



Bureau of Organizational Services

**Five-Year Capital Outlay Plan
FY2024 - FY2028**

October 30, 2022

MICHIGAN DEPARTMENT OF HEALTH AND HUMAN SERVICES

2024 Five-Year Capital Outlay Plan

Mission Statement

The Michigan Department of Health and Human Services (MDHHS) provides opportunities, services, and programs that promote a healthy, safe and stable environment for residents to be self-sufficient.

Department History

In April 2015, the Department of Human Services (DHS) was merged with the Department of Community Health (DCH) to create MDHHS.

Department of Human Services

The Department of Human Services was created in 1965 as a principal department with the name of "Department of Social Services." Renamed in 1995 to "Family Independence Agency," the department was once again renamed in 2004 to indicate its status as a principal department as the "Department of Human Services."

Department of Community Health

The Department of Community Health was created in 1996 through an executive order merging Department of Public Health (as Community Public Health Agency), Department of Mental Health, Medical Services Administration from the Department of Social Services, responsibility for Liquor Control Commission, Licensing, Monitoring and Accreditation and Division of Occupational Health from Department of Commerce, Food Service Sanitation from the Department of Agriculture and many functions of Department of Social Services.

Merger

The merger of DHS and DCH was enacted by Governor Rick Snyder's Executive Order No 2015-4.

Department Overview

MDHHS administers a variety of programs that are largely managed by the department's core resource areas – children, adults, family support, health services, population health and workforce. There are also several administrative divisions (for example, Financial Operations, Policy Planning Operational Support, Legislative Affairs and External Affairs and Communications) that provide vital services in support of the department's program operations.

Well-maintained and functional facilities are needed to support programs such as juvenile justice facilities, psychiatric hospitals and centers, laboratories, vocational and technical institutions and customer service offices.

Ongoing maintenance and repairs are needed to preserve the longevity and ensure that the infrastructure remains operable, providing continued support for the programs and overall mission of the department. Proactive repair and replacement of critical infrastructure that is rapidly aging and deteriorating has become increasingly difficult. As maintenance is deferred and needed repairs and improvements continue to go unaddressed due to the lack of available funding, the risk of infrastructure failure increases. As infrastructure failures occur, funding that is available must be directed toward emergency repairs, often at a much greater expense.

Where there is flexibility regarding the allocation of available funding, MDHHS looks to establish priorities for capital outlay planning. These priorities are established focusing on the following factors:

- **Operational need:** The critical nature of the department's mission and responsibility to Michigan citizens and taxpayer's mandates that the department's facilities be sufficient to meet their service functions. Full utilization of the department's varied resources is dependent upon sufficient and functional facilities.
- **Preventative maintenance:** The department must preserve its existing capital investments so that it may continue to fulfill its mission and provide services to Michigan residents. Effective preventative maintenance practices minimize costs over the long term, prevent health and safety hazards and allow for minimal interruptions of service.
- **Accessibility:** The department must strive to ensure that its facilities, programs and projects are barrier-free and accessible to all users.
- **Energy-efficient facilities:** The department seeks to promote energy-efficient facilities and reduce facility energy consumption. Opportunities include installing energy-efficient lights, water heaters, heating and ventilation systems and low-flow plumbing fixtures. Proper maintenance of roofs, installation of building insulation and the reduction of exterior air infiltration lead to further energy efficiencies.
- **Partnering/consolidation:** Where possible, the department shares facilities with other agencies to promote efficiencies and maximize the use of available funding. The department works with local government agencies and other entities to develop opportunities for Michigan residents.

The strategy for capital outlay planning interconnects with overarching priorities of the department. It focuses on:

- Serving people who have specialty services or support needs related to mental illness, developmental disability, substance use disorders and children with serious emotional disturbance.
- Being a leader in prevention and treatment for juvenile delinquency, building safe and healthy communities through our balanced approach, professionalism, and shared commitment to innovation and effective partnerships.
- Promoting and protecting the health of the population through surveillance and response to health issues, prevention of illness and injury and improvements in access to care.
- Providing emergency aid, food, childcare and other services to eligible Michigan residents.
- Coordinating services for Michigan's aging and adult population.

Five-Year Capital Outlay Plan Components

I. Mission Statement

The Juvenile Justice Program will be a national leader in prevention and treatment for juvenile delinquency, building safe and healthy communities through our balanced approach, professionalism and shared commitment to innovation and effective partnerships.

II. Programming Changes

Bay Pines Center is a 35-bed secure treatment facility for any gender who have been adjudicated for one or more felony counts. Bay Pines Center (BPC) has 24 female treatment beds and eight male treatment beds. BPC also has eight detention beds for youth who are awaiting a court decision. Currently Bay Pines Center is licensed to accept up to 35 youth, age 11 to 21. BPC is a state operated residential facility.

BPC is in the beginning stages of becoming specialized in Mental Health and Behavior Stabilization while utilizing a trauma informed treatment milieu.

III. Facility Assessment

BPC was built in 1994 and is located on 24 acres in Escanaba and is composed of multiple buildings consisting of a total square footage of 38,760.

a. Building utilization rates compared to industry standards:

Utilization is a measure of facility efficiency. The ratios of program (beds) and support space is used as the basis of measure. Bay Pines Center has a ratio of 773 sf./bed which yields a 93% efficiency.

b. Mandated facility standards for program implementation, where applicable (for example, federal/industry standards for laboratory facilities, hospitals, compliance with consent decrees, etc.):

The Bay Pines Center maintains compliance with Michigan Child Welfare Licensing standards as well as Department of Justice Prison Rape Elimination Act (PREA) standards.

c. Functionality of existing structures and space allocation to program areas served:

Bay Pines Center - 33,000 sq. ft. (Residential Center)
Frens Building - 1,920 sq. ft. (Storage)
McKeage Building - 1440 sq. ft. (Storage)

**ATTACHMENT E -
BAY PINES CENTER**

Pavilion - 720 sq. ft.
Pierce Building - 1680 sq. ft. (Storage)

- d. Replacement value of existing facilities (insured value of structure to the extent available):

Unknown.

- e. Utility system condition (such as heating, ventilation, and air conditioning (HVAC), water and sewage, electrical, etc.):

The current domestic hot water heating system has been replaced. Project was completed in 2017/2018.

The Air Handle and Air Conditioning Unit have been both replaced, project was completed in 2018/2019.

The Muffin Monster (sewage grinder) and Sewer Pumps have both been replaced in 2018.

- f. Facility infrastructure condition (such as roads, bridges, parking structures, lots, etc.):

The replacement of the security camera system project was completed 2018/2019.

When the fire alarm goes off all the doors to the outside yard automatically unlock allowing youth to exit in the event of a fire. Due to the security risk this poses, additional fencing in backyard around emergency exit doors was added. Project completed in 2019 thus eliminating this risk.

Flooring needed to be replaced in the gym/hallway/recreational pods/youth rooms. This area of the flooring is original to Bay Pines Center therefore approximately 27 years old. The flooring is composed of a rubberlike material. The flooring was disintegrating very slowly causing a dust like material to cover the floors. Flooring was replaced in the gym and hallway in 2019; however, the flooring in the youth's rooms was not replaced.

The shower rooms on each of the five living pods and gym needed to be refinished as the tile, plumbing and sufficient ventilation has been deemed a health and safety violation by the Delta County Health Department. This project is completed. However, the paint in the showers is now peeling off the walls.

Replacement of all interior/exterior locks to keyless pads will eliminate the cost of repairing/replacing keyed locks and eliminates security concerns regarding lost/stolen keys. Keyless pads would provide better controlled access keeping youth, staff, and buildings safe and secure. Project is in the end stages of

ATTACHMENT E - BAY PINES CENTER

completion. However due to COVID 19 was on hold. I would also note that this project has not been completed to adequate standards and is currently failing. Specifically, the locks not mounted correctly are falling off the door, doors are not opening when swabbed by the key fob, fob boxes have come lose, conduit is exposed therefore youth can pull off the wall (should have been designed differently), etc. This project is ongoing and needs additional funding.

Replace/repair all doors within the secure area of the facility. The building is 27 years old, and the doors are extremely heavy. Therefore, over the years they have worn out the hinges causing them to not shut properly. Some doors are damaged due to use/abuse over the years, and some are warped causing them not to close properly. In addition to the above, the youth barricade themselves in the rooms by placing their mattress between the door and the toilet or propping themselves in the same area and using their legs to prevent staff from entering their rooms. In these situations, staff have to use a devise that forces the door open which does cause damage. This has to occur when youth block their windows, and staff can't maintain line of sight supervision over the youth. This is a security concern. Estimating approximately 100 doors at \$6,000.00 per door. Currently Bay Pines Center has numerous windows broken due to the kids throwing rocks at them which causes them to break. Also, the youth are able to get on their beds and kick/hit the windows within their rooms which causes them to break. The windows do not shatter. However, the youth are able to pick small pieces of the glass out of the window once broken and use it as a weapon to hurt themselves or someone else. We are replacing broken windows with a product that can't be broken. Each window is \$300 to replace (window plus installation). Approximately 70 windows total need to be replaced in order for all youth room windows to be replaced as well as any window that they can throw rocks at while in the outside recreational area. This is a health and safety concern.

Youth are breaking the current light fixtures in their rooms. We are constantly having to have them replaced. We would like to be able to have them replaced with a non-breakable/correctional grade setting material. This is a safety concern as they are breaking the bulbs, plastic, and ripping them out of the ceiling thus exposing wires and utilizing the material as weapons to harm themselves or others, In addition to the above, the current flooring in the youth's rooms is laminate, which over time the caulking around the wall and floor has come lose. The youth pick at the floor and hide stuff in cracks or pull chunks of flooring when upset. Some youth use the flooring pieces to self-harm by cutting themselves with the sharp edges of the flooring. It is recommended that the flooring be replaced with a more durable/solid surface.

It should be noted that over the past 10 years the number of mental health youth that need to be emotionally stabilized has increased dramatically within Bay Pines Center. These youth are exhibiting increased suicidal and self-harm ideations and attempts. This is a health and safety concern.

**ATTACHMENT E -
BAY PINES CENTER**

Bay Pines Center continues to clean the walls and painted surfaces. However, paint is peeling off the walls and is discolored. Bay Pines Center has not had the interior of the building painted in over 12 years. This needs to be completed by a professional in order to ensure the surface area is properly prepared so the paint does not peel/scratch off the walls.

The drop ceiling within the secure residential area is very dirty and water stained and is sagging in multiple areas throughout the building. In addition to the above, the duct work located above the drop ceiling is very loud and is causing sound problems with the camera system. It is recommended that this be replaced with a better quality/sounds resistant product. The lack of ability to clearly hear when reviewing video footage is a safety and security risk.

Current medical and dental offices have the original equipment in them when the facility was built in 1994. The equipment has already exceeded the recommended use expectancy due to the contractors only coming into the facility on a limited weekly basis. The equipment is starting to need repair and the cost of replacing it is cheaper than repairing it.

The secure fenced-in area the youth use to get outside doesn't have a shaded area for the youth to sit under to help protect them from the UV rays. This area could also be used when the youth have family visits, keeping everyone in a secure area.

- g. Adequacy of existing utilities and infrastructure systems to current and five-year projected programmatic needs:

Current utilities and infrastructure systems are adequate to meet the programmatic needs of the facility five years into the future with the above noted infrastructure and utility improvements. I would note that Bay Pines Center has started the process to become an accredited Juvenile Justice Treatment Facility through CARF. Building safety and security is part of the accreditation process. These improves are likely to impact the ability to become accredited unless corrected.

- h. Date of most recently completed energy audit, and, if an energy audit has yet to be completed, what is the plan/schedule for doing so?

Last energy audit is unknown.

- i. Land owned by the agency, including a determination of whether capacity exists for future development, additional acquisitions are needed to meet future demands, or surplus land can be conveyed for a different purpose:

The Bay Pines site is currently located on 24 acres, which appears to be very adequate for present day needs and should be fully capable of providing additional space for any program development which may occur during the next five years.

IV. Implementation Plan

- a. Itemized listing of major capital projects by priority, including brief description and estimated cost. (*Adjust previously developed or prior year's figures utilizing industry standard CPI indexes where appropriate*):

See Bay Pines Center (BPC) Capital Outlay Five-Year Plan spreadsheet in this document.

- b. Define the impact of addressing deferred maintenance and structural repairs, including programmatic impacts, immediately versus over the next five years:

Failure to provide special maintenance or capital outlay funding to maintain the facility creates increased facility repair costs and unnecessary demands on facility maintenance staff and creates potential health and safety problems for staff and visitors. BPC is a 24-hour juvenile secure residential facility and must maintain a secure, safe and functioning facility to maintain staff, patient and public safety. I would note that Bay Pines Center has started the process to become an accredited Juvenile Justice Treatment Facility through CARF. Building safety and security is part of the accreditation process. These improves are likely to impact the ability to become accredited unless corrected.

- c. Identify, to the extent possible, a rate of return on planned expenditures. This could be expressed as operational savings that a planned capital expenditure would yield in future years.

Delaying needed repairs until they become critical generally results in costlier future special maintenance project costs and longer disruption in the BPC mission of providing residential treatment to youth. It also results in more youth being harmed by the above identified safety factors.

Building	Project	Brief Project Description	Facility Priority	Cost Estimate	Status	Funding Source
Shawono Center	Upgrade youth Showers/Bathrooms	The showers are almost 30 years old and poorly ventilated, which over time has caused the grout to break apart, the ceiling to flake and mold to grow. The shower doors remain locked all the time, limiting our ability to increase air flow to stop the spread of mold. Poor/slow water drainage is hazardous because youth wear flip flops when showering to prevent fungal infections.	1	\$300,000		
BPC (Residential Center)	Replace Doors/door handles in secure area of residential center	Replace/repair all doors within the secure area of the facility. The building is 25 years old and the doors are extremely heavy therefore over the years they have worn out the hinges causing them to not shut properly. Some doors are damaged due to use/abuse over the years, some are warped causing them not to close properly. In addition to the above, the youth barricade themselves in the rooms by placing their mattress between the door and the toilet or propping themselves in the same area and using their legs to prevent staff from entering their rooms. In these situations, staff have to use a device that forces the door open which does cause damage. This has to occur when youth block their windows and staff can't maintain line of sight supervision over the youth. This is a security concern. Estimating approximately 100 doors at 6,000.00/per door.	2	\$600,000		
Shawono Center	Boilers	The Boiler system is 25 years old and it's age demands constant attention to ensure heat and water temperature are working. Even then, many places in the building do not have regulated heat, causing disruption to sleep for youth, and during allergy season, the heating system brings about dry air. The corrosion on the boiler plates causing more usage of propane, which is astronomical in cost for the age of the building. Additionally, the boiler heats the buildings water, and this has been a problem previously. This facility needs hot water for youth showers, laundry, cleaning and sanitizing of dishes (a health department violation).	3	\$120,000		
Shawono Center	Roof Repair	If the remainder of the roof is not completed, Shawono will continue experiencing leakage during times of hard rain and when the snow/ice melt. Leakage causes further damage not only the outer structure of the building but results in additional damage inside too. Larger amounts of water have ruin paint, areas of drywall, ceiling tiles, flooring and carpet. Pools of water unnoticed may increase the risk to youth and staff's safety and causes mold growth.	4	\$350,000		
BPC (Residential Center)	Separate Heating/Cooling from Fire Suppression System	The Boiler system has a combined heating/cooling fluid system that is combined with the fire suppression system. Once a year, the cooling fluid needs to be drained so that the inspection can be completed and put back in. The yearly cost to complete this is approximately \$11,000.00. It is not very user friendly and is against fire code.	5	\$750,000		
BPC (Residential Center)	Secure Youth Bedroom Upgrades - Replace light fixtures, and new flooring.	1) Youth are breaking the current light fixtures in their rooms. We are constantly having to have them replaced. We would like to be able to have them replaced with a non-breakable/correctional grade setting material. This is a safety concern as they are breaking the bulbs, plastic, and ripping them out of the ceiling thus exposing wires and utilizing the material as weapons to harm themselves or others. 2) The current flooring is laminate which over time the caulking around the wall and floor has come lose. The youth pick at the floor and hide stuff in cracks or pull chunks of flooring when upset, some youth use th flooring piecing to self harm by cutting themselves with the sharp edges of the flooring. Replace floor with a more durable/solid surface. (approximate cost: light (includes installation) -120,750/Flooring - 250,000.00 (includes installabtion)/. This is a health and safety risk.	6	\$370,750		
Shawono Center	Replace Gym Floor	Shawon's gym is a heavily used space, especially in the winter and spring months. Replacing the flooring with a rubber-based cushion would make it "softer" because currently concrete is underneath the wood. During high impact sports, such as basketball, youth have been hurt when they fall. In addition to daily recreation for youth, the gym is used for social skills activities by group leaders, staff training and student assemblies. Most importantly, evidence-based research promotes the mind body connection. Exercise increases positive mental health outcomes by reducing symptoms associated with aggression, hyper-activity, depression, and anxiety. Shawono is working to establish an increase in the way exercise is therapeutically used in treatment with one of our goals being to decrease the use of seclusion and restraints	7	\$250,000		

BPC (Residential Center)	Two-way PA system between staff console and each youth's room	Installation of a PA system that allows staff to hear and speak to youth while they are in their rooms, especially at nighttime to monitor for safety in between 15-minute room checks. Currently staff can hear the youth in approximately half the room but due to the system being obsolete. Due to it being obsolete we can no longer fix the system when it breaks. We cannot talk to any of the youth in their rooms. It should be noted that over the past 10 years the number of mental health youth that need to be emotionally stabilized has increased dramatically within Bay Pines Center. These youth are exhibiting increased suicidal and self harm ideations and attempts. This is a health and safety concern. Approximate cost \$500,000.00	8	\$500,000		
Shawono Center	Convert All Lighting to LED	Reduce headaches associated with fluorescent overhead lighting, eliminate the "buzzing" sound associated with the older lighting system, more cost effective for a 24-hour facility. Reduce the need to purchase large, expensive over head lights, help ensure safety of youth with proper well-lit, heavily occupied areas throughout the building.	9	\$150,000		
BPC (Residential Center)	Interior painting	Bay Pines Center continues to clean the walls and painted surfaces however paint is peeling off the walls and is discolored. Bay Pines Center has not had the interior of the building painted in over 10 years. This needs to be completed by a professional in order to ensure the surface area is properly prepared so the paint doesn't peel/scratch off the walls.	10	\$200,000		

Five-Year Capital Outlay Plan Components

I. Mission Statement

The Juvenile Justice Program will be a national leader in prevention and treatment for juvenile delinquency, building safe and healthy communities through our balanced approach, professionalism and shared commitment to innovation and effective partnerships.

II. Programming Changes

Shawono Center is a secure treatment facility for male juveniles between the ages of 12 and 21 years who have been adjudicated for one or more felony counts. The center offers three specialized treatment programs. The Sexually Reactive program has 20 beds and limits the contact with the other treatment groups. The other 20 beds are a mixture of General Treatment with mild to medium mental health issues and Addictions/Substance Abuse Treatment. Shawono Center also has up to two detention beds available for youth through 20 years of age.

There are currently no planned programming changes.

III. Facility Assessment

Shawono Center is located on a 10-acre parcel that is heavily wooded and contains a small lake in a secluded area, a few miles from the city of Grayling. The U.S. Military Affairs owns the parcel of land.

a. Building utilization rates compared to industry standards:

Utilization is a measure of facility efficiency. The ratios of program (beds) and support space is used as the basis of measure. Shawono Center has a ratio of 1,322 sf/bed, which yields a 54 percent efficiency rating.

b. Mandated facility standards for program implementation, where applicable (such as federal/industry standards for laboratory facilities, hospitals, compliance with consent decrees, etc.):

The Shawono Center maintains compliance with Michigan Child Welfare Licensing standards as well as Department of Justice Prison Rape Elimination Act (PREA) standards.

c. Functionality of existing structures and space allocation to program areas served:

Main Building (1994) - 48,018 sq. ft. (Residential Center)

**ATTACHMENT E –
SHAWONO CENTER**

Department of Natural Resources Building (1974) - 5,500 sq. ft. (Storage)
Gas Storage Shed (1974) - 120 sq. ft.
Generator Housing (1979) - 100 sq. ft.

- d. Replacement value of existing facilities (insured value of structure to the extent available):

Unknown.

- e. Utility system condition (for example, heating, ventilation, and air conditioning (HVAC), water and sewage, electrical, etc.):

The septic field is quickly beginning to leach. This needs to be a high priority.

The current AC systems in the northeast classroom area, northeast dorms, and northeast classrooms need upgrading. The medical A/C was upgraded in 2020 medical corridor.

The emergency electrical system was upgraded within the last several years to include the kitchen area and coolers.

The plumbing in the building is aging. Plumbing for the rooms on South Pod, West Pod and the isolation room need upgrading as parts are starting to fail. Replacement parts, when available, are being utilized but all rooms need upgrading. The bathrooms in the administrative section were upgraded in 2020.

The control panels for the dorm areas were replaced in the last 18 months. This project is completed.

In evaluating electrical efficiency in the building, converting the lighting to LED would create a cost savings. The outside lighting is beginning to fail, replacing the outside lights will create efficiency while also increasing safety to Shawono residents, staff, and visitors.

The CCTV system is being replaced beginning July 25, 2022.

The roof is currently being partially replaced. The most critical areas that were leaking have been addressed. When the current project is completed approximately 60% of the roof will have been replaced. The remainder of the roof will need to be replaced.

The youth bathrooms and showers in the facility need maintenance and upgrading as they are showing signs of aging.

The boiler is more than 20 years old and will need to be replaced at some point soon.

**ATTACHMENT E –
SHAWONO CENTER**

- f. Facility infrastructure condition (such as roads, bridges, parking structures, lots, etc.):

Shawono Center did major improvements to the exterior of the building several years ago. The overall building is in good shape except for major maintenance and roof repairs to the main building. This was recently added to the list to be worked on this year. We are in the process of utilizing existing funds to repair the worst areas of the roof. We will need additional funds to finish the roof.

The parking lot was last resealed in 2012. The administrative parking area was expanded in 2020.

- g. Adequacy of existing utilities and infrastructure systems to current and five-year projected programmatic needs:

Current utilities and infrastructure systems are adequate to meet the programmatic needs of the facility five years into the future. A repair of this drain system is of the highest priority. The following recommendations are being made to replace/upgrade as soon as possible. This project is currently underway.

The gym floor is beginning to show its age and will need to be addressed at some point in the future.

Site/Architectural Items:

Resealing driveway.

Repairing roof (Project approved and in initial assessment phase, approved for phase one of the project.)

Replacing interior and exterior locks (complete)

Mechanical Items:

Replacement of two AC Units

Plumbing for dorm rooms and isolation rooms

Boiler

Electrical Items:

Lighting systems

Control panels for keyless entry for doors (completed)

- h. Date of most recently completed energy audit, and, if an energy audit has yet to be completed, what is the plan/schedule for doing so?

Business Energy Survey completed in 2013 by Great Lakes Energy.

- i. Land owned by the agency, including a determination of whether capacity exists

for future development, additional acquisitions are needed to meet future demands, or surplus land can be conveyed for a different purpose:

Shawono Center is situated on a 10-acre site with a small lake which is well suited to meet the facility's current program needs. There is ample room for future building expansion should there be a need to expand the Treatment/Detention Program or accommodate other specific building space needs. U.S. Military Affairs owns the land.

IV. Implementation Plan

- a. Itemized listing of major capital projects by priority, including brief description and estimated cost. (*Adjust previously developed or prior year's figures utilizing industry standard CPI indexes where appropriate*):

See Shawono Center Capital Outlay Five-Year Plan spreadsheet in this document.

- b. Define the impact of addressing deferred maintenance and structural repairs, including programmatic impacts, immediately versus over the next five years:

Failure to provide special maintenance or capital outlay funding to maintain the facility creates increased facility repair costs and unnecessary demands on facility maintenance staff and creates potential health and safety problems for staff and visitors. The Shawono is a 24-hour juvenile secure residential facility and must maintain a secure, safe, and functioning facility to maintain staff, patient and public safety.

- c. Identify, to the extent possible, a rate of return on planned expenditures. This could be expressed as operational savings that a planned capital expenditure would yield in future years.

Delaying needed repairs until they become critical generally results in costlier future special maintenance project costs and longer disruption in the Shawono Center mission of providing residential treatment to youth.

Building	Project	Brief Project Description	Facility Priority	Cost Estimate	Status	Funding Source
Shawono Center	Upgrade youth Showers/Bathrooms	The showers are almost 30 years old and poorly ventilated, which over time has caused the grout to break apart, the ceiling to flake and mold to grow. The shower doors remain locked all the time, limiting our ability to increase air flow to stop the spread of mold. Poor/slow water drainage is hazardous because youth wear flip flops when showering to prevent fungal infections.	1	\$300,000		
BPC (Residential Center)	Replace Doors/door handles in secure area of residential center	Replace/repair all doors within the secure area of the facility. The building is 25 years old and the doors are extremely heavy therefore over the years they have worn out the hinges causing them to not shut properly. Some doors are damaged due to use/abuse over the years, some are warped causing them not to close properly. In addition to the above, the youth barricade themselves in the rooms by placing their mattress between the door and the toilet or propping themselves in the same area and using their legs to prevent staff from entering their rooms. In these situations, staff have to use a device that forces the door open which does cause damage. This has to occur when youth block their windows and staff can't maintain line of sight supervision over the youth. This is a security concern. Estimating approximately 100 doors at 6,000.00/per door.	2	\$600,000		
Shawono Center	Boilers	The Boiler system is 25 years old and it's age demands constant attention to ensure heat and water temperature are working. Even then, many places in the building do not have regulated heat, causing disruption to sleep for youth, and during allergy season, the heating system brings about dry air. The corrosion on the boiler plates causing more usage of propane, which is astronomical in cost for the age of the building. Additionally, the boiler heats the buildings water, and this has been a problem previously. This facility needs hot water for youth showers, laundry, cleaning and sanitizing of dishes (a health department violation).	3	\$120,000		
Shawono Center	Roof Repair	If the remainder of the roof is not completed, Shawono will continue experiencing leakage during times of hard rain and when the snow/ice melt. Leakage causes further damage not only the outer structure of the building but results in additional damage inside too. Larger amounts of water have ruin paint, areas of drywall, ceiling tiles, flooring and carpet. Pools of water unnoticed may increase the risk to youth and staff's safety and causes mold growth.	4	\$350,000		
BPC (Residential Center)	Separate Heating/Cooling from Fire Suppression System	The Boiler system has a combined heating/cooling fluid system that is combined with the fire suppression system. Once a year, the cooling fluid needs to be drained so that the inspection can be completed and put back in. The yearly cost to complete this is approximately \$11,000.00. It is not very user friendly and is against fire code.	5	\$750,000		
BPC (Residential Center)	Secure Youth Bedroom Upgrades - Replace light fixtures, and new flooring.	1) Youth are breaking the current light fixtures in their rooms. We are constantly having to have them replaced. We would like to be able to have them replaced with a non-breakable/correctional grade setting material. This is a safety concern as they are breaking the bulbs, plastic, and ripping them out of the ceiling thus exposing wires and utilizing the material as weapons to harm themselves or others. 2) The current flooring is laminate which over time the caulking around the wall and floor has come lose. The youth pick at the floor and hide stuff in cracks or pull chunks of flooring when upset, some youth use th flooring piecing to self harm by cutting themselves with the sharp edges of the flooring. Replace floor with a more durable/solid surface. (approximate cost: light (includes installation) -120,750/Flooring - 250,000.00 (includes installabtion)/. This is a health and safety risk.	6	\$370,750		
Shawono Center	Replace Gym Floor	Shawon's gym is a heavily used space, especially in the winter and spring months. Replacing the flooring with a rubber-based cushion would make it "softer" because currently concrete is underneath the wood. During high impact sports, such as basketball, youth have been hurt when they fall. In addition to daily recreation for youth, the gym is used for social skills activities by group leaders, staff training and student assemblies. Most importantly, evidence-based research promotes the mind body connection. Exercise increases positive mental health outcomes by reducing symptoms associated with aggression, hyper-activity, depression, and anxiety. Shawono is working to establish an increase in the way exercise is therapeutically used in treatment with one of our goals being to decrease the use of seclusion and restraints	7	\$250,000		

BPC (Residential Center)	Two-way PA system between staff console and each youth's room	Installation of a PA system that allows staff to hear and speak to youth while they are in their rooms, especially at nighttime to monitor for safety in between 15-minute room checks. Currently staff can hear the youth in approximately half the room but due to the system being obsolete. Due to it being obsolete we can no longer fix the system when it breaks. We cannot talk to any of the youth in their rooms. It should be noted that over the past 10 years the number of mental health youth that need to be emotionally stabilized has increased dramatically within Bay Pines Center. These youth are exhibiting increased suicidal and self harm ideations and attempts. This is a health and safety concern. Approximate cost \$500,000.00	8	\$500,000		
Shawono Center	Convert All Lighting to LED	Reduce headaches associated with fluorescent overhead lighting, eliminate the "buzzing" sound associated with the older lighting system, more cost effective for a 24-hour facility. Reduce the need to purchase large, expensive over head lights, help ensure safety of youth with proper well-lit, heavily occupied areas throughout the building.	9	\$150,000		
BPC (Residential Center)	Interior painting	Bay Pines Center continues to clean the walls and painted surfaces however paint is peeling off the walls and is discolored. Bay Pines Center has not had the interior of the building painted in over 10 years. This needs to be completed by a professional in order to ensure the surface area is properly prepared so the paint doesn't peel/scratch off the walls.	10	\$200,000		

Five - Year Capital Outlay Plan Components**I. Mission Statement**

The mission of the Caro Psychiatric Hospital (CPH) is to provide an appropriate range of active inpatient psychiatric treatment services to best meet the needs of adults with severe mental illness and adults with autism spectrum disorder in collaboration with community health agencies and authorities. Divisions of specialized care are identified to meet ongoing treatment needs that reflect multiple medical and psychiatric diagnoses as well as those with learning disabilities. The prevalence of clinical behaviors and medical disorders that demonstrate self-injurious acts, increased violence and medical needs have created the need for more intensive treatment and physical plant modifications to ensure safety and security measures are maintained in order to provide therapeutic activities for the patients.

II. Programming Changes

Therapeutic programmatic changes have involved the modification and the expansion of the Psychosocial Rehabilitation Program (PSR) in order to provide five (5) hours of scheduled treatment seven (7) days per week for adults with severe chronic mental illness. The programs have an interdisciplinary approach that provide treatment focused on improving the biopsychosocial aspects for the individual patient as well as safety enhancements. The programs provide opportunities to participate in normalized roles, training activities of daily living and positive therapeutic relationships in an effort to prepare patients for community reintegration. Patient education, individual and group therapies involving recovery, and recreational, occupational, music and activity therapies are planned in accordance with the person-centered plan of service. The wide range of therapeutic PSR activities are delivered in the residential treatment areas. Since the COVID-19 pandemic, more treatment modalities are provided in the residential treatment areas. For the past three (3) years, virtual/telehealth visits with clinicians, community mental health representatives, court officials and families/guardians have been utilized.

Programmatic revisions in the therapeutic delivery system for patients with neuropsychiatric disorders are anticipated in the next five years in accordance with clinical symptomatology and staffing resources. Because this population has demonstrated increased multiple neurological, physical and mental impairments, the environment requires specialized physical modifications in order to maximize independence, provide training opportunities and ensure safety, particularly for the elderly who are often physically frail and fragile.

III. Facility Assessment

A. Building utilization rates compared to industry standards

The CPH is one of three public hospitals that provides adult inpatient psychiatric services to residents of the state. The average census for mentally ill patients is projected to be 100.

B. Mandated Facility Standard for Program Implementation

The CPH maintains its accreditation by the Joint Commission and its certification by the Centers for Medicare and Medicaid Services.

C. Functionality of Existing Structures and Space Allocation to Program Areas Served

The new CPH should meet the current and future needs of the program.

Main Building - 127,000 SF
Salt Shed – 3500 SF
Well House – 240 SF

D. Replacement Value of Existing Facilities

Unknown

E. Utility System Condition

The electrical system at CPH is powered by – Detroit Edison, With Emergency Generator Backup.

The HVAC system is a closed loop system consisting of 3 mechanical chillers, Multiple Air Handlers, 4 low pressure boilers.

Potable and fire suppression water supplied by the City of Caro by a dedicated municipal water supply.

Emergency backup water supply provided by onsite supply well maintained by Caro Municipal DPW.

F. Infrastructure Condition

The new CPH infrastructure (roads and parking lots) should be adequate to meet the needs of the facility.

G. Adequacy of Existing Utilities and Infrastructure Systems

The utilities systems at the new CPH should be adequate.

H. Energy Audit

Not applicable for the new CPH.

I. Land Capacity

The new CPH is located on 25 acres in Caro.

IV. Implementation Plan

The new CPH is expected to open in the spring of 2023.

Revised: July 2022

Five-Year Capital Outlay Plan Components – FY24

I. Mission Statement

The Center for Forensic Psychiatry's (CFP) mission is to provide quality forensic mental health services to individuals and the Michigan court system.

II. Programming Changes

In April 2021, Unit South 4, female unit, was converted to a coed unit, housing male and female patients. Females are housed downstairs, males are upstairs.

III. Facility Assessment

The CFP is a 357,000 square foot facility consisting of four buildings. The main buildings opened in 2005. The main building comprising 347,554 sq. ft. is a two-story structure constructed of masonry, brick, concrete, and steel. The physical exterior of the building is in very good condition.

a. Building utilization rates compared to industry standards:

The CFP, which is Michigan's sole certified forensic facility, conducts evaluations for all the district and circuit criminal courts in the state's 83 counties pursuant to state statutory requirements. The center is a 272-bed psychiatric facility that provides both diagnostic services to the criminal justice system and psychiatric treatment for criminal defendants adjudicated as incompetent to stand trial and/or acquitted due to insanity.

b. Mandated facility standards for program implementation, where applicable (such as federal/industry standards for laboratory facilities, hospitals, compliance with consent decrees, etc.):

The CFP maintains its accreditation by the Joint Commission and its certification by the Centers for Medicare and Medicaid Services (CMS).

c. Functionality of existing structures and space allocation to program areas served:

The facility is adequate to meet the current and projected needs of the program.

Main Building - 347,554 sq. ft. (Main Hospital)

**ATTACHMENT E –
CENTER FOR FORENSIC PSYCHIATRY**

Storage Building - 4,000 sq. ft.
Bar Screen Building - 1,440 sq. ft
Warehouse – 4,006 sq. ft.

- d. Replacement value of existing facilities (insured value of structure to the extent available):

Unknown.

- e. Utility system condition (for example, heating, ventilation, and air conditioning (HVAC), water and sewage, electrical, etc.):

The electrical system at CFP is powered from two primary distribution systems provided by Detroit Edison. The system is in very good condition. The emergency power is provided from two 1000KV generators that supply all life safety, critical power and equipment branch power. The facility's emergency power load is approximately 600KV. The system is in very good condition; however, the manufacturer timeframe to implement preventative maintenance on the automatic transfer switches has been met. The facility has started the PM and 50% has been completed.

The heating and ventilation system is in fair condition. Existing heating valves are failing. The facility staff has been replacing them, about 60 to date, but the frequency of failures is increasing as there are over 600 installed in the building. Also, all the heating piping though out the power plant and the facility has started to leak at the Victaulic fittings. We have started to replace them, and we have spent about \$90,000. The increased frequency of leaks could potentially become an infection control concern (mold). The main building cooling chillers are approaching their end of life cycle within the next five years.

CFP has a lift station/ bar screen building that handles all the sewage from the facility. The solution for addressing the handling of the bio waste by CFP staff is not adequate.

- f. Facility infrastructure condition (for example, roads, bridges, parking structures, lots, etc.)

The entire parking lot and all driveways were repaired and sealed in the summer of 2015. We sealed the cracks and seal coated all the asphalt in summer 2018. The cracks should be sealed every year but because of the cost it only has been done every three years which shortens the life expectancy. All asphalt in the main and handicap parking lot needs to be removed and replaced due to ongoing cracking and heaving, which, creates a safety risk and the potential of not meeting ADA requirements. Replace the asphalt and redesign dock area based on usage and the increased traffic in the area

The facility has four elevators that are in good working condition.

- g. Adequacy of existing utilities and infrastructure systems to current and five-year projected programmatic needs:

The utilities systems are currently adequate.

- h. Date of most recently completed energy audit, and, if an energy audit has yet to be completed, what is the plan/schedule for doing so?

Last energy audit was in 2006.

- i. Land owned by the agency, including a determination of whether capacity exists for future development, additional acquisitions are needed to meet future demands, or surplus land can be conveyed for a different purpose:

The CFP is located on approximately 54 acres in Saline. If there were a need to expand, there is space to do so. Space or open ground around the facility is needed to maintain the privacy and safety of the patients.

IV. Implementation Plan

- a. Itemized listing of major capital projects by priority, including brief description and estimated cost. *(Adjust previously developed or prior year's figures utilizing industry standard CPI indexes where appropriate):*

1. **Replace Heating Control Valves and heating system Victaulic fitting. (\$1,235,000)** --Existing valves and Victaulic fitting are failing. The increased frequency of leaks could potentially become an infection control concern (mold).
2. **Replace all Countertops and Cabinets (\$325,000)**– The laminate countertops and cabinets located in all the patient care areas are breaking which is creating an infection control problem that we have been cited for by JC and CMS.
3. **Replace and/or repair cement in the front entrance area (heated concrete) of the building, including patient yards and other areas. (\$455,000)** – *The cement is crumbling, which, creates a safety hazard (trips and falls) for patients, staff, and visits.*

**ATTACHMENT E –
CENTER FOR FORENSIC PSYCHIATRY**

4. **Modify Bar Screen Building to Minimize the Handling of Hazardous Waste, (\$617,500)** -Modify the existing lift station/bar screen building to minimize the handling of hazardous waste by staff, including modifying the roof to prevent heavy snow and ice from sliding off and onto someone entering building. This is a health and safety hazard.
5. **Replace the Building Security System (PLC) (\$780,000)** – The Allen Bradley PLC are at the end of life for support and replacement. Also, Wing Commander station on the units are at the end of life for support.
6. **Replace Main Building Cooling Chillers (\$1,170,000)** – Units are approaching their end of life cycle. In need of replacement to eliminate future high maintenance costs and reliability.
7. **Replace Audio Visual Systems (\$130,000)** – The AV systems in the Auditorium, Bureau and Conference Rooms are outdated. It's hard to hold conferences and seminars as the system equipment is not compatible to the current software and operating systems.
8. **Convert Fire Suppression System in the Patient Dining Rooms and Main Street Hallways (\$390,000)** – Convert existing wet fire suppression system to a dry system. The fire suppression system froze and burst this past weather above the ceilings in the patient dining rooms and on main street.
9. **Cable TV and Audio Visual System for the Patients' Units (\$520,000)** – Replace all outdated and not support analog equipment to ensure the patients units can continue to receive cable TV, including, upgrading the audio visual system to broadcast to all 8 units simultaneously.
10. **Exercise Equipment for Patients (\$390,000)** – Replace old patient equipment, add electrical to all the fitness rooms and check room design to ensure that they meet all codes and JC requirements.
11. **Medical Equipment (\$390,000)** – Replace old outdated medical equipment.
12. **Replace Chilled Water Ice Tanks (\$2,730,000)** – Units are approaching their end of life cycle. In need of replacement to eliminate future high maintenance costs and reliability.
13. **Repair Terrazzo Flooring (\$390,000)** – Due to cracking and missing pieces, the terrazzo flooring needs repairs to prevent trips and falls in our main street area (patient activities area) and tweener area leading to the units.

**ATTACHMENT E –
CENTER FOR FORENSIC PSYCHIATRY**

14. **Replace All the Asphalt in the Parking Lot including the Handicap and docking area (\$1,560,000)** – All asphalt needs to be removed and replaced due to ongoing cracking and heaving, which, creates a safety risk and the potential of not meeting ADA requirements. Replace the asphalt and redesign dock area based on usage and the increased traffic in the area.
15. **Replace Carpet and Furniture in Non-Patient Areas (\$910,000)** – Carpet and furniture in non-patient areas is becoming worn, discolored, and frayed.
16. **Replace all Parking Lot and outside building lighting with LED lights. (\$325,000)** - LED lighting is more efficient. The saving on the energy cost and maintenance upkeep will pay for the cost.
17. **Replace Heating Boilers (\$585,000)** – Boilers are approaching their end of life cycle. In need of replacement to eliminate future high maintenance costs and reliability.
18. **Building landscaping renovation (\$130,000)** - The existing landscaping is unsightly and unappealing. If replaced with a lower annual maintenance requirement type, it would give the facility a new look and feel that could be enjoyed by the visitors, employees and the community.

- b. Define the impact of addressing deferred maintenance and structural repairs, including programmatic impacts, immediately versus over the next five years:

Failure to provide special maintenance or capital outlay funding to maintain the facility creates increased facility repair costs, unnecessary demands on facility maintenance staff, and potential health and safety problems for staff, patients, and visitors. The CFP is a 24-hour psychiatric hospital and must maintain a secure, safe, and functioning facility for patients, staff, and visitors.

- c. Identify, to the extent possible, a rate of return on planned expenditures. This could be expressed as operational savings that a planned capital expenditure would yield in future years.

Delaying needed repairs until they become critical generally jeopardize the health and safety of the patients, staff, and visitors; results in costly special maintenance and/or capital outlay project funding; disrupts the CFP mission of providing psychiatric treatment to patients.

I. MISSION STATEMENT AND PROGRAM DESCRIPTION

The mission of Hawthorn Center is to provide children and adolescents with evidence based/supported and trauma-informed inpatient mental health services that meet the highest standards of quality in the context of an integrated, patient centered, wellness oriented, pro-active safety culture.

Hawthorn Center is the only state hospital that offers inpatient psychiatric care to emotionally impaired and mentally ill children and adolescents who are residents of the State of Michigan.

Hawthorn Center treats children and adolescents who have a severe mental illness and serious emotional disturbances. Most of the patients have longstanding histories of trauma, extreme difficulties in functioning at home, in school, and in the community. Almost all have had previous mental health interventions, including multiple inpatient treatment episodes, and many have a variety of medical complications.

An interdisciplinary team provides treatment, with the goal to provide a client-centered and trauma-informed/integrated treatment approach that includes individual psychotherapy, psychoeducation, milieu, and activity therapy (both in hospital and outside community), individualized special education experience, psychopharmacology treatment and family treatment. Behavior treatment plans and applied behavioral analysis/treatments are developed when therapeutically indicated.

Currently, there are four active patient units with a capacity of 14 patients per unit, or 56 patients for the hospital. The physical plant has two additional units that are in the administrative (Main) portion of the hospital that are currently off-line while undergoing significant renovation. Each of these areas will have the capacity to house an additional 14 patients following overhaul which will include modernizing bathrooms and showers, replacing bedroom and common room furniture, mitigating ligature risks, replacing ceiling, lighting, flooring, HVAC, and updating bedroom and common room furniture.

The hospital's current spending plan, condition of the physical plant, and behavioral exigencies permit up to 56 patients in four units.

The Hawthorn Center has a certified school on-site to meet the special education needs of the children and adolescents.

Hawthorn Center's mission statement also makes clear the facility's commitment to integrated patient safety systems. An integrated patient safety system is a health care organizational safety infrastructure that supports the following:

- A learning organization culture.
- A fair and just safety culture.
- A robust quality improvement system that collects data, analyzes data, uses data to inform decisions, and report findings.
- Validated methods to improve processes and systems.
- A proactive approach to risk reduction.
- Standardized ways for interdisciplinary teams to communicate and collaborate.

- Safely integrated technologies.
- A patient-centered approach that encourages patient and family activation in the safety process

II. PROGRAMMING CHANGES

Hawthorn Center mission statement indicates a commitment to respond to the changing needs of the service community. All admissions, other than Incompetent to Standard Trial admissions, require Community Mental Health Authority approval and involvement during patient stay and discharge planning bearing the responsibility for post-discharge treatment.

In recent years, patient presentations have become much more complex – increased symptoms of severe mental illness, extreme behaviors, co-morbid developmental conditions, profound deficits in functional communication skills, and medical conditions are noteworthy. Several patients have minimal, or no family supports and have become the responsibility of the Michigan Department of Health and Human Services. An increasing number are involved with the juvenile/family court system. Some have court-ordered treatment for restoration due to incompetence to stand trial (IST) and not guilty for reasons of insanity (NGRI) determinations. As a result of these changes in the characteristics of our patient population, the average length of stay has increased from 89.9 days in FY 15-16 to about 133 days in the current fiscal year. Additionally, since the beginning of the COVID crisis there is reduced availability of placement options and community-based treatment services. Consequently, patient movement from the hospital into community-based services is increasingly challenging at a time when the need for hospitalization remains high.

To meet the needs of our population, we have a Transitional Team for youth who continue to require hospital-level care but are awaiting discharge while aftercare plans are developed. Without such sophisticated aftercare plans, youth are prone to psychiatric hospitalization re-admission. The HC transition managers help to develop these plans and technically assists the community.

Applied behavior analysis in the care and treatment of patients with both challenging behavior problems and developmental delays is utilized. This requires a very structured and staff-intensive treatment environment as well as specialized educational programming.

III. FACILITY ASSESSMENT

Subjective Narrative:

Hawthorn Center is comprised of a main building (North Wing), which houses two patient living areas that are currently unoccupied, and the South Wing which houses four patient living units that are currently occupied. The facility is about 250,000 square feet on about 45 acres.

The Main Building was built in 1955 and is a two-story structure constructed of masonry, brick, concrete, and steel. This includes A, B, C, and D sections. E, F and G sections were added to the Main Building in 1962, 1964, and 1967. This building houses two closed patient

**ATTACHMENT E –
FY-24 -28 Capital
outlay Five Year Plan
HAWTHORN CENTER**

living areas, clinical, business, and administrative offices, Office of Recipient Right offices, support service areas such as the main kitchen and a maintenance shop, recreational facilities such as a gym, movie theater, and swimming pool, classrooms for the Special Education services and storage space. All but two building, which need extensive renovations are fully used.

The South Wing was built in 1975 and is a two-story structure constructed of masonry, brick, concrete, and steel and is attached to the main building. The South Wing includes H, J, K, L, and M sections. The building houses four patient living areas, reception and visiting area, classrooms for Special Education services, clinical office space, kitchen, swimming pool and gym. It is in somewhat better condition than the Main portion. A project to install a new roof on South Wing was completed in 2009.

Both structures are settling resulting in regular and serious foundation and plumbing problems. Asbestos abatement is necessary in both structures to make even surface improvements. Heating, ventilation, and cooling systems are manually operated making it very difficult to manage comfort. A great deal of repair and replacement in terms of electrical, structural integrity, heating and cooling systems, generator repair, replacement of unsafe windows, water leakage, etc. work has been ongoing. Additional planned projects include roof replacement and boiler replacements which is urgent. Due to adjacency issues, the facility is not conducive to current medical community expectations for behavioral care, treatment, and services.

Funding was approved for the following projects that are in progress. Below are those approved or near completion:

- Galvanized plumbing in the South Wing to be replaced with copper
- Air Quality Mitigation Phase I-III
- A, D, and F Section major renovations project to rehab living areas
- Abatement of pipe wrap insulation, duct insulation, and ceiling ACM
- Roof Replacement A, B, C, D, E, F, G Sections. Project approved through special funding source and currently progress.
- Boiler replacement in D, G, and H sections including backup boilers as required. Provide South Wing with backup. Current system has exceeded the life expectancy. Project approved through special funding source and currently in progress

Specific Narrative:

- a. Building utilization rates compared to industry standards - Hawthorn Center is the only state hospital that offers inpatient psychiatric care to children and adolescents (ages 4 through 17) who have a serious emotional disturbance or severe mental illness who are residents of the State of Michigan.
- b. Mandated facility standards for program implementation - Hawthorn Center maintains its accreditation with Joint Commission for Accreditation of Healthcare Organizations. Further, it is monitored by the state Medicaid Office for compliance with the Centers for

**ATTACHMENT E –
FY-24 -28 Capital
outlay Five Year Plan
HAWTHORN CENTER**

Medicare and Medicaid Services (CMS) guidelines.

- c. Functionality of existing structures and space allocation to program areas served -There are two gyms, two swimming pools, two occupational therapy rooms, a music therapy room, an art room, and dance therapy. In addition, there are patient-care areas, a school, and dining space. These are all separate, presenting significant line of sight and adjacency issues which make safe and modern behavioral programming challenging.
- d. Replacement value of existing facilities - \$90-100 million
- e. Utility system condition - Electrical service to the Main Building was designed and installed over 60 years ago. During FY2003, a 500 KVA transformer replaced an undersized 225 KVA transformer.

As a result of the Separation of Utility Services Project at Hawthorn Center in 2006, heat in the Main Building and South Wing is provided from gas fired boilers that produce hot water that is used for radiant heat and domestic use. The HVAC system in the South Wing is close to 50 years old. The HVAC systems in both buildings are manual/pneumatic making it near impossible to maintain consistent comfort. Hawthorn Center has received several recipient rights complaints specifically related to significant temperature fluctuations in the building especially during weather/temperature transitions. Energy efficiency and pneumatic controls still need to be upgraded.

The Main Building had completed an overhaul of the HVAC system on the second floor in FY2002. The overhaul of the first floor HVAC started with the replacement of windows in FY2003. Funding is needed to complete the first floor HVAC project.

A full building inspection of sewage waste lines is necessary due to the building subsidence mentioned earlier. Two fractured lines have been repaired in FY16.

- f. Facility infrastructure condition – the main building roof has passed its' useful life and is currently ponding and leaking into the building. This creates potential health and safety hazards.
- g. Adequacy of existing utilities and infrastructure systems to current and five-year projected programmatic needs – The utilities and infrastructure systems in this post-World War II structure are failing. As noted earlier, the manually controlled pneumatic HVAC system cannot provide consistent comfort for staff and patients. Further, the structure is subsiding resulting in damage to foundation and plumbing. Finally, adjacency issues make safe provision of behavioral treatment, care, and services a challenge. Foundations are failing. Transformer(s) are aging, storm drain, and sewer system is old and needs examination/repair. As noted previously, Hawthorn Center's Main building was built more than 60 years ago. Plumbing consists of galvanized pipe. Decades of exposure to water have caused galvanized pipes to corrode and rust on the inside seriously reducing water flow and quality. Some of the galvanized plumbing has rusted through causing leaks. The galvanized plumbing in the hospital's Main building

**ATTACHMENT E –
FY-24 -28 Capital
outlay Five Year Plan
HAWTHORN CENTER**

should be replaced eliminating potential exposure from leaching pipes. In a new study, researchers clearly show that lead present in the zinc coating of galvanized steel pipes can be a very significant long-term source of lead in water. Special Enterprise Maintenance fund project has been approved for this and is at the initial stage.

- h. Date of most recently completed energy audit - February, 2009
- i. Land owned by the agency - Hawthorn Center is located on approximately 45 acres. If there were a need to expand, there is space to do so, particularly after the cottages were demolished. A storage pole building was built recently. Space or open ground around the facility is needed to maintain the privacy and safety of the patients.
- j. Conclusion: Given the exigencies noted above, extreme consideration needs to be given regarding viability of the structure where behavioral treatment, care and services are rendered.

IV. IMPLEMENTATION PLAN

Priority 1

Project Title: Asbestos Flooring Abatement

Estimated Costs: \$ 550,000

Project Description: Continue flooring abatement and replacement of carpeting A, B, C, D, E, and G sections for infection control per joint commission recommendation.

Priority 2

Project Title: Ceiling Tiles-Main Building

Estimated Costs: \$500,000

Project Description: Replace metal pan ceiling with lay-in ceiling tile in Main Building that is deteriorated and falling.

Priority 3

Project Title: Air Conditioning- Main Building

Estimated Costs: \$2,500,000

Project Description: Air Conditioning –main building, first and second floor-administrative offices, intern and resident offices, training area, cafeteria, other patient activity areas. Current air conditioning is provided in minimal locations by window units which is highly

**ATTACHMENT E –
FY-24 -28 Capital
outlay Five Year Plan
HAWTHORN CENTER**

ineffective and costly electric bills.

Priority 4

Project Title: Main Building Window Replacement

Estimated Costs: \$ 600,000

Project Description: Replace windows in Main Building with energy efficient tempered glass with interior safety glass

Priority 5

Project Title: Rear Playground Fence

Estimated Cost: \$285,000

Project Description: Raise the rear playground fence height to 12 inches and add tip ins and mini micro mesh to match the Walking Trail Fence.

Priority 6

Project Title: Window Privacy film – South Wing living areas

Estimated Costs: \$85,000

Project Description: Patient Safety/Privacy; patient bedrooms and living area common areas: install privacy film and glass guard on second floor windows in M, K, L, and classroom wings.

Priority 7

Project Title: South Wing Kitchen Equipment

Estimated Costs: \$100,000

Project Description: Replace 40 plus year old range, dishwasher, and refrigeration unit, replace plumbing for grease trap and fixtures

**ATTACHMENT E –
FY-24 -28 Capital
outlay Five Year Plan
HAWTHORN CENTER**

Priority 8

Project Title: Parking Lot Replacement

Estimated Costs: \$1,300,000

Project Description: Remove and replace the existing asphalt parking lot that has been repaired many times over the years with a concrete parking lot. Complete demolition, install new base, concrete, and create a retention pond to assist with rainwater collection.

Priority 9

Project Title: Sewer Lines Repair

Estimated Costs: \$50,000

Project Description: Repair of collapsed sewer lines and drains identified with camera inspections.

Priority 10

Project Title: Office Furniture

Estimated Costs: \$500,000

Project Description: Replace old office furniture throughout the hospital.

Five-Year Capital Outlay Plan – Kalamazoo Psychiatric Hospital

I. Mission Statement

The Kalamazoo Psychiatric Hospital will provide trauma-informed person-centered inpatient psychiatric service and support, respecting the needs, dignity, individuality and cultural diversity of its patients, employees, volunteers, and the communities it serves.

II. Programming Changes

None – Continue to work with nursing department to provide necessary physical improvements to the environment.

III. Facility Assessment

The Kalamazoo Psychiatric Hospital (KPH) provides inpatient adult psychiatric services through a lease agreement with Western Michigan University (WMU) for utilization of specific buildings. KPH operates its hospital service programs from a quadrangle complex of six buildings, with some of its support operations housed in the separate buildings. An assessment of the physical condition of the buildings, leased by KPH, is reflected below by specific hospital service system.

Quad Building Structure (Good Condition)

The hospital structure is in good condition.

The minor concerns are:

- 1) A great deal of plaster repair is required due to the age of the facility.
- 2) Air Conditioning - Main back part of the kitchen area needs to have the current air conditioning replaced and upgraded with the proper size units.. There are several areas for both patient and staff that are still in need of being air conditioned currently at KPH.
- 3) Trees – The property has several dead or dying trees on the property. KPH has started working with a vendor to remove them; however, it will take some time to accomplish the task. Trees that are a safety issue will be dealt with first followed by trees that could affect the structural integrity of the hospital buildings.
- 4) Cooler/freezers – We have at least one cooler/freezers that need to be replaced due age and condition in the kitchen prep area. They need to be replaced with up-to-date and more energy efficient equipment.

**ATTACHMENT E-
KALAMAZOO PSYCHIATRIC HOSPITAL**

The major concerns are:

- 1) Roadway and Parking Areas – The roadways around KPH need to be repaved in some areas and patched in others. Patching would buy us some time in areas until we are able to completely resurface the roadways and parking lots. Any repaving or patching may also then need to be restriped.
- 2) Internal Water Piping (Legionella) - Here at KPH we have been experiencing multiple low-level hits with Legionella hospital wide. Currently KPH is conducting a water flushing program to mitigate the propagation of Legionella within the water system. We will be continuing with the water flushing program as long as we are receiving acceptable results. In addition, KPH will be implementing some upgrades that were recommended by Byce & Associates from the water study. It has been their recommendation that KPH start with the water flushing program and monitor the chlorine levels within the buildings water system. KPH may be required to make additional correction in the water systems based upon the outcome of the flushing program. KPH may be required complete the upgrades indicated within the body of the water study performed by Byce & Associates. To follow all of the recommended upgrades would ensure that KPH is providing our patients and staff with quality drinking water. Here at KPH safety is our top priority.
- 3) Security Upgrade - Redesign the front lobby area to add interior security checkpoints and physical barriers to prevent unimpeded access to the heart of the hospital. KPH needs to control visitors and contactors better. There are currently no physical barriers, as in other state facilities, to keep visitors from gaining access to the heart of the hospital. With the lobby redesign we would be able to implement a better flow of visitors through the metal detection for patient visitor safety. Further, better camera coverage on the exterior/interior of the building is needed to protect staff and visitors as well. On the inside of the quad Area, we need to install multiple cameras for the protection of our staff and patients. The quad area is where our patients take fresh air breaks and play outside court games with or without staff present. We are also in need of expanding our camera system storage and retrieval hardware. As we expand our camera system at KPH, the hardware will need to be upgraded as well. We need to add at least (1) server for the additional cameras and (1) fail over server. The fail over server would provide a safe back up for future server failure which would prevent the loss of any footage on the camera system. The adding of (1) server to the system would allow for the continued expansion of the camera system.
- 4) Sewer/Storm Drain Lines – The storm drainage lines, and sewer lines are very old and have been subjected to years of chemical cleaning and neglect that has weakened or destroyed them. Piping is replaced as necessary; however great lengths of it are buried within the facility floors/walls. Our

**ATTACHMENT E-
KALAMAZOO PSYCHIATRIC HOSPITAL**

greatest risk is the pipe from the kitchen to the sewer system. Nearly 100 feet of that has been replaced by our licensed plumber; however, hundreds more feet need to be addressed. The last section of pipe replaced in July 2017 had sections of piping that had eroded more than 50 percent away. We expect the piping to improve the further we get away from the kitchen area, the point of entry for the harsh cleaning chemicals that were formerly used. However, we know that there is more pipe damage down slope from what we have already replaced. Some of storm drains are in need of being replaced due to age and deterioration. Parts of the storm drainage system have collapsed, and other parts are in the process of failing at this time. The storm drainage failures have resulted in the undermining of the roadways and sidewalks causing damage. We need to address this prior to the repairing or repaving any of the roads and sidewalks at KPH.

- 5) Door Access - At this time KPH need to review how we access the buildings and how we move through the buildings. We need to have more keyless entrances on the outside and inside of the buildings. We need to update our access keys and the controls associated. We are looking into an electronic key fob system that will replace the standard keys that we are using at this time. The change would allow for the deactivation of any key at any time. This system would allow more control and accountability with the fob being able to be activated and deactivated remotely. The system is trackable and will allow for each employee movement to be followed throughout the buildings.

KPH is in need of the installation of an automated key watch system. The system would allow employees to check out a loaner set of keys without any interaction with safety. The loaner set would be tracked, and a real time report would be available for review at the push of a button. The system would provide an extra level of accountability by sending emails to the staff members who don't return the loaner set of keys. The report can be used to track contractors, vendors, and staff loaner keys.

- 6) Elevator Repairs/Replacements - The elevators at KPH have been in service for many years. The elevator systems are in need of some major upgrades to improve the longevity and the overall safety of the elevator systems. The elevators that are in need of immediate attention are the elevators in buildings #2 and #3. We have performed multiple service calls to repair the elevators in the past. Currently the elevators are a safety issue. People have been trapped in the elevators in the past. With the follow-up conversations with the service provider, there has been strong recommendations for the elevators to be upgraded or replaced due to safety concerns. Service calls and entrapments are becoming more frequent as the elevators continue to age and need servicing.

**ATTACHMENT E-
KALAMAZOO PSYCHIATRIC HOSPITAL**

- 7) Air Handlers - The air handlers throughout the hospital are in need of filtration and automation upgrades. As of now our air exchanges and filtration are below industry standards. The air quality within the hospital is of utmost importance to insure the health and safety of everyone within the buildings. The air handler systems need to have upgrades to the filtration prevent the spread of various airborne particulates and contaminants.
- 8) Switch Gear - Electrical Switch Gear in building #7 needs to be upgraded due to age and condition. The switch gear has failed in the past PM testing. The upgrade would allow for the future growth and use of Building #7.

Projects in process:

- 1) Anti-ligature project. The scope of this project is to address ligature concerns expressed by Joint Commission during their 2019 inspection. It includes, but not limited to, the replacement or modification of toilet dispensers, sinks and faucets, shower control panels, bathroom dividers, curtains, beds, doorknobs, door closers, grab bars (complete), towel dispensers, hinges, garment hooks, heater grates, interior drain covers, light fixtures, wardrobes, electrical raceways, and fixtures, plumbing fixtures and pipes, patient phones, and more.
- 2) Phone system – The phone system is antiquated at best. We continuously see issues with phone connectivity and programming. Obtaining business set replacement phones are very difficult. All phone sets are refurbished. This is a safety issue for both staff and patients. The phone system will become completely obsolete by 2025. AT&T will not be able to support KPH phone systems. We need to update to voice over IP system.
- 3) Repair/Replace Doors - To be compliant with the Joint Commission and the 2012 Life Safety Code (NFPA 101), we will need to replace many fire doors. Most doors are original or near original and modifications over the years when there were less stringent fire codes, have rendered these doors non-compliant. Failure to replace them places patients at risk and will create citations from TJC and Fire Marshal.
- 4) Install Sprinklers- Phase II - KPH need to be 100% sprinklered per the 2012 NFPA 101 and therefore the Joint Commission as well as for the overall safety of patients and staff. Approximately one-third of the hospital is sprinklered already so much of the infrastructure exists. Phase I was funded with FY 19 enterprise-wide Special Maintenance funds. All patient areas must be done with ligature concerns in mind which dramatically increases

**ATTACHMENT E-
KALAMAZOO PSYCHIATRIC HOSPITAL**

the cost. It is recommended to break this project up into smaller chunks over the next several years to make it manageable.

- 5) Outside Lighting - KPH is in the process of new upgrading all outside lighting to more energy efficient LED lighting. All the outside lights on the KPH grounds will be replaced with LED lights. Outside lighting replacement will improve the overall safety of the grounds by increasing the lumens of each fixture as required by CMS.

Building Roof (Excellent to Fair Condition)

The building roof has continued to age and shows additional end of life failures such as seam failures in areas not recently coated. KPH coated the front half of the hospital with a 12-year warranty rubber coating which has worked well as expected, but the back half, maintenance building, Gate Cottage, and chapel all need new roofs. We are working to repair/replace or coat these roofs in 2019; however, remaining available funds are expected to be short.

- a. Building utilization rates compared to industry standards

KPH is one of three public hospitals that provide adult inpatient psychiatric services to residents of the state. Hospital overall bed capacity is 205 beds. The current average census is 150.

- b. Mandated facility standards for program implementation, where applicable (for example, federal/industry standards for laboratory facilities, hospitals, compliance with consent decrees, etc.):

KPH follows Joint Commission and Life Safety Code standards; however, our departments are continually looking at methods of further improving our compliance.

- c. Functionality of existing structures and space allocation to program areas served.

The programming areas within the Kalamazoo Psychiatric Hospital have been made as functional and aesthetically pleasing as possible, given the structural limitations of the buildings. The facility is adequate to meet the current and projected needs of the program.

Projects aimed at improving the programming areas available within the hospital include:

**ATTACHMENT E-
KALAMAZOO PSYCHIATRIC HOSPITAL**

- 1) Installation or replacement of air conditioning in various areas.
- 2) Renovation of a former office wing into a unit to expand the availability of patient beds and streamline patient therapeutic and learning opportunities.

BUILDING	BUILDING PURPOSE	STATUS	SQ. FT.
Administration (1)	Office Building	Active	58,765
Acute Medical (3)	Hospital	Active	35,147
Booster Pump (72)	Utility Storage	Inactive	N/A
Children's Unit/Pheasant Ridge (7)	Maintenance	Active	37,176
Female Infirmary (4)	Hospital	Active	44,134
Female Receiving (1A)	Hospital	Active	58,909
Gate Cottage (42)	Museum	Active	2,199
Interfaith Chapel (14)	Chapel	Active	6,323
Male Infirmary (2)	Hospital	Active	35,399
Male Receiving (1B)	Hospital	Active	37,016
Shed	Warehouse/Storage	Active	N/A
Shed	Warehouse/Storage	Active	N/A
Shed	Warehouse/Storage	Active	N/A
Water Tower (49)	Utility Storage	Active	0
Grounds Building (8)	Maintenance	Active	1500

- d. Replacement value of existing facilities (insured value of structure to the extent available):

Not known.

- e. Utility system condition (for example, heating, ventilation, and air conditioning (HVAC), water and sewage, electrical, etc.):

Electrical System (Good Condition)

Under the lease agreement with Western Michigan University (WMU), primary electrical service is the responsibility of the WMU Power Plant.

Power requirements in some areas have outdistanced available panel boards and secondary electrical rewiring is needed in some areas. KPH Maintenance staff has undertaken the installation of additional panel boards and the upgrading of electrical wiring when possible. Usage of some current raceways are maxed out based on electrical code. New raceways are needed in some instances. Old incandescent and fluorescent lighting is being

**ATTACHMENT E-
KALAMAZOO PSYCHIATRIC HOSPITAL**

replaced with LED lamps and fixtures with the overriding goal to convert all lighting to LED over the years.

The outside lighting LED upgrades are in process at this moment. All of the outside lights will be replaced with LED lights. LED light will be added as needed to address the areas with low to no lighting. This project will increase the lumens of each fixture as well as cutting the energy usage.

Water System (Good Condition)

Cold water is provided by the City of Kalamazoo. Cold water main lines are operationally solid. Secondary lines are good, but they are very old, need occasional repair and they have a large amount of biofilm. The biofilm is one of the contributing factors to the propagation of Legionella within the building.

Hot water is provided under terms our of lease by the WMU power plant. The hot water lines are in fair condition. The hot water recirculating system needs to be upgraded to increase the return water temperature. The increase in temperature will mitigate the propagation of Legionella within the hot water system. The installed hot water recirculating system continues to supply hot water on demand to our patient areas but is undersized to provide our own supply of hot water should the power plant fail.

Drainage System/Storm (Fair Condition)

The drainage/sewer lines are very old and have been subjected to years of chemical clean-out practices that have weakened them. While drainage and sewer piping are replaced as necessary, great lengths of it are buried within the facility floors/walls. Most of the internal piping is in adequate condition, KPH is at risk with the piping coming out of the kitchen preparation area as previously mentioned.

The storm drainage system is in fair to poor condition. The storm drainage system needs to be thoroughly assessed to find out the true condition of the system. A visual assessment of the storm drainage system has shown signs of blockages and possible collapsed piping.

Steam System (Fair to Good Condition)

The steam lines are in fair to good condition. The insulation of the steam piping is problematic from an economic and safety perspective. Because of the insulation's poor condition, large amounts of heat are lost to the atmosphere, increasing utility costs. Also, much of the pipe insulation is an asbestos containing material which is abated as necessary by an independent contractor. Under the lease agreement with WMU, primary

**ATTACHMENT E-
KALAMAZOO PSYCHIATRIC HOSPITAL**

steam service is the responsibility of the WMU power plant.

The steam and condensate piping should be considered for replacement pending verification of condition once individual services can be isolated to accomplish the infrastructure repairs. It is suspected that the condensate pipe is in the worst condition, but the steam line has likely been in service since the 1920s and may well require replacement. It is suggested that a renewal program include an allowance for replacement to assure the long-term reliability of these services. A consequence of not performing this work would be the loss of steam to the facility. If it would be in the wintertime, both the high-pressure steam to the kitchen and the facility heat source for the air handlers would be lost.

KPH needs to undergo a complete and thorough assessment of the steam system by a third-party vendor to get an overall view of the condition of the system. With the assessment there will also be a complete energy audit of the steam system.

Ventilation System (Fair to Good Condition)

The ventilation system is operationally sound. But, in need of some upgrades in filtration at this time.

Compressed Air System (Excellent Condition)

The WMU Power Plant reliably supplies quality compressed air (dried) for use with the hospital's refrigeration and ventilation equipment. KPH has an air compressor with an air dryer that is capable of supplying quality compressed air to equipment in the case of a WMU Power Plant failure.

- f. Facility infrastructure condition (for example, roads, bridges, parking structures, lots, etc.):

Roadway Systems/Parking (Fair to Poor Condition)

The roadway system and parking lots that service our hospital is in fair to poor condition. Certain areas suffer from significant potholes and cracking and patches are failing. Repaving of these areas is needed. Some roads are subject to heavy truck traffic with most of it being trucks associated with WMU.

- g. Adequacy of existing utilities and infrastructure systems to current and five-year projected programmatic needs:

The utilities and infrastructure systems are adequate for current and five-year

**ATTACHMENT E-
KALAMAZOO PSYCHIATRIC HOSPITAL**

projected problematic needs.

- h. Date of most recently completed energy audit, and, if an energy audit has yet to be completed, what is the plan/schedule for doing so? 2006.
- i. Land owned by the agency, including a determination of whether capacity exists for future development, additional acquisitions are needed to meet future demands, or surplus land can be conveyed for a different purpose:

The Kalamazoo Psychiatric Hospital leases buildings and surrounding areas from Western Michigan University. The hospital buildings and grounds occupy approximately 35 acres, which is maintained by the hospital maintenance staff.

IV. Implementation Plan

- a. Itemized listing of major capital projects by priority, including brief description and estimated cost. (*Adjust previously developed or prior year's figures utilizing industry standard CPI indexes where appropriate*):

See Kalamazoo Psychiatric Hospital (KPH) Capital Outlay Five-Year Plan spreadsheet in this document.

- b. Define the impact of addressing deferred maintenance and structural repairs, including problematic impacts, immediately versus over the next five years:

This facility has several projects listed on the Capital Outlay Special Maintenance Request. Of those KPH has started on the anti-ligature, fire suppression, and KPH must show continual progress of this anti-ligature project to satisfy the Joint Commission. All other special maintenance requests will be performed in order of priority once funding is secured.

- c. Identify, to the extent possible, a rate of return on planned expenditures. This could be expressed as operational savings that a planned capital expenditure would yield in future years.

Delaying needed repairs until they become critical usually results in costlier special maintenance project costs and disruption in the hospital's mission of providing safe patient care and treatment.

Five - Year Capital Outlay Plan – Walter P. Reuther Psychiatric Hospital 2024

I. Mission Statement

Walter P. Reuther Psychiatric Hospital shall provide an appropriate range of active inpatient psychiatric treatment services to best meet the needs of adults with severe mental illness in collaboration with community mental health agencies and authorities.

II. Programming Changes

Walter P. Reuther Psychiatric Hospital's (WRPH) programming accepts adult patients from 18 years of age and up. WRPH has no planned program eliminations or facility closures.

III. Facility Assessment

Originally constructed in 1973, Walter Reuther Psychiatric Hospital is a 273,844 square foot facility consisting of three buildings. The main tower comprised of 256,982 square feet includes a basement (kitchen, warehouse, training, clinic), six stories where patients are housed, first floor clinical wing, and a seventh-floor maintenance area. Other parts of the main building include the Annex (added in 1981) which provides office space for support staff and conference rooms to facilitate meetings, and the Center for Activity, Rehabilitation, and Therapy, the newest (2014) addition to WRPH, includes a gymnasium, a variety of patient activity and therapy programs, and the Reuther Academy that provides secondary education to our younger patients. The other two buildings include the power plant and a maintenance shed. There are several updates and repairs required to keep the buildings safe and comfortable for our patients, staff, and visitors.

A Facility Condition Assessment was completed FTC&H Architects and Engineering in collaboration with the Michigan Department of Technology, Management & Budget in January 2015. This assessment identified \$22,725,840 in 2015 dollars of recommended/required infrastructure upgrades or improvements. Some of these have been completed, but many others are still needed.

a. Building utilization rates compared to industry standards:

WRPH is one of five public hospitals that provide inpatient psychiatric services to residents of the state of Michigan. The hospital's authorized census is for 180 patients aged 18 and older. The patient population is comprised of patients committed for mental illness, those found incompetent to stand trial, and those deemed Not Guilty by Reason of Insanity. This range of patients presents the hospital with a unique set of circumstances to provide safe yet essential treatment.

**ATTACHMENT E-
WALTER P. REUTHER PSYCHIATRIC HOSPITAL**

b. Mandated facility standards for program implementation, where applicable (i.e., federal/industry standards for laboratory facilities, hospitals, compliance with consent decrees, etc.):

WRPH is accredited by the Joint Commission (JC) and is a deemed status facility, where the Joint Commission surveys and accredits for the Center for Medicaid and Medicare Services (CMS).

WRPH has worked within its operating budget to address many of the deficiencies identified by accrediting and regulatory agencies.

Completed Projects as a Result of Citations from Accrediting/Regulatory Agencies

In 2014 the Joint Commission cited minor deficiencies and the repairs were completed using funding from the facility operations budget. These items included:

- Build an annex egress sidewalk.
- Install mechanical shaft steel platforms.
- Repair and update emergency egress lighting/wiring.
- Air duct cleaning.

More recent repairs completed include:

- Installation of new boiler controls.
- Replacement of fill in cooling towers.
- Replacement of concrete structures.
- Installation of new fire suppression system on seventh floor maintenance area.

The Joint Commission (JC) and Center for Medicaid/Medicare Services (CMS) conducted surveys in 2017 and again in 2018 resulting in WRPH receiving citations for several deficiencies. In 2017 the following repairs were completed using facility operating funds:

- Replaced exam tables.
- Installed ligature resistant handrails in shower room toilet areas on units 1-6.

In 2018 through 2019 projects addressing deficiencies included:

- Installation of ligature resistant doorknobs/hinges on all patient rooms.
- Installation of ligature resistant faucets in all patient bathrooms.
- Replacement of all non-ligature resistant patient beds.
- Replacement of all patient wardrobes with ligature resistant lockers.
- Reinforcement of windowsills.
- Replacement of all non-ligature resistant hallway and stairwell handrails throughout the main hospital and patient areas.
- Installation of fire suppression system and smoke detectors throughout hospital.

These projects were funded through the capital outlay process.

In 2018, The Office of the Auditor General Audit completed an audit and cited deficiencies related to key control and insecure entry/exit points to the hospital. Findings related to key control included inaccurate and incomplete records of key assignments.

**ATTACHMENT E-
WALTER P. REUTHER PSYCHIATRIC HOSPITAL**

Findings related to insecure entry/exit points included poor key management and frequently broken or damaged locks.

- In 2019, new Best door cores were installed throughout the hospital.
- In 2020, hospital entry doors and doors to the patient units were outfitted with badge readers and card swipe entry system.

The goal is to equip all general access area doors with the card swipe entry system to decrease the reliance upon keys. There are still many doors that need to be addressed.

In 2020 the update of the surveillance cameras on perimeter and grounds area for patient safety and security of state buildings and land began and was completed. The upgrade of the security system throughout interior and exterior hospital included adding more cameras and replacement of old cameras to improve resolution. Many of these cameras also include audio recording capability to improve care and incident investigation. Along with this upgrade the hospital added thermal camera monitoring to allow non-invasive and the least labor-intensive method to monitor temperatures of all persons entering the hospital at both of our main entries.

In Process Projects as a Result of Citations from Accrediting/Regulatory Agencies

The kitchen area located in the basement of the main tower requires significant renovation according to CMS physical plant findings of 2017. The kitchen floor does not slope to remove water in the dish room and pot and pan tank areas. Condensation removal from dishwashing unit requires upgrading ventilation to exhaust directly out of kitchen to outside. The current system exhausts up through the seventh floor from the basement, resulting in continued leaks and ceiling tile damage. Other problems included standing water on floors, dented equipment, and non-working equipment requires updating and replacement. ***The hospital received funding in 2021 for a complete renovation of the kitchen. This project began 8/2021 and should be complete by 12/2022.***

The fencing around the grounds area of the hospital was in poor repair, and not high enough to prevent patient elopement. Replacement and installation of fencing around the grounds area and north parking lot for patient security and safety to conduct required outside activities and programs as required by CMS, as well as to prevent theft and damage to staff/visitor vehicles. ***This project has been funded and began May 2021 with projected completion in August 2021.***

In 2019 the hospital was placed in Immediate Jeopardy by CMS due to hot conditions in the hospital. The two chiller units (air conditioning) were not functioning and were at the end of their useful life. This has necessitated rental of a temporary chiller and generator for the past three spring/summer seasons to keep the hospital at a comfortable temperature. ***The hospital did receive funding and the chiller replacement project is in process with a final completion date of February 17, 2022.***

The chiller replacement project will lead to increased damage to the parking lot area and

**ATTACHMENT E-
WALTER P. REUTHER PSYCHIATRIC HOSPITAL**

service roadway. The parking areas have broken concrete, crushed stone, and potholes creating safety concerns for staff and visitors. This leads to increased cost to maintain snow equipment broken from servicing this area. This area is needed to accommodate the number of staff working at the hospital. ***We are waiting to find out if funding will be approved as a part of the chiller replacement project.***

c. Functionality of existing structures and space allocation to program areas served with additional activity therapy building.

In 2016 WRPB increased its census to approximately 180 patients. In 2020 this was temporarily adjusted to 157 to address the COVID-19 pandemic. The census has again increased to accept up to 180 patients.

WRPB completed the construction build of an 18,000 square foot activity therapy building which is connected to the east side of the hospital. This building addresses the space needs for physical activities and scheduled programs to meet the therapy requirements of our patients.

With both the main hospital building and the activity therapy building, patients are provided with easy access to a full spectrum of mental health services and programs.

Reuther Hospital - 256,982 sq. ft.
Reuther Administrative Wing - 13,862 sq. ft.
Power Plant – 3,000 sq. ft.

d. Replacement value of existing facilities (insured value of structure to the extent available).

Unknown

e. Utility system condition (i.e., heating, ventilation, and air conditioning (HVAC), water and sewage, electrical, etc.)

All utility systems at WRPB are beyond their useful life currently at 48+ years. The HVAC chillers and cooling tower are beyond their life expectancy. A new HVAC computer system upgrade was completed FY18.

The hospital chiller is broken and beyond repair. In 2019, the hospital was cited by CMS for excessive heat in the building that placed the health of our patients in jeopardy. For the past three years, WRPB has had to use a rented, temporary chiller at significant cost. The hospital is in the process of replacing the chiller and cooling towers.

Upgrading these systems will increase hospital's cooling capacity and greatly reduce energy consumption and will meet life safety requirements.

Replacement of high voltage electrical panels and electrical switchgears, which includes the main distribution panel to the hospital and the main transformer, is needed. The

**ATTACHMENT E-
WALTER P. REUTHER PSYCHIATRIC HOSPITAL**

electrical panels require replacement due to excessive water damage and past useful life 48+ years to meet Life Safety Code.

Plumbing systems are of original construction (48+ years) and develop frequent leaks causing disruption to patient care. The system requires updating heat exchanger and hot water pumps. One pump is working, the backup pump is not working and parts are not replaceable. If system goes down, there is no hot water throughout the hospital. ***The hospital is in the process of updating the domestic water heater system.***

f. Facility infrastructure condition (i.e., roads, bridges, parking structures, lots, etc.)

The main hospital's south parking lot and main roadway was listed in the Facility Condition Assessment by FTC&H Architects and Engineering completed January 2015 and Capital Outlay report. The parking lot and roadway continue to deteriorate rapidly, and significant damage is expected during the chiller replacement project as a multi-ton crane will be parked in this lot. This replacement of parking and roadway was removed from original project included in the AT building construction due to lack of funding.

The facility's north and east parking lot will need to have repair and sealing to improve life expectancy.

g. Adequacy of existing utilities and infrastructure systems to current and five-year projected programmatic needs.

Infrastructure systems are not adequate and require current and five-year projected plan for replacement, update, and repair.

h. Date of most recently completed energy audit, and, if an energy audit has yet to be completed, what is the plan/schedule for doing so:

Last energy audit is unknown. WRPB will reach out to utility companies to see if one has been completed and/or if one can be completed in the future.

i. Land owned by the agency, including a determination of whether capacity exists for future development, additional acquisitions are needed to meet future demands, or surplus land can be conveyed for a different purpose:

The WRPB is located on approximately 14.33 acres in Westland. There is a need to expand and there is space to do so. Space or open ground around the facility is needed to maintain the privacy and safety of the patients.

IV. Implementation Plan

This facility is currently requesting major capital projects and has been submitted in priority order listing total of 21 items.

- 1. Waterproofing (\$75,000)** – Water leaks into the electrical room located in the

**ATTACHMENT E-
WALTER P. REUTHER PSYCHIATRIC HOSPITAL**

basement and infiltrates from the first-floor south courtyard between the annex and the main tower of the hospital. This places the hospital at risk for a loss of electrical power.

2. **Replace the South Parking Lot and Service Drive (\$593,000)** – The south parking lot is over 40 years old and has only been maintained by filling potholes with cold patch asphalt. Further filling of potholes is ineffective. Replacement is needed to prevent future accidents and injury to staff and visitors, and property damage claims.
3. **Replace North Hospital Drive Roadway (\$500,000)** – The road leading to the hospital west of Merriman Road is one of two roadway entrances to the hospital. Ownership of the roadway is unknown but is used almost exclusively by WRPB staff and visitors. This roadway is in poor condition, with crumbling asphalt, extreme potholing, and creates a significant risk to property.
4. **Replace Exterior Joint Sealants of Windows and Doors (\$350,000)** – The exterior joint sealants on the main tower and annex are in poor condition. The perimeter sealant around window frames has cracked and is deteriorating. Water is penetrating the building, collects on windowsills, drips onto floors leading to decreased integrity of the interior walls and exterior brick, and increased risk to patient and staff safety.
5. **Replace Heat Recovery Unit, Air Handler Unit Dampers, and Actuators (\$412,500)** – The dampers that direct air no longer control properly to regulate the temperature. The balance of air leaving and entering the building is not maintained, resulting in spaces starved for air and doors that do not open and close properly (potential risk for patient elopement.) Dampers have deteriorated and must be propped open to allow for air flow when the fan is in the “on” position.
6. **Upgrade Air Handler Units (\$862,500)** – Preventive maintenance on the air handler units is no longer sufficient to keep the air handlers functioning without costly need for outside service. Installation of variable motor fans, updating the air handlers and returning fans to balance air flow and ventilation are needed.
7. **Replace Grade Mounted 2500kVA Distribution Transformer, Substations, Electrical Distribution Panels, and Motor Control Centers (\$690,000)** – The transformer is in poor condition and has exceeded its life expectancy and needs to be replaced. The substations need substantial maintenance to be conducted. Due to the ventilation in the electrical room, the electrical distribution equipment is dirty and can cause arcing and other catastrophic failures that could damage the equipment and cause extended down time. The transformers and distribution equipment are the original equipment dating back to 1972 and have exceeded their useful life. The motor control centers are in poor condition and have had extensive and costly maintenance required in recent years.

**ATTACHMENT E-
WALTER P. REUTHER PSYCHIATRIC HOSPITAL**

- 8. Replace All Dual Duct Terminal Units with New that Include DDC Controllers (\$1,380,000)** – The current dual duct terminal units are at the end of their useful life and the dampers no longer modulate, causing spaces to overheat or overcool.
- 9. Replace/Repair All Exterior Doors (\$75,000)** – The exterior paint on ferrous metal items such as doors, frames, bollards, and lintels are in poor condition. The metal items are beginning to rust. These need to be repaired and/or replaced.
- 10. Increase the Number of Doors with Card Readers (\$300,000)** – To address the FY18 OAG audit, the addition of a card reader entry to all restrooms, conference rooms, nursing stations, and other multi-use areas will reduce the number of keys distributed to the 400+ staff at the facility.
- 11. Replace Cubicle and Shared Use Space (\$150,000)** – The cubicle and shared use space in the annex are over 30 years old. Replacement is needed to meet the demand and changes of the department and staffing. Much of the equipment does not meet ergonomic work requirements and places our staff at risk for injury.
- 12. Replace the Maintenance Equipment Storage Building (\$575,000)** – The current building is past its useful life and permits infiltration of water. There is insufficient space to protect the WRPB trucks and other mobile property maintenance equipment subjecting these items to accelerated degradation due to weather.
- 13. Replace Granite Windowsills (\$144,000)** – The current patient area windowsills are granite. These windowsills are easily broken and become a means for patients to make weapons or articles of self-abuse.
- 14. Replace Furniture in Patient Common Room Areas (\$175,000)** – The furniture in the patient common room areas presents a ligature risk. It is highly recommended that while this area is generally supervised by staff, the furniture should be of an anti-ligature nature.
- 15. Replace and Renovate All Common Area Restrooms (\$400,000)** – All of the common area restrooms for staff and visitors are extremely outdated. There are frequent plumbing problems due to old piping and fixtures. The stalls are rusting and beyond repair. Floor and wall tile and grout present sanitation and infection control risks.
- 16. Replace Vinyl Flooring Throughout the Hospital (\$3,000,000)** – Existing vinyl floor tiles on all seven levels of the main tower building and administration area are aged and deteriorating. We are no longer able to obtain matching tiles to replace damaged tile. This tile requires intensive and continuous upkeep.

**ATTACHMENT E-
WALTER P. REUTHER PSYCHIATRIC HOSPITAL**

17. Replace All Patient Cafeteria and On Unit Dining Tables and Chairs

(\$100,000) – The current tables and chairs are 25+ years old and have exceeded their life expectancy. We are no longer able to obtain matching replacements. The current furniture presents an infection control and patient safety risk

18. Replace Office Furniture (\$100,000) – All office furniture needs to be replaced. Most desks are over 40 years old or items that have been obtained from the Lansing surplus warehouse that are old, used, and not ergonomically adequate.

19. Replace Asphalt Walking Path (\$61,000) – The walking path is used by patients as a form of exercise and a way to de-stress. There are cracks and broken/sinking asphalt that present a safety risk.

See Attached Spreadsheet.

V. Define the impact of addressing deferred maintenance and structural repairs, including programmatic impacts, immediately versus over the next five years:

Failure to provide special maintenance funding and/ or work order-approved funds to maintain the facility consistent with industry standards and National Patient Safety Goals creates increased facility repair costs and unnecessary demands on facility maintenance staff; creates potential health and safety problems for patients and staff; results in WRPH being non-compliant with Joint Commission and Centers for Medicare and Medicaid Services; and typically results in taking programming areas out-of-service while critical projects are being performed. Failure to address structural operational issues can result in shut down of basic functions of heat, water, and cooling.

VI. Identify, to the extent possible, a rate of return on planned expenditures. This could be expressed as operational “savings” that a planned capital expenditure would yield in future years.

Delaying needed repairs until they become critical will result in higher cost, increased special maintenance project costs and disruption in the hospital’s mission of providing safe patient care and treatment. Delays in operational equipment replacements such as, electrical panels, dampers, etc., may result in implementation of an emergency plan to ensure safety and security of patients. Delaying repairs may result in non-compliance with Joint Commission and Center for Medicare and Medicaid Services with the potential to lose accreditation.

FISCAL YEAR 2021 \$15M ONE-TIME GF - PRIORITIZATION OF DHHS PSYCHIATRIC HOSPITAL SPECIAL MAINTENANCE PROJECTS

High-Level Facility by Facility Summary

Facility	Total # of Projects	Total of Cost
Walter Reuther (WRPH)	8	\$14,975,000
Center for Forensic Psychiatry (CFP)	10	\$15,380,200
Hawthorn Center	4	\$5,098,000
Kalamazoo Psychiatric Hospital (RPH)	3	\$1,300,000
Caro Center	0	\$0
Grand Total	25	\$36,753,200

Recommendation from DTMB is to proceed with first \$11M of projects now and hold on final \$4M in order to retain some flexibility for likely cost escalations in the market for both materials and labor.

SBO approves this course of action and the release of the top 7 projects.

Building	Project	DTMB File & Program Numbers	Brief Project Description	Facility Priority	System Priority	Cost Estimate	Status	Notes	Comments
WRPH	Kitchen Renovation and Upgrade		CMS audit for FY17 identified physical plant issues in kitchen areas; stagnant water on floors, improper drainage, inadequate storage and work space.	1	N/A	\$0	Project is proceeding with already allocated FY20 Enterprise-wide funding	DTMB 5/12/21: \$3.8M allocated in FY20 for CFP kitchen and redo of kitchen at WRPH. *Additional consideration to be requested for temporary kitchen costs during renovation (6 - 8 weeks) DHHS to provide temp kitchen costs & breakdown - With temp kitchen cost WRPH should complete within \$1.92M current funding.	DTMB 5/27/21: DHHS concurred this project is proceeding with allocated FY20 Enterprise Wide Funding and therefore removed from FY21 funding priority
CFP	Replace flooring in patient areas		The existing flooring has become an infection problem due to age.	3	N/A	\$0	Project is proceeding with already allocated FY18 Enterprise-wide funding	DTMB 5/12/21: \$400,000 in FY2018 EW funds still unused. DCD provided SOM flooring contract contact several times.	DTMB 5/27/21: DHHS concurred this project has unencumbered funding allocated in FY18 Enterprise Wide Funding and therefore removed from FY21 funding priority. Note FY18 funding was \$400,000 Enterprise Wide, initial FY21 request was \$500,000, however, CFP will work with \$400,000 FY18 EW funds.
WRPH	Replace Chillers & Controls	491/20165.MNB Program: 7249	Current chillers are past useful life 40+ years. Cooling tower is of inadequate capacity and 30 years past average serviceable life. Life safety need for patients and staff. Environment and temperature controls are Joint Commission and CMS requirements. Significant energy cost savings. (NOTE: Cost increase for existing FY20 \$2.8M project.)	2	1	\$2,300,000	FY20 existing project, with nearly \$2.8M allocated (50/50 DHHS/Special Maint split)	DTMB 5/10/21: Recently received revised bids came in higher than anticipated, or currently funded, by \$230k. This additional allocation will enable this project to move forward this season.	DTMB 5/27/21: DHHS concurred this project has unencumbered funding allocated in FY18 Enterprise Wide Funding and therefore removed from FY21 funding priority. Note FY18 funding was \$400,000 Enterprise Wide, initial FY21 request was \$500,000, however, CFP will work with \$400,000 FY18 EW funds.
Hawthorn Center	Boiler Replacement	491/21160.SDW Program: 7298	Boiler replacement "G" and "D" Sections and South wing. The current system has exceeded the life expectancy. There is no back up. The system has failed several times in the past and required expensive maintenance. Seals are leaking and potential carbon monoxide may be released. Joint Commission requires that a suitable back-up system be installed. Engineering study has been conducted by CenturyA & E.	1	2	\$400,000	Work required for ongoing operation over the next 1 to 5 years, even if potentially replaced in near-term.	DTMB 5/12/21: Reviewed records and is unable to identify any study or engineering information relating to this description & value. Need more definition of scope to evaluate such as number, type, size of boilers, and affiliated pumps, valves, controls that may also be a concern, etc.	DHHS 5/27/21: Information from Hawthorn Center: G Machine Room currently has 2 Intellifin Lochinvar boilers with around 2,000,000 - BTU output. There are slated back to around 75% output. Received a quote to replace these units with 2 FX76000 units with similar output that would fit within the current footprint. These would run around 25K a piece. This supports F.G Sections first and second floor. D Machine Room has currently 1 Intellifin boiler that supports D.E Sections without a redundant backup. Received a quote for 2 FX76000 units that would support for around 17K a piece that will fit within the current footprint. H Machine Room boiler is strictly a redundant backup but it supports all of South Wing when necessary. This is required and received a quote for a boiler at around 19K. All of these quotes are only for the units, no installation, no engineering, or additional fees. Estimating, with everything, it would be anywhere from \$250-400K. Avg. life expectancy of boilers is ~15 years, current boilers installed in 2004.
Hawthorn Center	Boiler Replacement - Cost Increase	491/21160.SDW Program: 7298	Augments the boiler replacement project above after bids have been received that have increased the cost of the project.		2a	\$437,600	Added on 11/24/21	SBO 3/1/21: The analysis of the bids shows that several necessary aspects of removing and replacing the new boilers was not taken into consideration with the original estimate. Additionally, labor and material costs continue to increase beyond anticipated amounts.	
Hawthorn Center	Water Main Replacements	491/19037.SDW Program: 7211	Continuation of nearly completed replacement project. This project will focus on replacement of water main piping.	2	3	\$1,050,000	Work required for ongoing operation over the next 1 to 5 years, even if potentially replaced in near-term.	DTMB 5/12/21: First part of project in process. Balance needed to complete. Note that original \$930,217 Pricing Basis was not complete, actual (\$951,000) was early 2021 bulletin quote. \$1M cost updated for cost escalation and DCD fee.	
CFP	Build a Facility Kitchen	491/20167.SDW Program: 7255	To ensure the safety of the meals the patient are being served. Currently, we are contracting with a vendor that is preparing the patients meals at Walter Reuther Hospital and then transporting the meals to The Forensic Center.	1	4	\$3,080,000	\$1.92M avail from 50% FY20 EW funds. Study options for new include cafeteria for 2 meal periods (50% population).	DTMB 5/12/21: \$3.8M allocated in FY20 to be split between CFP kitchen and redo of kitchen at WRPH. Study has been commissioned for CFP kitchen. Study is near completion, projecting a total cost of \$4M to \$5M; funding needed is \$5M minus the \$1.92M FY20 EW allocation. DTMB does not disagree a kitchen makes sense and would save on transport costs from WRPH; however, since that infrastructure is already in place, want to ensure that this priority level is appropriately determined relative to other critical needs at other facilities.	DHHS 5/27/21: Yes, DHHS believes this kitchen is a high priority, per the DTMB-SFA review of the facility done in 2019, this project was noted as the #1 short-term priority at CFP to "ensure the safety of the meals the patients are being served." Additionally, the re-therm process does not result in an appealing food product for the patients. The food the patients get is often overcooked on the hot side and frozen on the cold side. The plates we are using only last about 6 months before becoming permanently darkened so I am concerned as to what the outcome is to the food. CFP had an incident with patient illnesses that ended in a patient death. Although the cause was never determined, building our own scratch kitchen was identified as a method to have more control and oversight as a possible preventative mechanism. CFP does get a large number of grievances about the food.
CFP	Build a Facility Kitchen	491/20167.SDW Program: 7255	Augments the kitchen project above following professional cost estimates at the 400 level design.		4a	\$832,000	Added on 7/6/22	SBO 7/6/22: This increase includes \$25k that are estimated costs associated with approximately 15% of the fire road project being moved into the kitchen project, as the completion of the fire road needs to occur after the kitchen addition has been constructed.	

CFP	Anti-Ligature 491/21166.TYC Program: 7301	Do to recent surveys by both JC & CMS, it has been identified that we are not meeting the standards of ligature risks in the patient care areas and evaluation unit, including furniture, window dressings, computer and TV enclosures. The ligature risks identified needs to be addressed by June 2021 (received an extension to be completed by June 2021). We are required to report to JC monthly on our progress in addressing these ligature risks.	2	5	\$4,000,000	<p>DTMB 5/12/21: Need some quantitative summary, listing, etc. to base estimate review on. Is there a JC report listing specifics or PSC assessment of areas and level 1, 2, 3, 4 risk itemization? Approx \$1M+ Ligature mitigation done in 2 FY16 projects.</p> <p>DTMB 5/27/21: Concur that JC/CMS findings are not optional, nor is there much leeway for timing of action plan. DHHS/DTMB consensus that moving forward contracting a design professional and starting the analysis and development of detailed response design and refinement of scope/cost was the most beneficial path.</p> <p>Suggested consideration of Design Professional engaging in Anti-Ligature study of all facilities with possible funding prioritization globally based on Joint Commission status and needs since this is a significant area of evolving need with little flexibility from JC/CMS. The DHHS/DTMB consensus supported consideration of this approach.</p>	<p>DHHS 5/27/21: In recent years, The Joint Commission and CMS have intensified their focus on ligature risk reduction. Physical safety initiatives which is reflected in the National Patient Safety goal to reduce patient suicide risk (NPSG 15.01.01). However, it is the piece of compliance that is most cost prohibitive. It should also be noted that even the most rigorous assessment protocols and patient safety observation techniques are deemed less effective than physical modifications. Approaches such as periodic interval patient observation that are standard in psychiatric hospitals are no longer deemed acceptable as a mitigation technique (Beebe, 2019). During CPFS 2019 Joint Commission survey a citation was issued under standard EC.02.06.01 for deficiencies related to ligature risks. The SAFER Matrix assessment rated these deficiencies as High risk and widespread observations. To provisionally maintain accreditation, CPP was required to submit a proposal to The Joint Commission and CMS with a risk assessment indicating the repairs and replacements to be made. The proposal, which was initially approved in 2019, allowed one year for repairs and replacements to be made with status updates and audits submitted to The Joint Commission and CMS for approval each month. An extension was granted in June of 2020 as limited fund availability impeded progress. A second extension request was submitted in May of 2021 due to the impact of Covid-19 on fund availability as well as delays involving vendors. The pending approval of this proposal by The Joint Commission and CMS hinges on funding availability. If funds are not available to complete the project, CPP will become in jeopardy of losing accreditation. (Beebe, C. (2019). Ligature risk-requirements. Health Facilities Management Magazine, 2018-dec-firm-ligature-risk.pdf (aha.org)) We still have several items that need to be purchased, as seen in CFP JC tab.</p>
CFP	Install Fire Roadway Inside Secured Fence & Upgrade Fire Alarm System - Cost	Install paved road to ensure fire trucks can access all of the facility fire hydrants in the event of an emergency. The system has not been upgraded since 2003. The computer is operating on "Windows 98" and needs to be replaced by the vendor.	3	6	\$600,000	<p>DTMB 5/12/21: No fire truck road since original approx 20 yrs. Is this higher priority than falling equipment or infrastructure elsewhere? FA computer should be upgraded, cost estimate from manufacturer? Should be much smaller total value for FA above.</p> <p>DTMB 5/27/21: Consensus that Fire Alarm System upgrades are a priority - SFA requested and DHHS concurred DHHS will go back to facility and request specific assessment from Fire Alarm manufacturer to verify the extent of impact upgrade may require (potentially more than computer - could also affect some panels, cabling, devices) to verify scope & cost.</p> <p>Also, SFA requested separation of Fire Alarm Item and Fire Access Road item with facility gathering some input from local Fire Marshal/Departments as to need/extent of access development.</p>	<p>DHHS 5/27/21: Cited as the #2 short-term CFP priority by DTMB in 2019. Further, in the unfortunate event of a fire occurring after a recent rain, the firetrucks could get stuck in the grass which has the tendency to get very soft with a lot of rain and/or snow. We've had many vehicles stuck out there in years past and they were not as heavy as a firetruck could be. This could be an unpaved roadway.</p>
CFP	Install Fire Roadway Inside Secured Fence & Upgrade Fire Alarm System - Cost Increase	Augments the Fire Roadway and Alarm System project above following professional cost estimates that have increased the cost of the project.		6a	\$197,000	<p>SBO 3/1/22: Professional cost estimates indicate that the total cost of the fire road/alarm project is \$797,000, necessitating this additional \$197,000 be added to the project.</p>	
CFP	Install Fire Roadway Inside Secured Fence & Upgrade Fire Alarm System - Cost Increase	Second augmentation for the Fire Roadway and Alarm System project above based on updated professional cost estimates.		6b	\$396,200	<p>SBO 7/6/22: As noted above in the CFP kitchen augmentation 4a, 15% of the scope of this project has been moved to the kitchen project. Even with this scope reduction, the project is still estimated to cost more than the amount available, even after the first augmentation above. DHHS has committed to funding the fire alarm system upgrade from their own resources.</p>	
Hawthorn Center	Roof Replacement A, B, C, D, E, and F sections - Cost	Roof Replacement - Roof is currently in disrepair requiring monitoring and patching. Water is ponding on roof. Delaying project increases risk of mold.	3	7	\$1,400,000	<p>Work required for ongoing operation over the next 1 to 5 years, even if potentially replaced in near-term.</p>	<p>DTMB 5/27/21: Consensus reached that condition needs attention and should proceed even if facility operation is limited to the next 3 - 5 years. Cost adjusted by SFA per review of actual roof areas and more recent costs projected to future to the extent possible.</p>
Hawthorn Center	Roof Replacement A, B, C, D, E, and F sections - Cost Increase	Augments the roof replacement project above following professional cost estimates that have increased the cost of the project.		7a	\$750,000	<p>SBO 1/6/22: Professional cost estimates indicate that the total cost of the roof replacement project is \$2,151M, necessitating this additional \$750,000 be added to the project.</p>	
Hawthorn Center	Roof Replacement A, B, C, D, E, and F sections - Cost Increase	Second augmentation for the roof replacement project above following bidding that were all above the cost estimate, even with two deductions accepted.		7b	\$60,400	<p>SBO 4/26/22: Low bid was \$2,795,000.00. Two (2) deduct alternates were included when the project was bid out.</p> <ul style="list-style-type: none"> Deduct Alternate 1 - to drop down to a standard 20 year warranty from the 25 year warranty that was bid. (\$60,000.00) Deduct Alternate 2 - eliminate all work in area D approximately 20,400 SF of roof membrane, rigid insulation and all roof drain replacement and new overflow roof drains to meet code. (\$675,000.00). Area D will eventually need to have the work completed but it is the "newer" of all of the roofs. <p>Inclusion of both deduct alternates bring total cost to \$2,060,000.00. Currently a balance of \$2,002,278 remains in the Work Order. An additional \$2,400 is needed to cover DTMB fees.</p>	

CFP	Replace Handicap Parking Lot Service Area	All asphalt needs to be removed and replaced due to ongoing cracking and heaving, which creates a safety risk and the potential of not meeting ADA requirements. Replace the asphalt and redesign docking area based on usage and the increased traffic in the area.	17	23	\$1,200,000					
CFP	Replace all Counters & Cabinets on Patients Units	The laminate countertops & cabinets located in all the patient care areas are breaking which is creating an infection control problem that we have been cited for by JC and CMS.	6	24	\$2,500,000					
WRPH	Replace Energy Recovery Unit, Dampers, and Actuators	Replace unit, dampers and actuators - 47 years old past serviceable life. Life safety issue. Joint Commission and Energy Savings.	7	25	\$412,500	Recommended to bundle as part of one integrated solution in the future.	DTMB 5/12/22: Does this warrant stand alone status and action separate from AHU replacements, dual duct conversions, controls, etc.?	DTMB 5/12/21: SFA recommendation and DHHS concurred that this item and other Air Handler/Duct/VAV/Controls and related items at WRPH are best addressed as an integrated engineered solution system. This will require a significant level of funding and may likely be a future or otherwise separate issue from FY21 EW Allocation. SFA did suggest there may be some more minor routine maintenance/repair/replacement of components the could improve operation of the existing system short term at a lower investment level.		
WRPH	Replace Dual Duct Boxes	Replace all dual duct boxes, to update and include DDC controls - current system is 47 years old and significantly past useful life. Convert Pneumatic to Electronic	10	26	\$3,000,000	Recommended to bundle as part of one integrated solution in the future.	DTMB 5/12/22: Does this warrant stand alone status and action separate from AHU replacements, dual duct conversions, controls, etc.?	DTMB 5/12/21: SFA recommendation and DHHS concurred that this item and other Air Handler/Duct/VAV/Controls and related items at WRPH are best addressed as an integrated engineered solution system. This will require a significant level of funding and may likely be a future or otherwise separate issue from FY21 EW Allocation. SFA did suggest there may be some more minor routine maintenance/repair/replacement of components the could improve operation of the existing system short term at a lower investment level.		
WRPH	Air Handler Upgrade	Install variable motor fans, update air handlers/return fans to balance air flow and ventilation. Cost Efficiencies - Quality of Life	8	27	\$750,000	Recommended to bundle as part of one integrated solution in the future.	DTMB 5/12/22: Does this warrant stand alone status and action separate from AHU replacements, dual duct conversions, controls, etc.?	DTMB 5/12/21: SFA recommendation and DHHS concurred that this item and other Air Handler/Duct/VAV/Controls and related items at WRPH are best addressed as an integrated engineered solution system. This will require a significant level of funding and may likely be a future or otherwise separate issue from FY21 EW Allocation. SFA did suggest there may be some more minor routine maintenance/repair/replacement of components the could improve operation of the existing system short term at a lower investment level.		
WRPH	Replace All Air Handlers	Current Air Handlers are 47 years old and past their serviceable life. SFA-BOD 2019 assessment included this long term (5 yr) recommendation.		28	\$8,000,000	Recommended to bundle as part of one integrated solution in the future.	DTMB 5/12/22: Does this warrant stand alone status and action separate from AHU replacements, dual duct conversions, controls, etc.?	DTMB 5/12/21: SFA recommendation and DHHS concurred that this item and other Air Handler/Duct/VAV/Controls and related items at WRPH are best addressed as an integrated engineered solution system. This will require a significant level of funding and may likely be a future or otherwise separate issue from FY21 EW Allocation. SFA did suggest there may be some more minor routine maintenance/repair/replacement of components the could improve operation of the existing system short term at a lower investment level.		
				Cumulative Total Top 22	\$41,506,311					

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