

DEPARTMENT OF MILITARY AND VETERANS AFFAIRS
5-Year Capital Outlay Budget Plan
FY 2016-2020
October 31, 2014

I. Mission Statement

The Department of Military and Veterans Affairs (DMVA) operates and maintains forty-two active and three closed state-owned readiness centers, four federally owned facilities, a state-owned training center at Camp Grayling, and a federally-owned training center at Fort Custer. (The two Veteran's Homes Capital Outlay are included under separate cover.) These facilities must support the mission of tenant organizations for the Army. Facilities are critical to readiness, and support unit administration, maintenance, training and storage. They serve as command centers during domestic emergencies and as platforms for mobilization during times of war. Poor facility conditions negatively affect unit readiness and morale.

- A. Current status of facilities: DMVA's readiness centers range in age from 89 to less than 5 years and are located on parcels of land that range in size from one acre to more than 58 acres. Although millions of dollars are expended yearly to maintain and upgrade these facilities, several have exceeded their functional life-span and would require more than can be reasonably justified to be brought up to current accessibility and utilization standards. Most of the older readiness centers were built before the Americans with Disabilities Act (ADA) standards came into effect and are not in compliance with federal and state requirements. Of the 46 active readiness centers, 38 do not meet the National Guard Bureau (NGB) functionality requirements. These older facilities are not large enough to provide the classroom, storage, kitchen, locker room, and office space required to meet current standards. Changes in training technologies have placed additional emphasis and strain on outdated electrical systems and have increased the need for upgraded computer infrastructure.

- B. Recommendations: The DMVA's 5-Year Capital Outlay Budget Plan details the requirement to replace those aging facilities which are cost-prohibitive to continue to maintain and/or bring up to current accessibility and utilization standards. These readiness centers would be replaced with state-of-the-art, energy efficient facilities which will be functional throughout the 21st Century. Those readiness centers which have yet to exceed their functional life-span would be targeted for upgrade to current accessibility and utilization standards.

II. Programming Changes

Because of anticipated competition for federal and state funds, DMVA has been proactive in contracting master plans for our two training sites, our readiness centers and our facility maintenance shops. With these initiatives, DMVA is developing short, mid and long term goals that are aligned with our Master Plan. This will include upgrading and right-sizing readiness centers and facility maintenance shops statewide, and where practical, purchasing of buildings that meet our requirements and location needs. At Camp Grayling, we will be focusing on expanding its capabilities and collective level missions. This will enable it to provide training for regional states' National Guard units, United States Army Reserve units and the Active Component. As this occurs, we will focus on developing Fort Custer's capacity for increased numbers of squad level missions and overflow from Camp Grayling. DMVA has set a goal to have Camp Grayling "net-zero" in less than three years as well as decreasing energy use and grid dependency state-wide. Over the last year, DMVA has acquired federal funding to support the construction and installation of 3 wind funnels at our training sites, expand the solar array project at Fort Custer, and design and construct a virtual pipeline at Camp Grayling.

III. Facility Assessment

- C. Overview. DMVA operates and maintains 42 active state-owned and four federally owned readiness centers, a state-owned training area at Camp Grayling, and a federally-owned training area at Fort Custer.
- D. Facility Age. DMVA facilities range in age from 89 to less than 5 years old. The functional life-span of a readiness center is 50 years. The chart below provides a breakdown of the range of age of active readiness centers.

Over 80 years old	1
60-80 years old	3
40-59 years old	22
25-39 years old	8
10-24 years old	6
0-9 years old	6

- E. Property size. DMVA readiness centers are situated on parcels that range in size from one acre to more than 58 acres. The National Guard Bureau standard for acreage for readiness centers is no less than 15 acres with 20 acres being

desirable. The chart below provides a breakdown on the range of size of our active state-owned readiness center acreage:

Less than 2 acres	1
2-6 acres	16
7-14 acres	16
15-20 acres	1
More than 20 acres	8

F. Utilization Rates. National Guard Bureau Pamphlet 415-12, Army National Guard Facilities Allowances, prescribes size and utilization of space in readiness center. In all but the most recently constructed readiness centers, the number and size of classrooms, offices, locker rooms, food preparation and storage areas are significantly below the standard, resulting in grossly inadequate facilities.

G. Functionality. Due to changing political climate and war on terror, the military unit force structure has also increased. Since many of the DMVA's readiness centers have reached their life-span, they need to be extensively upgraded to meet current codes, technological infrastructure, accessibility standards and logistical mission requirements to match the increases in operations tempo. Most of the readiness centers are not large enough to provide the classroom, storage, locker room, office, administrative space and fire protection required to meet these standards. Changes in training technologies have placed additional emphasis on simulators and other computer-aided training requiring increased electrical and data infrastructure. The building shell at these readiness centers continues to be of serious concern. The roofs, boiler systems, windows, doors, and other internal infrastructure continue to age and degrade requiring more and more repairs to keep them in service. Additionally, over 57% of the readiness centers were built prior to 1972; the first year women were permitted to enlist into the Army National Guard, and were not designed to accommodate both genders. Although we have made great strides in addressing this issue, there are still 5 readiness centers that do not have adequate locker, restroom, or shower facilities for women.

H. Replacement Value. The current adjusted cost for existing facilities, including ancillary buildings at readiness center locations, is \$369,527,585. This consists of historical costs, plus major improvements. However, the replacement value of the existing infrastructure must take into consideration the changes in military force structure and unit composition mentioned in Para III.e above. Therefore, replacement readiness centers will be larger and have additional required features and capabilities. The estimated replacement cost of all active state and federally-owned readiness center is provided in the following chart (chart does not include the JFRC Headquarters Readiness Center).

Department of Military and Veterans Affairs
 5 Year Capital Outlay Budget Plan
 FY 2016-2020
 October 31, 2014

Type of Readiness Center	Number	Cost Per Readiness Center	Total Cost
Single Unit Readiness Centers	28	\$10 million	\$280 million
Multiple Unit Readiness Centers	17	\$18 million	\$306 million
Total	45		\$586 million

- I. Facilities Utilities Systems. In most instances, utilities (electric, gas, water/sewer, and telephone) for each complex are provided by private or public utility companies. These companies are responsible for upgrade and maintenance of systems to the point of delivery. Upgrade and maintenance of the internal utility infrastructure (heating, ventilating, and air conditioning systems, water pipes, electrical lines, etc.) are the responsibilities of the DMVA. Because of the age of many of the readiness centers, there are continuous repair and maintenance requirements for internal utility systems. Unless the older readiness centers are replaced, extensive repairs are anticipated to electrical, heating and plumbing systems. Repair and maintenance cost estimates for the next five years can be found in Para IV.b.

In a continued effort to effect energy performance, we utilize numerous energy reduction measures when designing new or remodeled facilities. These measures also help in meeting the energy reduction goals that are set forth by the federal government requirements. They include such actions as installing lighting fixtures with occupancy sensors, motion sensors in parking lots, double pane windows, high efficiency boilers, increasing the roof and wall insulation R factors, installing demand control ventilation systems and low-flow flush valves on bathroom fixtures. Advanced meters are currently being installed to more accurately measure utility consumption in our facilities. Also, 10% of our facilities will undergo an energy audit in FY15 with 25% scheduled for follow on fiscal years. An Energy Analyst has been hired to conduct these audits and is presently working on studies to meet this schedule. We also have a functioning Qualified Recycling Program; its mission is in conjunction with our continued energy reduction measures.

- J. Condition of Facility Infrastructure. The primary supporting infrastructure surrounding each readiness center is parking surfaces. These include paved and unpaved, Government Owned Vehicle (GOV) and Privately Owned Vehicle

(POV) areas. At 34 of our readiness centers, the GOV and POV parking areas do not meet National Guard Bureau criteria. In inclement weather, movement of heavy vehicles on these surfaces cause substantial damage and requires subsequent repair of the parking areas as several are in general degradation status and all 34 are rated poorly. As units are modernized and become more mobile, additional parking requirements for organizational equipment is generated. In most cases, fenced, secure parking areas with security lighting are required. At older locations with minimal acreage, there is insufficient space for GOV and POV parking.

- K. Adequacy of utilities and infrastructure. As outlined in Paras IIIe, IIIf, and IIIg above, several readiness centers require repair and preventive maintenance, including replacement of infrastructure (utilities, roofs, boilers, windows, doors, flooring), prior to failure of the structural component.
- L. Capacity for future development on existing land. In some instances, adequate acreage exists to replace readiness centers at the same locations. However, for many of the readiness centers exceeding their useful life-span, there is no available space for replacement or future development. Most of these readiness centers are in the built-up areas of the communities.

IV. Implementation Plan

The DMVA Implementation Plan consists of two separate, but equally important, components: Readiness Center Replacement and Readiness Center Infrastructure Upgrade/Repair/Maintenance.

- A. Readiness Center Replacement. As detailed in Para IIIb., the DMVA has 25 readiness centers that are over 40 years old and 1 that is over 80 years old. Taking into consideration that there are continuous repair costs, inadequate training facilities, lack of adequate GOV and POV parking areas, as well as a functional need for more acreage, these facilities are targets for replacement. In addition, there are some demographic markets which could support existing or proposed force structure where readiness center do not exist and should be built.
 - 1) Because of historical underfunding of the ARNG Military Construction (MILCON) program, obtaining federal funding to construct new readiness centers has waned. There are no approved MILCON readiness center projects on the Future Years Defense Plan (FYDP).
 - 2) In order to provide sufficient facilities for our soldiers, DMVA has begun a new initiative to purchase existing properties and convert them into readiness

centers. With the initial investment made by the state, DMVA can request federal match funds to be used to cover the costs to convert the facility into a readiness center. DMVA made its first purchase in October 2012 with a church in the City of Belmont using our Armory Construction funds. DMVA is scheduled to close in November 2014 on the purchase of a school in Traverse City.

- 3) DMVA continues to explore the markets in the Flint and Detroit areas. After the purchase of the Traverse City property, we will have exhausted all funds in the Armory Construction fund. DMVA does have 4 readiness centers and numerous parcels of land for sale with a total appraised value of \$2,241,600. Should a property become available before any of the excess property is sold, DMVA will request support from the State General Fund to help with purchase of property.

B. Readiness Center Infrastructure Upgrade/Repair/Maintenance. As outlined in Para IIIe, many readiness centers require upgrading to meeting ADA, training, and functionality requirements. Other locations require upgrade of readiness center infrastructure in order to reduce resultant repair/maintenance costs. The federal government provides reimbursement to the state, normally 50/50, for maintenance repairs on state owned facilities. As existing facilities continue to age and deteriorate, repair and maintenance requirements will increase. The following repair/maintenance cycle chart provides details for each:

Type of Project	# per year	Total Cost
Boiler replacement	2	75,000.00
Roof replacement	4	600,000.00
Door repair/replacement	2	75,000.00
Readiness Center Modifications	4	2,000,000.00
Lighting repair/replacement	2	100,000.00
Replace Fire Alarms	2	100,000.00
ADA upgrades	1	50,000.00
TOTALS	17	3,000,000.00

C. Impact of addressing structural repairs and upgrades over time. With an adequate long range Capital Outlay Plan, the DMVA can program the replacement of aging and deteriorating readiness centers, thus deferring or rescheduling structural repair, maintenance, and upgrade projects. However, some of the repairs accomplished each year are of an emergency nature, where deferment would cause further structural damage or creates a safety risk.

- 1) One benefit derived in addressing structural repairs or upgrades in the short term, rather than the long (5 year) term, includes maintaining and/or improving the facilities, which are utilized not only by National Guard members during training assemblies, but by local communities. The failure to properly maintain or repair facilities reflects poorly on the image of the Michigan Army National Guard and the Michigan Department of Military and Veterans Affairs. When unsafe conditions are present due to the need for repairs/maintenance, the facilities are not available for use by both the community and the unit(s) located in the readiness center. Failure to program structural repairs would adversely affect the ability of assigned units to conduct required training and thus degrade their readiness.
- 2) The DMVA does not have the personnel resources to address all structural deficiencies immediately. Additionally, if the Department were to request funding and schedule all structural repair/upgrade requirements immediately, there would be an adverse affect on the ability of units to conduct training if many of our readiness center were undergoing extensive repairs/upgrades.

D. Rate of Return on Expenditures - There are two areas in which this Capital Outlay Budget Plan will provide significant operational savings:

- 1) Utility Savings - The DMVA has realized a significant savings in utility costs as a result of its ongoing efforts to replace non-energy efficient roofs, windows, doors, and heating systems. The scheduled replacement of these items in selected readiness centers over the next five years will further enhance the savings. It is estimated that the rate of return due to the upgrade of utility components is 25% per year, thus recovering investment costs in just 4 years. There will be more usable information available when the results from the afore-mentioned energy audit are made available.
- 2) Readiness Center Replacement - The capital investment of replacing older readiness centers is recouped during the first 20 years of the life of the readiness centers. In many instances, the DMVA has spent many times more than the state's share of new readiness center construction in repairs/maintenance costs.

Grand Rapids Home for Veterans

I. Mission Statement

In accordance with GRHV Administrative Policy 01-01-M1, the mission of the Grand Rapids Home for Veterans is to provide compassionate, quality interdisciplinary care for the members to achieve their highest potential of independence, self-worth, wellness and dignity.

Leadership, staff, and members interact to develop operational programs of service, coordinate care given, and determine unmet needs.

The Home has a distinguished tradition of meeting the ever-changing needs of Michigan veterans. Service programs are developed to be efficient, effective, enhance the quality of life, and be accountable to the public purpose that underlies the Home. The Grand Rapids Home for Veterans is a symbol of America's promise to her veterans, that in return for their sacrifices and call to duty they would be cared for in time of need.

II. Programming Changes

The major change from the Home's past operational structure that will continue over the next five years, contingent on funding, will be the remodeling of member rooms in the McLeish Building and subsequently the Mann Building. This includes restructuring the Home from its practice of housing nursing veterans in 4-bed rooms to providing remodeled 2-bed and 1-bed rooms. The purpose of the remodeling has been and continues to be to enhance the quality of the life and medical care provided to our members while maintaining a nursing care census that is at a manageable and appropriate level relative to community nursing care standards. The most significant trend in State Veteran Home care is the increasing frequency of applicants with serious mental illness and behaviors that are difficult to manage. Veterans are also coming into the Home at later stages of complex illnesses with more chronic care needed. Veterans from the current conflicts may come into the Home in the future needing larger equipment in their rooms. These factors necessitate changes in the physical structure of a facility designed for a different veteran population.

The federal Omnibus Budget Reconciliation Act (OBRA) of 1987 amended the Medicaid program requirements for nursing homes and OBRA (425CFR483.70[d]) specifies that member rooms must be designed and equipped for adequate care, comfort, and privacy of the resident. The previous program structure did not allow for adequate privacy for veterans and their families and it did not provide a home-like environment. These program changes require a significant amount of maintenance and capital expenditure to bring to fruition.

The MVAA is in the very early stages of investigating the implementation of Medicaid certification for the State Veterans homes. This may require changes in the physical

structure of the buildings. These changes are unknown at this time. In addition, any cost projection for potential physical changes is also unknown.

The MVAA plans to fully implement electronic medical records (EMR) at the State Veterans Homes during FY2015. There may be minor changes necessary to interior walls to accommodate certain aspects of the EMR. It is also possible that minor changes to the existing telecommunications lines will be necessary to accommodate the system.

The GRHV is implementing in FY15/16 a capital asset management system that will allow the Home to better manage our capital assets and equipment. This system will assist the Home in determining how often we have purchased parts for or worked on a specific part or piece of equipment and search for trends associated with that task to determine if there is a potentially larger infrastructure issue. This will allow the Home to be able to understand when our equipment needs replacing and be on an accurate schedule for capital improvement and replacement.

III. Facility Assessment

Existing facilities age, land usage and physical condition

The Grand Rapids Home for Veterans is, by nursing population, the 6th largest state veterans home out of 149 in the nation. It has been providing long term nursing care for eligible veterans and their dependents at its current location since 1886. We currently provide nursing care at various levels in three resident nursing care buildings:

- Mann Building (built in 1988) - 121,383 sq. ft.
- McLeish Building (built in 1975) – 164,972 sq. ft.
- Rankin Building (built in 1946) – 54,200 sq. ft.

They are all block/concrete/steel/column construction with brick exterior and joined end-to-end on the first floor by breezeway.

Other buildings and structures on grounds:

- NCO Club/Clothing Room building, built in 1906, is wood frame construction with stucco exterior (4,900 sq. ft.)
- Public toilet building, built in 1978, is block construction with brick exterior (400 sq. ft.)
- Maintenance building, built in 1979, is block construction with brick exterior (10,800 sq. ft.)
- Power Plant, built in 1956, is block construction with brick exterior (13,941 sq. ft.)

Department of Military and Veterans Affairs
5 Year Capital Outlay Budget Plan
FY 2016-2020
October 31, 2014

- Poppy Room/Storage building built in 1975 is metal frame building with metal sheeting exterior (2,000 sq. ft.)
- Old Ice House building, built in 1885, is poured concrete construction (1,700 sq. ft.)
- Grounds building, built in 1974, is metal frame with metal sheeting exterior (2,000 sq. ft.)
- Bandshell structure, built in 1976, is wood frame construction with asphalt shingle exterior (2,000 sq. ft.)
- Greenhouse, built in 1967, is aluminum frame with glass construction (2,000 sq. ft.)
- Large tractor garage, built in 1950, is cement block construction (1,089 sq. ft.)
- Cemetery storage building, built in 1885, is block construction (110 sq. ft.)
- Cooling tower structure, built in 1975, is block and brick construction (110 sq. ft.)
- Cannon shelter, built in 1982, is wood frame construction (1,000 sq. ft.)
- Picnic shelter, built in 1983, is wood frame construction (430 sq. ft.)
- Storage building, built in 1998, is metal frame construction with metal sheeting (2,400 sq. ft.)
- Nature trail gazebo, built in 2000, is wood frame construction (675 sq. ft.)
- Grotto Park Healing Garden gazebo built in 2008 is wood frame construction (576 sq. ft.)
- Grotto Park Healing Garden pavilion, built in 2008, is wood frame construction (952 sq. ft.)
- Potting Shed, built in 2013, is wood frame construction (432 sq. ft.)

The total gross square footage of all buildings and structures is 388,070 sq. ft.

The entire campus occupies a tract of land of approximately 89 acres.

A registered veterans cemetery occupies approximately 11 ½ acres on the north end of the grounds. There is approximately 7 wooded acres on the south end of the campus that is the site of a nature trail for member recreation. To the east (rear) of the buildings, we provide parking for 334 employees and members. To the west (front) of the facility, we provide parking for 111 visitors and volunteers. The grounds are cared for by the Grounds Department and accessible to all members. All buildings and structures on the grounds are currently being used.

The Power Plant provides heat, domestic hot water, air conditioning and emergency power for all facilities on the grounds.

Exceptions:

- No air conditioning to the maintenance building (except the offices, conference room and break area, served by stand-alone unit)
- No air conditioning is provided to the greenhouse
- No air conditioning provided to the grounds building

- No air conditioning, heat or water provided to the storage building
- No air conditioning or water provided to the large tractor garage
- No air conditioning provided to the poppy room/storage building- air conditioning provided to poppy room with stand-alone unit
- No air conditioning provided to the public toilet building
- No air conditioning provided to the NCO Club/Clothing Room building (air conditioning provided to NCO Club side by a stand-alone unit)
- No air conditioning, heat or hot water provided to the cemetery storage building

The non-resident out-buildings are not supported with the fire alarm system.

A. Building utilization

We are currently occupied at 95% of our authorized capacity for nursing care, with approximately 407 members. Relative to other state veterans' homes throughout the nation, this is average. The buildings are aging and member rooms, physical therapy areas, member recreational areas, hallways, and shower rooms are in need of remodeling in all buildings. The kitchen and dining areas are in need of remodeling. There is a general shortage of space for equipment storage, housekeeping and general storage that are all supportive to nursing care. Nurse stations in the 39 year old McLeish Building are not constructed to be HIPPA compliant and are in need of remodeling to adjust for more recent regulations affecting health care institutions. Some equipment used for nursing care and food preparation are aged and in need of replacement.

B. Mandated facility standards for program implementation

The Home is regulated by the U.S. Department of Veterans Affairs under Nursing Home Care Standards for State Veterans Homes for all aspects of clinical care food standards and life/safety standards. The Michigan Department of Licensing and Regulation, Bureau of Fire Services for all applicable NFPA standards and OSHA/MIOSHA General Industry Standards. Life Safety Codes are enforced by the State Fire Marshall.

C. Functionality of existing structures and space allocation

- Skilled nursing care – 164,683 sq. ft.
 - Domiciliary care – 27,566 sq. ft.
 - Nursing administration & clinics – 2,009 sq. ft.
 - Social services – 1,893 sq. ft.
 - Activity/Recreational therapy – 9,143 sq. ft.
 - Physical therapy – 2,235 sq. ft.
 - Occupational therapy – 990 sq. ft.
 - Nutritional services – 11,493 sq. ft.

Department of Military and Veterans Affairs
5 Year Capital Outlay Budget Plan
FY 2016-2020
October 31, 2014

- Pharmacy – 1,241 sq. ft.
- Medical supplies – 1,838 sq. ft.
- Housekeeping/linen services – 6,525 sq. ft.
- Plant operations – 44,625 sq. ft.
- General administrative – 7,268 sq. ft.
- Employee lounge/locker/toilet areas – 4,691 sq. ft.

The Rankin Building is the oldest of the structures, constructed in 1946. It provides three stories of resident care, the first level being utilized for nursing care and the second and third level utilized for domiciliary care. It contains terrazzo flooring, ceramic tile walls and centrally located bathing systems. Exterior brick is in need of tuck and pointing and sealing. The overall roof has exhausted its warranty, is 25 years old, and in need of replacement. The HVAC system is over 30 years old and, while operable, is outdated and inefficient; with an estimated cost of \$750,000 to replace. The windows are 25 years old and will be in need of replacement in the next five years. The elevators are in poor condition. The building has had no electrical enhancements in 25 years. Although the electrical meets code, if there was any major renovation work the electric in the building upgrading would have to be done including additional electrical outlets and additional lighting fixtures. At almost 70 years old, the building is no longer appropriate for nursing home care relative to community standards. The building is naturally dark, the hallways are narrow, the bathrooms and resident rooms are aged.

The McLeish Building was constructed in 1975 and some member rooms and hallways are undergoing renovation. The building contains three resident floors and a first floor that houses clinical areas, administrative offices and a cafeteria. The current floor lay out includes 42 resident rooms per floor; two associated nurses' stations with medication rooms; two associated centralized bathing areas with all necessary plumbing fixtures and patient bathing equipment; several associated offices and connecting hallways; two central dining rooms with small pantry areas. The interior changes involve lighter wood and countertop colors and removal of the darker look that was prevalent in buildings constructed in the early to mid-1970s. Flooring and doors are being replaced to accommodate wheelchairs and engagement with heavier equipment. Doors should be replaced with more gash and ding resistant doors, which are more expensive but needed. The exterior brick is in good condition and a tuck and point was completed in 2001. The building contains several roof systems. The resident roof building was replaced in 1991 and is still in good condition, but will have to be replaced in the next five years. The kitchen roof was replaced in 2003 and in good condition. Another part of the roof covering the resident courtyard section, and major social gathering areas was replaced in 2008 and is in good condition. The HVAC is in good condition; however it is a pneumatic system. This is thirty year old technology. Overall temperatures are appropriately monitored, but controlling individual separate member rooms cannot be accomplished with this technology.

The windows are brand new in 2014 and rooms and dining areas now meet the VA requirement for glazing and light entry. The elevators are original to the structure, and modernization has only been done to the motors and controls. The interior of the elevator cars consist of original equipment. The electrical system meet code, although as resident rooms are being renovated, more outlets are being added.

The Mann was constructed in 1988. It houses resident on three floors, with 36 resident rooms on each floor. The building is in overall good condition with all exterior components including rooms. The roof, windows and exterior brick are currently in good shape. The roof was replaced in 2008 and is in good condition. The utility systems are in good condition. The core infrastructure of the HVAC system is good and operates properly. However the DDC controls for individual rooms is in need of replacement as it is first version technology from 1988. Interior rooms are a maintenance issue with the aging of the building and the rooms do not conform to current day communal nursing home living standards.

- D. Estimated replacement value of existing facilities (based on State of Michigan OFM Property Accounting Ledger Report for Fiscal Year ending 9/30/2013)

\$40,572,243.00 including property
(Current book value per report = \$9,002,615.00)

- E. Utility System Condition

Rankin Building – The HVAC is a rectangular duct system, low velocity with fan coil units located in all patient rooms. This is an inefficient system relative to modern standards. The heating system is a radiant two-pipe system. The water system is galvanized mains and risers with copper supply to all fixtures. The sewage system throughout the building is cast iron, is aged and susceptible to cracking, rusting and breaking. The electrical system is all copper conductors run in conduit throughout the building. In 2001 a project was done to fully sprinkle and fire suppress the entire building.

McLeish Building – The HVAC is a rectangular duct system, low velocity with original fan coil units located in all patient rooms. This is an inefficient system relative to modern standards. The air handling units are a duct system and are not designed for today's standards of atmospheric comfort. Most of the heating and cooling controls in the building are pneumatic. Heating is hot water radiant, one pipe mono-flow tee system. The water system is galvanized mains and risers with copper supply to all fixtures. The galvanized nature of the water system creates a maintenance issue because they rust out and pieces are replaced as they fail with modern piping. The sewage system throughout the building is cast iron, is aged and susceptible to cracking, rusting and breaking. The electrical system is all copper conductors run in conduit throughout the building. The fire

alarm system, including the ceiling smoke detectors, pull stations, door closers and all annunciating equipment is Seimans. Duct detectors are all wired true alarm to the system. In 2009, the building became fully suppressed with a new fire sprinkling system.

Mann Building – The HVAC is divided into two parts. Each side is served by separate supply air, return air and make-up air fans. The duct work system is round, high velocity. The heating system in the building is a hot water radiant, two-pipe system. The water system is galvanized mains and risers with copper supply to all fixtures. The sewage system throughout the building is cast iron. The electrical system is all copper conductors run in conduit throughout the building. The entire building is sprinkled with a charged wet type system. The fire alarm system, including the ceiling smoke detectors, duct smoke detectors, pull stations, door closers and all annunciating equipment is Seimans. It is tied to a central alarm system in the McLeish Building.

There are three boilers that serve the entire facility providing redundancy in service and range in age from 25 years to 8 years. The boilers are high pressure steam boilers. They are serviced annually to manufacturer and equipment code standards. The condition of the boilers is good.

A new domestic hot water plate and frame instantaneous hot water system with back up was installed in 2012. This is in new and excellent condition.

There are two chillers serving the Home's cooling system. The cooling system also includes a cooling tower constructed in 1985. One new 425 ton chiller was installed in 2014 and is in excellent condition. This chiller replaced a chiller that became inoperable in August 2013. Prior to this chiller fail both chillers were running 100% at peak months. Currently the new chiller has run 80% at peak with the second older chiller serving as a backup while the new chiller handles a vast majority of the load. The second chiller is an older 300 ton centrifugal chiller. This chiller runs inefficiently and is scheduled for replacement in spring 2015. A new chiller will be installed in its place to the specifications of the recently installed chiller. In addition the current aged cooling tower will be dismantled and two smaller, efficient cooling towers will be installed in spring/summer 2015 to assist with the cooling of the facility.

Much of the utility infrastructure from the power plant to the resident buildings is housed in an underground tunnel system where it is protected from the elements. Steam piping and hot water piping is all heavily insulated for efficiency. Some of the piping over the years has been repaired due to faulty welds or fittings breaking. Piping is 25 to 40 years old.

The electrical system has had periodic upgrades, is up to current state and federal code. Conduits that take the wiring from the power plant to the buildings are all in underground areas. Much of this is 25 to 40 years old. It is buried and

its current true condition is unknown. A generator serves the Home for stand-by emergency power. It was installed in 1973 and is a 12-cylinder Caterpillar diesel with 565kw. It currently only supplies code-required emergency power in resident buildings including exit signage, site lighting, emergency lighting and boiler power. The Home is undergoing a project that will replace the generator system in 2015. This project will add three new backup emergency generators dedicated to each of the facilities three main buildings. The generators will be located adjacent to the structures. They will be powered by diesel fuel supplied in self-contained tanks attached to the generator.

F. Facility Infrastructure Condition

Roads and parking lots are all asphalt and in marginal to poor condition. Spot repairs are made periodically as needed. Due to size of potholes and crumbling condition of the roads, many areas are beyond spot repairs and need complete replacement.

Approximately 14,000 sq. ft. of concrete sidewalk is 20+ years old and is in need of replacing. Only spot repairs have been made to take care of sagging and frost heaving sections during this time.

The GRHV has two bridges on its property. One connects the cemetery on the north end of the grounds to the rest of the agency grounds. The bridge currently has limited load-bearing capacity. In July 2012 a bridge inspection by Michigan Department of Transportation Bridge Inspection team was conducted. Based on their report, the bridge is in immediate need of replacement. Vehicular traffic was immediately restricted on this bridge and has been so since. The second bridge is constructed of wood, concrete and covered with sod. It is located over Lamberton Creek at the lower pond floor gate. The most recent inspection of this structure occurred in July 2000 and revealed what appears to be some deterioration of the wood structure underneath. We have since restricted traffic over this bridge to exclude motor vehicles except grounds care equipment.

The Home has a pond on its grounds fed by Lamberton Creek. The Home is in the study phase of a project to examine the benefits and feasibility of dredging and removing contaminated soil from the pond and its remediation. Dredging can have an impact on the dams and bridges and this is being investigated in conjunction with DVMA Office of Construction and Facilities Management and the state contractor.

A new front entrance and canopy was completed in fall 2013. The canopy is a steel and tensile structure and is 5,700 square feet in size. There is 3,500 square feet of heated sidewalk underneath the structure. It is in excellent condition.

New windows have been installed in the McLeish building as part of the overall remodeling of the structure. The project replaced 422 windows of varying sizes and configurations. The window installation was completed in October 2014.

G. Adequacy of existing utilities and infrastructure system

The Direct Digital Control system that controls the heating and cooling in the Mann Building is original to the 1988 structure. Due to its age 80% of the valves have to be manually adjusted to achieve the desired temperatures. Desired temperatures are reached, but to attain this is manual and time consuming. This is a software based system that contains parts that are no longer available on the market. The pneumatic control heating and cooling system in the McLeish Building is workable, but of old-fashioned design and very manual. The McLeish Building is a one pipe mono-flow tee system as opposed to a two-pipe system, which would have been more efficient in heating the space. The McLeish building was constructed in 1973-1975 during the energy crisis when there was a perceived benefit to saving money by putting in a one-pipe system.

The Home is serviced by substations of the local utility company. If the Home loses its primary electrical source from the utility, within five seconds the utility transfers the Home to the secondary source and the Home is under full power. The overall condition of the underground electric, given its age, is unknown. The boiler system in is good working order.

The generator system is scheduled for replacement during FY2015. The current diesel generator meets the current codes for backup emergency power but is not capable of supplying any extra emergency power in the member care buildings. The generator project will install a new generator at each member care building and install a new generator at the power plant. This will give the Home more backup power at each building to enable more equipment to be used and give the members more comfort. The additional generator at the power plant will allow one chiller to operate and give some cooling during the summer months should the Home lose power. The chiller system upgrade will be complete in FY2015. Domestic hot water system was replaced during FY2012.

H. Energy Audit

A general basic energy assessment was most recently completed in March 2012.

I. Assessment of existing land

The current site is approximately 89 acres and is adequate to meet our current needs. The State Veterans Cemetery occupies 11½ acres of this site and

contains around 5,000 graves. The current projection is that it has approximately ten years of space left for burials. It is probable that a columbarium structure will have to be erected in the near future for cremains to extend the active use of the cemetery. The roads in the cemetery are in need of replacement and are in fair to poor condition. The landscaping in the cemetery is old and needs consistent maintenance attention and possibly irrigation.

Within the next two years the federally operated VA Clinic that is to the rear of the Home's property is going to become vacant. The VA is moving their clinic operation to a new and modern location with better highway access. This 33,000 sq. ft. building has been offered to the State of Michigan through the GRHV on a lease to own option. In accordance with PA 61 of 1990 the Home has the right of first refusal of this land if it terminates its use as a VA clinic. The property is owned by a private entity and the land is leased to the federal government.

IV. Implementation Plan

A. Itemized list of major projects/Estimated cost

- 1) Direct Digital Control Project. \$2,000,000. This project will replace and add full DDC system in all resident buildings of the Home. The project will include a new head and new equipment. It will include all field devices that control outputs and regulate proper air temperatures, water temperatures, and steam control for heating systems as well as commercial kitchen equipment that uses hot water or steam for cooking purposes. This project will achieve total HVAC digital control throughout the facility. It will allow the Home to adjust temperatures in each individual room relative to member desired comfort levels.
- 2) Remodeling McLeish Building. \$6,000,000. Remodel 120 member rooms in the McLeish Building and Main-1 Courtyard in addition to those already remodeled on the building's second floor. The project will also include the remodeling of 4,200 square feet of hallways, 7 nurses stations, 7 dayrooms, 7 shower rooms and bathrooms throughout the McLeish Building.
- 3) Remodel Mann Building. \$6,000,000. Remodel 115 member rooms in the Mann Building. The project will also include the remodeling of 10,000 square feet of hallways, 6 nurses stations, 6 dayrooms, 6 shower rooms and bathrooms throughout the McLeish Building.
- 4) Paving/Repaving of Facility Roads and Sidewalks. \$1,700,000. The GRHV will repave/pave 10,147 lineal square footage of roadways and parking areas around the facility that have received only spot/patch repair in recent years. These roads include the roads to access the facility and the state veterans

cemetery. This project will also entail the replacing of approximately 14,000 square feet of sidewalk surrounding all three main buildings of the GRHV.

- 5) Replace State Veterans Cemetery Bridge. \$300,000. This project will remove the existing bridge and replace it with a new structure that will bear the weight of large trucks and motor vehicles and hearses for proper internment.

B. Impact

The Direct Digital Control project is a more efficient energy alternative to the current system. The current system is not automatic, it is manually controlled. Therefore, on a weekend and at night maintenance personnel have to come on overtime and manually adjust valves and or dampers.

The purpose of Board of Managers-initiated remodeling the McLeish and Mann Buildings are to provide more spacious and comfortable, homelike rooms which will provide more dignity and quality of life to the Michigan veterans who live here and rely on the State of Michigan for their medical care and quality of life. The federal Omnibus Budget Reconciliation Act (OBRA) of 1987 amended the Medicaid program requirements for nursing homes and OBRA (425CFR483.70[d]) specifies that member rooms must be designed and equipped for adequate care, comfort, and privacy of the resident. The previous program structure did not allow for adequate privacy for veterans and their families and it did not provide a home-like environment.

The roads and sidewalks repaving project calls for the excavation of the current paved portion of the road system, asphalt paving of the entire road including the dirt portion of the road system, removal of existing concrete curbs, removal of existing concrete stairs in the cemetery, the formation and placement of 24" non-reinforced concrete curb and gutter, the replacement of concrete stairs in the cemetery connecting to the road, and the installation of speed bumps. The entrance road system contains parking for visitors which is in poor condition, with prevalent large potholes and cracks all of which create hazards for the numerous physically disabled residents and members of the community which visit the Home. The parking will be replaced as part of the laying of the new road. There are numerous asphalt cracks and humps in the generally deteriorated cemetery roads. Concrete curbing is deteriorated, crumbling or non-existent. Concrete steps in the older portion of the cemetery are broken, deformed and potentially dangerous to use. The overall condition of the road, curbing and concrete work is poor. A large portion of the road in the cemetery used to access the newer plots is not paved or graded, is muddy and impassible in some weather, and presents a potential safety hazard. The entire road surface is in substandard condition and in need of replacement. The 14,000 square feet of sidewalk surface at the GRHV is in need of repair and replacement. Much of the sidewalk is 20+ years old and are cracking and experiencing upheavals. Many veterans

who live at the GRHV are mobile, and many are in wheelchairs, use canes, or need assistance in some form to walk. Uneven pavement and holes in the pavement as a result of aged sidewalks may cause avoidable falls and injuries.

The replacement of the State Veterans Cemetery bridge will allow the public to access the only active state owned veterans cemetery in Michigan, providing the cemetery with a modern safer entrance over Lamberton Creek.

C. Operational savings

The proposed configuration of the new cooling system could yield approximately \$150,000 in savings over five years. The Direct Digital Control system could yield approximately \$200,000 in savings over five years. These estimates have been provided by general contractors and professional design firms in the area.

D.J. JACOBETTI HOME FOR VETERANS

I.Mission Statement

Michigan Veteran Affairs Agency Mission Statement: Serve as the central coordinating point, connecting those who have served in the United States Armed Forces and their families, to services and benefits throughout the State of Michigan.

The primary mission of the D.J. Jacobetti Home for Veterans is to surround members with a home-like environment which provides compassionate quality interdisciplinary care to achieve their highest potential of independence, self-worth, wellness and dignity.

Keeping pace with the disabled population's changing needs, the D.J. Jacobetti Home for Veterans is a modern nursing home that serves and encourages its members to function at their maximum level. The D.J. Jacobetti Home for Veterans' staff places great emphasis on tailoring care plans to a member's individual needs to encourage their independence, rather than dependence. To that end, the Veterans' Home has adopted a comprehensive minimum data set needs assessment process. Every person admitted to the Home is thoroughly evaluated by medical services, social services, nursing, activities, dietary and physical therapy in terms of abilities and disabilities. Based on this comprehensive assessment an Interdisciplinary Care Plan is established within the first seven days of admission. An Interdisciplinary Team Meeting is conducted every 90 days to measure progress for the nursing member and every

180 days for the domiciliary member. The care plan also measures the deterioration and disabilities associated with the aging process. The focus is always on the member's abilities rather than disabilities. A State Veterans Home operated under the Michigan Veterans Affairs Agency; the D.J. Jacobetti Home for Veterans provides 155 nursing care beds, 27 memory care beds, two isolation beds and 22 domiciliary beds.

Michigan Veterans Affairs Agency Vision Statement: For Michigan to be the most veteran-friendly state by: providing the advice and assistance veterans need as they transition through the chapters of their lives; creating a “no wrong door” customer service culture; and advocating for and on behalf of veterans and their families.

The D.J. Jacobetti Home for Veterans will provide the highest quality of care to its Members and provide an environment that promotes a meaningful quality of life by being a center of excellence in long-term care. To attain this goal, the Home must continually assess its programs and services, provide such services to its Members, and support the Members and their families by meeting their ever-changing needs.

Objectives:

1. Maintain compliance with the laws, regulations, requirements, and standards of the State Nursing Home Regulations and the Federal V.A. Nursing and Domiciliary Standards.
2. Provide the best possible medical and nursing care to meet the needs of each veteran as determined through individual assessment, health professional intervention, and care planning.
3. Continually refine and develop programs to meet the changing needs of the State's veteran population while maximizing non-general fund revenues and improving the quality of care.
4. Develop, expand, and maintain professionally directed, therapeutically beneficial rehabilitation initiatives consistent with veteran needs and facility resources that will assist each veteran in achieving and retaining their maximum functional level.
5. Maintain a clean, safe, attractive environment, including buildings, grounds, equipment, and areas supportive to veterans' care.

Michigan Veterans Affairs Agency Values: Inclusion, Integrity, Transparency, Innovation, and Respect

Inclusion is proactive behavior that makes each member feel welcome and a part of their care plan providing a compassionate response to the needs of veterans and their families.

Integrity incorporates the qualities of honesty, trustworthiness, and personal responsibility into a commitment to provide excellent service in a fair and consistent yet flexible manner.

Transparency is the fact in which all relevant information regarding our Home is fully and freely available to the public and capable of being explained.

Innovation is creating and seeking opportunities to demonstrate continuous improvement to meet the ever changing needs of our members and offers them the opportunity to achieve independence and self-worth.

Respect is shown for personal circumstances and promotes an inclusive environment, encouraging creativity, humor, and flexibility.

We treat each Member, family, significant other, and employee with compassion, dignity and respect; exceed our customers' expectations; and recognize and honor all service to our country by the military, veterans, and individuals.

II. Programming Changes

Although we do not anticipate any significant programming changes over the next five years, the health care industry continues to evolve and long-term care providers will need to adapt and change as well to meet the challenges of our aging population.

The most significant trends already impacting the operation of the facility is the increasing medical/nursing acuity and the frequency of applicants with serious mental illness and difficult to manage behaviors. The DJJHV has one 63-bed unit that is designated as "basic" nursing and this unit often has some empty beds due to a lack of applicants whose needs are "basic" vs. skilled nursing. Staffing levels need to be increased and some physical plant modifications will be necessary to deal with this changing caseload.

At the D.J. Jacobetti Home, we have a need to continue to maintain and upgrade our physical plant to ensure life safety systems are sound and to improve the environment for the veterans who live here. It is imperative to ensure that the facility is modernized to provide a safe and quality living environment.

Modern long-term care incorporates a true “home” environment for aged residents and we continually strive to create a home. The renovation of the interior spaces in the oldest part of the facility will make the Jacobetti Home a safe and modern “home” for the veterans we care for.

III. Facility Assessment

Age, Usage and Physical Condition:

The Home is operated as a long-term care facility and the buildings along with the parking lots encompass 90% of the available land. The original building was constructed in 1954 and has undergone additions in 1965, 1967, and 1988. The latest construction in 1988 was a 50-bed addition and this wing has an independent heating system and a shared chilled water cooling system (updated 2012). The Home is constructed of masonry and brick veneer walls with interior plaster finishes. With the exception of the 1988 50-bed addition, ceramic tiles are installed up to 48 inches above finished floors in public areas. The roof has an average of 6 inches of insulation except over the Chapel.

A. Building Utilization:

The Home maintains a skilled nursing occupancy rate of 95%.

B. Mandated Facility Standards:

VA Nursing Home and Domiciliary Care Standards for State Veterans Homes
Michigan Dept. of Community Health State Nursing Home Licensing Standards
OSHA Standards
MIOSHA Standards
Food Service HACCP Standards
Life Safety Codes enforced by State Fire Marshal

C. Functionality of Existing Structures/Space Allocation to Program Areas Served:
Approximately 560 sq. ft. per member.

D. Estimated Replacement Value:

\$33,678,000; Based on grant requests from the VA State Home Construction Grant Program.

E. Assessment of Utilities System:

All resident areas of the Home are air-conditioned. The electrical system was updated in 2006 with the installation of a new emergency generator, transfer switch and replacement of many power panels and feeders. In addition, corridor lighting was upgraded to meet NFPA Life Safety Code. An automated fire suppression sprinkler system was installed in 2006, providing coverage to the entire building. Previously, only hazardous areas and a portion of the nursing units were sprinkled. A large portion of the plumbing system in the oldest part of the building has been replaced; however, additional upgrades will be required. Due to deterioration of the system, some repairs are needed on an on-going basis as the waste and vent piping disintegrates. The heating system was upgraded in 1998 and is in fair condition. Some emergency re-tubing of boilers was completed in 2007.

F. Assessment of Infrastructure:

Much of the roofing has been updated and is in good condition, with the most recent upgrade occurring in 2006. The oldest roof (part F) needs to be replaced this fiscal year. The amount of parking available is barely adequate at this time due to an increasing number of volunteers, visitors and families at the Home each day. We currently manage by using an adjacent abandoned parking lot (non-State owned).

G. Adequacy of Utilities and Infrastructure Systems to Current and 5-Year needs:

The plumbing system is adequate but requires ongoing repairs. The roofs are currently adequate.

H. Assessment of Existing Land; Capacity for Future Development; Acquisition needs: Existing land is adequate for current operations, but additional land adjacent to the facility is needed for additional parking.

IV. Implementation Plan

A. Major Projects in Priority Order/Estimated Costs:

- Replace Air Handling Units (\$300,000)
- Replace Hot Water Boilers (\$500,000)
- Replace Steam Humidifiers (\$120,000)
- Replace Interior Doors (\$450,000)
- Replace Asbestos Floor Tiles and Worn/Stained Carpet (\$125,000)
- Renovation of 2 West Nursing Unit (\$700,000)
- Renovation of 1 West Nursing Unit (\$700,000)
- Renovation of 3rd Floor Unit (\$500,000)

Replace Greenhouse Glass and Framework (\$75,000)

B. Impact of Addressing Structural Repairs Immediately vs. Over the Next Five Years:

Based on the Home's needs and priorities, we have scheduled our requests in priority order. The impacts of not addressing the issues requested for FY 2016 are as follows: The replacement of the oldest air handling units, hot water boilers and steam humidifiers are the final phase of updating the core mechanical infrastructure of the building. Once completed, the usable life of this building is extended for decades. In addition, proactively completing these updates greatly reduces the probability of failures requiring emergency repairs or replacement.

Renovations and upgrades are as important for current veterans (40% are WWII era) as they will be for future veterans and completing the renovations as soon as feasible is the prudent action in our efforts to provide long-term care for our Nation's heroes.

C. Rate of Return/Savings Generated by Capital Outlay:

Maintaining modern and up-to-date physical plant and living environment allows us to maximize our nursing census, which in turn, maximizes federal and restricted revenues, reducing the State portion of the cost of operating the home.