



**MONROE COUNTY COMMUNITY COLLEGE  
FACILITIES ASSESSMENT AND DEFERRED MAINTENANCE  
CAPITAL PLANNING REPORT  
2011 UPDATE**

**SHWGROUP**  
ARCHITECTS | ENGINEERS | PLANNERS





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## Purpose of the Study

This Facilities Assessment and Deferred Maintenance Capital Planning Study, developed through a combination of personnel interviews, facility walk-throughs and building system analysis, 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 Monroe County Community College personnel and allow for quick access to facilities information.
- Determine the general condition of the facilities owned by Monroe County Community College 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 assessed building and an aggregate FCI for all facilities at Monroe County Community College. The FCI is a benchmark index that rates the condition of existing College buildings and used by facilities managers nationwide to quantify and prioritize deferred maintenance projects for capital planning purposes.
- Assist Monroe County Community College in meeting its Mission Statement, Strategic Goals, and Institutional Vision through timely maintenance of the physical backbone of the College – the buildings of MCCC.

## Glossary

### Vital Statistics

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

### Observation Highlights

This is a focused 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 typical 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 are conglomerations of 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 increase annually due to inflation.

### Priority Issues/One Year Deferred Maintenance Backlog (1YR DMB)

The 1YR DMB is the value of projects that is deferred and requiring completion in order to maintain facilities and related infrastructure for safe use. The 1YR 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 problem 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.

## Priority Issues/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

## Zero-Five Year Cumulative 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.

*The Zero-Five Year DMB is often more telling of a buildings’ condition than the One Year DMB, since the first year number focuses primarily on life safety, code compliance and collateral damage. Most maintenance issues are not so critical as to fall into this category but often become so within 5 years.*

Looking at the previous example, if the building condition survey indicated an additional \$250,000 in repairs from years 1-5, then the 0-5 Year DMB would total \$350,000 (including \$100,000 from the first year).

## Zero-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.*

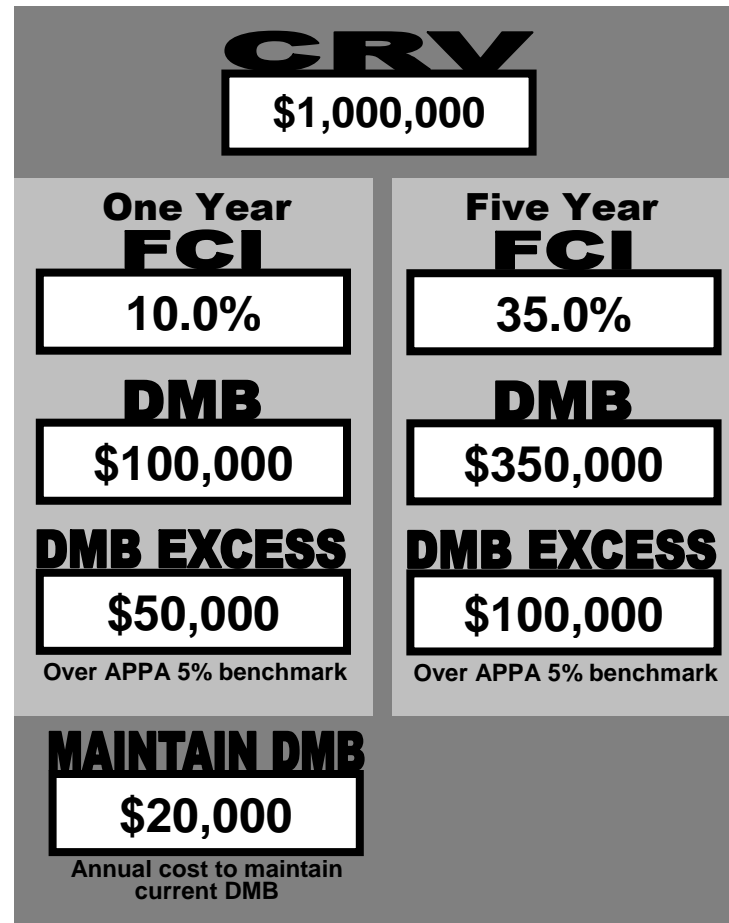
**DMB Equilibrium (Annual cost to maintain current DMB)**

This is the 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 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.*



*Generic Example of how the aforementioned data appears in this report*

### Building Use Types

The tables below shows building Use Types and their respective current construction costs per square foot used to develop this database. As some of these use types are not found on all campuses, not all Use Types are used in the database. These costs, based on regionally weighted, preliminary construction cost data provided by contractors, historical cost databases and data from RS Means and Marshall and Swift, are for typical college and university buildings.

<i>Use Type</i>	<i>Cost/SF</i>
Administration	\$175
Athletic	\$190
Auditorium	\$290
Boiler House	\$215
Classroom	\$185
Kitchen/Food Service	\$205
Lab	\$245
Library	\$190
Storage/Maintenance	\$115
Student Union	\$175
Vocational Lab	\$175

### Building Components

The table below shows the building components used in the report. These basic components have a major influence on the replacement value of a building. The buildings were evaluated during walkthroughs 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 repair or 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.

<i>Category</i>	<i>Component Name</i>
Structure	Structure
Envelope	Roof
	Glazing
	Cladding
Mechanical	HVAC Equipment
	Plumbing
Electrical	Primary/Secondary
	Distribution
	Lighting
	Voice/Data
Finishes	Ceilings
	Walls
	Doors
	Floors
Safety/Code	Building, Fire, ADA
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 deferred maintenance of the infrastructure – 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:**

This updated assessment for Monroe County Community College (MCCC), focuses on 18 buildings totaling 401,000 square feet at the Monroe main campus, Whitman Center campus, and Hurd Road Center campus. The estimated Current Replacement Value for these facilities is approximately \$82.2 million.

The date of completion for the assessed facilities ranges from 1968 to 2004. While almost all mission critical buildings are currently in good condition, the buildings contributing most significantly to overall long-term deferred maintenance and end-of-life issues are the original academic buildings. Factors contributing to the condition of these buildings include the age and condition of plumbing and mechanical systems, typical wear and tear on high-use items such as doors, and building use.

By APPA standards, short-term critical issues (those considered critical to operation, safety-related or having potential for collateral damage) are minimal. This situation is typical for most institutions, but MCCC has done a particularly good job containing these issues. Few items of great cost are likely to fail or significantly impact building viability within the next year. When looking forward five years, however, long-term conditions for several buildings quickly become rated fair to poor. This is also common, as over this longer timeframe, systems in older buildings become critical due to age or failure. The significantly higher five-year Facility Condition Index (FCI) for these buildings is predictive of these failures and based on two assumptions: that everything anticipated to fail will do so, and nothing is invested to correct the problem proactively.

### **Issues found across campus include:**

- Several roofs are near the middle of their service life, with leaks and other issues typical for roofs of this age. A roof condition assessment was performed by Professional Services Inc. prior to this assessment.

- HVAC systems near or past the end of their service life indicate a need to budget for replacement in the next few years. Valves on some systems are also failing.
- Original window systems are showing air infiltration, failed hardware, and deteriorated glazing compound.
- Doors are past the end of their service life on older buildings, especially exterior main entrance doors. Hardware is failing, thresholds are deteriorating, and hinges are wearing out. All require increasing levels of maintenance.
- ADA compliance issues in older buildings include knob-style door hardware, non-compliant dimensions of entrance vestibules, and some toilet rooms limited by available space. To meet current accessibility codes, any significant renovations will trigger modifications to meet current ADA requirements.

## **Summary:**

The jump from the “Priority Issues FCI” of 1.4% to the long-term “0-5 Year FCI” of 7.8% is typical for older campuses and, at a campus the size of MCCC, represents a sizeable capital investment, even to maintain conditions in their current state. These numbers also represent an increase from the 2008 Assessment, primarily driven by long-term issues that are becoming more urgent.

This potential FCI increase, while driven by many buildings, is most attributed to a few older facilities facing equipment end-of-life issues, including significant HVAC equipment in the Physical Plant Building. As an example, the 5-year FCI numbers for the CLRC and the two Technology Buildings contribute almost 50 percent of the total deferred maintenance backlog although they comprise less than 30 percent of the College’s square footage.

### **As stated in the Deferred Maintenance Backlog background, 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 and help the college stay ahead of life-safety concerns.
- 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.

The following pages of this report break this data down into a building-by-building review to clarify where attention is most needed.

## Recommendations:

### Short Term Recommendation:

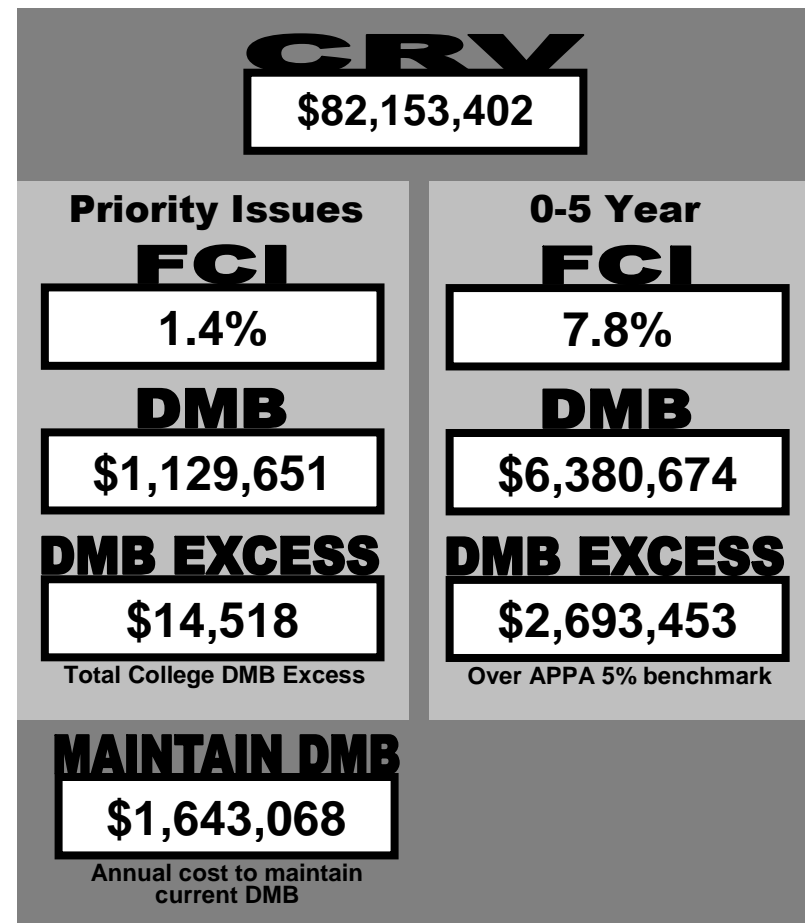
Monroe County Community College should review the items that comprise the One Year Deferred Maintenance Backlog of approximately \$1.13 million and address those affecting life/safety issues, those having the greatest potential for future damage to other building components, and those that are code compliance issues.

In addition to the first year issues that will carry over into the next five years, the College should also immediately begin budgeting for the projected \$6.38 million in deferred maintenance issues over the next five years and evaluate alternative solutions where the cost of repairs outweighs the benefits.

### Long Term Recommendation:

The College should budget as much as possible of the industry recommended "2% of CRV" maintenance fund of \$1.64 million annually for ongoing repairs to maintain the buildings once they are upgraded. While this benchmark is difficult for most institutions to attain, the goal of setting aside as close to this amount annually as possible is to ensure the buildings remain in stable condition and that funds are available in advance when systems reach the end of their lives.

\*Note: The DMB Excess value listed on the summary table to the right is the sum of all individual building excess values, not calculated at the campus-wide level. Therefore, a College DMB Excess number is present even though the College-wide FCI number is well below the APPA 5% threshold value.



**1 YEAR**



**5 YEAR**

## Example Campus Condition Photos

The following images are examples of different facility conditions across MCCC campuses.



**Whitman Center** – breach in fire-rated ceiling assembly.



**Whitman Center** – water infiltration along exterior wall has caused deterioration of the plastic-laminated windowsills.



**Whitman Center** – settlement/heaving of exterior concrete slab (at main entrance) presents a tripping hazard.



**Student Services/Administration** – Aluminum entrance doors and hardware at end of life.



**La-Z-Boy Center** – It appears there is a void within the exterior aluminum, curtain wall assembly allowing the environment to enter the interior.



**Health Education Building** – Typical sealant joint is at end of life.



**Physical Plant** – Cooling tower and basins are near end of life.



**Health Education Building** – Daylighting controls for the Atrium would save energy.

## Vital Statistics:

### Campbell Learning Resources Center

Use Type(s): Library, Classroom, Lab

Built: 1968

Area: 52,369 SF

Floors: 3

## Observation Highlights:

- Moisture problem in basement in Room C-3 requires additional investigation and remediation.
- Professional Services Inc. (PSI) rates the roof condition as "generally fair to good, no current roof leaks were reported." Roof perimeter at the gravel stop edges was repaired in 2010.
- Windows (glazing and frames) on levels 1 and 2 are due for replacement. Some window units are fogged at the first floor.
- Minor amount of brick tuck-pointing required at north elevation. Sealant joints at fascia panel joints were replaced in 2010.
- Chilled water valves are at end of life and due for replacement.
- Reduced voltage starter for 40HP fan motor is at end of life.
- Electrical Room areaway floor drain is either too small or partially plugged. Damage has occurred to ventilation dampers.
- Domestic water piping will need epoxy lining or replacement.
- Wireless equipment is at end of life and requires replacement.
- Investigate and remediate why battery-backup for digital PBX is not connected and in use.
- Minor cracking observed in brick walls at main stairwell. Recommend monitoring condition.
- Original exterior aluminum doors, frames, and hardware are nearing end of life.
- Stairwell doors are in poor condition and at end of life.
- Rear double doors at Learning Assistance Lab - hinges damaged, doors stick, doors swing into corridor.



1 YEAR



5 YEAR

# CRV

**\$9,793,003**

### Priority Issues

## FCL

**2.3%**

## DMB

**\$223,280**

## DMB EXCESS

**\$0**

Over APPA 5% benchmark

### 0-5 Year

## FCL

**11.7%**

## DMB

**\$1,142,843**

## DMB EXCESS

**\$653,193**

Over APPA 5% benchmark

## MAINTAIN DMB

**\$195,860**

Annual cost to maintain current DMB

**Campbell Learning Resources Ctr.**  
Monroe County Community College

## Vital Statistics:

### Student Services / Administration

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

**Built:** 1968, additions in 1978, 1988

**Area:** 72,219 SF

**Floors:** 1

### Observation Highlights:

- PSI rates the roof condition as “generally in fair condition.” Minor leaking reported.
- Previous infrared images indicate areas of moisture within the insulation. Leaks at penetrations will require corrective action. Some repairs made in 2010.
- Original anodized aluminum window framing with non-insulated glazing not energy efficient.
- Sealant joints at fascia panel joints were replaced in 2010.
- Isolation valves, and thermostats are at end of life and are due for replacement.
- Outside air damper for main air handler is not bolted to concrete wall.
- Galvanized piping throughout is near or at end of life. Assume replacement or epoxy lining within 10 years.
- Wireless equipment is at end of life and requires replacement.
- Original exterior aluminum doors, frames, and hardware are nearing end of life.
- East entry concrete steps poorly constructed - risers vary in height, treads are too shallow and uneven. Creates tripping hazard.
- Glass covered walkway between this and East Technology Building leaks in multiple locations. Repaired repeatedly, but steel rusting, paint peeling.



**1 YEAR**



**5 YEAR**

**CRV**

**\$12,927,201**

#### Priority Issues

**FCI**

**1.5%**

**DMB**

**\$191,323**

**DMB EXCESS**

**\$0**

Over APPA 5% benchmark

#### 0-5 Year

**FCI**

**8.3%**

**DMB**

**\$1,069,080**

**DMB EXCESS**

**\$422,719**

Over APPA 5% benchmark

**MAINTAIN DMB**

**\$258,544**

Annual cost to maintain current DMB

**Student Services / Admin.**

**Monroe County Community College**

## Vital Statistics:

### Life Science

Use Type(s): Classroom, Lab

Built: 1972

Area: 54,905 SF

Floors: 2

## Observation Highlights:

- Foundation cracking was present along west end of the building. No evidence of further movement noted.
- PSI rates the roof condition as “generally in fair to good condition.” Minor leaking reported. Minor roof repairs done in 2010.
- Walls in west stairwell in poor condition, interior walls in northeast corner chemistry labs on 2nd floor cracked. Condition stabilized several years ago, will require routine monitoring.
- Window system was replaced in 2010.
- Sealant joints at fascia panel joints were replaced in 2010.
- Chilled water valves are at end of life and due for replacement.
- Reheat control valves, isolation valves, and thermostats are at end of life and are due for replacement.
- Cold domestic water piping needs epoxy lining or replacement.
- Wireless equipment is at end of life and requires replacement.
- Interior door hardware at end of life and due for replacement. Approximately 50% of door knobs replaced with lever handles.
- Office carpet at end of life and due for replacement.



1 YEAR



5 YEAR

**CRV**

**\$12,134,005**

### Priority Issues

**FCL**

**1.4%**

**DMB**

**\$171,089**

**DMB EXCESS**

**\$0**

Over APPA 5% benchmark

### 0-5 Year

**FCL**

**5.6%**

**DMB**

**\$681,931**

**DMB EXCESS**

**\$75,231**

Over APPA 5% benchmark

**MAINTAIN DMB**

**\$242,680**

Annual cost to maintain current DMB

## Vital Statistics:

### East Technology

Use Type(s): Classroom, Lab

Built: 1968

Area: 28,523 SF

Floors: 1

## Observation Highlights:

- PSI rates the roof condition as “generally in fair to poor condition.” No leaks reported. Minor roof repairs done in 2010.
- Previous roof leak at room E-125, partially repaired in 2008 and may need additional work.
- Two-part, non-insulated glazing is typical throughout with no reported problems. Weather stripping is failing and requires ongoing maintenance. Windows are nearing end of life.
- Sealant joints at fascia panel joints were replaced in 2010.
- Reheat control valves, isolation valves, and thermostats are at end of life and are due for replacement
- Domestic hot water lines are fouled and near end of life. Domestic water piping needs epoxy lining or replacement.
- Wireless equipment is at end of life and requires replacement.
- Exterior doors remain in poor condition, hardware worn, all at end of life and due for replacement.
- East Vestibule not ADA compliant; too shallow.



1 YEAR



5 YEAR

**CRV**

**\$6,303,583**

### Priority Issues

**FCI**

**2.4%**

**DMB**

**\$152,547**

**DMB EXCESS**

**\$0**

Over APPA 5% benchmark

### 0-5 Year

**FCI**

**12.5%**

**DMB**

**\$786,057**

**DMB EXCESS**

**\$470,878**

Over APPA 5% benchmark

**MAINTAIN DMB**

**\$126,072**

Annual cost to maintain current DMB



## Vital Statistics:

### West Technology

Use Type(s): Classroom, Lab

Built: 1968

Area: 32,180 SF

Floors: 1

### Observation Highlights:

- PSI rates the roof condition as “generally in fair to poor condition.” Minor leaks reported. Minor roof repairs done in 2010.
- Two-part, non-insulated glazing is typical throughout, nearing end of life. Weather stripping is failing and requires ongoing maintenance. Windows are nearing end of life.
- Sealant joints at fascia panel joints were replaced in 2010.
- MDF room is dusty and may come from ceiling plenum. IDF Room 157 is too warm and needs ventilation.
- Galvanized piping throughout is near or at end of life. Domestic water is fouled when first used. MCCC anticipates ongoing maintenance issues.
- Wireless equipment is at end of life and requires replacement.
- Cracking was observed in a corridor wall within Room 164. The cause of the cracking is unknown. Recommend annual monitoring.
- Original exterior aluminum doors remain in poor condition, hardware worn, all at end of life and due for replacement.
- East Vestibule not ADA compliant; too shallow.
- Floor in Room 164 is cracked, damaged, and due for replacement.



1 YEAR



5 YEAR

**CRV**

**\$7,208,320**

#### Priority Issues

**FCI**

**1.3%**

**DMB**

**\$90,825**

**DMB EXCESS**

**\$0**

Over APPA 5% benchmark

#### 0-5 Year

**FCI**

**11.5%**

**DMB**

**\$827,515**

**DMB EXCESS**

**\$467,099**

Over APPA 5% benchmark

**MAINTAIN DMB**

**\$144,166**

Annual cost to maintain current DMB

## Vital Statistics:

### Health Education

**Use Type(s):** Athletic, Classroom, Lab

**Built:** 1997

**Area:** 50,700 SF

**Floors:** 1

### Observation Highlights:

- Interior expansion joints are not continuous from floor to walls and present potential future problems.
- PSI rates the roof condition as “generally in fair condition, several leaks were reported.” Minor roof repairs done in 2010.
- Storefront curtain wall and second story windows (Clerestory) were replaced in 2009. Minor leaks still occur in system.
- Masonry veneer was apparently installed with insufficient expansion / movement control joints. As a result, the building experienced some masonry failures. The installation of movement joints has addressed the problem. Some building control joints and some gaskets at the metal panels are at the end of their life.
- Two gas-fired, low pressure, steam boilers (Weil-McLain).
- Noise problems with gymnasium air handling unit, system cannot run at high speed when noise is a concern, causing space to be too hot.
- Daylighting control of the Atrium fluorescent fixtures should be considered for energy savings.
- Wireless equipment is at end of life and requires replacement.



**1 YEAR**



**5 YEAR**

**CRV**

**\$10,013,250**

#### Priority Issues

**FCI**

**0.9%**

**DMB**

**\$92,122**

**DMB EXCESS**

**\$0**

Over APPA 5% benchmark

#### 0-5 Year

**FCI**

**5.5%**

**DMB**

**\$554,734**

**DMB EXCESS**

**\$54,072**

Over APPA 5% benchmark

**MAINTAIN DMB**

**\$200,265**

Annual cost to maintain current DMB

**Vital Statistics:**

**Physical Plant**

**Use Type(s):** Power House

**Built:** 1968

**Area:** 9,394 SF

**Floors:** 2 (partial basement)

**Observation Highlights:**

- Incidental cracking noted within CMU walls at a number of locations including the director's office. Cracking appears to be stabilized but should be monitored.
- PSI rates the roof condition as "generally in fair condition, no roof leaks were reported." Minor roof repairs done in 2010.
- Minimal glazing, original single pane, nearing end of life.
- Sealant joints at pre-cast concrete panel joints at end of life; due for replacement.
- Absorption Chiller - Cooling Tower and tank: nearing end of life and will require replacement.
- Building houses utility tie-in and is the 13,200V distribution source for the campus. No problems were reported.
- Wireless equipment is at end of life and requires replacement.
- Office space and toilet room not ADA compliant.
- Fire alarm is pull station only (no detection).



**1 YEAR**



**5 YEAR**

**CRV**

**\$2,019,710**

**Priority Issues**

**FCI**

**1.0%**

**DMB**

**\$20,399**

**DMB EXCESS**

**\$0**

Over APPA 5% benchmark

**0-5 Year**

**FCI**

**24.9%**

**DMB**

**\$502,504**

**DMB EXCESS**

**\$401,518**

Over APPA 5% benchmark

**MAINTAIN DMB**

**\$40,394**

Annual cost to maintain current DMB

**Power Plant**  
Monroe County Community College

**Vital Statistics:**

**Boiler House 100**

**Use Type(s):** Power House

**Built:** 1978

**Area:** 2,184 SF

**Floors:** 1

**Observation Highlights:**

- Original standing seam metal roof is regularly inspected and has no reported problems. PSI rates the roof condition as “generally in fair condition.”
- Sealant joints for building at end of life.
- Two original, gas-fired, low pressure, Cleaver-Brooks steam boilers (1978-1979). Boilers are annually inspected and maintained: Fire tubes show pitting on exterior. College anticipates full boiler replacement by 2020.
- Galvanized piping failing, main lines replaced. Balance of piping requires replacement of long sections when failure occurs. Entire piping system due for replacement.
- Two hot water tanks (one installed in 2007 and one in 2010).
- Fire alarm is pull station only (no detection).



**1 YEAR**



**5 YEAR**

**CRV**

**\$469,560**

**Priority Issues**

**FCI**

**0.6%**

**DMB**

**\$2,583**

**DMB EXCESS**

**\$0**

Over APPA 5% benchmark

**0-5 Year**

**FCI**

**14.3%**

**DMB**

**\$67,100**

**DMB EXCESS**

**\$43,622**

Over APPA 5% benchmark

**MAINTAIN DMB**

**\$9,391**

Annual cost to maintain current DMB

**Boiler House 100**

**Monroe County Community College**

**Vital Statistics:**

**Boiler House 200**

**Use Type(s):** Power House

**Built:** 1978

**Area:** 2,184 SF

**Floors:** 1

**Observation Highlights:**

- Original standing seam metal roof. Roof is regularly inspected and has no reported problems. PSI rates the roof condition as “generally in fair condition.”
- Two original, gas-fired, low pressure, Cleaver-Brooks steam boilers (1978-1979). Boilers are annually inspected and maintained: Fire tubes show pitting on exterior. College anticipates full replacement by 2020.
- Two hot water tanks; one replaced in 2004 and a second tank added in 2005.
- Large double door (original) is rusting and requires cleaning and repainting.
- Fire alarm is pull station only (no detection).



**1 YEAR**



**5 YEAR**

**CRV**

**\$469,560**

**Priority Issues**

**FCI**

**0.8%**

**DMB**

**\$3,522**

**DMB EXCESS**

**\$0**

Over APPA 5% benchmark

**0-5 Year**

**FCI**

**11.7%**

**DMB**

**\$54,751**

**DMB EXCESS**

**\$31,273**

Over APPA 5% benchmark

**MAINTAIN DMB**

**\$9,391**

Annual cost to maintain current DMB

**Boiler House 200**

**Monroe County Community College**

**Vital Statistics:**

**Boiler House 300**

**Use Type(s):** Power House

**Built:** 1978

**Area:** 1,924 SF

**Floors:** 1

**Observation Highlights:**

- Original standing seam metal roof is regularly inspected and has no reported problems. PSI rates the roof condition as “generally in fair to poor condition.” Minor leaks reported.
- Two original, gas-fired, low pressure, Cleaver-Brooks steam boilers (1978-1979). College anticipates full replacement by 2020.
- Galvanized piping failing, requires replacement of long sections when failure occurs. Entire piping system due for replacement.
- Two hot water tanks - 1 replaced in 1999, the other replaced in 2002. New hot water tank added for kitchen in 2002.
- Large double door (original) is rusting and requires cleaning and repainting.
- Fire alarm is pull station only (no detection).



**1 YEAR**



**5 YEAR**

**CRV**

**\$413,660**

**Priority Issues**

**FCI**

**0.8%**

**DMB**

**\$3,102**

**DMB EXCESS**

**\$0**

Over APPA 5% benchmark

**0-5 Year**

**FCI**

**14.3%**

**DMB**

**\$59,195**

**DMB EXCESS**

**\$38,512**

Over APPA 5% benchmark

**MAINTAIN DMB**

**\$8,273**

Annual cost to maintain current DMB

**Boiler House 300**

**Monroe County Community College**

**Vital Statistics:**

**Maintenance Butler Building**

**Use Type(s):** Storage

**Built:** 1978

**Area:** 1,500 SF

**Floors:** 1

**Observation Highlights:**

- Metal siding has cosmetic damage from vehicle / equipment impacts. The resulting damage will allow water to enter the building. Condition should be corrected.



**1 YEAR**



**5 YEAR**

**CRV**

**\$172,500**

**Priority Issues**

**FCI**

**2.5%**

**DMB**

**\$4,382**

**DMB EXCESS**

**\$0**

Over APPA 5% benchmark

**0-5 Year**

**FCI**

**4.4%**

**DMB**

**\$7,504**

**DMB EXCESS**

**\$0**

Over APPA 5% benchmark

**MAINTAIN DMB**

**\$3,450**

Annual cost to maintain current DMB

**Maintenance Butler Building**  
Monroe County Community College

## Vital Statistics:

### Technology Butler Building

Use Type(s): Storage

Built: 1983

Area: 1,830 SF

Floors: 1

## Observation Highlights:

- Corrugated metal roofing panels and wall panels with exposed, gasketed fasteners. Roof regularly inspected; can see daylight in some locations. Corrugated metal siding panels appear to have original, factory finish; nearing end of life.
- Gutters were full of debris and non-functional. Correct gutter condition and replace and/or repair missing downspouts.
- Aluminum-framed window, exterior screen assemblies are in need of repair.
- Natural gas line installed from SAE Building to the Technology Building was run above grade and is protected from damage by a large steel pipe. This installation is not code compliant and needs remediation.



1 YEAR



5 YEAR

**CRV**

**\$210,450**

### Priority Issues

**FCI**

**2.1%**

**DMB**

**\$4,462**

**DMB EXCESS**

**\$0**

Over APPA 5% benchmark

### 0-5 Year

**FCI**

**6.6%**

**DMB**

**\$13,848**

**DMB EXCESS**

**\$3,326**

Over APPA 5% benchmark

**MAINTAIN DMB**

**\$4,209**

Annual cost to maintain current DMB

**Technology Butler Building**  
Monroe County Community College



## Vital Statistics:

**Salt Storage**

**Use Type(s):** Storage

**Built:** 1999

**Area:** 400 SF

**Floors:** 1

## Observation Highlights:

- Salt has pushed the rear wall of the building out of plane. Currently the wall is restrained using a series of wooden braces. Wall should be restored to plumb and level condition once the salt supply is emptied.
- No reported roofing problems. Roof evaluation was not included in PSI's roofing condition report. No visual defects were noted.
- Overhead door tracks and associated door hardware are failing due to the corrosive nature of the salt and are nearing end of useful life.
- No visual inspection of floor surface was possible.



**CRV**

**\$46,000**

### Priority Issues

**FCI**

**14.0%**

**DMB**

**\$6,440**

**DMB EXCESS**

**\$4,140**

Over APPA 5% benchmark

**MAINTAIN DMB**

**\$920**

Annual cost to maintain current DMB

### 0-5 Year

**FCI**

**21.5%**

**DMB**

**\$9,890**

**DMB EXCESS**

**\$7,590**

Over APPA 5% benchmark



**1 YEAR**



**5 YEAR**

**Salt Storage**  
Monroe County Community College

## Vital Statistics:

### La-Z-Boy Center

**Use Type(s):** Auditorium, Classroom, Administration

**Built:** 2004

**Area:** 53,329 SF

**Floors:** 1 with mechanical mezzanine & balcony

## Observation Highlights:

- Coping metal at metal panel system does not properly slope back to the roof. A line of sealant was added to keep water from streaking the visible face of the metal panels. Condition should be carefully monitored for evidence of water infiltration into and behind the metal panel system.
- PSI rates the roof condition as “generally in fair to good condition.” Roof to wall transitions may need to be repaired as they are identified.
- Sealant where window frames abut metal panel system is failing and is due for replacement.
- Exterior soffit: Synthetic stucco on cementitious backer panels is cracking at panel joints.
- Exterior masonry joints are beginning to age and will require tuck-pointing in the near future. Masonry expansion / control joint sealants are likewise nearing end of life and will require general repair and replacement. Slight efflorescence was returning in selected areas.
- IT Room H143 needs a door grille added to provide proper ventilation.
- Wireless equipment is at end of life and requires replacement.
- Two, gas-fired, low pressure, Weil McLain heating hot water boilers (installed in 2004).
- One gas-fired, atmospheric, domestic hot water tank (installed in 2004).



**CRV**  
\$13,732,218

### Priority Issues

**FCI**

0.4%

**DMB**

\$54,929

**DMB EXCESS**

\$0

Over APPA 5% benchmark

### 0-5 Year

**FCI**

2.4%

**DMB**

\$335,066

**DMB EXCESS**

\$0

Over APPA 5% benchmark

**MAINTAIN DMB**

\$274,644

Annual cost to maintain current DMB



1 YEAR



5 YEAR

**La-Z-Boy Center**  
Monroe County Community College

## Vital Statistics:

**SAE Building**

**Use Type(s):** Storage

**Built:** 2005

**Area:** 768 SF

**Floors:** 1

## Observation Highlights:

- Cracks in CMU exterior wall, primarily at the ends of steel lintels over the overhead sectional doors should be monitored.
- No reported roofing problems. Roof evaluation was not included in PSI's roofing condition report. No visual defects were noted.
- Gutters currently drain to immediate grade. Splash blocks should be installed to limit splash onto the building
- Doors and frames are protected with primer only. Doors and frames should be painted to protect them from moisture damage.



**1 YEAR**



**5 YEAR**

**CRV**

**\$124,200**

**Priority Issues**

**FCI**

**1.8%**

**DMB**

**\$2,236**

**DMB EXCESS**

**\$0**

Over APPA 5% benchmark

**0-5 Year**

**FCI**

**3.0%**

**DMB**

**\$3,726**

**DMB EXCESS**

**\$0**

Over APPA 5% benchmark

**MAINTAIN DMB**

**\$2,484**

Annual cost to maintain current DMB

## Vital Statistics:

### Whitman Center

Use Type(s): Lab, Classroom

Built: 1991

Area: 17,650 SF

Floors: 1

## Observation Highlights:

- PSI rates the flat roof condition as “generally in fair to good condition” and the sloped roof is in “generally good condition.” Flat roof over Main Entry is in generally poor condition.
- Plastic laminate windowsills are failing and due for replacement. Evidence of moisture infiltration at and around windows.
- Monitor moisture levels within CMU veneer masonry. Topical sealer may aid in limiting moisture infiltration and reduce evidence of moss/mildew on the north side of the building.
- IT closet near the Lobby requires ventilation to remove heat build-up.
- Repair 12” x 12” hole in closet fire-rated ceiling near Lobby.
- Repair small hole in Maintenance Room fire-rated wall near Lobby.
- Wireless equipment is at end of life and requires replacement.
- Corrections to cracking and moisture damage at Lobby were performed, recommend that condition is monitored. Isolation joints were installed to reduce the appearance of future cracking in some locations. This may prove to be a temporary correction.
- College has replaced fire alarm panel.
- Student Lounge Area exterior concrete slab joint material between sections needs replacing.
- Two gas-fired, forced draft, Weil-McLain heating hot water boilers (installed in 1991).



1 YEAR



5 YEAR

# CRV

**\$3,459,400**

### Priority Issues

## FCI

**2.2%**

## DMB

**\$77,145**

## DMB EXCESS

**\$0**

Over APPA 5% benchmark

### 0-5 Year

## FCI

**5.4%**

## DMB

**\$186,462**

## DMB EXCESS

**\$13,492**

Over APPA 5% benchmark

## MAINTAIN DMB

**\$69,188**

Annual cost to maintain current DMB

## Vital Statistics:

Whitman Center Garage

Use Type(s): Storage

Built: 1991

Area: 480 SF

Floors: 1

## Observation Highlights:

- Roofing was not replaced during the 2006 re-roof of the main building. Roofing is at end of life and due for replacement.
- Plywood siding is in good condition, needs repainting. Wood trim, in some areas, needs replacement. All wood trim needs repainting.
- Overhead sectional door and man door are at end of life and due for replacement.



1 YEAR



5 YEAR

**CRV**

**\$55,200**

**Priority Issues**

**FCI**

**23.8%**

**DMB**

**\$13,138**

**DMB EXCESS**

**\$10,378**

Over APPA 5% benchmark

**0-5 Year**

**FCI**

**24.8%**

**DMB**

**\$13,690**

**DMB EXCESS**

**\$10,930**

Over APPA 5% benchmark

**MAINTAIN DMB**

**\$1,104**

Annual cost to maintain current DMB

**Whitman Center Garage**

Monroe County Community College

## Vital Statistics:

### Hurd Road Center

**Use Type(s):** Classroom, Vocational Space, Maintenance/Storage

**Built:** 1956, 1993, 2006, & 2008

**Area:** 18,321 SF (total)

**Floors:** 1

### Facility Highlights:

- The entire 18,321 SF is maintained by Monroe County Community College.
  - 5,836 SF built in 1956
  - 6,770 SF built in 1993, renovated in 2011 for the Welding Center
  - 2,777 SF built in 2006
  - 2,938 SF built in 2008

### 1956 Building Observation Highlights:

- Roof drainage issues were noted (downspouts at grade).
- Exterior wood cladding (wainscot) is a maintenance issue.
- Carpeting is worn out; at end of life and due for replacement.
- Main electric service and power distribution for entire building.
- Gas-fired, residential furnace, with AC for Office Area only. Factory furnace has been turned off.

### 1993 Building Observation Highlights:

- Man door at southern end is prime-coated, needs painting.
- Toilet room is not ADA compliant.
- Rafter-hung, gas-fired heater is vented through roof.



**1 YEAR**



**5 YEAR**

**CRV**

**\$2,601,582**

#### Priority Issues

**FCI**

**0.6%**

**DMB**

**\$16,130**

**DMB EXCESS**

**\$0**

Over APPA 5% benchmark

#### 0-5 Year

**FCI**

**2.5%**

**DMB**

**\$64,779**

**DMB EXCESS**

**\$0**

Over APPA 5% benchmark

**MAINTAIN DMB**

**\$0**

Annual cost to maintain current DMB

**Hurd Road Center**  
Monroe County Community College

### **2006 Building Observation Highlights:**

- Roof drainage issues were noted (downspouts at grade).
- Exterior Northwest corner man-door needs concrete slab.

### **2008 Building Observation Highlights:**

- Roof drainage issues were noted (downspouts at grade).
- Exterior Northwest corner man-door needs concrete slab.
- Exterior North overhead roll-up door needs concrete slab.

