Carnegie West Branch
- Lorain Branch
- MLK Jr. Branch
- Rockport Branch
- South Branch
- Walz Branch

Need ADA compliant parking spaces:
- Rockport Branch
- South Branch
- South Brooklyn Branch

Need pavement repair
- Addison Branch
- Collinwood Branch
- West Park Branch

Lorain Branch



South Branch

West Park Branch

Common Architectural Findings

- Building envelope
  - Leaky roofs, flashings or copings
  - Corroded entrance systems
  - Masonry tuck pointing
- Accessibility
  - Non-accessible restrooms
  - Check out counters
  - Staff work areas/ lounges
- Finishes
  - Worn carpet, stained ceiling tiles, paint

Key Findings

Common Mechanical Findings

Mechanical Equipment (Boilers, Air Handlers, Misc.)

The majority of the mechanical equipment are at or over their median service life as suggested by ASHRAE.

Controls

Each library can benefit from advanced controls, control strategies, proper zoning, Outside Air Ventilation controls, variable frequency drives, and DDC (Direct Digital Control) to improve energy efficiencies.

Water Treatment

Water treatment of the heating water system protects the piping and equipment of the heating system. Many branches lack proper treatment of water, reducing service life.

Common Electrical Findings

Lighting

Most sites could benefit from upgrades lighting, not only for user comfort, but newer technology and design will result in energy savings.

Improved lighting controls

Avoid breaker switching for lights. Daylighting and occupancy control opportunities.

Power distribution

New panels will be required for increased computers. Routing of conduits/data to new locations will require careful design. Floor access is not always available.

Key Findings

Common Plumbing Findings

Plumbing Fixtures

Many of CPL public restrooms have existing ADA deficiencies that would require CPL to renovate these restrooms. It is recommended to replace these fixtures to reduce water consumption with renovation.

Recommended Fixture Requirements:

- Toilets: 1.28 Gallons Per Flush
- Urinals: 0.125 Gallons Per Flush
- Lavatories: 0.5 Gallons Per Minute (Aerators)
- Sinks: 0.5 Gallons Per Minute (Aerators)

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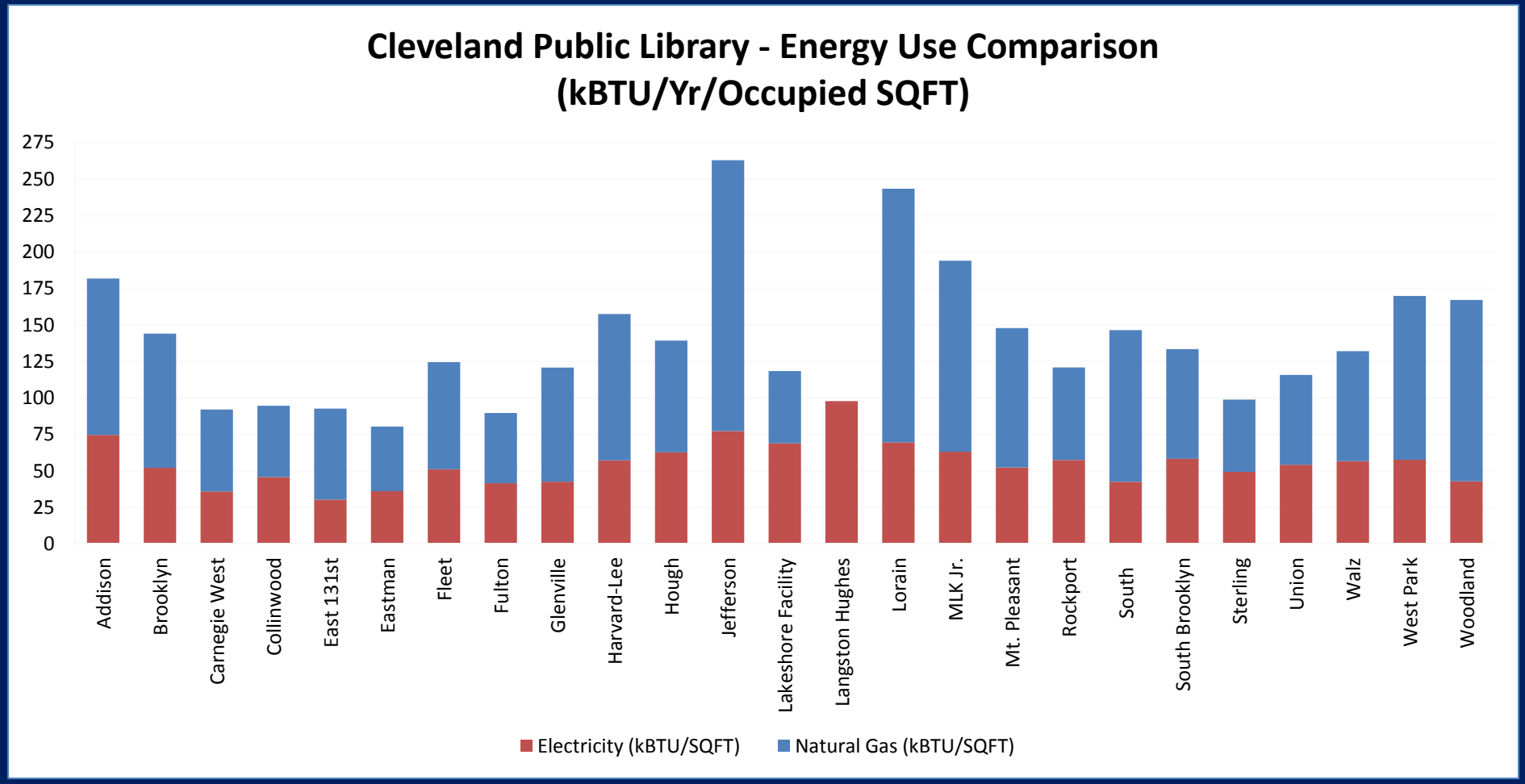
Key Findings

Energy Use – Energy (kBTU) Per Year



*Information based on actual utility bills provided by CPL.

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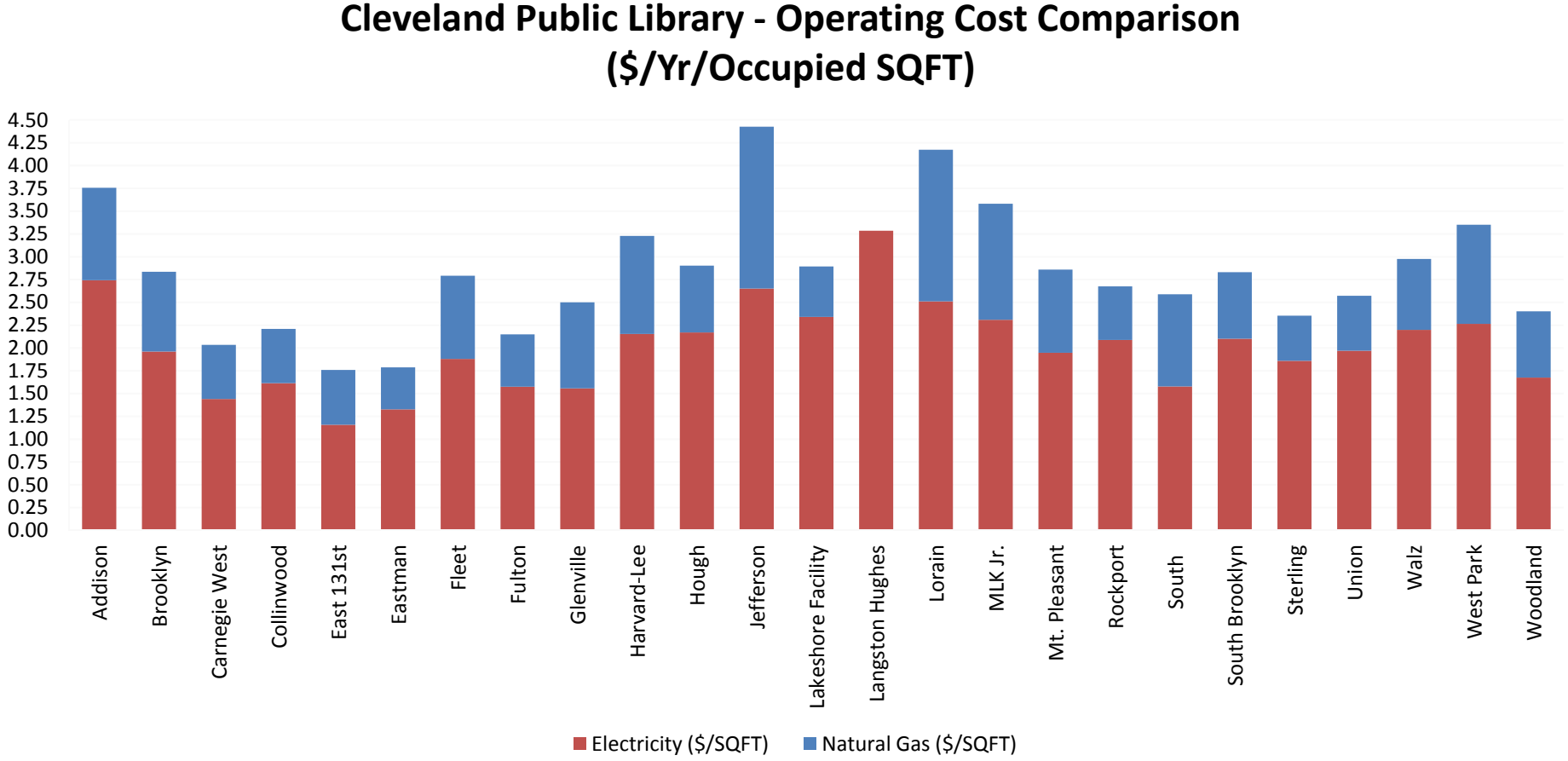
Key Findings

Energy Use – In U.S. Dollars Per Year



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Key Findings

Energy Use – Walz Library Energy Evaluation

Building #23
Walz Branch Library

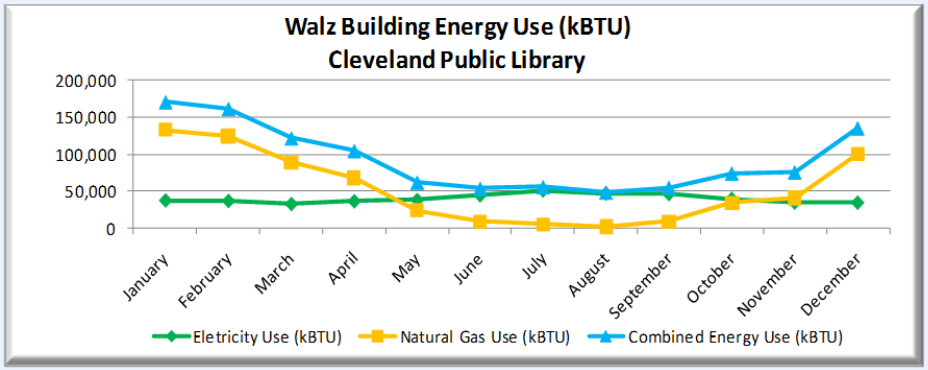
HVAC

CPL Main | CPL Libraries | CPL Assessments | Main Page | HVAC

Energy Ranking (kBTU/SQFT)
13th of 25 Reviewed Branches
Utility Ranking ($/SQFT)
17th of 25 Reviewed Branches

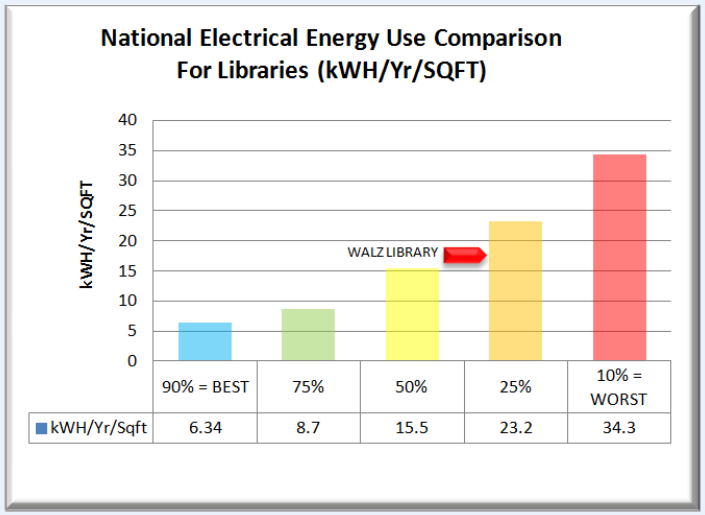
Library Building Performance		
$/SQFT:	**2.98**	Goal: <$2.0/SQFT
Overall kBTU/SQFT:	**132**	Goal: <92kBTU/SQFT
Gas kBTU/SQFT:	**75.4**	Goal: N/A
Electrical kWH/SQFT:	**16.61**	Goal: N/A

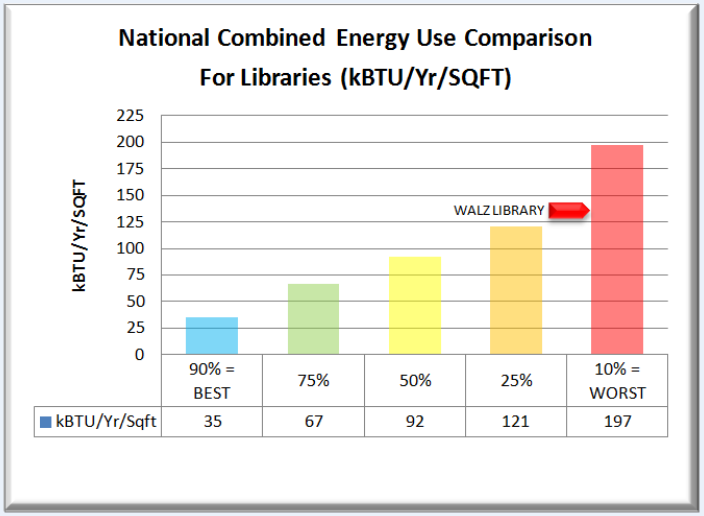
National Percentile of Libraries	
Overall Energy Use (kBTU/SQFT):	**10th**
Electrical Use (kBTU/SQFT):	**25th**



Building Profile:
Built: 1964
Building Gross SQFT: 9,600
Building Occupied SQFT: 8,500

Energy Use Summary:
This library's large energy consumers consist of (2) 80% Efficient Boilers with a Constant Volume Forced Air Split System. Waltz's energy performance can be improved through engineered evaluation, the purchasing of high efficiency equipment, upgraded building and temperature controls, lighting upgrades, and building envelope improvements. The energy use curve of this branch appears to be normal with higher gas use in the winter time and higher electric use in the summer time.





Next Steps- Planning

Next Steps

Meet with CPL leadership for workshop(s)
Determine Project priorities and phasing for reinvestment
Cost vs Value Comparisons.
Operational decisions
Decide how and where the money will be spent
On what schedule is funding available

Goal-
Develop a Master Plan outlining the desired reinvestment opportunities with a timeline that matches available funding

Assessment >> Planning >> Implementation

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Facility Assessment Sorting Tool

Go to data base-

Questions-

End of presentation

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Facility Assessment Sorting Tool