



**Lake Michigan College  
2012 Facility Condition Assessment Project  
Final Report**

September 12, 2012

Based on Condition Survey Provided by:

**VFA**

V10.0.3

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Lake Michigan College  
2012 Facility Condition Assessment  
Final Report Outline

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# Executive Portfolio Summary

By Region

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**Report Overview**

This report provides a high-level overview of the portfolio's condition, summarizing key information and identifying areas of concern. This report helps make high-level portfolio management and budget allocation decisions.

The three sections of this report are:

- **Portfolio FCI Range:** Shows minimum, maximum and group-average facility conditions based on the FCI. The facilities' average age and the backlog (projected costs associated with the group of facilities over the specified timeframe) are also provided.
- **Distribution of Requirement and Renewal Costs:** Shows a segmented roll-up of requirement and renewal costs.
- **Investment Summary:** Shows requirement and renewal costs broken out by year.

Average FCI: 0.192  
Portfolio Size: 561,293 SF

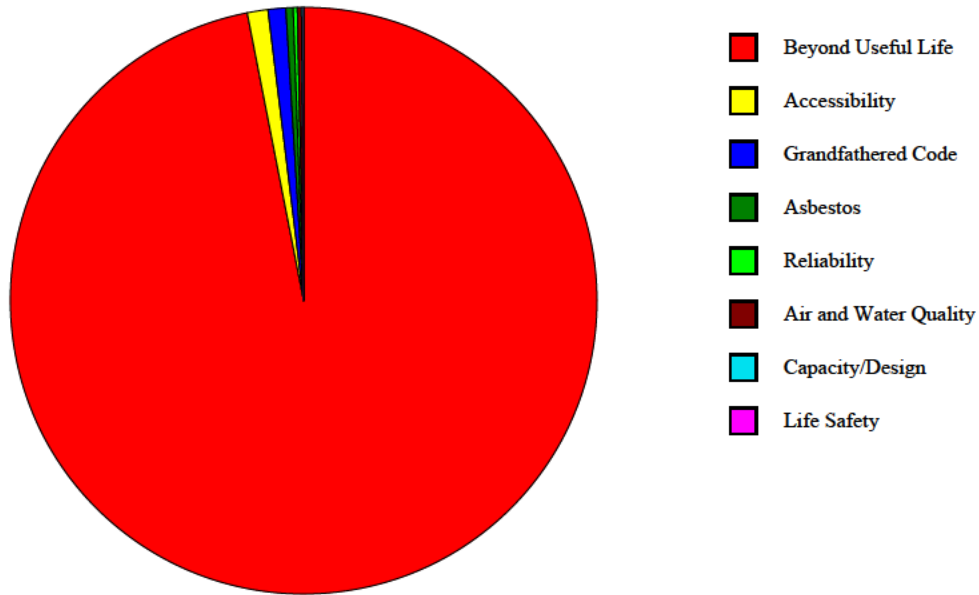
**Portfolio FCI Range**



All costs in 000s USD.

<b>Region</b>	<b>Minimum FCI</b>	<b>Maximum FCI</b>	<b>FCI Range</b>	<b>Average FCI</b>	<b>Average Age</b>	<b>Backlog</b>
Lake Michigan College	0.022	0.293	0.271	0.192	22.6	52,418

**Distribution of Requirement and Renewal Costs  
By Category**

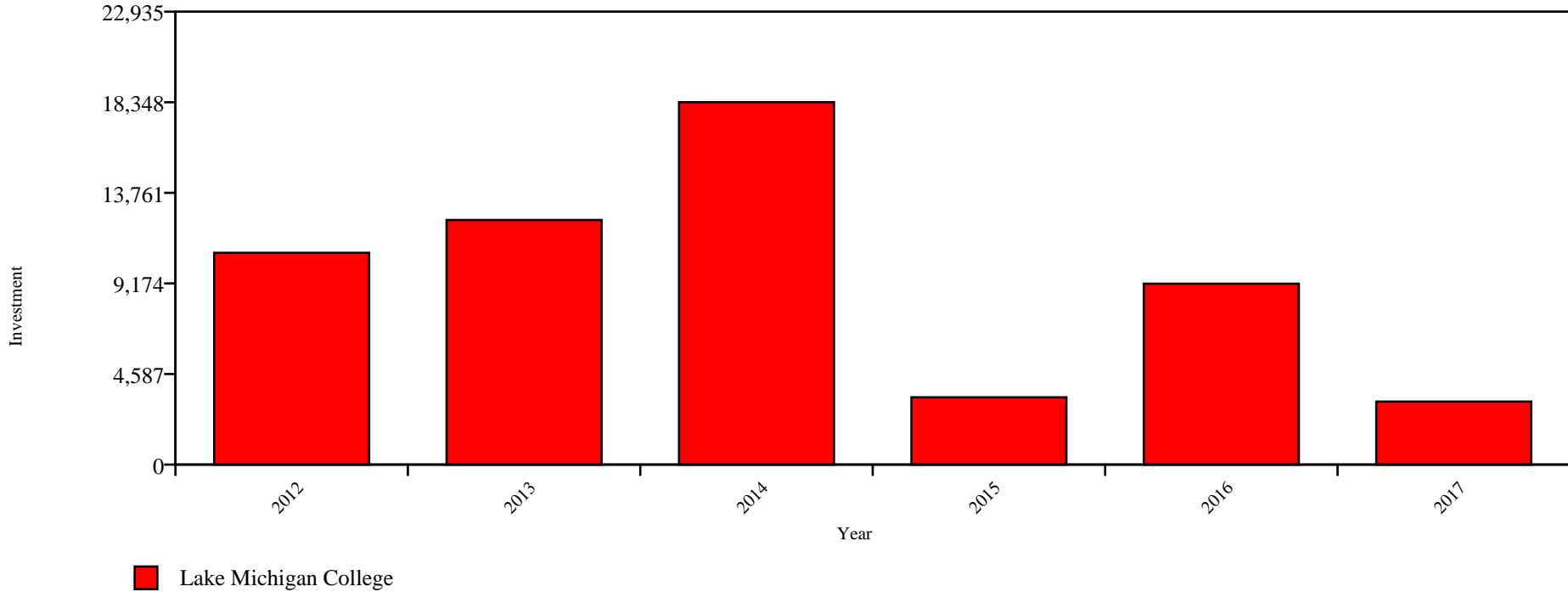


Category	Estimated Cost	Percentage of Total Cost
Beyond Useful Life	55,450	97%
Accessibility	652	1%
Grandfathered Code	558	1%
Asbestos	227	0%
Reliability	131	0%
Air and Water Quality	126	0%
Capacity/Design	66	0%
Life Safety	3	0%
<b>Total :</b>	<b>57,215</b>	

All costs in 000s USD.



Investment By Region, Per Year



Region	2012	2013	2014	2015	2016	2017	Total
Lake Michigan College	10,723	12,385	18,351	3,407	9,159	3,189	57,215
<b>Total :</b>	<b>10,723</b>	<b>12,385</b>	<b>18,351</b>	<b>3,407</b>	<b>9,159</b>	<b>3,189</b>	<b>57,215</b>

All costs in 000s USD.

**Report Parameters:****Region:**

Lake Michigan College,

**Campus:**

Lake Michigan College,

**Backlog Period:** 5**Costs include 4.70% inflation rate.****Backlog is not inflated.**



# Asset Snapshot Report

By Asset Name

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**Region:** Lake Michigan College  
**Campus:** Lake Michigan College

**Asset Name:** Napier Academic  
**Asset Number:** 1

**STATISTICS**

<b>FCI Cost:</b> 17,259,669	<b>FCI:</b> 0.29
<b>Total Requirements Cost:</b> 18,135,432	<b>RI:</b> 0.31

<b>Current Replacement Value</b>	58,845,201	<b>Size</b>	303,147 SF
<b>Address 1</b>	2755 East Napier Avenue	<b>Address 2</b>	-
<b>City</b>	-	<b>State/Province/Region</b>	MI

**PHOTO**



South Elevation

**SYSTEMS DESCRIPTION**

**A - Substructure - Foundation Wall and Footings - No Basement**

Basic foundation for building without basement - to include strip footing, 4-ft foundation wall and damp proofing. Also included are underdrains.

**A - Substructure - Structural Slab on Grade - Non Industrial**

*All costs in USD.*

The building substructure includes a non-industrial type structural slab on grade.

**A10 - Foundations - Concrete Footings**

Concrete column footings.

**B10 - Superstructure - Superstructure - Multi Story - Concrete**

Multi story light-weight structure with specific reinforced concrete construction. Concrete construction makes up entire structure, except for the gymnasium (E wing).

**B10 - Superstructure - Superstructure - Multi Story - Concrete/Steel - E Wing**

E wing (gymnasium) is comprised of a combination of a concrete structure with open web steel joists supporting a pre-cast concrete deck.

**B10 - Superstructure - Superstructure - Single Story - Steel - Penthouses**

Four mechanical penthouses are single-story steel framed buildings with a steel roof structure. Two are located on C wing, one each on B and L wing.

**B1015 - Exterior Stairs and Fire Escapes - Exterior Stairs - Concrete**

Exterior Concrete Stairs (6' wide x 5 risers) with railing. Two sets of exterior stairs. One located at the junction of B and S wing. The other is located at the junction of C and D wing.

**B1015 - Exterior Stairs and Fire Escapes - Exterior Stairs - Concrete - Circular**

Exterior Concrete Stairs (6' wide x 5 risers) with railing. Located at the junction of B and E wing. The circular stairs are severely deteriorated, and need to be replaced immediately.

**B1015 - Exterior Stairs and Fire Escapes - Exterior Stairs - Concrete - Platform**

The exterior stairs located on the west elevation of S wing are comprised of concrete platforms supported by a single concrete column at each platform.

**B2010 - Exterior Walls - Brick Walls**

The exterior wall construction is of brick cavity walls.

**B2010 - Exterior Walls - Metal Paneled Walls**

The exterior wall construction is of high quality metal panels such as standing seam metal located at the balcony on L wing, and the soffit/third floor at B and C Wing.

**B2010 - Exterior Walls - Pedestrian Sky Bridges - Concrete**

Concrete pedestrian bridges. Includes main entry bridge and four small bridges.

**B2010 - Exterior Walls - Pedestrian Sky Bridges - Steel**

Steel pedestrian bridge located at the southwest entry to D wing and the southeast emergency exit of the gymnasium at E wing. The steel bridges are in good condition, leading to their extended life.

**B2020 - Exterior Windows - Aluminum Windows - 1998**

The building includes aluminum framed exterior units, with insulating glass located at the south elevation of A, B and C wing, third floor only. Also located at the north elevation of A wing, third floor only.

**B2020 - Exterior Windows - Aluminum Windows - 2009**

The building includes aluminum framed exterior units, with insulating glass located at the north elevation of B and C wing, third floor only.

**B2020 - Exterior Windows - Aluminum Windows - Financial Aid**

The building includes aluminum framed exterior units, with insulating glass. Clerestory windows located in financial aid.

**B2020 - Exterior Windows - Aluminum Windows - L Wing**

The building includes aluminum framed exterior units, with single pane glass. Located on the north side of L wing, these windows are aged and energy inefficient.

*All costs in USD.*

**B2020 - Exterior Windows - Curtain Wall System - A Wing**

Exterior curtain wall window system with insulating glass. Located at the north elevation of the second floor of A wing.

**B2020 - Exterior Windows - Steel Windows**

The building includes steel framed exterior window units, with single pane glass. Original steel windows located throughout building are deteriorated and energy inefficient.

**B2030 - Exterior Doors - Door Assembly - 3 x 7 HM**

Exterior doors include non-rated 3 x 7 steel door and steel frame with hinges and lockset. Includes painted door and painted frame.

**B2030 - Exterior Doors - Door Assembly - 3 x 7 Storefront**

The exterior doors include swinging glazed aluminum storefront leaf, aluminum frame, hardware, including closer.

**B2030 - Exterior Doors - Door Assembly - 3 x 7 Storefront - 2000**

The exterior doors include swinging glazed aluminum storefront leaf, aluminum frame, hardware, including closer. Located in financial aid.

**B2030 - Exterior Doors - Door Assembly - 3 x 7 Storefront - 2004**

The exterior doors include swinging glazed aluminum storefront leaf, aluminum frame, hardware, including closer. Located in at the east elevation of B wing.

**B2030 - Exterior Doors - Door Assembly - 6 x 7 HM**

Exterior doors include pr. 3 x 7 steel doors and steel frame with hinges and locksets. Includes painted doors and painted frame.

**B2030 - Exterior Doors - Door Assembly - 6 x 7 Storefront**

The exterior doors include pr. swinging glazed aluminum storefront leafs plus glazed transom, aluminum frame, hardware, including closers.

**B2030 - Exterior Doors - Door Assembly - 6 x 7 Storefront - 2000**

The exterior doors include pr. swinging glazed aluminum storefront leafs plus glazed transom, aluminum frame, hardware, including closers. Typically located in A wing.

**B2030 - Exterior Doors - Door Assembly - 6 x 7 Storefront - 2004**

The exterior doors include pr. swinging glazed aluminum storefront leafs plus glazed transom, aluminum frame, hardware, including closers. Located at the junction of C and S wing, as well as at the entry to D wing.

**B2030 - Exterior Doors - Overhead Doors (Electrically Operated) - S Wing**

S wing includes four steel overhead doors located at the east elevation. Overhead doors are in good condition, leading to their extended life.

**B2030 - Exterior Doors - Overhead Doors (Manually Operated) - B Wing**

B wing includes steel overhead doors on the north elevation. Overhead doors are in good condition, leading to their extended life.

**B30 - Roofing - Adhered Membrane (EPDM) Single-Ply**

The roof covering is of a single-ply adhered membrane with insulation. The EPDM is in poor condition, with leaks throughout B, D and E wing.

**B30 - Roofing - Adhered Membrane (EPDM) Single-Ply - A Wing**

The roof covering is of a single-ply adhered membrane with insulation. Located on the section of A wing between D and E wing.

**B30 - Roofing - Metal Roofing**

The roof covering is of formed metal roofing, such as standing seam metal. Located on financial aid and the adjacent hall in A wing.

**B30 - Roofing - Single Ply Membrane - Ballasted - L Wing**

*All costs in USD.*

The roof covering is of a single-ply membrane covered with stone ballast and including deck insulation. It was reported that this roof is in good condition, with few, if any leaks. Located on L wing.

**B30 - Roofing - Single-Ply Eco White EPDM Membrane - Fully Adhered - C Wing**

Single Ply 60 mil EPDM Eco White Firestone Roofing Membrane. C wing installed during summer 2009, Title III Phase 1.

**B30 - Roofing - Single-Ply EPDM with Pavers on Roof - S Wing**

The roof covering includes tiled, brick, granite plaza surfaces. Located above S wing. It was reported that this roof is in good condition, with few, if any, leaks.

**B30 - Roofing - ~Adhered Membrane (EPDM) Single-Ply**

Single ply Eco-white and beige energy efficient roofing and insulation installed in August 2012.

**B3021 - Glazed Roof Openings - Skylights - Dome Types (Plastic) - C Wing**

Skylight with plastic dome, located over the stairs in C wing.

**B3021 - Glazed Roof Openings - Skylights - Monumental**

Skylights are aged, deteriorated and inefficient. Several show signs of leaking or condensation. The skylights consist of single pane glass.

**B3021 - Glazed Roof Openings - Skylights - Monumental L-Wing**

Skylights are aged, deteriorated and inefficient. Several show signs of leaking or condensation. The skylights consist of single pane glass.

**C10 - Interior Construction - Restroom - Complete - Double - A Wing**

Complete restroom including fixtures, accessories, wall, floor, and ceiling finishes, lighting, exhaust and outlets. Handicap compliant. Fire alarm devices are not included. Located on the third floor of A wing. Restrooms have been well maintained, and are in good condition, leading to their extended life.

**C10 - Interior Construction - Restroom - Complete - Gang - B Wing**

Complete restroom including fixtures, accessories, wall finishes, floor finishes, ceiling finishes, exhaust, lighting fixtures and receptacles. Accessible compliant. Fire alarm devices are not included. Restrooms have been well maintained, and are in good condition, leading to their extended life. Located on the third and first floor of B wing.

**C10 - Interior Construction - Restroom - Complete - Gang - B Wing - 2000**

Complete restroom including fixtures, accessories, wall finishes, floor finishes, ceiling finishes, exhaust, lighting fixtures and receptacles. Accessible compliant. Fire alarm devices are not included. Located in the day care area on the first floor of B wing.

**C10 - Interior Construction - Restroom - Complete - Gang - B Wing - 2000**

Complete restroom including fixtures, accessories, wall finishes, floor finishes, ceiling finishes, exhaust, lighting fixtures and receptacles. Accessible compliant. Fire alarm devices are not included. Located on the second floor of B wing.

**C10 - Interior Construction - Restroom - Complete - Gang - C Wing**

Complete restroom including fixtures, accessories, wall finishes, floor finishes, ceiling finishes, exhaust, lighting fixtures and receptacles. Accessible compliant. Fire alarm devices are not included. Restrooms have been well maintained, and are in good condition, leading to their extended life.

**C10 - Interior Construction - Restroom - Complete - Gang - C Wing - 2011**

Complete restroom including fixtures, accessories, wall finishes, floor finishes, ceiling finishes, exhaust, lighting fixtures and receptacles. Accessible compliant. Fire alarm devices are not included. Located at the 3rd floor.

**C10 - Interior Construction - Restroom - Complete - Gang - D Wing**

*All costs in USD.*

Complete restroom including fixtures, accessories, wall finishes, floor finishes, ceiling finishes, exhaust, lighting fixtures and receptacles. Fire alarm devices are not included. Restrooms have been well maintained, and are in good condition, leading to their extended life. Located on the first floor of D wing.

**C10 - Interior Construction - Restroom - Complete - Gang - E Wing**

Complete restroom including fixtures, accessories, wall finishes, floor finishes, ceiling finishes, exhaust, lighting fixtures and receptacles. Fire alarm devices are not included. Restrooms have been well maintained, and are in good condition, leading to their extended life.

**C10 - Interior Construction - Restroom - Complete - Gang - L Wing**

Complete restroom including fixtures, accessories, wall finishes, floor finishes, ceiling finishes, exhaust, lighting fixtures and receptacles. Fire alarm devices are not included. Restrooms have been well maintained, and are in good condition, leading to their extended life. Located on the third and first floor of L wing.

**C10 - Interior Construction - Restroom - Complete - Gang - S Wing**

Complete restroom including fixtures, accessories, wall finishes, floor finishes, ceiling finishes, exhaust, lighting fixtures and receptacles. Fire alarm devices are not included. Restrooms have been well maintained, and are in good condition, leading to their extended life. Located in S wing.

**C10 - Interior Construction - Restroom - Complete - Single - B Wing - 2000**

Complete restroom including fixtures, accessories, wall finishes, floor finishes, ceiling finishes, exhaust, lighting fixtures and receptacles. Includes unisex restroom on the third floor, and the staff restroom in the day care on the first floor of B wing.

**C10 - Interior Construction - Restroom - Shower - Add - E Wing**

Gang shower with two column type showers located on the first floor of E wing. Shower is in good condition, leading to its extended life.

**C10 - Interior Construction - Restroom - Shower - Add - E Wing**

Gang shower with two column type showers with partitions located on the second floor of E wing. Shower is in good condition, leading to its extended life.

**C1010 - Partitions - CMU Block Walls - Plain**

Interior walls include 8-in. hollow concrete block, light and regular weight, with no finish.

**C1010 - Partitions - CMU Walls - Glazed 2 Sides**

The building interior includes 8-in. x 16-in. x 8-in. CMU partitions with glazing two sides. Located in L Wing third floor kitchen.

**C1010 - Partitions - Folding Partitions - Deluxe**

The Medical Imaging Career Cener includes deluxe quality folding panel partitions.

**C1010 - Partitions - GWB Walls - Standard (Non-Painted)**

The building interior includes standard GWB partitions, taped and finished, but not painted, with no insulation, as well as plaster partitions.

**C1010 - Partitions - GWB Walls - Standard (Non-Painted) - A Wing**

The building interior includes standard GWB partitions, taped and finished, but not painted, with no insulation.

**C1010 - Partitions - Plaster Walls - 3 Coats**

The building interior walls consist of a combination of three coats of gypsum plaster on 3.4 lbs ribbed lath each side of 3-5/8-in. metal studs, or GWB.

**C1020 - Interior Doors - Swinging Doors**

Interior doors include 3' x 7' doors with hinges, lockset and closer. Includes steel and wood (birch and oak) faced rated doors, painted doors and frames.

*All costs in USD.*



**C1020 - Interior Doors - Swinging Doors - 2011**

Interior doors at the Medical Imaging Career Center and the 3rd Floor Renovations project include 3' x 7' doors with hinges, lockset and closer. Includes steel and wood (birch and oak) faced rated doors, painted doors and frames.

**C1020 - Interior Doors - Swinging Doors - A Wing**

Interior doors include 3' x 7' doors with hinges, lockset and closer. Includes steel and wood (birch and oak) faced rated doors, painted doors and frames.

**C1035 - Identifying Devices - Fittings: Signage (Room Numbering and Identification)**

Signs, graphic symbols, adhesive back, w/Braille, 8" x 8" + Signs, flexible door sign, adhesive back, w/Braille, 5/8" letters.

**C20 - Stairs - Stairs**

The interior stairs consist of 12 risers per flight with landing and 2 flights per story.

**C20 - Stairs - Stairs - Spiral**

Building includes steel spiral staircases. Three in D wing and one in E wing.

**C3010 - Wall Finishes - Brick**

Building wall finishes include brick.

**C3010 - Wall Finishes - Ceramic Tile**

Building wall coverings include 4-in. x 4-in. thin set ceramic decorator tiles at medium price. Tile job includes wainscot with bullnose trim.

**C3010 - Wall Finishes - Paint Masonry/Epoxy Finish - Economy**

Wall finishes include paint on CMU and minimum hi-build epoxy finish.

**C3010 - Wall Finishes - Painted Finish - (1 Coat Prime - 2 Coats Finish)**

Interior wall finishes include standard paint finish.

**C3010 - Wall Finishes - Raised Wood Paneling - High End FR (Fire-Rated) - C Wing**

Wall finishes at 3rd floor corridor renovation include high quality raised wood paneling, fire-rated.

**C3010 - Wall Finishes - Raised Wood Paneling - High End FR (Fire-Rated) - S Wing**

Wall finishes at the 1st floor corridor renovation include high quality raised wood paneling, fire-rated.

**C3020 - Floor Finishes - Carpeting 3 - Carpet Broadloom - A Wing**

Floor finishes include medium priced carpeting and base for average office areas. Located on the third floor of A wing.

**C3020 - Floor Finishes - Carpeting 3 - Carpet Broadloom - A Wing - 2000**

Floor finishes include medium priced carpeting and base for average office areas. Located in one stop.

**C3020 - Floor Finishes - Carpeting 3 - Carpet Broadloom - B Wing**

Floor finishes include medium priced carpeting and base for average office areas. Located in B103 and B213.

**C3020 - Floor Finishes - Carpeting 3 - Carpet Broadloom - B Wing - 2000**

Floor finishes include medium priced carpeting and base for average office areas. Located in B wing.

*All costs in USD.*

**C3020 - Floor Finishes - Carpeting 3 - Carpet Broadloom - B Wing - 2008**

Floor finishes include medium priced carpeting and base for average office areas. Located in B wing on the third floor corridor.

**C3020 - Floor Finishes - Carpeting 3 - Carpet Broadloom - C Wing**

Floor finishes include medium priced carpeting and base for average office areas. Located throughout C wing.

**C3020 - Floor Finishes - Carpeting 3 - Carpet Broadloom - C Wing - 2000**

Floor finishes include medium priced carpeting and base for average office areas. Located in the first and second floor corridors, as well as the administration area on the second floor of C wing.

**C3020 - Floor Finishes - Carpeting 3 - Carpet Broadloom - C Wing - 2008**

Floor finishes include medium priced carpeting and base for average office areas. Located in classrooms on the first and second floor of C wing.

**C3020 - Floor Finishes - Carpeting 3 - Carpet Broadloom - C Wing - 2011**

Floor finishes include medium priced carpeting and base for average office areas. Located at the 1st floor Medical Imaging Career Center and the 3rd floor renovations.

**C3020 - Floor Finishes - Carpeting 3 - Carpet Broadloom - D Wing**

Floor finishes include medium priced carpeting and base for average office areas. Located in the two lecture halls and the music practice room in D wing.

**C3020 - Floor Finishes - Carpeting 3 - Carpet Broadloom - D Wing - 2000**

Floor finishes include medium priced carpeting and base for average office areas. Located in the corridor and D116 in D wing.

**C3020 - Floor Finishes - Carpeting 3 - Carpet Broadloom - E Wing**

Floor finishes include medium priced carpeting and base for average office areas. Located on the second floor mezzanine in the gymnasium.

**C3020 - Floor Finishes - Carpeting 3 - Carpet Broadloom - L Wing**

Floor finishes include medium priced carpeting and base for average office areas.

**C3020 - Floor Finishes - Carpeting 3 - Carpet Broadloom - S Wing**

Floor finishes include medium priced carpeting and base for average office areas. Located throughout S wing.

**C3020 - Floor Finishes - Carpeting 3 - Carpet Broadloom - S Wing - 2011**

Floor finishes include medium priced carpeting and base for average office areas. Located at the 1st floor, "Hall of Pride" corridor.

**C3020 - Floor Finishes - Ceramic Tile - Thin Set - A Wing - 2000**

Floor finishes include ceramic tile. Located in one stop and the main entry between D and E wings.

**C3020 - Floor Finishes - Epoxy Flooring**

Floor finishes include cement epoxy flooring. Located at the 3rd Floor Renovation Project, Rm. Nos. C334 and C309D.

**C3020 - Floor Finishes - Quarry Tile - L Wing**

Floor finishes include quarry tile in the kitchen area on the third floor of L wing. Tile is in good condition, leading to its extended life.

**C3020 - Floor Finishes - Rubber Tile - C Wing**

Non-slip rubber flooring, sheet or tile, with raised standard pastilles and colors. Located at the 1st floor Medical Imaging Career Center, 3rd floor corridor and 3rd Floor Renovation Project.

**C3020 - Floor Finishes - Rubber Tile - S Wing**

*All costs in USD.*

Non-slip rubber flooring, sheet or tile, with raised standard pastilles and colors. Located at the 1st floor, "Hall of Pride" corridor.

**C3020 - Floor Finishes - VCT 2 - A Wing**

Floor finishes include standard quality VCT flooring and baseboard. Located in A303.

**C3020 - Floor Finishes - VCT 2 - B Wing - 2000**

Floor finishes include standard quality VCT flooring and baseboard. Located in the day care area on the first floor of B wing.

**C3020 - Floor Finishes - VCT 2 - C Wing**

Floor finishes include standard quality VCT flooring and baseboard. Located on the third floor of C wing.

**C3020 - Floor Finishes - VCT 2 - C Wing - 2008**

Floor finishes include standard quality VCT flooring and baseboard. Located in medical imaging on the first floor of C wing.

**C3020 - Floor Finishes - VCT 2 - E Wing**

Floor finishes include standard quality VCT flooring and baseboard. Located on the second floor mezzanine at the gymnasium.

**C3020 - Floor Finishes - VCT 2 - S Wing**

Floor finishes include standard quality VCT flooring and baseboard. Located in S113/S114.

**C3020 - Floor Finishes - VCT 2 - S Wing - 2005**

Floor finishes include standard quality VCT flooring and baseboard. Located in the cafeteria in S wing.

**C3020 - Floor Finishes - Wood Flooring - E Wing**

Floor finishes include strip flooring, located in the gymnasium in E wing.

**C3020 - Floor Finishes - ~Carpeting 3 - Carpet Broadloom - A Wing**

Vice President Finance and Admin and associated office spaces, along with Dir, HR replaced summer 2012

**C3030 - Ceiling Finishes - ACT Concealed Spline System - A Wing**

Concealed spline 12 x 12 x 3/4-in. ACT ceiling system with "Z" grid. Located in the offices on the third floor of A wing.

**C3030 - Ceiling Finishes - ACT Concealed Spline System - D Wing**

Concealed spline 12 x 12 x 3/4-in. ACT ceiling system with "Z" grid. Located at the second level adjacent to the lecture halls in D wing.

**C3030 - Ceiling Finishes - ACT Concealed Spline System - L Wing**

Concealed spline 12 x 12 x 3/4-in. ACT ceiling system with "Z" grid.

**C3030 - Ceiling Finishes - ACT Concealed Spline System - S Wing**

Concealed spline 12 x 12 x 3/4-in. ACT ceiling system with "Z" grid. Located throughout S wing.

**C3030 - Ceiling Finishes - ACT System - A Wing - 2000**

Standard suspended ACT ceiling system with 2 x 2 or 2 x 4 regular tiles in 15/16 or 9/16-in. grids. Located at one stop, the main entry and the corridor on the third floor of A wing.

**C3030 - Ceiling Finishes - ACT System - B Wing - 2000**

Standard suspended ACT ceiling system with 2 x 2 or 2 x 4 regular tiles in 15/16 or 9/16-in. grids.

*All costs in USD.*

**C3030 - Ceiling Finishes - ACT System - B Wing - 2008**

Standard suspended ACT ceiling system with 2 x 2 or 2 x 4 regular tiles in 15/16 or 9/16-in. grids. Located in medical imaging on the first floor of C wing.

**C3030 - Ceiling Finishes - ACT System - C Wing - 2000**

Standard suspended ACT ceiling system with 2 x 2 or 2 x 4 regular tiles in 15/16 or 9/16-in. grids. Located throughout C wing.

**C3030 - Ceiling Finishes - ACT System - C Wing - 2011**

Standard suspended ACT ceiling system with 2 x 2 regular tiles in 15/16-in. grids. Located in C Wing, 1st floor Medical Imaging Career Center and 3rd Floor Renovation Project.

**C3030 - Ceiling Finishes - ACT System - C-Wing 2009**

Standard suspended ACT ceiling system with 2 x 2 regular tiles in 15/16-in. grids. Title III Phase I, August 2009.

**C3030 - Ceiling Finishes - ACT System - S Wing - 2000**

Standard suspended ACT ceiling system with 2 x 2 or 2 x 4 regular tiles in 15/16 or 9/16-in. grids. Typically located in the corridors of S wing.

**C3030 - Ceiling Finishes - GWB Taped and Finished - A Wing - 2000**

GWB ceiling system over 8-ft above floor taped, finished and painted with primer and 2 finish coats. Ceiling on suspension system or fastened to mtl or wd furring. Located in the main entry between D and E wings.

**C3030 - Ceiling Finishes - GWB Taped and Finished - C Wing**

GWB ceiling system over 8-ft above floor taped, finished and painted with primer and 2 finish coats. Ceiling on suspension system or fastened to mtl or wd furring. GWB is in good condition, leading to its extended life.

**C3030 - Ceiling Finishes - GWB Taped and Finished - C Wing - 2011**

GWB ceiling system over 8-ft above floor taped, finished and painted with primer and 2 finish coats. Ceiling on suspension system or fastened to mtl or wd furring.

**C3030 - Ceiling Finishes - GWB Taped and Finished - D Wing**

GWB ceiling system over 8-ft above floor taped, finished and painted with primer and 2 finish coats. Ceiling on suspension system or fastened to mtl or wd furring. Located in the corridor and restrooms of D wing. GWB is in good condition, leading to its extended life.

**C3030 - Ceiling Finishes - GWB Taped and Finished - L Wing**

GWB ceiling system over 8-ft above floor taped, finished and painted with primer and 2 finish coats. Ceiling on suspension system or fastened to mtl or wd furring. GWB is in good condition, leading to its extended life.

**D1010 - Elevators and Lifts - Hydraulic Freight Elevator**

The conveying equipment includes a 4000 Lb. freight hydraulic elevator - three stops. Note: Observed Years remaining extended based on observed existing conditions.

**D1010 - Elevators and Lifts - Hydraulic Passenger Elevator**

The conveying equipment includes three (3) 2000 Lb. passenger hydraulic elevator - 3 stories. Observed Years Remaining extended based on existing conditions

**D1090 - Other Conveying Systems - Dumbwaiter for Low Rise**

The conveying system includes a dumbwaiter for a low rise building. This system is utilized in the library and is original to the building.

**D2010 - Plumbing Fixtures - Custodial/Utility Sinks**

The plumbing fixtures include custodial/utility sinks.

**D2010 - Plumbing Fixtures - Emergency Eyewash and Shower Units**

Plumbing fixtures include emergency safety shower and eyewash units.

*All costs in USD.*

**D2010 - Plumbing Fixtures - Kitchenette - Cabinet-Counter and Sink**

The plumbing fixtures include kitchenette cabinet, counter and sink units.

**D2010 - Plumbing Fixtures - Kitchenette - Cabinet-Counter and Sink - 2011**

The plumbing fixtures include kitchenette cabinet, counter and sink units.

**D2010 - Plumbing Fixtures - Laboratory Sinks**

The building plumbing fixtures include stainless steel or molded, chemical-resistant laboratory sinks. Note: selected available RS Means line item for stainless steel sink, for budgetary purposes only.

**D2010 - Plumbing Fixtures - Water Coolers - Wall Mount**

Plumbing fixtures include vitreous china drinking fountains with remote refrigerant units. Note: selected available RS Mean's line item for budgetary purposes only.

**D2010 - Plumbing Fixtures - Water Coolers - Wheelchair Type - 2000**

Plumbing fixtures include wheelchair type drinking fountains through out remodeled areas.

**D2020 - Domestic Water Distribution - Heat Exchanger - HW/HW - Shell and Tube**

The HVAC system includes a boiler HW to Domestic HW shell and tube heat exchanger. The heat exchanger is no longer in use, having been functionally replaced by a hot water heater which is used year around.

**D2020 - Domestic Water Distribution - Water Dist Complete**

The building domestic water distribution system includes a four inch main line, water meter, rpz backflow preventer, with rough ins included. This System does not include a water heater. Note: Observed Years remaining extended based on observed existing conditions.

**D2020 - Domestic Water Distribution - Water Dist Complete - 2011**

The building domestic water distribution system includes a four inch main line, water meter, rpz backflow preventer, with rough ins included. This System does not include a water heater. Note: Observed Years remaining extended based on observed existing conditions. Located at the 3rd Floor Renovation Project.

**D2020 - Domestic Water Distribution - Water Heater - Electric**

The domestic hot water is provided by two (2) 50-gallon residential grade electric water heaters. Located at room L308.

**D2020 - Domestic Water Distribution - Water Heater - Gas**

The domestic hot water is provided by a 80-gallon natural gas water heater located in room S000.

**D2030 - Sanitary Waste - Sanitary Waste**

The building includes an extensive sanitary waste system, of cast iron piping, with gravity discharge to the municipal system.

**D2040 - Rain Water Drainage - Roof Drainage**

Rain water drainage includes interior piping, roof drains and 4-inch discharge piping by gravity flow to a municipal main.

**D2090 - Other Plumbing Systems - Gas Distribution - Lab Air & Vac Systems**

The building includes compressed air and vacuum systems. This system is used for Labs and Dental Classrooms. The Air compressor and vacuum pumps are located in B Wing Penthouse.

**D2090 - Other Plumbing Systems - Lab Acid Waste System - Polypropylene**

The building includes a polypropylene piped acid water waste piping system for the laboratories.

**D2090 - Other Plumbing Systems - Natural Gas Distribution for Lab**

*All costs in USD.*

The building includes a natural gas distribution system for the laboratories.

**D2090 - Other Plumbing Systems - Natural Gas Supply for Bldg**

The building includes a natural gas supply and distribution system for boilers, labs and kitchen. Note: Observed Years remaining extended based on observed existing conditions.

**D3020 - Heat Generating Systems - Boiler HW - Gas/Oil Fired w/Redundancy**

Heat is provided by a hot water boiler with dual fuel capability (oil and gas). System designed for full redundancy. Boilers retubed in 1998. Located in room S000

**D3030 - Cooling Generating Systems - Chiller - Centrifugal wo Cooling Tower - 1968**

Cooling medium is provided by centrifugal chiller. Instead of a cooling tower the building has a pond around it is used in place of a tower. System includes a filtration system for sediment from the pond. Located in room S000

**D3030 - Cooling Generating Systems - Chiller - Centrifugal wo Cooling Tower - 1998**

Cooling medium is provided by centrifugal chiller. Instead of a cooling tower the building has a pond around it is used in place of a tower. System includes a filtration system for sediment from the pond. Located in room S000

**D3040 - Distribution Systems - Central AHU - Const Volume w/Distribution**

The HVAC system includes constant volume air handling units, distribution ductwork, diffusers and plenum return.

**D3040 - Distribution Systems - Central AHU - Const Volume w/Distribution - 2011**

The HVAC system located at the Medical Imaging Career Cener and at the 3rd Floor Renovation Project includes constant volume air handling units, distribution ductwork, diffusers and plenum return.

**D3040 - Distribution Systems - Central AHU - VAV System w/Distribution - A Wing**

The HVAC system has a central AHU with cooling and heating coils, VFD, VAV ducted distribution, diffusers and plenum return for parts of A Wing.

**D3040 - Distribution Systems - Exhaust System - Fume Hood - Ductwork and Fan**

Gas fired kiln was removed in 2009, replaced with two electric kilns with new fume hood and exhaust ductwork.

**D3040 - Distribution Systems - Exhaust System - Fume Hood - Ductwork and Fan**

Fume hoods installed in C-302 and C-306 during summer of 2010, Title III Phase 2.

**D3040 - Distribution Systems - Exhaust System - Fume Hood - Ductwork and Fan**

Fume hoods installed in C-308, -312, -320 and -323 during summer of 2009, Title III Phase 1.

**D3040 - Distribution Systems - Exhaust System - General Building**

The HVAC ventilation system includes roof mounted exhaust fans with ducting.

**D3040 - Distribution Systems - Exhaust System - Kitchen**

The ventilation system includes a kitchen exhaust system, with welded duct and insulation. Note: Observed Years remaining extended based on observed existing conditions.

**D3040 - Distribution Systems - Exhaust System - Restroom w/Roof Fan**

HVAC ventilation system includes roof mounted restroom exhaust fans with ducting.

**D3040 - Distribution Systems - Four Pipe Distribution System w/Pump**

HVAC distribution is provided by a four pipe distribution system. Observed Years Remaining extended based on existing conditions

*All costs in USD.*

**D3040 - Distribution Systems - Perimeter Units**

HVAC system includes perimeter heating units with temperature control by two pipe system with coils and multfin with cabinets in door ways and some stairwells.

**D3040 - Distribution Systems - Perimeter Units - 2011**

HVAC system located in Medical Imaging Career Center and at the 3rd Floor Renovation Project includes perimeter heating units with temperature control by two pipe system with coils and multfin with cabinets in door ways and some stairwells.

**D3040 - Distribution Systems - Return Air Ductwork and Fan - A Wing**

The HVAC system has return air ductwork and centrifugal or in-line return air fan for parts of Wing A.

**D3050 - Terminal and Package Units - Computer Room Cooling - DX w/Air Cooled Remote Condenser**

The HVAC system includes two (2) computer room cooling units with an air cooled remote condenser. One is presently being moved from book store to IT room where the other unit is located.

**D3050 - Terminal and Package Units - Split System AC - 1990**

The HVAC system includes two (2) split system AC unit with remote air cooled condensers for room S114A and a communications room.

**D3050 - Terminal and Package Units - Unit Heaters - Hot Water**

Heating is provided by suspended, forced hot water unit heaters for mechanical rooms and garages.

**D3060 - Controls and Instrumentation - DDC/Pneumatic System - Hybrid**

HVAC controls include a DDC system for system optimization, basic pc control, moderate sensor types and quantities. System includes pneumatic activation of control valves and dampers. Controls were updated in the mid 1990's.

**D3069 - Other Controls and Instrumentation - Motor Control Center**

There are several Motor Control Centers throughout the building. All are original and aged beyond their BOMA rated estimated life cycle. They are located in the penthouses and main electrical room. The typical MCC is 600 Amp, 480 Volt. The units are priced by section including starters.

**D40 - Fire Protection - Fire Extinguishers - Dry Chem w/Cabinet**

Handheld type dry chemical fire extinguishers are located throughout the building, as required. Includes cabinets, valve cabinets and hose cabinets.

**D40 - Fire Protection - FM200 System - Rm. C102F**

The fire protection systems include a minimum density FM200 system in room C102F.

**D40 - Fire Protection - Wet Sprinkler System - wo/Pump**

The fire protection systems include a wet fire sprinkler system with standpipes but no fire pump for most of A and B wings. Located in room S000

**D40 - Fire Protection - Wet Standpipe System**

The fire protection systems include a wet fire standpipe system with check valve protection.

**D40 - Fire Protection - Wet Standpipe System - 2011**

The fire protection systems include a wet fire standpipe system with check valve protection. Located at the 3rd Floor Renovation Project.

**D5012 - Low Tension Service and Dist. - Distribution Equipment, Panelboards, and Feeders 13 - 4000A 480Y/277V & 208Y/120V**

*All costs in USD.*

The electrical distribution system for this building includes an average concentration of panelboards, feeders, and associated equipment. The majority of the distribution and lighting panels are in good condition and show updates as there has been some renovations made over the years. The site contact reports that there are no problems associated with the distribution panels. Based on updates to the system as a whole and the history of no issues, the life has been extended.

**D5012 - Low Tension Service and Dist. - Electrical Sub-Service - 200A 480/208Y/120V + Distribution - 2011**

The Medical Imaging Career Center has a separate electrical sub service providing 480/277v and 208/120v distribution and branch circuitry. This system includes a typical electrical sub service, which includes incoming sub feeders, main panel, transformer and branch panel board.

**D5012 - Low Tension Service and Dist. - Main Electrical Service 13 - 1600A 480Y/277V**

The building includes a typical electrical service, which includes incoming feeders, main panel, and metering. There are three sub-stations with dual feeds for each. This item is sub-station #3. The equipment is original and is beyond its BOMA rated life.

**D5012 - Low Tension Service and Dist. - Main Electrical Service 13 - 2500A 480Y/277V**

The building includes a typical electrical service, which includes incoming feeders, main panel, and metering. There are three sub-stations with dual feeds for each. This item is sub-station #2. The equipment is original and is beyond its BOMA rated life.

**D5012 - Low Tension Service and Dist. - Main Electrical Service 13 - 3000A 480Y/277V**

The building includes a typical electrical service, which includes incoming feeders, main panel, and metering. There are three sub-stations with dual feeds for each. This item is sub-station #1. The equipment is original and is beyond its BOMA rated life.

**D5012 - Low Tension Service and Dist. - Main Electrical Service, Chillers - 3000A 480Y/277V**

A main electrical switch gear console was replaced in 2007. This system is utilized for the chillers.

**D5020 - Lighting and Branch Wiring - Lighting - Exterior - HID Wall Packs**

Exterior lighting includes HID wall packs, soffit lights, and accent lighting around the perimeter. The lights were reportedly replaced approximately 5-8 years ago per the site contact. This system is for budgetary purposes only.

**D5021 - Branch Wiring Devices - Branch Wiring, Original - Equipment & Devices**

Branch wiring for this building includes a typical concentration of branch wiring, devices, and utilization equipment throughout the building and classrooms. It is estimated that approximately 70 percent of the devices are original.

**D5021 - Branch Wiring Devices - Branch Wiring, Updated - Equipment & Devices**

Branch wiring for this building includes a typical concentration of branch wiring, devices, and utilization equipment throughout the building and classrooms. It is estimated that approximately 30 percent of the devices are updated, mostly coinciding with the 2000 renovation.

**D5021 - Branch Wiring Devices - Branch Wiring, Updated - Equipment & Devices - 2011**

Branch wiring for the Medical Imaging Career Center and the 3rd Floor Renovation Project includes a typical concentration of branch wiring, devices, and utilization equipment.

**D5022 - Lighting Equipment - Lighting Fixtures - Average Density**

[The building includes a average density lighting system. Lighting system includes lighting fixtures, lamps, conduit and wire.] Fixtures replaced during Title III Phase I, August 2009

**D5022 - Lighting Equipment - Lighting Fixtures, Original - Average Density**

The building includes a average density lighting system. Lighting system includes various types of lighting fixtures, HID Lights, lamps, conduit and wire. System does not address each particular lighting type as this is for budgetary purposes only. It is estimated that approximately 70 percent of the building has original lighting fixtures.

*All costs in USD.*



**D5022 - Lighting Equipment - Lighting Fixtures, Updated - Average Density**

The building includes a average density lighting system. Lighting system includes various types of lighting fixtures, HID Lights, lamps, conduit and wire. System does not address each particular lighting type as this is for budgetary purposes only. It is estimated that approximately 30 percent of the building has updated lighting fixtures, mostly coinciding with the 2000 renovation.

**D5022 - Lighting Equipment - Lighting Fixtures, Updated - Average Density - 2011**

The Medical Imaging Career Center and the 3rd Floor Renovation Project includes a average density lighting system. Lighting system includes various types of lighting fixtures, HID Lights, lamps, conduit and wire. System does not address each particular lighting type as this is for budgetary purposes only.

**D5031 - Public Address and Music Systems - Public Address System - Average Density**

The building includes an average density public address system on a limited area basis. The areas include the gymnasium and auditoriums. The public address system includes as a minimum: Amplifier, intercom/monitor, volume control, speakers (ceilings or walls), conduit and shielded wiring.

**D5031 - Public Address and Music Systems - Scoreboard Single Sided – College/High school Arena (Lower End)**

The building gymnasium has a scoreboard system. This system includes a wall hung scoreboard. The scoreboard also includes LED scoring system, LED clocking system, as well as PA and sound capabilities.

**D5033 - Telephone Systems - Telephone System - Average Density**

The building includes an average density telephone system. The phone system was replaced in the fall of 2011.

**D5037 - Fire Alarm Systems - Fire Alarm System - Average Density**

This building includes an average density fire alarm system. The fire alarm system includes: head end equipment, pull stations at all exit doors, audio/visual strobes, visual strobes, smokes in some rooms, conduit, wire and connections. The system was completely brought up to code with the year 2000 renovation to the building.

**D5039 - Local Area Networks - LAN System - Average Density**

Building includes an average density local area network system throughout the building and classrooms. The system appears to be well maintained and is reported by the site contact to be approximately 7-8 years of age.

**D5092 - Emergency Light and Power Systems - Emergency Battery Pack Lights**

The emergency lighting system includes a self contained battery pack and lights. The building is only partially protected with emergency battery pack lighting as there is an emergency generator for most egress lighting. Units appear to be aged for the most part.

**D5092 - Emergency Light and Power Systems - Emergency Generator - Average 100KW**

The emergency power system includes an Emergency Generator 250kW max. Includes: Emergency Generator, ATS, battery charger, muffler, day tank, feeder, wiring, and panels. the generator is tied to the life safety areas of the building.

**D5092 - Emergency Light and Power Systems - Exit Signs, Original - Low Density**

The emergency lighting system includes the installation of Exit signs on a low density level. Installation includes: single and double sided exit signs, conduit, wire, boxes, conduit bends, connections and circuit breakers. It is estimated that approximately 70 percent of the building utilizes older units that are at or near their BOMA rated life cycle.

**D5092 - Emergency Light and Power Systems - Exit Signs, Updated - Low Density**

The emergency lighting system includes the installation of Exit signs on a low density level. Installation includes: single and double sided exit signs, conduit, wire, boxes, conduit bends, connections and circuit breakers. It is estimated that approximately 30 percent of the building utilizes updated units.

**D5092 - Emergency Light and Power Systems - UPS System 120V Single Phase - per KVA**

The building data center includes an Uninterruptible Power Supply (UPS) System. The system includes as a minimum: UPS equipment, batteries, circuit breakers, conduit, and wiring.

*All costs in USD.*

**E - Equipment and Furnishings - Fixed Casework - Institutional - High End - 2000**

Building includes deluxe casework including wall and under counter cabinets and deluxe countertops (stone), without appliances. Located in A wing, as well as throughout the building in renovated spaces.

**E - Equipment and Furnishings - Fixed Casework - Institutional - High End - 2011**

The Medical Imaging Career Center and the 3rd Floor Renovations Project includes deluxe casework including wall and under counter cabinets and deluxe countertops (stone), without appliances.

**E - Equipment and Furnishings - Fixed Theater Seating - Deluxe - D Wing**

Furnishings include fixed theater seating in the two lecture halls in D wing. Seating is in good condition, leading to its extended life.

**E - Equipment and Furnishings - Fixed Theater Seating - Deluxe - S Wing**

Furnishings include fixed theater seating in S116 in S wing. Seating is in good condition, leading to its extended life.

**E - Equipment and Furnishings - Kitchen Equipment**

Equipment and furnishings includes kitchen equipment of average quantity and quality. Systems include, walk-in's, pot sinks, range hood with fire suppression and other equipment. Located at room L308

ASSET REPLACEMENT VALUE

Uniformat	System Name	Lifetime	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Value
A-Substructure	Foundation Wall and Footings - No Basement	75	6	1968	2043	26,291	420,652
A-Substructure	Structural Slab on Grade - Non Industrial	75	6	1968	2043	52,960	847,364
A10-Foundations	Concrete Footings	75	6	1968	2043	17,620	281,916
B10-Superstructure	Superstructure - Multi Story - Concrete	75	6	1968	2043	477,905	7,646,483
B10-Superstructure	Superstructure - Multi Story - Concrete/Steel - E Wing	75	6	1968	2043	29,758	476,132
B10-Superstructure	Superstructure - Single Story - Steel - Penthouses	75	6	1968	2043	4,501	72,015
B1015-Exterior Stairs and Fire Escapes	Exterior Stairs - Concrete	50	125	1968	2018	24,164	19,331
B1015-Exterior Stairs and Fire Escapes	Exterior Stairs - Concrete - Circular	50	125	1968	2013	23,734	18,987
B1015-Exterior Stairs and Fire Escapes	Exterior Stairs - Concrete - Platform	50	125	1968	2018	25,882	20,705
B2010-Exterior Walls	Brick Walls	75	13	1968	2043	175,824	1,406,592
B2010-Exterior Walls	Metal Paneled Walls	60	125	1968	2028	635,292	508,233
B2010-Exterior Walls	Pedestrian Sky Bridges - Concrete	50	125	1968	2018	857,804	686,243
B2010-Exterior Walls	Pedestrian Sky Bridges - Steel	30	125	1968	2014	85,905	68,724
B2020-Exterior Windows	Aluminum Windows - 1998	30	125	1998	2028	202,230	161,784
B2020-Exterior Windows	Aluminum Windows - 2009	30	125	2009	2031	114,808	91,846
B2020-Exterior Windows	Aluminum Windows - Financial Aid	30	125	2000	2030	5,056	4,045
B2020-Exterior Windows	Aluminum Windows - L Wing	30	125	1968	2012	404,460	323,568

All costs in USD.

Uniformat	System Name	Lifetime	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Value
B2020-Exterior Windows	Curtain Wall System - A Wing	40	125	2000	2040	311,349	249,079
B2020-Exterior Windows	Steel Windows	30	125	1968	2013	602,555	482,044
B2030-Exterior Doors	Door Assembly - 3 x 7 HM	30	125	1968	2013	62,423	49,938
B2030-Exterior Doors	Door Assembly - 3 x 7 Storefront	30	125	1968	2013	26,316	21,053
B2030-Exterior Doors	Door Assembly - 3 x 7 Storefront - 2000	30	125	2000	2030	4,386	3,509
B2030-Exterior Doors	Door Assembly - 3 x 7 Storefront - 2004	30	125	2004	2034	13,158	10,526
B2030-Exterior Doors	Door Assembly - 6 x 7 HM	30	125	1968	2013	21,588	17,271
B2030-Exterior Doors	Door Assembly - 6 x 7 Storefront	30	125	1968	2013	110,869	88,695
B2030-Exterior Doors	Door Assembly - 6 x 7 Storefront - 2000	30	125	2000	2030	103,940	83,152
B2030-Exterior Doors	Door Assembly - 6 x 7 Storefront - 2004	30	125	2004	2034	13,859	11,087
B2030-Exterior Doors	Overhead Doors (Electrically Operated) - S Wing	30	125	1968	2014	19,775	15,820
B2030-Exterior Doors	Overhead Doors (Manually Operated) - B Wing	30	125	1968	2014	20,072	16,057
B30-Roofing	Adhered Membrane (EPDM) Single-Ply	25	125	1968	2013	86,770	69,416
B30-Roofing	Adhered Membrane (EPDM) Single-Ply - A Wing	25	125	2011	2036	59,445	47,556
B30-Roofing	Metal Roofing	65	125	2000	2065	74,250	59,400
B30-Roofing	Single Ply Membrane - Ballasted - L Wing	25	125	1968	2012	149,988	119,990

All costs in USD.

Uniformat	System Name	Lifetime	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Value
B30-Roofing	Single-Ply Eco White EPDM Membrane - Fully Adhered - C Wing	25	125	2009	2036	321,545	257,236
B30-Roofing	Single-Ply EPDM with Pavers on Roof - S Wing	25	125	1968	2014	1,711,958	1,369,566
B30-Roofing	~Adhered Membrane (EPDM) Single-Ply	25	125	2012	2037	222,034	177,627
B3021-Glazed Roof Openings	Skylights - Dome Types (Plastic) - C Wing	25	125	2009	2034	779	623
B3021-Glazed Roof Openings	Skylights - Monumental	30	125	2012	2040	138,701	110,961
B3021-Glazed Roof Openings	Skylights - Monumental L-Wing	30	125	1968	2013	59,443	47,555
C10-Interior Construction	Restroom - Complete - Double - A Wing	30	125	1968	2014	45,430	36,344
C10-Interior Construction	Restroom - Complete - Gang - B Wing	30	125	1968	2014	118,179	94,543
C10-Interior Construction	Restroom - Complete - Gang - B Wing - 2000	30	125	2000	2030	39,393	31,514
C10-Interior Construction	Restroom - Complete - Gang - B Wing - 2000	30	125	2000	2030	78,786	63,029
C10-Interior Construction	Restroom - Complete - Gang - C Wing	30	125	1968	2017	157,572	126,058
C10-Interior Construction	Restroom - Complete - Gang - C Wing - 2011	30	125	2011	2041	78,786	63,029
C10-Interior Construction	Restroom - Complete - Gang - D Wing	30	125	1968	2014	78,786	63,029
C10-Interior Construction	Restroom - Complete - Gang - E Wing	30	125	1968	2014	78,786	63,029

All costs in USD.

Uniformat	System Name	Lifetime	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Value
C10-Interior Construction	Restroom - Complete - Gang - L Wing	30	125	1968	2014	157,572	126,058
C10-Interior Construction	Restroom - Complete - Gang - S Wing	30	125	1968	2014	78,786	63,029
C10-Interior Construction	Restroom - Complete - Single - B Wing - 2000	30	125	2000	2030	19,660	15,728
C10-Interior Construction	Restroom - Shower - Add - E Wing	30	125	1968	2014	11,915	9,532
C10-Interior Construction	Restroom - Shower - Add - E Wing	30	125	1968	2014	30,761	24,609
C1010-Partitions	CMU Block Walls - Plain	50	63	1968	2018	103,991	166,385
C1010-Partitions	CMU Walls - Glazed 2 Sides	50	63	1968	2018	40,716	65,145
C1010-Partitions	Folding Partitions - Deluxe	15	63	2011	2026	5,649	9,038
C1010-Partitions	GWB Walls - Standard (Non-Painted)	50	63	1968	2018	452,495	723,992
C1010-Partitions	GWB Walls - Standard (Non-Painted) - A Wing	50	63	2000	2050	40,595	64,951
C1010-Partitions	Plaster Walls - 3 Coats	50	63	1968	2018	1,134,737	1,815,579
C1020-Interior Doors	Swinging Doors	50	125	1968	2021	1,472,762	1,178,210
C1020-Interior Doors	Swinging Doors - 2011	50	125	2011	2061	137,707	110,165
C1020-Interior Doors	Swinging Doors - A Wing	50	125	2000	2050	70,020	56,016
C1035-Identifying Devices	Fittings: Signage (Room Numbering and Identification)	10	125	2000	2014	190,263	152,210
C20-Stairs	Stairs	75	38	1968	2043	160,254	427,345
C20-Stairs	Stairs - Spiral	75	38	1968	2043	20,677	55,138
C3010-Wall Finishes	Brick	75	125	1968	2043	685,441	548,353

All costs in USD.

Uniformat	System Name	Lifetime	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Value
C3010-Wall Finishes	Ceramic Tile	25	125	2011	2036	17,818	14,255
C3010-Wall Finishes	Paint Masonry/Epoxy Finish - Economy	15	125	2000	2015	61,858	49,486
C3010-Wall Finishes	Painted Finish - (1 Coat Prime - 2 Coats Finish)	10	125	2004	2014	463,044	370,435
C3010-Wall Finishes	Raised Wood Paneling - High End FR (Fire-Rated) - C Wing	30	81	2011	2041	167,084	205,642
C3010-Wall Finishes	Raised Wood Paneling - High End FR (Fire-Rated) - S Wing	30	81	2011	2041	106,306	130,838
C3020-Floor Finishes	Carpeting 3 - Carpet Broadloom - A Wing	10	125	1968	2015	68,784	55,027
C3020-Floor Finishes	Carpeting 3 - Carpet Broadloom - A Wing - 2000	10	125	2000	2014	77,907	62,326
C3020-Floor Finishes	Carpeting 3 - Carpet Broadloom - B Wing	10	125	1968	2012	23,875	19,100
C3020-Floor Finishes	Carpeting 3 - Carpet Broadloom - B Wing - 2000	10	125	2000	2014	322,183	257,746
C3020-Floor Finishes	Carpeting 3 - Carpet Broadloom - B Wing - 2008	10	125	2008	2018	22,618	18,095
C3020-Floor Finishes	Carpeting 3 - Carpet Broadloom - C Wing	10	125	1968	2013	166,683	133,346
C3020-Floor Finishes	Carpeting 3 - Carpet Broadloom - C Wing - 2000	10	125	2000	2014	202,005	161,604
C3020-Floor Finishes	Carpeting 3 - Carpet Broadloom - C Wing - 2008	10	125	2008	2018	30,158	24,126
C3020-Floor Finishes	Carpeting 3 - Carpet Broadloom - C Wing - 2011	10	125	2011	2021	34,807	27,845

All costs in USD.

Uniformat	System Name	Lifetime	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Value
C3020-Floor Finishes	Carpeting 3 - Carpet Broadloom - D Wing	10	125	1968	2012	114,448	91,558
C3020-Floor Finishes	Carpeting 3 - Carpet Broadloom - D Wing - 2000	10	125	2000	2014	30,786	24,629
C3020-Floor Finishes	Carpeting 3 - Carpet Broadloom - E Wing	10	125	1968	2014	12,566	10,053
C3020-Floor Finishes	Carpeting 3 - Carpet Broadloom - L Wing	10	125	1968	2013	499,810	399,848
C3020-Floor Finishes	Carpeting 3 - Carpet Broadloom - S Wing	10	125	1968	2013	148,526	118,821
C3020-Floor Finishes	Carpeting 3 - Carpet Broadloom - S Wing - 2011	10	125	2011	2021	13,759	11,007
C3020-Floor Finishes	Ceramic Tile - Thin Set - A Wing - 2000	25	125	2000	2025	210,083	168,066
C3020-Floor Finishes	Epoxy Flooring	50	125	2011	2061	22,639	18,112
C3020-Floor Finishes	Quarry Tile - L Wing	25	125	1968	2014	67,997	54,398
C3020-Floor Finishes	Rubber Tile - C Wing	15	125	2011	2026	478,054	382,443
C3020-Floor Finishes	Rubber Tile - S Wing	15	125	2011	2026	58,664	46,931
C3020-Floor Finishes	VCT 2 - A Wing	20	125	1968	2012	466	373
C3020-Floor Finishes	VCT 2 - B Wing - 2000	20	125	2000	2020	5,358	4,286
C3020-Floor Finishes	VCT 2 - C Wing	20	125	1968	2012	68,274	54,619
C3020-Floor Finishes	VCT 2 - C Wing - 2008	20	125	2008	2028	31,447	25,157
C3020-Floor Finishes	VCT 2 - E Wing	20	125	1968	2012	11,647	9,318
C3020-Floor Finishes	VCT 2 - S Wing	20	125	1968	2013	2,795	2,236
C3020-Floor Finishes	VCT 2 - S Wing - 2005	20	125	2005	2025	20,964	16,772
C3020-Floor Finishes	Wood Flooring - E Wing	25	125	1968	2014	157,212	125,770

All costs in USD.



Uniformat	System Name	Lifetime	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Value
C3020-Floor Finishes	~Carpeting 3 - Carpet Broadloom - A Wing	10	125	2012	2022	26,488	21,191
C3030-Ceiling Finishes	ACT Concealed Spline System - A Wing	20	125	1968	2014	63,065	50,452
C3030-Ceiling Finishes	ACT Concealed Spline System - D Wing	20	125	1968	2014	13,545	10,836
C3030-Ceiling Finishes	ACT Concealed Spline System - L Wing	20	125	1968	2014	340,850	272,680
C3030-Ceiling Finishes	ACT Concealed Spline System - S Wing	20	125	1968	2014	113,359	90,687
C3030-Ceiling Finishes	ACT System - A Wing - 2000	20	125	2000	2020	90,375	72,300
C3030-Ceiling Finishes	ACT System - B Wing - 2000	20	125	2000	2020	120,734	96,587
C3030-Ceiling Finishes	ACT System - B Wing - 2008	20	125	2008	2028	12,810	10,248
C3030-Ceiling Finishes	ACT System - C Wing - 2000	20	125	2000	2020	98,295	78,636
C3030-Ceiling Finishes	ACT System - C Wing - 2011	20	125	2011	2031	211,312	169,049
C3030-Ceiling Finishes	ACT System - C-Wing 2009	20	125	2009	2029	42,689	34,151
C3030-Ceiling Finishes	ACT System - S Wing - 2000	20	125	2000	2020	13,878	11,102
C3030-Ceiling Finishes	GWB Taped and Finished - A Wing - 2000	30	125	2000	2030	9,017	7,214
C3030-Ceiling Finishes	GWB Taped and Finished - C Wing	30	125	1968	2014	14,614	11,691
C3030-Ceiling Finishes	GWB Taped and Finished - C Wing - 2011	30	125	2011	2041	947	758
C3030-Ceiling Finishes	GWB Taped and Finished - D Wing	30	125	1968	2014	23,003	18,403
C3030-Ceiling Finishes	GWB Taped and Finished - L Wing	30	125	1968	2014	4,893	3,914

All costs in USD.

Uniformat	System Name	Lifetime	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Value
D1010-Elevators and Lifts	Hydraulic Freight Elevator	35	125	1968	2016	228,232	182,586
D1010-Elevators and Lifts	Hydraulic Passenger Elevator	35	125	1968	2016	298,591	238,873
D1090-Other Conveying Systems	Dumbwaiter for Low Rise	35	125	1968	2013	35,479	28,384
D2010-Plumbing Fixtures	Custodial/Utility Sinks	30	125	1968	2015	140,290	112,232
D2010-Plumbing Fixtures	Emergency Eyewash and Shower Units	30	125	2000	2030	11,633	9,307
D2010-Plumbing Fixtures	Kitchenette - Cabinet-Counter and Sink	30	125	2000	2033	190,231	152,185
D2010-Plumbing Fixtures	Kitchenette - Cabinet-Counter and Sink - 2011	30	125	2011	2041	2,434	1,947
D2010-Plumbing Fixtures	Laboratory Sinks	30	125	2000	2030	105,277	84,221
D2010-Plumbing Fixtures	Water Coolers - Wall Mount	20	125	1968	2013	37,981	30,384
D2010-Plumbing Fixtures	Water Coolers - Wheelchair Type - 2000	20	125	2000	2020	24,367	19,494
D2020-Domestic Water Distribution	Heat Exchanger - HW/HW - Shell and Tube	20	125	1968	2012	4,410	3,528
D2020-Domestic Water Distribution	Water Dist Complete	30	113	1968	2021	957,985	851,542
D2020-Domestic Water Distribution	Water Dist Complete - 2011	30	113	2011	2041	137,295	122,040
D2020-Domestic Water Distribution	Water Heater - Electric	10	112	2005	2015	6,522	5,823
D2020-Domestic Water Distribution	Water Heater - Gas	10	112	2003	2015	5,235	4,674
D2030-Sanitary Waste	Sanitary Waste	50	125	1968	2018	1,777,868	1,422,294
D2040-Rain Water Drainage	Roof Drainage	50	125	1968	2018	629,655	503,724
D2090-Other Plumbing Systems	Gas Distribution - Lab Air & Vac Systems	25	75	1968	2013	58,913	78,551
D2090-Other Plumbing Systems	Lab Acid Waste System - Polypropylene	40	125	2000	2040	69,118	55,294

All costs in USD.

Uniformat	System Name	Lifetime	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Value
D2090-Other Plumbing Systems	Natural Gas Distribution for Lab	40	125	2000	2040	55,103	44,082
D2090-Other Plumbing Systems	Natural Gas Supply for Bldg	40	125	1968	2018	702,785	562,228
D3020-Heat Generating Systems	Boiler HW - Gas/Oil Fired w/Redundancy	30	125	1968	2012	156,738	125,390
D3030-Cooling Generating Systems	Chiller - Centrifugal wo Cooling Tower - 1968	28	125	1968	2013	237,290	189,832
D3030-Cooling Generating Systems	Chiller - Centrifugal wo Cooling Tower - 1998	28	125	1998	2026	237,290	189,832
D3040-Distribution Systems	Central AHU - Const Volume w/Distribution	25	125	1968	2013	4,200,889	3,360,711
D3040-Distribution Systems	Central AHU - Const Volume w/Distribution - 2011	25	125	2011	2036	643,489	514,792
D3040-Distribution Systems	Central AHU - VAV System w/Distribution - A Wing	25	125	2000	2025	711,156	568,925
D3040-Distribution Systems	Exhaust System - Fume Hood - Ductwork and Fan	25	125	2010	2035	281,833	225,467
D3040-Distribution Systems	Exhaust System - Fume Hood - Ductwork and Fan	25	125	2010	2035	70,458	56,367
D3040-Distribution Systems	Exhaust System - Fume Hood - Ductwork and Fan	25	125	2009	2034	176,146	140,917
D3040-Distribution Systems	Exhaust System - General Building	25	125	2010	2035	328,820	263,056
D3040-Distribution Systems	Exhaust System - Kitchen	15	125	1968	2018	49,488	39,590
D3040-Distribution Systems	Exhaust System - Restroom w/Roof Fan	20	125	2012	2032	132,586	106,069
D3040-Distribution Systems	Four Pipe Distribution System w/Pump	30	125	1968	2018	5,810,803	4,648,642
D3040-Distribution Systems	Perimeter Units	30	125	1968	2012	4,945,297	3,956,238

All costs in USD.

Uniformat	System Name	Lifetime	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Value
D3040-Distribution Systems	Perimeter Units - 2011	30	125	2011	2041	681,580	545,264
D3040-Distribution Systems	Return Air Ductwork and Fan - A Wing	20	125	2000	2020	226,375	181,100
D3050-Terminal and Package Units	Computer Room Cooling - DX w/Air Cooled Remote Condenser	20	125	2000	2020	124,639	99,711
D3050-Terminal and Package Units	Split System AC - 1990	25	125	1990	2015	18,965	15,172
D3050-Terminal and Package Units	Unit Heaters - Hot Water	25	112	1968	2013	32,518	29,034
D3060-Controls and Instrumentation	DDC/Pneumatic System - Hybrid	25	125	1968	2014	1,735,513	1,388,410
D3069-Other Controls and Instrumentation	Motor Control Center	30	100	1968	2013	340,141	340,141
D40-Fire Protection	Fire Extinguishers - Dry Chem w/Cabinet	30	105	2000	2030	31,418	29,922
D40-Fire Protection	FM200 System - Rm. C102F	15	125	2006	2021	3,828	3,062
D40-Fire Protection	Wet Sprinkler System - wo/Pump	35	125	1998	2033	620,993	496,794
D40-Fire Protection	Wet Standpipe System	35	125	1968	2012	643,314	514,651
D40-Fire Protection	Wet Standpipe System - 2011	35	125	2011	2046	79,804	63,843
D5012-Low Tension Service and Dist.	Distribution Equipment, Panelboards, and Feeders 13 - 4000A 480Y/277V & 208Y/120V	30	125	1968	2018	1,626,447	1,301,158
D5012-Low Tension Service and Dist.	Electrical Sub-Service - 200A 480/208Y/120V + Distribution - 2011	30	125	2011	2041	23,293	18,635
D5012-Low Tension Service and Dist.	Main Electrical Service 13 - 1600A 480Y/277V	30	125	2010	2040	466,196	372,957
D5012-Low Tension Service and Dist.	Main Electrical Service 13 - 2500A 480Y/277V	30	125	2010	2040	543,526	434,821

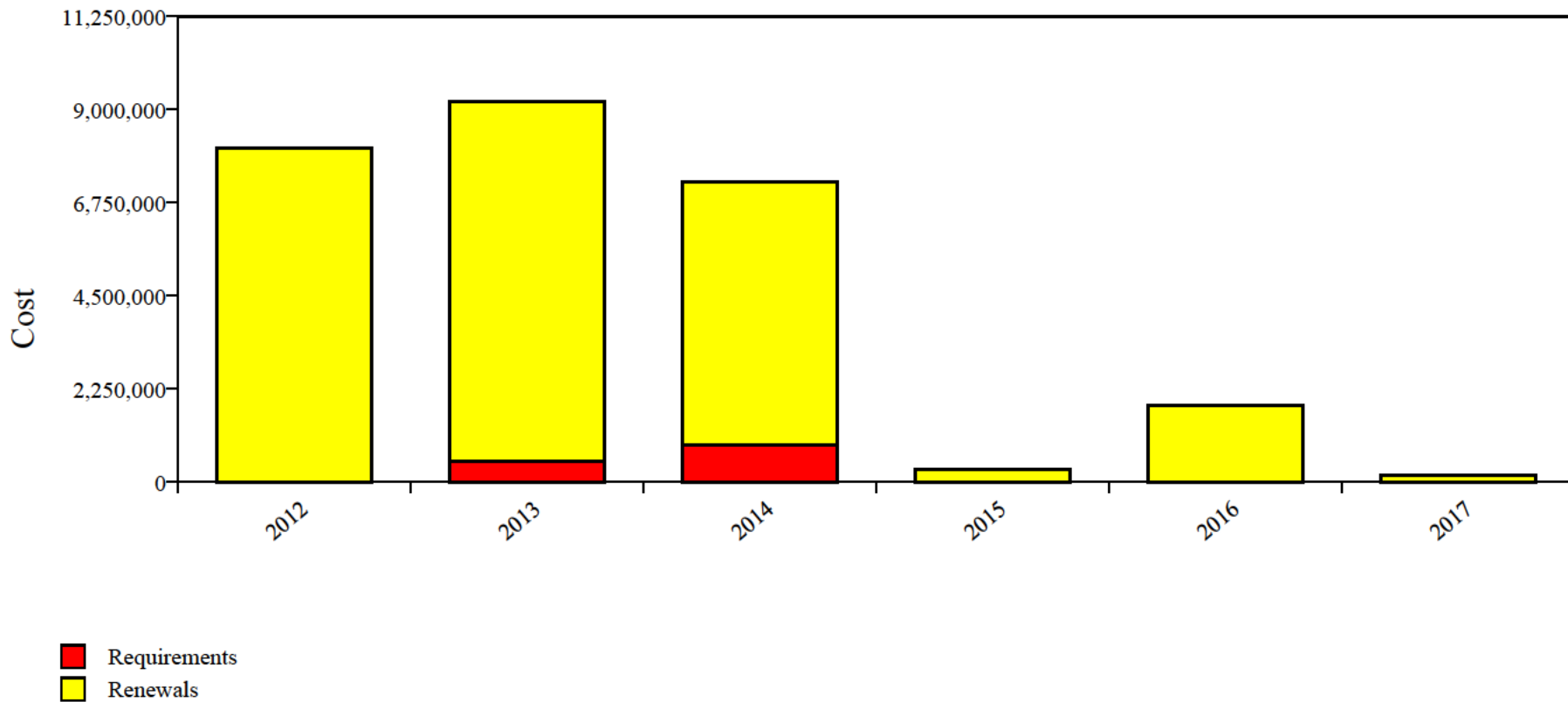
All costs in USD.

Uniformat	System Name	Lifetime	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Value
D5012-Low Tension Service and Dist.	Main Electrical Service 13 - 3000A 480Y/277V	30	125	2010	2040	590,099	472,079
D5012-Low Tension Service and Dist.	Main Electrical Service, Chillers - 3000A 480Y/277V	30	125	2007	2037	398,652	318,922
D5020-Lighting and Branch Wiring	Lighting - Exterior - HID Wall Packs	20	125	2001	2021	14,109	11,287
D5021-Branch Wiring Devices	Branch Wiring, Original - Equipment & Devices	30	125	1968	2013	1,016,047	812,837
D5021-Branch Wiring Devices	Branch Wiring, Updated - Equipment & Devices	30	125	2000	2030	526,566	421,253
D5021-Branch Wiring Devices	Branch Wiring, Updated - Equipment & Devices - 2011	30	125	2011	2041	212,609	170,087
D5022-Lighting Equipment	Lighting Fixtures - Average Density	20	125	2009	2029	47,294	37,835
D5022-Lighting Equipment	Lighting Fixtures, Original - Average Density	20	125	1968	2013	835,601	668,481
D5022-Lighting Equipment	Lighting Fixtures, Updated - Average Density	20	125	2000	2020	457,560	366,048
D5022-Lighting Equipment	Lighting Fixtures, Updated - Average Density - 2011	20	125	2011	2031	184,747	147,797
D5031-Public Address and Music Systems	Public Address System - Average Density	15	125	1968	2012	27,652	22,122
D5031-Public Address and Music Systems	Scoreboard Single Sided - College/High school Arena (Lower End)	15	125	1995	2012	4,272	3,417
D5033-Telephone Systems	Telephone System - Average Density	10	106	2011	2021	835,833	786,666
D5037-Fire Alarm Systems	Fire Alarm System - Average Density	10	125	2000	2012	1,411,094	1,128,875

All costs in USD.

Unifomat	System Name	Lifetime	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Value
D5039-Local Area Networks	LAN System - Average Density	15	106	2001	2016	1,256,165	1,182,273
D5092-Emergency Light and Power Systems	Emergency Battery Pack Lights	10	125	1990	2012	12,207	9,766
D5092-Emergency Light and Power Systems	Emergency Generator - Average 100KW	20	125	1998	2016	60,534	48,428
D5092-Emergency Light and Power Systems	Exit Signs, Original - Low Density	20	125	1968	2012	90,604	72,484
D5092-Emergency Light and Power Systems	Exit Signs, Updated - Low Density	20	125	2000	2020	90,604	72,484
D5092-Emergency Light and Power Systems	UPS System 120V Single Phase - per KVA	10	125	2004	2014	62,704	50,163
E-Equipment and Furnishings	Fixed Casework - Institutional - High End - 2000	25	125	2000	2025	158,769	127,015
E-Equipment and Furnishings	Fixed Casework - Institutional - High End - 2011	25	125	2011	2036	610,225	488,180
E-Equipment and Furnishings	Fixed Theater Seating - Deluxe - D Wing	35	63	1968	2014	23,741	37,986
E-Equipment and Furnishings	Fixed Theater Seating - Deluxe - S Wing	35	63	1968	2014	2,070	3,313
E-Equipment and Furnishings	Kitchen Equipment	20	125	1975	2013	103,126	82,501
						<b>Subtotal</b>	<b>58,845,201</b>
					<b>Total Replacement Value</b>		58,845,201

REQUIREMENTS AND RENEWALS



All costs in USD.

Requirement Name / Renewals	Prime System	Category	Priority	Action Date	Cost
Aluminum Windows - L Wing Renewal	B2020-Exterior Windows	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2012	404,460
Boiler HW - Gas/Oil Fired w/Redundancy Renewal	D3020-Heat Generating Systems	Beyond Useful Life	2- Potentially Critical	10/05/2012	156,738
Carpeting 3 - Carpet Broadloom - B Wing Renewal	C3020-Floor Finishes	Beyond Useful Life	2- Potentially Critical	11/17/2012	23,875
Carpeting 3 - Carpet Broadloom - D Wing Renewal	C3020-Floor Finishes	Beyond Useful Life	1- Currently Critical	10/14/2012	114,448
Emergency Battery Pack Lights Renewal	D5092-Emergency Light and Power Systems	Beyond Useful Life	2- Potentially Critical	10/05/2012	12,207
Exit Signs, Original - Low Density Renewal	D5092-Emergency Light and Power Systems	Beyond Useful Life	2- Potentially Critical	10/05/2012	90,604
Fire Alarm System - Average Density Renewal	D5037-Fire Alarm Systems	Beyond Useful Life	2- Potentially Critical	11/17/2012	1,411,094
Heat Exchanger - HW/HW - Shell and Tube Renewal	D2020-Domestic Water Distribution	Beyond Useful Life	1- Currently Critical	09/11/2012	4,410
Perimeter Units Renewal	D3040-Distribution Systems	Beyond Useful Life	1- Currently Critical	10/10/2012	4,945,297
Public Address System - Average Density Renewal	D5031-Public Address and Music Systems	Beyond Useful Life	2- Potentially Critical	10/05/2012	27,652
Scoreboard Single Sided – College/High school Arena (Lower End) Renewal	D5031-Public Address and Music Systems	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2012	4,272
Single Ply Membrane - Ballasted - L Wing Renewal	B30-Roofing	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2012	149,988
VCT 2 - A Wing Renewal	C3020-Floor Finishes	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2012	466
VCT 2 - C Wing Renewal	C3020-Floor Finishes	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2012	68,274
VCT 2 - E Wing Renewal	C3020-Floor Finishes	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2012	11,647
Wet Standpipe System Renewal	D40-Fire Protection	Beyond Useful Life	1- Currently Critical	10/10/2012	643,314
				<b>2012 Subtotal</b>	<b>8,068,746</b>

All costs in USD.



Requirement Name / Renewals	Prime System	Category	Priority	Action Date	Cost
Adhered Membrane (EPDM) Single-Ply Renewal	B30-Roofing	Beyond Useful Life	1- Currently Critical	09/10/2013	86,770
Branch Wiring, Original - Equipment & Devices Renewal	D5021-Branch Wiring Devices	Beyond Useful Life	2- Potentially Critical	10/10/2013	1,016,047
Brick Walls - Mortar Joints Deteriorated	B2010-Exterior Walls	Reliability	3- Necessary - Not Yet Critical	11/17/2013	125,528
Carpeting 3 - Carpet Broadloom - C Wing Renewal	C3020-Floor Finishes	Beyond Useful Life	2- Potentially Critical	10/10/2013	166,683
Carpeting 3 - Carpet Broadloom - L Wing Renewal	C3020-Floor Finishes	Beyond Useful Life	1- Currently Critical	09/11/2013	499,810
Carpeting 3 - Carpet Broadloom - S Wing Renewal	C3020-Floor Finishes	Beyond Useful Life	2- Potentially Critical	10/10/2013	148,526
Central AHU - Const Volume w/Distribution Renewal	D3040-Distribution Systems	Beyond Useful Life	2- Potentially Critical	10/10/2013	4,200,889
Chiller - Centrifugal wo Cooling Tower - 1968 Renewal	D3030-Cooling Generating Systems	Beyond Useful Life	1- Currently Critical	09/10/2013	237,290
Door Assembly - 3 x 7 HM Renewal	B2030-Exterior Doors	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2013	62,423
Door Assembly - 3 x 7 Storefront Renewal	B2030-Exterior Doors	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2013	26,316
Door Assembly - 6 x 7 HM Renewal	B2030-Exterior Doors	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2013	21,588
Door Assembly - 6 x 7 Storefront Renewal	B2030-Exterior Doors	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2013	110,869
Drain Pipe: Not Insulated	D2030-Sanitary Waste	Accessibility	3- Necessary - Not Yet Critical	12/17/2013	1,505
Dumbwaiter for Low Rise Renewal	D1090-Other Conveying Systems	Beyond Useful Life	1- Currently Critical	09/10/2013	35,479
Electrical Outlets - Lack GFCI Receptacle	D5021-Branch Wiring Devices	Grandfathered Code	Not Time Critical	09/11/2013	14,159
Emergency Generator - Lacks Capacity	D5092-Emergency Light and Power Systems	Capacity/Design	3- Necessary - Not Yet Critical	10/17/2013	63,158
Exterior Stairs - Concrete - Circular Renewal	B1015-Exterior Stairs and Fire Escapes	Beyond Useful Life	1- Currently Critical	09/10/2013	23,734

All costs in USD.

Requirement Name / Renewals	Prime System	Category	Priority	Action Date	Cost
Gas Distribution - Lab Air & Vac Systems Renewal	D2090-Other Plumbing Systems	Beyond Useful Life	2- Potentially Critical	11/17/2013	58,913
HVAC Cost Study- Engineer Environmental and Efficiency Study	D3040-Distribution Systems	Air and Water Quality	3- Necessary - Not Yet Critical	11/17/2013	59,951
Kitchen Equipment Renewal	E-Equipment and Furnishings	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2013	103,126
Lighting Fixtures, Original - Average Density Renewal	D5022-Lighting Equipment	Beyond Useful Life	2- Potentially Critical	10/10/2013	835,601
Motor Control Center Renewal	D3069-Other Controls and Instrumentation	Beyond Useful Life	1- Currently Critical	09/11/2013	340,141
Skylights - Monumental L-Wing Renewal	B3021-Glazed Roof Openings	Beyond Useful Life	1- Currently Critical	09/10/2013	59,443
Steel Windows Renewal	B2020-Exterior Windows	Beyond Useful Life	1- Currently Critical	09/11/2013	602,555
Unit Heaters - Hot Water Renewal	D3050-Terminal and Package Units	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2013	32,518
VAT - A Wing	C3020-Floor Finishes	Asbestos	3- Necessary - Not Yet Critical	11/17/2013	966
VAT - C Wing	C3020-Floor Finishes	Asbestos	3- Necessary - Not Yet Critical	11/17/2013	206,858
VAT - E Wing	C3020-Floor Finishes	Asbestos	3- Necessary - Not Yet Critical	11/17/2013	3,874
VAT - S Wing	C3020-Floor Finishes	Asbestos	3- Necessary - Not Yet Critical	11/17/2013	5,429
VCT 2 - S Wing Renewal	C3020-Floor Finishes	Beyond Useful Life	1- Currently Critical	09/11/2013	2,795
Water Coolers - Wall Mount Renewal	D2010-Plumbing Fixtures	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2013	37,981
<b>2013 Subtotal</b>					<b>9,190,925</b>
ACT Concealed Spline System - A Wing Renewal	C3030-Ceiling Finishes	Beyond Useful Life	2- Potentially Critical	09/10/2014	63,065
ACT Concealed Spline System - D Wing Renewal	C3030-Ceiling Finishes	Beyond Useful Life	2- Potentially Critical	09/10/2014	13,545
ACT Concealed Spline System - L Wing Renewal	C3030-Ceiling Finishes	Beyond Useful Life	2- Potentially Critical	09/10/2014	340,850

All costs in USD.

Requirement Name / Renewals	Prime System	Category	Priority	Action Date	Cost
ACT Concealed Spline System - S Wing Renewal	C3030-Ceiling Finishes	Beyond Useful Life	2- Potentially Critical	09/10/2014	113,359
Carpeting 3 - Carpet Broadloom - A Wing - 2000 Renewal	C3020-Floor Finishes	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	77,907
Carpeting 3 - Carpet Broadloom - B Wing - 2000 Renewal	C3020-Floor Finishes	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	322,183
Carpeting 3 - Carpet Broadloom - C Wing - 2000 Renewal	C3020-Floor Finishes	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	202,005
Carpeting 3 - Carpet Broadloom - D Wing - 2000 Renewal	C3020-Floor Finishes	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	30,786
Carpeting 3 - Carpet Broadloom - E Wing Renewal	C3020-Floor Finishes	Beyond Useful Life	2- Potentially Critical	09/11/2014	12,566
DDC/Pneumatic System - Hybrid Renewal	D3060-Controls and Instrumentation	Beyond Useful Life	2- Potentially Critical	09/11/2014	1,735,513
Electrical Panels - Lack Dedicated Space	D5012-Low Tension Service and Dist.	Grandfathered Code	Not Time Critical	09/11/2014	75,360
Fittings: Signage (Room Numbering and Identification) Renewal	C1035-Identifying Devices	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	190,263
Fixed Theater Seating - Deluxe - D Wing Renewal	E-Equipment and Furnishings	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	23,741
Fixed Theater Seating - Deluxe - S Wing Renewal	E-Equipment and Furnishings	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	2,070
Guard and Handrails - Non-Compliant	C20-Stairs	Grandfathered Code	Not Time Critical	10/17/2014	276,258
Guards - Lacking	-	Grandfathered Code	Not Time Critical	10/17/2014	24,660
GWB Taped and Finished - C Wing Renewal	C3030-Ceiling Finishes	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	14,614
GWB Taped and Finished - D Wing Renewal	C3030-Ceiling Finishes	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	23,003

All costs in USD.

Requirement Name / Renewals	Prime System	Category	Priority	Action Date	Cost
GWB Taped and Finished - L Wing Renewal	C3030-Ceiling Finishes	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	4,893
Handrails - Lacking	-	Grandfathered Code	Not Time Critical	10/17/2014	19,122
Hardware - Not ADAAG Compliant	C1020-Interior Doors	Accessibility	Not Time Critical	10/17/2014	480,364
Overhead Doors (Electrically Operated) - S Wing Renewal	B2030-Exterior Doors	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	19,775
Overhead Doors (Manually Operated) - B Wing Renewal	B2030-Exterior Doors	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	20,072
Painted Finish - (1 Coat Prime - 2 Coats Finish) Renewal	C3010-Wall Finishes	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	463,044
Pedestrian Sky Bridges - Steel Renewal	B2010-Exterior Walls	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	85,905
Quarry Tile - L Wing Renewal	C3020-Floor Finishes	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	67,997
Restroom - Complete - Double - A Wing Renewal	C10-Interior Construction	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	45,430
Restroom - Complete - Gang - B Wing Renewal	C10-Interior Construction	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	118,179
Restroom - Complete - Gang - D Wing Renewal	C10-Interior Construction	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	78,786
Restroom - Complete - Gang - E Wing Renewal	C10-Interior Construction	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	78,786
Restroom - Complete - Gang - L Wing Renewal	C10-Interior Construction	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	157,572
Restroom - Complete - Gang - S Wing Renewal	C10-Interior Construction	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	78,786
Restroom - Shower - Add - E Wing Renewal	C10-Interior Construction	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	11,915
Restroom - Shower - Add - E Wing Renewal	C10-Interior Construction	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	30,761

All costs in USD.

Requirement Name / Renewals	Prime System	Category	Priority	Action Date	Cost
Single-Ply EPDM with Pavers on Roof - S Wing Renewal	B30-Roofing	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	1,711,958
UPS System 120V Single Phase - per KVA Renewal	D5092-Emergency Light and Power Systems	Beyond Useful Life	2- Potentially Critical	09/10/2014	62,704
Wood Flooring - E Wing Renewal	C3020-Floor Finishes	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	157,212
<b>2014 Subtotal</b>					<b>7,235,009</b>
Carpeting 3 - Carpet Broadloom - A Wing Renewal	C3020-Floor Finishes	Beyond Useful Life	3- Necessary - Not Yet Critical	09/11/2015	68,784
Custodial/Utility Sinks Renewal	D2010-Plumbing Fixtures	Beyond Useful Life	3- Necessary - Not Yet Critical	09/10/2015	140,290
Paint Masonry/Epoxy Finish - Economy Renewal	C3010-Wall Finishes	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2015	61,858
Split System AC - 1990 Renewal	D3050-Terminal and Package Units	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2015	18,965
Water Heater - Electric Renewal	D2020-Domestic Water Distribution	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2015	6,522
Water Heater - Gas Renewal	D2020-Domestic Water Distribution	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2015	5,235
<b>2015 Subtotal</b>					<b>301,654</b>
Emergency Generator - Average 100KW Renewal	D5092-Emergency Light and Power Systems	Beyond Useful Life	3- Necessary - Not Yet Critical	10/12/2016	60,534
Hydraulic Freight Elevator Renewal	D1010-Elevators and Lifts	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2016	228,232
Hydraulic Passenger Elevator Renewal	D1010-Elevators and Lifts	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2016	298,591
LAN System - Average Density Renewal	D5039-Local Area Networks	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2016	1,256,165
<b>2016 Subtotal</b>					<b>1,843,522</b>
Restroom - Complete - Gang - C Wing Renewal	C10-Interior Construction	Beyond Useful Life	3- Necessary - Not Yet Critical	10/10/2017	157,572
<b>2017 Subtotal</b>					<b>157,572</b>

All costs in USD.

**Region:** Lake Michigan College  
**Campus:** Lake Michigan College

**Asset Name:** Bertrand Crossing  
**Asset Number:** 2

**STATISTICS**

<b>FCI Cost:</b> 187,480	<b>FCI:</b> 0.03
<b>Total Requirements Cost:</b> 187,480	<b>RI:</b> 0.03

<b>Current Replacement Value</b>	7,168,420	<b>Size</b>	34,283 SF
<b>Address 1</b>	1905 Foundation Drive	<b>Address 2</b>	-
<b>City</b>	-	<b>State/Province/Region</b>	MI

**PHOTO**



Exterior View

**SYSTEMS DESCRIPTION**

**A - Substructure - Foundation Wall and Footings - No Basement**

Basic foundation for building without basement - to include strip footing, 4-ft foundation wall and damp proofing. Also included are underdrains.

**A - Substructure - Structural Slab on Grade - Non Industrial**

*All costs in USD.*

The building substructure includes a non-industrial type structural slab on grade.

**A10 - Foundations - Concrete Footings**

Concrete column footings.

**B10 - Superstructure - Superstructure - Multi Story - Steel**

Multi-story steel building, includes steel columns, beams, floor pans, and roof structure.

**B2010 - Exterior Walls - Brick Walls**

The exterior wall construction is of brick cavity walls.

**B2010 - Exterior Walls - Metal Paneled Walls**

The exterior wall finishes are of steel siding such as corrugated materials.

**B2020 - Exterior Windows - Aluminum Storefront System - Insulated Glazing**

Exterior aluminum storefront window system with insulating glass.

**B2020 - Exterior Windows - Aluminum Windows**

The building includes aluminum framed exterior units, with insulating glass.

**B2030 - Exterior Doors - Automatic Openers - Pair**

Door hardware add-ons, automatic openers, commercial, electronic door opener, for swing doors, pair, per opening, incl. motion sensor, 12V control box, motor, handicap actuator buttons and wiring.

**B2030 - Exterior Doors - Door Assembly - 3 x 7 HM**

Exterior doors include non-rated 3 x 7 steel door and steel frame with hinges and lockset. Includes painted door and painted frame.

**B2030 - Exterior Doors - Door Assembly - 6 x 7 Storefront - 1998**

The exterior doors include pr. swinging glazed aluminum storefront leafs, aluminum frame, hardware, including closers.

**B2030 - Exterior Doors - Door Assembly - 6 x 7 Storefront - 2011**

The exterior doors include pr. swinging glazed aluminum storefront leafs, aluminum frame, hardware, including closers.

**B2030 - Exterior Doors - Overhead Doors (Manually Operated)**

Overhead, com, fbgl, steel, and alum, heavy duty, sectional.

**B30 - Roofing - Adhered Membrane (PVC) Single-Ply**

The roof covering is of a single-ply adhered membrane with insulation. Located on the lower level of the roof.

The current condition of this system was assessed and was determined to exceed the estimated BOMA years remaining as a result of the observed site conditions and effective maintenance procedures.

**B30 - Roofing - Gutters and Downspouts**

Rain water is removed from the roof by perimeter gutters, scuppers and downspouts, which discharge to the surrounding property. Located at the northeast elevation only.

**B30 - Roofing - Metal Roofing**

The roof covering is of formed metal roofing, such as standing seam metal. Located on the upper levels of the roof.

*All costs in USD.*

**B30 - Roofing - Metal Roofing - Entrance Vestibules**

The roof covering is of formed metal roofing, such as standing seam metal, located at the entrance vestibules.

**B30 - Roofing - Roof Accessories - Snow Guard**

Prefabricated snow guard, double rail type.

**C10 - Interior Construction - Restroom - Complete - Gang**

Complete restroom including fixtures, accessories, wall finishes, floor finishes, ceiling finishes, exhaust, lighting fixtures and receptacles. Accessible compliant. Fire alarm devices are not included.

**C1010 - Partitions - Folding Partitions**

The building interior includes a folding panel partition, located in 109.

**C1010 - Partitions - GWB Walls - Standard (Non-Painted)**

The building interior includes standard GWB partitions, taped and finished, but not painted, with no insulation.

**C1020 - Interior Doors - Swinging Doors**

Interior doors include 3' x 7' doors with hinges, lockset and closer. Includes steel and wood (birch and oak) faced rated doors, painted doors and frames.

**C1035 - Identifying Devices - Fittings: Signage (Room Numbering and Identification)**

Signs, graphic symbols, adhesive back, w/Braille, 8" x 8" + Signs, flexible door sign, adhesive back, w/Braille, 5/8" letters.

**C20 - Stairs - Stairs**

The interior stairs consist of 12 risers per flight with landing and 2 flights per story.

**C3010 - Wall Finishes - Painted Finish - Average (1 Coat Prime - 2 Coats Finish)**

Interior wall finishes include standard paint finish.

**C3020 - Floor Finishes - Carpeting 3 - Carpet Broadloom**

Floor finishes include medium priced carpeting and base for average office areas. Located in classrooms and office area. Carpet is typically in good condition, leading to its extended life.

**C3020 - Floor Finishes - VCT 2**

Floor finishes include standard quality VCT flooring and baseboard located in the main corridor.

**C3030 - Ceiling Finishes - ACT System**

Standard suspended ACT ceiling system with 2 x 2 or 2 x 4 regular tiles in 15/16 or 9/16-in. grids.

**D2010 - Plumbing Fixtures - Custodial/Utility Sinks**

The plumbing fixtures include custodial/utility sinks.

**D2010 - Plumbing Fixtures - Emergency Eyewash and Shower Units**

Plumbing fixtures include emergency safety shower and eyewash units.

**D2010 - Plumbing Fixtures - Group Wash Fountain**

The building plumbing fixtures include molded group wash fountains in shop lab areas. Note: selected available RS Means line item for budgetary purposes only.

**D2010 - Plumbing Fixtures - Kitchenette - Cabinet-Counter and Sink**

*All costs in USD.*



The plumbing fixtures include kitchenette cabinet, counter and sink units used in some classrooms. Typical room is room BC 123.

**D2010 - Plumbing Fixtures - Laboratory Sinks**

The building plumbing fixtures include molded chemical-resistant laboratory sinks.

**D2010 - Plumbing Fixtures - Water Coolers - Wall Mount Wheelchair Type**

Plumbing fixtures include wheelchair type drinking fountains.

**D2020 - Domestic Water Distribution - Water Dist Complete**

The building domestic water distribution system includes a four inch main line, water meter, rpz backflow preventer, with rough ins included. This System does not include a water heater.

**D2020 - Domestic Water Distribution - Water Heater - Gas**

The domestic hot water is provided by two (2) gas-fired, 48 gal, water heater, with recirculation pump. Note: Observed Years remaining extended based on observed existing conditions.

**D2030 - Sanitary Waste - Sanitary Waste**

The building includes an extensive sanitary waste system, of cast iron piping, with gravity discharge to the municipal system.

**D2040 - Rain Water Drainage - Roof Drainage**

Rain water drainage includes interior piping, roof drains and 4-inch discharge piping by gravity flow to a municipal main.

**D2090 - Other Plumbing Systems - Gas Distribution - Lab Air & Vac Systems**

The building includes compressed air and vacuum systems. This system is used for Labs and Dental Classrooms.

**D2090 - Other Plumbing Systems - Lab Acid Waste System - Polypropylene**

The building includes a polypropylene piped acid water waste piping system for the laboratories.

**D2090 - Other Plumbing Systems - Natural Gas Supply for Bldg**

The building includes a natural gas supply and distribution system for boilers.

**D3020 - Heat Generating Systems - Boiler HW - Gas Fired PVI**

Heat for the building is provided by two gas-fired PVI hot water boilers.

**D3030 - Cooling Generating Systems - Chiller - Screw**

Cooling medium is provided by a screw type chiller with air cooled condenser. : Selected available RS Mean's line item for budgetary purposes only.

**D3040 - Distribution Systems - Central AHU - VAV System w/Distribution**

The HVAC system has a central AHU with cooling and heating coils, VFD, VAV ducted distribution, diffusers and plenum return.

**D3040 - Distribution Systems - Exhaust System - Fume Hood - Ductwork and Fan**

The HVAC ventilation system includes fume hood and exhaust systems for a building. Typical such as room BC116.

**D3040 - Distribution Systems - Exhaust System - General Building**

The HVAC ventilation system includes roof mounted exhaust fans with ducting.

**D3040 - Distribution Systems - Exhaust System - Restroom w/Roof Fan**

HVAC ventilation system includes roof mounted restroom exhaust fans with ducting.

*All costs in USD.*

**D3040 - Distribution Systems - Perimeter Heat System - Radiant Ceiling Panels**

Airtex 2 x 4 lay-in panel hydronic radiant heating system. This includes the panels, tubing, manifold, controls, and pump. NOTE: this system is not available in RS Means. This system was chosen as the closest approximation.

**D3040 - Distribution Systems - Perimeter Induction Units**

HVAC system includes perimeter induction units with temperature control by two pipe system with coils.

**D3040 - Distribution Systems - Return Air Ductwork and Fan**

The HVAC system has return air ductwork and centrifugal or in-line return air fan.

**D3040 - Distribution Systems - Two Pipe Distribution System w/Pump**

HVAC distribution is provided by a two pipe distribution system.

**D3050 - Terminal and Package Units - Split System AC - Rm. 101C**

The HVAC system includes a split system AC unit with a remote air cooled condenser for room 101C.

**D3060 - Controls and Instrumentation - DDC System**

HVAC controls include a DDC system for system optimization, basic pc control, moderate sensor types and quantities.

**D3069 - Other Controls and Instrumentation - Motor Control Center**

The upper mechanical room has a Motor Control Center with 2 sections, 600 Amp, 480 Volt.

**D40 - Fire Protection - Fire Extinguishers - Dry Chem w/Cabinet**

Handheld type dry chemical fire extinguishers are located throughout the building, as required. Includes cabinets.

**D40 - Fire Protection - Wet Sprinkler System**

The fire protection systems include a light hazard, wet fire sprinkler system. This system includes backflow protection and standpipes but does not include a fire pump.

**D5012 - Low Tension Service and Dist. - Distribution Equipment, Panelboards, and Feeders 07 - 1,200A 480Y/277V & 208Y/120V**

The electrical distribution system for this building includes an average concentration of panelboards, feeders, and associated equipment. Most of the equipment is located in the main electrical room with electrical closets on each floor.

**D5012 - Low Tension Service and Dist. - Main Electrical Service 09 - 1200A 480Y/277V**

The building includes a typical electrical service, which includes incoming feeders, main panel, and metering.

**D5020 - Lighting and Branch Wiring - Lighting - Exterior - HID Wall Packs**

Exterior lighting includes HID wall packs, ground-mounted building lights, and accent lighting around the perimeter. This system is for budgetary purposes only.

**D5021 - Branch Wiring Devices - Branch Wiring - Equipment & Devices**

Branch wiring for this building includes a typical concentration of branch wiring, devices, and utilization equipment throughout the building and classrooms. There is a heavy concentration of overhead power drops for the trade labs. The system was adjusted accordingly.

**D5022 - Lighting Equipment - Lighting Fixtures - Average Density**

*All costs in USD.*

The building includes an average density lighting system. Lighting system includes various types of lighting fixtures, HID Lights, lamps, conduit and wire. System does not address each particular lighting type as this is for budgetary purposes only.

**D5033 - Telephone Systems - Telephone System - Average Density**

The building includes an average density telephone system. This system was replaced in the fall of 2011

**D5037 - Fire Alarm Systems - Fire Alarm System - Average Density**

This building includes an average density fire alarm system. The fire alarm system includes: head end equipment, pull stations at all exit doors, audio/visual strobes, visual strobes, smokes in some rooms, conduit, wire and connections. The system appears to be operating normally, although at the end of it's BOMA rated life.

**D5038 - Security and Detection Systems - Security System - Light Density**

The building is equipped with a light density security system. The security system includes as a minimum: Alarm panel, door contacts, motion detectors, conduit and wiring. The system was reportedly installed in 2007.

**D5039 - Local Area Networks - LAN System - Average Density**

Building includes an average density local area network system throughout the building and classrooms. The system appears to be well maintained and the years remaining has been extended by two years.

**D5092 - Emergency Light and Power Systems - Emergency Battery Pack Lights**

The emergency lighting system includes a self contained battery pack and lights. The building is fully protected with emergency battery pack lighting as there is no emergency generator. Units appear to be in good condition and years remaining was extended by 2 years.

**D5092 - Emergency Light and Power Systems - Exit Signs - Low Density**

The emergency lighting system includes the installation of Exit signs on a low density level. Installation includes: single and double sided exit signs, conduit, wire, boxes, conduit bends, connections and circuit breakers.

**E - Equipment and Furnishings - Fixed Casework - Institutional**

Building includes deluxe casework including wall and under counter cabinets and deluxe countertops (stone), without appliances. Located in the three labs.

ASSET REPLACEMENT VALUE

Uniformat	System Name	Lifetime	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Value
A-Substructure	Foundation Wall and Footings - No Basement	75	6	1998	2073	6,421	102,735
A-Substructure	Structural Slab on Grade - Non Industrial	75	6	1998	2073	10,813	173,006
A10-Foundations	Concrete Footings	75	6	1998	2075	3,597	57,559
B10-Superstructure	Superstructure - Multi Story - Steel	75	6	1998	2073	57,442	919,076
B2010-Exterior Walls	Brick Walls	75	13	1998	2073	21,747	173,976
B2010-Exterior Walls	Metal Paneled Walls	60	125	1998	2058	70,385	56,308
B2020-Exterior Windows	Aluminum Storefront System - Insulated Glazing	30	125	2011	2041	25,272	20,218
B2020-Exterior Windows	Aluminum Windows	30	125	1998	2028	117,293	93,835
B2030-Exterior Doors	Automatic Openers - Pair	30	125	2011	2041	85,589	68,471
B2030-Exterior Doors	Door Assembly - 3 x 7 HM	30	125	1998	2028	11,016	8,813
B2030-Exterior Doors	Door Assembly - 6 x 7 Storefront - 1998	30	125	1998	2031	27,717	22,174
B2030-Exterior Doors	Door Assembly - 6 x 7 Storefront - 2011	30	125	2011	2041	27,717	22,174
B2030-Exterior Doors	Overhead Doors (Manually Operated)	30	125	1998	2028	3,345	2,676
B30-Roofing	Adhered Membrane (PVC) Single-Ply	25	125	1998	2028	72,184	57,747
B30-Roofing	Gutters and Downspouts	30	125	1998	2028	6,904	5,523
B30-Roofing	Metal Roofing	65	125	1998	2065	707,198	565,758
B30-Roofing	Metal Roofing - Entrance Vestibules	65	125	2011	2076	10,328	8,262

All costs in USD.

Uniformat	System Name	Lifetime	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Value
B30-Roofing	Roof Accessories - Snow Guard	20	125	2011	2031	5,644	4,515
C10-Interior Construction	Restroom - Complete - Gang	30	125	1998	2028	75,163	60,131
C1010-Partitions	Folding Partitions	15	125	1998	2014	26,339	21,071
C1010-Partitions	GWB Walls - Standard (Non-Painted)	50	63	1998	2048	79,074	126,519
C1020-Interior Doors	Swinging Doors	50	125	1998	2048	112,033	89,626
C1035-Identifying Devices	Fittings: Signage (Room Numbering and Identification)	10	125	1998	2014	21,517	17,213
C20-Stairs	Stairs	75	38	1998	2073	9,305	24,814
C3010-Wall Finishes	Painted Finish - Average (1 Coat Prime - 2 Coats Finish)	10	125	2005	2015	38,722	30,978
C3020-Floor Finishes	Carpeting 3 - Carpet Broadloom	10	125	1998	2014	183,609	146,887
C3020-Floor Finishes	VCT 2	20	125	1998	2018	55,439	44,351
C3030-Ceiling Finishes	ACT System	20	125	1998	2018	80,447	64,357
D2010-Plumbing Fixtures	Custodial/Utility Sinks	30	125	1998	2028	15,865	12,692
D2010-Plumbing Fixtures	Emergency Eyewash and Shower Units	30	125	1998	2028	5,207	4,166
D2010-Plumbing Fixtures	Group Wash Fountain	30	125	1998	2028	21,102	16,882
D2010-Plumbing Fixtures	Kitchenette - Cabinet-Counter and Sink	30	125	1998	2028	51,549	41,239
D2010-Plumbing Fixtures	Laboratory Sinks	30	125	1998	2028	53,266	42,613
D2010-Plumbing Fixtures	Water Coolers - Wall Mount Wheelchair Type	20	125	1998	2018	8,354	6,683
D2020-Domestic Water Distribution	Water Dist Complete	30	113	1998	2028	123,866	110,103
D2020-Domestic Water Distribution	Water Heater - Gas	15	112	1998	2016	13,478	12,034
D2030-Sanitary Waste	Sanitary Waste	50	125	1998	2048	201,060	160,848

All costs in USD.

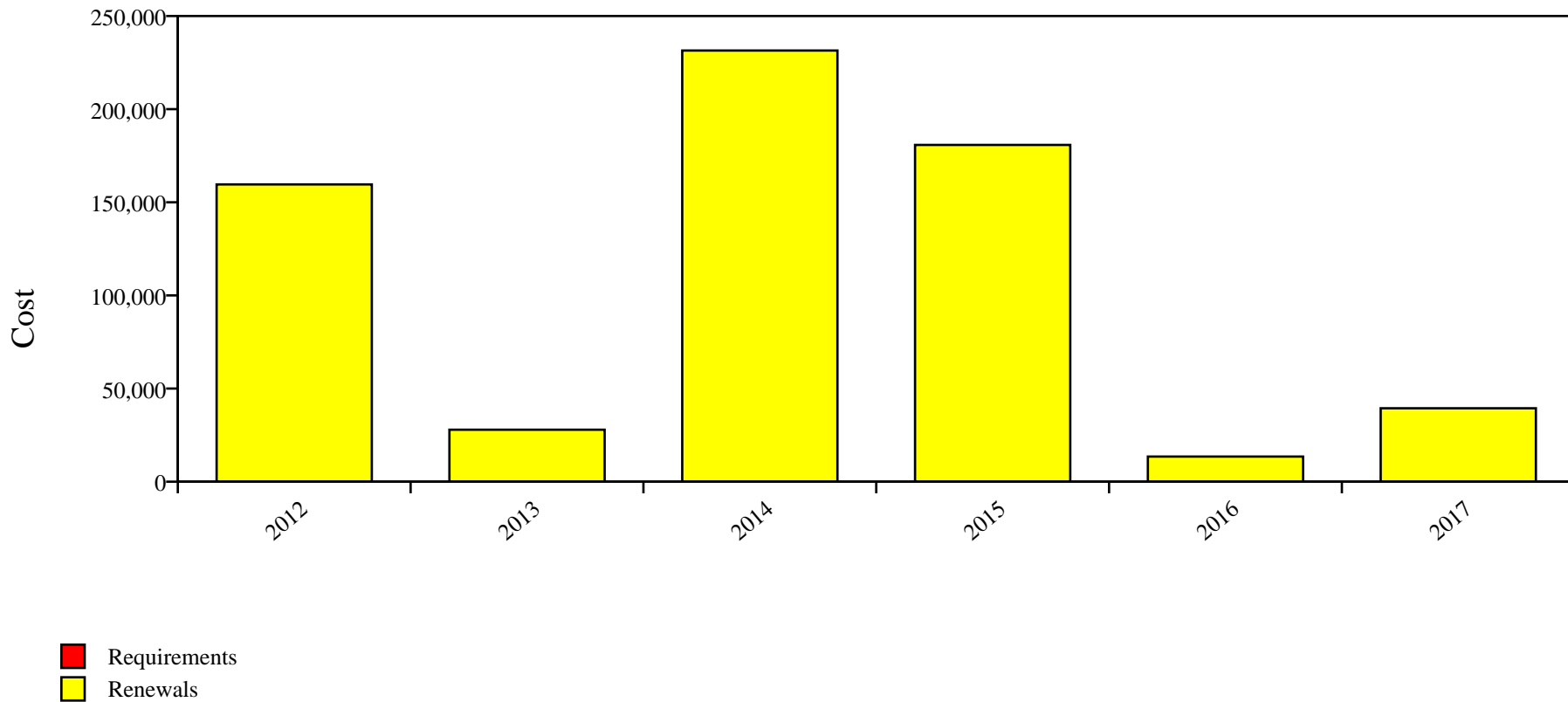
Uniformat	System Name	Lifetime	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Value
D2040-Rain Water Drainage	Roof Drainage	50	125	1998	2048	29,667	23,733
D2090-Other Plumbing Systems	Gas Distribution - Lab Air & Vac Systems	25	75	1998	2023	29,808	39,744
D2090-Other Plumbing Systems	Lab Acid Waste System - Polypropylene	40	125	1998	2038	34,971	27,977
D2090-Other Plumbing Systems	Natural Gas Supply for Bldg	40	125	1998	2038	79,478	63,583
D3020-Heat Generating Systems	Boiler HW - Gas Fired PVI	30	125	2011	2041	96,041	76,833
D3030-Cooling Generating Systems	Chiller - Screw	20	125	1998	2018	235,676	188,541
D3040-Distribution Systems	Central AHU - VAV System w/Distribution	25	125	1998	2023	912,857	730,285
D3040-Distribution Systems	Exhaust System - Fume Hood - Ductwork and Fan	25	125	1998	2023	105,687	84,550
D3040-Distribution Systems	Exhaust System - General Building	25	125	1998	2023	37,186	29,749
D3040-Distribution Systems	Exhaust System - Restroom w/Roof Fan	20	125	1998	2018	14,994	11,995
D3040-Distribution Systems	Perimeter Heat System - Radiant Ceiling Panels	18	113	2011	2029	5,927	5,268
D3040-Distribution Systems	Perimeter Induction Units	30	125	1998	2028	627,337	501,870
D3040-Distribution Systems	Return Air Ductwork and Fan	20	125	1998	2018	290,580	232,464
D3040-Distribution Systems	Two Pipe Distribution System w/Pump	30	125	1998	2028	419,329	335,463
D3050-Terminal and Package Units	Split System AC - Rm. 101C	25	125	1998	2023	9,483	7,586
D3060-Controls and Instrumentation	DDC System	20	125	1998	2018	102,043	81,634
D3069-Other Controls and Instrumentation	Motor Control Center	30	100	1998	2028	35,804	35,804
D40-Fire Protection	Fire Extinguishers - Dry Chem w/Cabinet	30	105	1998	2028	1,078	1,027

All costs in USD.

Uniformat	System Name	Lifetime	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Value
D40-Fire Protection	Wet Sprinkler System	35	125	1998	2033	219,180	175,344
D5012-Low Tension Service and Dist.	Distribution Equipment, Panelboards, and Feeders 07 - 1,200A 480Y/277V & 208Y/120V	30	125	1998	2028	204,269	163,415
D5012-Low Tension Service and Dist.	Main Electrical Service 09 - 1200A 480Y/277V	30	125	1998	2028	135,179	108,143
D5020-Lighting and Branch Wiring	Lighting - Exterior - HID Wall Packs	20	125	1998	2018	1,176	941
D5021-Branch Wiring Devices	Branch Wiring - Equipment & Devices	30	125	1998	2028	227,639	182,111
D5022-Lighting Equipment	Lighting Fixtures - Average Density	20	125	1998	2018	172,485	137,988
D5033-Telephone Systems	Telephone System - Average Density	10	106	2011	2021	94,525	88,964
D5037-Fire Alarm Systems	Fire Alarm System - Average Density	10	125	1998	2012	159,581	127,665
D5038-Security and Detection Systems	Security System - Light Density	10	125	2007	2017	39,412	31,530
D5039-Local Area Networks	LAN System - Average Density	15	106	1998	2015	142,060	133,704
D5092-Emergency Light and Power Systems	Emergency Battery Pack Lights	10	125	1998	2013	27,899	22,319
D5092-Emergency Light and Power Systems	Exit Signs - Low Density	20	125	1998	2018	14,638	11,710
E-Equipment and Furnishings	Fixed Casework - Institutional	25	125	1998	2023	138,060	110,448
						<b>Subtotal</b>	<b>7,168,420</b>
						<b>Total Replacement Value</b>	<b>7,168,420</b>

All costs in USD.

REQUIREMENTS AND RENEWALS



All costs in USD.



Requirement Name / Renewals	Prime System	Category	Priority	Action Date	Cost
Fire Alarm System - Average Density Renewal	D5037-Fire Alarm Systems	Beyond Useful Life	2- Potentially Critical	11/17/2012	159,581
<b>2012 Subtotal</b>					<b>159,581</b>
Emergency Battery Pack Lights Renewal	D5092-Emergency Light and Power Systems	Beyond Useful Life	1- Currently Critical	09/10/2013	27,899
<b>2013 Subtotal</b>					<b>27,899</b>
Carpeting 3 - Carpet Broadloom Renewal	C3020-Floor Finishes	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	183,609
Fittings: Signage (Room Numbering and Identification) Renewal	C1035-Identifying Devices	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	21,517
Folding Partitions Renewal	C1010-Partitions	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	26,339
<b>2014 Subtotal</b>					<b>231,465</b>
LAN System - Average Density Renewal	D5039-Local Area Networks	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2015	142,060
Painted Finish - Average (1 Coat Prime - 2 Coats Finish) Renewal	C3010-Wall Finishes	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2015	38,722
<b>2015 Subtotal</b>					<b>180,782</b>
Water Heater - Gas Renewal	D2020-Domestic Water Distribution	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2016	13,478
<b>2016 Subtotal</b>					<b>13,478</b>
Security System - Light Density Renewal	D5038-Security and Detection Systems	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2017	39,412
<b>2017 Subtotal</b>					<b>39,412</b>

All costs in USD.

**Region:** Lake Michigan College  
**Campus:** Lake Michigan College

**Asset Name:** Mendel Center  
**Asset Number:** 3

**STATISTICS**

<b>FCI Cost:</b> 4,672,767	<b>FCI:</b> 0.14
<b>Total Requirements Cost:</b> 4,672,767	<b>RI:</b> 0.14

<b>Current Replacement Value</b>	34,282,441	<b>Size</b>	138,688 SF
<b>Address 1</b>	2755 East Napier Avenue	<b>Address 2</b>	-
<b>City</b>	-	<b>State/Province/Region</b>	MI

**PHOTO**



Exterior View - Southwest Elevation

**SYSTEMS DESCRIPTION**

**A - Substructure - Foundation Wall and Footings - No Basement**

Basic foundation for building without basement - to include strip footing, 4-ft foundation wall and damp proofing. Also included are underdrains. Located in the original 1978 construction.

**A - Substructure - Foundation Wall and Footings - No Basement - 1992**

*All costs in USD.*

Basic foundation for building without basement - to include strip footing, 4-ft foundation wall and damp proofing. Also included are underdrains. Located at the 1992 addition.

**A - Substructure - Structural Slab on Grade - Non Industrial**

The building substructure includes a non-industrial type structural slab on grade. Located in the original 1978 construction, not including the Mainstage Theater area.

**A - Substructure - Structural Slab on Grade - Non Industrial - 1992**

The building substructure includes a non-industrial type structural slab on grade. Located at the 1992 addition and in the Mainstage Theater area.

**A10 - Foundations - Concrete Footings**

Concrete column footings located in the original 1978 construction.

**A10 - Foundations - Concrete Footings - 1992**

Concrete column footings located in the 1992 addition.

**B10 - Superstructure - Superstructure - Fireproofing - Add**

Fireproofing for structural components at the original 1978 construction.

**B10 - Superstructure - Superstructure - Multi Story - Steel**

Multi-story steel building, includes steel columns, beams, floor pans, and roof structure.

**B10 - Superstructure - Superstructure - Single Story - Steel - 1992**

Single-story steel framed building with steel columns and steel roof structure. Located at the 1992 addition.

**B2010 - Exterior Walls - Brick Walls**

The exterior wall construction is of brick cavity walls.

**B2010 - Exterior Walls - Metal Paneled Walls**

The exterior wall construction is of high quality metal panels such as standing seam metal located at the Mainstage Theaters exterior walls.

**B2020 - Exterior Windows - Aluminum Windows**

The building includes aluminum framed exterior units, with insulating glass.

**B2020 - Exterior Windows - Aluminum Windows - 1992**

The building includes aluminum framed exterior units, with insulating glass located at the main entry at the southeast elevation.

**B2030 - Exterior Doors - Door Assembly - 3 x 7 HM**

Exterior doors include non-rated 3 x 7 steel door and steel frame with hinges and lockset. Includes painted door and painted frame. Doors are in good condition, leading to their extended life.

**B2030 - Exterior Doors - Door Assembly - 3 x 7 HM - 1992**

Exterior doors include non-rated 3 x 7 steel door and steel frame with hinges and lockset. Includes painted door and painted frame. Located at the 1992 addition.

**B2030 - Exterior Doors - Door Assembly - 3 x 7 Storefront**

The exterior doors include swinging glazed aluminum storefront leaf, aluminum frame, hardware, including closer. Located in the Band Room.

**B2030 - Exterior Doors - Door Assembly - 6 x 7 HM**

Exterior doors include pr. 3 x 7 steel doors and steel frame with hinges and locksets. Includes painted doors and painted frame. Doors are in good condition, leading to their extended life.

*All costs in USD.*

**B2030 - Exterior Doors - Door Assembly - 6 x 7 Storefront**

The exterior doors include pr. swinging glazed aluminum storefront leafs plus glazed transom, aluminum frame, hardware, including closers. Doors are in good condition, leading to their extended life.

**B2030 - Exterior Doors - Door Assembly - 6 x 7 Storefront - 1992**

The exterior doors include pr. swinging glazed aluminum storefront leafs plus glazed transom, aluminum frame, hardware, including closers. Located in the 1992 addition, as well as the main entry at the southeast elevation.

**B2030 - Exterior Doors - Overhead Doors (Electrically Operated)**

The convention area has an overhead door allowing access to the convention hall. Door is in good condition, leading to its extended life.

**B2030 - Exterior Doors - Overhead Doors (Electrically Operated) - 1992**

The 1992 addition has two overhead doors located at the loading dock.

**B30 - Roofing - Adhered Membrane (EPDM) Single-Ply**

The roof covering is of a single-ply adhered membrane with insulation. Located at the covered entry roof at the southeast elevation.

**B30 - Roofing - Metal Roofing**

The roof covering is of formed metal roofing, such as standing seam metal. Located above the corridor on the west elevation between the Band Room and the convention area. Also at the Mainstage lower roof area at the southwest and northeast elevation.

**B30 - Roofing - Single Ply Membrane - Ballasted**

The roof covering is of a single-ply membrane covered with stone ballast and including deck insulation.

**B30 - Roofing - Single Ply Membrane - Ballasted - 1992**

The roof covering is of a single-ply membrane covered with stone ballast and including deck insulation. Located on the 1992 addition.

**B3020 - Roof Openings - Smoke Hatches**

Smoke vents located on the penthouse roof of the Mainstage area.

**B3021 - Glazed Roof Openings - Skylights - Monumental**

Skylights located at the pitched section of the metal roofing/siding at the upper levels of the Mainstage Theater show signs of leaking.

**C10 - Interior Construction - Restroom - Complete - Double**

Complete restroom including fixtures, accessories, wall, floor, and ceiling finishes, lighting, exhaust and outlets. Fire alarm devices are not included. Located in the dressing rooms. Restrooms are in good condition, leading to their extended life.

**C10 - Interior Construction - Restroom - Complete - Double - 1992**

Complete restroom including fixtures, accessories, wall, floor, and ceiling finishes, lighting, exhaust and outlets. Fire alarm devices are not included. Located in the Mainstage 1992 finish area.

**C10 - Interior Construction - Restroom - Complete - Gang**

Complete restroom including fixtures, accessories, wall finishes, floor finishes, ceiling finishes, exhaust, lighting fixtures and receptacles. Fire alarm devices are not included. Located between Hanson Theater and the convention area. Also located east of the convention area. Restrooms have been well maintained, and are in good condition, leading to their extended life.

**C10 - Interior Construction - Restroom - Complete - Gang - 1992**

*All costs in USD.*

Complete restroom including fixtures, accessories, wall finishes, floor finishes, ceiling finishes, exhaust, lighting fixtures and receptacles. Fire alarm devices are not included. Located on the first floor of the Mainstage 1992 finish area.

**C10 - Interior Construction - Restroom - Complete - Single**

Complete restroom including fixtures, accessories, wall finishes, floor finishes, ceiling finishes, exhaust, lighting fixtures and receptacles. Includes two restrooms in the office/administration area, as well as two single restrooms in the dressing rooms. Restrooms are in good condition, leading to their extended life.

**C10 - Interior Construction - Restroom - Shower**

Showers are located in the dressing room restrooms. Showers are in good condition, leading to their extended life.

**C1010 - Partitions - CMU Block Walls**

Interior walls include 8-in. hollow concrete block, light and regular weight, with no finish.

**C1010 - Partitions - CMU Block Walls - Plain - 1992**

Interior walls include 8-in. hollow concrete block, light and regular weight, with no finish.

**C1010 - Partitions - Folding Partitions**

The building interior includes deluxe quality folding panel partitions, located in the convention area. Partitions are in good condition, leading to their extended life.

**C1010 - Partitions - GWB Walls - Standard (Non-Painted)**

The building interior includes standard GWB partitions, taped and finished, but not painted, with no insulation.

**C1010 - Partitions - GWB Walls - Standard (Non-Painted) - 1992**

The building interior includes standard GWB partitions, taped and finished, but not painted, with no insulation.

**C1020 - Interior Doors - Swinging Doors**

Interior doors include 3' x 7' doors with hinges, lockset and closer. Includes steel and wood (birch and oak) faced rated doors, painted doors and frames.

**C1020 - Interior Doors - Swinging Doors - 1992**

Interior doors include 3' x 7' doors with hinges, lockset and closer. Includes steel and wood (birch and oak) faced rated doors, painted doors and frames. Located in the 1992 addition and the Mainstage 1992 finish.

**C1035 - Identifying Devices - Fittings: Signage (Room Numbering and Identification)**

Signs, graphic symbols, adhesive back, w/Braille, 8" x 8" + Signs, flexible door sign, adhesive back, w/Braille, 5/8" letters. Signage is in good condition, leading to its extended life.

**C20 - Stairs - Stairs**

The interior stairs consist of 12 risers per flight with landing and 2 flights per story.

**C20 - Stairs - Stairs - 1992**

The interior stairs consist of 12 risers per flight with landing and 2 flights per story.

**C20 - Stairs - Stairs - Spiral**

Building includes steel spiral staircase, located at the A/V room overlooking the convention area.

**C20 - Stairs - Stairs - Spiral - 1992**

Building includes steel spiral staircase, located at Mainstage.

*All costs in USD.*

**C3010 - Wall Finishes - Brick - 1992**

Building wall finishes include brick.

**C3010 - Wall Finishes - Ceramic Tiles**

Building wall coverings include 6-in. x 4-in. thin set ceramic decorator tiles at medium price. Located in the kitchen. Tile is in good condition, leading to its extended life.

**C3010 - Wall Finishes - Paint Masonry/Epoxy Finish**

Wall finishes include paint on CMU and minimum hi-build epoxy finish.

**C3010 - Wall Finishes - Painted Finish - (1 Coat Prime - 2 Coats Finish)**

Interior wall finishes include standard paint finish.

**C3010 - Wall Finishes - Wall Covering - Vinyl**

Wall finishes include wall covering composed of vinyl or other similar material, located in the convention area.

**C3020 - Floor Finishes - Access Office Flooring System - 1992**

Floor finishes include raised, access type computer room flooring (plastic laminate finish). Located in the 1992 addition.

**C3020 - Floor Finishes - Access Office Flooring System - 1998**

Floor finishes include raised, access type computer room flooring (plastic laminate finish) with related steps, handrails, guardrails and ramps. Located in the advanced technology center.

**C3020 - Floor Finishes - Carpeting 3 - Carpet Broadloom**

Floor finishes include medium priced carpeting and base for average office areas. Located in office/administration area.

**C3020 - Floor Finishes - Carpeting 3 - Carpet Broadloom - 1992**

Floor finishes include medium priced carpeting and base for average office areas. Located in the Mainstage 1992 finish area. Carpet is in good condition, leading to its extended life.

**C3020 - Floor Finishes - Carpeting 3 - Carpet Broadloom - 2003**

Floor finishes include medium priced carpeting and base for average office areas. Located in the convention area.

**C3020 - Floor Finishes - Carpeting 3 - Carpet Broadloom - 2006**

Floor finishes include medium priced carpeting and base for average office areas. Typically located in the corridors of the 1978 area.

**C3020 - Floor Finishes - Carpeting 3 - Carpet Broadloom - Hanson**

Floor finishes include medium priced carpeting and base for average office areas. Located in the Hanson Theater. Carpet is in good condition, leading to its extended life.

**C3020 - Floor Finishes - Quarry Tile**

Floor finishes include quarry tile in the kitchen area, as well as the entry between the band room and the Mainstage area. Tile is in good condition, leading to its extended life.

**C3020 - Floor Finishes - VCT 2**

Floor finishes include standard quality VCT flooring and baseboard. Located in the band room and the dressing rooms. VCT is in good condition, leading to its extended life.

**C3020 - Floor Finishes - VCT 2 - 1992**

Floor finishes include standard quality VCT flooring and baseboard. Located in the 1992 addition and the Mainstage finish area.

**C3020 - Floor Finishes - Wood Flooring**

*All costs in USD.*

Floor finishes include strip flooring, located in Dance/Drama.

**C3030 - Ceiling Finishes - ACT System**

Standard suspended ACT ceiling system with 2 x 2 or 2 x 4 regular tiles in 15/16 or 9/16-in. grids.

**C3030 - Ceiling Finishes - ACT System - 1992**

Standard suspended ACT ceiling system with 2 x 2 or 2 x 4 regular tiles in 15/16 or 9/16-in. grids. Located in the 1992 addition and the Mainstage finish area.

**C3030 - Ceiling Finishes - GWB Taped and Finished - 1992**

GWB ceiling system over 8-ft above floor taped, finished and painted with primer and 2 finish coats. Ceiling on suspension system or fastened to mtl or wd furring.

**D1010 - Elevators and Lifts - Hydraulic Passenger Elevator**

The conveying equipment includes two (2), 2500 Lb. passenger hydraulic elevator - four stops. Note: Observed Years remaining extended based on observed existing conditions.

**D1010 - Elevators and Lifts - Orchestra Lift - MC101D**

The conveying equipment includes a stage orchestra lift. Note: Observed Years remaining extended based on observed existing conditions. Note: Selected available RS Mean's line item for budgetary purposes only.

**D2010 - Plumbing Fixtures - Custodial/Utility Sinks**

The plumbing fixtures include custodial/utility sinks.

**D2010 - Plumbing Fixtures - Kitchenette - Cabinet-Counter and Sink**

The plumbing fixtures include kitchenette cabinet, counter and sink units.

**D2010 - Plumbing Fixtures - Water Coolers - Wall Mount**

Plumbing fixtures include drinking fountains set at dual heights. Note: Observed Years remaining extended based on observed existing conditions.

**D2020 - Domestic Water Distribution - Water Dist Complete**

The building domestic water distribution system includes a four inch main line, water meter, check valve with rough ins included. This System does not include a water heater. Located in room F150B. Note: Observed Years remaining extended based on observed existing conditions.

**D2020 - Domestic Water Distribution - Water Heater - Gas - 2000**

The domestic hot water is provided by a gas-fired, 100 MBH, commercial grade water heater, with recirculation pump.

**D2020 - Domestic Water Distribution - Water Heater - Gas - 2010**

The domestic hot water is provided by a gas-fired, 100 MBH, commercial grade water heater, with recirculation pump. Redundant units.

**D2030 - Sanitary Waste - Sanitary Waste**

The building includes an extensive sanitary waste system, of cast iron piping, with gravity discharge to the municipal system.

**D2040 - Rain Water Drainage - Roof Drainage**

Rain water drainage includes interior piping, roof drains and 4-inch discharge piping by gravity flow to a municipal main.

**D2090 - Other Plumbing Systems - Natural Gas Supply for Bldg**

The building includes a natural gas supply and distribution system for boilers and kitchen.

**D3011 - Oil Supply System - Underground Fuel Tank - Fbgls - 550 Gal**

*All costs in USD.*

The system also includes a underground fuel storage tank. For the generator and boilers.

**D3020 - Heat Generating Systems - Boiler HW - Gas Fired w/Redundancy**

Heat for the building is provided be a gas-fired hot water boiler. Full redundancy is included

**D3030 - Cooling Generating Systems - Chiller - Centrifugal w/Cooling Tower**

Cooling medium is provided by centrifugal chiller with associated cooling tower.

**D3040 - Distribution Systems - Central AHU - Const Volume w/Distribution**

The HVAC system includes three (3) roof mounted and rooms F108C, area above stage and behind Kitchen area constant volume air handling units, distribution ductwork, diffusers and plenum return.

**D3040 - Distribution Systems - Central AHU - VAV System w/Distribution**

The HVAC system has a central AHU with cooling and heating coils, VFD, VAV ducted distribution, diffusers and plenum return.

**D3040 - Distribution Systems - Exhaust System - General Building**

The HVAC ventilation system includes roof mounted exhaust fans with ducting.

**D3040 - Distribution Systems - Exhaust System - Restroom w/Roof Fan**

HVAC ventilation system includes roof mounted restroom exhaust fans with ducting.

**D3040 - Distribution Systems - Four Pipe Distribution System w/Pump**

HVAC distribution is provided by a four pipe distribution system.

**D3040 - Distribution Systems - Perimeter Units**

HVAC system includes perimeter heating units with temperature control by two pipe system with coils and multfin cabinet units in some areas.

**D3040 - Distribution Systems - Return Air Ductwork and Fan**

The HVAC system has return air ductwork and centrifugal or in-line return air fan. Note: Observed Years remaining extended based on observed existing conditions.

**D3050 - Terminal and Package Units - Split System AC - Piano Room**

The HVAC system includes a split system AC unit with a remote air cooled condenser for the piano room located on the stage.

**D3050 - Terminal and Package Units - Unit Heaters - Hot Water**

Heating is provided by suspended, forced hot water unit heaters in mechanical rooms and storage areas.

**D3060 - Controls and Instrumentation - DDC/Pneumatic System - Hybrid**

HVAC controls include average DDC system for system optimization, basic pc control, moderate sensor types and quantities. System includes pneumatic activation of control valves and dampers.

**D3069 - Other Controls and Instrumentation - Motor Control Center, Main Elec Room**

There is a Motor Control Center in the buildings main electrical room. It appears to be original in age and is beyond its BOMA rated estimated life cycle. The typical MCC is 600 Amp, 480 Volt. The units are priced by section including starters.

**D3069 - Other Controls and Instrumentation - Motor Control Center, Theater**

There is a Motor Control Center in the theater backstage mechanical area. It appears to be original in age and is in good condition. The typical MCC is 600 Amp, 480 Volt. The units are priced by section including starters.

**D40 - Fire Protection - Dry Sprinkler System**

*All costs in USD.*



The fire protection systems include a dry fire sprinkler system. Includes air pump, controls and manual discharge for the telecommunications room. Note: Observed Years remaining extended based on observed existing conditions.

**D40 - Fire Protection - Fire Extinguishers - Dry Chem w/Cabinet**

Handheld type dry chemical fire extinguishers are located throughout the building, as required. Includes cabinets.

**D40 - Fire Protection - Wet Sprinkler System - w/Pump**

The fire protection systems include an ordinary hazard wet fire sprinkler system with backflow protection, standpipes, and fire pump. Note: Observed Years remaining extended based on observed existing conditions.

**D5012 - Low Tension Service and Dist. - Distribution Equipment, Panelboards, and Feeders 13 - 3000A 480Y/277V & 208Y/120V**

The electrical distribution system for this building includes an average concentration of panelboards, feeders, and associated equipment. The majority of the distribution and lighting panels are in good condition and show updates as there has been some renovations made over the years. The site contact reports that there are no problems associated with the distribution panels. Based on updates to the system as a whole and the history of no issues, the life has been extended.

**D5012 - Low Tension Service and Dist. - Distribution Equipment, Panelboards, and Feeders 13, 1992 Renovation - 3000A 480Y/277V & 208Y/120V**

The electrical distribution system for this building includes an average concentration of panelboards, feeders, and associated equipment. The majority of the distribution and lighting panels are in good condition. The site contact reports that there are no problems associated with the distribution panels.

**D5012 - Low Tension Service and Dist. - Main Electrical Service 13 - 3000A 480Y/277V**

The building includes a typical electrical service, which includes incoming feeders, main panel, and metering. There is only one parallel feed to the building. The 3000 Amp equipment is original and is beyond its BOMA rated life.

**D5020 - Lighting and Branch Wiring - Lighting - Exterior**

Exterior lighting includes HID wall packs, soffit lights, and accent lighting around the perimeter. The lights appear to be original. This system is for budgetary purposes only.

**D5021 - Branch Wiring Devices - Branch Wiring, 1992 Renovation - Equipment & Devices**

Branch wiring for this building includes a typical concentration of branch wiring, devices, and utilization equipment throughout the building and classrooms.

**D5021 - Branch Wiring Devices - Branch Wiring, Original - Equipment & Devices**

Branch wiring for this building includes a typical concentration of branch wiring, devices, and utilization equipment throughout the building and theater.

**D5022 - Lighting Equipment - Lighting Fixtures, 1992 Renovation - Average Density**

The building includes a average density lighting system. Lighting system includes various types of lighting fixtures, HID Lights, lamps, conduit and wire. System does not address each particular lighting type as this is for budgetary purposes only. These lights are original to the 1992 renovation.

**D5022 - Lighting Equipment - Lighting Fixtures, Original - Average Density**

The building includes a average density lighting system. Lighting system includes various types of lighting fixtures, HID Lights, lamps, conduit and wire. System does not address each particular lighting type as this is for budgetary purposes only. The fixtures are original.

**D5022 - Lighting Equipment - Stage Lighting**

Stage Lighting. Includes master control panel, spots, borders and stage lights. There are two theaters in the building, one of which is the main theater.

**D5031 - Public Address and Music Systems - Public Address System - Average Density**

All costs in USD.

The building includes an average density public address system on a limited area basis. The areas include the conference centers and theaters. The public address system includes as a minimum: Amplifier, intercom/monitor, volume control, speakers (ceilings or walls), conduit and shielded wiring.

**D5032 - Intercommunication and Paging System - Intercom System**

The building includes a partial intercom system for areas such as the theater, green rooms, and conference centers.

**D5033 - Telephone Systems - Telephone System - Average Density**

The building includes an average density telephone system. This system was replaced in the fall of 2011.

**D5037 - Fire Alarm Systems - Fire Alarm System, 1992 Renovation - Average Density**

This building includes an average density fire alarm system. The fire alarm system includes: head end equipment, pull stations at all exit doors, audio/visual strobes, visual strobes, smokes in some rooms, conduit, wire and connections. The system is original to this section of the building, although it appears that some devices have been updated.

**D5037 - Fire Alarm Systems - Fire Alarm System, Original Building - Average Density**

This building includes an average density fire alarm system. The fire alarm system includes: head end equipment, pull stations at all exit doors, audio/visual strobes, visual strobes, smokes in some rooms, conduit, wire and connections. The system is original to the building, although it appears that some devices have been updated.

**D5039 - Local Area Networks - LAN System - Average Density**

Building includes an average density local area network system throughout the building and classrooms. The system appears to be well maintained and is reported by the site contact to be approximately 7-8 years of age. this building is supported by the data center in the Napier Campus building.

**D5091 - Grounding Systems - Lightning Protection Systems - Bldg Under 75'**

The upper theater section of the building includes a typical Lightning Protection System. The Lightning Protection System includes as a minimum: air terminals, equipment connections, down conductors, ground terminals, and cabling.

**D5092 - Emergency Light and Power Systems - Emergency Battery Pack Lights**

The emergency lighting system includes a self contained battery pack and lights. The building is only partially protected with emergency battery pack lighting as there is an emergency generator for most egress lighting. Units appear to be aged for the most part.

**D5092 - Emergency Light and Power Systems - Emergency Generator - Average 280KW**

The emergency power system includes an Emergency Generator 250kW max. Includes: Emergency Generator, ATS, battery charger, muffler, day tank, feeder, wiring, and panels.

**D5092 - Emergency Light and Power Systems - Exit Signs, Original - Low Density**

The emergency lighting system includes the installation of Exit signs on a low density level. Installation includes: single and double sided exit signs, conduit, wire, boxes, conduit bends, connections and circuit breakers. All of the Exit signs appear to be original to the building and the renovation year. Most units are at or near their BOMA rated life cycle.

**E - Equipment and Furnishings - Fixed Theater Seating - Deluxe**

Furnishings include fixed theater seating in Hanson Theater.

**E - Equipment and Furnishings - Fixed Theater Seating - Deluxe - 1992**

Furnishings include fixed theater seating in the Mainstage theater.

**E - Equipment and Furnishings - Kitchen Equipment**

Equipment and furnishings includes kitchen equipment of average quantity and quality. Systems include, walk-in's, pot sinks, range hood with fire suppression and other equipment. Note: Observed Years remaining extended based on observed existing conditions.

**E - Equipment and Furnishings - Theater And Stage Equipment - Economy**

The building includes a minimum amount of theater and stage equipment, located in the Hanson Theater. Stage equipment is in good condition, leading to its extended life.

**E - Equipment and Furnishings - Theater And Stage Equipment - High Quality - 1992**

The building includes theater and stage equipment of high quantity and quality, located in Mainstage.

**G2040 - Site Development - Retaining Walls - Concrete**

Concrete retaining walls with brick face. Located at the main entry (southeast elevation).

**G2040 - Site Development - Walls - Brick - 1992**

Brick and CMU wall surrounding the loading dock.

ASSET REPLACEMENT VALUE

Uniformat	System Name	Lifetime	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Value
A-Substructure	Foundation Wall and Footings - No Basement	75	6	1978	2053	11,820	189,114
A-Substructure	Foundation Wall and Footings - No Basement - 1992	75	6	1992	2067	1,837	29,389
A-Substructure	Structural Slab on Grade - Non Industrial	75	6	1978	2053	28,782	460,509
A-Substructure	Structural Slab on Grade - Non Industrial - 1992	75	6	1992	2067	14,361	229,773
A10-Foundations	Concrete Footings	75	6	1978	2053	13,329	213,261
A10-Foundations	Concrete Footings - 1992	75	6	1992	2067	1,025	16,395
B10-Superstructure	Superstructure - Fireproofing - Add	75	100	1978	2053	386,036	386,036
B10-Superstructure	Superstructure - Multi Story - Steel	75	6	1978	2053	217,967	3,487,464
B10-Superstructure	Superstructure - Single Story - Steel - 1992	75	6	1992	2067	3,435	54,954
B2010-Exterior Walls	Brick Walls	75	13	1978	2053	61,765	494,120
B2010-Exterior Walls	Metal Paneled Walls	60	125	1978	2038	1,063,168	850,534
B2020-Exterior Windows	Aluminum Windows	30	125	1978	2013	296,604	237,283
B2020-Exterior Windows	Aluminum Windows - 1992	30	125	1992	2022	116,282	93,026
B2030-Exterior Doors	Door Assembly - 3 x 7 HM	30	125	1978	2014	14,688	11,750
B2030-Exterior Doors	Door Assembly - 3 x 7 HM - 1992	30	125	1992	2022	7,344	5,875
B2030-Exterior Doors	Door Assembly - 3 x 7 Storefront	30	125	1978	2014	4,386	3,509
B2030-Exterior Doors	Door Assembly - 6 x 7 HM	30	125	1978	2014	35,980	28,784

All costs in USD.

Uniformat	System Name	Lifetime	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Value
B2030-Exterior Doors	Door Assembly - 6 x 7 Storefront	30	125	1978	2014	83,152	66,522
B2030-Exterior Doors	Door Assembly - 6 x 7 Storefront - 1992	30	125	1992	2022	83,152	66,522
B2030-Exterior Doors	Overhead Doors (Electrically Operated)	30	125	1978	2014	5,159	4,127
B2030-Exterior Doors	Overhead Doors (Electrically Operated) - 1992	30	125	1992	2022	9,888	7,910
B30-Roofing	Adhered Membrane (EPDM) Single-Ply	25	125	1995	2020	60,315	48,252
B30-Roofing	Metal Roofing	65	125	1978	2043	278,438	222,750
B30-Roofing	Single Ply Membrane - Ballasted	25	125	1978	2014	697,452	557,961
B30-Roofing	Single Ply Membrane - Ballasted - 1992	25	125	1992	2017	56,979	45,583
B3020-Roof Openings	Smoke Hatches	30	100	1978	2014	74,864	74,864
B3021-Glazed Roof Openings	Skylights - Monumental	30	125	1978	2013	296,504	237,203
C10-Interior Construction	Restroom - Complete - Double	30	125	1978	2014	45,430	36,344
C10-Interior Construction	Restroom - Complete - Double - 1992	30	125	1992	2022	136,291	109,033
C10-Interior Construction	Restroom - Complete - Gang	30	125	1978	2014	157,572	126,058
C10-Interior Construction	Restroom - Complete - Gang - 1992	30	125	1992	2022	78,786	63,029
C10-Interior Construction	Restroom - Complete - Single	30	125	1978	2014	39,319	31,455
C10-Interior Construction	Restroom - Shower	30	125	1978	2014	123,043	98,434
C1010-Partitions	CMU Block Walls	50	63	1978	2028	291,357	466,171
C1010-Partitions	CMU Block Walls - Plain - 1992	50	63	1992	2042	145,233	232,373
C1010-Partitions	Folding Partitions	15	125	1978	2014	542,304	433,843

All costs in USD.

Uniformat	System Name	Lifetime	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Value
C1010-Partitions	GWB Walls - Standard (Non-Painted)	50	63	1978	2028	136,227	217,963
C1010-Partitions	GWB Walls - Standard (Non-Painted) - 1992	50	63	1992	2042	63,748	101,997
C1020-Interior Doors	Swinging Doors	50	125	1978	2028	345,434	276,347
C1020-Interior Doors	Swinging Doors - 1992	50	125	1992	2042	273,079	218,464
C1035-Identifying Devices	Fittings: Signage (Room Numbering and Identification)	10	125	1992	2014	87,044	69,635
C20-Stairs	Stairs	75	38	1978	2053	9,862	26,298
C20-Stairs	Stairs - 1992	75	38	1992	2067	59,171	157,789
C20-Stairs	Stairs - Spiral	75	38	1978	2053	5,169	13,784
C20-Stairs	Stairs - Spiral - 1992	75	38	1978	2053	25,846	68,922
C3010-Wall Finishes	Brick - 1992	75	125	1992	2067	278,913	223,130
C3010-Wall Finishes	Ceramic Tiles	25	125	1978	2014	53,666	42,932
C3010-Wall Finishes	Paint Masonry/Epoxy Finish	15	125	2000	2015	259,700	207,760
C3010-Wall Finishes	Painted Finish - (1 Coat Prime - 2 Coats Finish)	10	125	2004	2014	97,926	78,341
C3010-Wall Finishes	Wall Covering - Vinyl	10	125	2003	2014	34,642	27,714
C3020-Floor Finishes	Access Office Flooring System - 1992	25	125	1992	2017	29,255	23,404
C3020-Floor Finishes	Access Office Flooring System - 1998	25	125	1998	2023	49,867	39,893
C3020-Floor Finishes	Carpeting 3 - Carpet Broadloom	10	125	2011	2021	43,980	35,184
C3020-Floor Finishes	Carpeting 3 - Carpet Broadloom - 1992	10	125	1992	2014	344,549	275,640

All costs in USD.

Uniformat	System Name	Lifetime	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Value
C3020-Floor Finishes	Carpeting 3 - Carpet Broadloom - 2003	10	125	2003	2014	180,945	144,756
C3020-Floor Finishes	Carpeting 3 - Carpet Broadloom - 2006	10	125	2006	2016	92,734	74,187
C3020-Floor Finishes	Carpeting 3 - Carpet Broadloom - Hanson	10	125	1996	2014	37,948	30,359
C3020-Floor Finishes	Quarry Tile	25	125	1978	2014	72,338	57,870
C3020-Floor Finishes	VCT 2	20	125	1978	2014	60,564	48,451
C3020-Floor Finishes	VCT 2 - 1992	20	125	1992	2014	93,524	74,820
C3020-Floor Finishes	Wood Flooring	25	125	1990	2015	40,941	32,753
C3030-Ceiling Finishes	ACT System	20	125	1978	2012	117,478	93,983
C3030-Ceiling Finishes	ACT System - 1992	20	125	1992	2014	136,747	109,397
C3030-Ceiling Finishes	GWB Taped and Finished - 1992	30	125	1992	2022	117,560	94,048
D1010-Elevators and Lifts	Hydraulic Passenger Elevator	35	125	1978	2016	340,452	272,361
D1010-Elevators and Lifts	Orchestra Lift - MC101D	35	125	1978	2016	233,506	186,805
D2010-Plumbing Fixtures	Custodial/Utility Sinks	30	125	1992	2022	64,182	51,345
D2010-Plumbing Fixtures	Kitchenette - Cabinet-Counter and Sink	30	125	1992	2022	88,143	70,515
D2010-Plumbing Fixtures	Water Coolers - Wall Mount	20	125	1992	2016	36,881	29,505
D2020-Domestic Water Distribution	Water Dist Complete	30	113	1978	2016	501,084	445,408
D2020-Domestic Water Distribution	Water Heater - Gas - 2000	15	112	2000	2015	12,455	11,121
D2020-Domestic Water Distribution	Water Heater - Gas - 2010	15	112	2010	2025	12,455	11,121
D2030-Sanitary Waste	Sanitary Waste	50	125	1978	2028	813,364	650,691
D2040-Rain Water Drainage	Roof Drainage	50	125	1978	2028	288,063	230,451
D2090-Other Plumbing Systems	Natural Gas Supply for Bldg	40	125	1978	2018	321,520	257,216

All costs in USD.

Uniformat	System Name	Lifetime	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Value
D3011-Oil Supply System	Underground Fuel Tank - Fbgls - 550 Gal	35	125	1998	2033	91,033	72,826
D3020-Heat Generating Systems	Boiler HW - Gas Fired w/Redundancy	30	125	1978	2012	1,373,777	1,099,021
D3030-Cooling Generating Systems	Chiller - Centrifugal w/Cooling Tower	28	125	2004	2032	1,063,612	850,890
D3040-Distribution Systems	Central AHU - Const Volume w/Distribution	25	125	1978	2015	1,764,479	1,411,583
D3040-Distribution Systems	Central AHU - VAV System w/Distribution	25	125	1992	2017	1,011,829	809,464
D3040-Distribution Systems	Exhaust System - General Building	25	125	1978	2013	150,433	120,347
D3040-Distribution Systems	Exhaust System - Restroom w/Roof Fan	20	125	1978	2013	60,657	48,526
D3040-Distribution Systems	Four Pipe Distribution System w/Pump	30	125	1978	2016	2,658,409	2,126,727
D3040-Distribution Systems	Perimeter Units	30	125	1992	2022	2,574,264	2,059,411
D3040-Distribution Systems	Return Air Ductwork and Fan	20	125	1992	2017	322,085	257,668
D3050-Terminal and Package Units	Split System AC - Piano Room	25	125	1992	2017	9,483	7,586
D3050-Terminal and Package Units	Unit Heaters - Hot Water	25	112	1992	2017	16,259	14,517
D3060-Controls and Instrumentation	DDC/Pneumatic System - Hybrid	25	125	1992	2017	793,987	635,190
D3069-Other Controls and Instrumentation	Motor Control Center, Main Elec Room	30	100	1978	2013	35,804	35,804
D3069-Other Controls and Instrumentation	Motor Control Center, Theater	30	100	1992	2022	107,413	107,413
D40-Fire Protection	Dry Sprinkler System	35	125	1978	2018	29,845	23,876
D40-Fire Protection	Fire Extinguishers - Dry Chem w/Cabinet	30	105	1992	2022	4,360	4,153

All costs in USD.



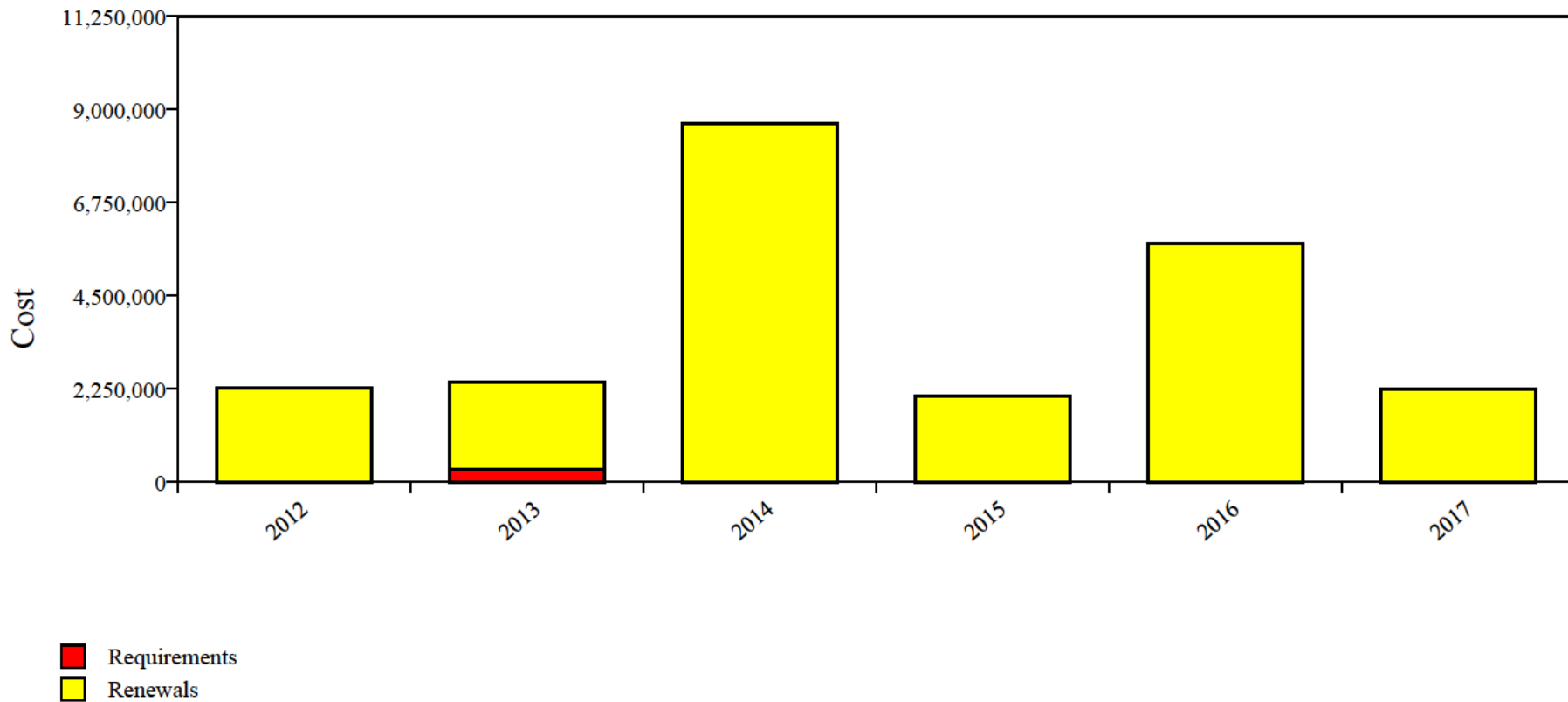
Uniformat	System Name	Lifetime	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Value
D40-Fire Protection	Wet Sprinkler System - w/Pump	35	125	1978	2016	1,224,331	979,465
D5012-Low Tension Service and Dist.	Distribution Equipment, Panelboards, and Feeders 13 - 3000A 480Y/277V & 208Y/120V	30	125	1978	2014	431,191	344,953
D5012-Low Tension Service and Dist.	Distribution Equipment, Panelboards, and Feeders 13, 1992 Renovation - 3000A 480Y/277V & 208Y/120V	30	125	1992	2022	431,191	344,953
D5012-Low Tension Service and Dist.	Main Electrical Service 13 - 3000A 480Y/277V	30	125	2010	2040	590,099	472,079
D5020-Lighting and Branch Wiring	Lighting - Exterior	20	125	1978	2013	7,145	5,716
D5021-Branch Wiring Devices	Branch Wiring, 1992 Renovation - Equipment & Devices	30	125	1992	2022	526,566	421,253
D5021-Branch Wiring Devices	Branch Wiring, Original - Equipment & Devices	30	125	1978	2013	465,331	372,265
D5022-Lighting Equipment	Lighting Fixtures, 1992 Renovation - Average Density	20	125	1992	2012	293,421	234,737
D5022-Lighting Equipment	Lighting Fixtures, Original - Average Density	20	125	1978	2014	404,349	323,480
D5022-Lighting Equipment	Stage Lighting	20	100	1992	2012	410,480	410,480
D5031-Public Address and Music Systems	Public Address System - Average Density	15	125	1992	2013	27,652	22,122
D5032-Intercommunication and Paging System	Intercom System	10	125	1992	2013	98,534	78,827
D5033-Telephone Systems	Telephone System - Average Density	10	106	2011	2021	382,389	359,895
D5037-Fire Alarm Systems	Fire Alarm System, 1992 Renovation - Average Density	10	125	1992	2013	271,469	217,175

All costs in USD.

Uniformat	System Name	Lifetime	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Value
D5037-Fire Alarm Systems	Fire Alarm System, Original Building - Average Density	10	125	1978	2013	374,098	299,279
D5039-Local Area Networks	LAN System - Average Density	15	106	2001	2016	574,688	540,883
D5091-Grounding Systems	Lightning Protection Systems - Bldg Under 75'	30	125	1992	2022	45,556	36,444
D5092-Emergency Light and Power Systems	Emergency Battery Pack Lights	10	125	1992	2013	47,460	37,968
D5092-Emergency Light and Power Systems	Emergency Generator - Average 280KW	20	125	1994	2014	162,027	129,622
D5092-Emergency Light and Power Systems	Exit Signs, Original - Low Density	20	125	1992	2012	59,216	47,373
E-Equipment and Furnishings	Fixed Theater Seating - Deluxe	35	63	1978	2014	16,771	26,833
E-Equipment and Furnishings	Fixed Theater Seating - Deluxe - 1992	35	63	1992	2027	103,523	165,637
E-Equipment and Furnishings	Kitchen Equipment	20	125	1992	2016	103,126	82,501
E-Equipment and Furnishings	Theater And Stage Equipment - Economy	20	125	1978	2014	258,120	206,496
E-Equipment and Furnishings	Theater And Stage Equipment - High Quality - 1992	20	125	1992	2014	4,357,609	3,486,087
G2040-Site Development	Retaining Walls - Concrete	40	125	1978	2018	94,930	75,944
G2040-Site Development	Walls - Brick - 1992	40	125	1992	2032	90,505	72,404
						<b>Subtotal</b>	<b>34,282,441</b>
<b>Total Replacement Value</b>							<b>34,282,441</b>

All costs in USD.

REQUIREMENTS AND RENEWALS



All costs in USD.

Requirement Name / Renewals	Prime System	Category	Priority	Action Date	Cost
ACT System Renewal	C3030-Ceiling Finishes	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2012	117,478
Boiler HW - Gas Fired w/Redundancy Renewal	D3020-Heat Generating Systems	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2012	1,373,777
Exit Signs, Original - Low Density Renewal	D5092-Emergency Light and Power Systems	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2012	59,216
Lighting Fixtures, 1992 Renovation - Average Density Renewal	D5022-Lighting Equipment	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2012	293,421
Stage Lighting Renewal	D5022-Lighting Equipment	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2012	410,480
<b>2012 Subtotal</b>					<b>2,254,372</b>
Aluminum Windows Renewal	B2020-Exterior Windows	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2013	296,604
Branch Wiring, Original - Equipment & Devices Renewal	D5021-Branch Wiring Devices	Beyond Useful Life	1- Currently Critical	09/11/2013	465,331
Drain Pipe: Not Insulated	C10-Interior Construction	Accessibility	3- Necessary - Not Yet Critical	12/17/2013	1,505
Electrical Outlets - Lack GFCI Receptacle	D5021-Branch Wiring Devices	Grandfathered Code	Not Time Critical	10/17/2013	10,170
Electrical Panel - Lack Circuit Identification	D5012-Low Tension Service and Dist.	Life Safety	2- Potentially Critical	10/17/2013	3,232
Electrical Panels - Lack Dedicated Space	D5012-Low Tension Service and Dist.	Grandfathered Code	Not Time Critical	10/17/2013	37,680
Emergency Battery Pack Lights Renewal	D5092-Emergency Light and Power Systems	Beyond Useful Life	1- Currently Critical	09/11/2013	47,460
Exhaust System - General Building Renewal	D3040-Distribution Systems	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2013	150,433
Exhaust System - Restroom w/Roof Fan Renewal	D3040-Distribution Systems	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2013	60,657
Fire Alarm System, 1992 Renovation - Average Density Renewal	D5037-Fire Alarm Systems	Beyond Useful Life	1- Currently Critical	09/11/2013	271,469
Fire Alarm System, Original Building - Average Density Renewal	D5037-Fire Alarm Systems	Beyond Useful Life	1- Currently Critical	09/11/2013	374,098

All costs in USD.

Requirement Name / Renewals	Prime System	Category	Priority	Action Date	Cost
Guard and Handrails - Non-Compliant	C20-Stairs	Grandfathered Code	Not Time Critical	10/17/2013	37,741
Hardware - Not ADAAG Compliant	C1020-Interior Doors	Accessibility	Not Time Critical	10/17/2013	116,794
HVAC Cost Study- Engineer Environmental and Efficiency Study	D3040-Distribution Systems	Air and Water Quality	3- Necessary - Not Yet Critical	11/17/2013	59,951
Intercom System Renewal	D5032-Intercommunication and Paging System	Beyond Useful Life	1- Currently Critical	09/11/2013	98,534
Lighting - Exterior Renewal	D5020-Lighting and Branch Wiring	Beyond Useful Life	1- Currently Critical	09/11/2013	7,145
Motor Control Center, Main Elec Room Renewal	D3069-Other Controls and Instrumentation	Beyond Useful Life	1- Currently Critical	09/11/2013	35,804
Partitions- Generator Room Non-Compliant	-	Grandfathered Code	Not Time Critical	10/17/2013	11,756
Public Address System - Average Density Renewal	D5031-Public Address and Music Systems	Beyond Useful Life	1- Currently Critical	09/11/2013	27,652
Rooftop HVAC Equipment - Lacks Service Outlets	D5021-Branch Wiring Devices	Grandfathered Code	Not Time Critical	10/17/2013	7,872
Skylights - Monumental Renewal	B3021-Glazed Roof Openings	Beyond Useful Life	1- Currently Critical	09/11/2013	296,504
<b>2013 Subtotal</b>					<b>2,418,392</b>
ACT System - 1992 Renewal	C3030-Ceiling Finishes	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	136,747
Carpeting 3 - Carpet Broadloom - 1992 Renewal	C3020-Floor Finishes	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	344,549
Carpeting 3 - Carpet Broadloom - 2003 Renewal	C3020-Floor Finishes	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	180,945
Carpeting 3 - Carpet Broadloom - Hanson Renewal	C3020-Floor Finishes	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	37,948
Ceramic Tiles Renewal	C3010-Wall Finishes	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	53,666

All costs in USD.

Requirement Name / Renewals	Prime System	Category	Priority	Action Date	Cost
Distribution Equipment, Panelboards, and Feeders 13 - 3000A 480Y/277V & 208Y/120V Renewal	D5012-Low Tension Service and Dist.	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	431,191
Door Assembly - 3 x 7 HM Renewal	B2030-Exterior Doors	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	14,688
Door Assembly - 3 x 7 Storefront Renewal	B2030-Exterior Doors	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	4,386
Door Assembly - 6 x 7 HM Renewal	B2030-Exterior Doors	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	35,980
Door Assembly - 6 x 7 Storefront Renewal	B2030-Exterior Doors	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	83,152
Emergency Generator - Average 280KW Renewal	D5092-Emergency Light and Power Systems	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	162,027
Fittings: Signage (Room Numbering and Identification) Renewal	C1035-Identifying Devices	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	87,044
Fixed Theater Seating - Deluxe Renewal	E-Equipment and Furnishings	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	16,771
Folding Partitions Renewal	C1010-Partitions	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	542,304
Lighting Fixtures, Original - Average Density Renewal	D5022-Lighting Equipment	Beyond Useful Life	2- Potentially Critical	09/11/2014	404,349
Overhead Doors (Electrically Operated) Renewal	B2030-Exterior Doors	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	5,159
Painted Finish - (1 Coat Prime - 2 Coats Finish) Renewal	C3010-Wall Finishes	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	97,926
Quarry Tile Renewal	C3020-Floor Finishes	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	72,338
Restroom - Complete - Double Renewal	C10-Interior Construction	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	45,430
Restroom - Complete - Gang Renewal	C10-Interior Construction	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	157,572
Restroom - Complete - Single Renewal	C10-Interior Construction	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	39,319
Restroom - Shower Renewal	C10-Interior Construction	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	123,043
Single Ply Membrane - Ballasted Renewal	B30-Roofing	Beyond Useful Life	2- Potentially Critical	09/11/2014	697,452
Smoke Hatches Renewal	B3020-Roof Openings	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	74,864

All costs in USD.

Requirement Name / Renewals	Prime System	Category	Priority	Action Date	Cost
Theater And Stage Equipment - Economy Renewal	E-Equipment and Furnishings	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	258,120
Theater And Stage Equipment - High Quality - 1992 Renewal	E-Equipment and Furnishings	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	4,357,609
VCT 2 - 1992 Renewal	C3020-Floor Finishes	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	93,524
VCT 2 Renewal	C3020-Floor Finishes	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	60,564
Wall Covering - Vinyl Renewal	C3010-Wall Finishes	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	34,642
<b>2014 Subtotal</b>					<b>8,653,309</b>
Central AHU - Const Volume w/Distribution Renewal	D3040-Distribution Systems	Beyond Useful Life	3- Necessary - Not Yet Critical	09/11/2015	1,764,479
Paint Masonry/Epoxy Finish Renewal	C3010-Wall Finishes	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2015	259,700
Water Heater - Gas - 2000 Renewal	D2020-Domestic Water Distribution	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2015	12,455
Wood Flooring Renewal	C3020-Floor Finishes	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2015	40,941
<b>2015 Subtotal</b>					<b>2,077,575</b>
Carpeting 3 - Carpet Broadloom - 2006 Renewal	C3020-Floor Finishes	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2016	92,734
Four Pipe Distribution System w/Pump Renewal	D3040-Distribution Systems	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2016	2,658,409
Hydraulic Passenger Elevator Renewal	D1010-Elevators and Lifts	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2016	340,452
Kitchen Equipment Renewal	E-Equipment and Furnishings	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2016	103,126
LAN System - Average Density Renewal	D5039-Local Area Networks	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2016	574,688
Orchestra Lift - MC101D Renewal	D1010-Elevators and Lifts	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2016	233,506
Water Coolers - Wall Mount Renewal	D2010-Plumbing Fixtures	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2016	36,881
Water Dist Complete Renewal	D2020-Domestic Water Distribution	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2016	501,084
Wet Sprinkler System - w/Pump Renewal	D40-Fire Protection	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2016	1,224,331

All costs in USD.

Requirement Name / Renewals	Prime System	Category	Priority	Action Date	Cost
				<b>2016 Subtotal</b>	<b>5,765,211</b>
Access Office Flooring System - 1992 Renewal	C3020-Floor Finishes	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2017	29,255
Central AHU - VAV System w/Distribution Renewal	D3040-Distribution Systems	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2017	1,011,829
DDC/Pneumatic System - Hybrid Renewal	D3060-Controls and Instrumentation	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2017	793,987
Return Air Ductwork and Fan Renewal	D3040-Distribution Systems	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2017	322,085
Single Ply Membrane - Ballasted - 1992 Renewal	B30-Roofing	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2017	56,979
Split System AC - Piano Room Renewal	D3050-Terminal and Package Units	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2017	9,483
Unit Heaters - Hot Water Renewal	D3050-Terminal and Package Units	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2017	16,259
				<b>2017 Subtotal</b>	<b>2,239,877</b>



**Region:** Lake Michigan College  
**Campus:** Lake Michigan College

**Asset Name:** M-TEC  
**Asset Number:** 4

**STATISTICS**

<b>FCI Cost:</b> 240,362	<b>FCI:</b> 0.03
<b>Total Requirements Cost:</b> 240,362	<b>RI:</b> 0.03

<b>Current Replacement Value</b>	8,576,090	<b>Size</b>	43,953 SF
<b>Address 1</b>	400 Klock Road	<b>Address 2</b>	-
<b>City</b>	-	<b>State/Province/Region</b>	MI

**PHOTO**



Exterior View

**SYSTEMS DESCRIPTION**

**A - Substructure - Foundation Wall and Footings - No Basement**

Basic foundation for building without basement - to include strip footing, 4-ft foundation wall and damp proofing. Also included are underdrains.

**A - Substructure - Foundation Wall and Footings - No Basement - Garage**

*All costs in USD.*

Basic foundation for building without basement - to include strip footing, 4-ft foundation wall and damp proofing. Also included are underdrains. Located in the garage west of the building.

**A - Substructure - Structural Slab on Grade - Non Industrial**

The building substructure includes a non-industrial type structural slab on grade.

**A - Substructure - Structural Slab on Grade - Non Industrial - Garage**

The building substructure includes a non-industrial type structural slab on grade. Located in the garage west of the building.

**A10 - Foundations - Concrete Footings**

Concrete column footings.

**B10 - Superstructure - Superstructure - Multi Story - Steel**

Multi-story steel building, includes steel columns, beams, floor pans, and roof structure.

**B10 - Superstructure - Superstructure - Single Story - Steel - Garage**

Single-story steel framed building with steel columns and steel roof structure. Located in the garage west of the building.

**B2010 - Exterior Walls - Metal Paneled Walls**

The exterior wall finishes are of steel siding such as corrugated materials. Includes blue, silver and gold siding.

**B2010 - Exterior Walls - Metal Paneled Walls - Garage**

The exterior wall finishes are of metal siding such as corrugated materials. Located at the garage west of the building.

**B2020 - Exterior Windows - Aluminum Windows**

The building includes aluminum framed exterior units, with insulating glass.

**B2030 - Exterior Doors - Door Assembly - 3 x 7 HM**

Exterior doors include non-rated 3 x 7 steel door and steel frame with hinges and lockset. Includes painted door and painted frame.

**B2030 - Exterior Doors - Door Assembly - 3 x 7 HM - Garage**

Exterior doors include non-rated 3 x 7 steel door and steel frame with hinges and lockset. Includes painted door and painted frame. Located at the garage west of the building.

**B2030 - Exterior Doors - Door Assembly - 3 x 7 Storefront**

The exterior doors include swinging glazed aluminum storefront leaf, aluminum frame, hardware, including closer.

**B2030 - Exterior Doors - Door Assembly - 6 x 7 HM**

Exterior doors include pr. 3 x 7 steel doors and steel frame with hinges and locksets. Includes painted doors and painted frame.

**B2030 - Exterior Doors - Door Assembly - 6 x 7 Storefront**

The exterior doors include pr. swinging glazed aluminum storefront leaves, aluminum frame, hardware, including closers.

**B2030 - Exterior Doors - Overhead Doors (Electrically Operated)**

Overhead Door, steel, alum, or fiberglass, rolling, electric operation.

**B2030 - Exterior Doors - Overhead Doors (Electrically Operated) - Garage**

Overhead Door, steel, alum, or fiberglass, rolling, electric operation. Located in the garage west of the building.

*All costs in USD.*

**B30 - Roofing - Adhered Membrane (EPDM) Single-Ply**

The roof covering is of a single-ply adhered membrane with insulation. Located on the lower levels of the roof.

**B30 - Roofing - Gutters and Downspouts**

Rain water is removed from the roof by perimeter gutters, scuppers and downspouts, which discharge to the surrounding property. Located at the metal (upper) roofing only.

**B30 - Roofing - Gutters and Downspouts - Garage**

Rain water is removed from the roof by perimeter gutters, scuppers and downspouts, which discharge to the surrounding property. Located at the garage west of the building.

**B30 - Roofing - Metal Roofing**

The roof covering is of formed metal roofing, such as standing seam metal. Located on the upper levels of the roof.

**B30 - Roofing - Metal Roofing - Garage**

The roof covering is of formed metal roofing, such as standing seam metal. Located on the garage west of the building.

**C10 - Interior Construction - Restroom - Complete - Gang**

Complete restroom including fixtures, accessories, wall finishes, floor finishes, ceiling finishes, exhaust, lighting fixtures and receptacles. Accessible compliant. Fire alarm devices are not included.

**C1010 - Partitions - GWB Walls - Standard (Non-Painted)**

The building interior includes standard GWB partitions, taped and finished, but not painted, with no insulation.

**C1020 - Interior Doors - Overhead/Rolling Fire Door - (Electronic Operation)**

[Building includes small overhead rolling door. Electrically operated. Up to 10' x 10' overhead and 8' x 8' class A rolling fire door. With Electric Motorized Operation. Located at the vending machines and as an entry to MT101.

**C1020 - Interior Doors - Swinging Doors**

Interior doors include 3' x 7' doors with hinges, lockset and closer. Includes steel and wood (birch and oak) faced rated doors, painted doors and frames.

**C1035 - Identifying Devices - Fittings: Signage (Room Numbering and Identification)**

Signs, graphic symbols, adhesive back, w/Braille, 8" x 8" + Signs, flexible door sign, adhesive back, w/Braille, 5/8" letters.

**C20 - Stairs - Stairs**

The interior stairs consist of 12 risers per flight with landing and 2 flights per story. Leading to two mezzanine/storage areas.

**C3010 - Wall Finishes - Painted Finish - (1 Coat Prime - 2 Coats Finish)**

Interior wall finishes include standard paint finish.

**C3020 - Floor Finishes - Carpeting 3 - Carpet Broadloom**

Floor finishes include medium priced carpeting and base for average office areas. Located in corridors, classrooms and office area.

**C3020 - Floor Finishes - Epoxy Flooring**

Floor finishes include epoxies and related base. Located in the corridors and MT116.

**C3030 - Ceiling Finishes - ACT System**

Standard suspended ACT ceiling system with 2 x 2 or 2 x 4 regular tiles in 15/16 or 9/16-in. grids.

*All costs in USD.*

**D2010 - Plumbing Fixtures - Custodial/Utility Sinks**

The plumbing fixtures include custodial/utility sinks. Utility sinks are located in several of the labs, typical is like in hydraulics lab.

**D2010 - Plumbing Fixtures - Emergency Eyewash and Shower Units**

Plumbing fixtures include emergency safety shower and eyewash units.

**D2010 - Plumbing Fixtures - Group Wash Fountain**

The building plumbing fixtures include molded group wash fountains in CNC Lab. Note: selected available RS Means line item for budgetary purposes only.

**D2010 - Plumbing Fixtures - Kitchenette - Cabinet-Counter and Sink**

The plumbing fixtures include kitchenette cabinet, counter and sink units used in some classrooms. Typical room is MT119

**D2010 - Plumbing Fixtures - Water Coolers - Wall Mount Dual Height**

Plumbing fixtures include dual height drinking fountains.

**D2020 - Domestic Water Distribution - Water Dist Complete**

The building domestic water distribution system includes a four inch main line, water meter, rpz backflow preventer, with rough ins included. This System does not include a water heater.

**D2020 - Domestic Water Distribution - Water Heater - Gas**

The domestic hot water is provided by a gas-fired, 100 MBH, commercial grade water heater, with recirculation pump.

**D2030 - Sanitary Waste - Sanitary Waste**

The building includes an extensive sanitary waste system, of cast iron piping, with gravity discharge to the municipal system.

**D2040 - Rain Water Drainage - Roof Drainage**

Rain water drainage includes interior piping, roof drains and 4-inch discharge piping by gravity flow to a municipal main.

**D2090 - Other Plumbing Systems - Natural Gas Supply for Bldg**

The building includes a natural gas supply and distribution system for boilers.

**D3020 - Heat Generating Systems - Boiler HW - Gas Fired w/Redundancy**

Heat for the building is provided by a gas-fired hot water boiler. Full redundancy is included

**D3030 - Cooling Generating Systems - DX Condensing Unit**

Cooling medium is provided by a DX cooling system, located at back of the building.

**D3040 - Distribution Systems - Central AHU - VAV System w/Distribution**

The HVAC system has a central AHU with cooling and heating coils, VFD, VAV ducted distribution, diffusers and plenum return.

**D3040 - Distribution Systems - Exhaust System - Fume Hood - Ductwork and Fan**

Ventilation system includes fume hood and duct exhaust systems for the welding lab.

**D3040 - Distribution Systems - Exhaust System - General Building**

The HVAC ventilation system includes roof mounted exhaust fans with ducting.

**D3040 - Distribution Systems - Exhaust System - Restroom w/Roof Fan**

*All costs in USD.*

HVAC ventilation system includes roof mounted restroom exhaust fans with ducting.

**D3040 - Distribution Systems - Radiant Perimeter Heating - Hydronic**

Hydronic radiant perimeter heating system using PEX tubing. This includes the tubing, manifold, controls, and pump. Note: Selected available RS Mean's line item for budgetary purposes only.

**D3040 - Distribution Systems - Return Air Ductwork and Fan**

The HVAC system has return air ductwork and centrifugal or in-line return air fan.

**D3040 - Distribution Systems - Two Pipe Distribution System w/Pump**

HVAC distribution is provided by a two pipe distribution system.

**D3050 - Terminal and Package Units - Split System AC - Rm. MT125**

The HVAC system includes two (2) split system AC unit with a remote air cooled condenser for room MT125.

**D3050 - Terminal and Package Units - Unit Heaters - Electric - Garage**

Heating is provided by suspended, electric unit heaters.

**D3050 - Terminal and Package Units - Unit Heaters - Hot Water**

Heating is provided by suspended, forced hot water unit heaters for mechanical room and in lab areas.

**D3060 - Controls and Instrumentation - DDC System**

HVAC controls include a DDC system for system optimization, basic pc control, moderate sensor types and quantities.

**D40 - Fire Protection - Fire Extinguishers - Dry Chem w/Cabinet**

Handheld type dry chemical fire extinguishers are located throughout the building, as required. Includes cabinets.

**D40 - Fire Protection - Wet Sprinkler System**

The fire protection systems include a light hazard, wet fire sprinkler system. This system includes backflow protection and standpipes but does not include a fire pump.

**D5012 - Low Tension Service and Dist. - Distribution Equipment, Panelboards, and Feeders 11 - 2000A 480Y/277V & 208Y/120V**

The electrical distribution system for this building includes an average concentration of panelboards, feeders, and associated equipment located throughout the main electrical room, labs, and electrical closets. there is a connection for an emergency generator, although no permanent generator on site.

**D5012 - Low Tension Service and Dist. - Main Electrical Service 11 - 2000A 480Y/277V**

The building includes a typical electrical service, which includes incoming feeders, main panel, and metering. The system is located in the main electrical room.

**D5020 - Lighting and Branch Wiring - Lighting - Exterior - HID Wall Packs**

Exterior lighting includes HID wall packs, ground-mounted building lights, and accent lighting around the perimeter. This system is for budgetary purposes only.

**D5021 - Branch Wiring Devices - Branch Wiring - Equipment & Devices**

Branch wiring for this building includes a typical concentration of branch wiring, devices, and utilization equipment throughout the building and classrooms. There is a heavy concentration of overhead power drops for the trade labs. The system was adjusted accordingly.

**D5022 - Lighting Equipment - Lighting Fixtures - Average Density**

All costs in USD.

The building includes an average density lighting system. Lighting system includes various types of lighting fixtures, HID fixtures, lamps, conduit and wire. System does not address each particular lighting type as this is for budgetary purposes only.

**D5033 - Telephone Systems - Telephone System - Average Density**

The building includes an average density telephone system. The system was replaced in the fall of 2011

**D5037 - Fire Alarm Systems - Fire Alarm System - Average Density**

This building includes an average density fire alarm system. The fire alarm system includes: head end equipment, pull stations at all exit doors, audio/visual strobes, visual strobes, smokes in some rooms, conduit, wire and connections.

**D5038 - Security and Detection Systems - Security System - Light Density**

The building is equipped with a light density security system. The security system includes as a minimum: Alarm panel, door contacts, motion detectors, conduit and wiring. The system was reportedly installed in 2007.

**D5039 - Local Area Networks - LAN System - Average Density**

Building includes an average density local area network system throughout the building and classrooms.

**D5092 - Emergency Light and Power Systems - Emergency Battery Pack Lights**

The emergency lighting system includes a self contained battery pack and lights. The building is fully protected with emergency battery pack lighting as there is no emergency generator.

**D5092 - Emergency Light and Power Systems - Exit Signs - Low Density**

The emergency lighting system includes the installation of Exit signs on a low density level. Installation includes: single and double sided exit signs, conduit, wire, boxes, conduit bends, connections and circuit breakers.

ASSET REPLACEMENT VALUE

Uniformat	System Name	Lifetime	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Value
A-Substructure	Foundation Wall and Footings - No Basement	75	6	2000	2075	8,018	128,291
A-Substructure	Foundation Wall and Footings - No Basement - Garage	75	6	2000	2075	767	12,267
A-Substructure	Structural Slab on Grade - Non Industrial	75	6	2000	2075	14,417	230,673
A-Substructure	Structural Slab on Grade - Non Industrial - Garage	75	6	2000	2075	201	3,209
A10-Foundations	Concrete Footings	75	6	2000	2075	4,797	76,744
B10-Superstructure	Superstructure - Multi Story - Steel	75	6	2000	2075	73,645	1,178,314
B10-Superstructure	Superstructure - Single Story - Steel - Garage	75	6	2000	2075	224	3,578
B2010-Exterior Walls	Metal Paneled Walls	60	125	2000	2060	208,658	166,926
B2010-Exterior Walls	Metal Paneled Walls - Garage	60	125	2000	2060	10,498	8,398
B2020-Exterior Windows	Aluminum Windows	30	125	2000	2030	263,405	210,724
B2030-Exterior Doors	Door Assembly - 3 x 7 HM	30	125	2000	2030	14,688	11,750
B2030-Exterior Doors	Door Assembly - 3 x 7 HM - Garage	30	125	2000	2030	3,672	2,938
B2030-Exterior Doors	Door Assembly - 3 x 7 Storefront	30	125	2000	2030	8,772	7,018
B2030-Exterior Doors	Door Assembly - 6 x 7 HM	30	125	2000	2030	7,196	5,757
B2030-Exterior Doors	Door Assembly - 6 x 7 Storefront	30	125	2000	2030	34,647	27,717
B2030-Exterior Doors	Overhead Doors (Electrically Operated)	30	125	2000	2030	14,831	11,865
B2030-Exterior Doors	Overhead Doors (Electrically Operated) - Garage	30	125	2000	2030	4,944	3,955

All costs in USD.

Uniformat	System Name	Lifetime	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Value
B30-Roofing	Adhered Membrane (EPDM) Single-Ply	25	125	2000	2025	106,857	85,486
B30-Roofing	Gutters and Downspouts	30	125	2000	2030	17,005	13,604
B30-Roofing	Gutters and Downspouts - Garage	30	125	2000	2030	364	292
B30-Roofing	Metal Roofing	65	125	2000	2065	881,820	705,456
B30-Roofing	Metal Roofing - Garage	65	125	2000	2065	18,900	15,120
C10-Interior Construction	Restroom - Complete - Gang	30	125	2000	2030	78,786	63,029
C1010-Partitions	GWB Walls - Standard (Non-Painted)	50	63	2000	2050	143,890	230,224
C1020-Interior Doors	Overhead/Rolling Fire Door - (Electronic Operation)	50	125	2000	2050	10,700	8,560
C1020-Interior Doors	Swinging Doors	50	125	2000	2050	130,705	104,564
C1035-Identifying Devices	Fittings: Signage (Room Numbering and Identification)	10	125	2000	2014	27,586	22,069
C20-Stairs	Stairs	75	38	2000	2075	18,611	49,628
C3010-Wall Finishes	Painted Finish - (1 Coat Prime - 2 Coats Finish)	10	125	2000	2014	70,462	56,369
C3020-Floor Finishes	Carpeting 3 - Carpet Broadloom	10	125	2000	2014	298,710	238,968
C3020-Floor Finishes	Epoxy Flooring	25	125	2000	2025	46,135	36,908
C3030-Ceiling Finishes	ACT System	20	125	2000	2020	118,877	95,101
D2010-Plumbing Fixtures	Custodial/Utility Sinks	30	125	2000	2030	35,790	28,632
D2010-Plumbing Fixtures	Emergency Eyewash and Shower Units	30	125	2000	2030	6,676	5,341
D2010-Plumbing Fixtures	Group Wash Fountain	30	125	2000	2030	21,102	16,882

All costs in USD.



Uniformat	System Name	Lifetime	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Value
D2010-Plumbing Fixtures	Kitchenette - Cabinet-Counter and Sink	30	125	2000	2030	83,573	66,858
D2010-Plumbing Fixtures	Water Coolers - Wall Mount Dual Height	20	125	2000	2020	11,688	9,351
D2020-Domestic Water Distribution	Water Dist Complete	30	113	2000	2030	158,804	141,159
D2020-Domestic Water Distribution	Water Heater - Gas	15	112	2000	2015	12,455	11,121
D2030-Sanitary Waste	Sanitary Waste	50	125	2000	2050	257,771	206,217
D2040-Rain Water Drainage	Roof Drainage	50	125	2000	2050	49,752	39,801
D2090-Other Plumbing Systems	Natural Gas Supply for Bldg	40	125	2000	2040	101,896	81,517
D3020-Heat Generating Systems	Boiler HW - Gas Fired w/Redundancy	30	125	2000	2030	435,377	348,302
D3030-Cooling Generating Systems	DX Condensing Unit	15	125	2000	2015	179,036	143,229
D3040-Distribution Systems	Central AHU - VAV System w/Distribution	25	125	2000	2025	1,170,340	936,272
D3040-Distribution Systems	Exhaust System - Fume Hood - Ductwork and Fan	25	125	2000	2025	35,229	28,183
D3040-Distribution Systems	Exhaust System - General Building	25	125	2000	2025	47,675	38,140
D3040-Distribution Systems	Exhaust System - Restroom w/Roof Fan	20	125	2000	2020	19,224	15,379
D3040-Distribution Systems	Radiant Perimeter Heating - Hydronic	30	125	2000	2030	125,937	100,750
D3040-Distribution Systems	Return Air Ductwork and Fan	20	125	2000	2020	372,542	298,033
D3040-Distribution Systems	Two Pipe Distribution System w/Pump	30	125	2000	2030	537,606	430,085
D3050-Terminal and Package Units	Split System AC - Rm. MT125	25	125	2000	2025	18,965	15,172
D3050-Terminal and Package Units	Unit Heaters - Electric - Garage	15	112	2000	2015	5,322	4,751

All costs in USD.

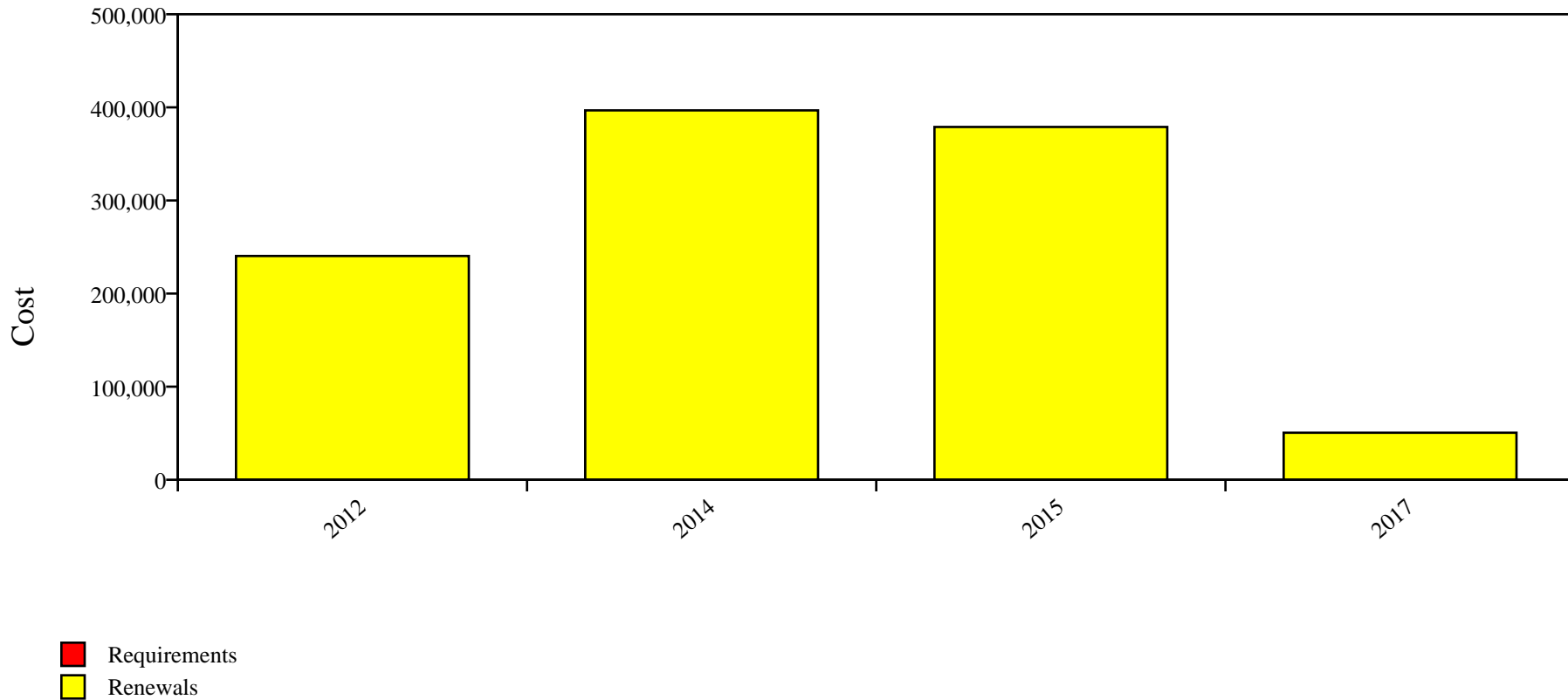
Uniformat	System Name	Lifetime	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Value
D3050-Terminal and Package Units	Unit Heaters - Hot Water	25	112	2000	2025	30,109	26,883
D3060-Controls and Instrumentation	DDC System	20	125	2000	2020	130,825	104,660
D40-Fire Protection	Fire Extinguishers - Dry Chem w/Cabinet	30	105	2000	2030	1,382	1,316
D40-Fire Protection	Wet Sprinkler System	35	125	2000	2035	281,003	224,802
D5012-Low Tension Service and Dist.	Distribution Equipment, Panelboards, and Feeders 11 - 2000A 480Y/277V & 208Y/120V	30	125	2000	2030	399,897	319,918
D5012-Low Tension Service and Dist.	Main Electrical Service 11 - 2000A 480Y/277V	30	125	2000	2030	198,993	159,194
D5020-Lighting and Branch Wiring	Lighting - Exterior - HID Wall Packs	20	125	2000	2020	18,812	15,050
D5021-Branch Wiring Devices	Branch Wiring - Equipment & Devices	30	125	2000	2030	291,848	233,478
D5022-Lighting Equipment	Lighting Fixtures - Average Density	20	125	2000	2020	221,137	176,910
D5033-Telephone Systems	Telephone System - Average Density	10	106	2011	2021	121,187	114,058
D5037-Fire Alarm Systems	Fire Alarm System - Average Density	10	125	2000	2012	204,593	163,675
D5038-Security and Detection Systems	Security System - Light Density	10	125	2007	2017	50,529	40,423
D5039-Local Area Networks	LAN System - Average Density	15	106	2000	2015	182,130	171,417
D5092-Emergency Light and Power Systems	Emergency Battery Pack Lights	10	125	2000	2012	35,769	28,615
D5092-Emergency Light and Power Systems	Exit Signs - Low Density	20	125	2000	2020	18,767	15,013
						<b>Subtotal</b>	<b>8,576,090</b>

**Total Replacement Value**

8,576,090

All costs in USD.

REQUIREMENTS AND RENEWALS



All costs in USD.

Requirement Name / Renewals	Prime System	Category	Priority	Action Date	Cost
Emergency Battery Pack Lights Renewal	D5092-Emergency Light and Power Systems	Beyond Useful Life	2- Potentially Critical	11/17/2012	35,769
Fire Alarm System - Average Density Renewal	D5037-Fire Alarm Systems	Beyond Useful Life	2- Potentially Critical	11/17/2012	204,593
<b>2012 Subtotal</b>					<b>240,362</b>
Carpeting 3 - Carpet Broadloom Renewal	C3020-Floor Finishes	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	298,710
Fittings: Signage (Room Numbering and Identification) Renewal	C1035-Identifying Devices	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	27,586
Painted Finish - (1 Coat Prime - 2 Coats Finish) Renewal	C3010-Wall Finishes	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	70,462
<b>2014 Subtotal</b>					<b>396,758</b>
DX Condensing Unit Renewal	D3030-Cooling Generating Systems	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2015	179,036
LAN System - Average Density Renewal	D5039-Local Area Networks	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2015	182,130
Unit Heaters - Electric - Garage Renewal	D3050-Terminal and Package Units	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2015	5,322
Water Heater - Gas Renewal	D2020-Domestic Water Distribution	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2015	12,455
<b>2015 Subtotal</b>					<b>378,943</b>
Security System - Light Density Renewal	D5038-Security and Detection Systems	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2017	50,529
<b>2017 Subtotal</b>					<b>50,529</b>

All costs in USD.

**Region:** Lake Michigan College  
**Campus:** Lake Michigan College

**Asset Name:** South Haven  
**Asset Number:** 5

**STATISTICS**

<b>FCI Cost:</b> 191,881	<b>FCI:</b> 0.02
<b>Total Requirements Cost:</b> 191,881	<b>RI:</b> 0.02

<b>Current Replacement Value</b>	8,572,113	<b>Size</b>	41,222 SF
<b>Address 1</b>	125 Veterans Boulevard	<b>Address 2</b>	-
<b>City</b>	-	<b>State/Province/Region</b>	MI

**PHOTO**



Exterior View

**SYSTEMS DESCRIPTION**

**A - Substructure - Foundation Wall and Footings - No Basement**

Basic foundation for building without basement - to include strip footing, 4-ft foundation wall and damp proofing. Also included are underdrains.

**A - Substructure - Foundation Wall and Footings - No Basement - Garage**

*All costs in USD.*

Basic foundation for building without basement - to include strip footing, 4-ft foundation wall and damp proofing. Also included are underdrains. Located in the garage north of the north wing.

**A - Substructure - Structural Slab on Grade - Non Industrial**

The building substructure includes a non-industrial type structural slab on grade.

**A - Substructure - Structural Slab on Grade - Non Industrial - Garage**

The building substructure includes a non-industrial type structural slab on grade. Located in the garage north of the north wing.

**A10 - Foundations - Concrete Footings**

Concrete column footings.

**B10 - Superstructure - Superstructure - Multi Story - Steel**

Multi-story steel building, includes steel columns, beams, floor pans, and roof structure.

**B10 - Superstructure - Superstructure - Single Story - Concrete/Steel - Garage**

Single story concrete and steel building. Located at the garage north of the north wing.

**B2010 - Exterior Walls - Brick Walls**

The exterior wall construction is of brick cavity walls.

**B2010 - Exterior Walls - Brick Walls - Garage**

The exterior wall construction is of brick cavity walls. Located at the garage north of the north wing.

**B2010 - Exterior Walls - Metal Paneled Walls - Aluminum**

The exterior wall construction includes high quality aluminum panels on the south elevation.

**B2010 - Exterior Walls - Metal Paneled Walls - Copper**

The exterior wall construction includes high quality copper panels on the west elevation.

**B2020 - Exterior Windows - Aluminum Windows**

The building includes aluminum framed exterior units, with insulating glass.

**B2020 - Exterior Windows - Curtain Wall System**

Exterior curtain wall window system with insulating glass.

**B2030 - Exterior Doors - Door Assembly - 3 x 7 HM**

Exterior doors include non-rated 3 x 7 steel door and steel frame with hinges and lockset. Includes painted door and painted frame.

**B2030 - Exterior Doors - Door Assembly - 3 x 7 HM - Garage**

Exterior doors include non-rated 3 x 7 steel door and steel frame with hinges and lockset. Includes painted door and painted frame. Located in the garage north of the north wing.

**B2030 - Exterior Doors - Door Assembly - 3 x 7 Storefront**

The exterior doors include swinging glazed aluminum storefront leaf, aluminum frame, hardware, including closer.

**B2030 - Exterior Doors - Door Assembly - 6 x 7 HM**

Exterior doors include pr. 3 x 7 steel doors and steel frame with hinges and locksets. Includes painted doors and painted frame.

*All costs in USD.*

**B2030 - Exterior Doors - Door Assembly - 6 x 7 Storefront**

The exterior doors include pr. swinging glazed aluminum storefront leafs plus glazed transom, aluminum frame, hardware, including closers.

**B2030 - Exterior Doors - Overhead Doors (Manually Operated) - Garage**

Overhead, com, fbgl, steel, and alum, heavy duty, sectional. Located in the garage north of the north wing.

**B30 - Roofing - Adhered Membrane (EPDM) Single-Ply**

The roof covering is of a single-ply adhered membrane with insulation.

**B30 - Roofing - Adhered Membrane (EPDM) Single-Ply - Garage**

The roof covering is of a single-ply adhered membrane with insulation. Located in the garage north of the north wing.

**B30 - Roofing - Metal Roofing**

The roof covering is of formed metal roofing, such as standing seam metal. Located at the atrium/entry.

**C10 - Interior Construction - Restroom - Complete - Gang**

Complete restroom including fixtures, accessories, wall finishes, floor finishes, ceiling finishes, exhaust, lighting fixtures and receptacles. Accessible compliant. Fire alarm devices are not included.

**C10 - Interior Construction - Restroom - Complete - Single**

Complete restroom including fixtures, accessories, wall finishes, floor finishes, ceiling finishes, exhaust, lighting fixtures and receptacles. Located in the day care area.

**C1010 - Partitions - CMU Block Walls - Plain**

Interior walls include 8-in. hollow concrete block, light and regular weight, with no finish. Located at the stairwells and the mechanical room.

**C1010 - Partitions - Folding Partitions**

The building interior includes folding panel partitions, located in SH221, SH141 and SH145.

**C1010 - Partitions - GWB Walls - Standard (Non-Painted)**

The building interior includes standard GWB partitions, taped and finished, but not painted, with no insulation.

**C1020 - Interior Doors - Swinging Doors**

Interior doors include 3' x 7' doors with hinges, lockset and closer. Includes steel and wood (birch and oak) faced rated doors, painted doors and frames.

**C1035 - Identifying Devices - Fittings: Signage (Room Numbering and Identification)**

Signs, graphic symbols, adhesive back, w/Braille, 8" x 8" + Signs, flexible door sign, adhesive back, w/Braille, 5/8" letters.

**C20 - Stairs - Stairs**

The interior stairs consist of 12 risers per flight with landing and 2 flights per story.

**C20 - Stairs - Stairs - Main**

Main staircase is steel with a cable rail system.

**C3010 - Wall Finishes - Aluminum Panels**

Aluminum panels located in the entry/atrium.

**C3010 - Wall Finishes - Brick**

*All costs in USD.*

Building wall finishes include brick.

**C3010 - Wall Finishes - Paint Masonry/Epoxy Finish - Economy**

Wall finishes include paint on CMU and minimum hi-build epoxy finish.

**C3010 - Wall Finishes - Painted Finish - (1 Coat Prime - 2 Coats Finish)**

Interior wall finishes include standard paint finish.

**C3020 - Floor Finishes - Carpeting 5 - Carpet Tiles**

Floor finishes include a standard range carpet tiles (18 x 18 modules or 24 x 24) and vinyl or rubber base, for medium traffic areas.

**C3020 - Floor Finishes - Ceramic Tile - Thin Set**

Floor finishes include ceramic tile located in the entry/atrium.

**C3020 - Floor Finishes - Quarry Tile**

Floor finishes include quarry tile in SH130.

**C3020 - Floor Finishes - VCT 2**

Floor finishes include standard quality VCT flooring and baseboard located in the day care area.

**C3020 - Floor Finishes - Vinyl Sheet Goods**

Floor finishes include areas of vinyl sheet goods flooring and related base. Located in rooms SH205 and SH209.

**C3030 - Ceiling Finishes - ACT System**

Standard suspended ACT ceiling system with 2 x 2 or 2 x 4 regular tiles in 15/16 or 9/16-in. grids.

**D1010 - Elevators and Lifts - Hydraulic Passenger Elevator**

The conveying equipment includes a 3500 Lb. passenger hydraulic elevator - two stops.]

**D2010 - Plumbing Fixtures - Custodial/Utility Sinks**

The plumbing fixtures include custodial/utility sinks.

**D2010 - Plumbing Fixtures - Emergency Eyewash and Shower Units**

Plumbing fixtures include emergency safety shower and eyewash units.

**D2010 - Plumbing Fixtures - Kitchenette - Cabinet-Counter and Sink**

The plumbing fixtures include kitchenette cabinet, counter and sink units used in some classrooms. Typical room is SH215.

**D2010 - Plumbing Fixtures - Laboratory Sinks**

The building plumbing fixtures include molded, chemical-resistant laboratory sinks.

**D2010 - Plumbing Fixtures - Water Coolers - Wall Mount Dual Height**

Plumbing fixtures include dual height drinking fountains.

**D2020 - Domestic Water Distribution - Water Dist Complete**

The building domestic water distribution system includes a four inch main line, water meter, rpz backflow preventer, with rough ins included. This System does not include a water heater.

*All costs in USD.*



**D2020 - Domestic Water Distribution - Water Heater - Gas**

The domestic hot water is provided by a gas-fired, 100 MBH, commercial grade water heater, with recirculation pump. Located in room SH132.

**D2030 - Sanitary Waste - Sanitary Waste**

The building includes an extensive sanitary waste system, of cast iron piping, with gravity discharge to the municipal system.

**D2040 - Rain Water Drainage - Roof Drainage**

Rain water drainage includes interior piping, roof drains and 4-inch discharge piping by gravity to the lower outside walls and dumps on ground.

**D2090 - Other Plumbing Systems - Gas Distribution - Lab Air & Vac Systems**

The building includes compressed air and vacuum systems for Labs. Typical rooms such as SH205.

**D2090 - Other Plumbing Systems - Lab Acid Waste System - Polypropylene**

The building includes a polypropylene piped acid water waste piping system for the laboratories. Typical Room is SH205.

**D2090 - Other Plumbing Systems - Natural Gas Distribution for Lab**

The building includes a natural gas distribution system for the laboratories. Typical room such as SH205.

**D2090 - Other Plumbing Systems - Natural Gas Supply for Bldg**

The building includes a natural gas supply and distribution system for boilers.

**D3020 - Heat Generating Systems - Boiler HW - Gas Fired w/Redundancy**

Heat for the building is provided by a gas-fired hot water boiler. Full redundancy is included

**D3030 - Cooling Generating Systems - DX Condensing Unit**

Cooling medium is provided by three (3) DX cooling system, located at back of the building.

**D3040 - Distribution Systems - Central AHU - VAV System w/Distribution**

The HVAC system has a central AHU with cooling and heating coils, VFD, VAV ducted distribution, diffusers and plenum return.

**D3040 - Distribution Systems - Exhaust System - Fume Hood - Ductwork and Fan**

The HVAC ventilation system includes fume hood and exhaust systems for a building. Typical such as room SH205.

**D3040 - Distribution Systems - Exhaust System - General Building**

The HVAC ventilation system includes roof mounted exhaust fans with ducting.

**D3040 - Distribution Systems - Exhaust System - Restroom w/Roof Fan**

HVAC ventilation system includes roof mounted restroom exhaust fans with ducting.

**D3040 - Distribution Systems - Fan Coil System - Cabinet**

HVAC system includes wall hung cabinet type fan coil hot water system located in stairwell.

**D3040 - Distribution Systems - Radiant Perimeter Heating - Hydronic**

Hydronic radiant perimeter heating system using PEX tubing. This includes the tubing, manifold, controls, and pump. Note: Selected available RS Mean's line item for budgetary purposes only.

**D3040 - Distribution Systems - Return Air Ductwork and Fan**

*All costs in USD.*

The HVAC system has return air ductwork and centrifugal or in-line return air fan.

**D3040 - Distribution Systems - Two Pipe Distribution System w/Pump**

HVAC distribution is provided by a two pipe distribution system.

**D3050 - Terminal and Package Units - Split System AC - Rm. SH128**

The HVAC system includes a split system AC unit with a remote air cooled condenser for room SH128.

**D3050 - Terminal and Package Units - Unit Heaters - Electric**

Heating is provided by suspended, electric unit heaters in mechanical rooms.

**D3060 - Controls and Instrumentation - DDC System**

HVAC controls include a DDC system for system optimization, basic pc control, moderate sensor types and quantities.

**D40 - Fire Protection - Fire Extinguishers - Dry Chem w/Cabinet**

Handheld type dry chemical fire extinguishers are located throughout the building, as required. Includes cabinets.

**D40 - Fire Protection - Wet Sprinkler System**

The fire protection systems include a light hazard, wet fire sprinkler system. This system includes backflow protection and standpipes but does not include a fire pump.

**D5012 - Low Tension Service and Dist. - Distribution Equipment, Panelboards, and Feeders 07 - 1,200A 480Y/277V & 208Y/120V**

The electrical distribution system for this building includes an average concentration of panelboards, feeders, and associated equipment. Most of the equipment is located in the main electrical room with electrical closets on each floor.

**D5012 - Low Tension Service and Dist. - Main Electrical Service 09 - 1200A 480Y/277V**

The building includes a typical electrical service, which includes incoming feeders, main panel, and metering.

**D5020 - Lighting and Branch Wiring - Lighting - Exterior - HID Wall Packs**

Exterior lighting includes HID wall packs, ground-mounted building lights, and accent lighting around the perimeter. This system is for budgetary purposes only.

**D5021 - Branch Wiring Devices - Branch Wiring - Equipment & Devices**

Branch wiring for this building includes a typical concentration of branch wiring, devices, and utilization equipment throughout the building and classrooms.

**D5022 - Lighting Equipment - Lighting Fixtures - Average Density**

The building includes a average density lighting system. Lighting system includes various types of lighting fixtures, lamps, conduit and wire. System does not address each particular lighting type as this is for budgetary purposes only.

**D5033 - Telephone Systems - Telephone System - Average Density**

The building includes an average density telephone system. The system was replaced in the fall of 2011.

**D5037 - Fire Alarm Systems - Fire Alarm System - Average Density**

This building includes an average density fire alarm system. The fire alarm system includes: head end equipment, pull stations at all exit doors, audio/visual strobes, visual strobes, smokes in some rooms, conduit, wire and connections.

**D5038 - Security and Detection Systems - Security System - Light Density**

*All costs in USD.*

The building is equipped with a light density security system. The security system includes as a minimum: Alarm panel, door contacts, motion detectors, conduit and wiring. The system was reportedly installed in 2007.

**D5039 - Local Area Networks - LAN System - Average Density**

Building includes an average density local area network system throughout the building and classrooms.

**D5092 - Emergency Light and Power Systems - Emergency Generator - Small 35KW**

The emergency power system includes an Emergency Generator 39kW max. Includes: Emergency Generator, ATS, battery charger, muffler, feeder, wiring, and panels. The unit has a direct natural gas line for fuel.

**D5092 - Emergency Light and Power Systems - Exit Signs - Low Density**

The emergency lighting system includes the installation of Exit signs on a low density level. Installation includes: single and double sided exit signs, conduit, wire, boxes, conduit bends, connections and circuit breakers.

**E - Equipment and Furnishings - Fixed Casework - Institutional**

Building includes deluxe casework including wall and under counter cabinets and deluxe countertops (stone), without appliances. Located in SH205 and SH209.

**E - Equipment and Furnishings - Kitchen Equipment**

Equipment and furnishings includes kitchen equipment of average quantity and quality. Systems include, walk-in's, pot sinks, range hood with fire suppression and other equipment. Located room SH130.

**G2040 - Site Development - Walls - Brick**

Brick and CMU wall surrounding the cooling towers and dumpsters at the north end of the north wing.

ASSET REPLACEMENT VALUE

Uniformat	System Name	Lifetime	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Value
A-Substructure	Foundation Wall and Footings - No Basement	75	6	2003	2078	8,242	131,869
A-Substructure	Foundation Wall and Footings - No Basement - Garage	75	6	2003	2078	703	11,245
A-Substructure	Structural Slab on Grade - Non Industrial	75	6	2003	2078	10,096	161,529
A-Substructure	Structural Slab on Grade - Non Industrial - Garage	75	6	2003	2078	168	2,682
A10-Foundations	Concrete Footings	75	6	2003	2078	3,359	53,740
B10-Superstructure	Superstructure - Multi Story - Steel	75	6	2003	2078	69,069	1,105,100
B10-Superstructure	Superstructure - Single Story - Concrete/Steel - Garage	75	6	2003	2078	649	10,382
B2010-Exterior Walls	Brick Walls	75	13	2003	2078	43,890	351,120
B2010-Exterior Walls	Brick Walls - Garage	75	13	2003	2078	4,990	39,917
B2010-Exterior Walls	Metal Paneled Walls - Aluminum	60	125	2003	2063	126,015	100,812
B2010-Exterior Walls	Metal Paneled Walls - Copper	60	125	2003	2063	51,695	41,356
B2020-Exterior Windows	Aluminum Windows	30	125	2003	2033	114,091	91,273
B2020-Exterior Windows	Curtain Wall System	40	125	2003	2043	336,133	268,906
B2030-Exterior Doors	Door Assembly - 3 x 7 HM	30	125	2003	2033	3,672	2,938
B2030-Exterior Doors	Door Assembly - 3 x 7 HM - Garage	30	125	2003	2033	3,672	2,938
B2030-Exterior Doors	Door Assembly - 3 x 7 Storefront	30	125	2003	2033	52,632	42,106
B2030-Exterior Doors	Door Assembly - 6 x 7 HM	30	125	2003	2033	7,196	5,757
B2030-Exterior Doors	Door Assembly - 6 x 7 Storefront	30	125	2003	2033	13,859	11,087

All costs in USD.

Uniformat	System Name	Lifetime	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Value
B2030-Exterior Doors	Overhead Doors (Manually Operated) - Garage	30	125	2003	2033	3,345	2,676
B30-Roofing	Adhered Membrane (EPDM) Single-Ply	25	125	2003	2028	179,318	143,455
B30-Roofing	Adhered Membrane (EPDM) Single-Ply - Garage	25	125	2003	2028	3,539	2,832
B30-Roofing	Metal Roofing	65	125	2003	2068	151,200	120,960
C10-Interior Construction	Restroom - Complete - Gang	30	125	2003	2033	157,572	126,058
C10-Interior Construction	Restroom - Complete - Single	30	125	2003	2033	19,660	15,728
C1010-Partitions	CMU Block Walls - Plain	50	63	2003	2053	20,270	32,432
C1010-Partitions	Folding Partitions	15	125	2003	2018	109,931	87,944
C1010-Partitions	GWB Walls - Standard (Non-Painted)	50	63	2003	2053	134,951	215,922
C1020-Interior Doors	Swinging Doors	50	125	2003	2053	126,037	100,829
C1035-Identifying Devices	Fittings: Signage (Room Numbering and Identification)	10	125	2003	2014	25,872	20,698
C20-Stairs	Stairs	75	38	2003	2078	18,611	49,628
C20-Stairs	Stairs - Main	75	38	2003	2078	10,700	28,532
C3010-Wall Finishes	Aluminum Panels	30	125	2003	2033	47,956	38,364
C3010-Wall Finishes	Brick	75	125	2003	2078	33,154	26,523
C3010-Wall Finishes	Paint Masonry/Epoxy Finish - Economy	15	125	2003	2018	12,058	9,646
C3010-Wall Finishes	Painted Finish - (1 Coat Prime - 2 Coats Finish)	10	125	2003	2014	66,084	52,868
C3020-Floor Finishes	Carpeting 5 - Carpet Tiles	10	125	2003	2014	132,025	105,620
C3020-Floor Finishes	Ceramic Tile - Thin Set	25	125	2003	2028	85,904	68,723

All costs in USD.

<b>Unifomat</b>	<b>System Name</b>	<b>Lifetime</b>	<b>% Renew</b>	<b>Year Installed</b>	<b>Next Renewal Year</b>	<b>Renewal Cost</b>	<b>Replacement Value</b>
C3020-Floor Finishes	Quarry Tile	25	125	2003	2028	11,478	9,182
C3020-Floor Finishes	VCT 2	20	125	2003	2023	11,880	9,504
C3020-Floor Finishes	Vinyl Sheet Goods	12	125	2003	2015	29,438	23,550
C3030-Ceiling Finishes	ACT System	20	125	2003	2023	167,085	133,668
D1010-Elevators and Lifts	Hydraulic Passenger Elevator	35	125	2003	2038	97,709	78,167
D2010-Plumbing Fixtures	Custodial/Utility Sinks	30	125	2003	2033	19,077	15,261
D2010-Plumbing Fixtures	Emergency Eyewash and Shower Units	30	125	2003	2033	6,261	5,009
D2010-Plumbing Fixtures	Kitchenette - Cabinet-Counter and Sink	30	125	2003	2033	78,380	62,704
D2010-Plumbing Fixtures	Laboratory Sinks	30	125	2003	2033	56,036	44,829
D2010-Plumbing Fixtures	Water Coolers - Wall Mount Dual Height	20	125	2003	2023	10,962	8,770
D2020-Domestic Water Distribution	Water Dist Complete	30	113	2003	2033	148,936	132,388
D2020-Domestic Water Distribution	Water Heater - Gas	15	112	2003	2018	24,911	22,242
D2030-Sanitary Waste	Sanitary Waste	50	125	2003	2053	241,755	193,404
D2040-Rain Water Drainage	Roof Drainage	50	125	2003	2053	44,079	35,264
D2090-Other Plumbing Systems	Gas Distribution - Lab Air & Vac Systems	25	75	2003	2028	31,358	41,810
D2090-Other Plumbing Systems	Lab Acid Waste System - Polypropylene	40	125	2003	2043	36,789	29,432
D2090-Other Plumbing Systems	Natural Gas Distribution for Lab	40	125	2003	2043	29,330	23,464
D2090-Other Plumbing Systems	Natural Gas Supply for Bldg	40	125	2003	2043	95,565	76,452
D3020-Heat Generating Systems	Boiler HW - Gas Fired w/Redundancy	30	125	2003	2033	408,325	326,660
D3030-Cooling Generating Systems	DX Condensing Unit	15	125	2003	2018	167,912	134,330

All costs in USD.

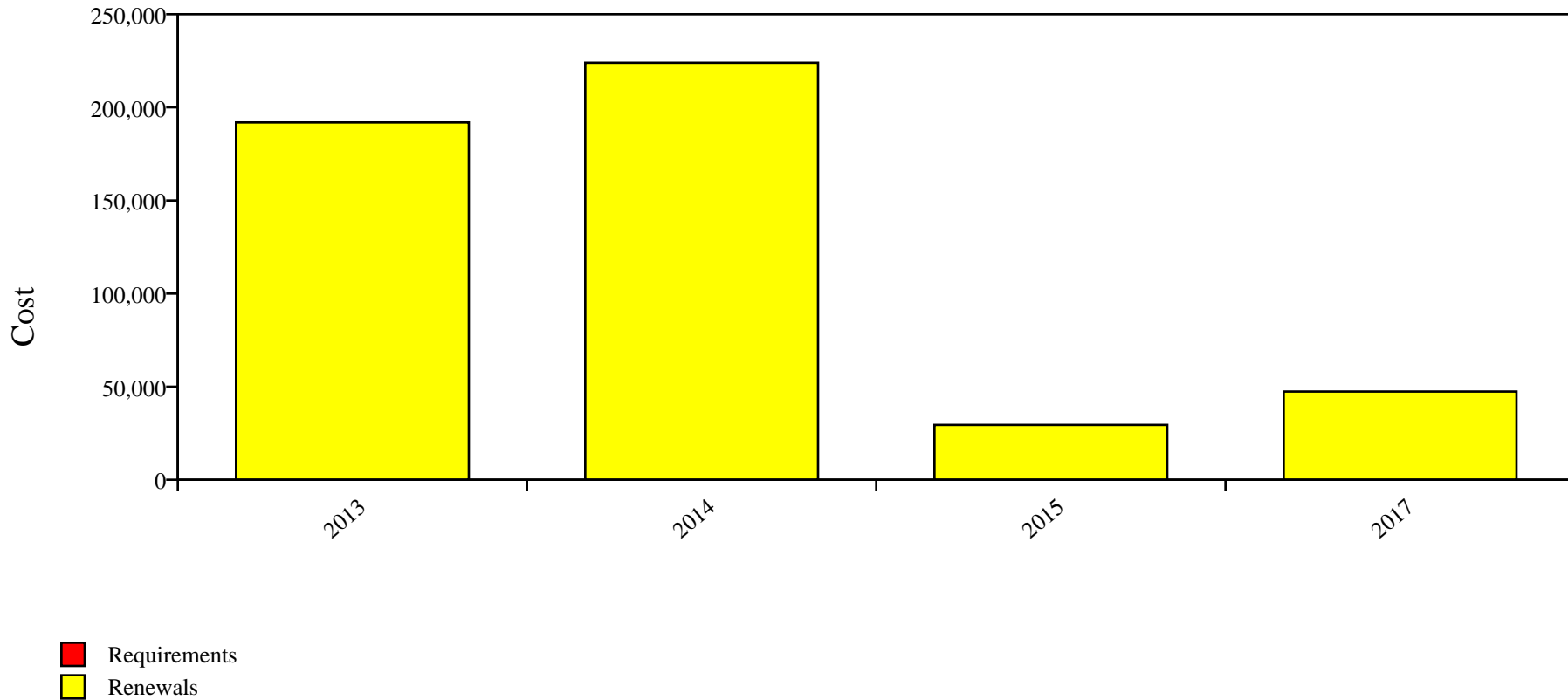
Uniformat	System Name	Lifetime	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Value
D3040-Distribution Systems	Central AHU - VAV System w/Distribution	25	125	2003	2028	1,097,622	878,098
D3040-Distribution Systems	Exhaust System - Fume Hood - Ductwork and Fan	25	125	2003	2028	105,687	84,550
D3040-Distribution Systems	Exhaust System - General Building	25	125	2003	2028	44,713	35,770
D3040-Distribution Systems	Exhaust System - Restroom w/Roof Fan	20	125	2003	2023	18,029	14,423
D3040-Distribution Systems	Fan Coil System - Cabinet	30	125	2003	2033	5,201	4,161
D3040-Distribution Systems	Radiant Perimeter Heating - Hydronic	30	125	2003	2033	118,112	94,489
D3040-Distribution Systems	Return Air Ductwork and Fan	20	125	2003	2023	349,394	279,515
D3040-Distribution Systems	Two Pipe Distribution System w/Pump	30	125	2003	2033	504,202	403,362
D3050-Terminal and Package Units	Split System AC - Rm. SH128	25	125	2003	2028	9,483	7,586
D3050-Terminal and Package Units	Unit Heaters - Electric	15	112	2003	2018	26,608	23,757
D3060-Controls and Instrumentation	DDC System	20	125	2003	2023	122,697	98,157
D40-Fire Protection	Fire Extinguishers - Dry Chem w/Cabinet	30	105	2003	2033	1,296	1,234
D40-Fire Protection	Wet Sprinkler System	35	125	2003	2038	263,543	210,834
D5012-Low Tension Service and Dist.	Distribution Equipment, Panelboards, and Feeders 07 - 1,200A 480Y/277V & 208Y/120V	30	125	2003	2033	245,614	196,491
D5012-Low Tension Service and Dist.	Main Electrical Service 09 - 1200A 480Y/277V	30	125	2003	2033	135,179	108,143
D5020-Lighting and Branch Wiring	Lighting - Exterior - HID Wall Packs	20	125	2003	2023	14,697	11,758

All costs in USD.

Uniformat	System Name	Lifetime	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Value
D5021-Branch Wiring Devices	Branch Wiring - Equipment & Devices	30	125	2003	2033	239,088	191,270
D5022-Lighting Equipment	Lighting Fixtures - Average Density	20	125	2003	2023	207,397	165,918
D5033-Telephone Systems	Telephone System - Average Density	10	106	2011	2021	113,657	106,971
D5037-Fire Alarm Systems	Fire Alarm System - Average Density	10	125	2003	2013	191,881	153,505
D5038-Security and Detection Systems	Security System - Light Density	10	125	2007	2017	47,389	37,911
D5039-Local Area Networks	LAN System - Average Density	15	106	2003	2018	170,814	160,766
D5092-Emergency Light and Power Systems	Emergency Generator - Small 35KW	20	125	2003	2023	25,652	20,522
D5092-Emergency Light and Power Systems	Exit Signs - Low Density	20	125	2003	2023	17,601	14,080
E-Equipment and Furnishings	Fixed Casework - Institutional	25	125	2003	2028	71,791	57,433
E-Equipment and Furnishings	Kitchen Equipment	20	125	2003	2023	114,200	91,360
G2040-Site Development	Walls - Brick	40	125	2003	2043	37,209	29,767
						<b>Subtotal</b>	<b>8,572,113</b>
						<b>Total Replacement Value</b>	<b>8,572,113</b>



REQUIREMENTS AND RENEWALS



All costs in USD.

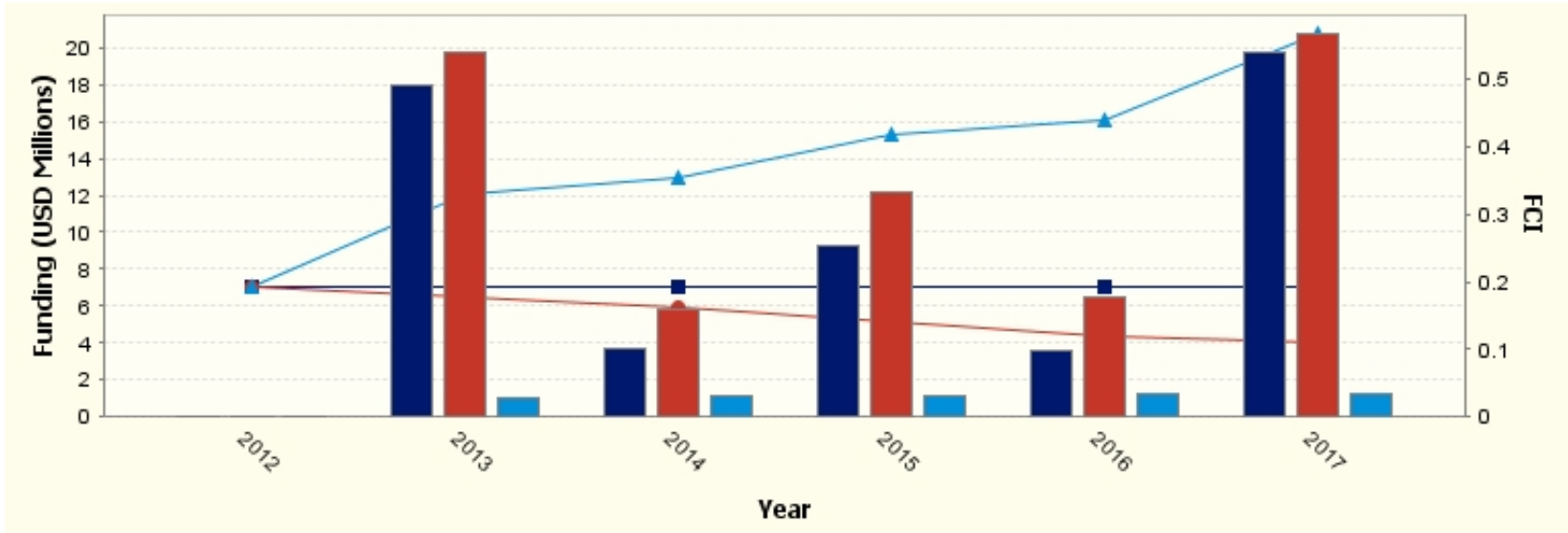
Requirement Name / Renewals	Prime System	Category	Priority	Action Date	Cost
Fire Alarm System - Average Density Renewal	D5037-Fire Alarm Systems	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2013	191,881
<b>2013 Subtotal</b>					<b>191,881</b>
Carpeting 5 - Carpet Tiles Renewal	C3020-Floor Finishes	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	132,025
Fittings: Signage (Room Numbering and Identification) Renewal	C1035-Identifying Devices	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	25,872
Painted Finish - (1 Coat Prime - 2 Coats Finish) Renewal	C3010-Wall Finishes	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2014	66,084
<b>2014 Subtotal</b>					<b>223,981</b>
Vinyl Sheet Goods Renewal	C3020-Floor Finishes	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2015	29,438
<b>2015 Subtotal</b>					<b>29,438</b>
Security System - Light Density Renewal	D5038-Security and Detection Systems	Beyond Useful Life	3- Necessary - Not Yet Critical	11/17/2017	47,389
<b>2017 Subtotal</b>					<b>47,389</b>

All costs in USD.



# Funding / FCI Report

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■ Funding-Maintain - FCI

■ Funding-Target - Funding to reduce FCI to 10.00% in 5 years

■ Funding-Specific Annual Funding

■ FCI-Maintain - FCI

● FCI-Target - Funding to reduce FCI to 10.00% in 5 years

▲ FCI-Specific Annual Funding

Cost Curve Applied: Spiky 0

Note: All cost curves other than Spiky 0 will result in a change to the starting FCI that is displayed. For a full description of all Forecast Parameters applied to this funding scenario, see the final page of this report.

All costs in USD.

**Maintain - FCI**

Cost Curve Applied: Spiky 0

Year	Replacement Cost	Renewal Cost	Backlog Deterioration	Total New Liability	New Backlog Total	Net Plant Value	Funding	Funding Reserve	FCI
2012	117,444,264	21,784,029	0	22,552,158	22,552,158	94,892,106	0	0	0.1920
2013	122,964,150	16,610,401	472,242	17,999,568	23,612,110	99,352,039	17,999,568	0	0.1920
2014	128,743,471	3,253,978	494,438	3,748,416	24,721,881	104,021,590	3,748,416	0	0.1920
2015	134,794,421	8,748,250	517,676	9,265,927	25,883,810	108,910,610	9,265,927	0	0.1920
2016	141,129,765	3,045,978	542,007	3,587,985	27,100,351	114,029,415	3,587,985	0	0.1920
2017	147,762,871	19,154,084	567,481	19,721,566	28,374,069	119,388,803	19,721,566	0	0.1920

**Target - Funding to reduce FCI to 10.00% in 5 years**

Cost Curve Applied: Spiky 0

Year	Replacement Cost	Renewal Cost	Backlog Deterioration	Total New Liability	New Backlog Total	Net Plant Value	Funding	Funding Reserve	FCI
2012	117,444,264	21,784,029	0	22,552,158	22,552,158	94,892,106	0	0	0.1920
2013	122,964,150	16,610,401	472,242	17,999,568	21,874,785	101,089,365	19,736,894	0	0.1779
2014	128,743,471	3,253,978	458,058	3,712,036	20,814,530	107,928,941	5,800,407	0	0.1617
2015	134,794,421	8,748,250	435,856	9,184,107	18,834,977	115,959,444	12,141,943	0	0.1397
2016	141,129,765	3,045,978	394,404	3,440,383	16,712,315	124,417,450	6,448,290	0	0.1184
2017	147,762,871	19,154,084	349,956	19,504,040	16,225,040	131,537,832	20,776,795	0	0.1098

**Specific Annual Funding**

Cost Curve Applied: Spiky 0

Year	Replacement Cost	Renewal Cost	Backlog Deterioration	Total New Liability	New Backlog Total	Net Plant Value	Funding	Funding Reserve	FCI
2012	117,444,264	21,784,029	0	22,552,158	22,552,158	94,892,106	0	0	0.1920
2013	122,964,150	16,610,401	472,242	17,999,568	40,564,678	82,399,472	1,047,000	0	0.3299
2014	128,743,471	3,253,978	849,424	4,103,403	45,478,414	83,265,057	1,096,209	0	0.3532
2015	134,794,421	8,748,250	952,318	9,700,568	56,168,739	78,625,682	1,147,731	0	0.4167
2016	141,129,765	3,045,978	1,176,173	4,222,152	61,829,150	79,300,616	1,201,674	0	0.4381
2017	147,762,871	19,154,084	1,294,702	20,448,787	83,925,756	63,837,115	1,258,153	0	0.5680

*Forecast Parameters*

Region	Lake Michigan College
Campus	Lake Michigan College
Asset	All
Systems	All
Priority	All
Requirement Type	All
Years	5
Inflation	4.70%
Backlog Deterioration	2.00%
Renewal Option	Annual
Cost curve	Spiky 0
Fiscal Year Start Date (mm/dd)	1/1
FCI/RI Setting	FCI
Specific-Apply Inflation to Funding	True

\* About Cost Curves:

Cost curve are models of how renewal costs may occur over time. In the Spiky 0 forecast, all renewal costs are projected to occur entirely in the System Renewal Year. In all other cost curve forecasts, renewal costs are projected to occur over multiple years, including years before and after the System Renewal Year. As a result, the starting Facilities Condition Index (FCI) that is displayed will not be the current FCI, because the model will apply funding prior to the current year.

For detailed information about cost curves, see "About Cost Curves" in the Funding Module section of the VFA.facility User Manual.





# **Funding Needs Report**

**by Asset Name**

**Region:**

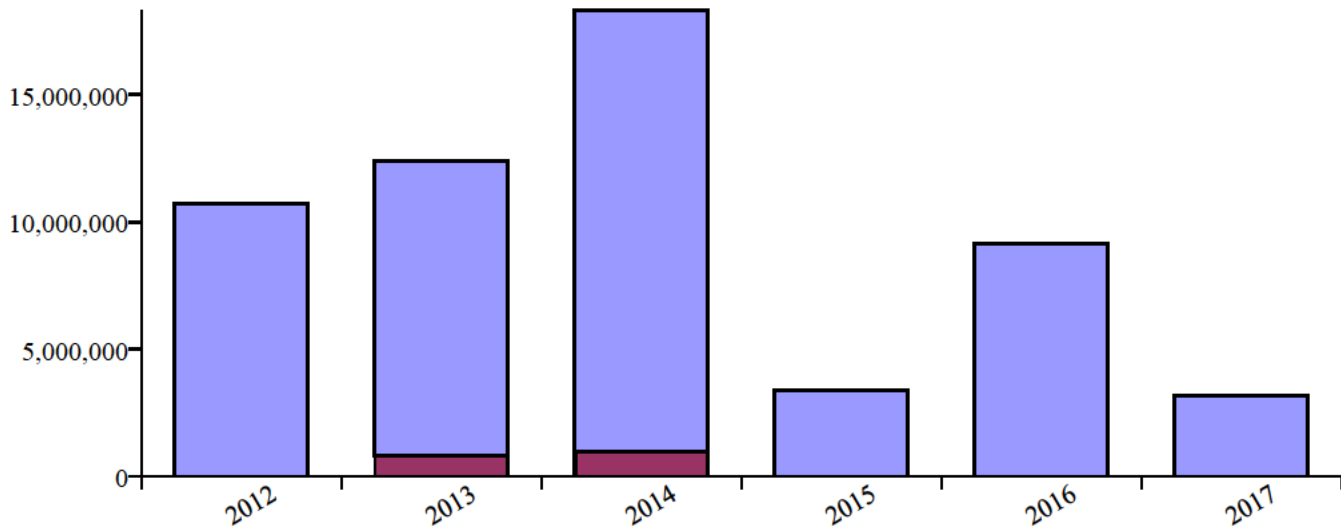
Lake Michigan College

**Campus:**

Lake Michigan College

**Asset Name:**

All Assets



■ Requirements  
■ Renewal

Year	Renewal	Requirements	Total
2012	10,723,060	0	10,723,060
2013	11,580,836	804,231	12,385,067
2014	17,391,087	960,020	18,351,108
2015	3,406,915	0	3,406,915
2016	9,159,416	0	9,159,416
2017	3,189,138	0	3,189,138
<b>Total</b>	<b>55,450,453</b>	<b>1,764,251</b>	<b>57,214,704</b>

All costs in USD. Inflation Rate=4.70%

Region	Campus	Asset	Name	Year	Renewal	Requirement	Total
Lake Michigan College	Lake Michigan College	Napier Academic	D3020-Heat Generating Systems	2012	156,738	-	156,738
Lake Michigan College	Lake Michigan College	Napier Academic	D3040-Distribution Systems	2012	4,945,297	-	4,945,297
Lake Michigan College	Lake Michigan College	Napier Academic	D2020-Domestic Water Distribution	2012	4,410	-	4,410
Lake Michigan College	Lake Michigan College	Napier Academic	D40-Fire Protection	2012	643,314	-	643,314
Lake Michigan College	Lake Michigan College	Napier Academic	B30-Roofing	2012	149,988	-	149,988
Lake Michigan College	Lake Michigan College	Napier Academic	C3020-Floor Finishes	2012	466	-	466
Lake Michigan College	Lake Michigan College	Napier Academic	B2020-Exterior Windows	2012	404,460	-	404,460
Lake Michigan College	Lake Michigan College	Mendel Center	D3020-Heat Generating Systems	2012	1,373,777	-	1,373,777
Lake Michigan College	Lake Michigan College	M-TEC	D5037-Fire Alarm Systems	2012	204,593	-	204,593
Lake Michigan College	Lake Michigan College	M-TEC	D5092-Emergency Light and Power Systems	2012	35,769	-	35,769
Lake Michigan College	Lake Michigan College	Bertrand Crossing	D5037-Fire Alarm Systems	2012	159,581	-	159,581
Lake Michigan College	Lake Michigan College	Napier Academic	C3020-Floor Finishes	2012	23,875	-	23,875
Lake Michigan College	Lake Michigan College	Napier Academic	C3020-Floor Finishes	2012	11,647	-	11,647
Lake Michigan College	Lake Michigan College	Napier Academic	C3020-Floor Finishes	2012	68,274	-	68,274
Lake Michigan College	Lake Michigan College	Napier Academic	C3020-Floor Finishes	2012	114,448	-	114,448
Lake Michigan College	Lake Michigan College	Napier Academic	D5037-Fire Alarm Systems	2012	1,411,094	-	1,411,094
Lake Michigan College	Lake Michigan College	Napier Academic	D5092-Emergency Light and Power Systems	2012	90,604	-	90,604
Lake Michigan College	Lake Michigan College	Napier Academic	D5092-Emergency Light and Power Systems	2012	12,207	-	12,207
Lake Michigan College	Lake Michigan College	Napier Academic	D5031-Public Address and Music Systems	2012	27,652	-	27,652
Lake Michigan College	Lake Michigan College	Napier Academic	D5031-Public Address and Music Systems	2012	4,272	-	4,272
Lake Michigan College	Lake Michigan College	Mendel Center	C3030-Ceiling Finishes	2012	117,478	-	117,478
Lake Michigan College	Lake Michigan College	Mendel Center	D5092-Emergency Light and Power Systems	2012	59,216	-	59,216
Lake Michigan College	Lake Michigan College	Mendel Center	D5022-Lighting Equipment	2012	293,421	-	293,421
Lake Michigan College	Lake Michigan College	Mendel Center	D5022-Lighting Equipment	2012	410,480	-	410,480
			<b>Subtotal</b>		<b>10,723,060</b>	<b>-</b>	<b>10,723,060</b>
Lake Michigan College	Lake Michigan College	Napier Academic	D2010-Plumbing Fixtures	2013	39,766	-	39,766
Lake Michigan College	Lake Michigan College	Napier Academic	D3040-Distribution Systems	2013	4,398,331	-	4,398,331
Lake Michigan College	Lake Michigan College	Napier Academic	D2090-Other Plumbing Systems	2013	61,682	-	61,682
Lake Michigan College	Lake Michigan College	Napier Academic	D3030-Cooling Generating Systems	2013	248,443	-	248,443
Lake Michigan College	Lake Michigan College	Napier Academic	D3050-Terminal and Package Units	2013	34,046	-	34,046
Lake Michigan College	Lake Michigan College	Napier Academic	E-Equipment and Furnishings	2013	107,973	-	107,973
Lake Michigan College	Lake Michigan College	Napier Academic	B2020-Exterior Windows	2013	630,875	-	630,875
Lake Michigan College	Lake Michigan College	Napier Academic	B2030-Exterior Doors	2013	65,356	-	65,356
Lake Michigan College	Lake Michigan College	Napier Academic	B2030-Exterior Doors	2013	22,603	-	22,603
Lake Michigan College	Lake Michigan College	Napier Academic	B30-Roofing	2013	90,848	-	90,848

All costs in USD. Inflation Rate=4.70%

Region	Campus	Asset	Name	Year	Renewal	Requirement	Total
Lake Michigan College	Lake Michigan College	Napier Academic	B3021-Glazed Roof Openings	2013	62,237	-	62,237
Lake Michigan College	Lake Michigan College	Napier Academic	B1015-Exterior Stairs and Fire Escapes	2013	24,849	-	24,849
Lake Michigan College	Lake Michigan College	Mendel Center	D3040-Distribution Systems	2013	157,504	-	157,504
Lake Michigan College	Lake Michigan College	Mendel Center	D3040-Distribution Systems	2013	63,508	-	63,508
Lake Michigan College	Lake Michigan College	Napier Academic	B2030-Exterior Doors	2013	116,080	-	116,080
Lake Michigan College	Lake Michigan College	Napier Academic	B2030-Exterior Doors	2013	27,553	-	27,553
Lake Michigan College	Lake Michigan College	South Haven	D5037-Fire Alarm Systems	2013	200,899	-	200,899
Lake Michigan College	Lake Michigan College	Bertrand Crossing	D5092-Emergency Light and Power Systems	2013	29,211	-	29,211
Lake Michigan College	Lake Michigan College	Napier Academic	C3020-Floor Finishes	2013	523,301	-	523,301
Lake Michigan College	Lake Michigan College	Napier Academic	C3020-Floor Finishes	2013	174,517	-	174,517
Lake Michigan College	Lake Michigan College	Napier Academic	C3020-Floor Finishes	2013	155,506	-	155,506
Lake Michigan College	Lake Michigan College	Napier Academic	C3020-Floor Finishes	2013	2,927	-	2,927
Lake Michigan College	Lake Michigan College	Mendel Center	B2020-Exterior Windows	2013	310,544	-	310,544
Lake Michigan College	Lake Michigan College	Mendel Center	B3021-Glazed Roof Openings	2013	310,440	-	310,440
Lake Michigan College	Lake Michigan College	Napier Academic	D5022-Lighting Equipment	2013	874,874	-	874,874
Lake Michigan College	Lake Michigan College	Napier Academic	D5021-Branch Wiring Devices	2013	1,063,801	-	1,063,801
Lake Michigan College	Lake Michigan College	Napier Academic	D3069-Other Controls and Instrumentation	2013	356,128	-	356,128
Lake Michigan College	Lake Michigan College	Napier Academic	D1090-Other Conveying Systems	2013	37,147	-	37,147
Lake Michigan College	Lake Michigan College	Mendel Center	D5037-Fire Alarm Systems	2013	391,681	-	391,681
Lake Michigan College	Lake Michigan College	Mendel Center	D5020-Lighting and Branch Wiring	2013	7,481	-	7,481
Lake Michigan College	Lake Michigan College	Mendel Center	D5021-Branch Wiring Devices	2013	487,201	-	487,201
Lake Michigan College	Lake Michigan College	Mendel Center	D3069-Other Controls and Instrumentation	2013	37,487	-	37,487
Lake Michigan College	Lake Michigan College	Mendel Center	D5092-Emergency Light and Power Systems	2013	49,691	-	49,691
Lake Michigan College	Lake Michigan College	Mendel Center	D5031-Public Address and Music Systems	2013	28,952	-	28,952
Lake Michigan College	Lake Michigan College	Mendel Center	D5037-Fire Alarm Systems	2013	284,228	-	284,228
Lake Michigan College	Lake Michigan College	Mendel Center	D5032-Intercommunication and Paging System	2013	103,165	-	103,165
Lake Michigan College	Lake Michigan College	Napier Academic	HVAC Cost Study- Engineer Environmental and Efficiency Study	2013	-	62,769	62,769
Lake Michigan College	Lake Michigan College	Napier Academic	VAT - A Wing	2013	-	1,011	1,011
Lake Michigan College	Lake Michigan College	Napier Academic	VAT - E Wing	2013	-	4,056	4,056
Lake Michigan College	Lake Michigan College	Napier Academic	VAT - C Wing	2013	-	216,580	216,580
Lake Michigan College	Lake Michigan College	Napier Academic	VAT - S Wing	2013	-	5,684	5,684
Lake Michigan College	Lake Michigan College	Napier Academic	Brick Walls - Mortar Joints Deteriorated	2013	-	131,428	131,428
Lake Michigan College	Lake Michigan College	Mendel Center	HVAC Cost Study- Engineer Environmental and Efficiency Study	2013	-	62,769	62,769
Lake Michigan College	Lake Michigan College	Mendel Center	Guard and Handrails - Non-Compliant	2013	-	39,515	39,515

All costs in USD. Inflation Rate=4.70%

Region	Campus	Asset	Name	Year	Renewal	Requirement	Total
Lake Michigan College	Lake Michigan College	Mendel Center	Hardware - Not ADAAG Compliant	2013	-	122,283	122,283
Lake Michigan College	Lake Michigan College	Mendel Center	Partitions- Generator Room Non-Compliant	2013	-	12,309	12,309
Lake Michigan College	Lake Michigan College	Napier Academic	Emergency Generator - Lacks Capacity	2013	-	66,126	66,126
Lake Michigan College	Lake Michigan College	Napier Academic	Electrical Outlets - Lack GFCI Receptacle	2013	-	14,824	14,824
Lake Michigan College	Lake Michigan College	Mendel Center	Electrical Outlets - Lack GFCI Receptacle	2013	-	10,648	10,648
Lake Michigan College	Lake Michigan College	Mendel Center	Electrical Panel - Lack Circuit Identification	2013	-	3,384	3,384
Lake Michigan College	Lake Michigan College	Mendel Center	Electrical Panels - Lack Dedicated Space	2013	-	39,451	39,451
Lake Michigan College	Lake Michigan College	Mendel Center	Rooftop HVAC Equipment - Lacks Service Outlets	2013	-	8,242	8,242
Lake Michigan College	Lake Michigan College	Mendel Center	Drain Pipe: Not Insulated	2013	-	1,576	1,576
Lake Michigan College	Lake Michigan College	Napier Academic	Drain Pipe: Not Insulated	2013	-	1,576	1,576
<b>Subtotal</b>					<b>11,580,836</b>	<b>804,231</b>	<b>12,385,067</b>
Lake Michigan College	Lake Michigan College	Napier Academic	D3060-Controls and Instrumentation	2014	1,902,485	-	1,902,485
Lake Michigan College	Lake Michigan College	Napier Academic	B2030-Exterior Doors	2014	21,678	-	21,678
Lake Michigan College	Lake Michigan College	Napier Academic	B2030-Exterior Doors	2014	22,003	-	22,003
Lake Michigan College	Lake Michigan College	Napier Academic	B30-Roofing	2014	1,876,664	-	1,876,664
Lake Michigan College	Lake Michigan College	Napier Academic	C10-Interior Construction	2014	13,061	-	13,061
Lake Michigan College	Lake Michigan College	Napier Academic	C3010-Wall Finishes	2014	507,593	-	507,593
Lake Michigan College	Lake Michigan College	Napier Academic	C3020-Floor Finishes	2014	74,539	-	74,539
Lake Michigan College	Lake Michigan College	Napier Academic	C3020-Floor Finishes	2014	172,337	-	172,337
Lake Michigan College	Lake Michigan College	Napier Academic	C3030-Ceiling Finishes	2014	5,364	-	5,364
Lake Michigan College	Lake Michigan College	Napier Academic	B2010-Exterior Walls	2014	94,170	-	94,170
Lake Michigan College	Lake Michigan College	Napier Academic	C10-Interior Construction	2014	49,801	-	49,801
Lake Michigan College	Lake Michigan College	Napier Academic	C10-Interior Construction	2014	129,549	-	129,549
Lake Michigan College	Lake Michigan College	Napier Academic	C10-Interior Construction	2014	86,366	-	86,366
Lake Michigan College	Lake Michigan College	Napier Academic	C10-Interior Construction	2014	86,366	-	86,366
Lake Michigan College	Lake Michigan College	Napier Academic	C10-Interior Construction	2014	33,720	-	33,720
Lake Michigan College	Lake Michigan College	Napier Academic	C10-Interior Construction	2014	86,366	-	86,366
Lake Michigan College	Lake Michigan College	Napier Academic	C10-Interior Construction	2014	172,732	-	172,732
Lake Michigan College	Lake Michigan College	Napier Academic	C3030-Ceiling Finishes	2014	373,643	-	373,643
Lake Michigan College	Lake Michigan College	Napier Academic	C3020-Floor Finishes	2014	353,179	-	353,179
Lake Michigan College	Lake Michigan College	Napier Academic	C3030-Ceiling Finishes	2014	69,132	-	69,132
Lake Michigan College	Lake Michigan College	Napier Academic	C3020-Floor Finishes	2014	85,402	-	85,402
Lake Michigan College	Lake Michigan College	Napier Academic	C3020-Floor Finishes	2014	13,775	-	13,775
Lake Michigan College	Lake Michigan College	Napier Academic	E-Equipment and Furnishings	2014	26,025	-	26,025

All costs in USD. Inflation Rate=4.70%

Region	Campus	Asset	Name	Year	Renewal	Requirement	Total
Lake Michigan College	Lake Michigan College	Napier Academic	C3020-Floor Finishes	2014	221,440	-	221,440
Lake Michigan College	Lake Michigan College	Napier Academic	C3020-Floor Finishes	2014	33,748	-	33,748
Lake Michigan College	Lake Michigan College	Napier Academic	C3030-Ceiling Finishes	2014	16,020	-	16,020
Lake Michigan College	Lake Michigan College	Napier Academic	C3030-Ceiling Finishes	2014	25,216	-	25,216
Lake Michigan College	Lake Michigan College	Napier Academic	C3030-Ceiling Finishes	2014	14,848	-	14,848
Lake Michigan College	Lake Michigan College	Napier Academic	E-Equipment and Furnishings	2014	2,270	-	2,270
Lake Michigan College	Lake Michigan College	Napier Academic	C3030-Ceiling Finishes	2014	124,265	-	124,265
Lake Michigan College	Lake Michigan College	Napier Academic	C1035-Identifying Devices	2014	208,568	-	208,568
Lake Michigan College	Lake Michigan College	Mendel Center	B2030-Exterior Doors	2014	39,442	-	39,442
Lake Michigan College	Lake Michigan College	Mendel Center	B2030-Exterior Doors	2014	4,808	-	4,808
Lake Michigan College	Lake Michigan College	Mendel Center	B30-Roofing	2014	764,553	-	764,553
Lake Michigan College	Lake Michigan College	Mendel Center	B3020-Roof Openings	2014	82,066	-	82,066
Lake Michigan College	Lake Michigan College	Mendel Center	B2030-Exterior Doors	2014	16,101	-	16,101
Lake Michigan College	Lake Michigan College	Mendel Center	B2030-Exterior Doors	2014	5,655	-	5,655
Lake Michigan College	Lake Michigan College	Mendel Center	B2030-Exterior Doors	2014	91,152	-	91,152
Lake Michigan College	Lake Michigan College	Mendel Center	C3010-Wall Finishes	2014	107,347	-	107,347
Lake Michigan College	Lake Michigan College	Mendel Center	C10-Interior Construction	2014	49,801	-	49,801
Lake Michigan College	Lake Michigan College	Mendel Center	C10-Interior Construction	2014	43,102	-	43,102
Lake Michigan College	Lake Michigan College	Mendel Center	C10-Interior Construction	2014	172,732	-	172,732
Lake Michigan College	Lake Michigan College	Mendel Center	C10-Interior Construction	2014	134,880	-	134,880
Lake Michigan College	Lake Michigan College	Mendel Center	C1035-Identifying Devices	2014	95,418	-	95,418
Lake Michigan College	Lake Michigan College	Mendel Center	E-Equipment and Furnishings	2014	18,384	-	18,384
Lake Michigan College	Lake Michigan College	Mendel Center	C1010-Partitions	2014	594,479	-	594,479
Lake Michigan College	Lake Michigan College	Mendel Center	C3010-Wall Finishes	2014	37,975	-	37,975
Lake Michigan College	Lake Michigan College	Mendel Center	C3020-Floor Finishes	2014	79,297	-	79,297
Lake Michigan College	Lake Michigan College	Mendel Center	C3020-Floor Finishes	2014	66,391	-	66,391
Lake Michigan College	Lake Michigan College	Mendel Center	C3020-Floor Finishes	2014	198,354	-	198,354
Lake Michigan College	Lake Michigan College	Mendel Center	C3030-Ceiling Finishes	2014	149,903	-	149,903
Lake Michigan College	Lake Michigan College	Mendel Center	C3010-Wall Finishes	2014	58,829	-	58,829
Lake Michigan College	Lake Michigan College	Mendel Center	E-Equipment and Furnishings	2014	282,953	-	282,953
Lake Michigan College	Lake Michigan College	Mendel Center	E-Equipment and Furnishings	2014	4,776,850	-	4,776,850
Lake Michigan College	Lake Michigan College	Mendel Center	C3020-Floor Finishes	2014	377,698	-	377,698
Lake Michigan College	Lake Michigan College	Mendel Center	C3020-Floor Finishes	2014	41,599	-	41,599
Lake Michigan College	Lake Michigan College	Mendel Center	C3020-Floor Finishes	2014	102,522	-	102,522
Lake Michigan College	Lake Michigan College	Mendel Center	D5022-Lighting Equipment	2014	443,252	-	443,252
Lake Michigan College	Lake Michigan College	Mendel Center	D5012-Low Tension Service and Dist.	2014	472,676	-	472,676
Lake Michigan College	Lake Michigan College	Mendel Center	D5092-Emergency Light and Power Systems	2014	177,616	-	177,616

All costs in USD. Inflation Rate=4.70%

Region	Campus	Asset	Name	Year	Renewal	Requirement	Total
Lake Michigan College	Lake Michigan College	South Haven	C1035-Identifying Devices	2014	28,361	-	28,361
Lake Michigan College	Lake Michigan College	South Haven	C3010-Wall Finishes	2014	72,442	-	72,442
Lake Michigan College	Lake Michigan College	South Haven	C3020-Floor Finishes	2014	144,727	-	144,727
Lake Michigan College	Lake Michigan College	Napier Academic	D5092-Emergency Light and Power Systems	2014	68,737	-	68,737
Lake Michigan College	Lake Michigan College	M-TEC	C1035-Identifying Devices	2014	30,240	-	30,240
Lake Michigan College	Lake Michigan College	M-TEC	C3010-Wall Finishes	2014	77,241	-	77,241
Lake Michigan College	Lake Michigan College	M-TEC	C3020-Floor Finishes	2014	327,449	-	327,449
Lake Michigan College	Lake Michigan College	Bertrand Crossing	C1035-Identifying Devices	2014	23,587	-	23,587
Lake Michigan College	Lake Michigan College	Bertrand Crossing	C1010-Partitions	2014	28,873	-	28,873
Lake Michigan College	Lake Michigan College	Bertrand Crossing	C3020-Floor Finishes	2014	201,274	-	201,274
Lake Michigan College	Lake Michigan College	Napier Academic	Guard and Handrails - Non-Compliant	2014	-	302,837	302,837
Lake Michigan College	Lake Michigan College	Napier Academic	Guards - Lacking	2014	-	27,033	27,033
Lake Michigan College	Lake Michigan College	Napier Academic	Handrails - Lacking	2014	-	20,962	20,962
Lake Michigan College	Lake Michigan College	Napier Academic	Hardware - Not ADAAG Compliant	2014	-	526,579	526,579
Lake Michigan College	Lake Michigan College	Napier Academic	Electrical Panels - Lack Dedicated Space	2014	-	82,610	82,610
<b>Subtotal</b>					<b>17,391,087</b>	<b>960,020</b>	<b>18,351,108</b>
Lake Michigan College	Lake Michigan College	Napier Academic	D3050-Terminal and Package Units	2015	21,767	-	21,767
Lake Michigan College	Lake Michigan College	Napier Academic	D2010-Plumbing Fixtures	2015	161,015	-	161,015
Lake Michigan College	Lake Michigan College	Napier Academic	D2020-Domestic Water Distribution	2015	7,485	-	7,485
Lake Michigan College	Lake Michigan College	Napier Academic	C3010-Wall Finishes	2015	70,996	-	70,996
Lake Michigan College	Lake Michigan College	Mendel Center	D3040-Distribution Systems	2015	2,025,147	-	2,025,147
Lake Michigan College	Lake Michigan College	Mendel Center	D2020-Domestic Water Distribution	2015	14,295	-	14,295
Lake Michigan College	Lake Michigan College	Napier Academic	D2020-Domestic Water Distribution	2015	6,008	-	6,008
Lake Michigan College	Lake Michigan College	M-TEC	D5039-Local Area Networks	2015	209,036	-	209,036
Lake Michigan College	Lake Michigan College	Bertrand Crossing	D5039-Local Area Networks	2015	163,047	-	163,047
Lake Michigan College	Lake Michigan College	M-TEC	D2020-Domestic Water Distribution	2015	14,295	-	14,295
Lake Michigan College	Lake Michigan College	M-TEC	D3030-Cooling Generating Systems	2015	205,485	-	205,485
Lake Michigan College	Lake Michigan College	Napier Academic	C3020-Floor Finishes	2015	78,946	-	78,946
Lake Michigan College	Lake Michigan College	M-TEC	D3050-Terminal and Package Units	2015	6,108	-	6,108
Lake Michigan College	Lake Michigan College	Mendel Center	C3010-Wall Finishes	2015	298,066	-	298,066
Lake Michigan College	Lake Michigan College	Mendel Center	C3020-Floor Finishes	2015	46,989	-	46,989
Lake Michigan College	Lake Michigan College	South Haven	C3020-Floor Finishes	2015	33,786	-	33,786
Lake Michigan College	Lake Michigan College	Bertrand Crossing	C3010-Wall Finishes	2015	44,442	-	44,442
<b>Subtotal</b>					<b>3,406,915</b>	<b>-</b>	<b>3,406,915</b>

All costs in USD. Inflation Rate=4.70%

Region	Campus	Asset	Name	Year	Renewal	Requirement	Total
Lake Michigan College	Lake Michigan College	Napier Academic	D1010-Elevators and Lifts	2016	358,810	-	358,810
Lake Michigan College	Lake Michigan College	Napier Academic	D1010-Elevators and Lifts	2016	274,260	-	274,260
Lake Michigan College	Lake Michigan College	Mendel Center	D1010-Elevators and Lifts	2016	409,112	-	409,112
Lake Michigan College	Lake Michigan College	Mendel Center	D2010-Plumbing Fixtures	2016	44,320	-	44,320
Lake Michigan College	Lake Michigan College	Mendel Center	D2020-Domestic Water Distribution	2016	602,140	-	602,140
Lake Michigan College	Lake Michigan College	Mendel Center	D40-Fire Protection	2016	1,471,247	-	1,471,247
Lake Michigan College	Lake Michigan College	Mendel Center	D3040-Distribution Systems	2016	3,194,541	-	3,194,541
Lake Michigan College	Lake Michigan College	Mendel Center	D1010-Elevators and Lifts	2016	280,598	-	280,598
Lake Michigan College	Lake Michigan College	Mendel Center	E-Equipment and Furnishings	2016	123,924	-	123,924
Lake Michigan College	Lake Michigan College	Bertrand Crossing	D2020-Domestic Water Distribution	2016	16,196	-	16,196
Lake Michigan College	Lake Michigan College	Napier Academic	D5039-Local Area Networks	2016	1,509,501	-	1,509,501
Lake Michigan College	Lake Michigan College	Napier Academic	D5092-Emergency Light and Power Systems	2016	72,743	-	72,743
Lake Michigan College	Lake Michigan College	Mendel Center	C3020-Floor Finishes	2016	111,436	-	111,436
Lake Michigan College	Lake Michigan College	Mendel Center	D5039-Local Area Networks	2016	690,588	-	690,588
			<b>Subtotal</b>		<b>9,159,416</b>	-	<b>9,159,416</b>
Lake Michigan College	Lake Michigan College	Mendel Center	D3040-Distribution Systems	2017	405,232	-	405,232
Lake Michigan College	Lake Michigan College	Mendel Center	D3060-Controls and Instrumentation	2017	998,957	-	998,957
Lake Michigan College	Lake Michigan College	Mendel Center	D3050-Terminal and Package Units	2017	11,931	-	11,931
Lake Michigan College	Lake Michigan College	Mendel Center	D3050-Terminal and Package Units	2017	20,456	-	20,456
Lake Michigan College	Lake Michigan College	Mendel Center	D3040-Distribution Systems	2017	1,273,036	-	1,273,036
Lake Michigan College	Lake Michigan College	South Haven	D5038-Security and Detection Systems	2017	59,623	-	59,623
Lake Michigan College	Lake Michigan College	M-TEC	D5038-Security and Detection Systems	2017	63,573	-	63,573
Lake Michigan College	Lake Michigan College	Bertrand Crossing	D5038-Security and Detection Systems	2017	49,586	-	49,586
Lake Michigan College	Lake Michigan College	Napier Academic	C10-Interior Construction	2017	198,250	-	198,250
Lake Michigan College	Lake Michigan College	Mendel Center	B30-Roofing	2017	71,689	-	71,689
Lake Michigan College	Lake Michigan College	Mendel Center	C3020-Floor Finishes	2017	36,807	-	36,807
			<b>Total</b>		<b>55,450,453</b>	<b>1,764,251</b>	<b>57,214,704</b>



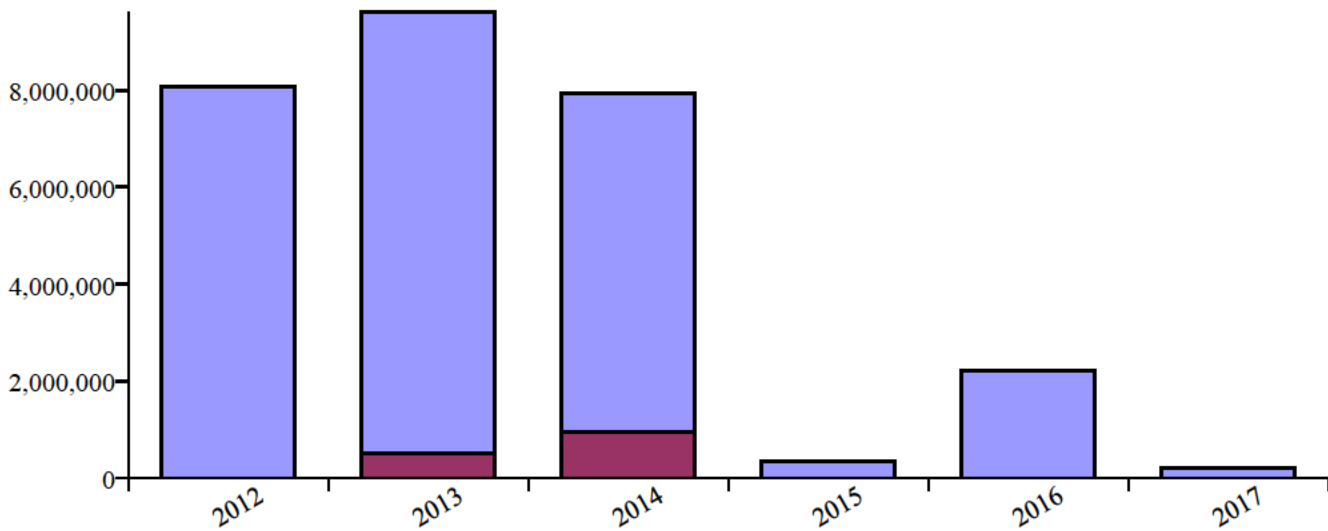
Region: Lake Michigan College  
Campus: Lake Michigan College

Asset Name: Napier Academic  
Asset Number: 1

Address 1	2755 East Napier Avenue	Address 2	-
City	-	State	MI
Country	-	ZIP	-

Replacement Value 58,845,201

Size 303,147



■ Requirements  
■ Renewal

Name	Year	Renewal	Requirements	Total
D3020-Heat Generating Systems	2012	156,738	-	156,738
D3040-Distribution Systems	2012	4,945,297	-	4,945,297
D2020-Domestic Water Distribution	2012	4,410	-	4,410
D40-Fire Protection	2012	643,314	-	643,314
B30-Roofing	2012	149,988	-	149,988
C3020-Floor Finishes	2012	466	-	466
B2020-Exterior Windows	2012	404,460	-	404,460
C3020-Floor Finishes	2012	23,875	-	23,875
C3020-Floor Finishes	2012	11,647	-	11,647
C3020-Floor Finishes	2012	68,274	-	68,274
C3020-Floor Finishes	2012	114,448	-	114,448
D5037-Fire Alarm Systems	2012	1,411,094	-	1,411,094
D5092-Emergency Light and Power Systems	2012	90,604	-	90,604
D5092-Emergency Light and Power Systems	2012	12,207	-	12,207
D5031-Public Address and Music Systems	2012	27,652	-	27,652
D5031-Public Address and Music Systems	2012	4,272	-	4,272
<b>Subtotal</b>		<b>8,068,745</b>	<b>0</b>	<b>8,068,745</b>

All costs in USD. Inflation Rate=4.70%

D2010-Plumbing Fixtures	2013	39,766	-	39,766
D3040-Distribution Systems	2013	4,398,331	-	4,398,331
D2090-Other Plumbing Systems	2013	61,682	-	61,682
D3030-Cooling Generating Systems	2013	248,443	-	248,443
D3050-Terminal and Package Units	2013	34,046	-	34,046
E-Equipment and Furnishings	2013	107,973	-	107,973
B2020-Exterior Windows	2013	630,875	-	630,875
B2030-Exterior Doors	2013	65,356	-	65,356
B2030-Exterior Doors	2013	22,603	-	22,603
B30-Roofing	2013	90,848	-	90,848
B3021-Glazed Roof Openings	2013	62,237	-	62,237
B1015-Exterior Stairs and Fire Escapes	2013	24,849	-	24,849
B2030-Exterior Doors	2013	116,080	-	116,080
B2030-Exterior Doors	2013	27,553	-	27,553
C3020-Floor Finishes	2013	523,301	-	523,301
C3020-Floor Finishes	2013	174,517	-	174,517
C3020-Floor Finishes	2013	155,506	-	155,506
C3020-Floor Finishes	2013	2,927	-	2,927
D5022-Lighting Equipment	2013	874,874	-	874,874
D5021-Branch Wiring Devices	2013	1,063,801	-	1,063,801
D3069-Other Controls and Instrumentation	2013	356,128	-	356,128
D1090-Other Conveying Systems	2013	37,147	-	37,147
HVAC Cost Study- Engineer Environmental and Efficiency Study	2013	-	62,769	62,769
VAT - A Wing	2013	-	1,011	1,011
VAT - E Wing	2013	-	4,056	4,056
VAT - C Wing	2013	-	216,580	216,580
VAT - S Wing	2013	-	5,684	5,684
Brick Walls - Mortar Joints Deteriorated	2013	-	131,428	131,428
Emergency Generator - Lacks Capacity	2013	-	66,126	66,126
Electrical Outlets - Lack GFCI Receptacle	2013	-	14,824	14,824
Drain Pipe: Not Insulated	2013	-	1,576	1,576
<b>Subtotal</b>		<b>9,118,843</b>	<b>504,055</b>	<b>9,622,898</b>
D3060-Controls and Instrumentation	2014	1,902,485	-	1,902,485
B2030-Exterior Doors	2014	21,678	-	21,678
B2030-Exterior Doors	2014	22,003	-	22,003
B30-Roofing	2014	1,876,664	-	1,876,664
C10-Interior Construction	2014	13,061	-	13,061
C3010-Wall Finishes	2014	507,593	-	507,593
C3020-Floor Finishes	2014	74,539	-	74,539
C3020-Floor Finishes	2014	172,337	-	172,337
C3030-Ceiling Finishes	2014	5,364	-	5,364
B2010-Exterior Walls	2014	94,170	-	94,170
C10-Interior Construction	2014	49,801	-	49,801
C10-Interior Construction	2014	129,549	-	129,549
C10-Interior Construction	2014	86,366	-	86,366
C10-Interior Construction	2014	86,366	-	86,366
C10-Interior Construction	2014	33,720	-	33,720
C10-Interior Construction	2014	86,366	-	86,366
C10-Interior Construction	2014	172,732	-	172,732
C3030-Ceiling Finishes	2014	373,643	-	373,643
C3020-Floor Finishes	2014	353,179	-	353,179
C3030-Ceiling Finishes	2014	69,132	-	69,132

All costs in USD. Inflation Rate=4.70%

C3020-Floor Finishes	2014	85,402	-	85,402
C3020-Floor Finishes	2014	13,775	-	13,775
E-Equipment and Furnishings	2014	26,025	-	26,025
C3020-Floor Finishes	2014	221,440	-	221,440
C3020-Floor Finishes	2014	33,748	-	33,748
C3030-Ceiling Finishes	2014	16,020	-	16,020
C3030-Ceiling Finishes	2014	25,216	-	25,216
C3030-Ceiling Finishes	2014	14,848	-	14,848
E-Equipment and Furnishings	2014	2,270	-	2,270
C3030-Ceiling Finishes	2014	124,265	-	124,265
C1035-Identifying Devices	2014	208,568	-	208,568
D5092-Emergency Light and Power Systems	2014	68,737	-	68,737
Guard and Handrails - Non-Compliant	2014	-	302,837	302,837
Guards - Lacking	2014	-	27,033	27,033
Handrails - Lacking	2014	-	20,962	20,962
Hardware - Not ADAAG Compliant	2014	-	526,579	526,579
Electrical Panels - Lack Dedicated Space	2014	-	82,610	82,610
<b>Subtotal</b>		<b>6,971,060</b>	<b>960,020</b>	<b>7,931,081</b>
D3050-Terminal and Package Units	2015	21,767	-	21,767
D2010-Plumbing Fixtures	2015	161,015	-	161,015
D2020-Domestic Water Distribution	2015	7,485	-	7,485
C3010-Wall Finishes	2015	70,996	-	70,996
D2020-Domestic Water Distribution	2015	6,008	-	6,008
C3020-Floor Finishes	2015	78,946	-	78,946
<b>Subtotal</b>		<b>346,218</b>	<b>0</b>	<b>346,218</b>
D1010-Elevators and Lifts	2016	358,810	-	358,810
D1010-Elevators and Lifts	2016	274,260	-	274,260
D5039-Local Area Networks	2016	1,509,501	-	1,509,501
D5092-Emergency Light and Power Systems	2016	72,743	-	72,743
<b>Subtotal</b>		<b>2,215,314</b>	<b>0</b>	<b>2,215,314</b>
C10-Interior Construction	2017	198,250	-	198,250
<b>Subtotal</b>		<b>198,250</b>	<b>0</b>	<b>198,250</b>
<b>Total</b>		<b>26,918,429</b>	<b>1,464,075</b>	<b>28,382,505</b>

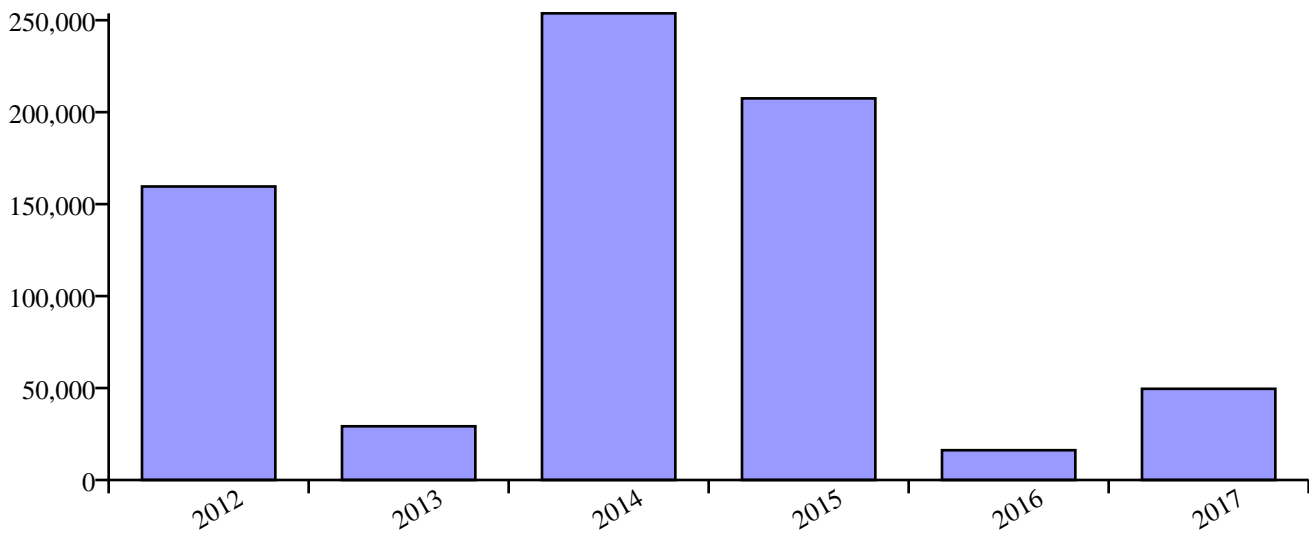
**Region:** Lake Michigan College  
**Campus:** Lake Michigan College

**Asset Name:** Bertrand Crossing  
**Asset Number:** 2

<b>Address 1</b> 1905 Foundation Drive	<b>Address 2</b> -
<b>City</b> -	<b>State</b> MI
<b>Country</b> -	<b>ZIP</b> -

**Replacement Value** 7,168,420

**Size** 34,283



■ Requirements  
■ Renewal

Name	Year	Renewal	Requirements	Total
D5037-Fire Alarm Systems	2012	159,581	-	159,581
	<b>Subtotal</b>	<b>159,581</b>	<b>0</b>	<b>159,581</b>
D5092-Emergency Light and Power Systems	2013	29,211	-	29,211
	<b>Subtotal</b>	<b>29,211</b>	<b>0</b>	<b>29,211</b>
C1035-Identifying Devices	2014	23,587	-	23,587
C1010-Partitions	2014	28,873	-	28,873
C3020-Floor Finishes	2014	201,274	-	201,274
	<b>Subtotal</b>	<b>253,733</b>	<b>0</b>	<b>253,733</b>
D5039-Local Area Networks	2015	163,047	-	163,047
C3010-Wall Finishes	2015	44,442	-	44,442
	<b>Subtotal</b>	<b>207,489</b>	<b>0</b>	<b>207,489</b>

All costs in USD. Inflation Rate=4.70%

D2020-Domestic Water Distribution	2016	16,196	-	16,196
	<b>Subtotal</b>	<b>16,196</b>	<b>0</b>	<b>16,196</b>
D5038-Security and Detection Systems	2017	49,586	-	49,586
	<b>Subtotal</b>	<b>49,586</b>	<b>0</b>	<b>49,586</b>
	<b>Total</b>	<b>715,797</b>	<b>0</b>	<b>715,797</b>

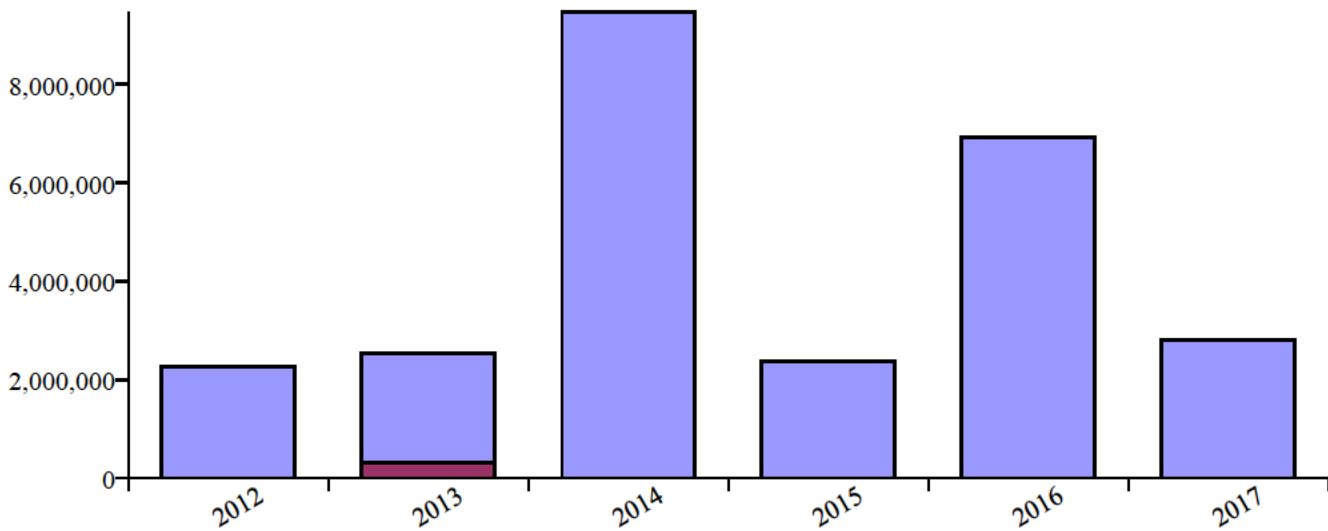
Region: Lake Michigan College  
Campus: Lake Michigan College

Asset Name: Mendel Center  
Asset Number: 3

Address 1	2755 East Napier Avenue	Address 2	-
City	-	State	MI
Country	-	ZIP	-

Replacement Value 34,282,441

Size 138,688



■ Requirements  
■ Renewal

Name	Year	Renewal	Requirements	Total
D3020-Heat Generating Systems	2012	1,373,777	-	1,373,777
C3030-Ceiling Finishes	2012	117,478	-	117,478
D5092-Emergency Light and Power Systems	2012	59,216	-	59,216
D5022-Lighting Equipment	2012	293,421	-	293,421
D5022-Lighting Equipment	2012	410,480	-	410,480
<b>Subtotal</b>		<b>2,254,372</b>	<b>0</b>	<b>2,254,372</b>
D3040-Distribution Systems	2013	157,504	-	157,504
D3040-Distribution Systems	2013	63,508	-	63,508
B2020-Exterior Windows	2013	310,544	-	310,544
B3021-Glazed Roof Openings	2013	310,440	-	310,440
D5037-Fire Alarm Systems	2013	391,681	-	391,681
D5020-Lighting and Branch Wiring	2013	7,481	-	7,481
D5021-Branch Wiring Devices	2013	487,201	-	487,201
D3069-Other Controls and Instrumentation	2013	37,487	-	37,487
D5092-Emergency Light and Power Systems	2013	49,691	-	49,691
D5031-Public Address and Music Systems	2013	28,952	-	28,952
D5037-Fire Alarm Systems	2013	284,228	-	284,228

All costs in USD. Inflation Rate=4.70%

D5032-Intercommunication and Paging System	2013	103,165	-	103,165
HVAC Cost Study- Engineer Environmental and Efficiency Study	2013	-	62,769	62,769
Guard and Handrails - Non-Compliant	2013	-	39,515	39,515
Hardware - Not ADAAG Compliant	2013	-	122,283	122,283
Partitions- Generator Room Non-Compliant	2013	-	12,309	12,309
Electrical Outlets - Lack GFCI Receptacle	2013	-	10,648	10,648
Electrical Panel - Lack Circuit Identification	2013	-	3,384	3,384
Electrical Panels - Lack Dedicated Space	2013	-	39,451	39,451
Rooftop HVAC Equipment - Lacks Service Outlets	2013	-	8,242	8,242
Drain Pipe: Not Insulated	2013	-	1,576	1,576
<b>Subtotal</b>		<b>2,231,883</b>	<b>300,176</b>	<b>2,532,059</b>
B2030-Exterior Doors	2014	39,442	-	39,442
B2030-Exterior Doors	2014	4,808	-	4,808
B30-Roofing	2014	764,553	-	764,553
B3020-Roof Openings	2014	82,066	-	82,066
B2030-Exterior Doors	2014	16,101	-	16,101
B2030-Exterior Doors	2014	5,655	-	5,655
B2030-Exterior Doors	2014	91,152	-	91,152
C3010-Wall Finishes	2014	107,347	-	107,347
C10-Interior Construction	2014	49,801	-	49,801
C10-Interior Construction	2014	43,102	-	43,102
C10-Interior Construction	2014	172,732	-	172,732
C10-Interior Construction	2014	134,880	-	134,880
C1035-Identifying Devices	2014	95,418	-	95,418
E-Equipment and Furnishings	2014	18,384	-	18,384
C1010-Partitions	2014	594,479	-	594,479
C3010-Wall Finishes	2014	37,975	-	37,975
C3020-Floor Finishes	2014	79,297	-	79,297
C3020-Floor Finishes	2014	66,391	-	66,391
C3020-Floor Finishes	2014	198,354	-	198,354
C3030-Ceiling Finishes	2014	149,903	-	149,903
C3010-Wall Finishes	2014	58,829	-	58,829
E-Equipment and Furnishings	2014	282,953	-	282,953
E-Equipment and Furnishings	2014	4,776,850	-	4,776,850
C3020-Floor Finishes	2014	377,698	-	377,698
C3020-Floor Finishes	2014	41,599	-	41,599
C3020-Floor Finishes	2014	102,522	-	102,522
D5022-Lighting Equipment	2014	443,252	-	443,252
D5012-Low Tension Service and Dist.	2014	472,676	-	472,676
D5092-Emergency Light and Power Systems	2014	177,616	-	177,616
<b>Subtotal</b>		<b>9,485,835</b>	<b>0</b>	<b>9,485,835</b>
D3040-Distribution Systems	2015	2,025,147	-	2,025,147
D2020-Domestic Water Distribution	2015	14,295	-	14,295
C3010-Wall Finishes	2015	298,066	-	298,066
C3020-Floor Finishes	2015	46,989	-	46,989
<b>Subtotal</b>		<b>2,384,497</b>	<b>0</b>	<b>2,384,497</b>

All costs in USD. Inflation Rate=4.70%

D1010-Elevators and Lifts	2016	409,112	-	409,112
D2010-Plumbing Fixtures	2016	44,320	-	44,320
D2020-Domestic Water Distribution	2016	602,140	-	602,140
D40-Fire Protection	2016	1,471,247	-	1,471,247
D3040-Distribution Systems	2016	3,194,541	-	3,194,541
D1010-Elevators and Lifts	2016	280,598	-	280,598
E-Equipment and Furnishings	2016	123,924	-	123,924
C3020-Floor Finishes	2016	111,436	-	111,436
D5039-Local Area Networks	2016	690,588	-	690,588
<b>Subtotal</b>		<b>6,927,906</b>	<b>0</b>	<b>6,927,906</b>
D3040-Distribution Systems	2017	405,232	-	405,232
D3060-Controls and Instrumentation	2017	998,957	-	998,957
D3050-Terminal and Package Units	2017	11,931	-	11,931
D3050-Terminal and Package Units	2017	20,456	-	20,456
D3040-Distribution Systems	2017	1,273,036	-	1,273,036
B30-Roofing	2017	71,689	-	71,689
C3020-Floor Finishes	2017	36,807	-	36,807
<b>Subtotal</b>		<b>2,818,107</b>	<b>0</b>	<b>2,818,107</b>
<b>Total</b>		<b>26,102,599</b>	<b>300,176</b>	<b>26,402,775</b>



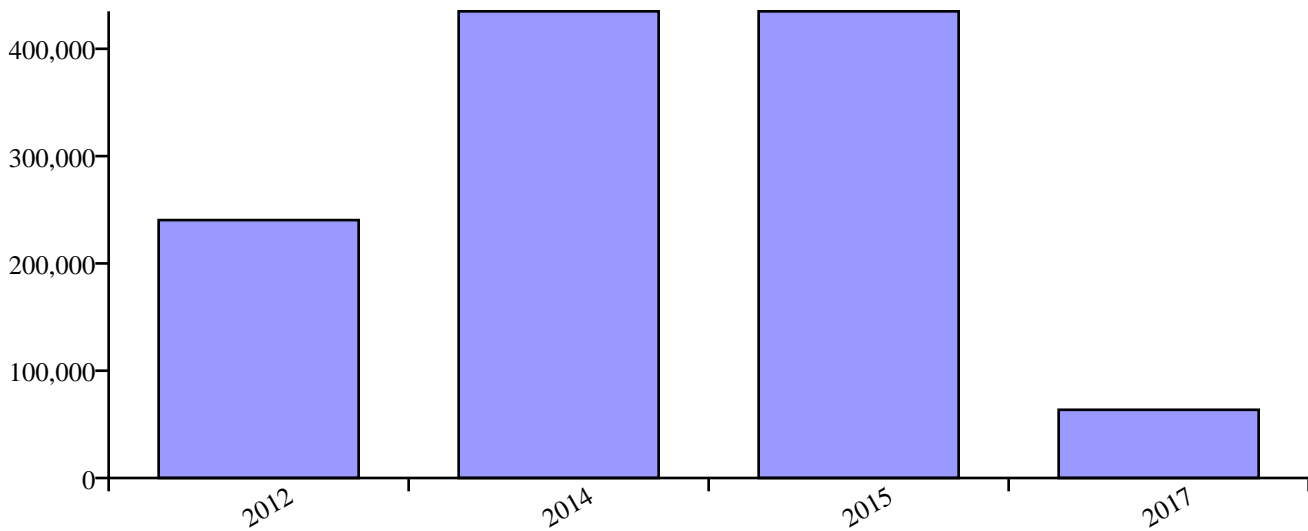
**Region:** Lake Michigan College  
**Campus:** Lake Michigan College

**Asset Name:** M-TEC  
**Asset Number:** 4

<b>Address 1</b> 400 Klock Road	<b>Address 2</b> -
<b>City</b> -	<b>State</b> MI
<b>Country</b> -	<b>ZIP</b> -

**Replacement Value** 8,576,090

**Size** 43,953



■ Requirements  
■ Renewal

Name	Year	Renewal	Requirements	Total
D5037-Fire Alarm Systems	2012	204,593	-	204,593
D5092-Emergency Light and Power Systems	2012	35,769	-	35,769
<b>Subtotal</b>		<b>240,362</b>	<b>0</b>	<b>240,362</b>
C1035-Identifying Devices	2014	30,240	-	30,240
C3010-Wall Finishes	2014	77,241	-	77,241
C3020-Floor Finishes	2014	327,449	-	327,449
<b>Subtotal</b>		<b>434,929</b>	<b>0</b>	<b>434,929</b>
D5039-Local Area Networks	2015	209,036	-	209,036
D2020-Domestic Water Distribution	2015	14,295	-	14,295
D3030-Cooling Generating Systems	2015	205,485	-	205,485
D3050-Terminal and Package Units	2015	6,108	-	6,108
<b>Subtotal</b>		<b>434,925</b>	<b>0</b>	<b>434,925</b>
D5038-Security and Detection Systems	2017	63,573	-	63,573

All costs in USD. Inflation Rate=4.70%

<b>Subtotal</b>	<b>63,573</b>	<b>0</b>	<b>63,573</b>
<b>Total</b>	<b>1,173,789</b>	<b>0</b>	<b>1,173,789</b>

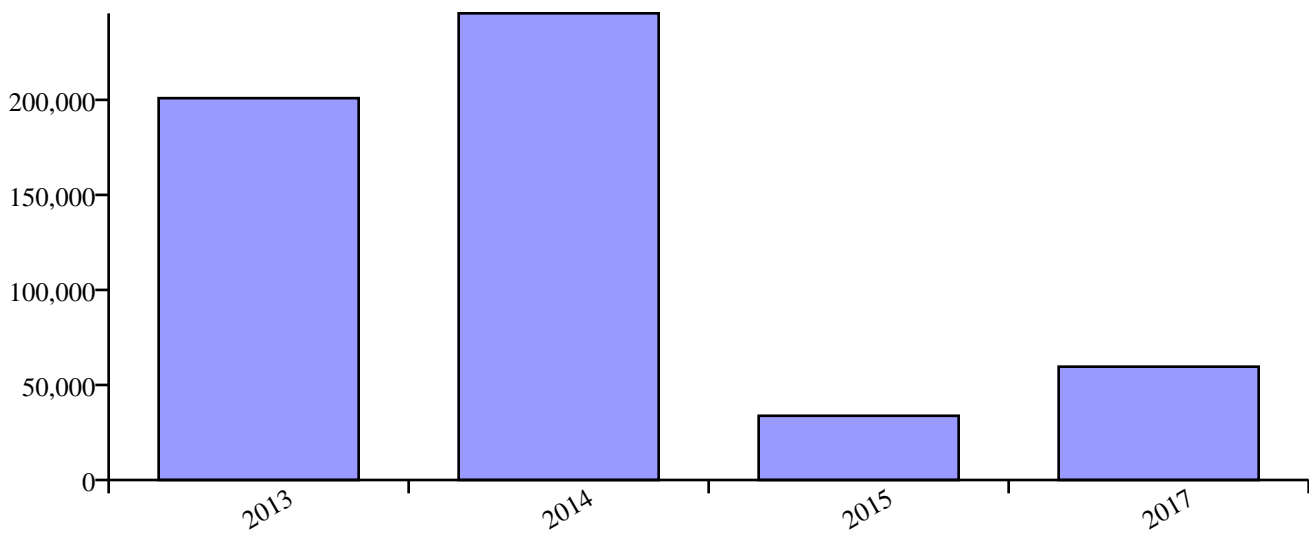
**Region:** Lake Michigan College  
**Campus:** Lake Michigan College

**Asset Name:** South Haven  
**Asset Number:** 5

<b>Address 1</b>	125 Veterans Boulevard	<b>Address 2</b>	-
<b>City</b>	-	<b>State</b>	MI
<b>Country</b>	-	<b>ZIP</b>	-

**Replacement Value** 8,572,113

**Size** 41,222



■ Requirements  
■ Renewal

Name	Year	Renewal	Requirements	Total
D5037-Fire Alarm Systems	2013	200,899	-	200,899
	<b>Subtotal</b>	<b>200,899</b>	<b>0</b>	<b>200,899</b>
C1035-Identifying Devices	2014	28,361	-	28,361
C3010-Wall Finishes	2014	72,442	-	72,442
C3020-Floor Finishes	2014	144,727	-	144,727
	<b>Subtotal</b>	<b>245,530</b>	<b>0</b>	<b>245,530</b>
C3020-Floor Finishes	2015	33,786	-	33,786
	<b>Subtotal</b>	<b>33,786</b>	<b>0</b>	<b>33,786</b>
D5038-Security and Detection Systems	2017	59,623	-	59,623
	<b>Subtotal</b>	<b>59,623</b>	<b>0</b>	<b>59,623</b>
	<b>Total</b>	<b>539,838</b>	<b>0</b>	<b>539,838</b>

All costs in USD. Inflation Rate=4.70%

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# Requirement List Report

By Asset Name and Priority

Critical / Potentially Critical

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**Region:** Lake Michigan College  
**Campus:** Lake Michigan College

**Asset Name:** Napier Academic  
**Asset Number:** 1

**Priority:** 3- Necessary - Not Yet Critical

Requirement Name	Category	Prime System	Linked System	Action Date	Finish Date	Estimated Cost
Brick Walls - Mortar Joints Deteriorated	Reliability	Exterior Walls	Exterior Walls	11/17/2013		125,528
Drain Pipe: Not Insulated	Accessibility	Sanitary Waste	Sanitary Waste	12/17/2013		1,505
Emergency Generator - Lacks Capacity	Capacity/Design	Emergency Light and Power Systems	Emergency Light and Power Systems	10/17/2013		63,158
HVAC Cost Study- Engineer Environmental and Efficiency Study	Air and Water Quality	Distribution Systems	Distribution Systems	11/17/2013		59,951
VAT - A Wing	Asbestos	Floor Finishes	Floor Finishes	11/17/2013		966
VAT - C Wing	Asbestos	Floor Finishes	Floor Finishes	11/17/2013		206,858
VAT - E Wing	Asbestos	Floor Finishes	Floor Finishes	11/17/2013		3,874
VAT - S Wing	Asbestos	Floor Finishes	Floor Finishes	11/17/2013		5,429
<b>3- Necessary - Not Yet Critical Totals :</b>						<b>467,269</b>

**Priority:** Not Time Critical

Requirement Name	Category	Prime System	Linked System	Action Date	Finish Date	Estimated Cost
Electrical Outlets - Lack GFCI Receptacle	Grandfathered Code	Branch Wiring Devices	Branch Wiring Devices	09/11/2013		14,159
Electrical Panels - Lack Dedicated Space	Grandfathered Code	Low Tension Service and Dist.	Low Tension Service and Dist.	09/11/2014		75,360
Guard and Handrails - Non-Compliant	Grandfathered Code	Stairs	Stairs	10/17/2014		276,258
Guards - Lacking	Grandfathered Code	-	Not Applicable	10/17/2014		24,660
Handrails - Lacking	Grandfathered Code	-	Not Applicable	10/17/2014		19,122
Hardware - Not ADAAG Compliant	Accessibility	Interior Doors	Interior Doors	10/17/2014		480,364
<b>Not Time Critical Totals :</b>						<b>889,923</b>

All costs in USD.

Napier Academic Totals : 1,357,192

**Region:** Lake Michigan College

**Asset Name:** Mendel Center

**Campus:** Lake Michigan College

**Asset Number:** 3

**Priority:** 2- Potentially Critical

Requirement Name	Category	Prime System	Linked System	Action Date	Finish Date	Estimated Cost
Electrical Panel - Lack Circuit Identification	Life Safety	Low Tension Service and Dist.	Low Tension Service and Dist.	10/17/2013		3,232
<b>2- Potentially Critical Totals :</b>						<b>3,232</b>

**Priority:** 3- Necessary - Not Yet Critical

Requirement Name	Category	Prime System	Linked System	Action Date	Finish Date	Estimated Cost
Drain Pipe: Not Insulated	Accessibility	Interior Construction	Interior Construction	12/17/2013		1,505
HVAC Cost Study- Engineer Environmental and Efficiency Study	Air and Water Quality	Distribution Systems	Distribution Systems	11/17/2013		59,951
<b>3- Necessary - Not Yet Critical Totals :</b>						<b>61,456</b>

**Priority:** Not Time Critical

Requirement Name	Category	Prime System	Linked System	Action Date	Finish Date	Estimated Cost
Electrical Outlets - Lack GFCI Receptacle	Grandfathered Code	Branch Wiring Devices	Branch Wiring Devices	10/17/2013		10,170
Electrical Panels - Lack Dedicated Space	Grandfathered Code	Low Tension Service and Dist.	Low Tension Service and Dist.	10/17/2013		37,680
Guard and Handrails - Non-Compliant	Grandfathered Code	Stairs	Stairs	10/17/2013		37,741
Hardware - Not ADAAG Compliant	Accessibility	Interior Doors	Interior Doors	10/17/2013		116,794
Partitions- Generator Room Non-Compliant	Grandfathered Code	-	Not Applicable	10/17/2013		11,756

All costs in USD.



**by Asset Name and Priority**

Requirement Name	Category	Prime System	Linked System	Action Date	Finish Date	Estimated Cost
Rooftop HVAC Equipment - Lacks Service Outlets	Grandfathered Code	Branch Wiring Devices	Branch Wiring Devices	10/17/2013		7,872
<b>Not Time Critical Totals :</b>						<b>222,013</b>
<b>Mendel Center Totals :</b>						<b>286,701</b>
<b>Lake Michigan College Totals :</b>						<b>1,643,893</b>
<b>Lake Michigan College Totals :</b>						<b>1,643,893</b>

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# Requirement List Report

By Asset Name and Category

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**Region:** Lake Michigan College

**Asset Name:** Napier Academic

**Campus:** Lake Michigan College

**Asset Number:** 1

**Category:** Accessibility

Requirement Name	Prime System	Priority	Linked System	Action Date	Finish Date	Estimated Cost
Drain Pipe: Not Insulated	Sanitary Waste	3- Necessary - Not Yet Critical	Sanitary Waste	12/17/2013		1,505
Hardware - Not ADAAG Compliant	Interior Doors	Not Time Critical	Interior Doors	10/17/2014		480,364
<b>Accessibility Totals :</b>						<b>481,869</b>

**Category:** Air and Water Quality

Requirement Name	Prime System	Priority	Linked System	Action Date	Finish Date	Estimated Cost
HVAC Cost Study- Engineer Environmental and Efficiency Study	Distribution Systems	3- Necessary - Not Yet Critical	Distribution Systems	11/17/2013		59,951
<b>Air and Water Quality Totals :</b>						<b>59,951</b>

**Category:** Asbestos

Requirement Name	Prime System	Priority	Linked System	Action Date	Finish Date	Estimated Cost
VAT - A Wing	Floor Finishes	3- Necessary - Not Yet Critical	Floor Finishes	11/17/2013		966
VAT - C Wing	Floor Finishes	3- Necessary - Not Yet Critical	Floor Finishes	11/17/2013		206,858
VAT - E Wing	Floor Finishes	3- Necessary - Not Yet Critical	Floor Finishes	11/17/2013		3,874
VAT - S Wing	Floor Finishes	3- Necessary - Not Yet Critical	Floor Finishes	11/17/2013		5,429
<b>Asbestos Totals :</b>						<b>217,127</b>

**Category:** Beyond Useful Life

All costs in USD.

Requirement Name	Prime System	Priority	Linked System	Action Date	Finish Date	Estimated Cost
ACT Concealed Spline System - A Wing Renewal	Ceiling Finishes	2- Potentially Critical	Ceiling Finishes	09/10/2014		63,065
ACT Concealed Spline System - D Wing Renewal	Ceiling Finishes	2- Potentially Critical	Ceiling Finishes	09/10/2014		13,545
ACT Concealed Spline System - L Wing Renewal	Ceiling Finishes	2- Potentially Critical	Ceiling Finishes	09/10/2014		340,850
ACT Concealed Spline System - S Wing Renewal	Ceiling Finishes	2- Potentially Critical	Ceiling Finishes	09/10/2014		113,359
Adhered Membrane (EPDM) Single-Ply Renewal	Roofing	1- Currently Critical	Roofing	09/10/2013		86,770
Aluminum Windows - L Wing Renewal	Exterior Windows	3- Necessary - Not Yet Critical	Exterior Windows	11/17/2012		404,460
Boiler HW - Gas/Oil Fired w/Redundancy Renewal	Heat Generating Systems	2- Potentially Critical	Heat Generating Systems	10/05/2012		156,738
Branch Wiring, Original - Equipment & Devices Renewal	Branch Wiring Devices	2- Potentially Critical	Branch Wiring Devices	10/10/2013		1,016,047
Carpeting 3 - Carpet Broadloom - A Wing - 2000 Renewal	Floor Finishes	3- Necessary - Not Yet Critical	Floor Finishes	11/17/2014		77,907
Carpeting 3 - Carpet Broadloom - A Wing Renewal	Floor Finishes	3- Necessary - Not Yet Critical	Floor Finishes	09/11/2015		68,784
Carpeting 3 - Carpet Broadloom - B Wing - 2000 Renewal	Floor Finishes	3- Necessary - Not Yet Critical	Floor Finishes	11/17/2014		322,183
Carpeting 3 - Carpet Broadloom - B Wing Renewal	Floor Finishes	2- Potentially Critical	Floor Finishes	11/17/2012		23,875
Carpeting 3 - Carpet Broadloom - C Wing - 2000 Renewal	Floor Finishes	3- Necessary - Not Yet Critical	Floor Finishes	11/17/2014		202,005
Carpeting 3 - Carpet Broadloom - C Wing Renewal	Floor Finishes	2- Potentially Critical	Floor Finishes	10/10/2013		166,683
Carpeting 3 - Carpet Broadloom - D Wing - 2000 Renewal	Floor Finishes	3- Necessary - Not Yet Critical	Floor Finishes	11/17/2014		30,786
Carpeting 3 - Carpet Broadloom - D Wing Renewal	Floor Finishes	1- Currently Critical	Floor Finishes	10/14/2012		114,448

All costs in USD.

Requirement Name	Prime System	Priority	Linked System	Action Date	Finish Date	Estimated Cost
Carpeting 3 - Carpet Broadloom - E Wing Renewal	Floor Finishes	2- Potentially Critical	Floor Finishes	09/11/2014		12,566
Carpeting 3 - Carpet Broadloom - L Wing Renewal	Floor Finishes	1- Currently Critical	Floor Finishes	09/11/2013		499,810
Carpeting 3 - Carpet Broadloom - S Wing Renewal	Floor Finishes	2- Potentially Critical	Floor Finishes	10/10/2013		148,526
Central AHU - Const Volume w/Distribution Renewal	Distribution Systems	2- Potentially Critical	Distribution Systems	10/10/2013		4,200,889
Chiller - Centrifugal wo Cooling Tower - 1968 Renewal	Cooling Generating Systems	1- Currently Critical	Cooling Generating Systems	09/10/2013		237,290
Custodial/Utility Sinks Renewal	Plumbing Fixtures	3- Necessary - Not Yet Critical	Plumbing Fixtures	09/10/2015		140,290
DDC/Pneumatic System - Hybrid Renewal	Controls and Instrumentation	2- Potentially Critical	Controls and Instrumentation	09/11/2014		1,735,513
Door Assembly - 3 x 7 HM Renewal	Exterior Doors	3- Necessary - Not Yet Critical	Exterior Doors	11/17/2013		62,423
Door Assembly - 3 x 7 Storefront Renewal	Exterior Doors	3- Necessary - Not Yet Critical	Exterior Doors	11/17/2013		26,316
Door Assembly - 6 x 7 HM Renewal	Exterior Doors	3- Necessary - Not Yet Critical	Exterior Doors	11/17/2013		21,588
Door Assembly - 6 x 7 Storefront Renewal	Exterior Doors	3- Necessary - Not Yet Critical	Exterior Doors	11/17/2013		110,869
Dumbwaiter for Low Rise Renewal	Other Conveying Systems	1- Currently Critical	Other Conveying Systems	09/10/2013		35,479
Emergency Battery Pack Lights Renewal	Emergency Light and Power Systems	2- Potentially Critical	Emergency Light and Power Systems	10/05/2012		12,207
Emergency Generator - Average 100KW Renewal	Emergency Light and Power Systems	3- Necessary - Not Yet Critical	Emergency Light and Power Systems	10/12/2016		60,534
Exit Signs, Original - Low Density Renewal	Emergency Light and Power Systems	2- Potentially Critical	Emergency Light and Power Systems	10/05/2012		90,604
Exterior Stairs - Concrete - Circular Renewal	Exterior Stairs and Fire Escapes	1- Currently Critical	Exterior Stairs and Fire Escapes	09/10/2013		23,734
Fire Alarm System - Average Density Renewal	Fire Alarm Systems	2- Potentially Critical	Fire Alarm Systems	11/17/2012		1,411,094
Fittings: Signage (Room Numbering and Identification) Renewal	Identifying Devices	3- Necessary - Not Yet Critical	Identifying Devices	11/17/2014		190,263

All costs in USD.

Requirement Name	Prime System	Priority	Linked System	Action Date	Finish Date	Estimated Cost
Fixed Theater Seating - Deluxe - D Wing Renewal	Equipment and Furnishings	3- Necessary - Not Yet Critical	Equipment and Furnishings	11/17/2014		23,741
Fixed Theater Seating - Deluxe - S Wing Renewal	Equipment and Furnishings	3- Necessary - Not Yet Critical	Equipment and Furnishings	11/17/2014		2,070
Gas Distribution - Lab Air & Vac Systems Renewal	Other Plumbing Systems	2- Potentially Critical	Other Plumbing Systems	11/17/2013		58,913
GWB Taped and Finished - C Wing Renewal	Ceiling Finishes	3- Necessary - Not Yet Critical	Ceiling Finishes	11/17/2014		14,614
GWB Taped and Finished - D Wing Renewal	Ceiling Finishes	3- Necessary - Not Yet Critical	Ceiling Finishes	11/17/2014		23,003
GWB Taped and Finished - L Wing Renewal	Ceiling Finishes	3- Necessary - Not Yet Critical	Ceiling Finishes	11/17/2014		4,893
Heat Exchanger - HW/HW - Shell and Tube Renewal	Domestic Water Distribution	1- Currently Critical	Domestic Water Distribution	09/11/2012		4,410
Hydraulic Freight Elevator Renewal	Elevators and Lifts	3- Necessary - Not Yet Critical	Elevators and Lifts	11/17/2016		228,232
Hydraulic Passenger Elevator Renewal	Elevators and Lifts	3- Necessary - Not Yet Critical	Elevators and Lifts	11/17/2016		298,591
Kitchen Equipment Renewal	Equipment and Furnishings	3- Necessary - Not Yet Critical	Equipment and Furnishings	11/17/2013		103,126
LAN System - Average Density Renewal	Local Area Networks	3- Necessary - Not Yet Critical	Local Area Networks	11/17/2016		1,256,165
Lighting Fixtures, Original - Average Density Renewal	Lighting Equipment	2- Potentially Critical	Lighting Equipment	10/10/2013		835,601
Motor Control Center Renewal	Other Controls and Instrumentation	1- Currently Critical	Other Controls and Instrumentation	09/11/2013		340,141
Overhead Doors (Electrically Operated) - S Wing Renewal	Exterior Doors	3- Necessary - Not Yet Critical	Exterior Doors	11/17/2014		19,775
Overhead Doors (Manually Operated) - B Wing Renewal	Exterior Doors	3- Necessary - Not Yet Critical	Exterior Doors	11/17/2014		20,072
Paint Masonry/Epoxy Finish - Economy Renewal	Wall Finishes	3- Necessary - Not Yet Critical	Wall Finishes	11/17/2015		61,858
Painted Finish - (1 Coat Prime - 2 Coats Finish) Renewal	Wall Finishes	3- Necessary - Not Yet Critical	Wall Finishes	11/17/2014		463,044

All costs in USD.

Requirement Name	Prime System	Priority	Linked System	Action Date	Finish Date	Estimated Cost
Pedestrian Sky Bridges - Steel Renewal	Exterior Walls	3- Necessary - Not Yet Critical	Exterior Walls	11/17/2014		85,905
Perimeter Units Renewal	Distribution Systems	1- Currently Critical	Distribution Systems	10/10/2012		4,945,297
Public Address System - Average Density Renewal	Public Address and Music Systems	2- Potentially Critical	Public Address and Music Systems	10/05/2012		27,652
Quarry Tile - L Wing Renewal	Floor Finishes	3- Necessary - Not Yet Critical	Floor Finishes	11/17/2014		67,997
Restroom - Complete - Double - A Wing Renewal	Interior Construction	3- Necessary - Not Yet Critical	Interior Construction	11/17/2014		45,430
Restroom - Complete - Gang - B Wing Renewal	Interior Construction	3- Necessary - Not Yet Critical	Interior Construction	11/17/2014		118,179
Restroom - Complete - Gang - C Wing Renewal	Interior Construction	3- Necessary - Not Yet Critical	Interior Construction	10/10/2017		157,572
Restroom - Complete - Gang - D Wing Renewal	Interior Construction	3- Necessary - Not Yet Critical	Interior Construction	11/17/2014		78,786
Restroom - Complete - Gang - E Wing Renewal	Interior Construction	3- Necessary - Not Yet Critical	Interior Construction	11/17/2014		78,786
Restroom - Complete - Gang - L Wing Renewal	Interior Construction	3- Necessary - Not Yet Critical	Interior Construction	11/17/2014		157,572
Restroom - Complete - Gang - S Wing Renewal	Interior Construction	3- Necessary - Not Yet Critical	Interior Construction	11/17/2014		78,786
Restroom - Shower - Add - E Wing Renewal	Interior Construction	3- Necessary - Not Yet Critical	Interior Construction	11/17/2014		11,915
Restroom - Shower - Add - E Wing Renewal	Interior Construction	3- Necessary - Not Yet Critical	Interior Construction	11/17/2014		30,761
Scoreboard Single Sided – College/High school Arena (Lower End) Renewal	Public Address and Music Systems	3- Necessary - Not Yet Critical	Public Address and Music Systems	11/17/2012		4,272
Single Ply Membrane - Ballasted - L Wing Renewal	Roofing	3- Necessary - Not Yet Critical	Roofing	11/17/2012		149,988
Single-Ply EPDM with Pavers on Roof - S Wing Renewal	Roofing	3- Necessary - Not Yet Critical	Roofing	11/17/2014		1,711,958
Skylights - Monumental L-Wing Renewal	Glazed Roof Openings	1- Currently Critical	Glazed Roof Openings	09/10/2013		59,443

All costs in USD.



Requirement Name	Prime System	Priority	Linked System	Action Date	Finish Date	Estimated Cost
Split System AC - 1990 Renewal	Terminal and Package Units	3- Necessary - Not Yet Critical	Terminal and Package Units	11/17/2015		18,965
Steel Windows Renewal	Exterior Windows	1- Currently Critical	Exterior Windows	09/11/2013		602,555
Unit Heaters - Hot Water Renewal	Terminal and Package Units	3- Necessary - Not Yet Critical	Terminal and Package Units	11/17/2013		32,518
UPS System 120V Single Phase - per KVA Renewal	Emergency Light and Power Systems	2- Potentially Critical	Emergency Light and Power Systems	09/10/2014		62,704
VCT 2 - A Wing Renewal	Floor Finishes	3- Necessary - Not Yet Critical	Floor Finishes	11/17/2012		466
VCT 2 - C Wing Renewal	Floor Finishes	3- Necessary - Not Yet Critical	Floor Finishes	11/17/2012		68,274
VCT 2 - E Wing Renewal	Floor Finishes	3- Necessary - Not Yet Critical	Floor Finishes	11/17/2012		11,647
VCT 2 - S Wing Renewal	Floor Finishes	1- Currently Critical	Floor Finishes	09/11/2013		2,795
Water Coolers - Wall Mount Renewal	Plumbing Fixtures	3- Necessary - Not Yet Critical	Plumbing Fixtures	11/17/2013		37,981
Water Heater - Electric Renewal	Domestic Water Distribution	3- Necessary - Not Yet Critical	Domestic Water Distribution	11/17/2015		6,522
Water Heater - Gas Renewal	Domestic Water Distribution	3- Necessary - Not Yet Critical	Domestic Water Distribution	11/17/2015		5,235
Wet Standpipe System Renewal	Fire Protection	1- Currently Critical	Fire Protection	10/10/2012		643,314
Wood Flooring - E Wing Renewal	Floor Finishes	3- Necessary - Not Yet Critical	Floor Finishes	11/17/2014		157,212
<b>Beyond Useful Life Totals :</b>						<b>25,440,236</b>

**Category:** Capacity/Design

Requirement Name	Prime System	Priority	Linked System	Action Date	Finish Date	Estimated Cost
Emergency Generator - Lacks Capacity	Emergency Light and Power Systems	3- Necessary - Not Yet Critical	Emergency Light and Power Systems	10/17/2013		63,158
<b>Capacity/Design Totals :</b>						<b>63,158</b>

**Category:** Grandfathered Code

All costs in USD.

Requirement Name	Prime System	Priority	Linked System	Action Date	Finish Date	Estimated Cost
Electrical Outlets - Lack GFCI Receptacle	Branch Wiring Devices	Not Time Critical	Branch Wiring Devices	09/11/2013		14,159
Electrical Panels - Lack Dedicated Space	Low Tension Service and Dist.	Not Time Critical	Low Tension Service and Dist.	09/11/2014		75,360
Guard and Handrails - Non-Compliant	Stairs	Not Time Critical	Stairs	10/17/2014		276,258
Guards - Lacking	-	Not Time Critical	Not Applicable	10/17/2014		24,660
Handrails - Lacking	-	Not Time Critical	Not Applicable	10/17/2014		19,122
<b>Grandfathered Code Totals :</b>						<b>409,559</b>

**Category:** Reliability

Requirement Name	Prime System	Priority	Linked System	Action Date	Finish Date	Estimated Cost
Brick Walls - Mortar Joints Deteriorated	Exterior Walls	3- Necessary - Not Yet Critical	Exterior Walls	11/17/2013		125,528
<b>Reliability Totals :</b>						<b>125,528</b>
<b>Napier Academic Totals :</b>						<b>26,797,428</b>

**Region:** Lake Michigan College

**Asset Name:** Bertrand Crossing

**Campus:** Lake Michigan College

**Asset Number:** 2

**Category:** Beyond Useful Life

Requirement Name	Prime System	Priority	Linked System	Action Date	Finish Date	Estimated Cost
Carpeting 3 - Carpet Broadloom Renewal	Floor Finishes	3- Necessary - Not Yet Critical	Floor Finishes	11/17/2014		183,609
Emergency Battery Pack Lights Renewal	Emergency Light and Power Systems	1- Currently Critical	Emergency Light and Power Systems	09/10/2013		27,899
Fire Alarm System - Average Density Renewal	Fire Alarm Systems	2- Potentially Critical	Fire Alarm Systems	11/17/2012		159,581
Fittings: Signage (Room Numbering and Identification) Renewal	Identifying Devices	3- Necessary - Not Yet Critical	Identifying Devices	11/17/2014		21,517
Folding Partitions Renewal	Partitions	3- Necessary - Not Yet Critical	Partitions	11/17/2014		26,339
LAN System - Average Density Renewal	Local Area Networks	3- Necessary - Not Yet Critical	Local Area Networks	11/17/2015		142,060
Painted Finish - Average (1 Coat Prime - 2 Coats Finish) Renewal	Wall Finishes	3- Necessary - Not Yet Critical	Wall Finishes	11/17/2015		38,722
Security System - Light Density Renewal	Security and Detection Systems	3- Necessary - Not Yet Critical	Security and Detection Systems	11/17/2017		39,412
Water Heater - Gas Renewal	Domestic Water Distribution	3- Necessary - Not Yet Critical	Domestic Water Distribution	11/17/2016		13,478
<b>Beyond Useful Life Totals :</b>						<b>652,617</b>
<b>Bertrand Crossing Totals :</b>						<b>652,617</b>

All costs in USD.

**Region:** Lake Michigan College

**Asset Name:** Mendel Center

**Campus:** Lake Michigan College

**Asset Number:** 3

**Category:** Accessibility

Requirement Name	Prime System	Priority	Linked System	Action Date	Finish Date	Estimated Cost
Drain Pipe: Not Insulated	Interior Construction	3- Necessary - Not Yet Critical	Interior Construction	12/17/2013		1,505
Hardware - Not ADAAG Compliant	Interior Doors	Not Time Critical	Interior Doors	10/17/2013		116,794
<b>Accessibility Totals :</b>						<b>118,299</b>

**Category:** Air and Water Quality

Requirement Name	Prime System	Priority	Linked System	Action Date	Finish Date	Estimated Cost
HVAC Cost Study- Engineer Environmental and Efficiency Study	Distribution Systems	3- Necessary - Not Yet Critical	Distribution Systems	11/17/2013		59,951
<b>Air and Water Quality Totals :</b>						<b>59,951</b>

**Category:** Beyond Useful Life

Requirement Name	Prime System	Priority	Linked System	Action Date	Finish Date	Estimated Cost
Access Office Flooring System - 1992 Renewal	Floor Finishes	3- Necessary - Not Yet Critical	Floor Finishes	11/17/2017		29,255
ACT System - 1992 Renewal	Ceiling Finishes	3- Necessary - Not Yet Critical	Ceiling Finishes	11/17/2014		136,747
ACT System Renewal	Ceiling Finishes	3- Necessary - Not Yet Critical	Ceiling Finishes	11/17/2012		117,478
Aluminum Windows Renewal	Exterior Windows	3- Necessary - Not Yet Critical	Exterior Windows	11/17/2013		296,604
Boiler HW - Gas Fired w/Redundancy Renewal	Heat Generating Systems	3- Necessary - Not Yet Critical	Heat Generating Systems	11/17/2012		1,373,777

All costs in USD.

Requirement Name	Prime System	Priority	Linked System	Action Date	Finish Date	Estimated Cost
Branch Wiring, Original - Equipment & Devices Renewal	Branch Wiring Devices	1- Currently Critical	Branch Wiring Devices	09/11/2013		465,331
Carpeting 3 - Carpet Broadloom - 1992 Renewal	Floor Finishes	3- Necessary - Not Yet Critical	Floor Finishes	11/17/2014		344,549
Carpeting 3 - Carpet Broadloom - 2003 Renewal	Floor Finishes	3- Necessary - Not Yet Critical	Floor Finishes	11/17/2014		180,945
Carpeting 3 - Carpet Broadloom - 2006 Renewal	Floor Finishes	3- Necessary - Not Yet Critical	Floor Finishes	11/17/2016		92,734
Carpeting 3 - Carpet Broadloom - Hanson Renewal	Floor Finishes	3- Necessary - Not Yet Critical	Floor Finishes	11/17/2014		37,948
Central AHU - Const Volume w/Distribution Renewal	Distribution Systems	3- Necessary - Not Yet Critical	Distribution Systems	09/11/2015		1,764,479
Central AHU - VAV System w/Distribution Renewal	Distribution Systems	3- Necessary - Not Yet Critical	Distribution Systems	11/17/2017		1,011,829
Ceramic Tiles Renewal	Wall Finishes	3- Necessary - Not Yet Critical	Wall Finishes	11/17/2014		53,666
DDC/Pneumatic System - Hybrid Renewal	Controls and Instrumentation	3- Necessary - Not Yet Critical	Controls and Instrumentation	11/17/2017		793,987
Distribution Equipment, Panelboards, and Feeders 13 - 3000A 480Y/277V & 208Y/120V Renewal	Low Tension Service and Dist.	3- Necessary - Not Yet Critical	Low Tension Service and Dist.	11/17/2014		431,191
Door Assembly - 3 x 7 HM Renewal	Exterior Doors	3- Necessary - Not Yet Critical	Exterior Doors	11/17/2014		14,688
Door Assembly - 3 x 7 Storefront Renewal	Exterior Doors	3- Necessary - Not Yet Critical	Exterior Doors	11/17/2014		4,386
Door Assembly - 6 x 7 HM Renewal	Exterior Doors	3- Necessary - Not Yet Critical	Exterior Doors	11/17/2014		35,980
Door Assembly - 6 x 7 Storefront Renewal	Exterior Doors	3- Necessary - Not Yet Critical	Exterior Doors	11/17/2014		83,152
Emergency Battery Pack Lights Renewal	Emergency Light and Power Systems	1- Currently Critical	Emergency Light and Power Systems	09/11/2013		47,460
Emergency Generator - Average 280KW Renewal	Emergency Light and Power Systems	3- Necessary - Not Yet Critical	Emergency Light and Power Systems	11/17/2014		162,027
Exhaust System - General Building Renewal	Distribution Systems	3- Necessary - Not Yet Critical	Distribution Systems	11/17/2013		150,433

All costs in USD.

Requirement Name	Prime System	Priority	Linked System	Action Date	Finish Date	Estimated Cost
Exhaust System - Restroom w/Roof Fan Renewal	Distribution Systems	3- Necessary - Not Yet Critical	Distribution Systems	11/17/2013		60,657
Exit Signs, Original - Low Density Renewal	Emergency Light and Power Systems	3- Necessary - Not Yet Critical	Emergency Light and Power Systems	11/17/2012		59,216
Fire Alarm System, 1992 Renovation - Average Density Renewal	Fire Alarm Systems	1- Currently Critical	Fire Alarm Systems	09/11/2013		271,469
Fire Alarm System, Original Building - Average Density Renewal	Fire Alarm Systems	1- Currently Critical	Fire Alarm Systems	09/11/2013		374,098
Fittings: Signage (Room Numbering and Identification) Renewal	Identifying Devices	3- Necessary - Not Yet Critical	Identifying Devices	11/17/2014		87,044
Fixed Theater Seating - Deluxe Renewal	Equipment and Furnishings	3- Necessary - Not Yet Critical	Equipment and Furnishings	11/17/2014		16,771
Folding Partitions Renewal	Partitions	3- Necessary - Not Yet Critical	Partitions	11/17/2014		542,304
Four Pipe Distribution System w/Pump Renewal	Distribution Systems	3- Necessary - Not Yet Critical	Distribution Systems	11/17/2016		2,658,409
Hydraulic Passenger Elevator Renewal	Elevators and Lifts	3- Necessary - Not Yet Critical	Elevators and Lifts	11/17/2016		340,452
Intercom System Renewal	Intercommunication and Paging System	1- Currently Critical	Intercommunication and Paging System	09/11/2013		98,534
Kitchen Equipment Renewal	Equipment and Furnishings	3- Necessary - Not Yet Critical	Equipment and Furnishings	11/17/2016		103,126
LAN System - Average Density Renewal	Local Area Networks	3- Necessary - Not Yet Critical	Local Area Networks	11/17/2016		574,688
Lighting - Exterior Renewal	Lighting and Branch Wiring	1- Currently Critical	Lighting and Branch Wiring	09/11/2013		7,145
Lighting Fixtures, 1992 Renovation - Average Density Renewal	Lighting Equipment	3- Necessary - Not Yet Critical	Lighting Equipment	11/17/2012		293,421
Lighting Fixtures, Original - Average Density Renewal	Lighting Equipment	2- Potentially Critical	Lighting Equipment	09/11/2014		404,349
Motor Control Center, Main Elec Room Renewal	Other Controls and Instrumentation	1- Currently Critical	Other Controls and Instrumentation	09/11/2013		35,804
Orchestra Lift - MC101D Renewal	Elevators and Lifts	3- Necessary - Not Yet Critical	Elevators and Lifts	11/17/2016		233,506
Overhead Doors (Electrically Operated) Renewal	Exterior Doors	3- Necessary - Not Yet Critical	Exterior Doors	11/17/2014		5,159
Paint Masonry/Epoxy Finish Renewal	Wall Finishes	3- Necessary - Not Yet Critical	Wall Finishes	11/17/2015		259,700

All costs in USD.

Requirement Name	Prime System	Priority	Linked System	Action Date	Finish Date	Estimated Cost
Painted Finish - (1 Coat Prime - 2 Coats Finish) Renewal	Wall Finishes	3- Necessary - Not Yet Critical	Wall Finishes	11/17/2014		97,926
Public Address System - Average Density Renewal	Public Address and Music Systems	1- Currently Critical	Public Address and Music Systems	09/11/2013		27,652
Quarry Tile Renewal	Floor Finishes	3- Necessary - Not Yet Critical	Floor Finishes	11/17/2014		72,338
Restroom - Complete - Double Renewal	Interior Construction	3- Necessary - Not Yet Critical	Interior Construction	11/17/2014		45,430
Restroom - Complete - Gang Renewal	Interior Construction	3- Necessary - Not Yet Critical	Interior Construction	11/17/2014		157,572
Restroom - Complete - Single Renewal	Interior Construction	3- Necessary - Not Yet Critical	Interior Construction	11/17/2014		39,319
Restroom - Shower Renewal	Interior Construction	3- Necessary - Not Yet Critical	Interior Construction	11/17/2014		123,043
Return Air Ductwork and Fan Renewal	Distribution Systems	3- Necessary - Not Yet Critical	Distribution Systems	11/17/2017		322,085
Single Ply Membrane - Ballasted - 1992 Renewal	Roofing	3- Necessary - Not Yet Critical	Roofing	11/17/2017		56,979
Single Ply Membrane - Ballasted Renewal	Roofing	2- Potentially Critical	Roofing	09/11/2014		697,452
Skylights - Monumental Renewal	Glazed Roof Openings	1- Currently Critical	Glazed Roof Openings	09/11/2013		296,504
Smoke Hatches Renewal	Roof Openings	3- Necessary - Not Yet Critical	Roof Openings	11/17/2014		74,864
Split System AC - Piano Room Renewal	Terminal and Package Units	3- Necessary - Not Yet Critical	Terminal and Package Units	11/17/2017		9,483
Stage Lighting Renewal	Lighting Equipment	3- Necessary - Not Yet Critical	Lighting Equipment	11/17/2012		410,480
Theater And Stage Equipment - Economy Renewal	Equipment and Furnishings	3- Necessary - Not Yet Critical	Equipment and Furnishings	11/17/2014		258,120
Theater And Stage Equipment - High Quality - 1992 Renewal	Equipment and Furnishings	3- Necessary - Not Yet Critical	Equipment and Furnishings	11/17/2014		4,357,609
Unit Heaters - Hot Water Renewal	Terminal and Package Units	3- Necessary - Not Yet Critical	Terminal and Package Units	11/17/2017		16,259
VCT 2 - 1992 Renewal	Floor Finishes	3- Necessary - Not Yet Critical	Floor Finishes	11/17/2014		93,524
VCT 2 Renewal	Floor Finishes	3- Necessary - Not Yet Critical	Floor Finishes	11/17/2014		60,564
Wall Covering - Vinyl Renewal	Wall Finishes	3- Necessary - Not Yet Critical	Wall Finishes	11/17/2014		34,642
Water Coolers - Wall Mount Renewal	Plumbing Fixtures	3- Necessary - Not Yet Critical	Plumbing Fixtures	11/17/2016		36,881
Water Dist Complete Renewal	Domestic Water Distribution	3- Necessary - Not Yet Critical	Domestic Water Distribution	11/17/2016		501,084

All costs in USD.

by Asset Name and Category

Requirement Name	Prime System	Priority	Linked System	Action Date	Finish Date	Estimated Cost
Water Heater - Gas - 2000 Renewal	Domestic Water Distribution	3- Necessary - Not Yet Critical	Domestic Water Distribution	11/17/2015		12,455
Wet Sprinkler System - w/Pump Renewal	Fire Protection	3- Necessary - Not Yet Critical	Fire Protection	11/17/2016		1,224,331
Wood Flooring Renewal	Floor Finishes	3- Necessary - Not Yet Critical	Floor Finishes	11/17/2015		40,941
<b>Beyond Useful Life Totals :</b>						<b>23,122,035</b>

**Category: Grandfathered Code**

Requirement Name	Prime System	Priority	Linked System	Action Date	Finish Date	Estimated Cost
Electrical Outlets - Lack GFCI Receptacle	Branch Wiring Devices	Not Time Critical	Branch Wiring Devices	10/17/2013		10,170
Electrical Panels - Lack Dedicated Space	Low Tension Service and Dist.	Not Time Critical	Low Tension Service and Dist.	10/17/2013		37,680
Guard and Handrails - Non-Compliant	Stairs	Not Time Critical	Stairs	10/17/2013		37,741
Partitions- Generator Room Non-Compliant	-	Not Time Critical	Not Applicable	10/17/2013		11,756
Rooftop HVAC Equipment - Lacks Service Outlets	Branch Wiring Devices	Not Time Critical	Branch Wiring Devices	10/17/2013		7,872
<b>Grandfathered Code Totals :</b>						<b>105,219</b>

**Category: Life Safety**

Requirement Name	Prime System	Priority	Linked System	Action Date	Finish Date	Estimated Cost
Electrical Panel - Lack Circuit Identification	Low Tension Service and Dist.	2- Potentially Critical	Low Tension Service and Dist.	10/17/2013		3,232
<b>Life Safety Totals :</b>						<b>3,232</b>
<b>Mendel Center Totals :</b>						<b>23,408,736</b>

All costs in USD.



**Region:** Lake Michigan College

**Asset Name:** M-TEC

**Campus:** Lake Michigan College

**Asset Number:** 4

**Category:** Beyond Useful Life

Requirement Name	Prime System	Priority	Linked System	Action Date	Finish Date	Estimated Cost
Carpeting 3 - Carpet Broadloom Renewal	Floor Finishes	3- Necessary - Not Yet Critical	Floor Finishes	11/17/2014		298,710
DX Condensing Unit Renewal	Cooling Generating Systems	3- Necessary - Not Yet Critical	Cooling Generating Systems	11/17/2015		179,036
Emergency Battery Pack Lights Renewal	Emergency Light and Power Systems	2- Potentially Critical	Emergency Light and Power Systems	11/17/2012		35,769
Fire Alarm System - Average Density Renewal	Fire Alarm Systems	2- Potentially Critical	Fire Alarm Systems	11/17/2012		204,593
Fittings: Signage (Room Numbering and Identification) Renewal	Identifying Devices	3- Necessary - Not Yet Critical	Identifying Devices	11/17/2014		27,586
LAN System - Average Density Renewal	Local Area Networks	3- Necessary - Not Yet Critical	Local Area Networks	11/17/2015		182,130
Painted Finish - (1 Coat Prime - 2 Coats Finish) Renewal	Wall Finishes	3- Necessary - Not Yet Critical	Wall Finishes	11/17/2014		70,462
Security System - Light Density Renewal	Security and Detection Systems	3- Necessary - Not Yet Critical	Security and Detection Systems	11/17/2017		50,529
Unit Heaters - Electric - Garage Renewal	Terminal and Package Units	3- Necessary - Not Yet Critical	Terminal and Package Units	11/17/2015		5,322
Water Heater - Gas Renewal	Domestic Water Distribution	3- Necessary - Not Yet Critical	Domestic Water Distribution	11/17/2015		12,455
<b>Beyond Useful Life Totals :</b>						<b>1,066,592</b>
<b>M-TEC Totals :</b>						<b>1,066,592</b>

All costs in USD.

**Region:** Lake Michigan College

**Asset Name:** South Haven

**Campus:** Lake Michigan College

**Asset Number:** 5

**Category:** Beyond Useful Life

Requirement Name	Prime System	Priority	Linked System	Action Date	Finish Date	Estimated Cost
Carpeting 5 - Carpet Tiles Renewal	Floor Finishes	3- Necessary - Not Yet Critical	Floor Finishes	11/17/2014		132,025
Fire Alarm System - Average Density Renewal	Fire Alarm Systems	3- Necessary - Not Yet Critical	Fire Alarm Systems	11/17/2013		191,881
Fittings: Signage (Room Numbering and Identification) Renewal	Identifying Devices	3- Necessary - Not Yet Critical	Identifying Devices	11/17/2014		25,872
Painted Finish - (1 Coat Prime - 2 Coats Finish) Renewal	Wall Finishes	3- Necessary - Not Yet Critical	Wall Finishes	11/17/2014		66,084
Security System - Light Density Renewal	Security and Detection Systems	3- Necessary - Not Yet Critical	Security and Detection Systems	11/17/2017		47,389
Vinyl Sheet Goods Renewal	Floor Finishes	3- Necessary - Not Yet Critical	Floor Finishes	11/17/2015		29,438
<b>Beyond Useful Life Totals :</b>						<b>492,689</b>
<b>South Haven Totals :</b>						<b>492,689</b>
<b>Lake Michigan College Totals :</b>						<b>52,418,062</b>
<b>Lake Michigan College Totals :</b>						<b>52,418,062</b>