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**Facilities Inventory, Assessment and
Deferred Maintenance Capital Planning Report
November 2011 Update**

Kirtland Community College

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Purpose of the Study

This Facilities Assessment and Deferred Maintenance Capital Planning Study was performed to accomplish the following objectives:

- Provide an inventory of the College's facilities in a database format to be easily updated and maintained by KCC personnel and allow for quick access to facilities information.
- Determine the general condition of the buildings and grounds of KCC and provide the data in a concise format, allowing quick determination of the current replacement value and condition of each facility.
- Determine a Facilities Condition Index (FCI) for each building and KCC as a whole. The FCI is a benchmark index that rates the condition of existing college buildings and is used by facilities managers to quantify and prioritize deferred maintenance projects for capital planning purposes.
- Assist Kirtland Community College in meeting the goals of its Mission Statement through timely maintenance of the physical backbone of the college – the buildings of KCC.

“Kirtland Community College provides open access to education, as well as cultural opportunities, to enrich the lives of the people in Northern Michigan. “

Overall Recommendations

The results of this assessment update show that KCC has increased its campus-wide One Year Facilities Condition Index (FCI) from 5.5 % to 5.9 %. The national average is 7% FCI. Due to additional maintenance and repairs, the projected campus-wide Five Year FCI has been reduced – from 13.0 to 12.9%. Refer to page 8 for more information.

As stated in the Deferred Maintenance Backlog Background on page 6, the investment solution has two facets:

- The funds needed for immediate repair projects – repairs and/or replacements that will prevent further deterioration of the buildings and infrastructure.
- The funds required to maintain and/or improve the condition of the buildings. These funds need to be budgeted in advance to allow for repairs at the appropriate time - before items become critical or cause additional damage.

We propose the following:

Short Term Recommendation

KCC should review the items that comprise the One Year Deferred Maintenance Backlog of \$2.2 million and first address those affecting life/safety issues, those having the greatest potential for future damage to other building components, and those that are code compliance issues.

Long Term Recommendation

Option One - Maintain Current FCI: KCC should budget approximately \$770,000 annually - approximately 2% of the Current Replacement Value of the College (a national benchmark value considered adequate to service and maintain the condition of a typical building). Although the FCI has increased, this dollar amount is higher due to increases in construction costs and additional maintenance needs.

By allocating 2% of the Current Replacement Value annually, the College should be able to do the following:

- Fund annual building maintenance, exclusive of catastrophic and atypical equipment failure.
- Save for future equipment replacement and expected building system replacement (i.e. roofs, boilers, etc.)

By setting aside this amount, the College can maintain their current status with a Facility Condition Index of 5.8% - considered “Fair” by Association of Higher Education facility Officers (APPA) standards.

Option Two - Budget for Upcoming Maintenance Issues: KCC should also consider budgeting up to \$1.7 million annually for the next five years to significantly reduce the anticipated Five Year Deferred Maintenance Backlog. This plan will also provide an adequate base for future equipment and system replacement.

After this initial period of covering the funding backlog, the College can then allocate approximately \$770,000 annually to maintain the new, FCI.

Refer to page 28 for site conditions and recommendations.

Glossary

Following are definitions of terms used in this report.

Vital Statistics

Basic building information— building use types (classroom, library, administration), year built, building area in square feet, and number of floors.

Observation Highlights

A partial list of field observations, highlighting major repair/replacement items and recently completed work. For a more complete list of field observations, see the individual building data sheets in the appendix.

Current Replacement Value (CRV)

The CRV is the cost to construct a replacement building in today's dollars. The figure is based on the square footage of the current structure and the estimated current construction cost for that type of structure. Since some buildings encompass several different uses (i.e.: classroom, library, administration) the CRV is based on estimated proportions of use types in each building. By the nature of the calculations and square foot construction costs, the current replacement value has a $\pm 20\%$ margin of error and will likely increase annually due to inflation.

One Year Deferred Maintenance Backlog (1YR DMB)

The value of projects that have been deferred and require completion in order to safely maintain facilities and related infrastructure for their current use. The 1 Year DMB amounts shown are for items requiring immediate attention to fix critical problems. *A long-term investment strategy should also include items that require repair or replacement within 5 years, thus avoiding the increased repair costs resulting from deferred repairs (i.e. leaky roof damaging interior finishes).*

Facilities Condition Index (FCI)

Simply put, the FCI is the current DMB divided by the CRV. The resulting number is compared against nationally accepted standards and used to determine the condition of the building, campus or college.

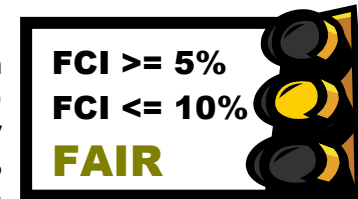
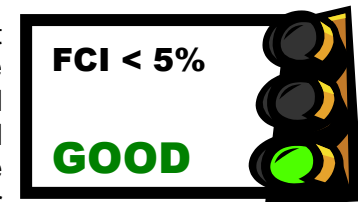
The Association of Higher Education Facilities Officers (APPA) recommends that the FCI for any given building should not exceed 5% for the building to be considered in "Good" condition. The rating of "Fair" indicates that the building requires some attention to bring it up to standard, with some problems areas potentially requiring immediate attention. The rating of "Poor" indicates that the building needs urgent attention to prevent the existing problems from affecting other building systems and compounding future repair costs.

The APPA FCI Ratings, indicating the general condition of the building, are shown here along with the corresponding "traffic signals" that give a quick visual indication of the FCI rating.

One Year DMB Excess

This represents the amount the DMB exceeds the APPA benchmark of a building with a 5% FCI – essentially the dollar amount to be spent immediately to reduce the DMB to attain the APPA rating of "Good". In situations where a building is in better than "good" condition (FCI<5%), the one year DMB excess is shown as zero.

For example, if a building has a CRV of \$1,000,000 and an FCI of 10%, the DMB would be \$100,000. This would leave



a DMB excess of \$50,000 – the amount to be spent to reduce the FCI to within the APPA 5% benchmark.

Five Year Deferred Maintenance Backlog (5YR DMB)

Similar to the One Year DMB, the Five Year DMB represents the total value of projects that will require attention within the next five years, including those that fall under the One Year DMB. This value is included to help determine the investment required over the next five years to repair and/or replace problem items before they become critical.

Looking at the previous example, if the building condition survey indicated an additional \$250,000 in repairs from years 1-5, then the 5 Year DMB would total \$350,000 (including \$100,000 from the first year).

Five Year DMB Excess

Similar to the One Year DMB Excess value, this amount represents the investment to bring the DMB in line with the APPA benchmark of 5% of the Current Replacement Value. In situations where a building is in better than “good” condition – a bit more difficult over a five year span, the five year DMB excess is shown as zero.

This number is a good starting point for determining budgets – it allows the college to see what to spend to bring buildings into the APPA “good” range – with the understanding that complete elimination of the Deferred Maintenance Backlog is not a likely scenario.

DMB Equilibrium (Annual cost to maintain current DMB)

This is the total dollar amount to be invested annually to keep the FCI (and DMB) from deteriorating – regardless of the current condition of the building.

Reusing the previous example, the amount required to maintain the FCI at current levels would be \$20,000 annually (2% of \$1,000,000).

The number is based on a nationally accepted heuristic rule of 2% of the CRV and assumes that building components have a 50-year renewal cycle and depreciate along a straight line. The assumptions were made to simplify calculations; in reality, building components DO NOT expire according to straight-line depreciation, and most components will require replacement within 30-40 years (excluding structure and foundation).

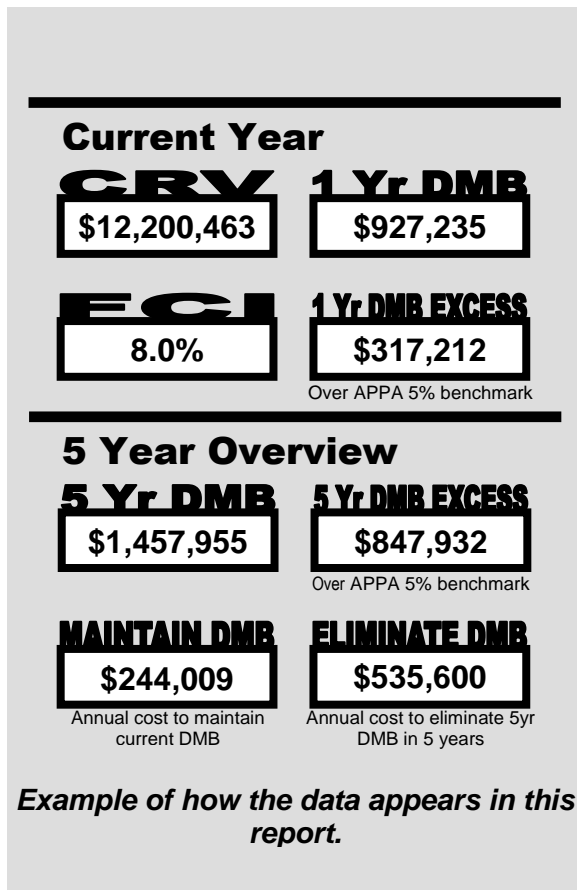
To restate – this annual investment will only maintain the existing FCI and do little or nothing to reduce any existing backlog.

DMB Elimination (Annual cost to eliminate the 5 Year DMB)

The annual investment for a set number of years to eliminate the Five Year DMB. This amount is determined by taking the 5 Year DMB amount and spreading it over a number of years (into more affordable and achievable partitions) and adding the result to the annual maintenance cost.

Again using the previous example and assuming a 5-year reduction plan, the annual amount required to bring the DMB to zero would be \$90,000 (for five years).

\$70,000....\$350,000 “Five Year DMB” divided by 5 years.
\$20,000....FCI Equilibrium investment– 2% of \$1,000,000.
\$90,000....DMB Elimination investment - each year for 5 years (then \$20,000 each year afterwards to maintain the greatly reduced DMB)



Building Use Types

The table to the right shows the building use type and its respective current construction cost per square foot. This cost, based on the actual construction cost and regionally weighted, preliminary construction cost data provided by the construction cost estimation companies RS Means and Marshall and Swift, are for typical buildings of this type and have a ±20% margin of error.

Use Type	Cost/SF
Administration	\$130
Athletic	\$160
Career Tech	\$140
Classroom	\$140
Conference Center	\$135
Daycare	\$140
Kitchen/Food Service	\$180
Lab	\$220
Library	\$130
Maintenance	\$120
Performing Arts	\$135
Power House	\$210

Building Components

The table to the right shows the building components used in the report. These are the basic components having a major influence on the replacement value of a building. The buildings were evaluated during walk-throughs with the facility personnel to determine how much of each component made up the CRV. It was then determined what percentage of each component required replacement within one year, five years, ten years, and beyond. This data is used to determine the investment required to reduce the current and future deferred maintenance backlog.

Category	Component Name
Structure	Structure
Envelope	Roof
	Glazing
	Cladding
Mechanical	HVAC Equipment
	HVAC Terminal Units
	Plumbing
Electrical	Primary
	Secondary
	Distribution
	Lighting
Finishes	Voice/Data
	Ceilings
	Walls
	Doors
Safety/Code	Floors
	Building, Fire, ADA, OSHA
Other	Site Repair, Ext. Light, etc

Deferred Maintenance Backlog

A Brief Background

The problem of deferred maintenance at colleges and universities has been studied and better understood over the last decade. From an article by Dan Hounsell, in the magazine Maintenance Solutions, discussing how universities are addressing the issue of deferred maintenance:

“Maintenance management professionals, who once seemed to be one of the few parties giving serious thought to the issue, now have been joined in the debate by growing numbers of sympathetic voters and far-sighted facility decision makers.”

The Association of Higher Education Facilities Officers (APPA) concluded in a 1995 report titled “A Foundation to Uphold: A Preliminary Report” that the national backlog of deferred maintenance at colleges and universities exceeds \$26 billion, up 27 percent from estimates made in a similar report from 1988.

\$5.7 billion of that \$26 billion backlog is classified as “urgent deferred maintenance” – projects that require immediate attention and that will cost far more if they are not completed within a year. Although spending this sum will eliminate current urgent needs, in only a few years there will be a new roster of items to replace them – if future budget planning is not undertaken. According to the APPA report, the current backlog “represents a threat to the capability of higher education facilities to support college and university missions.”

Other conclusions from the report include:

- More than 50 percent of all college types reported that deferred maintenance increased or stayed the same since 1988; only 25 percent reported decreases.
- 20 percent of the colleges in the study accounted for nearly 60 percent of the accumulated deferred maintenance.

- Public colleges typically have a greater deferred maintenance backlog than private universities, with 78 percent of the public research universities reporting an increase in deferred maintenance backlogs.
- By assuming that infrastructure deferred maintenance – site repairs, road and parking lot maintenance, exterior lighting, etc. – was not included in the figures provided by the campuses in the study, the estimated cost to eliminate accumulated deferred maintenance increases to \$32.5 billion – with urgent needs increasing to \$7.1 billion.
- When senior school administrators made deferred maintenance a priority, the institution made progress in reducing its backlog.

The most important point to remember is that even if universities and colleges spend these amounts, this will only eliminate the existing deferred maintenance backlog. There needs to be a coordinated, funded plan put into place at colleges and universities to maintain the condition of the facilities once they have been repaired – or time will again take its toll.



Vital Statistics:

Kirtland Community College (KCC), founded in 1966, consists of the main campus and the M-TEC/University Center in Gaylord, totaling 7 major buildings (2 with additions), 7 physical plant buildings, a Children's Learning Center, and 6 houses currently used for a variety of purposes. The college's district consists of all or part of 9 counties, totaling approximately 2,500 square miles. The 21 facilities and additions in this report total approximately 279,461 square feet with a total Current Replacement Value estimated at approximately \$38,525,929.

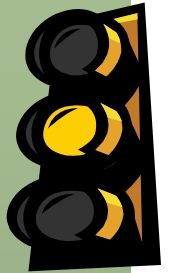
A majority of the buildings date back to the original construction period of 1966-1968. The life expectancy of many original and replacement building materials and systems has been passed, some even to the point where maintenance is no longer effective. The following list highlights some issues noted throughout the campus.

- All roofs on major buildings have been replaced in the last 10 years. Cedar shakes are coming off the mansard roofs in several locations.
- ADA accessibility issues require addressing – toilet rooms, door hardware, Braille signage, etc. in older buildings are not up to current standards.
- Many original ceilings show water and humidity damage and should be replaced.
- Replacement parts for many different systems are becoming increasingly hard to find due to obsolescence.

Repair and replacement has been addressed as funds allow and as part of building addition work. In other cases, budget constraints have forced delays, causing direct and collateral damage.

The deferred maintenance backlog and FCI (approximately 5.9%) at Kirtland Community College has worsened. The FCI has remained in the "Fair range". The FCI national average is currently at 7%.

The next section of this report breaks this data down into a building-by-building review to clarify where attention is needed, as some buildings contribute to the current Deferred Maintenance Backlog far more than others.



Current Year

CRV
\$38,525,929

1 Yr DMB
\$2,265,896

FCI
5.9%

1 Yr DMB EXCESS
\$575,373

Over APPA 5% benchmark

5 Year Overview

5 Yr DMB
\$4,980,413

5 Yr DMB EXCESS
\$3,114,363

Over APPA 5% benchmark

MAINTAIN DMB
\$770,519

Annual cost to maintain
current DMB

ELIMINATE DMB
\$1,766,601

Annual cost to eliminate
5yr DMB in 5 years

Campus Condition Examples

The following images are indicative of some of the deferred maintenance issues present across the campus.



ADM Building – Boiler Room Door



Print Shop Door – Ice Build Up



MTEC Roof repairs – damaged as result of ice buildup



Library - Worn Carpet



Deteriorated Parking Lots

Vital Statistics:

M-TEC (and University Center) - Gaylord Campus

Use Type(s): Administration, Classroom

Built: 2002

Area: 46,621 s.f. – 28,000 s.f. belongs to M-TEC

Observation Highlights:

- Needs canopy for ice protection at one entrance – safety problem
- Moisture occurring in windows.
- Roof Repairs
- Peak Electrical Load Problem



Current Year

CRV
\$56,433,698

1 Yr DMB
\$257,991

ECI
4.0%

1 Yr DMB EXCESS
\$0

Over APPA 5% benchmark

5 Year Overview

5 Yr DMB
\$564,879

5 Yr DMB EXCESS
\$243,194

Over APPA 5% benchmark

MAINTAIN DMB
\$128,674

Annual cost to maintain current DMB

ELIMINATE DMB
\$241,650

Annual cost to eliminate 5yr DMB in 5 years

Vital Statistics:

Administration Building

Use Type(s): Administration, Classroom

Built: 1980

Area: 45,323 s.f.

Observation Highlights:

- Insect problems
- Some building settlement has occurred. There is a problem with washout.
- Most original windows replaced in 90-91.
- Unit ventilators have condensation problem.
- Main electrical distribution replaced during addition work.
- Original lighting in good condition.
- Mostly original ceilings – damaged from work above ceilings.
- 60% new carpet. Flooring in halls cracked due to moisture. Cracked subfloor causing cracking and upheaval of floor tile.
- Three fire protection systems – coordination not completely successful yet.
- Toilet rooms ADA on lower level only.
- Need controls for HVAC and fin tube systems.
- Need 4-pipe system for heating and cooling.
- Braille Room Signage not complete



Current Year

CRV
\$6,073,282

1 Yr DMB
\$392,334

FCI
6.5%

1 Yr DMB EXCESS
\$88,670

Over APPA 5% benchmark

5 Year Overview

5 Yr DMB
\$1,033,065

5 Yr DMB EXCESS
\$729,401

Over APPA 5% benchmark

MAINTAIN DMB
\$121,466

Annual cost to maintain current DMB

ELIMINATE DMB
\$328,079

Annual cost to eliminate 5yr DMB in 5 years

Vital Statistics:

Administration Building - Addition

Use Type(s): Administration, Classroom

Built: 1999

Area: 11,955 s.f.

Observation Highlights:

- Has 4 pipe system, needs chiller for air conditioning
- 2 units ventilators noisy and need replacement
- Approx. 9 square feet of exterior brick on west side needs replacement



Current Year

CRV
\$1,637,835

1 Yr DMB
\$19,490

ECI
1.2%

1 Yr DMB EXCESS
\$0

Over APPA 5% benchmark

5 Year Overview

5 Yr DMB
\$43,075

5 Yr DMB EXCESS
\$0

Over APPA 5% benchmark

MAINTAIN DMB
\$32,757

Annual cost to maintain
current DMB

ELIMINATE DMB
\$41,372

Annual cost to eliminate
5yr DMB in 5 years

Vital Statistics:

Arts and Maintenance Building

Use Type(s): Classroom, Maintenance

Built: 2000

Area: 30,123 s.f.

Observation Highlights:

- Exterior block rust stained, minor ice damage on panels
- Canopies needed at entries to prevent ice buildup
- Overhead doors & Pedestrian Door leaking



Current Year

CRV
\$3,915,990

1 Yr DMB
\$152,332

ECI
3.9%

1 Yr DMB EXCESS
\$0

Over APPA 5% benchmark

5 Year Overview

5 Yr DMB
\$227,519

5 Yr DMB EXCESS
\$31,720

Over APPA 5% benchmark

MAINTAIN DMB
\$78,320

Annual cost to maintain
current DMB

ELIMINATE DMB
\$123,24

Annual cost to eliminate
5yr DMB in 5 years

Vital Statistics:

Career Tech Center

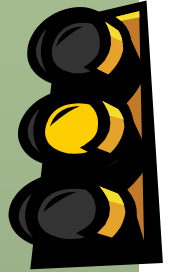
Use Type(s): Performing Arts, Classroom, Career Tech.

Built: 1966

Area: 42,084 s.f.

Observation Highlights:

- Settlement problems – Auditorium foundation wall leaks. Overhead doors require constant maintenance. – Two doors Replaced 2005
- Cedar shakes on mansard roof falling off. Lower Roof completed 2006.
- Glazing and masonry in good condition – except at auditorium entrance.
- Two ventilation units abandoned, ventilation not provided to portions of building. Temperature control problems. Cosmetology area ventilation is poor. Boiler new.
- Pneumatic lines contaminated with oil/water. Replacement parts unavailable. 50 % of the building now on DDC controls
- One of the drains in Auto lab goes to a drywell (code violation, but grandfathered in).
- No isolated grounds.
- Master clock system not functioning, due for replacement.
- Hall lighting poor. Auto lab ballasts changed frequently. Auditorium step lighting constantly needs relamping. Energy efficient ballast needed.
- Original ceilings in poor condition. Some newer ceilings – OK.
- Building settlement causing quarry tile to crack and loosen. Auditorium carpet needs replacing.
- No disabled access to stage.
- Auditorium Lobby needs carpet replacement.
- Storm line problem causing water entry interior



Current Year

CRV
\$5,839,155

1 Yr DMB
\$420,419

ECI
7.2%

1 Yr DMB EXCESS
\$128,461

Over APPA 5% benchmark

5 Year Overview

5 Yr DMB
\$910,908

5 Yr DMB EXCESS
\$618,950

Over APPA 5% benchmark

MAINTAIN DMB
\$116,783

Annual cost to maintain current DMB

ELIMINATE DMB
\$298,965

Annual cost to eliminate 5yr DMB in 5 years

Vital Statistics:

Children's Learning Center

Use Type(s): Daycare

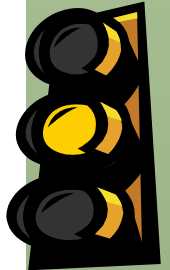
Built: 1968

Area: 1,568 s.f.

Observation Highlights:

- Wood frame construction – former residence. Block basements typically leak. Some have been repaired.
- Original hot water baseboard heating – no reported problems.
- Roof replaced in 1994-1995.
- Original windows. Majority need replacement.
- Some new flooring.

Smoke detectors and fire extinguishers only fire protection.
Recommend full code review for fire and accessibility compliance.



Current Year

CRV
\$219,520

1 Yr DMB
\$11,415

ECI
5.2%

1 Yr DMB EXCESS
\$439

Over APPA 5% benchmark

5 Year Overview

5 Yr DMB
\$28,362

5 Yr DMB EXCESS
\$17,386

Over APPA 5% benchmark

MAINTAIN DMB
\$4,390

Annual cost to maintain current DMB

ELIMINATE DMB
\$10,063

Annual cost to eliminate 5yr DMB in 5 years

Vital Statistics:

Firing Range

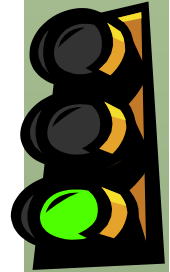
Use Type(s): Storage

Built: 2006

Area: 576 s.f.

Observation Highlights:

- New Building
- Range needs walls or berm improved



Current Year

CRV
\$37,440

1 Yr DMB
\$0

ECI
0%

1 Yr DMB EXCESS
\$0

Over APPA 5% benchmark

5 Year Overview

5 Yr DMB
\$135

5 Yr DMB EXCESS
\$0

MAINTAIN DMB
\$749

Annual cost to maintain
current DMB

ELIMINATE DMB
\$776

Annual cost to eliminate
5yr DMB in 5 years

Vital Statistics:

Instructional Building

Use Type(s): Administration, Classroom

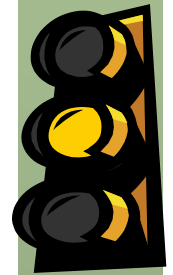
Built: 1968

Area: 27,555 s.f.

Observation Highlights:

- Some building settlement has occurred
- Cedar shakes on mansard roof need repair.
- Most original windows replaced in 90-91.
- Exterior soffits under mansard roofs require repair/repainting – made of asbestos.
- No A/C in classrooms. Building has humidity problem, causing ceiling tiles to sag. Classroom ventilation inadequate. Need more DDC controls for HVAC system. DDC controls need repairs.
- Master clock system not functioning, due for replacement.
- Some main electrical panels obsolete.
- Original lighting – require constant ballast replacement. Exterior soffit lights not working.
- Areas of drywall in poor condition. Wall covering damaged in corridors. Interior block walls need tuckpointing.
- Original flooring – carpets frayed and damaged.
- Not ADA compliant, wheelchair access to some rooms not possible due to stairs, door handles need upgrade, no ADA signage.
- Need ADA Science Station

November 2011 Update



Current Year

CRV
\$4,243,470

1 Yr DMB
\$387,853

ECI
9.1%

1 Yr DMB EXCESS
\$175,680

Over APPA 5% benchmark

5 Year Overview

5 Yr DMB
\$880,096

5 Yr DMB EXCESS
\$667,922

Over APPA 5% benchmark

MAINTAIN DMB
\$84,869

Annual cost to maintain
current DMB

ELIMINATE DMB
\$260,889

Annual cost to eliminate
5yr DMB in 5 years

Vital Statistics:

Instructional Building - Addition

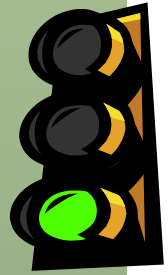
Use Type(s): Administration, Classroom

Built: 1999

Area: 17,783 s.f.

Observation Highlights:

- Insects infesting building
- Building very hot. A/C system and/or improved ventilation needed for improved cooling, will require 4 pipe system. Some window AC units installed 2005.



Current Year

CRV

\$2,454,054

1 Yr DMB

\$69,941

ECI

2.9%

1 Yr DMB EXCESS

\$0

Over APPA 5% benchmark

5 Year Overview

5 Yr DMB

\$116,568

5 Yr DMB EXCESS

\$0

Over APPA 5% benchmark

MAINTAIN DMB

\$49,081

Annual cost to maintain
current DMB

ELIMINATE DMB

\$72,395

Annual cost to eliminate
5yr DMB in 5 years

Vital Statistics:

Kirtland House

Use Type(s): Kirtland House

Built: 1968

Area: 4,913 s.f.

Observation Highlights:

- Wood frame construction. Residential building with conference addition.
- Roof replaced in early 1990's. Some leaks and asphalt shingle damage. Partial replacement 2005
- Original windows. Original siding – no reported problems.
- Original electrical and plumbing, residential grade – no reported problems.
- Original forced air system. AC in conference area only. System fails frequently, condensate problems, furnace in attic problematic.
- Interior remodeled 5+/- years ago. Damaged ceilings replaced in last two years.
- Sprinkled at conference addition only. No fire alarm system.
- Recommend full code review for fire and accessibility compliance.
- Parking lot curbing in poor condition; Parking Lot needs replacement



Current Year

CRV
\$663,255

1 Yr DMB
\$32,301

ECI
4.9%

1 Yr DMB EXCESS
\$0

Over APPA 5% benchmark

5 Year Overview

5 Yr DMB
\$59,030

5 Yr DMB EXCESS
\$25,867

Over APPA 5% benchmark

MAINTAIN DMB
\$13,265

Annual cost to maintain current DMB

ELIMINATE DMB
\$25,071

Annual cost to eliminate 5yr DMB in 5 years

Vital Statistics:

Library

Use Type(s): Library

Built: 1968

Area: 15,510 s.f.

Observation Highlights:

- New single-ply roof in 1997,. Mansard roof wood shakes need repair.
- Glazing replaced in 1991.
- Some rooftop units not working – no ventilation provided in these areas. Original boilers replaced in 2003.
- Technology Data room needs own A/C system. Current arrangement causing discomfort in adjoining areas. Installed window unit 2006 – still problem.
- Mostly original plumbing. Toilet flanges rusted. No ADA restrooms.
- Primary panel obsolete and building needs more capacity.
- Lighting low in library. Ballasts require frequent replacement.
- Doors closers not working well – HVAC pressure causing doors to not close.
- Original ceilings need replacing.
- Fire alarm system not self-addressing.
- Exterior light poles need replacement.
- Electrical needed for servers



Current Year

CRV
\$2,016,300

1 Yr DMB
\$116,945

ECI
5.8%

1 Yr DMB EXCESS
\$16,130

Over APPA 5% benchmark

5 Year Overview

5 Yr DMB
\$269,176

5 Yr DMB EXCESS
\$168,361

Over APPA 5% benchmark

MAINTAIN DMB
\$40,326

Annual cost to maintain current DMB

ELIMINATE DMB
\$94,161

Annual cost to eliminate 5yr DMB in 5 years

Vital Statistics:

Observatory Building

Use Type(s): Storage

Built: 2006

Area: 288 s.f.

Observation Highlights:

- New Building



Current Year

CRV
\$18,720

1 Yr DMB
\$0

ECI
0%

1 Yr DMB EXCESS
\$0

Over APPA 5% benchmark

5 Year Overview

5 Yr DMB
\$337

5 Yr DMB EXCESS
\$0

MAINTAIN DMB
\$374

Annual cost to maintain
current DMB

ELIMINATE DMB
\$447

Annual cost to eliminate
5yr DMB in 5 years

Vital Statistics:

Student Housing - 60 College Drive

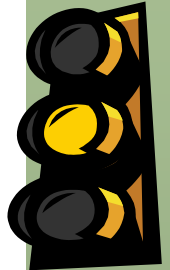
Use Type(s): Fire Science & CJ Lab

Built: 1968

Area: Approximately 1,700 s.f.

Observation Highlights:

- Wood frame construction. Block basements show some leaking (typical).
- Garage floor cracking (typical).
- Original hot water baseboard heating – no reported problems.
- Roofs replaced in 1994-1995.
- Original windows. Majority need replacement.
- Original siding.
- Original electrical and plumbing – residential grade.
- Fire extinguishers currently only fire protection.
- Mold in bathroom floor
- Pet odors penetrated floors.



Current Year

CRV
\$241,360

1 Yr DMB
\$13,589

FCI
5.6%

1 Yr DMB EXCESS
\$1,521

Over APPA 5% benchmark

5 Year Overview

5 Yr DMB
\$30,870

5 Yr DMB EXCESS
\$18,802

Over APPA 5% benchmark

MAINTAIN DMB
\$4,827

Annual cost to maintain current DMB

ELIMINATE DMB
\$11,001

Annual cost to eliminate 5yr DMB in 5 years

Vital Statistics:

Storage Building

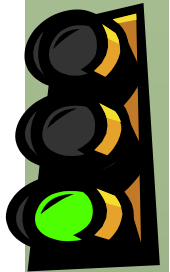
Use Type(s): Storage

Built: 1966

Area: 1,200 s.f.

Observation Highlights:

- Wood frame structure.
- Siding needs repainting.
- No lighting, exterior & interior



Current Year

CRV
\$78,000

1 Yr DMB
\$624

ECI
0.8%

1 Yr DMB EXCESS
\$0

Over APPA 5% benchmark

5 Year Overview

5 Yr DMB
\$3,861

5 Yr DMB EXCESS
\$0

Over APPA 5% benchmark

MAINTAIN DMB
\$1,560

Annual cost to maintain
current DMB

ELIMINATE DMB
\$2,332

Annual cost to eliminate
5yr DMB in 5 years

Storage Building

Vital Statistics:

Student Center

Use Type(s): Administration, Student Union, Kitchen/Food Service

Built: 1966

Area: 17,870 s.f.

Observation Highlights:

- Some settlement has occurred – some doors stick
- Windows replaced in 1994
- Exterior soffits under mansard roofs require repair/repainting – made of asbestos.
- Many air leaks in HVAC system. Original boiler replaced. Ventilation of kitchen is poor. Coil and control replacement needs addressing.
- Newer ceiling in bookstore, balance original, some water damaged and discolored.
- Moveable partition in cafeteria damaged. Ceramic wall tiles in toilet rooms needs repair.
- Exterior doors rusting and hardware in poor condition.
- Quarry tile in good condition. Carpet original and needs replacement.
- Restrooms not ADA compliant. Lever handles needed throughout building.
- Original fire alarm system, no strobes



Current Year

CRV
\$2,912,810

1 Yr DMB
\$295,650

ECI
10.2%

1 Yr DMB EXCESS
\$150,010

Over APPA 5% benchmark

5 Year Overview

5 Yr DMB
\$626,254

5 Yr DMB EXCESS
\$480,614

Over APPA 5% benchmark

MAINTAIN DMB
\$58,256

Annual cost to maintain current DMB

ELIMINATE DMB
\$183,507

Annual cost to eliminate 5yr DMB in 5 years

Vital Statistics:

Student Housing: 8 Houses

(5 College Drive - Abandoned,
10 College Drive & 20 College Drive -
35 College Drive – Performing Arts Storage,
45 College Drive & 50 College Drive - Fire Science & CJ Lab,
25 College Drive & 30 College Drive – Guest House)

Use Type(s): Residential

Built: 1968

Area: approximately 1,568 s.f. each

Observation Highlights:

- All buildings listed above are similar and in essentially the same condition. Information is typical and values are averaged for all student housing.
- Wood frame construction. Block basements typically leak and some are caving in. Some have been repaired.
- Original hot water baseboard heating – no reported problems.
- Roofs replaced in 1994-1995.
- Original windows. Majority need replacement.
- Original siding- repaint as necessary.
- Original electrical and plumbing – residential grade.
- Fire extinguishers currently only fire protection.
- No ADA or fire safety upgrades, recommend full fire and ADA code compliance review.
- DEQ reclassified well system to Nontransient Type 3 Community Well System tentatively until new construction confirmed.



Current Year

CRV
\$177,940

1 Yr DMB
\$10,503

ECI
5.9%

1 Yr DMB EXCESS
\$1,808

Over APPA 5% benchmark

5 Year Overview

5 Yr DMB
\$22,915

5 Yr DMB EXCESS
\$14,018

Over APPA 5% benchmark

MAINTAIN DMB
\$3,558

Annual cost to maintain current DMB

ELIMINATE DMB
\$8,141

Annual cost to eliminate 5yr DMB in 5 years

Vital Statistics:

Switch Gear Building

Use Type(s): Physical Plant

Built: 1998

Area: 936 s.f.

Observation Highlights:

- Houses electrical feed to all 6 major buildings on the Main Campus.
- The current replacement value includes an estimate for replacement of typical physical plant equipment.
- Needs emergency lighting and fire alarm system.



Current Year

CRV
\$196,560

1 Yr DMB
\$1,474

ECI
0.8%

1 Yr DMB EXCESS
\$0

Over APPA 5% benchmark

5 Year Overview

5 Yr DMB
\$1,966

5 Yr DMB EXCESS
\$0

Over APPA 5% benchmark

MAINTAIN DMB
\$3,931

Annual cost to maintain current DMB

ELIMINATE DMB
\$44,324

Annual cost to eliminate 5yr DMB in 5 years

Vital Statistics:

Wastewater Treatment Building

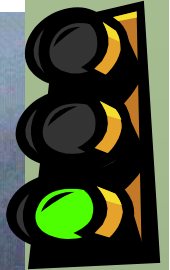
Use Type(s): Physical Plant

Built: 2000

Area: 576 s.f.

Observation Highlights:

- New Building
- The current replacement value includes an estimate for replacement of typical physical plant equipment.
- New sand filter scheduled in 2020 – possibly earlier
- Aerator needed due to complete coverage of lagoon with duckweed.
- CRV does not include Lagoon, Sand Filter & Snow Machine
- Under review by DEQ for phosphorous & fecal coliform removal.



Current Year

CRV
\$120,960

1 Yr DMB
\$508

ECI
0.4%

1 Yr DMB EXCESS
\$0

Over APPA 5% benchmark

5 Year Overview

5 Yr DMB
\$992

5 Yr DMB EXCESS
\$0

Over APPA 5% benchmark

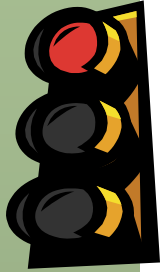
MAINTAIN DMB
\$2,419

Annual cost to maintain
current DMB

ELIMINATE DMB
\$2,18

Annual cost to eliminate
5yr DMB in 5 years

Wastewater Treatment Building



Vital Statistics:

Campus Grounds

Area: Approximately 220 acres

Observation Highlights:

- Most asphalt walkways are a continuous improvement item.
- Concrete paving a continuous improvement item.
- One parking lot fronting the student center is deteriorated, needing resurfacing within 3-5 years. If resurfacing is delayed, immediate restriping, curb repair and minor patching is recommended.
- Parking lots behind the Administration Building, the Library and the Kirtland House need replacement.
- Pathway lighting is inadequate. Replacement of existing and addition of new lighting should be considered. Many lighting poles and fixtures are damaged or partly missing. Any new lighting should take light pollution into account, directing light only downward and avoiding over-lighting the sky.
- Vegetation overgrowth and erosion runoff in some areas have plugged storm drains. Erosion is becoming an increasing problem.
- Regrading/planting to detour further erosion is recommended.
- The main entrance sign mortar repaired in 2002. Sign will need replacement in near future.
- Signage differentiating vehicular paths from pedestrian paths needs to be installed in some areas, as many are similar in width.
- Apron at F-97 resurfaced.

- Well system rated unsatisfactory in geological study. Water sampling tested OK.
- The following items may cause DEQ to require new well system:
 1. New building construction.
 2. Existing and/or new housing.
 3. Distance between wells and other underground systems.
 4. A new well system will be completed in 2011.

