



2041 Facilities Master Plan

2 September 2021

Maryland Department of General Services
Project BD-000-180-003

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Glossary of Terms	
Term	Definition
Acute Competency Restoration (“ACR”)	Focuses on the treatment to obtain competency to stand trial. This requires that the person understands the charges, verdicts and potential consequences, trial participation, process, ability to assist counsel, and decision-making ability.
Average Daily Census (“ADC”)	Average Daily Census is the average number of patients per day in a hospital over the course of a year.
Average Length of Stay (“ALOS”)	Refers to the average number of days that patients spend in hospital. It is measured by dividing the total number of days stayed by all inpatients during a year by the number of admissions or discharges. ALOS: $\frac{\text{number of patients}}{\text{number of admissions or \# of discharges}}$
Americans with Disabilities Act (“ADA”)	Ensures access to the built environment for people with disabilities. The ADA Standards establish design requirements for the construction and alteration of facilities subject to the law. These enforceable standards apply to places of public accommodation, commercial facilities, and state and local government facilities.
Central Maryland Region	Comprised of Anne Arundel County, Baltimore City, Baltimore County, Harford County, and Howard County.
Chronic Care	Chronic Care is the collective term for patients requiring skilled nursing and long-term acute care services.
Clifton T. Perkins Hospital Center	Clifton T. Perkins Hospital Center, located at 8450 Dorsey Run Road, Jessup, MD is a maximum-security inpatient behavioral health facility. The facility is licensed and certified by the Office of Health Care Quality and accredited by The Joint Commission.
Community Re-Entry (“CRE”)	Focuses on patients who are transitioning back to the community from higher acuity levels of care. A successful transition requires that the appropriate services and activities exist in the community.
Competency Maintenance (“CM”)	Directed at patients who are deemed competent to stand trial and are awaiting judicial review and disposition. Treatment focuses on maintaining competency throughout the entire length of hospitalization.
Core Planning Team	The Core Planning Team is comprised of members of the Maryland Department of Health, Maryland Department of General Services, Marshall Craft Associates, and Jensen + Partners.

Glossary of Terms	
Term	Definition
Cost per Patient	The cost of care per patient is the annual operating costs divided by the number of patients in the unit or facility, depending on the specific situation. The operating costs are a compilation of general administrative, maintenance, dietary, and clinical functions. Maintenance includes management of the physical plant and the grounds, housekeeping, fire and safety services, transportation, and laundry/linen services. Services such as fiscal, volunteer, procurement, IT/communication, workshops, and administrative are rolled up into general administrative costs. General administrative costs are most often relatively fixed and are not fluctuating with the patient census unlike dietary and clinical care functions.
Deer's Head Hospital Center	Deer's Head Hospital Center, located at 351 Deer's Head Hospital Road, Salisbury, MD provides outcome-oriented, comprehensive management of complex medical conditions. The facility provides inpatient and outpatient dialysis, and skilled nursing/long-term care. The facility is licensed and certified by the Office of Health Care Quality and accredited by The Joint Commission.
Developmental Disabilities Administration ("DDA")	DDA provides services to individuals with substantial functional limitations resulting from cognitive impairments.
Developmental Disabilities Facilities	Includes the Holly Center and Potomac Center.
Eastern Shore Hospital Center	Eastern Shore Hospital Center, located at 5262 Woods Road, Cambridge, MD provides inpatient behavioral health services on Maryland's Eastern Shore for adults age 18 and older that are suffering from psychiatric disorders. The facility is licensed and certified by the Office of Health Care Quality and accredited by The Joint Commission.
Eastern Shore Maryland Region	Comprised of Caroline, Cecil, Dorchester, Kent, Queen Anne's, Somerset, Talbot, Wicomico, and Worcester Counties.
Facility for Children ("FFC")	The FFC provides competency attainment services for children and adolescents who are participating in the legal process. These are patients who cannot attain competency and understanding of their charges and the legal process in the community.
Federally Qualified Health Centers ("FQHCs")	FQHCs are community-based health care providers that qualify for enhanced reimbursement from Medicare and Medicaid. They must provide primary care services to an underserved area or population, offer a sliding fee scale, have an ongoing quality assurance program, and have a governing board of directors.
Gero-Psychiatric ("GP")	Patients with increased medical service needs, including changes in acuity levels, which are generally attributable to aging. There may be younger patients that require similar levels of care due to factors not attributable to age.

Glossary of Terms	
Term	Definition
Health Professional Shortage Areas (“HPSA”)	The Health Resources and Services Administration under the U.S. Department of Health and Human Services designates HPSA as areas with a shortage of primary medical care, dental care, or mental health providers.
Holly Center	Holly Center, located at 926 Snow Hill Road, Salisbury, MD provides residential and support services to individuals with intellectual and developmental disabilities working to integrate into less restrictive settings in the community. The facility is licensed and certified by the Office of Health Care Quality.
Inpatient Behavioral Health	Provides intensive residential psychiatric treatment on a 24-hour basis, to individuals experiencing severe psychiatric symptoms or behaviors that place them at risk of harming themselves or others.
Inpatient Behavioral Health Facilities	Includes Springfield Hospital Center, Eastern Shore Hospital Center, Spring Grove Hospital Center, Clifton T. Perkins Hospital Center, and Thomas B. Finan Center.
Intellectual disability (“ID”)	Can be part of an inpatient behavioral health cohort.
Intensive management (“IMGMT”)	Directed at inpatient behavioral health patients who are violent, predatory, or malingering. These patients require a maximum level of security.
Intensive medical (“IM”)	Provided to patients requiring long-term institutionalization due to the instability of their condition and can be deemed non-restorable to competency following extensive treatment and intervention.
John L. Gildner Regional Institute for Children and Adolescents (“John L. Gildner RICA”)	John L. Gildner RICA, located at 15000 Broschart Road, Rockville, MD is a community-based treatment and special educational facility serving adolescents with severe emotional disabilities. The onsite school is managed through a partnership between MDH and Montgomery County Public Schools. The facility is licensed and certified by the Office of Health Care Quality and accredited by The Joint Commission.
Joint Commission	The Joint Commission accredits and certifies more than 22,000 health care organizations and programs in the United States, including hospitals and health care organizations that provide ambulatory and office-based surgery, behavioral health, home health care, laboratory, and nursing care center services. An independent, not-for-profit organization, The Joint Commission is the nation’s oldest and largest standards-setting and accrediting body in health care.
Long-Term Acute Care Hospitals (“LTACH”)	Long-term acute care hospitals (LTACH) are facilities that specialize in the treatment of patients with serious medical conditions that require care on an ongoing basis but no longer require intensive care or extensive diagnostic procedures.
MDH Service Line	MDH currently operates four (4) core service lines. These include: Inpatient Behavioral Health, RICA, DDA, and Chronic Care

Glossary of Terms	
Term	Definition
Mechanical, Electrical, and Plumbing Engineering (“MEP”)	These three (3) technical disciplines encompass the systems that make building interiors suitable for human occupancy.
Medically Underserved Areas & Medically Underserved Populations	Medically Underserved Areas and Medically Underserved Populations are defined by the Federal Government to include areas or population groups that demonstrate a shortage of health care services.
Not Criminally Responsible (“NCR”)	A law in Maryland that considers that at the time the crime was committed the defendant could not understand their actions were illegal or conform their actions to the law because of a mental disorder or developmental disabilities.
Office of Health Care Quality (“OHCQ”)	The OHCQ is a department within the Maryland Department of Health charged with monitoring the quality of care in Maryland's health care facilities and community-based programs. OHCQ licenses and certifies facilities and programs throughout Maryland. Licensing authorizes a facility to do business in the state. Certification authorizes a facility to participate in Medicare and Medicaid Programs. OHCQ surveys these facilities and programs to determine compliance with State and federal regulations, which set forth minimum standards for the delivery of care.
Potomac Center	Potomac Center, located at 1380 Marshall Street, Hagerstown, MD provides residential and support services to individuals with intellectual and developmental disabilities working to integrate into less restrictive settings in the community. The facility is licensed and certified by the OHCQ.
Regional Institute for Children and Adolescents Baltimore (“RICA Baltimore”)	RICA Baltimore, located at 605 S. Chapel Gate Lane, Baltimore, MD is a community-based treatment and special educational facility serving adolescents students with severe emotional disabilities. This facility serves adolescents from the Central Maryland region, the Eastern Shore, and parts of Western Maryland. The facility is licensed and certified by the OHCQ and accredited by The Joint Commission.
Regional Institutes for Children and Adolescents Facilities	Includes RICA Baltimore and John L. Gildner RICA facilities.
Residential Institutes for Children and Adolescents (“RICA”)	RICA facilities provide residential and day treatment programming for children and adolescents with severe emotional disabilities from across Maryland.
Secure Evaluation and Therapeutic Treatment (“SETT”)	The SETT program is located on the grounds of the Potomac Center and provides evaluation and assessment services, as well as active treatment, to people with intellectual disabilities and court involvement within a secure and safe environment.
Skilled Nursing Facility (“SNF”)	A facility that provides both short term treatment for rehabilitation from an illness or injury, or long-term treatment for patients who need a high level of care on a frequent or constant basis due to a chronic medical condition.

Glossary of Terms	
Term	Definition
Southern Maryland Region	Comprised of Calvert, Charles, Montgomery, Prince George's, and St. Mary's Counties
Spring Grove Hospital Center	Spring Grove Hospital Center, located at 55 Wade Avenue, Catonsville, MD provides a broad spectrum of inpatient behavioral health services to adults and adolescents with psychiatric disorders. Spring Grove Hospital Center was founded in 1797 and is the second oldest continuously operating psychiatric hospital in the United States. The facility is licensed and certified by the Office of Health Care Quality and accredited by The Joint Commission.
Springfield Hospital Center	Springfield Hospital Center, located at 6655 Sykesville Road, Sykesville, MD first opened in 1896. The facility provides a wide range of inpatient behavioral health clinical services for the treatment of psychiatric disorders. The facility is licensed and certified by the OHCQ and accredited by The Joint Commission.
Thomas B. Finan Center	Thomas B. Finan Center, located at 10102 Country Club Road, Cumberland, MD is a multi-purpose inpatient behavioral health facility. The facility specializes in the evaluation and treatment services for adults with psychiatric disorders. The facility is licensed and certified by the OHCQ and accredited by The Joint Commission.
Transition Traumatic Brain Injury ("TBI")	TBI is sudden damage to the brain caused by an injury. Common causes include car/motorcycle crashes, falls, sports injuries, and assaults. Injuries can range from mild concussions to severe permanent brain damage.
Western Maryland Hospital Center	Western Maryland Hospital Center, located at 1500 Pennsylvania Avenue, Hagerstown, MD specializes in interventional health care services including: rehabilitation, peritoneal dialysis, total parenteral nutrition or special isolation, diagnosis and comorbidities, brain injury, spinal cord injury, multiple trauma, multiple system failure, post coronary artery bypass graft surgery (or other open heart surgeries requiring extensive re-stabilization and rehabilitation), Stage III-IV wound management and wound vac, hyperalimentation, and infectious disease management and isolation including negative pressure isolation. The facility is licensed and certified by the OHCQ and accredited by The Joint Commission.
Western Maryland Region	Comprised of Allegany, Carroll, Frederick, Garrett, and Washington Counties.

**SECTION I:
EXECUTIVE SUMMARY**

Introduction

This Executive Summary provides a high-level overview of each of the six (6) sections contained within the Maryland Department of Health’s 2041 Master Plan Report (the “Plan”). The Executive Summary starts with the background of the Maryland Department of Health, then reviews the purpose of the Plan, work approach and stakeholder engagement. It concludes with a recap of the alternatives analyzed and recommendations, including recommended capital costs, projected operating savings, and capital cost avoidance.

Background

The Maryland Department of Health (“MDH” or “Department”) is a cabinet level agency within the State government that is responsible for the public health and well-being for all Marylanders. MDH currently operates 1,876 beds at 11 facilities. Services provided are organized into four (4) areas of care: Inpatient Behavioral Health, Regional Institutes for Children and Adolescents (“RICA”), residential facilities for individuals with developmental disabilities, and Chronic Care services.

Purpose of the Plan

The purpose of the *Maryland Department of Health 2041 Master Plan* is to align MDH’s projected patient care needs with health care services offered or provided by the Department. The Plan supports implementation of the State’s 2019 partnering agreement “Maryland Total Cost of Care (TCOC) Model”, with the U.S. Centers for Medicare & Medicaid Services (“CMS”). The TCOC Model sets a per capita limit on Medicare total cost of care in Maryland. The TCOC Model is the first CMS Innovation model to hold a state fully at risk for annual increases in total cost of care for Medicare beneficiaries.¹ With implementation of the Plan, the State will progressively transform health care delivery across the healthcare system with the objective of improving health and quality of care while reducing costs. At the same time, State growth in Medicare spending must be maintained at lower than the national growth rate and at an annual savings target of \$300 million per year.²

¹ Centers for Medicaid and Medicare Services, Maryland’s Total Cost of Care Model
<https://innovation.cms.gov/innovation-models/md-tccm#:~:text=The%20Model's%20financial%20targets%20are,based%20payments%20for%20Maryland%20hospital>
s.

² Maryland’s Total Cost of Care Model Background and Summary, Centers for Medicaid and Medicare Services
https://hsrc.maryland.gov/Documents/Modernization/Total%20Cost%20of%20Care%20Model%20-%20Background%20and%20Summary_7_26_17.pdf

At the outset of the planning process, a set of Guiding Principles, against which evaluations and decisions of the Plan were to be made, was developed:

- Realign health care delivery to support evolving care models and trends.
- Improve the patient care environment.
- Implement efficiencies in service through utilization of all appropriate healthcare assets available throughout Maryland - not just those owned and operated by MDH.
- Fulfill the requirements associated with the Maryland Total Cost of Care Model.

Facilities

MDH has 14 facility campuses located throughout the State. Three (3) of those facilities are closed or leased. For the remaining 11 operating facilities, services are provided within a large number of buildings - many of these buildings, due to their age, do not align with evolving patient care models and are reaching or are at the end of their useful life. Due to the age of many MDH facilities, the cost to provide care consistently exceeds comparable locations and national benchmarks for similar services.

Facility Assessment Summary

Service Line	Facility	Overall Score	Infrastructure Assessment			
			Functional	Architectural	MEP	Civil Engineering
Inpatient Behavioral Health	Springfield Hospital Center	Fair	Fair	Fair	Fair	Good
	Clifton T. Perkins Hospital Center	Good	Good	Good	Fair	Fair
	Eastern Shore Hospital Center	Good	Good	Good	Good	Good
	Spring Grove Hospital Center	Poor	Poor	Poor	Fair	Poor
	Thomas B. Finan Center	Fair	Fair	Fair	Fair	Fair
Residential Institutes for Children and Adolescents	RICA Baltimore	Fair	Good	Fair	Good	Fair
	John L. Gildner RICA	Fair	Good	Fair	Fair	Fair
Residential Services for Individuals with Developmental Disabilities	Holly Center	Fair	Fair	Fair	Fair	Fair
	Potomac Center	Fair	Fair	Fair	Fair	Fair
Chronic Care	Western Maryland Hospital Center	Poor	Poor	Poor	Poor	Fair
	Deer's Head Hospital Center	Poor	Poor	Poor	Fair	Fair

Figure 1 Facility Assessment Summary

Planning Process

The Plan was developed in accordance with the Maryland Department of Budget and Management's *Facilities Master Plan Guidelines*.³ MDH coordinated with the Maryland Department of General Services (“DGS”) to procure the services of consultants to assist in the development of the Plan. Maryland architectural firm of Marshall Craft Associates and its local team of architects and engineers, along with the national health care planning firm, Jensen+Partners were selected to work closely with a MDH-DGS planning committee of senior MDH leaders, to undertake development of the *Maryland Department of Health 2041 Master Plan*.

As MDH was working to finalize the Plan in Spring 2020, MDH’s unforeseen urgent need to respond to the COVID-19 pandemic refocused the Department’s efforts from completion of the Plan. This resulted in a delayed finalization and submission of the Plan. Planning data used for submission of the Plan utilizes baseline and cost projection data through 2020.

Stakeholder Engagement

The planning process, particularly the current state assessment and development of a future care model, engaged a wide group of MDH leaders, medical and clinical staff, strategy and medical planners, and administrative staff. Representatives from community health care organizations also participated in the review and consideration of shared resources or facilities. Over 100 individuals contributed their expertise and ideas in a series of work sessions. Following the release of the Plan, MDH intends to continue its community and local government outreach to refine recommendations and improve outcomes.

Five Step Work Approach

- Analysis of Programs and Services
 - The Core Planning Team, working with the key stakeholders, reviewed the current model of care delivery, projected revisions for future models of care, and defined volume projections through the year 2041. Volume projections were developed to incorporate three (3) key factors: market demand and utilization forecast, shifting demographics and disease prevalence, and the impact of a future care model to address evolving developments and best practices for patient services. Volume projections forecast a reduction in the future bed demand across MDH’s service lines. The future combined total bed demand is projected to be 1,589 in 2030 and 1,540 in 2040, and requires a consequential re-thinking of the highest and best use of the current facility campuses, their facilities and locations.

³ <https://dbm.maryland.gov/budget/Documents/capbudget/FacilitiesMasterPlan.pdf>

- Analysis of Facilities
 - The planning process included a survey of the facilities and a comprehensive analysis of the infrastructure and functionality of each site. The assessment analyzed cost information of operating and non-operating facilities and the total cost of care of clinical operations. Conclusions from the analysis indicated that the requirements to upgrade many of the existing facilities to projected future standards of care would be operationally difficult and cost prohibitive.

- Alternate Development Scenarios
 - The consultants and Core Planning Team developed alternate scenarios to align the forecasted programmatic needs with those for facilities. For example, the program analysis indicated that Maryland has a surplus of existing bed capacity in the private sector, which could potentially be repurposed to address MDH demand – in some cases at a reduced cost. In lieu of MDH undertaking costly retrofit or replacement of facility buildings, the potential to shift some of MDH’s patients to available space in community health care organizations was explored. The Core Planning Team met with a broad range of representatives of various health care organizations to develop an understanding of their interest in potential partnership opportunities with MDH. These discussions and additional analyses determined that, while some patients are suitable for community health care settings, the higher acuity patients will likely need to be cared for by MDH.

 - Various alternative recommendations were considered during the development of the Plan. The Plan recommends investing in MDH facilities and right-sizing the capacity of the facilities, while also developing partnerships with health care organizations and enhancing the community reintegration of patients.

Master Plan Phased Recommendation Summary

A. Phase 1 Recommendation Summary (FY 2022-2026)

- a. Divestiture of Non-Operating Facilities
 - i. Crownsville Hospital Center (Anne Arundel)
 - ii. Regional Institute for Children & Adolescents Southern Maryland (Prince George's)
 - iii. Upper Shore Community Mental Health Center (Kent)
- b. Construction:
 - i. Construct four (4) 24-hour crisis centers located in each region of the State (Western Maryland, Central Maryland, Southern Maryland, Eastern Shore)
- c. Strategic Partnerships
 - i. Identify and develop strategic partnerships to transition services currently provided at Deer's Head Hospital Center and Western Maryland Hospital Center
 - ii. Consolidate MDH Behavioral Health Administration office spaces into the Department's relocation to the Baltimore Central Business District
 - iii. Perform an assessment of the Central Maryland Inpatient Behavioral Health Capacity

B. Phase 2 Recommendation Summary (FY 2027 - 2031)

- a. Construction
 - i. Construct two (2) facilities:
 - 1. Facility for Children (Central Maryland);
 - 2. Secure Evaluation Therapeutic Treatment (SETT) Facility (Jessup)
 - ii. Construct a replacement hospital building at Springfield Hospital Center (Sykesville)

C. Phase 3 Recommendation Summary (FY 2032 - 2041)

- a. Construction
 - i. Renovate the Holly Center
- b. Community Integration
 - i. Identify and develop strategic partnerships and integration plans to transition services currently provided at Potomac Center and Spring Grove Hospital Center

D. Operations and Maintenance Impacts

- a. Cumulative cost avoidance of \$321.6 million by implementation of the Plan over the twenty-year term, including and a one-time cost avoidance of \$24.1 million through the transition of services from four (4) facilities

**SECTION II:
OVERVIEW OF MARYLAND DEPARTMENT OF HEALTH**

Introduction

Section II provides an overview and background information for MDH. It includes the history, mission, and scope of services of the Department. Starting with the origins and rationale for the Plan's effort, Section II details the MDH service lines and facility locations.

History

Since the mid-1600s, Maryland has been committed to supporting its residents by providing vital health and social services. The first activities included the registration of births, deaths, and marriages. The incorporation of Baltimore Town into Baltimore City involved the formalization of a public health agency and the development of specific health policies and ordinances to provide health care services. Today, Maryland has 24 local health departments located in Baltimore City and in each of Maryland's 23 counties.

MDH has five (5) major divisions - Public Health Services, Behavioral Health Administration, Developmental Disabilities Administration, Health Care Financing, and Operations. Additionally, the Department has 20 professional boards that license and regulate health care professionals, as well as various commissions that issue grants, conduct research, and make recommendations on issues that affect Maryland's health care delivery system. MDH has a staff of more than 10,000 and a budget greater than \$17 billion.

Purpose of the Plan

The *Joint Chairmen's Report* on the Fiscal Year (FY) 2018 State Operating Budget (HB 150) and the State Capital Budget (HB 151) and Related Recommendations (page 251 of referenced Report) requested that MDH develop a Conceptual Facilities Master Plan with early action items to be completed by October 1, 2017, and completion of a full Facilities Master Plan by October 1, 2018. MDH developed and delivered the *Conceptual Facilities Master Plan* on time and subsequently requested extensions for completion of the full *Facilities Master Plan* - this document, due to the complexity and magnitude of the endeavor, changes in scope for the work that arose during the planning process, and delays due to MDH refocusing its efforts to respond to the COVID-19 pandemic.

On November 20, 2019, a memorandum of understanding ("MOU") was developed between the Centers for Medicare and Medicaid Services ("CMS") and the State of Maryland regarding the Maryland Total Cost of Care Model. The scope and purpose of the MOU defined "The commitment, principles, and framework for CMS and the State to develop a comprehensive set of goals, measures, milestones, and targets for hospital quality improvement, health care system transformation and quality improvement, and population health outcomes ("Statewide Integrated Health Improvement Strategy") for the Maryland Total Cost of Care Model [...]." The MOU included the Statewide Integrated Health Improvement Strategy Principles and outlined

the agreement between CMS and the State. The Statewide Integrated Health Improvement Strategy Principles are as follows:

1. *Goals, measures, and targets should be relevant to Maryland as established through a collaborative public process as determined by the State.*
2. *Goals, measures, and targets should reflect an all-payer perspective.*
3. *Goals, measures, and targets should capture statewide improvements achieved under the Model, including improved health outcomes and equity.*
4. *Goals for the three domains described in Section III.C.1 through III.C.3 of this MOU should be synergistic and mutually reinforcing.*
5. *Measures should be focused on outcomes whenever possible.*
6. *Milestones, including process measures, may be used to signal progress toward the targets.*
7. *The Statewide Integrated Health Improvement Strategy Proposal should fully maximize the population health improvement opportunities made possible by the Model; and*
8. *The Statewide Integrated Health Improvement Strategy Proposal should promote public and private partnerships with shared resources and infrastructure.⁴*

⁴ Department of Health and Human Services and CMS: Memorandum of Understanding Between the Centers for Medicare & Medicaid Services and State of Maryland in relation to the Maryland Total Cost of Care Model Statewide Integrated Health Improvement Strategy dated November 20, 2019

Service Lines and Specialized Care Services

The health care services provided at Maryland Department of Health facilities have historically been divided into four (4) service delivery lines:

- I. Inpatient Behavioral Health;
- II. Residential Institutes for Children and Adolescents (“RICA”);
- III. Residential Services for Individuals with Developmental Disabilities; and
- IV. Chronic Care.

The State’s role is to provide care for Maryland residents, regardless of payer status, diagnosis, or court involvement. The following is a brief overview of each service line:

A. Inpatient Behavioral Health

MDH provides hospital-based behavioral health services that includes intensive residential psychiatric treatment to individuals experiencing psychiatric symptoms or behaviors. Inpatient behavioral health patients can be voluntarily committed, civilly committed, and be court involved through Title 3 of the Criminal Procedure Article of the Annotated Code of Maryland. Court involved patients are involved with the criminal justice process, and their treatment and competency restoration are managed in concert with the judicial system. Inpatient services may include psychiatric and clinical evaluation, medication administration and management, individual and family counseling, group therapy, medical and nursing supervision and interventions, psychoeducation, and aftercare services. Inpatient psychiatric care services for individuals with severe and persistent mental illness are structured to develop or restore independent living and social skills, including the ability to make decisions regarding: life, self-care, illness management, and community participation; as well as to promote access to and use of community resources to facilitate the individual’s integration into the community, thereby facilitating recovery, and preventing relapse and re-hospitalization.

Over the last century, the patient care model and the patient population for Inpatient Behavioral Health has changed. Twenty years ago, the majority of MDH patients required long-term institutional care because of their inability to medically manage their condition in the community. Today, MDH’s patient population is primarily composed of court-ordered placements. In addition to the shift in type of patients, the patient population now includes more patients who are older. In some cases, patients have become more appropriate for community settings. In other cases, patients have become more complex in their care needs due to the severity and diversity of diagnoses, legal offenses, and the services required to deliver quality care. MDH has responded to the changing patient population through the development of specialized care services to meet evolving patient care needs.

Specialized Care Services include:

- **Acute Competency Restoration** focuses on the treatment to obtain competency to stand trial. This requires the person to understand the charges, verdicts and potential consequences, trial participation, process, ability to assist counsel, and decision-making ability.
- **Intensive Management** is directed at inpatient behavioral health patients who are violent, predatory, or malingering. These patients require a maximum level of security.
- **Intensive Medical** patients require long-term institutionalization due to the instability of their condition and can be deemed non-restorable to competency following extensive treatment and intervention.
- **Competency Maintenance** is directed at patients who are deemed competent and are awaiting judicial review and disposition. Treatment focuses on maintaining competency throughout the hospitalization.
- **Intellectual Disability** can be part of an inpatient behavioral health cohort. These intellectually disabled patients are in a defined unit with care plans.
- **Gero-psychiatric Care** is for patients with increased medical service needs, including changes in acuity levels, which are generally attributable to aging. There may be younger patients that require similar levels of care due to factors not attributable to age.
- **Community Re-Integration** focuses on patients who are transitioning back to the community. A successful transition requires that the appropriate services and activities exist in the community.
- **Adolescent/Child** patients are separated from adult populations.

B. Residential Institutes for Children and Adolescents (RICA)

RICA facilities provide residential and day treatment programs for children and adolescents with emotional disabilities from across Maryland. Referrals may result from conditions such as affective disorders, behavioral disorders, clinical depression, and psychosis.

C. Developmental Disabilities Administration (DDA)

DDA facilities provide services to individuals with substantial functional limitations resulting from cognitive impairments. Direct care services are provided by MDH in two (2) intermediate care residential facilities for individuals with intellectual and developmental disabilities. DDA also provides integration of individuals with developmental disabilities into the community. DDA partners with individuals with developmental disabilities to provide support and resources to live fulfilling lives in the community. The Developmental Disabilities Administration is the primary administration within MDH that funds community-based services and support for people with developmental disabilities.

D. Chronic Care

MDH provides chronic care for patients in the form of skilled nursing facility care (“SNF”) and long-term acute care hospital (“LTACH”) services at two facilities. The Western Maryland Hospital Center also provides Traumatic Brain Injury (“TBI”) services. Deer’s Head Hospital Center also provides inpatient and outpatient dialysis treatment. Demand for chronic care beds is projected to decrease over the next 10 years due to increases in the availability of services in the community and advances in medical treatment and care available in non-hospital settings. Treatment is shifting toward a model that is closer to patients’ homes.

Locations of Care (organized by service line)

The following map depicts the location of the 14 MDH facilities located throughout Maryland’s four (4) regions. Of the 14 sites, 11 are operating facilities, and 3 are non-operating facilities that are either leased or vacant. The map also details the programs located at each site. All hospital facilities are licensed and certified by the OHCQ and accredited by The Joint Commission.

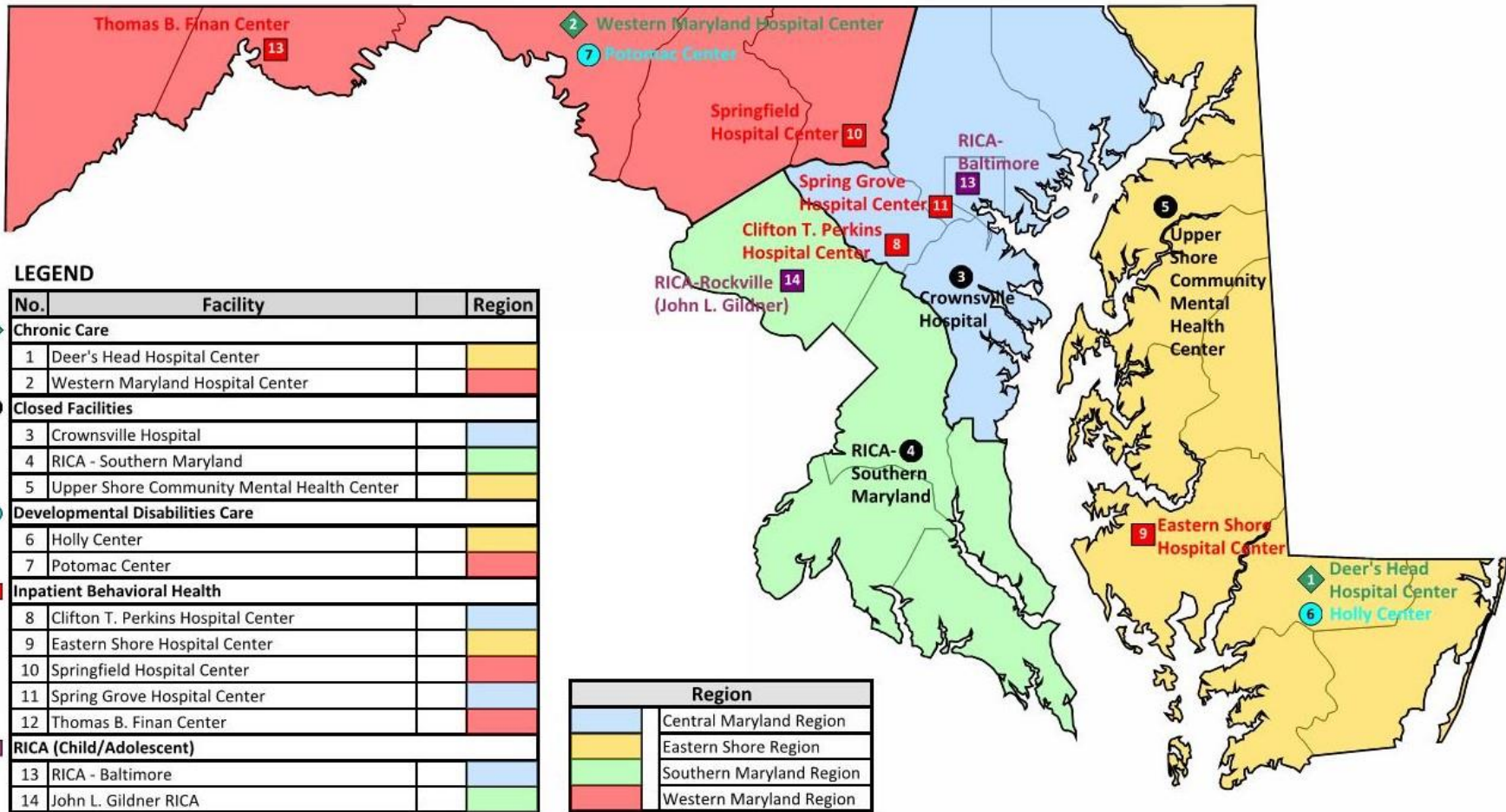


Figure 2 MDH Facility Locations/Regions Map

A. Inpatient Behavioral Health Facilities Locations:

Springfield Hospital Center

Springfield Hospital Center, located at 6655 Sykesville Road, Sykesville, MD first opened in 1896. Springfield Hospital Center provides a wide range of inpatient behavioral health services for the treatment of psychiatric disorders.

Clifton T. Perkins Hospital Center

Clifton T. Perkins Hospital Center, located at 8450 Dorsey Run Road, Jessup, MD is a maximum-security inpatient behavioral health facility. The facility receives patients requiring psychiatric evaluation who have been accused of certain felonies and have raised the Not Criminally Responsible⁵ defense and/or their competency to stand trial is in question. The facility provides mental health treatment to felony inmates from correctional facilities who meet the criteria for involuntary commitment.⁶ Additionally, the facility accepts patients from other MDH regional psychiatric hospitals who exhibit violent and aggressive behavior.

Eastern Shore Hospital Center

Eastern Shore Hospital Center, located at 5262 Woods Road, Cambridge, MD provides inpatient behavioral health services on the Eastern Shore for adults aged 18 and older that are suffering from psychiatric disorders.

Spring Grove Hospital Center

Spring Grove Hospital Center, located at 55 Wade Avenue, Catonsville, MD provides a broad spectrum of inpatient behavioral health services to adults and adolescents with psychiatric disorders. Spring Grove Hospital Center was founded in 1797 and is the second oldest continuously operating psychiatric hospital in the United States. The hospital maintains several student teaching programs and serves as an important training site for universities, including the University of Maryland Medical School.

Thomas B. Finan Center

The Thomas B. Finan Center, located at 10102 Country Club Road, Cumberland, MD is a multi-purpose inpatient behavioral health facility. The facility specializes in the evaluation and treatment services for adult psychiatric patients. The Joseph D. Brandenburg Center is also located on the Thomas B. Finan Center campus and is a former developmental disabilities residential treatment facility with 50 licensed beds that was closed in 2011.

⁵ A law in Maryland that considers that at the time the crime was committed the defendant could not understand their actions were illegal or conform their actions to the law because of a mental disorder or developmental disabilities.

⁶ Maryland law allows involuntary admission to a hospital when an individual has a mental disorder and needs inpatient care or treatment and presents a danger to the life or safety of the person or others and is unable or unwilling to be admitted voluntarily.

The center is currently leased to the Allegany County Board of Education to provide special education. The buildings are sub-leased to Sheppard Pratt for special needs students at the Sheppard Pratt School - Cumberland Jefferson School. All recommendations made in regard to the Thomas B. Finan Center will also encapsulate the Joseph D. Brandenburg Center.

B. Regional Institutes for Children and Adolescents Facility Locations:

Regional Institute for Children and Adolescents - RICA Baltimore

The Regional Institute for Children and Adolescents Baltimore facility, located at 605 S. Chapel Gate Lane, Baltimore, MD serves adolescents from the Central Maryland region, the Eastern Shore Maryland region, and parts of the Western Maryland Region. The facility is staffed by qualified multidisciplinary treatment teams, providing treatment and educational programs for adolescent boys and girls aged 12 to 17 who are experiencing emotional, behavioral, and learning difficulties.

Regional Institute for Children and Adolescents - John L. Gildner RICA

The John L. Gildner Regional Institute for Children and Adolescents, located at 15000 Broschart Road, Rockville, MD is a community-based treatment and special educational facility serving adolescents experiencing emotional, behavioral, and learning difficulties. This facility is managed through a partnership between MDH and Montgomery County Public Schools.

C. Developmental Disabilities Administration Facilities Locations:

Holly Center

The Holly Center, located at 926 Snow Hill Road, Salisbury, MD provides residential and support services to individuals with intellectual and developmental disabilities working to integrate into less restrictive settings in the community.

Potomac Center

The Potomac Center, located at 1380 Marshall Street, Hagerstown, MD provides residential and support services to individuals with intellectual and developmental disabilities working to integrate into less restrictive settings in the community.

Secure Evaluation and Therapeutic Treatment Program (SETT)

The SETT is located on the grounds of the Potomac Center and provides evaluation and assessment services as well as active treatment to people with intellectual disabilities and court involvement. Additionally, direct case consultation and assistance is provided to both criminal justice and human services staff regarding individuals with intellectual disabilities involved with the criminal justice system.

D. Chronic Care Facilities Locations:

Western Maryland Hospital Center

Western Maryland Hospital Center, located at 1500 Pennsylvania Avenue, Hagerstown, MD specializes in various interventional health care services including; rehabilitation, peritoneal dialysis, total parenteral nutrition or special isolation, diagnosis and comorbidities, brain injury, spinal cord injury, multiple traumas, multiple system failure, post coronary artery bypass graft surgery (or other open-heart surgeries requiring extensive re-stabilization and rehabilitation), Stage III-IV wound management and wound vac, hyperalimentation, and infectious disease management and isolation including negative pressure isolation. The facility has several types of licensed beds, including 63 skilled nursing licensed beds and 60 long term acute care hospital beds (LTACH), which includes eight (8) beds designated for the traumatic brain injury program (TBI).

Deer's Head Hospital Center

Deer's Head Hospital Center, located at 351 Deer's Head Hospital Road, Salisbury, MD provides outcome-oriented, comprehensive management of complex medical conditions. The facility has 125 licensed beds that are divided into 80 SNF beds and 45 LTACH beds. Three (3) of the 80 SNF beds are designated for non-compliant tuberculosis patients. The facility also provides inpatient and outpatient dialysis, and skilled nursing/long-term care.

E. Non-Operating Facilities:

In addition to the 11 MDH operating facilities, there are also three (3) non-operating facilities: Crownsville Hospital Center (partially leased), RICA Southern Maryland (leased), and Upper Shore Community Mental Health Center (partially leased).

Crownsville Hospital Center

The facility, located at 1520 Crownsville Road, Crownsville, MD is a former inpatient behavioral health facility that was closed in 2004. The campus is partially leased to various tenants, including the Anne Arundel County Food Bank, Maryland Environmental Service ("MES"), Gaudenzia residential drug treatment program, Maryland Institute for Emergency Medical Services Systems ("MIEMSS"), and Addiction Recovery Inc. (Hope House) residential drug treatment program.

Regional Institute for Children and Adolescents Southern Maryland

The facility, located at 9400 Surratts Road, Cheltenham, MD is a former Regional Institute for Children and Adolescents facility with 40 licensed beds, serving students with severe emotional disabilities that was closed in 2010. The facility is currently leased to the Prince George's County Public School System that operates the Croom High School at this location.

Upper Shore Community Mental Health Center

The facility, located at 300 Scheeler Road, Chestertown, MD is a former inpatient behavioral health facility that was closed in 2010. The majority of this facility is currently leased to the Kent County Health Department that operates the A.F. Whitsitt Center at this location. The A.F. Whitsitt Center is an inpatient residential treatment facility that treats substance use disorders and co-occurring mental health disorders.

**SECTION III:
PLANNING PROCESS AND BACKGROUND DATA**

Introduction

Section III provides an overview of the Plan’s work approach. It describes the project’s goals, participants, methodology, and sources of data.

Project Goals

The planning process began with the development of project goals, which were broadly reviewed and confirmed so that they could ultimately be used with the Guiding Principles as criteria for decision-making.

The goals for the Plan include:

- Optimizing MDH’s statewide healthcare system that will:
 - Provide enhanced patient care;
 - Provide optimal facilities and environments of care; and
 - Realize efficiencies and cost savings.
- Provide healthcare to all Maryland residents in need;
- Reduce the total cost of care and make Maryland a national model;
- Develop phased recommendations that are actionable and flexible in the short-term/ 0-5 years (Phase 1), medium term/ 6-10 years (Phase 2) and long-term/ 11-20 years (Phase 3);
- Use partnerships to utilize excess capacity in the existing private sector facilities.

Project Team

The Core Planning Team included representatives from MDH, DGS, the Maryland architectural firm of Marshall Craft Associates and its local team of engineers and architects, along with the national health care planning firm, Jensen+Partners. As shown on the Work Plan below, the Core Planning Team was on-site for all work sessions to meet with project stakeholders and leadership. When off-site, the Core Planning Team utilized technology to maintain communication and progress with the Core Planning Team and leadership on a weekly basis.

The Core Planning Team organization matrix illustrates MDH’s concept for leadership of the planning process and stakeholder participation. The team was designed to represent both a local institution focus (red workgroups) and broad-system planning (vertical workgroups). Whenever possible, the Core Planning Team relied on existing groups, or modified existing groups to assure robust participation. This level of stakeholder engagement was successful in soliciting information and ideas about how best to serve patients, and facilitating broad-based participation.

STEERING COMMITTEE
Dennis Schrader, MDH Secretary Robert Neall, MDH Secretary (former) Thomas Andrews, Chief of Staff Webster Ye, Assistant Secretary Atif Chaudhry, Dep. Sec. of Operations Gregg Todd, Dep. Sec. of Operations (former) Bernard Simons, Dep. Sec. of Developmental Disabilities Dr. Jinlene Chan, Dep. Sec. of Public Health Services Fran Phillips, Dep. Sec. of Public Health Services (former) Dr. Aliya Jones, Dep. Sec. of Behavioral Health Administration Will Andalora, Director of Office of Facilities Management & Development Bryan Mroz, Director of MDH Healthcare System John Robison, Director of State Hospital Administration (former) Steve Lauria, DGS Chief of Design/DGS Project Manager

CORE PLANNING TEAM
<ul style="list-style-type: none"> Atif Chaudhry, Deputy Secretary of Operations Gregg Todd, Deputy Secretary of Operations (former) Will Andalora, Director of Office of Facilities Management and Development Steve Lauria, DGS Chief of Design/DGS Project Manager Marshall Craft Associates Jensen + Partners

Chronic Care
Lead: Dr. Jinlene Chan CEOs and clinical staff from: <ul style="list-style-type: none"> Deer's Head Hospital Center Western Maryland Hospital Center

Inpatient Behavioral Health
Lead: John Robison CEOs and clinical staff from: <ul style="list-style-type: none"> Clifton T. Perkins Hospital Center Eastern Shore Hospital Center Spring Grove Hospital Center Springfield Hospital Center Thomas B. Finan Center

Developmental Disabilities Care
Lead: Bernard Simons CEOs and clinical staff from: <ul style="list-style-type: none"> Holly Center Potomac Center

RICA (Child/Adolescent)
Lead: John Robison CEOs and clinical staff from: <ul style="list-style-type: none"> RICA – Baltimore John L. Gildner - RICA

SITES OF CARE		
CO-LEADS:		
Clifton T. Perkins Hospital <i>Central Region</i> CEO: Marian Fogan	John L. Gildner RICA <i>Western Region</i> CEO: Kenneth Basler	Springfield Hospital <i>Western Region</i> CEO: Paula Langmead
Holly Center <i>Eastern Region</i> CEO: Mae Esh	Potomac Center <i>Western Region</i> CEO: Holly Young	Thomas B. Finan Center <i>Western Region</i> CEO: Lesa Diehl
Eastern Shore Hospital Center <i>Eastern Region</i> CEO: Forrest Daniels	RICA - Baltimore <i>Central Maryland</i> CEO: Tracey Heslop	Western Maryland Hospital Center <i>Western Region</i> CEO: Kelly Devilbiss
Deer's Head Hospital Center <i>Eastern Region</i> CEO: Mary Beth Waide		Spring Grove Hospital Center <i>Central Region</i> CEO: Dwain Shaw

Human Resources

Information and Technology

Facilities and Construction

Real Estate

Supply Chain and Logistics

Communications

Community

Figure 3 Core Planning Team Organization Matrix

A. Steering Committee

The Steering Committee was led and facilitated by the Core Planning Team which initially met to review the Plan’s approach, align the master planning process with strategic initiatives, and set the project goals. Steering Committee participation assured a defined and organized process to meet the health care system’s strategic objectives and goals. At the end of each work session, the Steering Committee met to review a summary of the work in progress and provide input and direction at each step of the project. Steering Committee members participated in focused workgroups in their areas of greatest interest and expertise.

B. Service and Program Work Groups

A series of Service and Program Work Groups, primarily co-chaired by clinical and administrative staff, were organized around the key program and service areas of Inpatient Behavioral Health, RICA, DDA and Chronic Care. These workgroups met both “vertically” by service type and “horizontally” by location. Additionally, members participated in a series of planning sessions to define the potential space impacts from the future care model. For example, discussion topics included judicial/clinical patient flow with the robust post-acute community services. Other stakeholders helped to establish program working assumptions for broad-based initiatives by providing input regarding Patient Experience, Information and Technology, Health Services Cost Review Commission (“HSCRC”), Maryland Department of Juvenile Services (“DJS”), Facilities and Construction, Supply Chain, Procurement, and Logistics.

Methodology

A. Work Plan

The Work Plan below, illustrates a high-level overview of the work approach. The approach developed by the Core Planning Team allowed regular collaboration and interaction with the Steering Committee and stakeholders in a series of engaging work sessions. A leadership briefing concluded each work session to confirm the next steps and clarify direction when needed. The 14 work sessions allowed key leadership-Steering Committee members to address issues and focus on long-term decisions, in addition to deliverables review and approval. The Work Plan was organized into six services including:

1. Facility Tours and Analysis;
2. Program Analysis and Development;
3. Facility for Children;
4. Area Plans;
5. Priorities and Budget; and
6. Consolidated 20-Year Plan.

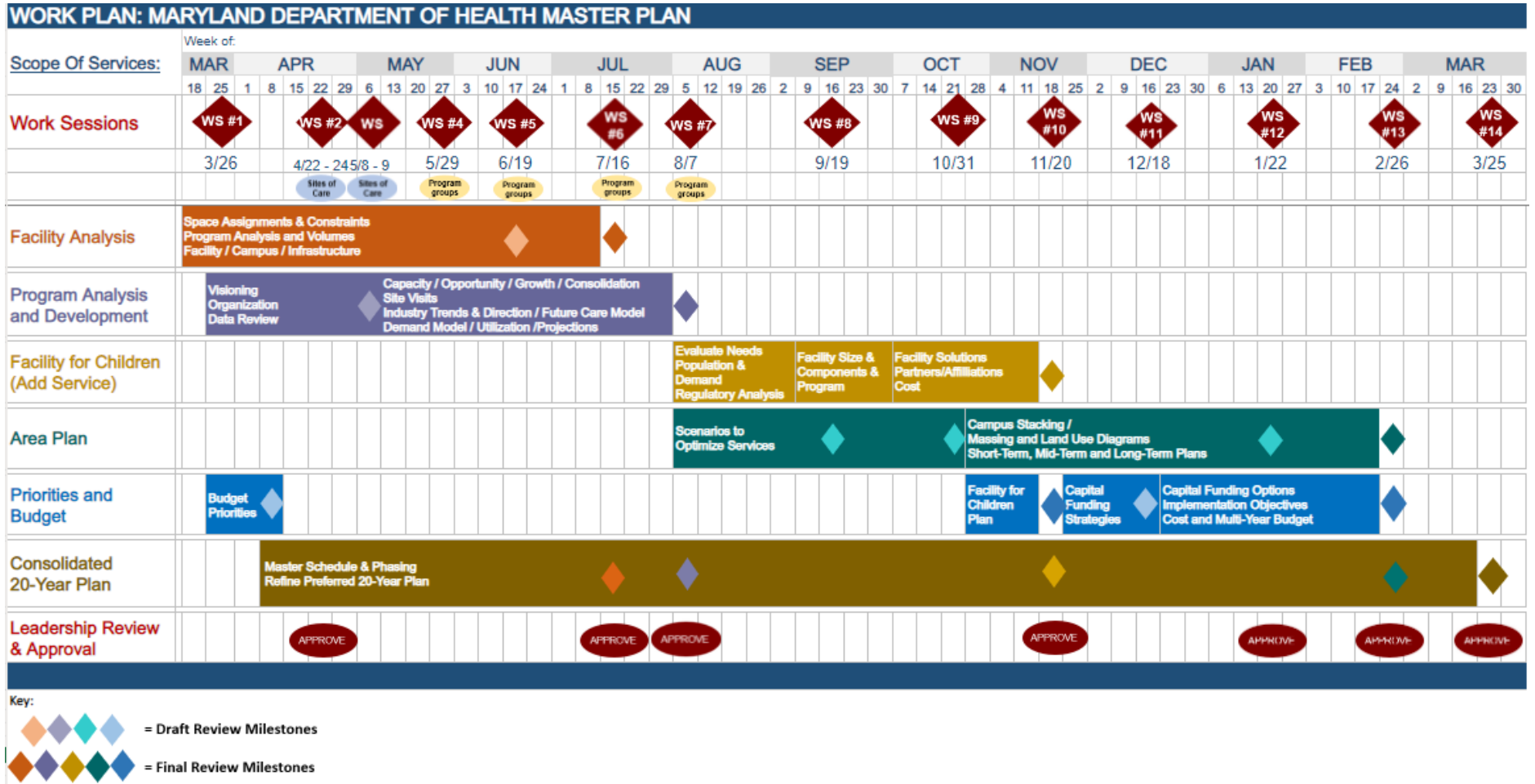


Figure 4 Work Plan

B. Data Sources

Throughout the planning process, MDH provided resource documents for review and incorporation into the situation assessment, needs assessment, gap analysis, and final recommendations.

In addition, external resources and data sources compiled by the Core Planning Team were utilized throughout the planning process. The external references assisted in analyzing trends, benchmarking with best practices, modeling for volume projections, and developing the future care model for the various service lines. Moreover, data analysis was integral to assessing the situation, determining needs, defining gaps, formulating the future care model, and providing the Plan's recommendations. The external data sources are also included in the appendix.

The Core Planning Team began with a complete review of all applicable previous strategic, financial and facility plans to inform the current project and related 2015 MDH Institutional Review documents. The documents include, but are not limited to, the following:

- *Annual Report on Selected Acute Care and Special Hospital Services Report for the Fiscal Year 2018* by the Maryland Health Care Commission
- MDH Community Health Facilities Grant Program documentation prepared by the Maryland Department of Health (1/30/2019)
- Building Condition Assessments for Western Maryland Hospital Center, Deer's Head Hospital Center, and Clifton T. Perkins Hospital Center North Wing
- *Guidelines for Submission of a Facilities Master Plan to the Maryland Department of Budget and Management*, June 2016
- Maryland Department of General Services Office of Facilities, Planning, Engineering, and Construction 5-year project history
- Facility Plans for all facilities
- Summary facility synopsis data sheets
- Health Management Information Systems ("HMIS") data for operating facilities (2015-2019)
- Facility personnel contact list
- Preventative Maintenance Reports

C. Program and Utilization Analysis

The project involved a high-level review of services and programs provided across the State. This analysis also involved interviews with MDH leadership to confirm occupancy and utilization, identifying opportunities to increase or reduce capacity for existing programs.

D. Current Care Model

A Current Care Model was developed to reflect the current operational workflow, spaces, and the locations of services. This assessment focused on documentation of current patient access, locations and environments of care, integration of somatic and behavioral health, preventative care, workforce, partnerships and collaborative services, and transitions of care.

E. Facility Analysis - Current State Assessment

This assessment included an engaged review of the *2015 MDH Institutional Review* with senior leadership to assure that key areas had been assessed, and that the current and potential future use of space was identified. The Current State Assessment was completed during the first part of the project and included a background and physical description of each facility, operational program analysis and volume, functionality/space assessment, and facility infrastructural spotlight maps.

F. Functionality Assessment

A functionality assessment was conducted to identify current capacity and service constraints, including an evaluation of existing operations and assessment of the organization's ability to provide services in existing facilities. The functionality assessment included facility tours and review of operational and functionality workflow.

G. Facility, Campus, and Infrastructure

The Core Planning Team toured each site and met with facility leadership to evaluate the current conditions of the primary building systems, including architectural features, mechanical and electrical systems, and site characteristics. These detailed evaluations formed the basis of a building rating system, as well as a timeline and budget schedule for anticipated improvements and deferred maintenance. The evaluations also helped to inform the suitability of the buildings' use for future care needs.

H. Program Analysis and Development – Needs Assessment / Visioning and Organization

At the project kickoff, the Steering Committee defined the goals and working assumptions to create a foundation for the project. The leadership team provided essential context for the Plan, and approaches to stakeholder engagement were addressed and defined. The Core Planning Team developed a detailed schedule and confirmed sources of information and data available to support the project. Finally, the team conducted a preliminary review of strategic plans and established direction for the Plan.

I. Industry Benchmarks

Using historic and currently available volume metrics and national best practices, the Core Planning Team provided an analysis of trends, projections, and forecasts for services informed by changes in health care policy, reimbursement, technology, and the future model of care. The

Core Planning Team met with leadership from each location and incorporated any anticipated changes in facility rates, shifts of care to the community, and unmet demand.

J. Future Care Model

The Core Planning Team developed a future care model to inform the locations of required services and space requirements for future planning. This assessment focused on the quality of service and population health and wellness to drive the model of care and address projected changes in the way patients access health care services. By incorporating evidence-based planning, MDH can achieve measurable operational improvements, provide value-driven customer-focused care, and lower overall project cost and risk.

K. Market Analysis / Utilization

The Core Planning Team developed a market analysis, which identified primary and secondary service areas, existing operations, and demographic data with psychographic analysis. The market analysis created a foundation for the 2041 volume projections. The use of various capacity and demand models projected growth for some health care service delivery lines and a decline in others. Based on existing and projected utilization rates, national benchmarking, and innovative care models, the Core Planning Team determined the projected number of beds needed within the State.

L. The Plan / Area Plan Scenarios

Based on the vision and needs assessment, the Core Planning Team produced a phased system-wide plan for the implementation of recommendations. Using the information accumulated and assessed in the previous two segments of the Plan, this stage defined the future facility needs necessary to support MDH program goals. The area plans included a strategy for each of the locations of care based on the services forecasted in the Program Analysis and Development. The project plan identified proposed facility upgrades, strategic renovation and relocation opportunities, potential partnerships, transitions of patients to the community, divestiture, and construction of new facilities. These solutions were intended to provide the State of Maryland and MDH with a phased approach to implementation.

M. Phasing, Cost, and Schedule

As part of the development and selection of the preferred Plan scenarios, the Core Planning Team created three (3) phases of implementation. The team worked with executive leadership to define strategic priorities and budgetary goals for project consideration. Following the Area Plans, the last two (2) work sessions prioritized the scenarios into Phase 1 (years 0-5), Phase 2 (years 6-10), and Phase 3 (years 11-20) implementation objectives with relative costs for each to facilitate multi-year State budgeting and appropriations. The strategy included an actionable schedule, complete with steps and milestones to ensure the Plan can move quickly to implement and execute efficiently. Moreover, the Plan defines flexible phasing to support development with minimal disruption to patients.

**SECTION IV:
INSTITUTIONAL SITUATION ASSESSMENT**

Introduction

Section IV serves to document all facets of the current situation for each service delivery line and facility. It provides a brief overview of the market dynamics, including demographics, health professional shortage areas, and medically underserved populations within Maryland. Next, Section IV provides an in-depth operational, functional, and infrastructure assessment of each of the MDH facilities.

The service line assessment reviews the “current care model” as it relates to entry points and access to care, locations and environments of care, somatic and behavioral health integration, preventive care, and workforce challenges.

The operational, functional, and infrastructure assessments are documented at the facility level. The operational assessments include a review of throughput and capacity, as well as other considerations including the cost of care per patient (operating costs). The functional assessments address the effectiveness of the current operations within facility conditions. Lastly, the infrastructure assessments evaluate the facility conditions, including the cost to bring the existing facilities up to projected future standards of care for the patient environment.

Demographic Profile

Population

While natural population increase (births minus deaths) outpaced migration as Maryland’s principal source of growth, an aging population contributed significantly to increasing the overall population in Maryland over the past 30 years. Between 2020 and 2040, it is estimated that Maryland’s population will increase by 11.3% to over 6.8 million.

- The 65+ age cohort is projected to grow by over 47% by 2040. Charles County (103% increase), Frederick County (79% increase), and St. Mary’s County (72% increase) are projected to see the greatest percentage increase for the 65+ age cohort by 2040;
- The Maryland 0-19 age cohort is projected to increase nearly 10% from 1,505,724 in 2020 to 1,653,048 in 2040. This is lower than the national growth rate that is projected to increase by 14% over the same period. Cecil County (42% increase), Caroline County (35% increase), and Charles County (34% increase) are projected to see the greatest percentage increase for the 0-19 age cohort in the state;
- The Maryland 19+ age cohort is projected to grow by 12% between 2020 and 2040 to nearly 5.2 million. Over the same period, the national population of this age cohort is projected to grow 15% to over 300 million;

Population Change by Age Cohort & County, 2020-2040															
County	Ages: 0-19			Ages: 20-49			Ages: 50-64			Ages: 65+			Total		
	2020	2040	Change	2020	2040	Change	2020	2040	Change	2020	2040	Change	2020	2040	Change
Allegany Co.	16,877	15,215	-9.8%	29,140	30,396	4.3%	14,077	13,184	-6.3%	16,309	17,259	5.8%	76,403	76,054	-0.5%
Anne Arundel Co.	140,310	151,446	7.9%	223,321	232,751	4.2%	118,900	111,059	-6.6%	90,700	127,014	40.0%	573,231	622,270	8.6%
Baltimore City	144,087	146,110	1.4%	281,111	278,064	-1.1%	109,407	122,643	12.1%	81,687	96,586	18.2%	616,292	643,403	4.4%
Baltimore Co.	206,823	210,458	1.8%	320,976	322,452	0.5%	169,066	153,666	-9.1%	150,135	194,175	29.3%	847,000	880,751	4.0%
Calvert Co.	23,387	23,804	1.8%	32,958	35,198	6.8%	22,842	16,950	-25.8%	15,419	24,501	58.9%	94,606	100,453	6.2%
Caroline Co.	9,080	12,294	35.4%	11,797	14,410	22.1%	7,433	7,446	0.2%	5,739	8,795	53.2%	34,049	42,945	26.1%
Carroll Co.	38,404	40,291	4.9%	55,611	57,891	4.1%	41,688	27,224	-34.7%	33,496	56,389	68.3%	169,199	181,795	7.4%
Cecil Co.	24,962	35,334	41.6%	37,660	48,361	28.4%	24,690	22,057	-10.7%	17,289	29,693	71.7%	104,601	135,445	29.5%
Charles Co.	44,786	59,820	33.6%	62,652	79,660	27.1%	37,590	34,245	-8.9%	22,014	44,844	103.7%	167,042	218,569	30.8%
Dorchester Co	8,057	9,137	13.4%	11,482	13,126	14.3%	7,780	7,896	1.5%	6,983	9,340	33.8%	34,302	39,499	15.2%
Frederick Co.	64,133	85,558	33.4%	98,055	122,752	25.2%	56,844	48,922	-13.9%	41,748	74,916	79.4%	260,780	332,148	27.4%
Garrett Co.	6,678	7,038	5.4%	10,065	10,445	3.8%	6,956	5,728	-17.7%	6,594	8,246	25.1%	30,293	31,457	3.8%
Harford	62,072	70,903	14.2%	94,065	103,903	10.5%	56,340	46,469	-17.5%	45,205	67,942	50.3%	257,682	289,217	12.2%
Howard	87,523	88,659	1.3%	129,211	136,058	5.3%	69,662	65,375	-6.2%	50,525	81,755	61.8%	336,921	371,847	10.4%
Kent	4,188	3,955	-5.6%	6,084	6,043	-0.7%	4,869	4,487	-7.8%	5,755	8,511	47.9%	20,896	22,996	10.0%
Montgomery	261,843	293,552	12.1%	413,295	432,722	4.7%	210,618	220,950	4.9%	166,271	249,908	50.3%	1,052,027	1,197,132	13.8%
Prince George's	229,629	231,202	0.7%	383,426	373,292	-2.6%	176,428	175,119	-0.7%	126,659	202,778	60.1%	916,142	982,391	7.2%
Queen Anne's	11,563	14,381	24.4%	16,237	19,694	21.3%	12,600	10,715	-15.0%	10,334	16,244	57.2%	50,734	61,034	20.3%
Somerset	6,072	7,083	16.7%	11,250	12,771	13.5%	5,039	4,408	-12.5%	4,389	5,290	20.5%	26,750	29,552	10.5%
St. Mary's	33,179	42,254	27.4%	46,145	59,139	28.2%	24,866	26,428	6.3%	15,964	27,530	72.5%	120,154	155,351	29.3%
Talbot	7,744	8,458	9.2%	11,130	11,984	7.7%	8,391	7,241	-13.7%	11,591	14,311	23.5%	38,856	41,994	8.1%
Washington	38,205	50,159	31.3%	58,071	70,155	20.8%	33,347	30,137	-9.6%	27,174	39,500	45.4%	156,797	189,951	21.1%
Wicomico	27,411	33,909	23.7%	41,658	49,732	19.4%	19,596	19,976	1.9%	17,537	23,039	31.4%	106,202	126,656	19.3%
Worcester	10,129	12,028	18.7%	15,425	18,109	17.4%	13,195	11,896	-9.8%	14,352	19,569	36.4%	53,101	61,602	16.0%
State of Maryland	1,505,724	1,653,048	9.8%	2,400,244	2,539,108	5.8%	1,253,168	1,194,221	-4.7%	982,672	1,448,135	47.4%	6,141,808	6,834,512	11.3%

Source: Maryland Department of Planning, Projections and State Data Center

Figure 5 Population Change by County

Situation Assessment by Service Line and Location

Analysis and proposals of the Plan are organized around the service lines of health care provided by MDH and the locations in which the services are provided. This section includes a summary of each service line and the campus and facilities where it is provided. Each location includes a graphical summary 'dashboard', a background description and history, location map, and the facility's physical characteristics, such as acreage, circulation and parking, adequacy of utilities, and consistency with adjacent land use.

Situation Assessments are comprised of the following categories:

Operational Assessment Bed Utilization and Current Care Model: Functional Assessment; Infrastructure Assessment, which describes the relationship of operations within the facility and evaluation based on an established set of criteria resulting in a good, fair, or poor rating.

Function Assessment Criteria:

1. Unit:
 - Location/Adjacency – Assessment of access into the facility, convenience to public transportation, and adjacency to other services.
 - Unit size – Assessment of existing size for operations, equipment, and comfort of staff and patients. Size is also assessed based on its adequacy when compared with the percentage of clinical space, patient space, support space, and public space to benchmarks and regulatory requirements.
2. Staff:
 - Workflow – Assessment of operational efficiencies and/or roadblocks for facility staff.
 - Staff Support – Assessment of staff workspace and working conditions, including specific spaces to perform job functions including but not limited to, medication rooms, clean and soiled linen rooms, documentation space, storage, and nutritional areas.
3. Patient:
 - Patient rooms – Assessment of patient room environment including patient comfort, accessibility within the room, safety equipment, and general conditions.
 - Patient amenities – Assessment of the availability of, and access to open space, patient restrooms, library, food, activity rooms, and guest spaces.
4. Activity:
 - Access to outdoors – Assessment of ease of access to the outdoors, such as through patios, atriums, or general entryways.
 - Dayroom/Activity – Assessment emphasized elements such as size and location of the dayroom, types of activities offered, and availability to patients.

- A well-designed unit has multiple spaces for patients (for example, a dayroom and several activity rooms). One activity room should be reserved for quiet activities.
5. Safety:
- Patient Safety – Assessment of items that directly affect patient safety. Examples include: staff’s direct sight lines to patient rooms; possible hazards, such as sharp edges on furniture and crawl spaces; ligature-resistant patient environment; and technological infrastructure to improve patient safety.
 - Staff Safety – Assessment of items that affect staff safety. Examples include: access control, security, and technological infrastructure for patient monitoring; and areas with decreased direct visualization of patients that could put the staff at risk.
6. Aesthetics:
- Interior – Assessment of interior design elements regarding functionality for staff and/or patients.
 - Exterior – Assessment of the exterior design including campus design, and/or community as a whole. Assessment of functionality of exterior design elements, as applicable.

Infrastructure Assessment: Assessment of each facility location’s Architectural, Mechanical, Electrical, Plumbing (MEP), and Civil Engineering Systems. Main categories for the architectural discipline are: Exterior, Interior, and Code Compliance. Using the Exterior main category as an example, the subsequent subcategories include: Building Skin, Windows/Doors, and Roof/Gutters. Rating categories were generated as part of the evaluation process for each professional discipline. A summary of these findings was compiled to generate an overall rating for the facility of good, fair, or poor for each discipline. This evaluation method was used to develop all facility assessments.

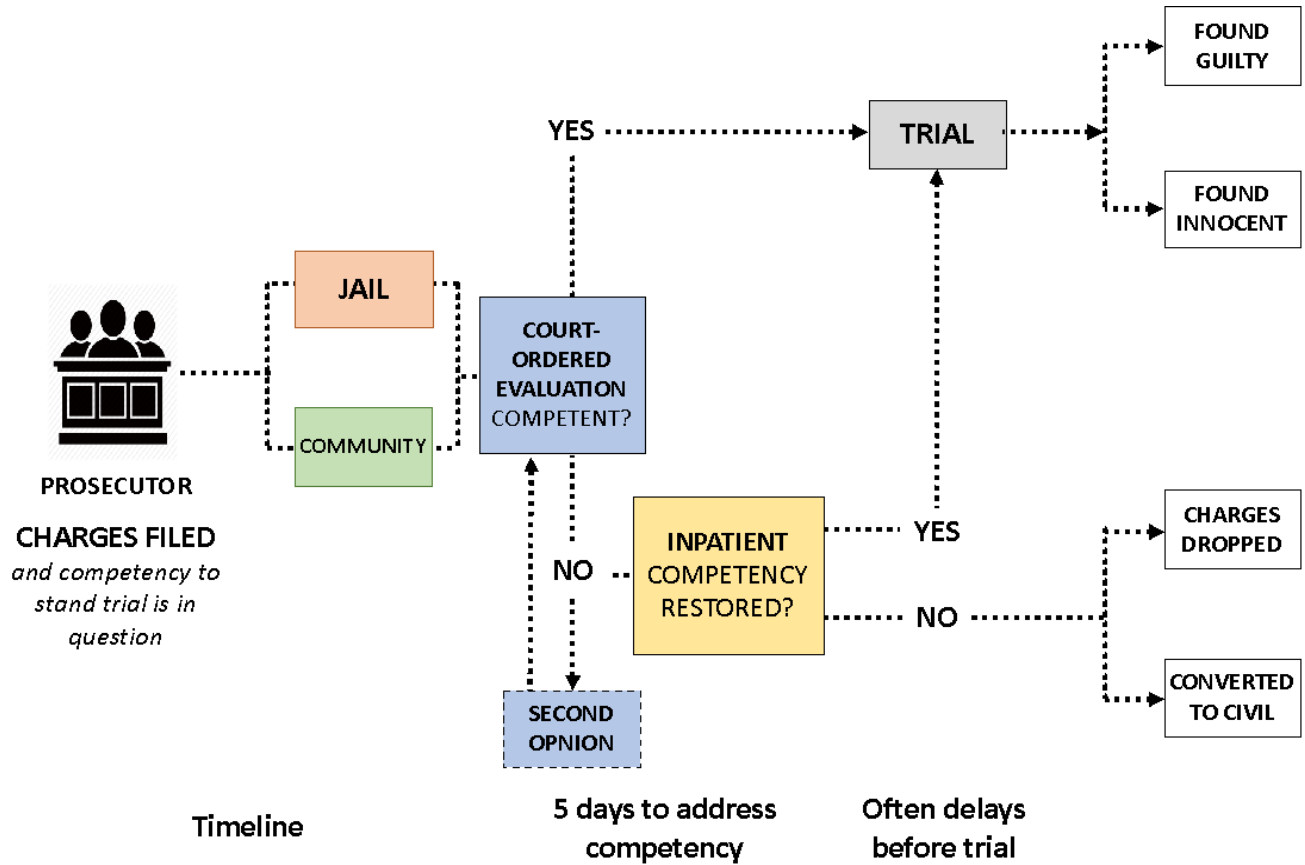
Cost Per Patient and Operating Cost Assessment: Assessment of cost per patient for each facility location is based on FY 2018 baseline operating budget data and the number of beds in use at the time of the assessment. The calculated cost per patient is included in the graphical summary ‘dashboard’ for each facility location. Operational and clinical costs projections for planning purposes were calculated over the next 5, 10, and 20 years assuming an average rate of inflation of 2% per year. These represent base costs associated with maintaining current operations. The operating costs are a compilation of general administrative, maintenance, dietary, and clinical functions. Maintenance costs include: management of the physical plant and the grounds, housekeeping, fire and life safety services, transportation, and laundry/linen services. Services including fiscal, volunteer, procurement, IT/communication, workshops, and administrative are compiled as general administrative, which are primarily fixed costs that are not subject to significant fluctuation with the patient census. Clinical costs include dietary and clinical care costs associated with patient care and healthcare services. Projected costs are used to generate operational cost avoidance for transitioning services.

A. Current Care Model: Inpatient Behavioral Health Facility Assessments

The Inpatient Behavioral Health service line at a high level is grouped into two patient populations: non-court involved and court involved. MDH has the capacity to provide care for both populations at Springfield Hospital Center, Spring Grove Hospital Center, Eastern Shore Hospital Center, and Thomas B. Finan Center. The Clifton T. Perkins Hospital Center focuses exclusively on court involved patients. MDH has become the primary care provider for the court involved patients, resulting in limited space for non-court involved patients who need long-term care.

A court decides whether the defendant can reside in the community or needs to be placed in a facility such as a detention center or hospital. Competency of the defendant must be determined prior to a trial. If the defendant is determined to be competent to stand trial, the defendant proceeds through the judicial system. However, when defendants are evaluated and deemed as not competent to stand trial, every attempt is made to attain competency. These defendants may be admitted to a MDH facility or, very rarely, reside in the community. MDH determines the facility the patient is assigned based on the severity of the offense and the coexistence of other comorbidities. If the patient attains competency, then the patient will proceed through the court system. If not, then the patient charges are dropped or converted to a civil offense. Patients deemed not competent to stand trial need various levels of care to achieve competency restoration. MDH provides patient care across multiple facilities based on the severity of the offense and the individual's medical, psychosocial, and behavioral diagnoses.

The current court involved Inpatient Behavioral Health care model is depicted below:



Notes: Once a patient has been addressed by courts, they are now voluntary in hospital, but court can still dictate conditions of discharge. There is a priority to address the need for community-based behavioral health hospitalization, but because facilities are full of court ordered patients, community needs are never treated.

Figure 6 Court Involved Inpatient Behavioral Health Care Model

Non-court involved patients access MDH inpatient behavioral health facilities in several ways. Common points of entry are from the community/home, crisis center, police diversion programs, and an acute care hospital. An acute care patient may be transferred from an inpatient bed and/or an emergency department. This occurs when the patient’s condition cannot be effectively managed in an outpatient setting and consequently requires long-term care. If the patients are discharged, they will be transitioned to group homes, post-acute care facilities such as SNF, assisted living, or their homes.

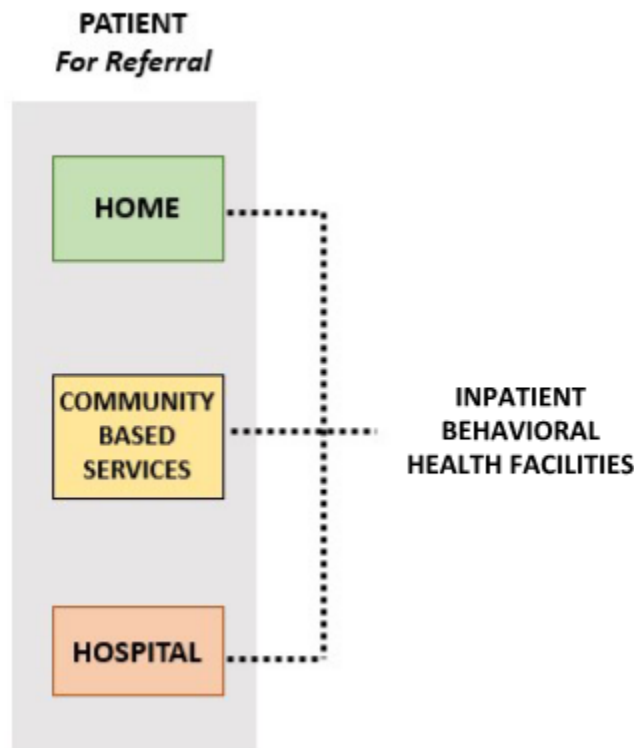


Figure 7 Non-court Involved Inpatient Behavioral Health Care Model

Inpatient Behavioral Health Facilities – Infrastructure Assessment Summary

Service Line	Facility	Overall Score	Infrastructure Assessment			
			Functional	Architectural	MEP	Civil Engineering
Inpatient Behavioral Health	Springfield Hospital Center	Fair	Fair	Fair	Fair	Good
	Clifton T. Perkins Hospital Center	Good	Good	Good	Fair	Fair
	Eastern Shore Hospital Center	Good	Good	Good	Good	Good
	Spring Grove Hospital Center	Poor	Poor	Poor	Fair	Poor
	Thomas B. Finan Center	Fair	Fair	Fair	Fair	Fair

Figure 8 Inpatient Behavioral Health Facilities Infrastructure Assessment

Springfield Hospital Center

6655 Sykesville Road | Sykesville, Maryland | Carroll County

Service Line	Facility	Overall Score	Infrastructure Assessment			
			Functional	Architectural	MEP	Civil Engineering
Inpatient Behavioral Health	Springfield Hospital Center	Fair	Fair	Fair	Fair	Good

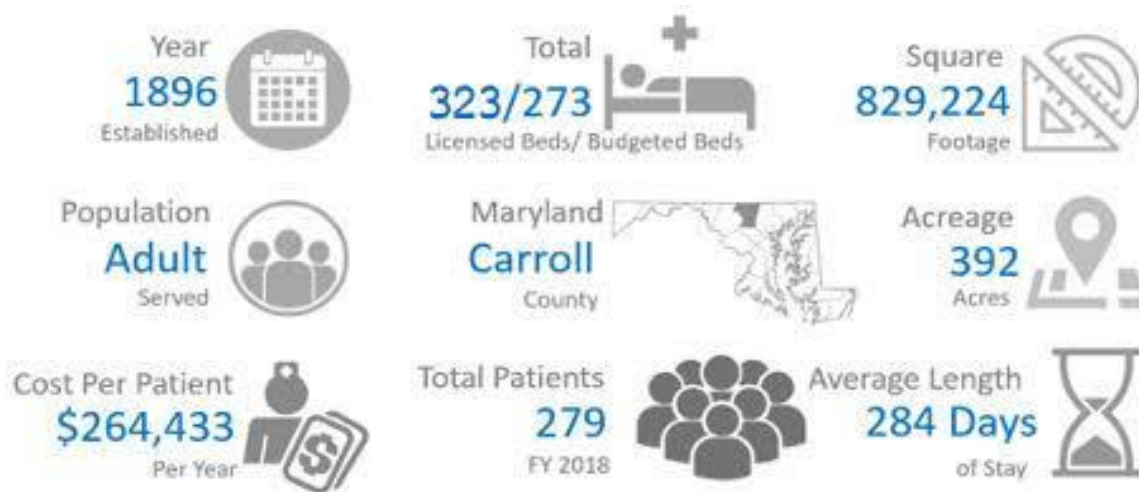
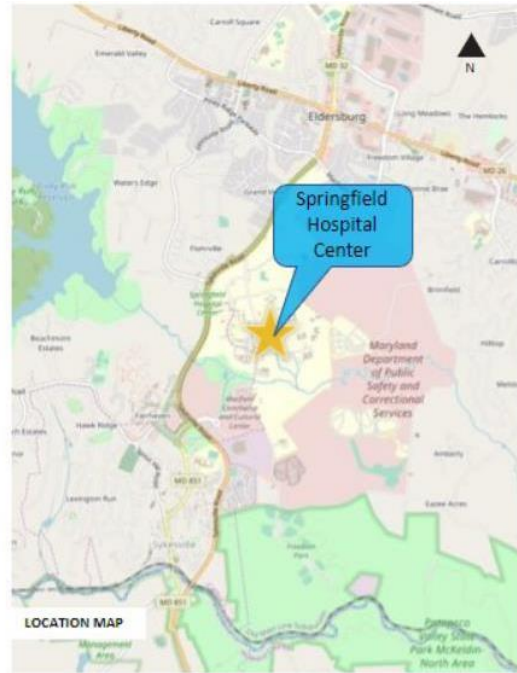


Figure 9 Springfield Hospital Center Dashboard

All data presented in facility dashboards is based on 2018 data.

Background and History

Springfield Hospital Center is a 323-licensed bed, inpatient psychiatric hospital located in Sykesville, Maryland serving adult and geriatric patients, as well as deaf patients requiring hospitalization for psychiatric disorders. The facility was established in 1896 with over 3,000 acres and comprises 74 buildings and structures. Many of the original buildings have been decommissioned over time, but the hospital still occupies over 16 major buildings, plus several small maintenance buildings on 392 acres. The three-primary patient-occupied buildings were constructed in 1952 (McKeldin Building), 1981 (Hitchman Building), and 1988 (Salomon Building). Portions of the property have been transferred to the Town of Sykesville and numerous buildings have been leased to other entities over time. The facility is licensed and certified by OHCQ and accredited by The Joint Commission.

Physical Characteristics

The primary patient buildings are single-story masonry veneer buildings. The total square footage of all buildings on the property is approximately 829,224 square feet.⁷ About 40% of the buildings onsite are unoccupied and an additional approximate 5% of the buildings are leased to other entities. The obsolete and decommissioned buildings onsite include: the Martin Gross Complex, and the Clark Circle Complex. Several issues impede the demolition of these buildings, including environmental abatement due to lead paint and asbestos and their status of eligibility with the Maryland Register of Historic Properties.

Site and Acreage

The Springfield Hospital Center sits on a parcel of 392 acres⁸ in the southeastern portion of Carroll County. The site contains a varied topography. The Piney Run River, and its associated flood plain, run east/west through the site. Smaller streams, with no FEMA flood plain, run across the northernmost portion of the site. Trees are scattered throughout the site with the denser stands being around the watercourses. Overall, there is rolling topography with some significant grade and some areas of steep slope, though most do not cross the threshold of “undevelopable” by the Maryland Department of Environment (“MDE”) standards (greater than 15%). The site contains multiple drainage areas with the overall slopes draining to the watercourses and to the south. Several Carroll County municipal wells exist on the property and have pending easements. These appear to have minimal impact on the overall development capacity of the site as they are located in or near the flood plains or watercourses. The central portion of the site is developed with the facility and its appurtenances occupying multiple buildings scattered throughout. The

⁷ Building area was obtained from the clinical facility overview reports provided by the Maryland Department of Health.

⁸ Site acreage is obtained from the clinical facility overview reports provided by the Maryland Department of Health.

remaining developable area on the site is approximately 30 acres, which is also scattered about the site. This area does not include the demolition of any existing structure(s).

Circulation / Parking

Primary access to the site is from Sykesville Road (State Route 32) on the west and north sides with secondary access from Second Street and Buttercup Road to the east and south, respectively. Parking is located throughout the campus, with lots at nearly every building. There are approximately 700 parking spaces on-site with designated handicapped parking scattered into many of the lots. There is not a shortage of parking on the site.

Adequacy of Utilities

The site is served by municipal utilities, and the water and sewer connections are located on Main Street. The utilities appear adequate for the existing facility. The water and sewer lines are public utilities, but the service distribution lines are State-owned. The water mains in the roadways were replaced in 2004 and it is unlikely that any additions to the site would trigger upgrades other than the service to the building itself. The exact age of the sanitary system is unknown. Electric service infrastructure is State owned including the substation. The system is fed by a 2-loop 13 KV switchgear utility substation, which appears adequate to serve all of the buildings on the site and is easy to expand if required. Furthermore, the analysis of the gas service concludes that it has a theoretical capacity of 33,168,880 BTU's, which is also adequate to serve the site.

Consistency with Adjacent Land

The property has been used for its current purpose or similar purposes for over 100 years and is consistent with adjacent land use, including leased properties. Portions of the Springfield Hospital Center campus were previously transferred to other State agencies, including the Maryland Military Department, Maryland Department of Public Safety and Correctional Services, and the Maryland State Police. The utilization of the Springfield Hospital Center property is consistent with the adjoining uses of other State agencies.

Operational Assessment: Bed Utilization and Current Care Model

At the time of the assessment, Springfield Hospital Center's 273 budgeted and in-use beds reported 279 discharges and nearly 80,000 patient days, resulting in an average daily census of 216 patients and an average length of stay of 284 days. All of the existing hospital units within the facility were at or over capacity. This included seven of twelve hospital units running at 100% capacity. Springfield Hospital Center had 50 licensed beds that were not currently in use, which resulted in the remaining units operating at a higher occupancy. The Department opened an additional 21 beds in 2021 to address the need for additional patient beds. There were other licensed beds allocated to Springfield Hospital Center, but they were no longer in service or were dedicated to a different program. Units are divided based on diagnosis and the potential for disruptive behavior by the patient. One unit provided specialized services for the hearing impaired. The clinical team performed group rounding with nursing, therapy, psychiatrists, and

internists. The holistic approach worked extremely well for the residents of the facilities. The average cost of care per patient ranged from \$172,000 in the General Behavioral Health Unit to nearly \$340,000 in the Admissions Unit.

Functional Assessment

The functional assessment of the Springfield Hospital Center facility is rated as fair overall with a good rating for civil engineering infrastructure. However, the Salomon building received a poor functional assessment score due to lack of adjacencies and the unit's location within the building and the complex. Patients must exit each unit for certain activities, which is not ideal and exposes the facility to potential elopement risks. There are also some areas that lack adequate visualization. The floor plans have blind corners near the entrance, exit, and bathrooms that must be visually observed by staff as part of the operation of the unit. Although the nursing stations are located centrally in each unit, they do not have a clear line of sight to the entire patient care area. Moreover, the consultation rooms have only one exit, which does not provide staff with another exit in the event of an emergency.

The remaining patient buildings on the Springfield Hospital Center campus were rated fair for the functional assessment. The age of the facilities in comparison with current best practices for unit design contributed to the fair rating in a number of the categories. All of the patient units on the Springfield Hospital Center campus had very good access to outdoor space and natural lighting.

Infrastructure Assessment

The newest patient buildings on the Springfield Hospital Center campus are suitable for inpatient psychiatric care. These buildings were designed specifically for inpatient care. The McKeldin Building, while providing the most secure inpatient building for the hospital, has group-type institutional bathrooms and a HVAC system that needs to be updated.

Architectural Assessment Summary

The hospital site contains 16 major buildings and several smaller maintenance buildings. The architectural assessment focused on the patient care buildings including the McKeldin Building constructed in 1952 and the Salomon and Hitchman buildings, both constructed in the 1980s. The Salomon and Hitchman buildings are in fair to good condition and the McKeldin Building was in poor condition. While the newer buildings were constructed for their current use, the McKeldin Building will not meet projected future patient care best practices. Renovations and improvements made over the past ten years include the installation of anti-ligature door hardware, installation of sinks in patient rooms, the replacement of boilers, water heaters, and flat roofing at the Salomon Building, and the replacement of the fire alarm system in the McKeldin Building. The condition of the existing buildings, as well as their size and use were noted on the Inventory and Evaluation Map.

Mechanical / Electrical / Plumbing Assessment Summary

The condition of the mechanical equipment in the different buildings on the campus vary widely. Multiple Energy Performance Contracts (EPC) have been implemented across the facility during the last twenty years. These EPCs have replaced numerous types of equipment including boilers and HVAC controls. However, much of the other equipment is original and past its designed life expectancy. Multiple chillers and cooling towers will need replacement.

The electrical main distribution panelboards and sub-panels are in fair condition but exceed the 30-year designed life expectancy for this type of equipment and should be replaced. In the McKeldin Building, the main electrical distribution and sub-panels need to be replaced. While existing fluorescent fixture lamps were replaced with LED lamps in the three (3) patient buildings as part of the Energy Performance Contract, the lighting control systems should also be upgraded.

Civil Assessment Summary

The site is in good overall condition and well maintained. Most of the buildings on the site were constructed before the Americans with Disabilities Act (“ADA”) was enacted. Therefore, many streets and sidewalk locations are too steep for compliance with current ADA requirements. Although the ADA code did not require these streets or sidewalks to be reconstructed for compliance, these site conditions will ultimately impact the pedestrian accessibility of the site. While some effort has been made to create accessible routes into individual buildings, improvements are required at walkways, parking, pick-up and drop-off areas, striping and signage, and overall paving condition and surfaces. The paving condition varies from good to fair throughout the site but is serviceable overall.

Most of the drainage on site is overland to street and yard inlets and culverts. There are no visible overriding drainage issues. However, there is a modern-day stormwater management device near the dining building, which was overgrown and minimally functional at the time of the survey.

Springfield Hospital Center

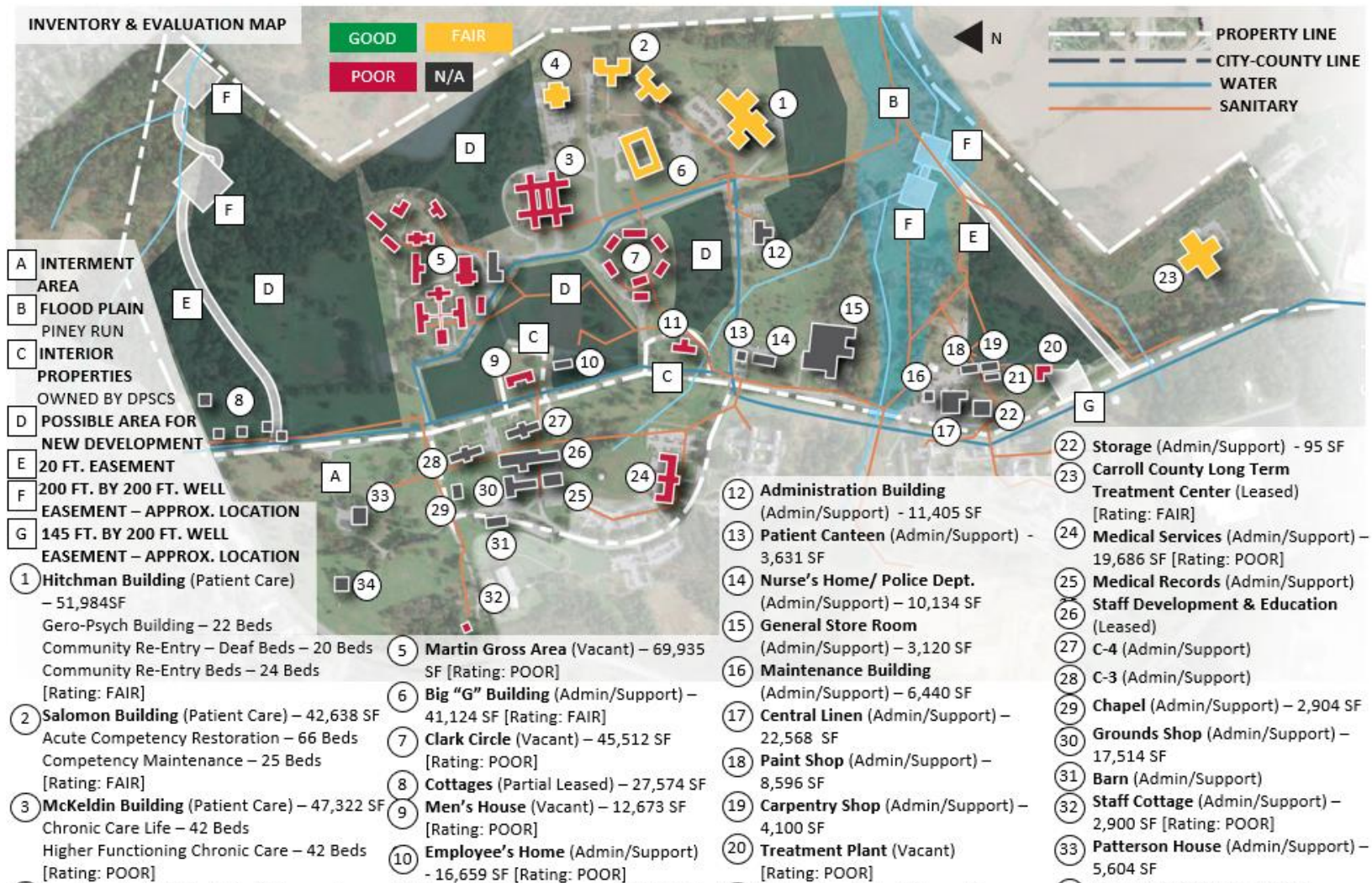


Figure 10 Springfield Hospital Center Inventory & Evaluation Map

Clifton T. Perkins Hospital Center

8450 Dorsey Run Road | Jessup, Maryland | Howard County

Service Line	Facility	Overall Score	Infrastructure Assessment			
			Functional	Architectural	MEP	Civil Engineering
Inpatient Behavioral Health	Clifton T. Perkins Hospital Center	Good	Good	Good	Fair	Fair

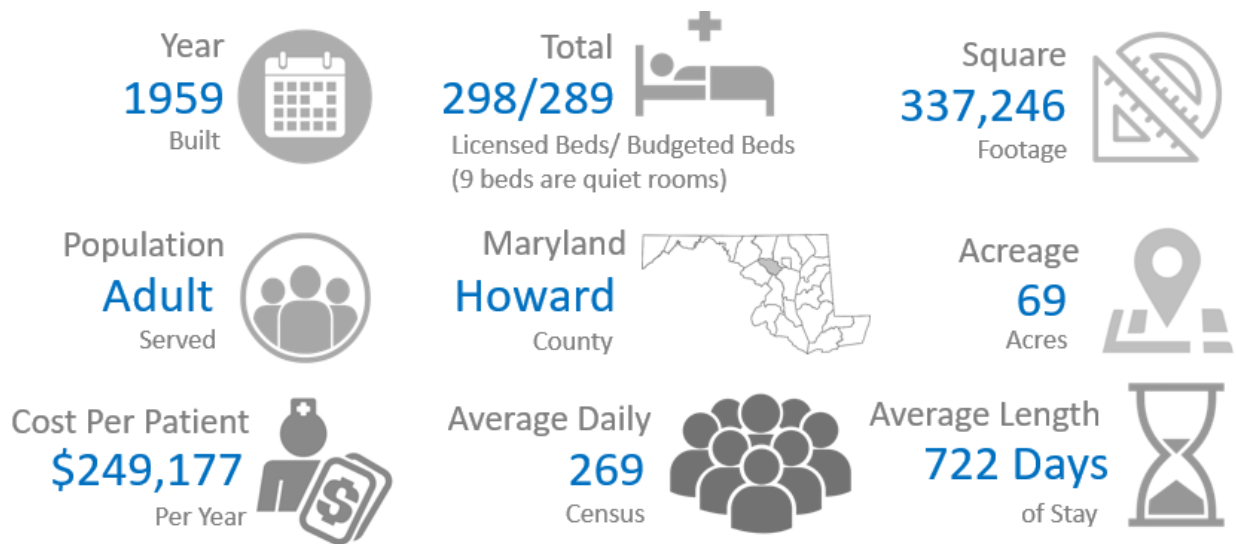
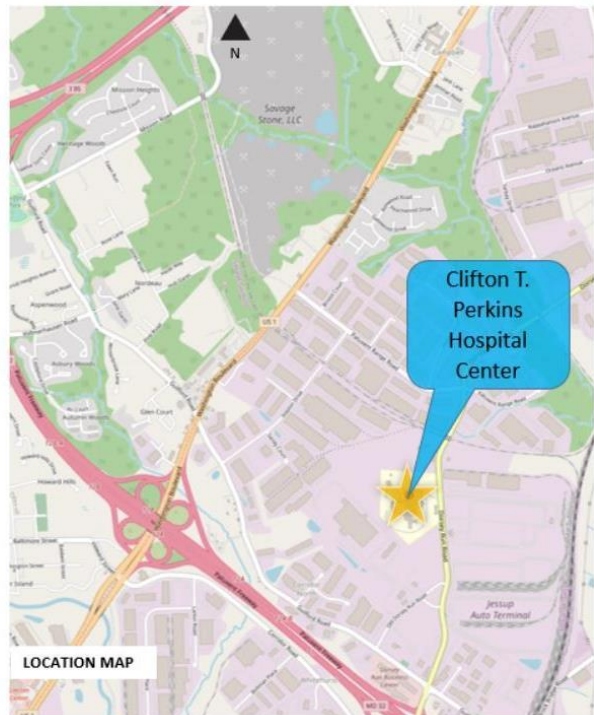


Figure 11 Clifton T. Perkins Hospital Center Dashboard

Background and History

The Clifton T. Perkins Hospital Center is a 298-licensed bed, forensic inpatient psychiatric hospital located in Jessup, Maryland. It has admissions, residential, and transitional wards. The original hospital was established in 1959. Between 1972 and 1984, the Rehabilitation North Wing, Administrative Building, and the Medium Security Wing were added. The Maximum-Security Silver Wing was added in 1998 and an addition was constructed onto the Maximum-Security area in 2006. The facility is currently transitioning to serve maximum-security patients in all areas of the facility.

Physical Characteristics

The total square footage of the facility is approximately 337,246 square feet, including the primary two-story residential complex, an administrative annex, and two vacant decommissioned former dormitory buildings.⁹ The primary residential facility is predominantly a steel frame and masonry building in good condition.

Site and Acreage

The Clifton T. Perkins Hospital Center sits on an approximately 69-acre parcel located in the southeastern portion of Howard County.¹⁰ The site is largely wooded, but there are no easements indicating that the forest areas are protected. There is a significant grade change across the property, some areas of steep slope. The existing facility is sited on a relatively level plateau with grade dropping away at the southern perimeter of the secured yard and to the north of Mackowick road to a low area that contains some water or minor stream source. The highest elevation is at the northwest corner at approximately 250 feet, and the lowest elevation is at the southeast corner at approximately 210 feet. The slope is not continuous, but rather undulates over the entire property, except for a plateau where the existing facility is located. Moreover, there are no floodplains or utility easements on the property. There is approximately 20 acres of wooded land on the property that is relatively level and could potentially be used for future development.

Circulation / Parking

Access to the site is from Dorsey Run Road on the east side of the property. Mackowick Road is the main on-site facility road and accesses all points of the facility. The southern half of Mackowick Road is developed as a perimeter access road outside of the secured outdoor space and access is restricted to facility personnel. Parking is located in several lots on the northwest corner of the site. An internal Sally Port is utilized for client transportation to the east. There are

⁹ Overall square footage was obtained from the clinical facility overview reports provided by the Maryland Department of Health.

¹⁰ Acreage was obtained from the clinical facility overview reports provided by the Maryland Department of Health.

approximately 410 parking spaces on site, of which approximately 30 are dedicated to the maintenance staff and vehicles. There is currently no shortage of parking on the site.

Adequacy of Utilities

The site is served by municipal utilities. Water and sewer connections are located on Dorsey Run Road. There are no known issues with these utilities, and they are adequate to support existing operations of the existing facility. Due to the service sizes of the utilities, it is unlikely that an addition to the building would require a service upgrade; however, any significant development on the property is likely to require an upgrade. The site has one electrical feeder, and does not have a secondary feeder for redundancy. The electrical service is served by a 2-loop, 13.8KV Switchgear Utility Substation, which is adequate to meet all current needs. The planned North Wing Renovation project includes installation of a second redundant electrical feeder. The existing electrical service is a loop system that can be expanded to support future growth. The natural gas meter capacity is 1,200,000 BTUs, which is adequate to serve the facility.

Consistency with Adjacent Land

The site is consistent with adjacent institutional land use. Properties adjacent to the site are largely industrial and manufacturing businesses.

Operational Assessment: Bed Utilization and Current Care Model

The Clifton T. Perkins Hospital Center campus includes 8 units utilized for maximum-security level occupancy and 4 units utilized for medium-security patients. The facility is licensed for 298 beds, but is operated at 289 beds. The reason for the difference is that the seclusion rooms are included in the licensed bed count. At the time of the assessment the Silver Wing was licensed to operate 218 beds, but on average was staffed for 210 beds. The North Wing was licensed to operate 80 beds, but on average was staffed for 79 beds. The whole facility had an occupancy rate of 93% for FY 2018. The unit was running at 98% occupancy for FY 2019. Also, in FY 2019, the combined wards operated 289 beds reporting 136 discharges, 103,000 patient days, resulting in an average daily census of 283 patients. The average cost of care per patient per year was approximately \$250,000 in both the Silver and North Wings.

Functional Assessment

The Clifton T. Perkins Hospital Center functions well and received an overall rating of “good”. A few areas of the facility that are rated fair include: A lack of physical therapy on site, which requires transporting patients to another MDH campus for therapy; the units and public areas of the building have abundant natural lighting, but limited outside access; nursing stations on several units have only one access point; some nursing stations have protective screens, but the screens have openings between the ceiling and top of the enclosure that could potentially be encroached.

Infrastructure Assessment

The Clifton T. Perkins Hospital Center is well suited to meet the needs of its medium and maximum-security level inpatient behavioral health patients. However, there are several

infrastructure issues throughout the building that will need to be upgraded. The HVAC system is aging and needs to be upgraded. The system has ongoing challenges with maintaining consistent and suitable temperatures. A comprehensive assessment of the HVAC system is needed. The sanctuary waste system should also be assessed based on the age of some of the infrastructure.

At the time of the assessment the facility required security and communication upgrades including upgrades to the personal alarm and public address systems. The Department of Health has initiated a security infrastructure project to address security concerns and is working with the Department of General Services to initiate design of the North Wing renovation project in the Fall of 2021. The project will include the replacement of failing infrastructure, additional security and public address system upgrades, construction of a new secured patient intake unit, separation of patient circulation from staff and visitors, and construction of a new food service center. The project will also transition all North Wing beds for maximum-security occupancy.

Architectural Assessment Summary

Originally constructed in 1959, the facility has had a series of additions throughout the years and is maintained well. Noted security concerns can be addressed with some minor upgrades, some of which have been undertaken by the Department, and some of which are planned as part of the North Wing Renovation project.

Mechanical / Electrical / Plumbing Assessment Summary

A \$10 million Energy Performance Contract was implemented in 2018, which included the installation of new equipment, including some HVAC equipment. However, other portions of the HVAC system need to be upgraded. The facility does not have a backup ventilation system for the air conditioning system in most of the wards. The facility will need a more comprehensive assessment of the HVAC system.

The electrical main distribution panelboards and sub-panels are in fair condition but exceed the 30-year design life expectancy for this type of equipment and should be replaced. Furthermore, the original fluorescent fixture lamps were replaced with LED lamps as part of the Energy Performance Contract, however the lighting control systems should also be upgraded.

Civil Assessment Summary

The central portion of the site is the only portion developed for the facility and its appurtenances. There is a small, improved area on the northeast corner of the site with two dormitory buildings that are no longer in use and one unoccupied building on the east side along Dorsey Run Road just south of the main entrance. The remaining developable area on the site is approximately 10 acres on the south and east sides and 35 acres to the north.

Overall, the site is in good condition and well maintained. One of the overriding issues centers on accessible exterior routes for compliance with the Americans with Disabilities Act. While effort has been made to improve site accessibility, the site would benefit from improvements in

parking, pick-up and drop-off areas, painting and signage, sidewalk settlement, and joint widths. The Department of Health initiated a project to create accessible egress paths from the maximum-security Silver Wing in 2020.

The condition of the site paving varies with main parking lots mostly in good condition with some localized cracking and curb damage. The rear service drive requires maintenance. There are two stormwater management ponds, which also require maintenance.

Clifton T. Perkins Hospital Center

INVENTORY & EVALUATION MAP

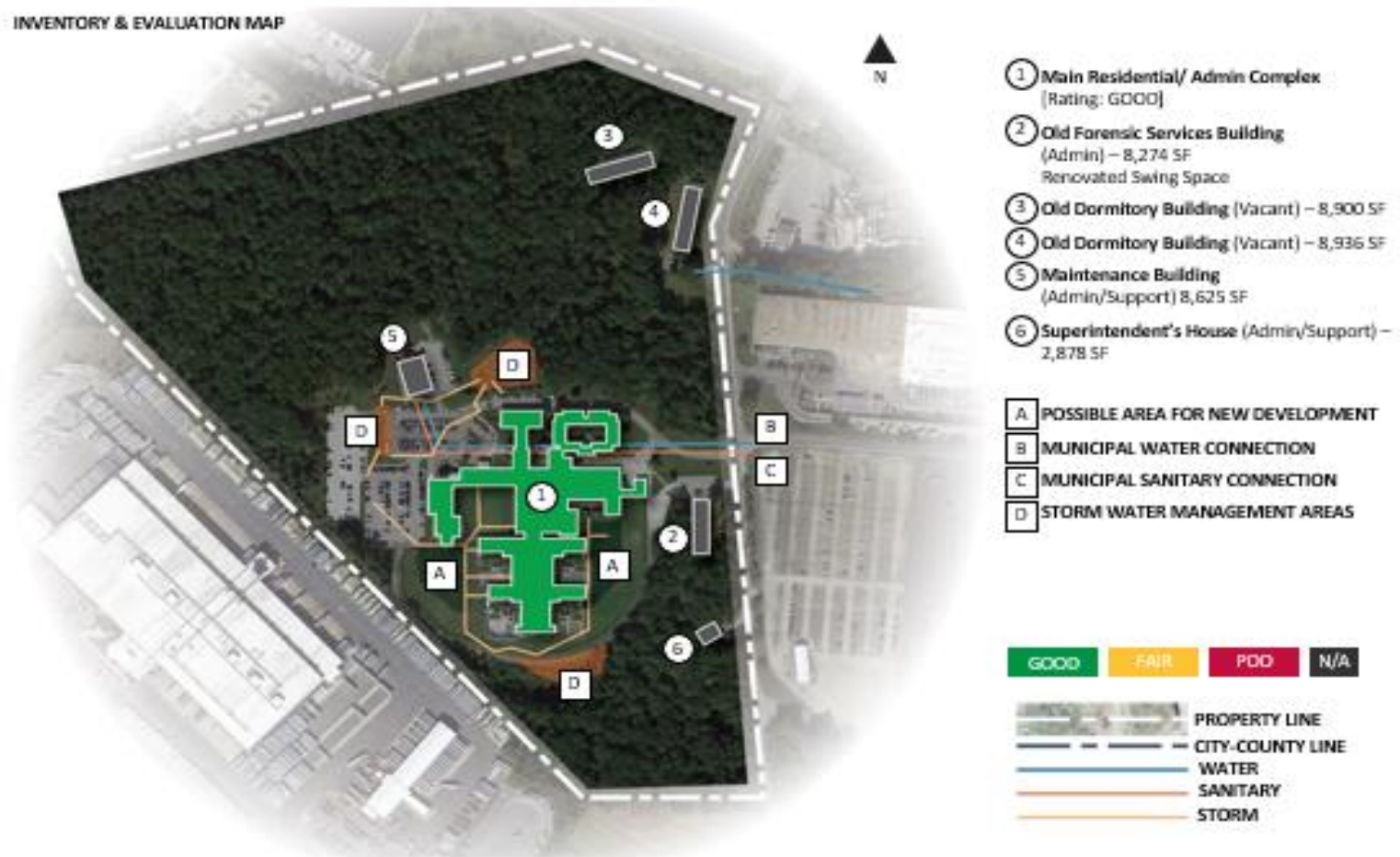
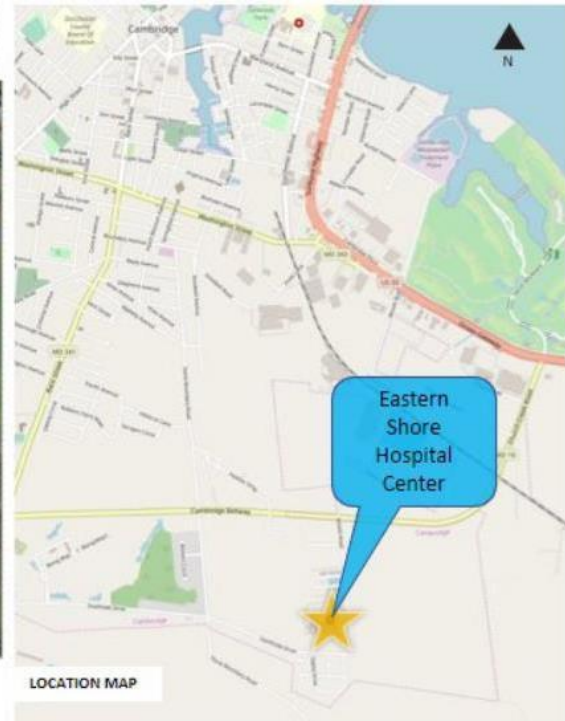











Figure 12 Clifton T. Perkins Inventory & Evaluation Map

Eastern Shore Hospital Center

5262 Woods Road | Cambridge, Maryland | Dorchester County

Service Line	Facility	Overall Score	Infrastructure Assessment			
			Functional	Architectural	MEP	Civil Engineering
Inpatient Behavioral Health	Eastern Shore Hospital Center	Good	Good	Good	Good	Good



<p>Year 2001 Built</p> 	<p>Licensed 84/80 Licensed Beds/ Budgeted Beds</p> 	<p>Square 108,000 Footage</p> 
<p>Population Adult Served</p> 	<p>Maryland Dorchester County</p> 	<p>Acreage 22 Acres</p> 
<p>Cost Per Patient \$269,173 Per Year</p> 	<p>Average Daily 63 Census</p> 	<p>Average Length 617 Days of Stay</p> 

This cost was generated from the operating costs on Image 29 because no FY 2018 budget was provided.

Figure 13 Eastern Shore Hospital Center

Background and History

The Eastern Shore Hospital Center is an 84-licensed bed psychiatric hospital located in Cambridge, Maryland serving adult and geriatric patients with acute and long-term needs. The hospital was originally founded in 1912 and was formerly located on the Choptank River. The current replacement hospital was constructed in 2001 as a facility designed to serve its current patients.

Physical Characteristics

The campus consists of a single story, approximately 108,000 square foot building with four patient units and associated support space.¹¹ The facility is constructed as slab on grade with a steel frame and masonry veneer. The building is completely occupied by the Maryland Department of Health.

Site and Acreage

The Eastern Shore Hospital Center sits on a parcel of approximately 22 acres, located on the east side of the City of Cambridge just inside the corporate limits.¹² The City/County line follows Woods Road. The site is largely clear with scattered trees on the south side and along Woods Road. Overall, the site slopes gradually down to the southwest. There is no significant grade except for approximately six feet of elevation change at the north corner along Woods Road. There are no floodplains or forestation easements. Drainage easements are indicated along the north and west property lines- two feet on the north side and 25 feet on the west.

Circulation / Parking

Access to the site is from Woods Road on the east side, which leads to the front parking lots and an access drive on the north side which leads to the maintenance shop at the rear of the site. Most of the parking is located in front of the facility with a small lot to the north, largely dedicated to staff personnel. There are approximately 286 parking spaces on site of which 30 are in the north lot and appear to be dedicated to the maintenance vehicles. There are 12 spaces dedicated to handicapped parking. There currently is not a shortage of parking spaces on the site.

Adequacy of Utilities

The site contains two stormwater management devices, one in the southeast corner and one in the northwest corner. These forebay and pond devices control the quantity and quality of the stormwater discharge. The site is served by municipal utilities with the water and sewer connections on Woods Road. There are no reported issues with these utilities, and they are adequate for the operation of the existing facility. It is likely, given the service sizes, that an addition to the building would not require a service upgrade, but that would depend on the size and use of the addition. The electrical service is a non-looped system fed from a 277/480V,

¹¹ Building square footage was obtained from the clinical facility overview reports provided by the Maryland Department of Health.

¹² Acreage obtained from the clinical facility overview reports provided by the Maryland Department of Health.

3,000A Utility Transformer. Since it is not a looped system, expansion would require more investment.

Consistency with Adjacent Land

The site is consistent with adjacent institutional land use, including other institutional properties and farmland.

Operational Assessment: Bed Utilization and Current Care Model

In FY 2019, the Eastern Shore Hospital Center had 84 licensed beds, with 80 beds in use, 108 reported discharges, and nearly 28,500 patient days, resulting in an average daily census of 78 patients and an average length of stay of 617 days. All four units at the facility were over capacity and run at a collective occupancy rate of 93%. Like other facilities in the State, the units had some specialization based on the acuity of the patient, their potential for disruptive behavior, and their behavioral health and medical needs.

Functional Assessment

The Eastern Shore Hospital Center is well designed for its intended purpose to serve as an inpatient behavioral health facility. The overall functional rating was good. The specific categories that are considered fair include access to outside space, day room and activity space, workflow, and adjacencies. The day rooms and activity rooms are smaller in size, but are adequate to support the facility. The main street has natural access and is a serene space. Some of the necessary patient services are located outside of the patient units and require transportation into the public space.

Infrastructure Assessment

All hospital functions are consolidated into one modern building, which is in good condition. The facility has a modern electronic security system in place that is appropriate for the type of patients being served. The facility is now 20 years old and some of the mechanical systems are experiencing some issues requiring repair. There are other cosmetic renovations that should be considered including paint and carpet replacement.

Architectural Assessment Summary

Constructed in 2001, the facility is relatively new and in good condition with expected wear on interior finishes. The building was constructed for the patients that it serves and works well operationally.

Mechanical / Electrical / Plumbing Assessment Summary

In 2019, a repair to an underground HVAC chiller line was completed. In addition, all mechanical equipment was originally from 2001, and all of the mechanical room areas appeared clean and maintained. The Department initiated a replacement project for the two chillers serving the facility in 2021.

The electrical main panelboards, sub-panels, and emergency generator system are in fair operable condition. However, the lighting and lighting control systems will likely need to be upgraded.

Civil Assessment Summary

The majority of the site is developed with the facility and its appurtenances. A small parcel, approximately one acre in the southwest corner, has been leased to a separately operated facility. The remaining developable area on the site is approximately 2 acres on the south side and 5 acres to the north and east. These areas include existing parking lots. Overall, the site is in good overall condition and well maintained. The stormwater management devices on the property may need updating.

In terms of accessibility compliance with the ADA, this facility had a fair rating. The facility was constructed following the ADA Act and was designed to meet full compliance. At the time of the survey inspection of the sidewalk construction showed some details such as joint width, vertical differentials, etc. that will need to be addressed at this facility.

Eastern Shore Hospital Center

INVENTORY & EVALUATION MAP

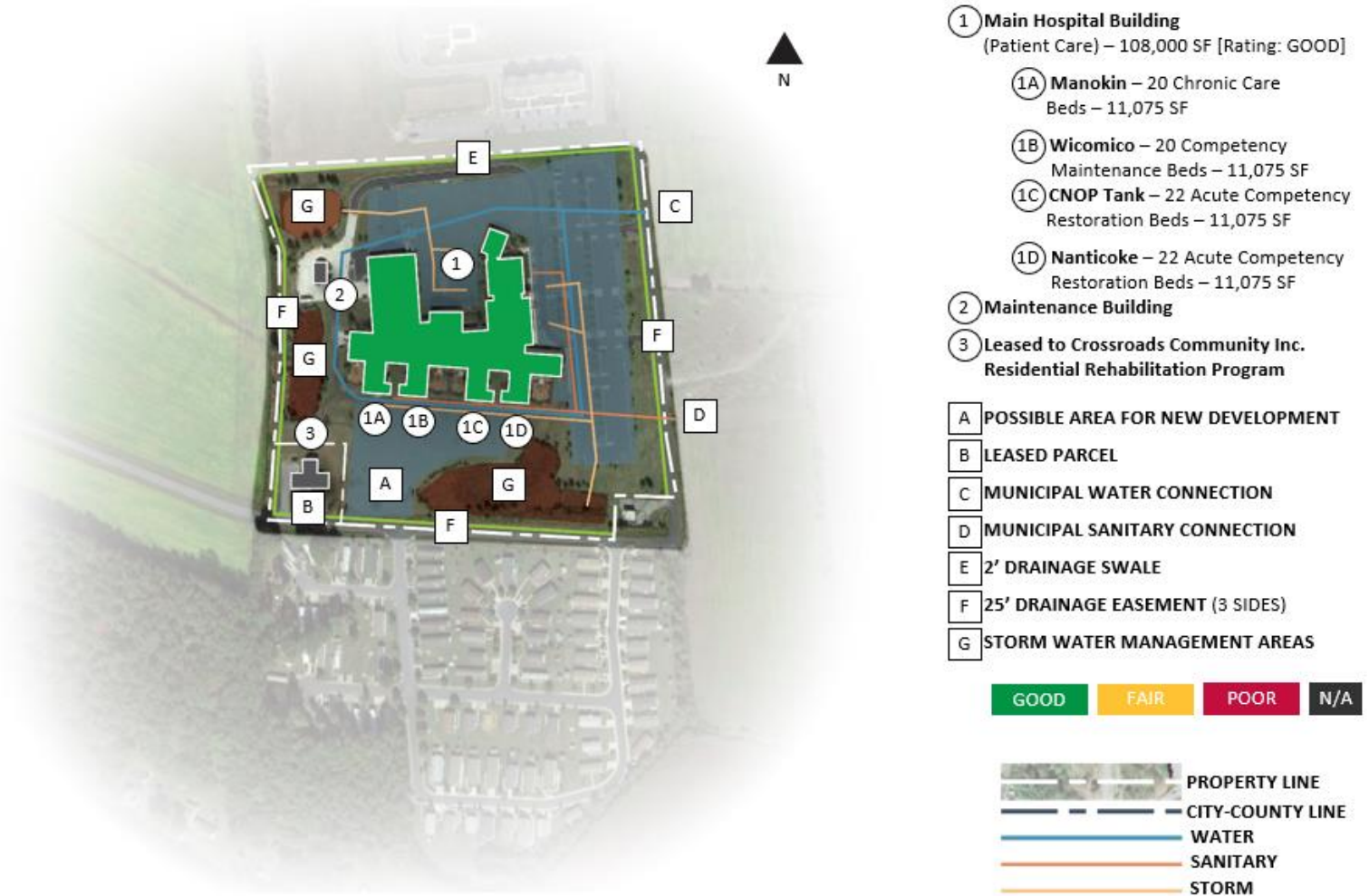


Figure 14 Eastern Shore Hospital Center Inventory & Evaluation Map

Spring Grove Hospital Center

55 Wade Avenue | Catonsville, Maryland | Baltimore County

Service Line	Facility	Overall Score	Infrastructure Assessment			
			Functional	Architectural	MEP	Civil Engineering
Inpatient Behavioral Health	Spring Grove Hospital Center	Poor	Poor	Poor	Fair	Poor

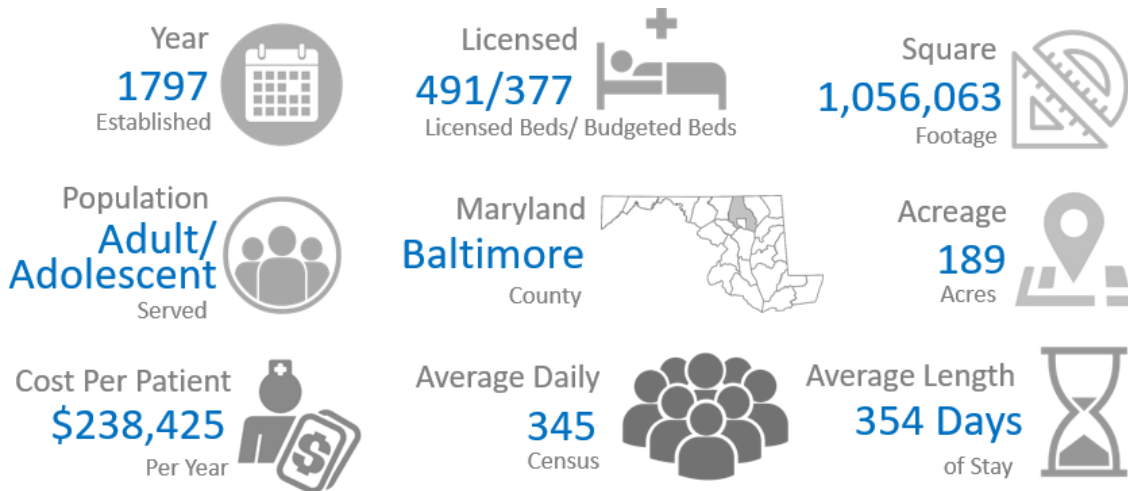
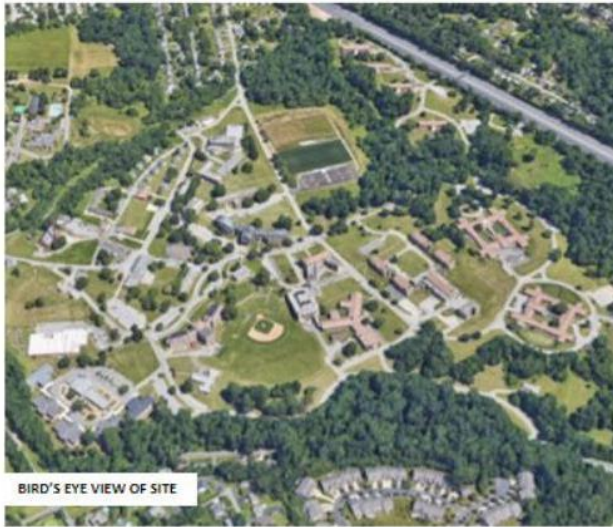


Figure 15 Spring Grove Hospital Center Dashboard

Background and History

Spring Grove Hospital Center is a 491-licensed bed psychiatric hospital located in Catonsville, Maryland, which serves adult and adolescent patients, including patients with intellectual disabilities. The facility was established in 1797 and is the nation's second-oldest continuously operating psychiatric hospital. Many of the original buildings have been decommissioned over time and many others exceed their useful life.

Physical Characteristics

The total square footage of all buildings on the property is approximately 1,056,063 square feet.¹³ The campus has over 72 buildings and minor structures. The primary patient buildings range in size and vary from single-story buildings to three-story buildings. The buildings are masonry veneer and were not constructed to meet current thermal and air infiltration standards. Moreover, all of the patient care buildings have exceeded their useful life. About a quarter of the buildings on the site are vacant and unoccupied. Furthermore, 25 buildings on the site are eligible for designation on the Maryland Register of Historic Buildings.

Site and Acreage

The Spring Grove Hospital Center sits on approximately 189 acres, located in the southwestern portion of Baltimore County.¹⁴ The site contains a variety of topographic and site conditions. The Western Branch Herbert Run runs east/west across the site, effectively cutting the northern section of the campus (approximately 12.5 acres) off from the rest of the facility. Access to the northern section is via two bridges, which span the waterway. The stream is not a FEMA designated flood plain. Trees are scattered throughout the site, with denser stands around the watercourse and along the southwest property line. The local topography is rolling with predominantly gentle slopes. Overall, the site slopes down to the east. The total site contains multiple drainage areas with the overall slopes toward the watercourses and to the east.

The majority of the site is developed, since the facility and its appurtenances occupy multiple buildings scattered throughout the property. The remaining developable area on the site is approximately 40 acres and is scattered about the site. This area does not include the demolition of any existing structure(s).

Circulation / Parking

Primary access to the site is from Wade Avenue to the northwest, with secondary access from several roads to the southeast and east. Parking is located throughout the campus, with lots at nearly every building. There are approximately 600 parking spaces onsite, with designated handicapped parking in many of the lots. There currently is no shortage of parking on the site.

¹³ Square footage was obtained from the clinical facility overview reports provided by the Maryland Department of Health.

¹⁴ Acreage was obtained from the clinical facility overview reports provided by the Maryland Department of Health.

Adequacy of Utilities

The site is served by municipal utilities; the water and sewer connections are located on Wade Ave. The exact ages of the services are unknown. The water and sewer connections are adequate for the existing facility. The electric service is private and served by a State-owned 2-loop 13.8KV utility substation. There is gas service on the site, which serves all patient buildings to provide heating.

Consistency with Adjacent Land

The site is consistent with adjacent institutional land use. Properties adjacent to the site include University of Maryland Baltimore County, Catonsville High School, Community College of Baltimore County, Catonsville, residential areas, and the I-695 Beltway.

Operational Assessment: Bed Utilization and Current Care Model

In FY 2018, the Spring Grove Hospital Center's adult units, licensed for 491 beds with 377 beds in use, reported 278 discharges, and nearly 124,000 patient days, resulting in an average daily census of 339 patients and an average length of stay of 405 days. The adult units provided age and gender-specific acute, sub-acute, and continuing care services. The majority of adult-focused units within the facility were near or at capacity. The average cost of care per patient ranged from \$211,000 in the Psychiatric Unit to \$265,000 in the acute care units.

Spring Grove Hospital Center also operates an Adolescent Acute Care Unit, which was licensed for 25 beds, but staffed for 10 beds. The unit was capped at 10 because of the acuity of the patients, their diagnoses, and offenses. The average cost of care per patient averaged nearly \$406,000 - almost twice that of the adult population.

Functional Assessment

Spring Grove Hospital Center's campus has over 72 buildings and minor structures, some dating back to the 19th century. The patient buildings were designed at a time when patients were often placed in rooms with four or five patients per room. Patient care standards have changed over time, reducing the number of patients per room. The facilities are aged and are in need of some upgrades. This is reflected in some of the functional assessment categories including: interior, exterior, adjacencies, and patient amenities. The deficiencies in the identified categories support an overall rating of poor for the most patient units. The Department of Health has initiated multiple patient environment improvement projects over the last ten years to address patient safety, environment of care, and bathroom upgrades. These projects have not been able to address the plan layouts of all patient buildings which do not meet current best practices for patient unit design. Some units have been renovated and improved sufficiently to obtain a good functional rating. The good rating was driven by workflow, staff support space, and patient safety.

Infrastructure Assessment

The current campus is not suitable for use as a modern psychiatric facility. The majority of residential patient structures are located on one side of the campus and all of the treatment facilities located on the opposite side of the campus. Current hospital uses are in spaces over-scaled or under-scaled for the patient population.

Architectural Assessment Summary

The facility analysis focused on the patient care buildings. The Tawes and Smith Buildings require roof replacements and the four Red Brick Cottages have soffit and exterior door issues. Some of the multi-story buildings do not have elevators and are not compliant with the ADA. More importantly, the internal conditions of the buildings and their arrangement on the site create operational challenges. Additionally, residential facilities are not co-located with treatment facilities. The campus has received some renovations and improvements over the last ten years, which included site-wide ligature mitigation improvements, generator and switchgear replacements, and water infiltration mitigation.

Mechanical / Electrical / Plumbing Assessment Summary

An energy performance contract was implemented in 2007, and the facility has already exceeded its predicted energy savings. At the time of the assessment, the Dayhoff, White, Tawes, and Noyes buildings had newer boilers and control systems, but the air handling units, ductwork, and piping in the Tawes and Noyes buildings were past their design lives. These two buildings also have outdated interior AC units. Moreover, the main mechanical equipment in the basement of the Noyes building was replaced recently due to flood damage.

The electrical main distribution panelboards and sub-panels are in fair condition, but exceed the 30-year design life expectancy for this type of equipment and should be replaced. The lighting and lighting control systems should be upgraded.

Civil Assessment Summary

The site is in good overall condition and well maintained. Most of the site was constructed before ADA accessibility requirements. The streets and sidewalks in many cases are too steep to comply with current standards, however the ADA does not require reconstruction. While some effort has been made to make each building site accessible, ADA compliance will require improvements in grading, walkways, parking, pick-up and drop-off areas, striping and signage, and overall paving condition and surfaces.

There are no overriding drainage issues noted, however, the site does not have modern day stormwater management devices. Most of the drainage on site is overland to street and yard inlets and culverts. This, coupled with the topography of the campus, resulted in major flooding on May 27, 2018, which resulted in over \$1 million worth of repairs on campus.

Spring Grove Hospital Center

INVENTORY & EVALUATION MAP

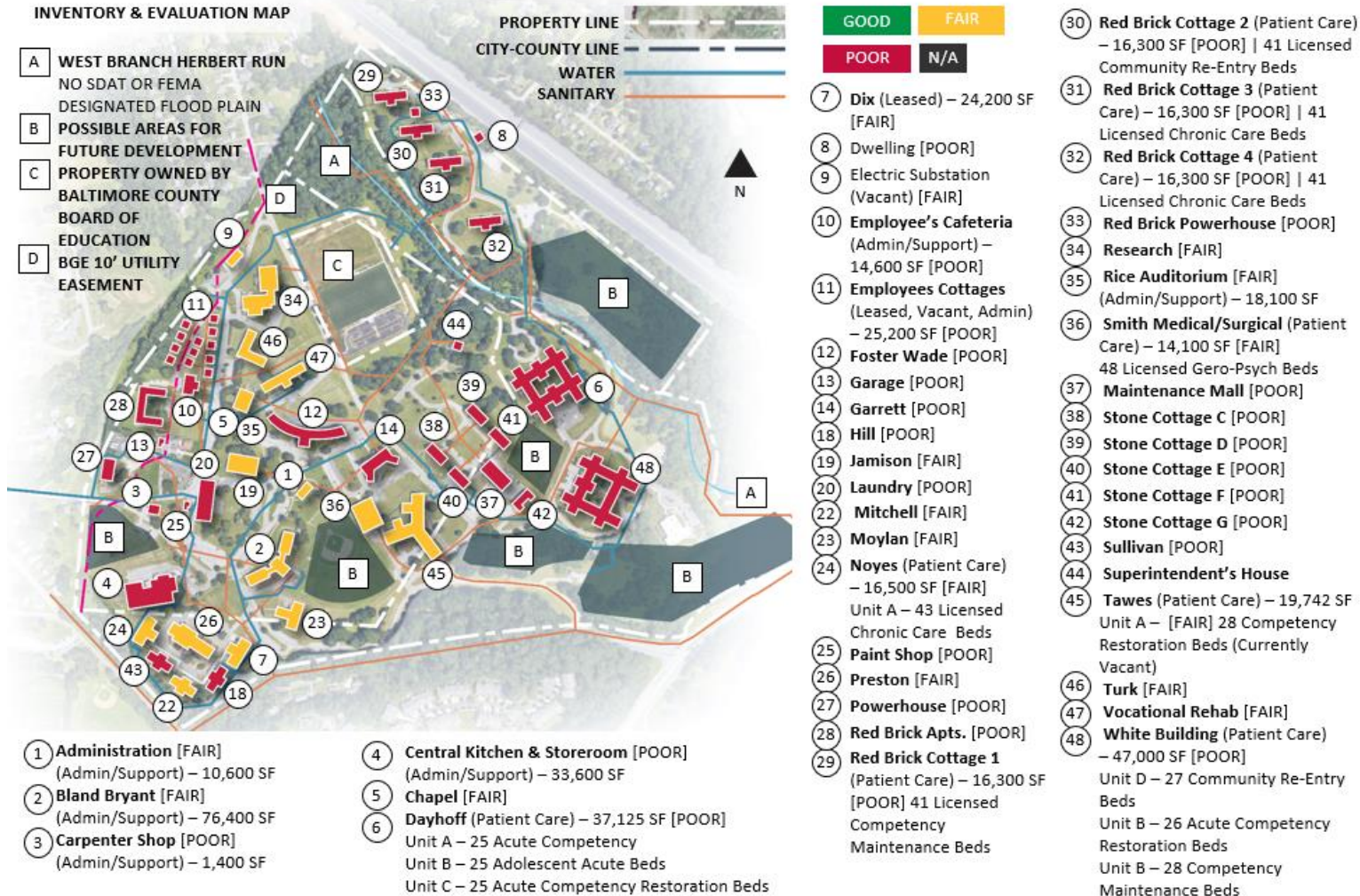


Figure 16 Spring Grove Hospital Center Inventory & Evaluation Map

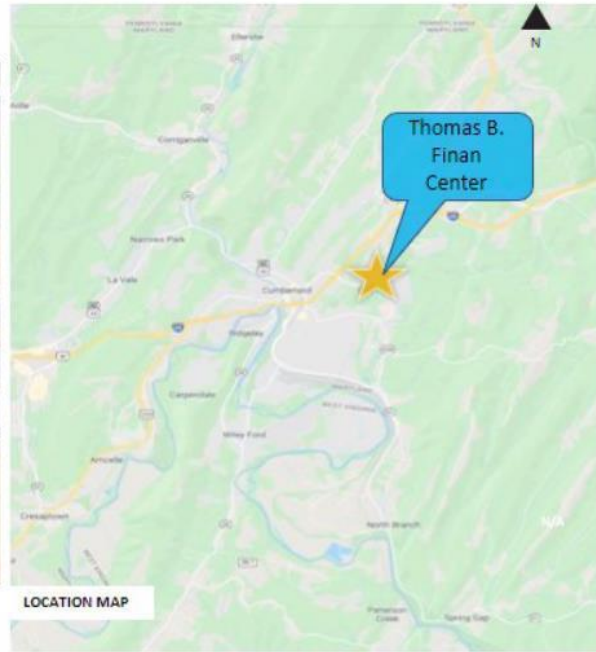
Thomas B. Finan Center

10102 Country Club Road SE | Cumberland, Maryland | Allegany County

Service Line	Facility	Overall Score	Infrastructure Assessment			
			Functional	Architectural	MEP	Civil Engineering
Inpatient Behavioral Health	Thomas B. Finan Center	Fair	Fair	Fair	Fair	Fair



BIRD'S EYE VIEW OF SITE



LOCATION MAP

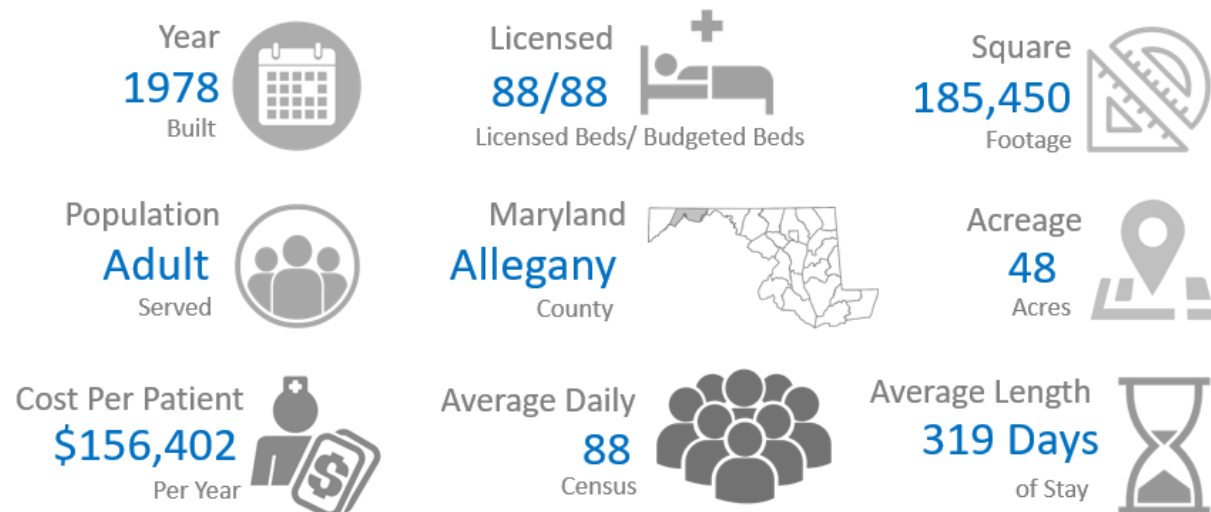


Figure 17 Thomas B. Finan Center Dashboard

Background and History

Thomas B. Finan Center is an 88-licensed bed psychiatric hospital located in Cumberland, Maryland, which serves adult and gero-psychiatric patients. The campus houses an assisted living program and a building is leased to a substance use disorder treatment program. The facility was constructed in 1978. The facility is designed to serve both voluntary and involuntary patients. Over time, portions of the building have been leased to various entities.

Physical Characteristics

The facility comprises ten single-story residential cottages, connected by enclosed corridors, plus a large gymnasium, chapel, canteen, and administrative areas. The cottages are masonry bearing wall construction, with pitched asphalt shingle roofs connected by glass enclosed corridors with flat roofs. The total size of the facility is approximately 185,450 square feet.¹⁵ About 20 percent of the facility is leased, and four percent of the facility is unoccupied.

Site and Acreage

The facility sits on a parcel of approximately 48 acres, located near the center of Cumberland.¹⁶ The site is largely wooded however, it is important to note that the two western-most counties (Allegany and Garrett) do not have the same reforestation requirements as the rest of Maryland's counties. The site also includes a softball field and a walking path.

The site contains one stormwater management device located on the east side of the property. It appears to serve both quantity and quality purposes, as it consists of a forebay and pond that were permitted at the time of construction. Overall, there are significant grade changes with areas of steep slope that cross the threshold of "undevelopable" by MDE standards. The highest elevation is at the north corner at approximately 800 feet and the lowest elevation is at the south corner at approximately 700 feet. The developed area flattens where the existing facility is located. The parking lot on the west side tiers downward over an elevation difference of about 20 feet. There are no floodplains, utility, or forestation easements on the property.

Circulation / Parking

Access to the site is from Country Club Road on the west side, which leads to parking and the ring road that leads to all points in the facility. The majority of the parking is located on the west side of the facility with some smaller lots scattered to the north and south. There are approximately 295 parking spaces onsite, of which 10 are dedicated to handicapped parking. There currently is no shortage of parking on the site.

Adequacy of Utilities

The site is served by municipal utilities, and the sewer connection is on Country Club Road. Water is supplied to a tower at the southern portion of the site and distributed to the facility from there.

¹⁵ Square footage obtained from the clinical facility overview reports provided by the Maryland Department of Health.

¹⁶ Acreage obtained from the clinical facility overview reports provided by the Maryland Department of Health.

The utilities are adequate for the existing facility. However, the finite capacity of the water tower will require an additional detailed study if any significant addition will be considered in the future. Furthermore, the electrical service is adequate to serve the site and is fed by a 2-loop 12KV switchgear utility substation. As of 2018, a new gas service was provided by Allegheny Power with a theoretical capacity of 7,418,000 BTUs.

Consistency with Adjacent Land

The site is consistent with adjacent institutional land use. Properties adjacent to the site include Allegheny College of Maryland, University of Pittsburgh Western Maryland Hospital, the Jefferson School, and residential communities.

Operational Assessment: Bed Utilization and Current Care Model

At the time of the assessment, Thomas B. Finan Center's 66-bed psychiatric inpatient residential unit (excludes Cottage 5) comprised of three 22-bed cottages, reported 66 discharges and nearly 22,000 patient days, resulting in an average daily census of 66 patients, an average length of stay of 365 days, and an occupancy rate of 100%. The Thomas B. Finan Center was one of the few state facilities that was fully staffed for the number of licensed beds. The average cost of care per patient was nearly \$160,000. The Thomas B. Finan Center also operated a 22-bed assisted living behavioral health unit. In FY 2018, the unit reported 28 discharges and over 6,200 patient days resulting in an occupancy rate of 77%.

Functional Assessment

The Thomas B. Finan Center is an older facility that would benefit from additional staff support spaces. Patient amenities including outdoor space and dayrooms are plentiful. The overall functional rating for the complex is fair.

Infrastructure Assessment

At the time of the assessment, the Thomas B. Finan Center had ten residential cottages and each cottage had a 22-bed capacity. Two cottages were leased to the Allegheny County Health Department to provide substance use disorder treatment services to adults. Cottages 1, 2, and G were residential inpatient cottages. Cottages 5 and 6 were used by the assisted living program. Cottage 7 was leased to a nonprofit provider that operated an inpatient step-down unit for MDH patients. An inpatient step-down unit is for patients that are ready for discharge from MDH psychiatric facilities, but are not yet ready to be placed into the community. Cottage 8 was vacant, and Cottage A was an administrative and patient space.

Architectural Assessment Summary

The Thomas B. Finan Center is in fair and expected condition for a facility of this age. The buildings are constructed with load bearing masonry walls and steel-framed roof structures finished with asphalt shingles. Interior walls are a combination of concrete masonry units and gypsum wallboard with painted finishes. The primary architectural deficiencies include layouts that compromise sightlines, and soffits and fascia that require replacement on all buildings.

The facility has benefitted from several significant renewal projects over the last ten years, which included new roof coatings on the connecting hallways and installation of ligature mitigation measures.

Mechanical / Electrical / Plumbing Assessment Summary

The facility completed a \$4 million energy performance contract in 2020, which included installation of new boilers, HVAC controls, a fire sprinkler system, and natural gas service. The facility also completed several significant MEP projects including the replacement of the fire alarm system and renewal of the fire damper system.

The electrical main distribution panelboards, sub-panels, and emergency generator are in fair condition, but exceeded the 30-year design life expectancy for this type of equipment and should be replaced. Also, the existing fluorescent fixture lamps surveyed were replaced with LED lamps as part of the energy performance contract, but the lighting control systems should be upgraded.

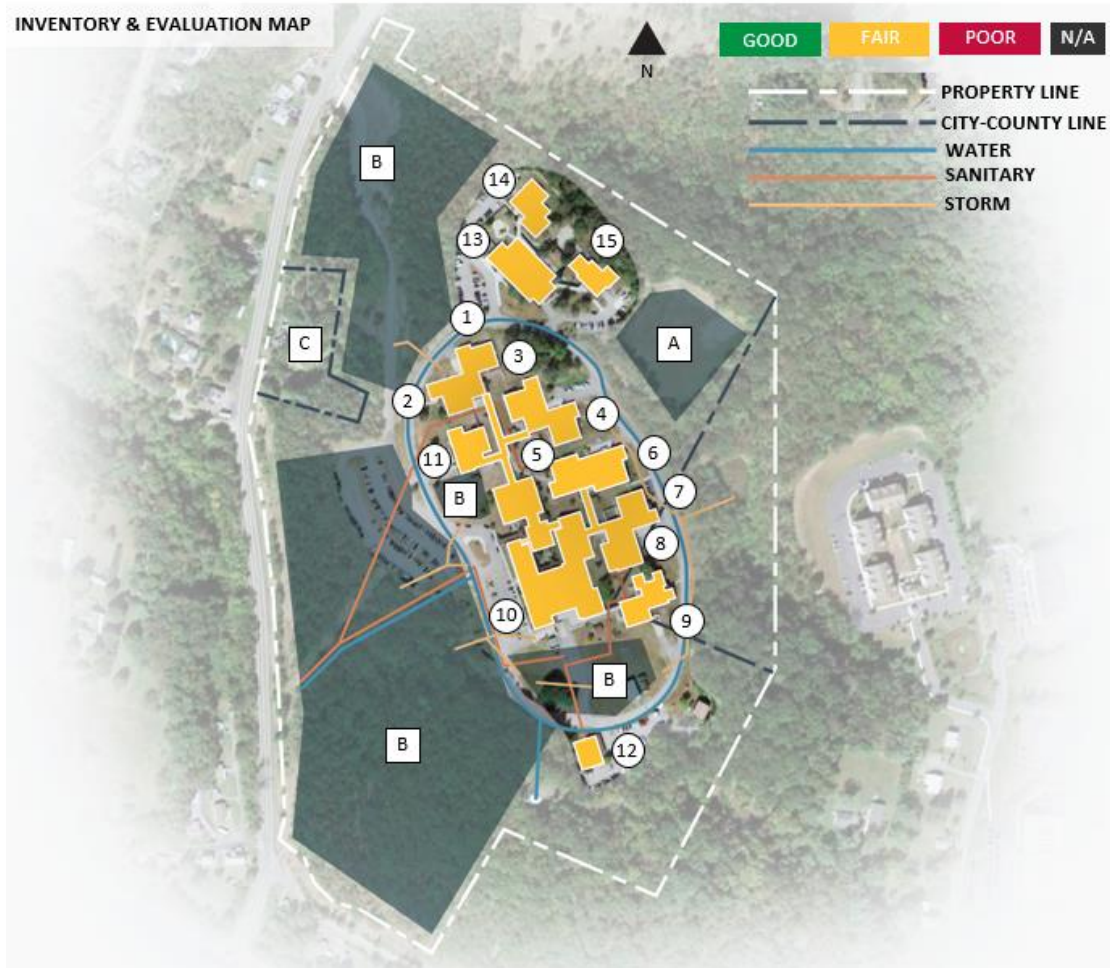
Civil Engineering Assessment Summary

The site is in serviceable condition and well maintained, with a few notable exceptions. While some effort was made to make the site accessible, several improvements are needed in grading including: walkways, parking, pick-up and drop-off areas, striping and signage, and overall paving condition and surfaces to meet ADA requirements. Additionally, the paving condition varied from fair to poor with potholes, cracking, and settlement noted throughout.

The biggest issue on the site is the eroded slope on the west side, just outside of the ring road. The collapse was reportedly caused by damage to and overflow of the storm drain system in that area. It has affected the remaining storm drain system and the immediate vicinity of the ring road. The Department initiated a project to repair the eroded slope. The project is an active project with Department of General Services with an anticipated completion date of _____,

Thomas B. Finan Center

INVENTORY & EVALUATION MAP



- ① **Cottage #1** (Patient Care) – 7,430 SF
22 Licensed Beds – Active Competency
Restoration [Rating: FAIR]
- ② **Cottage #2** (Patient Care) – 11,610 SF
22 Beds – Gero-Psych [Rating: FAIR]
- ③ **Cottage #3** (Leased) - 10,145 SF
Dept. of Juvenile Services [Rating: FAIR]
- ④ **Cottage #4** (Leased) – 8,725 SF
Allegany County Health [Rating: FAIR]
- ⑤ **Cottage #5** (Patient Care) – 12,145 SF
22 Bed Extended Care [Rating: FAIR]
- ⑥ **Cottage #6** (Vacant) – 6,807 SF [Rating:
FAIR]
- ⑦ **Cottage #7** (Leased) – 8,516 SF
Archway Station [Rating: FAIR]
- ⑧ **Cottage #8** (Vacant) – 10,010 SF
[Rating: FAIR]
- ⑨ **Cottage "G"** - 12,680 SF [Rating: FAIR]
- ⑩ **Admin Building** - 60,695 SF [Rating:
FAIR]
- ⑪ **Cottage "A"** – 10,875 SF
Security and IT [Rating: FAIR]
- ⑫ **Maintenance Building** - 4,735 SF
[Rating: FAIR]
- ⑬ **School Admin** (Leased) – 16,300 SF
[Rating: FAIR]
- ⑭ **Residential Beds** (Leased) – 11,850 SF
[Rating: FAIR]
- ⑮ **Residential Beds** (Leased) – 11,720 SF
[Rating: FAIR]
- A** **BASEBALL FIELD NO LONGER USED:**
May be suitable for development but
significantly lower than the rest of the
facility
- B** **POSSIBLE AREA FOR NEW
DEVELOPMENT**
- C** **PROPERTY NOT OWNED BY THE STATE**

Figure 18 Thomas B. Finan Center Inventory & Evaluation Map

B. Current Care Model: RICA

The Regional Institute for Children and Adolescents (“RICA”) service line provides education, psychosocial, and medical services needed by students who are not appropriate for mainstream educational endeavors. The referrals for the RICA come from a number of sources: foster care, social services, juvenile services, school systems, or other residential treatment center (“RTC”) programs. The referrals are reviewed for their appropriateness and then the student is placed on a waiting list. The length of the waiting list depends on the number of operational RTCs, diversion resources to avoid the need for the RTC, and the downstream services that facilitate the discharges from the RICA sites.

The patients/students typically remain in the facility for up to nine months, but can have a length of stay up to three years. The discharge from the RICA is based upon the completion of personalized goals or when the patient ages out.

Each RICA has a residential and day program. The residential programs are set up to be more of a weekday residential program where the students go home over the weekend. However, this is changing, and more students are staying all week which impacts the staffing and facility demands on each program.

The current RICA care model is depicted below

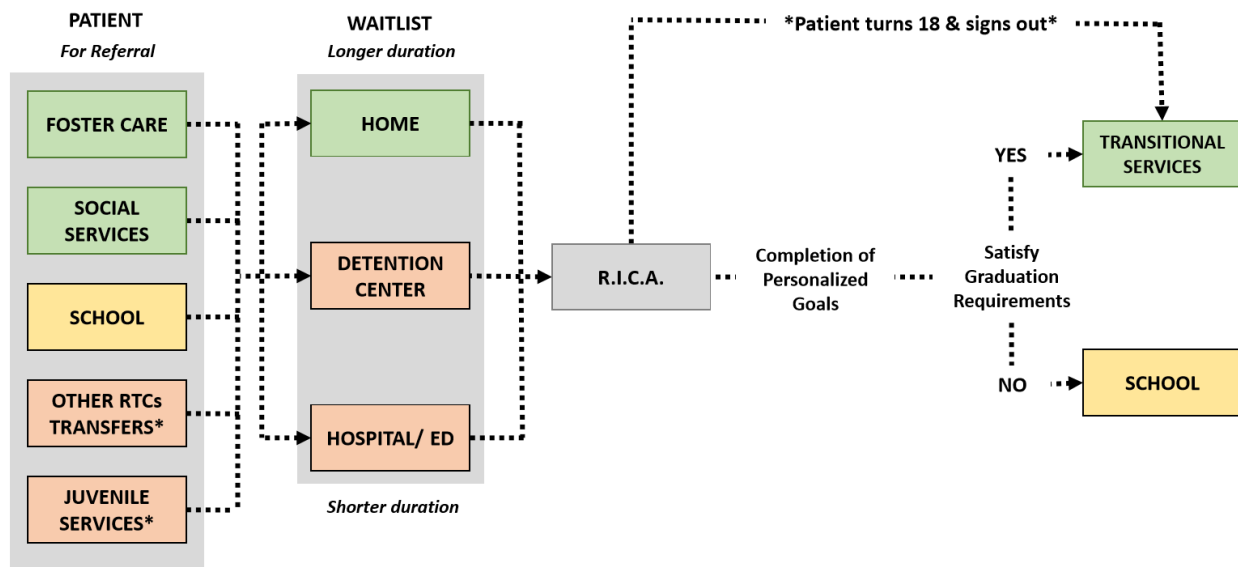


Figure 19 RICA Care Model

RICA – Infrastructure Assessment Summary

Service Line	Facility	Overall Score	Infrastructure Assessment			
			Functional	Architectural	MEP	Civil Engineering
Residential Institutes for	RICA Baltimore	Fair	Good	Fair	Good	Fair
Residential Institutes for	John L. Gildner RICA	Fair	Good	Fair	Fair	Fair

Figure 20 RICA Infrastructure Assessment Summary

RICA - Baltimore

605 South Chapel Gate Lane | Baltimore, Maryland | Baltimore City

Service Line	Facility	Overall Score	Infrastructure Assessment			
			Functional	Architectural	MEP	Civil Engineering
Residential Institutes for Children and Adolescents	RICA Baltimore	Fair	Good	Fair	Good	Fair

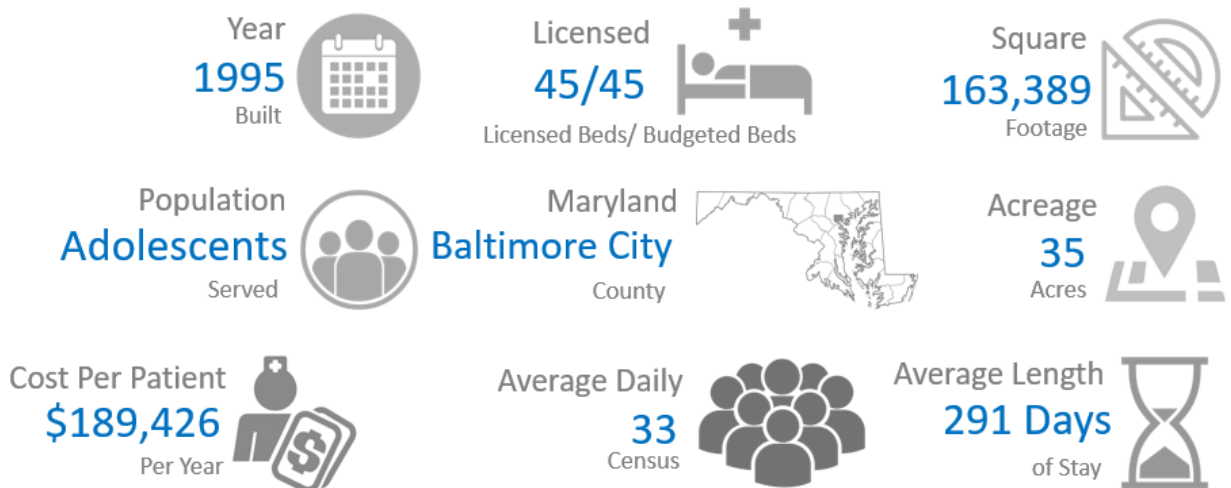
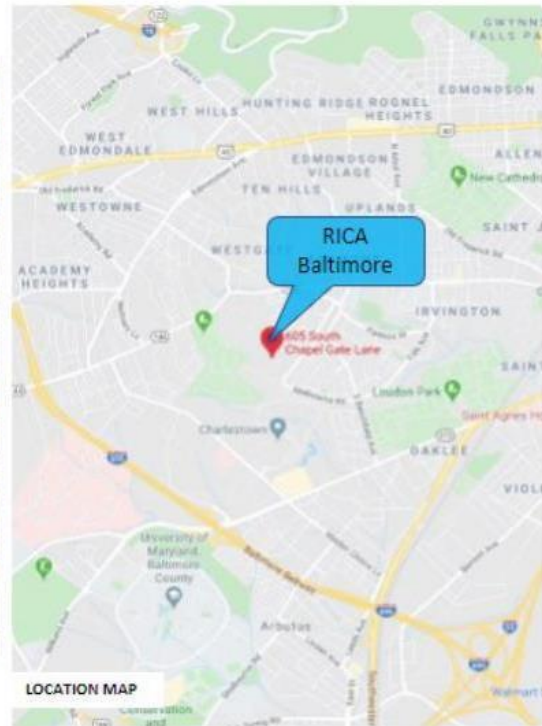


Figure 21 RICA Baltimore Dashboard

Background and History

RICA Baltimore is a 45-licensed bed residential treatment center for adolescents located at 605 S. Chapel Gate Lane in Baltimore, Maryland. The original program started in the late 1950s and was originally located on the Rosewood campus, which is now closed. In the early 1970s, the program moved to its current site, however, the building was soon determined to be obsolete and a new facility was constructed on the same site in 1995.

Physical Characteristics

The RICA Baltimore buildings total approximately 163,389 square feet.¹⁷ The buildings consist of three single-story connected cottages that are directly linked to a multi-purpose building that houses a school, administration, cafeteria, and support spaces. The structures have load-bearing masonry walls with sloped asphalt shingle roofs. There is also a separate gymnasium, maintenance garage, and greenhouse. The former RICA Baltimore dormitory building is a 71,384 gross square feet two-story masonry framed structure with a partial sloped roof and partial flat roof. The building has exceeded its useful life. It has been decommissioned and is currently vacant.

Site and Acreage

RICA Baltimore sits on a parcel of approximately 35 acres, located on the southwest side of Baltimore City, close to the Baltimore County line.¹⁸ The site is largely clear with scattered trees throughout most of the area. However, it has a dense stand of trees on the south side where the stormwater management devices outfall. Overall, the site slopes gradually down to the southwest with no steep slopes. Neither the State Department of Assessments and Taxation (“SDAT”), nor Baltimore City online information indicate any flood plains or forestation easements.

Circulation / Parking

Access to the site is from the dead-end of Chapel Gate Lane. Parking is largely on the north side around the main buildings. There are approximately 182 parking spaces onsite and 4 of those spaces are dedicated to handicapped parking. There is no shortage of parking on the site.

Adequacy of Utilities

The site is served by municipal utilities. The water connection is located on S. Chapel Gate Lane and the sewer connection is located on Wickham Road to the east. The municipal utilities are adequate for the existing facility. Due to the sizes and ages of the services, it is likely that an addition to the building would require a service upgrade. However, that is dependent on the size and use of the addition. The site has a theoretical gas capacity of 6,535,650 BTUs. The facility also has an electrical service fed from a utility transformer, which makes it more difficult to expand in the future without replacing the service.

¹⁷ Square footage obtained from the clinical facility overview reports provided by the Maryland Department of Health.

¹⁸ Acreage obtained from the clinical facility overview reports provided by the Maryland Department of Health.

Consistency with Adjacent Land

The site is consistent with adjacent land use. The facility is surrounded by mostly single-family and multi-family residences.

Operational Assessment: Bed Utilization and Current Care Model

In FY 2018, RICA Baltimore's 45-bed child/adolescent residential unit, consisted of three 15-bed cottages, organized by age and gender. The facility was fully staffed for its licensed beds. The combined units reported 35 discharges and nearly 10,200 patient days, resulting in an average daily census of 38 patients, an average length of stay of 291 days, and an occupancy rate of 84%. The program was originally designed to have the students furlough for the weekend; over time, however, the program has transitioned to permitting students to stay over the weekend. This also changed the operations and staffing of the facility. The average cost of care per patient was \$190,000 per year. At the time of the survey RICA Baltimore operated, and continues to operate a successful day program with 45 patients enrolled in the program. Both the residential and day programs were near budgeted capacity.

Functional Assessment

The RICA Baltimore campus has three cottages where the students reside and a large school for educational activities. The functional rating for the facility is good and functions well. The residential cottages are designed in a radial form, with patient rooms down a hallway and the central commons area in the center. This allows for private and public space and direct line of sight by the staff. The school has all of the necessary resources to provide superior education to the students.

Infrastructure Assessment

RICA Baltimore has been located on the 35-acre site in southwest Baltimore City since 1973. In 1995, the new facility was constructed, consisting of three cottages and a multi-purpose building. The new facility houses the cafeteria/dietary area, maintenance department and shops, the school, and the administration wing. These buildings are in good to excellent condition, although some of the mechanical systems are approaching their end of life and will require replacement. A project was completed in 2017 that replaced multiple air handling units serving patient cottages. The facility also has a gymnasium and maintenance garage.

Architectural Assessment Summary

The main building complex was constructed in 1995 and in fair to good condition. The original decommissioned and vacant dormitory building is unoccupied and is in poor condition. In 2012, the facility was upgraded with anti-ligature devices. Other facility renewal projects completed in the last ten years included the following: roof replacement of the multi-purpose building and cottages, replacement of the gymnasium heating, ventilation, and air conditioning, and rooftop air handling unit replacements.

Mechanical / Electrical / Plumbing Assessment Summary

Most of the mechanical equipment on the is original to the construction of the building. However, the gym air conditioning unit and the cottage rooftop units were installed in 2017, with the exception for the controls for the units. Mechanical equipment approaching the end of projected design life include the ice chiller, cooling towers, and multi-purpose building air handling units. All buildings on the campus are fire sprinklered, excluding the gymnasium.

The electrical main distribution panels, sub-panels and emergency generator systems are in good operable condition and have 5-10 years of useful life remaining. However, the lighting and lighting control systems should be upgraded.

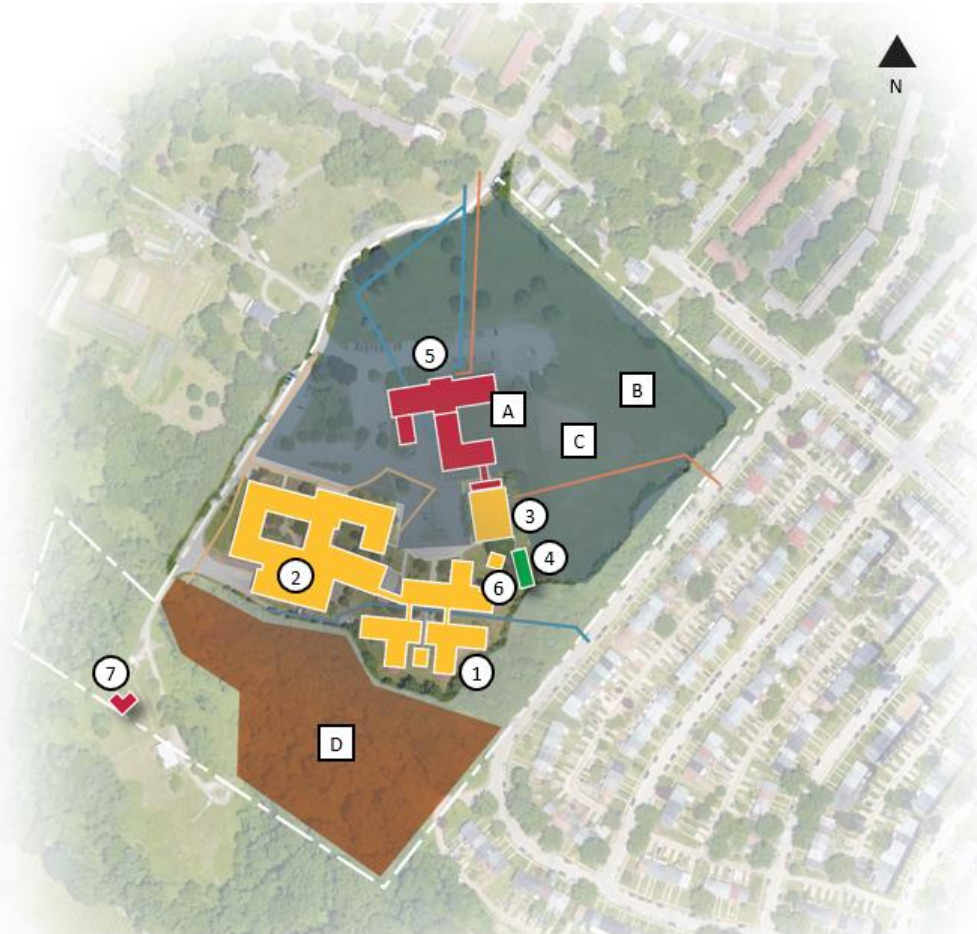
Civil Assessment Summary

The majority of the site is developed with the facility and its appurtenances. An existing multi-story building in the center of the campus is decommissioned. This could be a prime location on the site for redevelopment. The developable area on the site, including the area occupied by the decommissioned building, is approximately eight acres. That area does not include the stormwater management area to the south.

Overall, the site's public areas are in good condition and well maintained. The main facility was designed after the ADA act for full compliance with the regulations in effect at the time. The accessible route from parking areas that existed prior to construction of the new facility will require additional upgrades. The paving throughout the site is in serviceable condition, except for the service road to the rear, which is in poor condition. Some repairs are necessary in select areas of the paving onsite.

RICA Baltimore

INVENTORY & EVALUATION MAP



- ① Residential Dormitory – 24,242 SF
[Rating: FAIR]
 - 1A Cottage A – 15 Beds – Developmental
 - 1B Cottage B – 15 Beds – Older Boys
 - 1C Cottage C – 15 Beds – Girls
- ② Admin/Multipurpose – 53,078 SF
[Rating: FAIR]
- ③ Gymnasium – 8,305 SF [Rating: FAIR]
- ④ Green House – 2,000 SF [Rating: GOOD]
- ⑤ Original RICA Building – 71,384 SF
[Rating: POOR]
- ⑥ Service Building – 1,400 SF [Rating: FAIR]
- ⑦ Employee House (Vacant) – 3,036 SF
[Rating: POOR]

- A EXISTING ABANDONED BUILDING
Possible are for future development
- B RELATIVELY STEEPLY SLOPED
Can be developed but with significant grading
- C POSSIBLE ARE FOR FUTURE DEVELOPMENT
To include utility relocation
- D STORM WATER MANAGEMENT AREA

GOOD	FAIR	POOR	N/A
------	------	------	-----

	PROPERTY LINE
	CITY-COUNTY LINE
	WATER
	SANITARY
	STORM

Figure 22 RICA Baltimore Inventory & Evaluation Map

John L. Gildner RICA

15000 Broschart Road | Rockville Maryland | Montgomery County

Service Line	Facility	Overall Score	Infrastructure Assessment			
			Functional	Architectural	MEP	Civil Engineering
Residential Institutes for Children and Adolescents	John L. Gildner RICA	Fair	Good	Fair	Fair	Fair

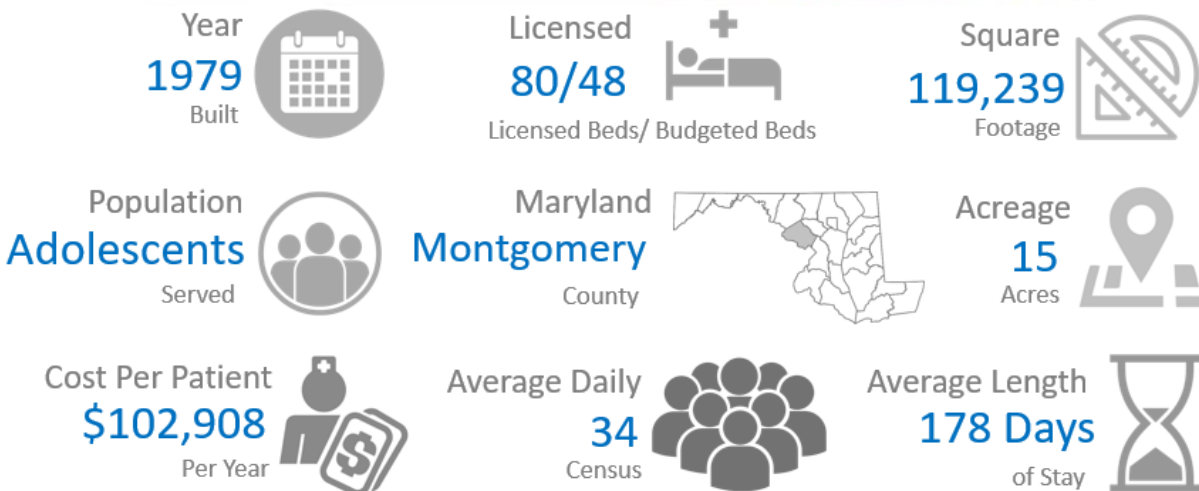
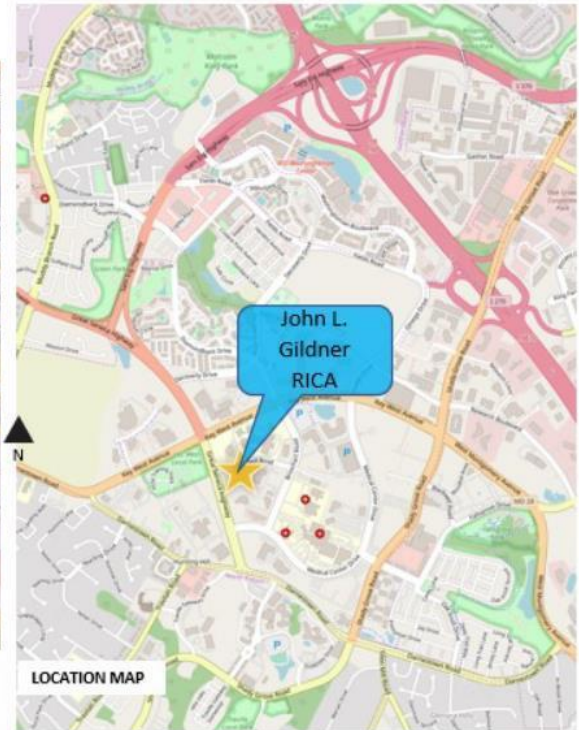


Figure 23 John L. Gildner RICA Dashboard

Background and History

John L. Gildner RICA is an 80-licensed bed residential treatment center for adolescents located in Rockville, Maryland. The facility was constructed in 1979 as a special education school for students with emotional disabilities, autism, and other health impairments. John L. Gildner RICA provides an academic, behavioral day and residential treatment program for adolescents in Montgomery County and throughout the State.

Physical Characteristics

The buildings total approximately 119,239 square feet and include three residential cottages, a school/administration building, and a maintenance building.¹⁹ All buildings are single-story and slab on grade. The facility also includes outdoor athletic facilities. The buildings are fully occupied by the Maryland Department of Health.

Site and Acreage

The facility sits on a parcel of approximately 15 acres, located just west of the incorporated limits of the City of Rockville in Montgomery County.²⁰ The site is largely clear with scattered trees throughout. Overall, the site slopes gradually down to the southwest. There is some grade on the site but overall, it is relatively level with no steep slopes. Neither SDAT, nor Montgomery County online information indicate any flood plains or forestation easements. One water line easement appears to bisect the site between the buildings and the ballfield.

Circulation / Parking

Access to the site is from Broschart Road on the east side, which leads to a ring road giving access to the entire facility. Parking is scattered throughout the site, but the majority of it is to the east around the main buildings. There are approximately 295 parking spaces onsite, and 8 appear to be dedicated to handicapped parking. There is no shortage of parking on the site.

Adequacy of Utilities

The site is served by municipal utilities with the water and sewer connections on Blackwell Road to the south. The utilities are adequate for the existing facility. Due to the size of the service, it is unlikely that an addition to the building would require a service upgrade, but ultimately that will depend on the size and use of the addition. There is no natural gas service to the site, which would benefit the facility. The electrical service is fed from a 2-loop 13.8KV Switchgear Utility substation and is adequate to serve the site and will support expansion.

Consistency with Adjacent Land

The site is consistent with adjacent institutional land use. Properties adjacent to the site include other health care providers and schools.

¹⁹ Square footage obtained from the clinical facility overview reports provided by the Maryland Department of Health.

²⁰ Acreage obtained from the clinical facility overview reports provided by the Maryland Department of Health.

Operational Assessment: Bed Utilization and Current Care Model

At the time of the assessment, the facility's 80-bed child/adolescent residential hospital consisted of three cottages offering residential treatment and support services. Only 48 of these licensed beds were in use. The combined units reported 37 discharges and nearly 15,700 patient days, resulting in an average daily census of 36 patients, an average length of stay of 178 days, and an occupancy rate of 75% when considering the ADC relative to the 48 beds in use. The average cost of care per patient per year was nearly \$103,000.

Functional Assessment

John L. Gildner RICA campus has multiple cottages for student residences and a school complex for educational activities. Overall, the campus and its buildings are rated good for the functional assessment. The school functions quite well in its current state, but is not connected to the residential cottages. The facility was originally designed as an open campus which requires students to cross the campus to enter the school buildings. Similar to RICA Baltimore, the patient rooms are slightly smaller than current best practices for design. The facility functions well but will need some updating and continued maintenance to improve the interior and exterior. A central open space is used for the day room and activity space. It does not have acoustical controls that support multiple small group activities. Sound travel is not well controlled.

Infrastructure Assessment

John L. Gildner RICA is a mental health residential treatment facility serving adolescents from Montgomery County and the surrounding area. Multidisciplinary care teams provide treatment and educational programs for adolescents who are experiencing emotional, behavioral, and learning difficulties. Program services include psychiatric evaluation and treatment, 24-hour nursing and residential services, individual, group, and family therapy, crisis intervention, special education, extended year education programs, alternative learning center, rehabilitation services, and a community integration program. The facility provides day treatment for elementary to high school-aged children from Montgomery County. The school is operated by Montgomery County Public Schools.

Architectural Assessment Summary

Constructed in 1979, the primary buildings are in fair (expected) condition for their age. The site consists of single-story structures and the buildings are generally ADA compliant. The roofs have been replaced within the past 20 years and are still in good condition. The Department is currently engaged in a project to replace the exterior windows with modern energy efficient units. The facility pool is not currently in use.

Mechanical / Electrical / Plumbing Assessment Summary

The site does not have natural gas, and the buildings are only partially fire sprinklered. Much of the mechanical equipment is nearing the end of its design life. The electrical main distribution panelboards and sub-panels are in fair condition but have exceeded the 30-year design life

expectancy for this type of equipment and should be replaced. Moreover, the lighting and lighting control systems should be upgraded.

Civil Assessment Summary

The majority of the site is developed with the facility and its appurtenances. The remaining developable area on the site is currently occupied by the ballfield.

Overall, the facility's public areas are in good condition and well maintained. Some steps toward accessibility compliance have been made at the facility, however, compliance will require additional upgrades. Paving throughout the site is in serviceable condition, however, repairs are necessary for some areas.

In general, drainage largely consists of overland flow to paving and yard inlets. On the day of the on site visit, several areas were settled and ponding, and in need of repairs. There are minor erosion issues in various locations that require regrading.

John L. Gildner RICA

INVENTORY & EVALUATION MAP



Figure 24 John L. Gildner RICA Inventory & Evaluation Map

C. Current Care Model: DDA

MDH has two facilities that provide care for patients with intellectual and developmental disabilities. The Holly Center and the Potomac Center are well positioned in the State to address residents' needs. The vast majority of the patients who have intellectual and developmental disabilities are cared for in the community. The number of patients who require residential care is small and decreasing.

Patients are referred from home, community, or the hospital. Patients who are non-ambulatory and require the most intensive care are admitted to the Holly Center. The Potomac Center handles patients that are more mobile and have higher functionality. The Potomac Center also accommodates the State's Secure Evaluation and Therapeutic Treatment ("SETT") program, which provides evaluation and assessment services, as well as active treatment to court-involved individuals with intellectual disabilities. Patients admitted to the SETT program.

The Holly Center operates a respite program that also provides care for patients who do not get admitted. The respite program provides a daily service where a caregiver can bring in the patient for the day. If the caregiver needs more than a day, then the patient can stay for a longer period of time.

Patients can be discharged from these facilities to their home or a community-based service such as a group home. There are also patients who become more acutely ill and will be transferred to the hospital.

The current Developmental Disabilities Administration care model is depicted below:

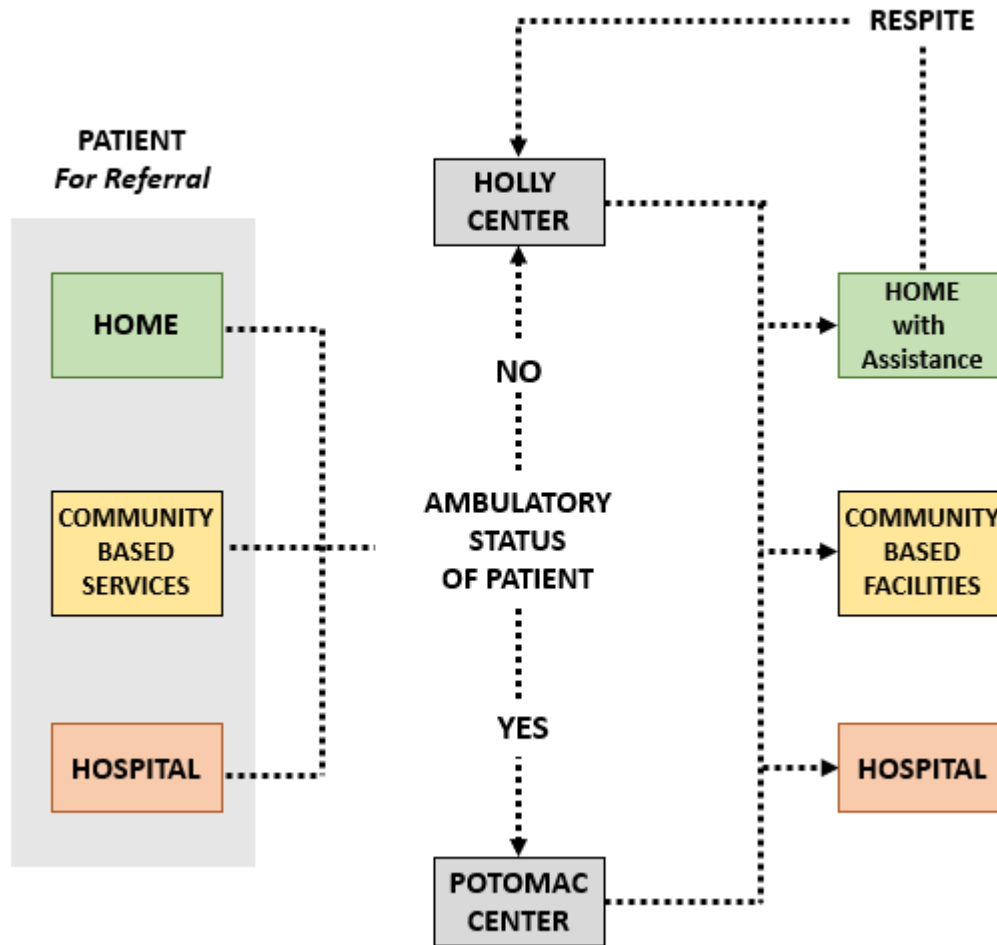


Figure 25 Developmental Disabilities Administration Care Model

DDA – Infrastructure Assessment Summary

Service Line	Facility	Overall Score	Infrastructure Assessment			
			Functional	Architectural	MEP	Civil Engineering
Residential Services for Individuals with Developmental Disabilities	Holly Center	Fair	Fair	Fair	Fair	Fair
Residential Services for Individuals with Developmental Disabilities	Potomac Center	Fair	Fair	Fair	Fair	Fair

Figure 26 DDA Infrastructure Assessment Summary

Holly Center

926 Snow Hill Road | Salisbury, Maryland | Wicomico County

Service Line	Facility	Overall Score	Infrastructure Assessment			
			Functional	Architectural	MEP	Civil Engineering
Residential Services for Individuals with Developmental Disabilities	Holly Center	Fair	Fair	Fair	Fair	Fair

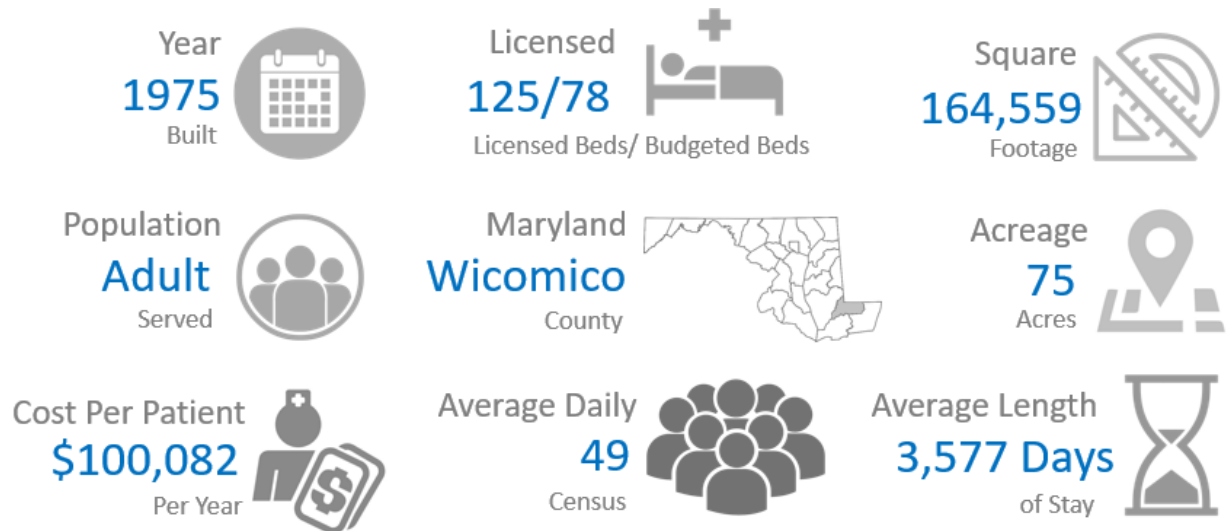
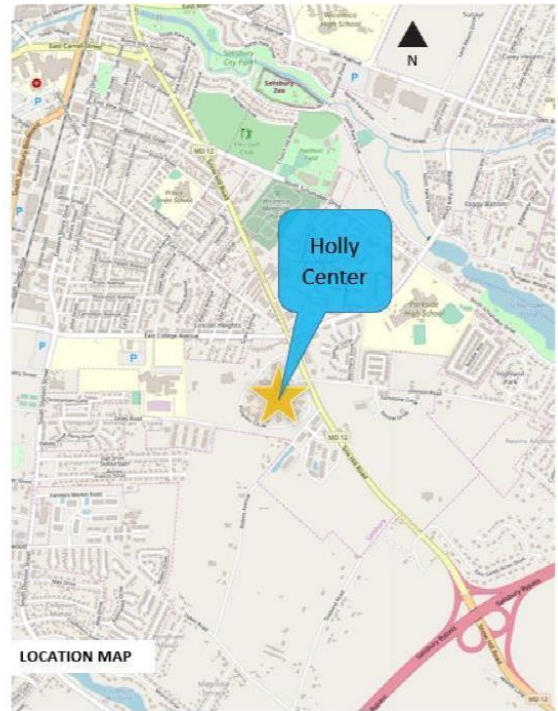


Figure 27 Holy Center Dashboard

Background and History

The Holly Center is a 125-licensed bed residential intermediate care facility for individuals with intellectual and developmental disabilities and is located on Snow Hill Road in Salisbury, Maryland. The Holly Center was constructed in 1975 to serve individuals primarily from the nine counties of the Eastern Shore. As the population and needs have declined over time, more of the residential cottages have been leased to other organizations that provide complementary services to the region.

Physical Characteristics

The Holly Center consists of 14 one-story buildings, totaling approximately 164,559 square feet.²¹ The residential and leased buildings are organized around a central area that contains the administration building. The buildings are slab-on-grade with masonry veneer and masonry bearing walls. Less than a quarter of the campus' total is leased, and a small portion is vacant.

Site and Acreage

This facility sits on a parcel of approximately 75 acres, located on the southwest side, just inside of the City of Salisbury.²² The site is scattered with mature trees throughout most of the area, but with denser stands on the north, south, and west property lines. Overall, the site is fairly flat, but slopes gradually down to the east. Neither SDAT nor Wicomico County information indicate any flood plains or forestation easements.

The eastern half of the site is developed with the facility and its appurtenances. The remaining open area on the site is approximately 17 acres and includes the central courtyard and the main entrance area. There is little developable area remaining on the site.

Circulation / Parking

Access to the site is from Snow Hill Road (Maryland Route 12). Parking is scattered throughout the site, with approximately 309 parking spaces, and only a few of those spaces appear to be dedicated to handicapped parking. Moreover, approximately 31 spaces appear to be dedicated to the maintenance building. The facility also serves the greater community with the use of its swimming pool for various community events. The parking supports normal activities but staff reported a shortage of parking during shift change and community events.

Adequacy of Utilities

The site is served by municipal utilities with the water and sewer connections on Grant Avenue to the north. The utilities are adequate for the existing facility. Due to the size and age of the services, it is likely that any additional development or significant renovation will require service upgrades. The site is served by natural gas service which has a theoretical capacity of 6,582,400 BTUs and is adequate to serve the site. The electrical service is fed from a 25KV switchgear utility

²¹ Square footage obtained from the clinical facility overview reports provided by the Maryland Department of Health.

²² Acreage obtained from the clinical facility overview reports provided by the Maryland Department of Health.

substation, which is adequate to serve the site. The looped system will also make future expansion easier.

Consistency with Adjacent Land

The site is consistent with adjacent land use. Properties adjacent to the site include retail businesses and multi-family housing.

Operational Assessment: Bed Utilization and Current Care Model

At the time of the assessment, the Holly Center had 125 inpatient licensed beds across 4 cottages. The facility reported 5 admissions and nearly 17,900 patient days, resulting in an average daily census of 49 patients, an average length of stay of 3,577 days, and an occupancy rate of 63% based on the budgeted beds. Many of the patients were non-ambulatory and required a significant amount of care. The average cost of care per patient was over \$100,000. Although the facility was licensed for 125 beds, in general, it is staffed for fewer beds. The Holly Center also operated an inpatient respite unit and several outpatient clinics. However, these outpatient clinics provided a small number of visits for the residents.

Functional Assessment

The Holly Center comprises nine cottages and five administration/patient services/maintenance buildings. One additional building on the campus is utilized as a Senior Center as is not a part of the assessment. Four cottages provide patient services and the remaining five cottages are leased. The functional assessment focused on the four cottages providing patient care services. These cottages are well equipped for patient care and had a functional rating of fair. The cottages were not designed to meet current best practices for staff support spaces including workstations and storage space, which requires more movement of equipment to provide care. This is primarily attributable to the quantity and size of the equipment required to provide services which has increased over time, and will continue to increase where patients are non-ambulatory.

Infrastructure Assessment

The Holly Center campus comprises 75-acres and 14 buildings. The buildings are structurally sound, one-story cottages. The administration buildings are also one story. The buildings are generally in fair to good condition. The Department initiated an ADA upgrade project in 2020 to renovate the changing rooms and bathrooms accessing the newly renovated pool. Construction is anticipated to start in the fall of 2021.

Architectural Assessment Summary

The 14 buildings on the property were in fair condition with properly maintained features and conditions, which would be expected for structures constructed in 1975. Interior finishes showed normal wear and tear. Moreover, the buildings were one-story structures so there were no prominent ADA issues. The site also had some ongoing or recent remediation projects, such as, an ongoing roof replacement project.

Mechanical / Electrical / Plumbing Assessment Summary

A \$10 million energy performance contract was implemented in 2018, which included new HVAC equipment and installation of a new natural gas service. The electrical main distribution panelboards and sub-panels are in fair condition but exceeded the 30-year design life expectancy for this type of equipment and should be replaced. In addition, fluorescent fixture lamps were replaced with LED lamps, as part of the energy performance contract. However, the lighting control systems should also be upgraded.

Civil Assessment Summary

The site's public areas are in serviceable condition and reasonably well maintained. The facility has some site features that meet accessibility compliance, however, full compliance will require some additional upgrades.

Additionally, both pedestrian and vehicular paving are in serviceable condition in the front of the facility, but in poor condition in the rear and at the outer buildings. Paving repairs are necessary for numerous areas. As noted previously, the facility reported an overall parking shortage. The Department initiated a project to replace some of the site sidewalks in 2021.

Drainage largely consists of overland flow to paving and yard inlets. There is a perimeter swale on the south side and within it are numerous conveyance pipes under driveways. The drainage piping is visible and noted to be in poor condition. Also, on each side of the driveways there are open drainage swales. On the day of the onsite visit, numerous areas in the rear of the cottages were settled and ponding, and in need of repairs. Minor erosion issues are scattered throughout the campus, which require maintenance.

Holly Center

INVENTORY & EVALUATION MAP



- ① Cottage 100 – 6,760 SF [Rating: FAIR]
Leased to Eastern Shore Regional Office
- ② Cottage 200 – 6,760 SF [Rating: FAIR]
Leased to Center for Clean Start,
Worcester Health Department
- ③ Cottage 300 – 10,200 SF [Rating: FAIR]
25 Developmental Disability Beds
- ④ Cottage 400 – 8,725 SF [Rating: FAIR]
Leased Wicomico Health Department
- ⑤ Cottage 500 – 6,760 SF [Rating: FAIR]
Leased MDH Eastern Shore Regional Laboratory
- ⑥ Cottage 600 10,200 SF [Rating: FAIR]
25 Developmental Disability Beds
- ⑦ Cottage 700 – 10,200 SF [Rating: FAIR]
25 Developmental Disability Beds
- ⑧ Cottage 800 – 7,500 SF [Rating: FAIR]
25 Developmental Disability Beds
- ⑨ Cottage 900 – 7,500 SF [Rating: FAIR]
Leased US Kennels
- ⑩ Health Services Building – 12,510 SF
- ⑪ Patient Center – 4,284 SF [Rating: FAIR]
- ⑫ Activities Building – 36,834 SF [Rating: FAIR]
- ⑬ Admin/Services Building – 18,584 SF [Rating: FAIR]
- ⑭ Maintenance Building – 3,680 SF
- ⑮ Senior Center

- A 10 FT. SETBACK
- B POSSIBLE AREA FOR FUTURE DEVELOPMENT
- C MUNICIPAL SANITARY & WATER CONNECTIONS
- D 30 FT. SETBACK

- GOOD
- FAIR
- POOR
- N/A

- PROPERTY LINE
- CITY-COUNTY LINE
- WATER
- SANITARY
- STORM

Figure 28 Holly Center Inventory & Evaluation Map

Potomac Center

1380 Marshall Street | Hagerstown, Maryland | Washington County

Service Line	Facility	Overall Score	Infrastructure Assessment			
			Functional	Architectural	MEP	Civil Engineering
Residential Services for Individuals with Developmental Disabilities	Potomac Center	Fair	Fair	Fair	Fair	Fair

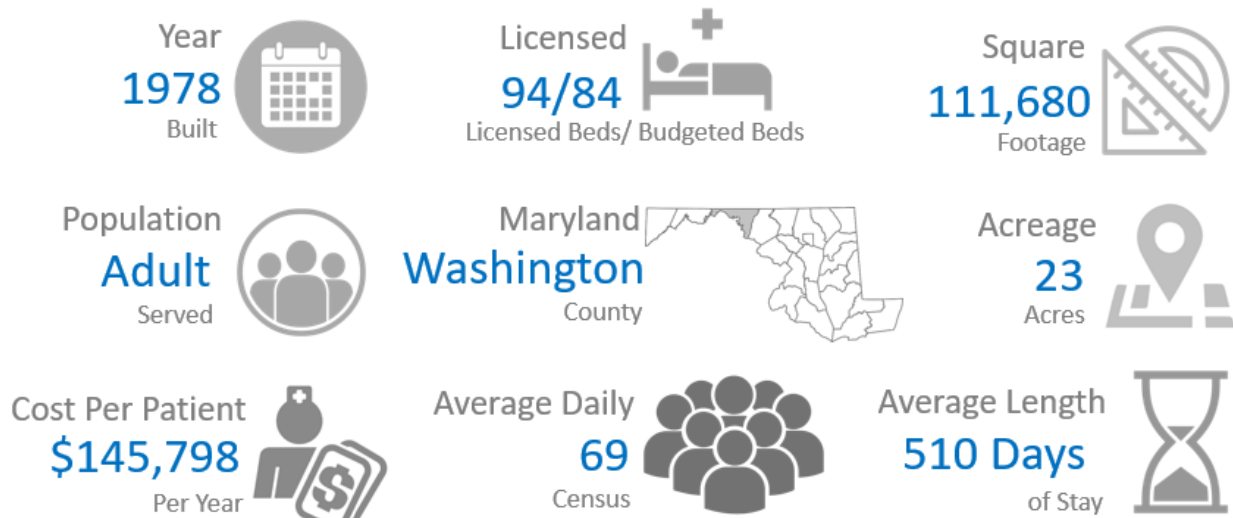
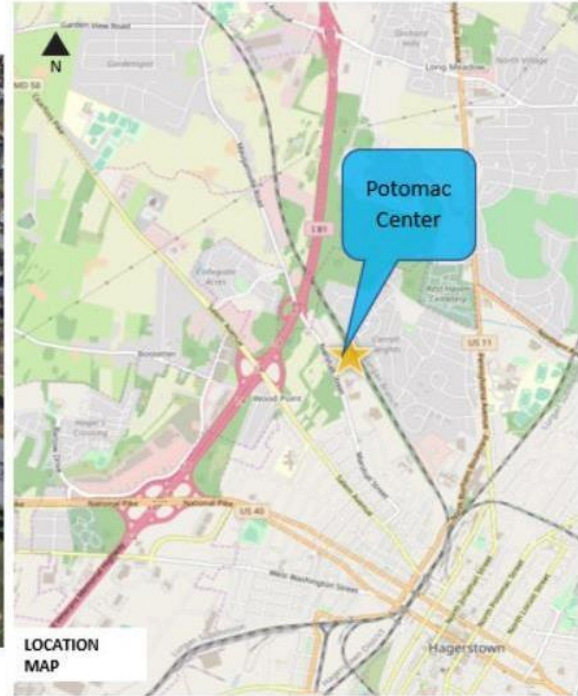


Figure 29 Potomac Center Dashboard

Background and History

The Potomac Center is a 94-licensed bed residential intermediate care facility for individuals with intellectual developmental disabilities and is located on Marshall Street in Hagerstown, Maryland. The site also accommodates the State’s Secure Evaluation and Therapeutic Treatment (“SETT”) program, which provides treatment to court-involved individuals with intellectual disabilities. The Potomac Center was constructed in 1978 to serve individuals primarily from Western Maryland with developmental disabilities. In 2020, two of the residential cottages were converted for use by the SETT program.

Physical Characteristics

The Potomac Center consists of 11 one-story buildings totaling approximately 111,680 square feet.²³ The facility includes six residential cottages, two program buildings, two administration buildings, and two maintenance buildings. The buildings are slab on grade with masonry bearing walls and sloped asphalt shingle roofs. The facility is completely occupied by the Maryland Department of Health.

Site and Acreage

The facility sits on a parcel of approximately 23 acres, located on the north side, and just inside of the City of Hagerstown.²⁴ The site is scattered with mature trees throughout most of the area, but with a denser stand on the eastern property line. This property line also abuts a railroad right-of-way. Overall, the site slopes downward from north to south, however the topography is very rolling, with almost no flat areas. Neither SDAT, nor Washington County information indicate any flood plains or forestation easements. Additionally, there is a water line that appears to transect the site, but there is no evidence of an easement. The site is fully developed with the facility and its appurtenances.

Circulation / Parking

Access to the site is from Marshall Street and there are three access points from that road. Parking is scattered throughout the site. There are approximately 100 parking spaces onsite, and only a few appear to be dedicated to handicapped parking. This total count does not include the parking at the school to the south, which appears to share some parking with the DDA Western Maryland Regional Office located on a portion of the campus. There is a shortage of parking. The facility changed the 2-way road that rounds the northern part of the site, to a 1-way road with parallel parking to help alleviate the situation.

Adequacy of Utilities

The site is served by municipal utilities with the water and sewer connections on Marshall Street to the west. These utilities are adequate for the existing facility. However, there is no gas service

²³ Square footage obtained from the clinical facility overview reports provided by the Maryland Department of Health.

²⁴ Acreage obtained from the clinical facility overview reports provided by the Maryland Department of Health.

to the site. Electrical service is fed through a 2-loop 13.8KV switchgear utility substation, which is adequate to serve the site. The loop system will also make future expansion easier.

Consistency with Adjacent Land

The site is consistent with adjacent land use, which includes schools and residential properties.

Operational Assessment: Bed Utilization and Current Care Model

At the time of the assessment, the Potomac Center's campus included two separate units: a 62-bed DDA unit and a 32-bed SETT unit. The DDA unit reported 23 discharges and 15,358 patient days resulting in an average daily census of 42 patients and an occupancy rate of 68%. The average annual cost of care per patient was over \$145,000. The SETT unit staffed 28 of its available 32 beds and reported an occupancy of 84% (based on licensed beds). The average annual cost of care per patient was nearly \$147,000.

Functional Assessment

Similar to the Holly Center, the Potomac Center is a campus with multiple separate cottages. The cottages are rated fair for overall functionality; however, the facility is rated good for its exterior and access to the outdoors. The campus has a very bucolic and serene environment that allows the patients and their families to access outdoor space. An architectural site perimeter fence was installed at the facility in 2019.

The facility is well suited for the care it is providing. The SETT program, recently relocated to the Potomac Center, provides care for patients with intellectual disabilities at this location.

Infrastructure Assessment

All of the buildings on campus are in good condition; however, some infrastructure upgrades are needed, such as the replacement of the emergency generator and installation of some new air handling equipment. Recent facility improvements include new roof-top cooling units and air handling units. Moreover, the Infirmary has been expanded for administrative use. The Department is currently engaged in a project to replace the emergency generator and related distribution improvements. A project to replace additional mechanical infrastructure is in progress.

Architectural Assessment Summary

The buildings on the campus were constructed in 1978 and are in fair condition with expected wear for a facility of this age. The exterior doors needed to be replaced, and the interior flooring, doors, and windows show signs of wear. The facility may need to be "hardened" to accommodate more complex patients.

Mechanical / Electrical / Plumbing Assessment Summary

The site does not have natural gas service and the buildings are only partially fire sprinklered. The site has some cottages with newer heating, ventilation, and air conditioning equipment, but

much of the campus has original air conditioning, piping, and control systems that are past their designed useful lives.

The electrical main distribution panelboards and sub-panels are in fair condition but exceed the 30-year design life expectancy for this type of equipment and should be replaced. Replacement of the original generator is an active project initiated by the Department. Also, the lighting and lighting control systems should be upgraded.

Civil Assessment Summary

The public areas are in good overall condition and well maintained. The facility has initiated several measures toward accessibility compliance; however, full compliance will require additional upgrades. Overall, the paving is in fair to good condition. On the shared loop road (with the school to the south), there are some damaged paving areas. Drainage is via overland flow to pipes and/or concrete swales, which drain to the wooded railroad buffer to the west.

Potomac Center

INVENTORY & EVALUATION MAP

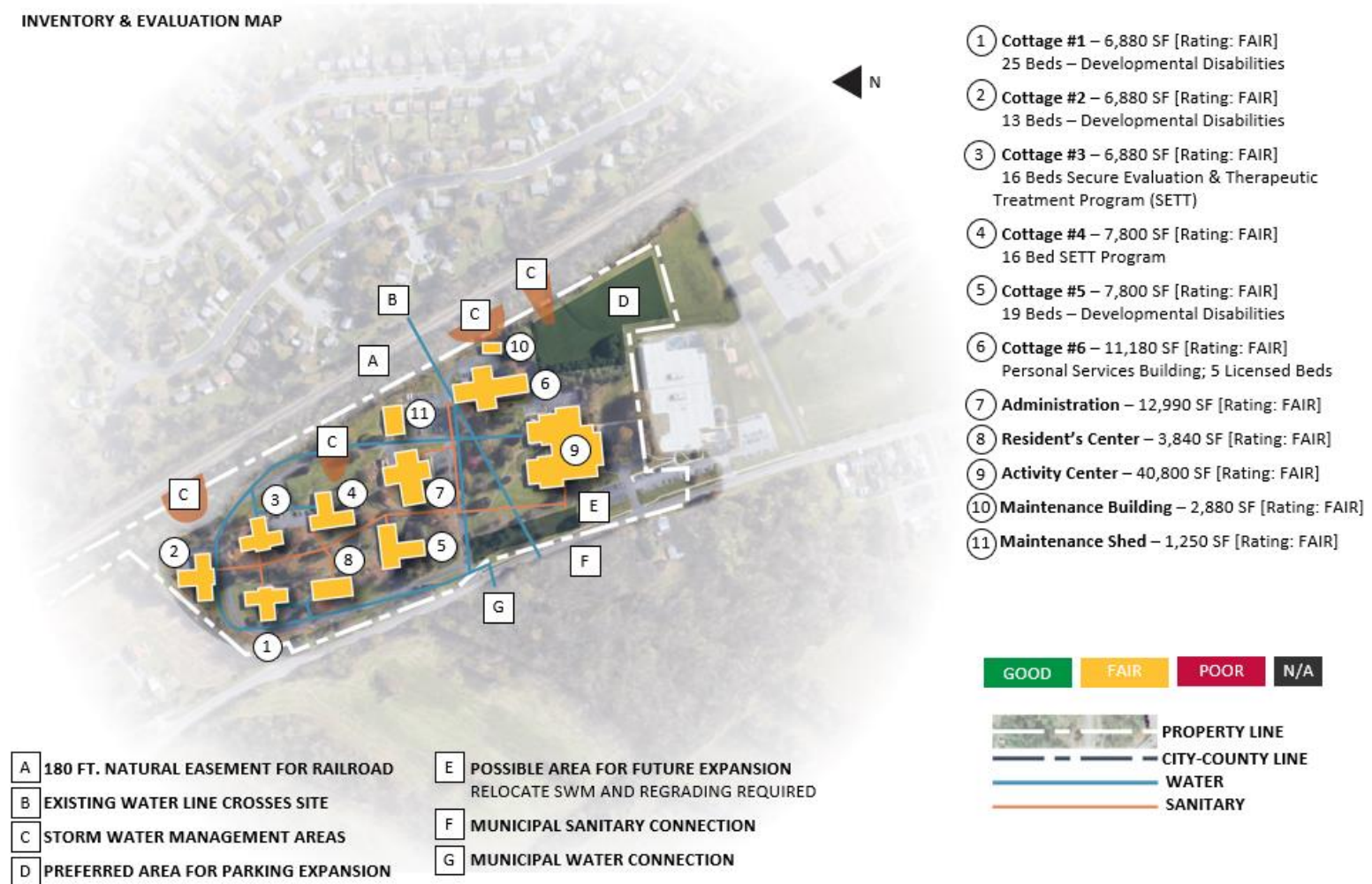


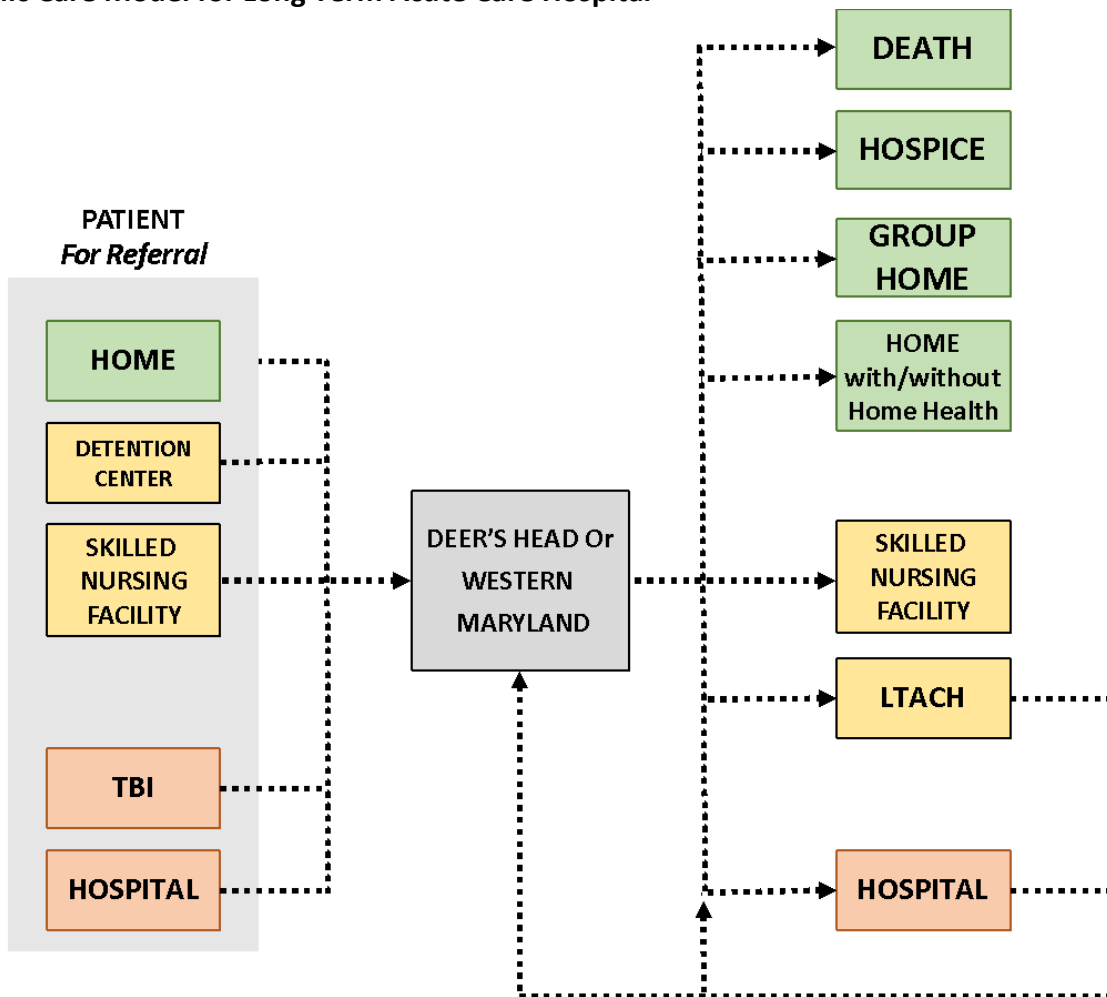
Figure 30 Potomac Inventory & Evaluation Map

D. Current Care Model: Chronic Care

Long term acute care hospitals (“LTACHs”) provide care for patients who transition from an acute care hospital or a TBI unit, but are unable to be discharged to a SNF or home. The patients can also be admitted from home, detention centers, or SNFs. The patients admitted from home and SNFs generally have an escalating or increasing level of medical complexity. The length of time for patient admission varies, depending on the medical complexity of the patient. Discharge planning can be complex, and is based on individual patient’s needs. Patients can cycle through the post-acute care setting, acute care, and some of the community resources.

The current chronic care models are depicted below:

Chronic Care Model for Long Term Acute Care Hospital

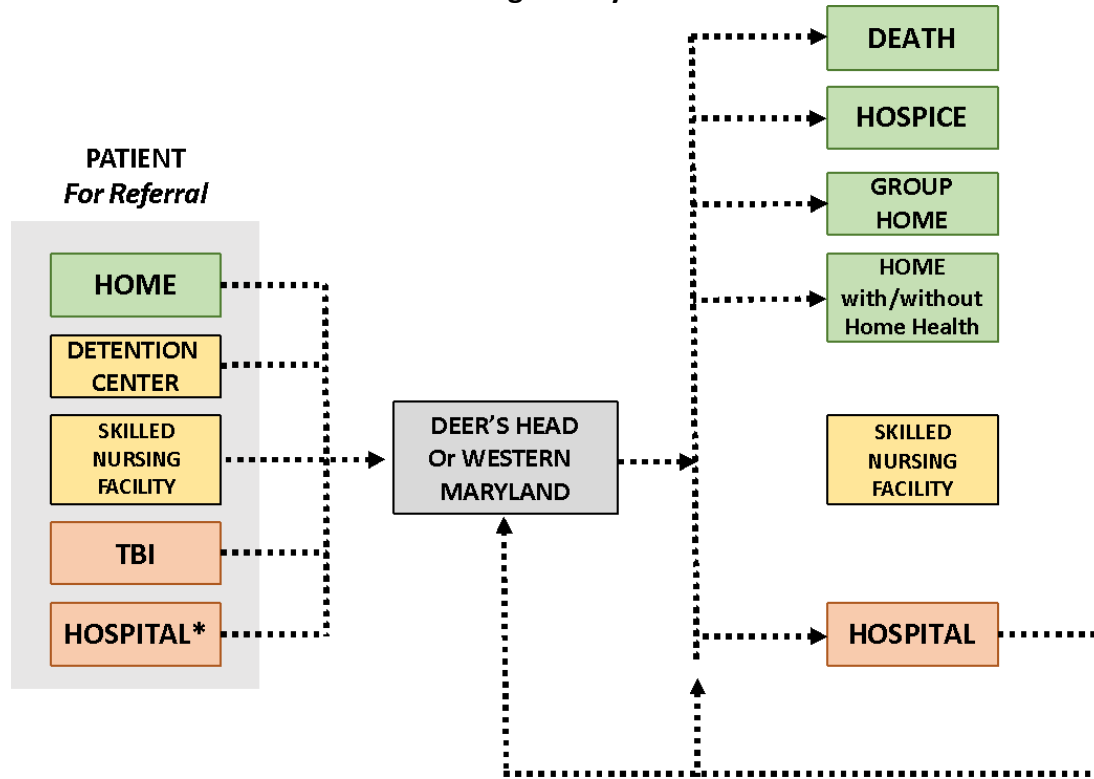


Note: Deer’s Head and Western Maryland Hospitals coordinate processing admissions

Figure 31 Long Term Acute Care Hospital Chronic Care Model

Skilled Nursing Facilities have similar patterns regarding admissions, discharges, throughput, and placement. The patients in the SNF units are less acute and medically complex, so there is a greater opportunity for discharge to their homes.

Chronic Care Model for Skilled Nursing Facility



**Note: Transfers from Acute Care Facilities and/or State Hospitals*

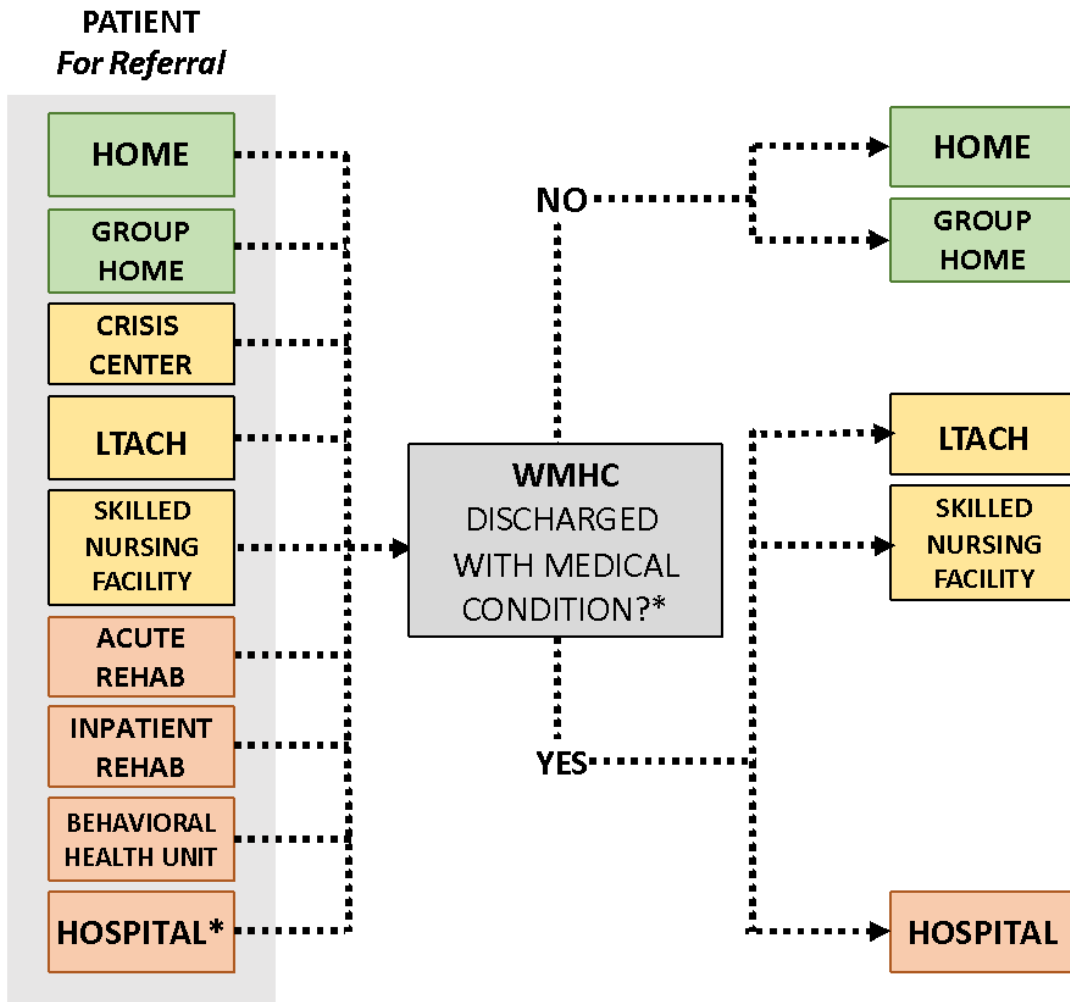
Figure 32 Skilled Nursing Facility Chronic Care Model



The TBI patients follow a similar pathway as LTACH patients, especially when reviewing the discharge options. Western Maryland Hospital Center provides TBI care under the waiver program.²⁵

Chronic Care Model for Traumatic Brain Injury (TBI)

²⁵ The Waiver program provides specialized community-based services to adults with brain injuries who meet program eligibility. Eligible individuals must be between the ages of 22 and 64, have sustained a brain injury after the age of 17, require a nursing facility or chronic hospital level of care and reside in a state owned and operated nursing facility, an accredited chronic hospital, or a state psychiatric hospital. An individual's income and assets are reviewed to determine financial eligibility for medical assistance.



**Note: for individuals who have additional or continued high level of support needs*

Figure 33 Traumatic Brain Injury Chronic Care Model

Chronic Care – Infrastructure Assessment Summary

Service Line	Facility	Overall Score	Infrastructure Assessment			
			Functional	Architectural	MEP	Civil Engineering
Chronic Care	Western Maryland Hospital Center	Poor	Poor	Poor	Poor	Fair
Chronic Care	Deer's Head Hospital Center	Poor	Poor	Poor	Fair	Fair

Figure 34 Chronic Care Infrastructure Assessment Summary

Western Maryland Hospital Center

1500 Pennsylvania Avenue | Hagerstown Maryland | Washington County

Service Line	Facility	Overall Score	Infrastructure Assessment			
			Functional	Architectural	MEP	Civil Engineering
Chronic Care	Western Maryland Hospital Center	Poor	Poor	Poor	Poor	Fair

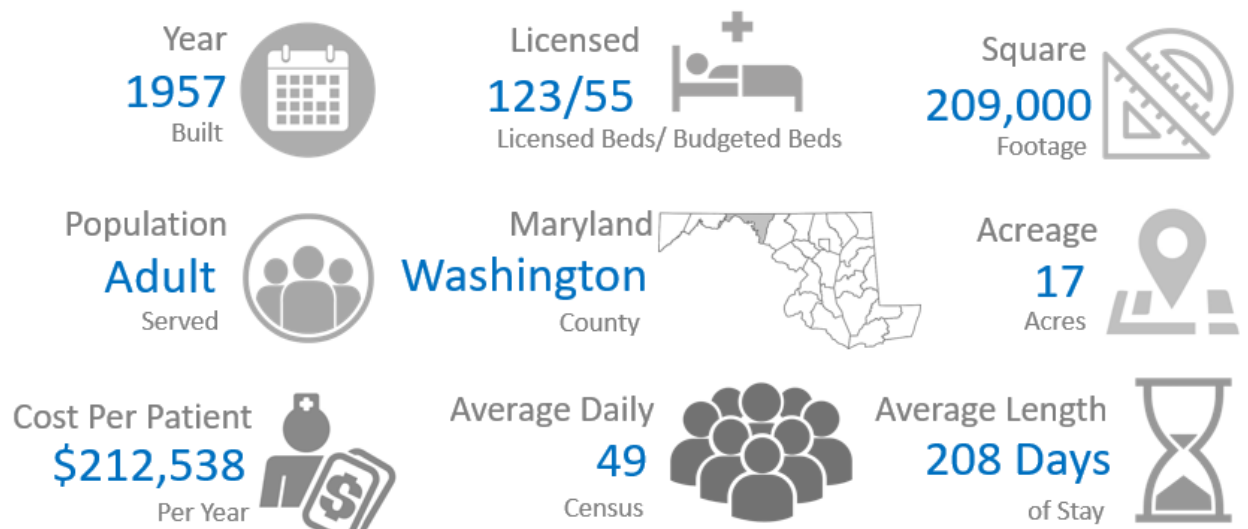
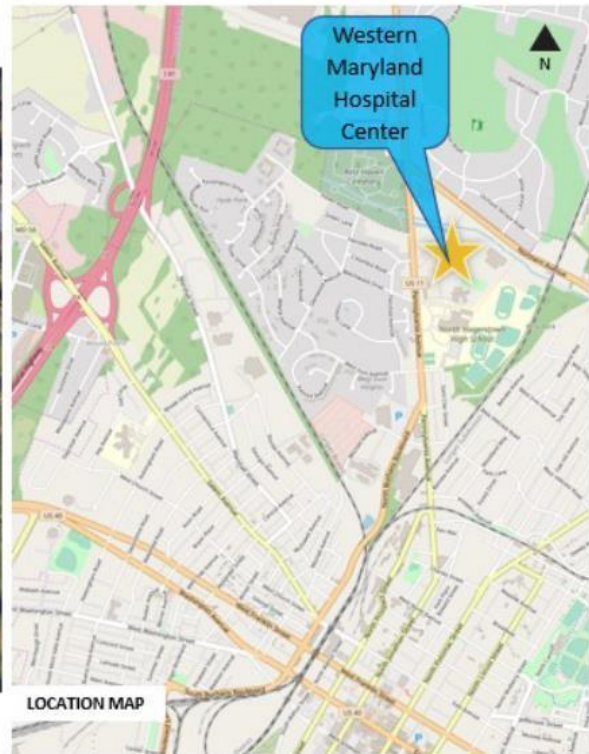


Figure 35 Western Maryland Hospital Center Dashboard

Background and History

Western Maryland Hospital Center is a 123-licensed bed specialty hospital serving adults with chronic, complex medical conditions and Traumatic Brain Injuries. It is located on Pennsylvania Avenue in Hagerstown, Maryland. The facility also has a comprehensive care program serving residents who no longer require hospital-level care. Western Maryland Hospital Center was constructed in 1957. The facility consists of the main hospital and smaller residential buildings, which once housed staff. The smaller buildings are now leased to the Washington County Health Department.

Physical Characteristics

The buildings on site total approximately 209,000 square feet and about a quarter of the overall square footage is leased.²⁶ The main hospital structure contains four floors, including a basement, and the construction of the building lacks a sufficient thermal barrier, as well as an air barrier. The technology available at the time of the construction of the facility does not meet modern standards for hospital construction including the ability to precisely control temperature and humidity for treatment of medically complex patients. The absence of a thermal/air barrier and the absence of a modern mechanical system makes precise control of the facility very challenging. This led to a mold problem, which required a major remediation project. The campus includes several outbuildings, but neither SDAT nor Maryland Historic Trust (“MHT”) online information indicate that these are historically registered buildings.

Site and Acreage

Western Maryland Hospital Center sits on a parcel of approximately 17 acres, located on the northern edge of the City of Hagerstown.²⁷ The site is sparsely wooded, primarily along the perimeter. There is also approximately 20 feet of grade change over the site from the north to the south. Neither SDAT nor Washington County online information indicate any utility or forestation easements. However, there is a flood plain on the north side of the site associated with a small stream, which will limit any future development on the north side. There is also a garden area to the southeast that is privately endowed and maintained. The remaining developable area on the site is approximately eight acres, with four on the west side and four on the southeast corner.

Circulation / Parking

Access to the site is from Pennsylvania Avenue on the west side and Northern Avenue on the north side. There are approximately 285 parking spaces onsite, of which 17 appear to be dedicated to handicapped parking. There is no shortage of parking on the site.

²⁶ Square footage obtained from the clinical facility overview reports provided by the Maryland Department of Health.

²⁷ Acreage obtained from the clinical facility overview reports provided by the Maryland Department of Health.

Adequacy of Utilities

The site is served by municipal utilities with the water connection on Pennsylvania Avenue and the sewer connections on Northern Avenue. Overall, the utilities are adequate for the existing facility. Due to the size of the service, it is unlikely that a small addition to the building would require a service upgrade, but any significant development on the property may require upgrades to services. The facility is served by natural gas with a theoretical capacity of 8,360,000 BTUs, provided by the City of Hagerstown and is adequate to serve the site. Finally, an electrical service is fed through a 2-loop, 4,160V switchgear utility substation, which is easier to expand in the future since it is a loop system.

Consistency with Adjacent Land

The site is consistent with adjacent institutional land use. Properties adjacent to the site include the Washington County Health Department and the Hospice of Washington County.

Operational Assessment: Bed Utilization and Current Care Model

At the time of the assessment, Western Maryland Hospital Center was licensed for 63 skilled nursing beds (SNF) and 60 chronic care special hospital beds, which included long-term acute care (LTACH) and traumatic brain injury (TBI) patients. It was budgeted for and operated a 36-bed SNF unit and a 19-bed unit specializing in long-term acute care and brain injury services. Several factors were responsible for the discrepancy between licensed beds and beds in use, such as patient demand, staffing, and some infrastructure and outdated design characteristics. For example, there were several multiple occupancy rooms that were no longer used for maximal capacity and were converted to semi-private rooms. Moreover, unit 1 West housed a 23-bed unit that was vacant, and unit 2 West housed a 29-bed unit that was vacant.

The skilled nursing unit, which specialized in chronic, long-term patients instead of short-term rehabilitative admissions, reported 9 discharges and 12,187 patient days, resulting in an occupancy rate of 90%. There were other SNFs in the community who addressed the short-term rehabilitative patients. Furthermore, the average cost of care per patient in Western Maryland Hospital Center's skilled nursing unit was \$269,000.

On the other hand, unit 2 East housed a long-term acute care unit. Although it was licensed for 23 beds, the unit was budgeted for 12 beds and was staffed for 10 beds. The average cost of care per patient in the long-term acute care unit was \$56,500.

Western Maryland Hospital Center also had an 8-bed brain injury program that was budgeted and staffed for 7 beds. In FY 2018, the unit reported 81 discharges and over 2,400 patient days, resulting in an occupancy rate of 75%. The average daily census fluctuated between 3 to 7. There were several nationally recognized TBI programs in the State and the District of Columbia and the majority of patients were transferred to those programs. Western Maryland Hospital Center was

one of the few facilities that accepted the State of Maryland waiver program patients. The average cost of care per patient in the long-term acute care unit was nearly \$93,000.

Functional Assessment

Western Maryland Hospital Center is rated as a poor facility. The function of the interior building planning and the building envelope contribute to this rating. Despite the limitations of the physical layout of the facility and original construction of the building envelope, the facility staff and maintenance staff manage to deliver quality patient care.

One of the disadvantages of the hospital is the large unit square footage per patient room. The units were originally designed to have multiple occupants; however, standards of care for these types of patients have changed over time resulting in a reduction in the number of patients per room. Therefore, when the rooms function as a single or double room, the room is too spacious and not very efficient. Also, some of the amenities including patient bathrooms are not located in the room, but a shared space in portions of the building. The area around the hospital is well maintained and provides an enjoyable outdoors space for patients.

Infrastructure Assessment

The campus consists of the main hospital building and four smaller buildings on 17 acres of land. The smaller buildings are leased to the Washington County Health department. Although the hospital is well maintained, there are major physical plant issues. The most serious concerns include the heating, ventilation, and air-conditioning systems in the main hospital building. While investments have been made to maintain the existing system, the through wall fan-coil HVAC systems do not meet current best care practices for design of hospital mechanical systems. In addition, much of the piping was original and required replacement.

Architectural Assessment Summary

Over \$3 million dollars of notable capital facility renewal projects have been performed on the facility over the past ten years and at the time of the assessment. Furthermore, the building skin and windows do not provide optimal thermal performance. Also, the roofing has reached the end of its expected useful life. ADA upgrades may be required for certain portions of the building.

Mechanical / Electrical / Plumbing Assessment Summary

The assessment showed that mechanical equipment maintenance, overhauls, and upgrades have been completed over the past few decades, but most equipment has still exceeded its useful life. The boilers, steam piping, and pneumatic controls are original to the building. The low efficiency of the equipment and increased maintenance expenses, combined with the requirement to employ an onsite engineer 24/7 to monitor the boiler system contribute to increased operating expenses.

The electrical main distribution panelboards and sub-panels are in fair condition, but are approaching the 30-year design life expectancy for this type of equipment and should be replaced. Moreover, the lighting and lighting control systems should be upgraded.

Civil Assessment Summary

The central portion of the site was developed with the facility and its appurtenances. There were several outbuildings, but neither SDAT nor Maryland Historic Trust online information indicated that there were historically registered buildings.

At the time of the assessment, the site was in fair condition and well maintained. The facility has implemented some level of accessibility compliance; however, full compliance will require additional upgrades. Paving throughout the site is in serviceable condition, although some areas require repair. A mill and overlay throughout is recommended. Stormwater drainage largely consisted of overland flow to paving and yard inlets.

Western Maryland Hospital Center

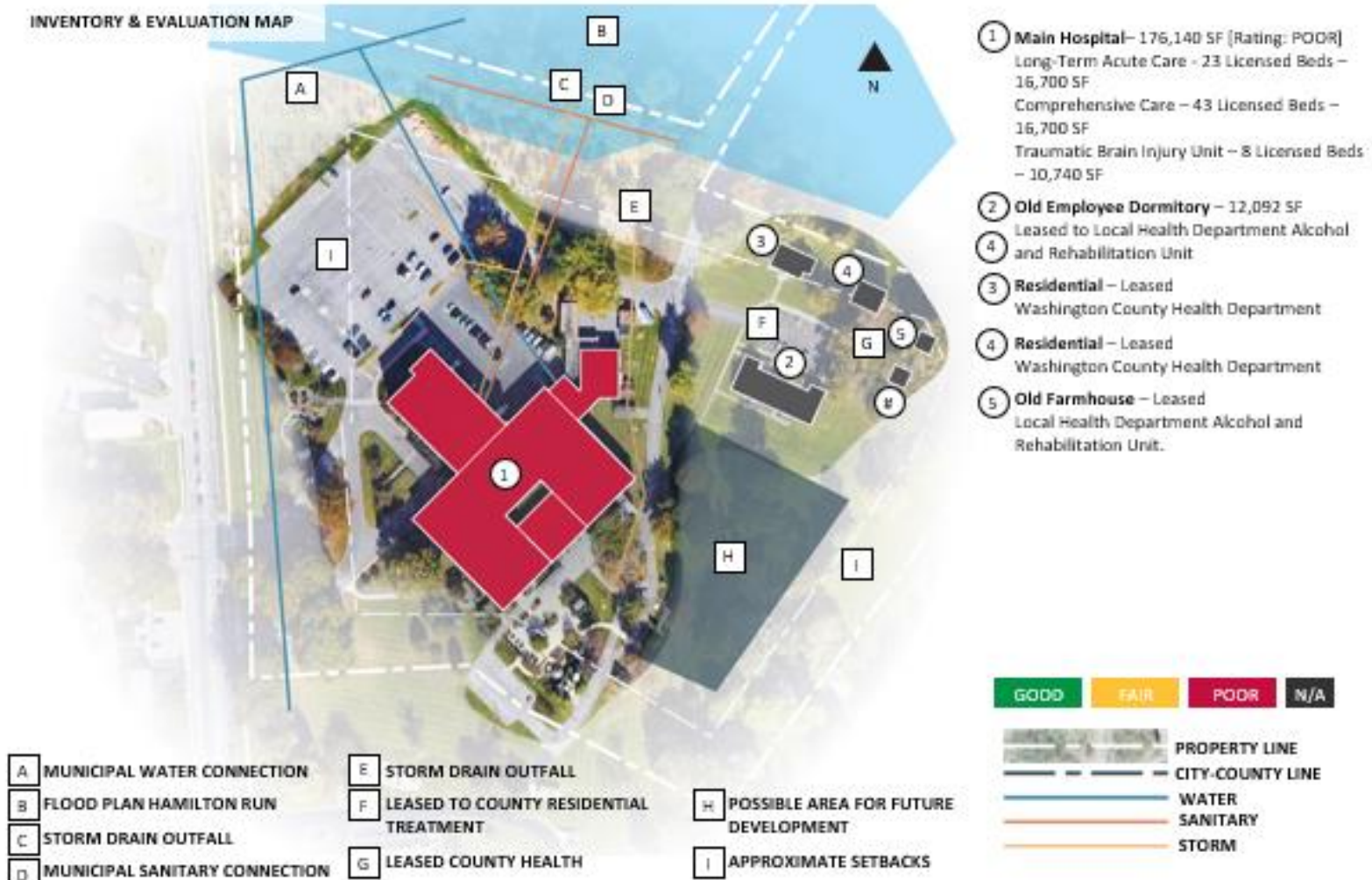


Figure 36 Western Maryland Hospital Center Inventory & Evaluation Map

Deer's Head Hospital Center

351 Deer's Head Hospital Road | Salisbury, Maryland | Wicomico County

Service Line	Facility	Overall Score	Infrastructure Assessment			
			Functional	Architectural	MEP	Civil Engineering
Chronic Care	Deer's Head Hospital Center	Poor	Poor	Poor	Fair	Fair

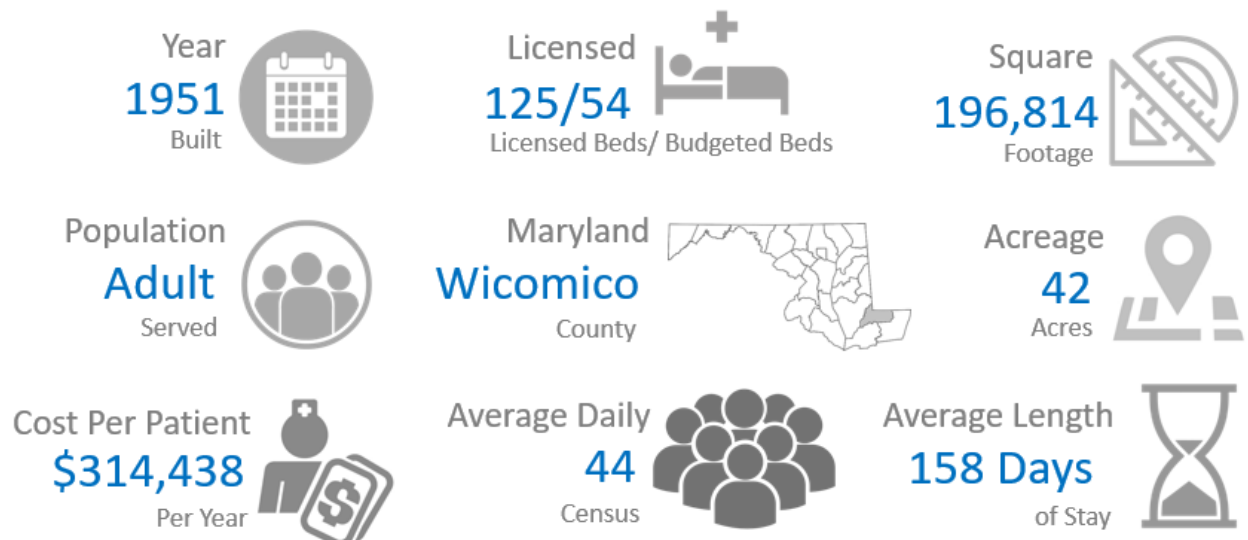


Figure 37 Deer's Head Hospital Center Dashboard

Background and History

The Deer's Head Hospital Center is a 125-licensed bed specialty hospital serving adults with chronic, complex medical conditions and is located on Deer's Head Road in Salisbury, Maryland. The facility also operates a kidney dialysis unit, skilled nursing unit, and leases space for hospice care. A portion of the campus is leased to a residential substance use disorder treatment provider.

Physical Characteristics

The buildings on the site total approximately 196,814 square feet and sit on a peninsula surrounded by water.²⁸ The multi-story main building was built in 1951 and is constructed of concrete and brick veneer with exterior open-air balconies. The technology available at the time of the construction does not meet modern standards for hospital construction including the ability to precisely control temperature and humidity for treatment of medically complex patients. The absence of a thermal/air barrier and the absence of a modern mechanical system makes precise control of the facility very challenging. This led to a mold problem, which required a major remediation project. Less than a quarter of the overall square footage of the main building is leased.

Site and Acreage

The Deer's Head Hospital Center sits on a parcel of approximately 42 acres, located on the east side of the City of Salisbury.²⁹ The southern portion of the parcel is in the city, while the northern portion is in Wicomico County. The site is a peninsula between two offshoots of Johnson Pond, which is itself an offshoot of the Wicomico River. SDAT and FEMA identify flood plains for these water bodies that impinge a little over the existing shoreline, since there are significant drops to the water's edge. However, the water bodies are not likely to create a significant burden should future development be initiated. The Chesapeake Bay Critical Area is downstream but does not reach this property.

Circulation / Parking

Access to the site is from Deer's Head Hospital Road on the east side. Parking is scattered across the site with the main and visitor lots to the south. There are approximately 210 parking spaces, with visitor parking in the front and staff parking largely in the rear. There is no shortage of parking on the site.

Adequacy of Utilities

The site is served by municipal utilities with the water and sewer connections. The utilities are adequate for the existing facility. Given the size of the service, it is unlikely that an addition to the building would require a service upgrade, but any significant development on the property would likely require upgrades. The site is served by natural gas. The electrical service is fed by a

²⁸ Square footage obtained from the clinical facility overview reports provided by the Maryland Department of Health.

²⁹ Acreage obtained from the clinical facility overview reports provided by the Maryland Department of Health.

4,160V, 1,000A transformer. While this condition is adequate for the current electric service, it will be difficult to expand since it is not a looped system.

Consistency with Adjacent Land

The site is somewhat isolated from other properties as it sits on a peninsula. However, a portion of the site has been leased to a residential substance use disorder treatment provider that offers services consistent with the hospital center.

Operational Assessment: Bed Utilization and Current Care Model

At the time of the assessment Deer's Head Hospital Center's 125-licensed bed chronic care unit consisted of a 45-bed long-term acute care and hospice unit, and an 80-bed skilled nursing unit. Both units were running well below capacity. The long-term acute care and hospice unit staffed only six of the available 45 licensed beds. The 80-bed skilled nursing unit only operated half of its available licensed beds. The average cost of care per patient was nearly \$142,000 in the long-term acute care and hospice unit. The skilled nursing unit cost of care per patient was nearly \$337,000.

Deer's Head Hospital Center also operated a 27-bay dialysis unit. The unit averaged nearly 8,000 outpatient dialysis treatments and around 1,000 inpatient dialysis treatments annually.

Functional Assessment

Deer's Head Hospital Center is approaching seventy years in age (1951 construction). The age of the structure impedes the functional status. The units are small and crowded with minimal private rooms. The bathing rooms are very tight, which makes managing a medical complex, or bariatric patient difficult. The functional assessment identified the facility as poor. The unit size, patient rooms size, patient amenities, and dayroom activities were inadequate for the facility's needs.

Infrastructure Assessment

At the time of the assessment, the campus consisted of the main hospital building and six smaller buildings, located on 42 acres of wooded land in Wicomico County. Despite the age of the facility, it is well maintained. A new kidney dialysis unit was constructed and opened in 2014. The old kidney dialysis unit space was renovated into offices in 2015. The hospital's heating, ventilation, and air-conditioning system underwent a major renovation in the late 1980s and the electrical-distribution system was renovated in 1985. Also, a significant mold issue was identified in the summer of 2017 that resulted in a mold remediation project, which was ongoing at the time of the onsite visit. A comprehensive building assessment was also performed to identify building envelope and mechanical issues that needed to be addressed to prevent future mold growth.

Architectural Assessment Summary

The age of the main hospital building, which was constructed in 1951, creates challenges from both an operational and maintenance standpoint. However, the dialysis addition, constructed in 2014, is in good shape, except for some minor flashing issues where it is tied back to the original hospital.

Operationally, there is minimum accessibility compliance throughout the facility, with one accessible entrance on the backside of the building and another ramp that accesses the KDU. Patients were grouped in multi-bed units that do not meet best practices.

The building has undergone extensive mold remediation, but the age of the mechanical systems and the construction of the building envelope could cause the same problem to reoccur without additional corrective upgrades. The absence of a thermal/air barrier and the absence of a modern mechanical system limit the ability to maintain positive pressure for the facility. The constant negative pressure draws moisture into the building requiring increased dehumidification to prevent mold growth. Additionally, horizontal masonry surfaces such as balconies, stairs, landings, and ramps are cracked due to water damage.

Mechanical / Electrical / Plumbing Assessment Summary

Some new mechanical equipment has been installed at the facility including the cooling towers, but most of the air handlers, pumps, chillers, and pneumatic controls are over 30 years old and have exceeded their designed useful life. The electrical main distribution panelboards and sub-panels are in fair condition but have exceeded the 30-year design life expectancy for this type of equipment and should be replaced. Also, the lighting and lighting control systems should be upgraded.

Civil Assessment Summary

The site is largely wooded and, with the exception of the area near the water's edge, there is very little grade change. The southern portion of the site is developed with the facility and its appurtenances. The remaining developable area on the site includes approximately 13 acres to the north but would require significant tree removal.

Deer's Head Hospital Center

INVENTORY & EVALUATION MAP

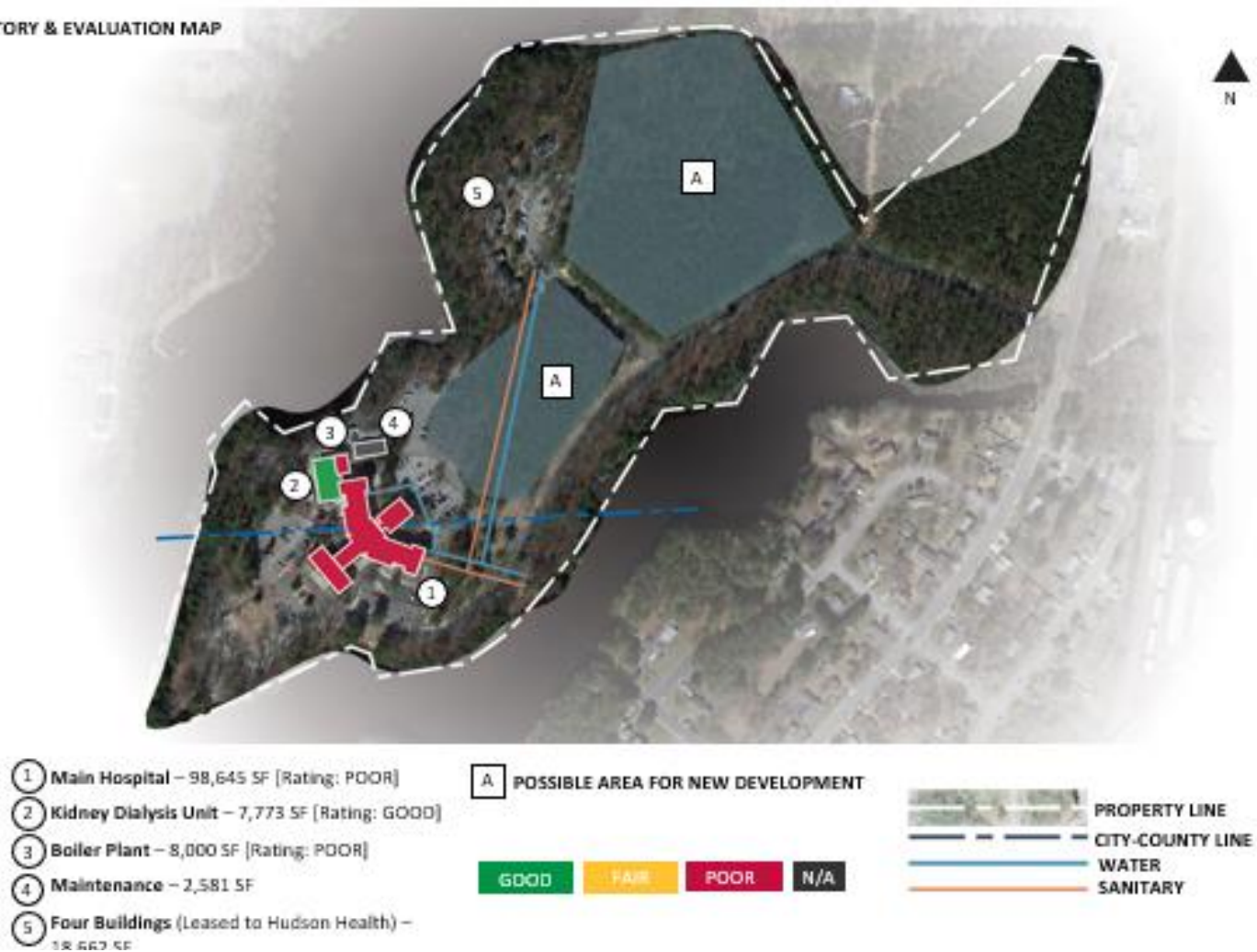


Figure 38 Deer's Head Hospital Center Inventory & Evaluation Map

**SECTION V:
NEEDS ASSESSMENT**

Introduction

Section V details the Needs Assessment of the facilities for the next 20 years. The methodology used for calculating future hospital bed needs incorporates use rates (discharges and days per 1,000 population), disease state, demographics including growth, aging, in/out migration, and various socioeconomic factors. Also included in the bed need methodology are trends and best practices that are affecting how, where, and by whom health care is consumed. Quickly disappearing is the inpatient centric one-size fits all reactive approach to treating behavioral health patients. Replacing it is a vertically integrated proactive and collaborative community-based approach where the right care is provided at the right place and at the right time. This model of care reduces unnecessary and costly inpatient utilization and replaces it with an individualized care model whereby treatment is provided collaboratively across multiple settings (inpatient, outpatient, community, home, etc.).

This section explains current and future care models that are being widely adopted by health care providers treating behavioral health patients. Then this section assesses future bed needs by region and bed type.

Future Care Model

A. Overarching Care Model Premise

As described, the future care model for treating behavioral health patients will be more holistic and proactive.

Right Care at the Right Place, at the Right Time

The Triple Aim³⁰ approach to managing behavioral health patients means that acute episodes (that are self-limiting and may require observation) could be treated by and cared for in an outpatient community-based setting. Patients with acute episodes requiring an admission of less than one week to several months would also have access to community-based resources upon discharge to assist in maintaining stability and reduce the likelihood of readmission.

A holistic care continuum would mean that patients flow seamlessly between sites of care (acute care, post-acute, intensive outpatient care, partial hospital program care, and the community) depending on the patient's medical and behavioral needs. This approach works particularly well with a diverse court-involved patient population.

³⁰ Triple Aim is a framework developed by the Institute for Healthcare Improvement that describes an approach to optimizing health system performance. The overarching goal of Triple Aim is to: improve patient experience of care (including quality and satisfaction), improve the health of populations, and reduce per capita cost of health care.

B. Locations and Environments of Care

Prioritization should be made for inpatient behavioral health populations that require longer stays, especially patients who are a danger to themselves or others. This will ensure responsible and efficient use of resources. Once the preferred care model has been adopted, implemented, and operationalized, facilities can be right sized to meet the appropriate demand. Future care models continue to separate child/adolescent units from adult-focused units.

To facilitate a model that promotes “the right care at the right place, at the right time,” health care providers are accelerating efforts towards vertical integration by plugging gaps in the continuum of care. If these gaps are left unchecked, it could negatively affect how care is consumed and provided. MDH’s current model of care lacks access to a vertically integrated continuum of care. This means that patients, regardless of their acuity level, are housed in the same inpatient environment and treated together. This type of care is expensive and unnecessary because equally impactful treatment options are available in a variety of other care settings (inpatient acute, outpatient, transitional care, community-based, or at home).

Bed Needs

The State of Maryland’s health utilization trends are in line with national trends in relation to the shift from inpatient to outpatient services. Since 1980, the inpatient average daily census has halved from approximately 12,000 patients per day in 1980, to slightly more than 6,000 patients per day in 2017. In the last 10 years, the number of licensed beds in Maryland declined 11% to approximately 9,600 licensed beds.

In Maryland, there are two types of hospital-based inpatient psychiatric services. These include acute psychiatric for shorter lengths of stay and continuing care for longer-term stays. There are 29 hospitals in Maryland that provide inpatient psychiatric care within a general acute care hospital. Psychiatric inpatient care is also provided at five freestanding private hospitals or in seven state hospitals (operated by MDH). These facility types are licensed as a category of “special hospital” beds under Maryland’s licensing statute.³¹

State psychiatric hospitals primarily provide longer-term psychiatric services and private hospitals tend to provide psychiatric inpatient services requiring shorter lengths of stay. Additionally, the number of admissions to state psychiatric hospitals has steadily declined over the last 10 years. In 2004, there were 3,220 psychiatric admissions to state-run facilities. In FY 2018, there were 940 adult admissions, a 72% decline.

³¹ MD Code, Health - General, § 19-307 - Classifications of hospitals and related institutions. A hospital is defined as a special hospital if the hospital provides specialized services (such as obstetrics, mental health, tuberculosis, orthopedics, chronic disease, or communicable disease) and has the facilities to provide those specialized services.

A. Bed Projections: Summary

A thorough bed needs assessment was conducted to project bed need by regions served by MDH and its eleven (11) operating facilities. The bed need estimates were determined using several different qualitative and quantitative growth factors that consider use rates, population growth/decline, disease state, improvements in care coordination and care redesign, and social determinants of health including housing, food security, and other psychographic considerations. Once all these considerations were amalgamated, the following questions were addressed:

- Is there existing inventory (beds) in the region a given facility provides health care services, and how well utilized is this inventory?
- Is the demand for services shrinking or growing?
- How will use rates (days and discharges per 1,000 population) affect the demand for health care in the future?
- How does age impact health utilization and disease state?
- How does income inequality, and other social determinants, impact access to health care services?
- How does technology assist in driving down future health care demand?
- What will a changing adult and child/adolescent population do to future demand for health services provided by MDH?

B. Bed Needs Summary: Regional Assessment

Taking these determinants into consideration, the Core Planning Team forecasted future health consumption by service type and region.

C. Bed Projections: Detailed Summary

The Core Planning Team determined that the total combined number of licensed beds in FY 2019 comprised of 1876 beds did not accurately represent the operational need at the time of the assessment. As such, the Core Planning Team utilized the Beds in Use- Budgeted FY 2019 bed count of 1483 beds as the baseline for projecting growth through 2040 to a total projected FY 2040 bed need of 1540 licensed beds. The following table provides a detailed overview of bed need projections by location and service line.

Service Line	Facility	Bed Type	Licensed Beds FY2019	Beds in Use - Budgeted FY 2019	Projected Beds FY 2040
Inpatient Behavioral Health	Springfield Hospital Center		323	273	291
	Clifton T. Perkins Hospital Center		298 ¹	289	320
	Eastern Shore Hospital Center		84	80	80
	Spring Grove Hospital Center		491	377	493
	Thomas B. Finan Center		88	88	110
RICA	RICA - Baltimore	RTC	45	45	47
		Day ²	80 ⁴		
	John L. Gildner RICA	RTC	80	48	69
		Day	64 ⁴	6	18 ⁴
		FFC ³	6	6	18
DDA	Holly Center	IDD	125	78	5
		IDD	62	56	8
	Potomac Center	SETT	32	28	34
Chronic Care	Western Maryland Hospital Center	TBI	8	7	7
		LTACH	23	12	14
		SNF	40	36	13
		CLSD	52 ⁵		
	Deer's Head Hospital Center	LTACH	24	6	9
		SNF	80	48	22
		SNF	21 ⁶		
		Dialysis	Outpatient Services		
TOTALS			1,876	1,483	1,540

¹ 298 licensed beds. There are 9 quiet rooms included in the licensed bed count.

² The program has the ability to accommodate 80 day students; however, due to staffing concerns only 50

³ The 6 FFC beds are included in the 80 total RTC beds.

⁴ Day beds are not included in total bed count.

⁵ WMHC 29 closed LTACH beds and 23 closed SNF beds.

Figure 39 Bed Need Projection by Location and Service Line

D. Inpatient Behavioral Health

Western Maryland Region: The Western Maryland region comprises Allegany, Carroll, Frederick, Garrett, and Washington Counties. There are a total of 503 behavioral health beds providing inpatient behavioral health services in the Western Maryland region. MDH operates two facilities in this region: Thomas B. Finan Center, an 88-bed facility located in Allegany County; and Springfield Hospital Center, a 273-bed facility located in Carroll County. Together, these two facilities operate 72% of the Western Maryland region's inpatient behavioral health beds. The Western Maryland region's 503 beds provided 144,793 patient days resulting in an average daily census of 397 patients and an occupancy rate of nearly 80%.

Within the Western Maryland region, bed demand is projected to increase by 11% from 503 beds in 2018 to 557 beds in 2040. Given that 72% of inpatient beds today are State-run, demand for State-run behavioral health services will total 401 beds by 2040.

Eastern Shore Region: The Eastern Shore region comprises Caroline, Cecil, Dorchester, Kent, Queen Anne's, Somerset, Talbot, Wicomico, and Worcester Counties. There are a total of 143 behavioral health beds providing inpatient behavioral health services in the Eastern Shore region. MDH operates Eastern Shore Hospital Center, an 80-bed facility located in Dorchester County. The Eastern Shore region's 143 beds provided 34,902 patient days resulting in an average daily census of 96 patients and an occupancy rate of 65%.

Given the low occupancy rate (65%) and availability of beds, bed demand in the Eastern Maryland region is projected to decrease 7% to 133 beds by 2040. Therefore, demand for State-run behavioral health services will not exceed 80 beds by 2040.

Central and Southern Maryland: The Central and Southern Maryland regions comprise Anne Arundel, Baltimore City, Baltimore, Harford, Howard, Calvert, Charles, Montgomery, Prince George's, and St. Mary's Counties. There are a total of 1,639 behavioral health beds providing inpatient behavioral health services in the Central and Southern Maryland regions. MDH operates two facilities that provide services to these regions: Spring Grove Hospital Center, a 377-bed facility located in Baltimore County, and Clifton T. Perkins Hospital Center, a 289-bed facility located in Howard County. The Central and Southern Maryland regions' 1,639 beds provided 476,000 patient days resulting in an average daily census of 1,305 patients and an occupancy rate of 80%.

Within the Central and Southern Maryland regions, bed demand is projected to increase by 21% from 1,639 beds in 2018 to 1,983 beds in 2040. Given that 41% of inpatient beds today are State-run, demand for State-run behavioral health services will total 813 beds by 2040.

E. Regional Institutes for Children and Adolescents

The RICA future projection model includes all age groups, but focuses on patients under 19 years of age. The age groups for determining growth were as follows: less than 5, 5 to 9, 10 to 13, 14 to 19, and over 19 years old. All Residential Treatment Center (RTC) beds are included in the model. Included in the assessment are use rates related to specific diagnoses that impact the RICA: neuroses, psychoses, adjustment reaction/psychosocial dysfunction, personality/impulse control, organic disturbances/ intellectual disability, and behavioral/developmental disorders. Moreover, there are variables to address the waitlists for RICA patients, as well as variables that include adjustment in court commitments.

The future care model will be significantly affected by court commitment policies. The degree of policy stringencies will determine the volume of referrals. The preference is for a greater use of preventive programs, instead of needing a RTC program. These same services allow for a quicker transition back into the community and decrease the need for inpatient beds. Moreover, administrative policy changes that facilitate the ease for patients to be admitted to various RTC facilities will also decrease the demand for beds. Finally, technology improvements can facilitate the creation of virtual schools, which can be used as a potential solution to treat and keep patients in the community.

Admission to a RICA is generally limited to adolescents between the ages of 12 and 17, though the admission team may waive the age limit in certain cases. Child and adolescent growth assumptions consider a future care model that enforces more accurate screening measures for identifying patients who are appropriate for the residential program. Those that are not identified as ideal candidates for residential treatment will be referred to partner health facilities that specialize in certain diagnoses.

There are two facilities in the Central Maryland region that provide inpatient children and adolescent behavioral health services. Together, they operate 169 beds resulting in 42,235 patient days and an occupancy rate of 68%.

RICA Baltimore's 45 licensed beds account for 27% of regional beds and 35% of patient census. On average, there is a 10-day waitlist to gain access to the facility. At the time of this assessment, it was determined that within Baltimore County, the population of residents eligible to benefit from RICA services is forecast to increase to 60,000 children in 2040. Given the slight increase in population and change in use rates, migration from neighboring counties, and other health utilization drivers, it is projected that bed demand will increase from 169 beds available today to 175 beds by 2040. Given RICA Baltimore operates 27% of the county beds today, applying this same percentage against future bed demand (174 beds) results in a 2040 bed need of 47 beds at RICA Baltimore.

John L. Gildner RICA, which is also part of the Central region, is the only inpatient provider of child and adolescent behavioral health services in Montgomery County. The facility is licensed for 80 beds and is currently operating 48 beds, resulting in 14,240 patient days and an occupancy rate of 81% (based on budgeted beds). On average, there is a 20-day waitlist to gain access to the facility. At the time of the assessment, it was determined that within Montgomery County, the population of residents eligible for RICA services is forecast to increase 11% to 68,000 children by 2040. Given the increase in population and change in use rates, migration from neighboring counties, certain health utilization drivers, estimated bed need is expected to increase from 48 beds available today to 69 beds by 2040. Increasing the number of beds would still allow John L. Gildner RICA to operate well within capacity.

F. Facility for Children

The purpose of a Facility for Children (FFC) is to support children and adolescents who are participating in the legal process. FFCs assist adolescents in attaining competency and an understanding of the legal process, as well as provide a Residential Treatment Center level care for children who cannot be served in the community and who are not eligible for participating in RTC programs. The current FFC is a four (4) bed unit located on the grounds of the John L. Gildner RICA in Rockville, MD. The FFC patient population is increasing across the state. FFC patients cannot be commingled with RTC students and require stand-alone services. There is a growing number of FFC patients, due in part to a recognition of the specialized care services required to support these youth. Expansion of specialized services is required to address existing capacity constraints to ensure FFC patients are getting the educational, psychosocial, and medical care needed. Statute requires,³² a FFC unit be safe and secure, and also stipulates that an FFC facility cannot be a detention center. The growth in the FFC population will result in the need for additional capacity. By 2041, demand for FFC services will grow to a projected need of 18 beds.

G. Developmental Disability Administration

Two facilities in Maryland provide services for patients with intellectual and developmental disabilities, Holly Center and Potomac Center. The Holly Center has 125 licensed beds, 78 budgeted beds, and 50 staffed beds. The facility reported nearly 17,900 patient days, resulting in an average daily census of 49 patients and an occupancy rate of 63% (when compared to budgeted beds).

The Potomac Center has 94 licensed beds, 84 budgeted beds, and 74 staffed beds. Potomac Center reported over 27,000 patient days, resulting in an average daily census of 69 patients and an occupancy rate of 82% (when compared to budgeted beds). Thirty-two of the 94 licensed beds will be allocated to SETT. The ADC for the SETT beds is 27 patients.

³² Courts and Judicial Proceedings Article, Section 3-8A-17.1 - 3-8A-17.12

Furthermore, the Holly Center is located in Salisbury in the Eastern Shore region, and the Potomac Center is located in Hagerstown in the Western Maryland region, and both receive patients from across the state. Thus, when determining drivers for future demand for developmental disabilities services, all of Maryland was considered. There has been a transition from institutional levels of care to in-community supported care. Individuals requiring developmental disabilities services have increased access to care in various settings including in-home, group homes, assisted living, or other post-acute care facilities as a result of ongoing efforts by the Department and community providers. The Holly Center supports an ageing population of severely disabled patients and data shows that the need for these beds is decreasing. Current projections show that these beds may not be filled with new patients, unless there is a need for this level of care.

It is projected that the number of patient days will increase by 37% from 44,923 in 2018 to 61,833 in 2040 (including both Holly Center and Potomac Center). However, it is estimated that approximately 93% of all future patients will be transitioned into community-based care settings.³³ This results in a projected bed need for developmental disabilities services to be 13 beds by 2040. This bed need model was determined by considering the various age cohorts within the population, including the population less than 65, 65 to 74, 75 to 84, and 85 and over.

H. Chronic Care: Skilled Nursing and Long-Term Acute Care

MedPAC³⁴ analyzed the post-acute care system and determined that many patients are in a higher level of care than necessary. Some 42% of patients in LTACHs could be transferred to lower levels of care. An additional 11% could move to an inpatient rehabilitation facility and 31% of the patients could move to a SNF. Nearly 20% of patients in an inpatient rehabilitation facility could be placed into a SNF, 9% of the patients could use home health services, and 3% of patients could be transitioned into outpatient therapy. SNF patients could be transitioned into either care provided in an outpatient therapy setting or at home utilizing home health services. Fifteen percent of SNF patients could use home health and 5% could utilize outpatient therapy. Fourteen percent of patients, receiving home health services, would receive care in outpatient therapy.

The bed model for SNF, LTACH, and TBI use the age groups: less than 65 years old, 65 to 74, 75 to 84, and 85 and older. The use rate of SNF and LTACH, per 1,000 patients, determined the demand for post-acute care services. The care model was adjusted based on the MedPAC care model shift.

Two MDH facilities offer skilled nursing and long-term acute care services: Western Maryland Hospital Center located in Washington County (Western Maryland region); and Deer's Head Hospital Center located in Wicomico County (Eastern Shore region). Although Western Maryland

³³ MD DD Council FY 2017 – 2021.

³⁴ MedPAC is a nonpartisan legislative branch agency that provides the U.S. Congress with analysis and policy advice on the Medicare program.

Hospital Center reports 40 licensed skilled nursing beds, only 36 beds are operational. In the Western Maryland Hospital region, there are a total of 4,399 skilled nursing beds,³⁵ providing services to approximately 125,000 residents over the age of 65. The average occupancy rate for skilled nursing services in the Western Maryland region is 88% based on 1.4 million patient days and a census of 3,834 patients. Despite an estimated 35% increase in the region's 65+ population, the projected demand for inpatient skilled nursing beds will decrease by 30% based on available bed supply and care redesign. Based on the current capacity the Western Maryland region will have an excess capacity of approximately 1,300 skilled nursing beds by 2040.

In the Western Maryland region, Western Maryland Hospital Center provides inpatient LTACH services. At the time of the survey, Western Maryland Hospital Center's 12 budgeted LTACH beds provided 81 discharges and 5,207 patient days resulting in an average daily census of 14 patients. Despite an estimated 35% increase in the region's 65+ population, it is estimated that through a combination of care redesign and relocating an estimated 40% of patients utilizing a higher level of care than is needed, bed demand in the Western Maryland region is projected to total 14 LTACH beds by 2040.

In the Eastern Shore region, with the inclusion of Deer's Head Hospital Center, there are a total of 2,666 skilled nursing beds providing services. Together, these skilled nursing beds reported over 930,000 patient days resulting in an ADC of 2,552 patients and an occupancy rate of 83%. The 65+ population in the Eastern Shore region is predicted to increase by more than 35% from nearly 94,000 to 125,000+ in 2040. Despite the projected increase in the Eastern Shore region's age cohort of 65+, the demand for inpatient skilled nursing beds is projected to decrease based on available bed supply and care redesign. With projected changes in use rates and care patterns, by 2040 it is estimated that the Eastern Shore region will have an excess capacity of 850 skilled nursing beds.

In the Eastern Shore region, Deer's Head Hospital Center provides inpatient LTACH services. The facility's 6 budgeted LTACH beds resulted in 64 discharges and 1,635 patient days resulting in an ADC of 4 patients and an occupancy rate of 75%. Based on the current available capacity, and that an estimated 42% of the patients in LTACH are in a higher level of care than is needed, future demand for LTACH services in the Eastern Shore region is projected to total 9 beds by 2040.

I. Future Care Model Outcomes

Crisis centers

Crisis centers help by providing immediate treatment to acute behavioral health episodes. This can reduce the number of behavioral health patients seeking emergency department services, and prevent inpatient admissions. Crisis centers are most often located within the community and not attached to a hospital campus. The distribution of crisis centers in the community brings

³⁵ As sourced by the Maryland Health Care Commission.

care closer to where patients reside and reduces the stigma of seeking mental health services. Crisis centers are a growing important addition to behavioral health care redesign, and have the potential to impact the need for inpatient behavioral healthcare through early support and patient care. The future care model envisions the addition of multiple regional crisis centers distributed throughout the State of Maryland to provide enhanced and accessible mental health care to all residents. By creating a network of first responders, Maryland residents will have access to preventive services that will reduce admissions/re-admissions, provide social support and comfort, and intervene with acute episodes requiring stabilization.

**SECTION VI:
RECOMMENDATIONS**

Introduction

Section VI details the Plan's recommendations. The development of the Plan by the Steering Committee and Core Planning Team followed a rigorous planning process utilizing the prescribed Maryland Department of Budget and Management's Facilities Master Plan Guidelines.³⁶ The planning process included: Analysis of MDH Programs and Utilization; Analysis of Current Care Models, Analysis of MDH Facilities; Functional Assessment of MDH Facilities; Analysis of Projected Need; Comparative Benchmark Analysis; Future Care Model Planning; Market Analysis/Utilization; Analysis of Alternatives, and Phased Implementation and Cost Planning. All recommendations and decisions in the Plan were evaluated and measured against the Guiding Principles put in place at the outset of the planning process:

- Realign health care delivery to support evolving care models and trends.
- Improve the patient care environment.
- Implement efficiencies in service through utilization of all appropriate healthcare assets available throughout Maryland - not just those owned and operated by MDH.
- Fulfill the requirements associated with the Maryland Total Cost of Care Model.

The summary of recommendations is organized by service line and then by phased implementation timeline, and includes recommendations for divestiture of non-operating facilities, identification and definition of strategic partnerships to transition services with community health care providers, and construction of capital projects. The recommendation for each MDH facility includes campus plan notes and the alternatives considered alongside the recommended solution. Finally, an overview of alternatives is included, as well as a summary of the costs and savings of the recommended solutions.

Recommendations

The Maryland Department of Health currently has 1,876 licensed beds spread throughout the Department's 11 operating facilities. The bed need is projected to decrease to a total need of 1,540 by 2040. The reduction in the need for inpatient services over time has resulted in excess square footage capacity across MDH facilities. The Plan recommends the funding of eight (8) capital construction projects with a total value calculated as a one-time capital cost of \$120.2 million, that will be expended over time, and identifies ongoing maintenance projects required, which total \$192.4 million by 2041. Costs to divest MDH non-operating facilities as outlined by the Plan range between \$0-\$34.2 million dollars. These costs will vary based on the model of delivery and demolition/remediation undertaken as part of the divestiture process.

The funds required to construct the new capital projects and fund ongoing maintenance costs, are projected to be wholly offset by operating savings totaling \$297.5 million annually by 2041, and by one-time ongoing maintenance cost avoidance of \$24.1 million by 2035. Beyond 2041 the

³⁶ <https://dbm.maryland.gov/budget/Documents/capbudget/FacilitiesMasterPlan.pdf>

plan projects annual savings of \$21.7 million. Annual savings are additive and will increase over time. Additional operational maintenance savings are projected which are not quantified in the Plan that will result from the construction of modern healthcare infrastructure. Cost savings can be repurposed for delivery of health care within the State.

The Plan includes recommendations regarding the implementation of capital construction projects and the divestiture of non-operating campuses to decrease operational costs and produce increased savings. Savings of \$11.5 million annually are projected by the end of Phase 1.

The recommendations for the Plan are structured for phased implementation for divestiture of non-operating facilities, identification and definition of strategic partnerships to transition services, and construction of capital projects. Ongoing maintenance costs and operational savings costs are identified as part of the Plan.

A. Phased Implementation

Implementation of the Plan will occur in three phases over a twenty-year time frame:

- Phase 1: 0-5 years Fiscal Years 2022-2026
- Phase 2: 6-10 years Fiscal Years 2027-2031
- Phase 3: 11-20 years Fiscal Years 2032-2041

B. Inpatient Behavioral Health Service Line Recommendation

The Inpatient Behavioral Health service line recommendation is based on the projected growth of the service line and the findings of the situation assessment. The projection was for more beds and a need for new crisis care services to be strategically placed throughout all regions. The situation assessment showed that the two largest MDH inpatient behavioral health facilities have patients in a number of buildings that are at the end of life or nearing the end of their estimated useful life.

The recommendation for the Inpatient Behavioral Health service line focuses on transitioning patients out of buildings nearing obsolescence. The Plan recommends continuing to provide care within buildings, which will be maintained and updated to continue to provide excellent care for the next 20 years. Specialized programs within inpatient behavioral health (such as geropsychiatric, adolescent, and community re-integration patients), can likely be transitioned to partner facilities within the region. The Inpatient Behavioral Health service line plan is articulated through the phasing schedule below.

Phase 1 - FY 2022 - 2026

- a. Divestiture of Non-Operating Facilities
 - i. Crownsville Hospital Center (Anne Arundel)
 - ii. Upper Shore Community Mental Health Center (Kent)
- b. Construction:
 - i. Construct four (4) 24-hour crisis centers located in each region of the State (Western Maryland, Central Maryland, Southern Maryland, Eastern Shore)
- c. Strategic Partnerships
 - i. Consolidate MDH Behavioral Health Administration office spaces into the Department's relocation to the Baltimore Central Business District
 - ii. Perform an assessment of the Central Maryland Inpatient Behavioral Health Capacity
- d. Maintain Operations and Perform Ongoing Maintenance
 - i. Continue to maintain operations at MDH Inpatient Behavioral health Facilities and continue to perform ongoing maintenance and repair projects.
 1. Spring Grove Hospital Center
 2. Springfield Hospital Center
 3. Clifton T. Perkins Hospital Center
 4. Eastern Shore Hospital Center

5. Thomas B. Finan Center

Phase 2 - FY 2027 - 2031

- a. Construction
 - i. Construct a replacement hospital building at Springfield Hospital Center (Sykesville)
- b. Maintain Operations and Perform Ongoing Maintenance
 - i. Continue to maintain operations at MDH Inpatient Behavioral health Facilities and continue to perform ongoing maintenance and repair projects.
 - 1. Spring Grove Hospital Center
 - 2. Springfield Hospital Center
 - 3. Clifton T. Perkins Hospital Center
 - 4. Eastern Shore Hospital Center
 - 5. Thomas B. Finan Center

Phase 3 - FY 2032 - 2041

- a. Integration/Strategic Partnerships
 - i. Identify and develop strategic partnerships and integration plans to transition services currently provided at Spring Grove Hospital Center
- b. Maintain Operations and Perform Ongoing Maintenance
 - i. Continue to maintain operations at MDH Inpatient Behavioral health Facilities and continue to perform ongoing maintenance and repair projects.
 - 1. Spring Grove Hospital Center (until services are transitioned)
 - 2. Springfield Hospital Center
 - 3. Clifton T. Perkins Hospital Center
 - 4. Eastern Shore Hospital Center
 - 5. Thomas B. Finan Center

C. Regional Institute for Children and Adolescents (RICA) Service Line Recommendation

The recommendation is to maintain the number of beds and day programs currently offered at both RICA Baltimore and John L. Gildner RICA. The situation assessment detailed in the report showed that both RICA campuses meet the current care practices, without major renovations. Therefore, the recommendation for RICA is to continue to provide the services in the existing facilities for the next 20 years.

Phase 1 - FY 2022 - 2026

- a. Divestiture of Non-Operating Facilities
 - i. Regional Institute for Children & Adolescents Southern Maryland (Prince George's)
- b. Maintain Operations
 - i. Continue to maintain operations at RICA Baltimore and John L. Gildner RICA.
 - ii. Continue to perform ongoing maintenance and repair projects, and scheduled system replacements.

Phase 2 - FY 2027 - 2031

- a. Maintain Operations
 - i. Continue to maintain operations at RICA Baltimore and John L. Gildner RICA.
 - ii. Continue to perform ongoing maintenance and repair projects, and scheduled system replacements.

Phase 3 - FY 2032 - 2041

- a. Maintain Operations
 - i. Continue to maintain operations at RICA Baltimore and John L. Gildner RICA.
 - ii. Continue to perform ongoing maintenance and repair projects, and scheduled system replacements.

D. Facilities for Children (FFC) Service Line Recommendation

The recommendation is to construct a new stand-alone Facility for Children (“FFC”).

Phase 1 - FY 2022 - 2026

- a. Maintain Operations
 - i. Continue to maintain operations of the existing FFC facility located on the grounds of the John L. Gildner RICA

Phase 2 - FY 2027 – 2031

- a. Construction
 - i. Construction of a new FFC facility (Central Maryland Region)
- b. Maintain Operations
 - i. Continue to maintain operations of the existing FFC facility located on the grounds of the John L. Gildner RICA, until services are transitioned

Phase 3 - FY 2032 - 2041

- a. Maintain Operations
 - a. Continue to maintain operations at the new FFC facility in the Central Maryland Region

E. Developmental Disabilities Administration (DDA) Service Line Recommendation

The DDA recommendation is based on the projected need of the service line, which shows a continued decline of the census within MDH DDA facilities as more services are met in the community.

Phase 1: FY 2022 - 2026

- a. Maintain Operations
 - i. Continue to maintain operations at Potomac Center and Holly Center.
 - ii. Continue to perform ongoing maintenance and repair projects, and scheduled system replacements.

Phase 2: FY 2027 - 2031

- a. Maintain Operations
 - i. Continue to maintain operations at Potomac Center and Holly Center.
 - ii. Continue to perform ongoing maintenance and repair projects, and scheduled system replacements.
- b. Construction/Renovation
 - i. Construction of a new Secure Evaluation and Therapeutic Treatment (SETT) Facility (Jessup)
- c. Strategic Partnerships
 - i. Foster partnerships with community health care providers to transition DDA patients into the community.

Phase 3: FY 2032 - 2041

- a. Construction
 - i. Renovate the Holly Center
- b. Integration/Strategic Partnerships
 - i. Transition the SETT patients from Potomac Center to the new SETT facility
 - ii. Integrate and transition services currently provided at Potomac Center
- c. Maintain Operations
 - i. Continue to maintain operations at Potomac Center (until services are transitioned) and Holly Center.
 - ii. Continue to perform ongoing maintenance and repair projects, and scheduled system replacements.

F. Chronic Care Service Line Recommendation

The 20-year projection for the Chronic Care service line shows a decline in census for both Western Maryland Hospital Center and the Deer's Head Hospital Center for all three components of care currently provided: skilled nursing, long-term acute care, and traumatic brain injury. Both chronic care hospitals were determined to be aged and at or near the end of their projected useful life. Given both the future needs and situational assessment conclusions, the recommendation is to transition this service line to regional health care partners.

Phase 1: FY 2022 - 2026

- a. Strategic Partnerships
 - i. Identify and develop strategic partnerships to transition services currently provided at Deer's Head Hospital Center and Western Maryland Hospital Center

Phase 2: FY 2027 - 2031

- a. Strategic Partnerships
 - i. Continue and expand strategic partnerships to care for skilled nursing, long-term acute care, and traumatic brain injury patients.

Phase 3: FY 2032 - 2041

- a. Strategic Partnerships
 - i. Continue and expand strategic partnerships to care for skilled nursing, long-term acute care, and traumatic brain injury patients.

Operating Cost Comparison

Master Facilities Plan Operating Costs – Recommended Scenario vs. Alternatives Considered

In 2021, the Maryland Department of Health is projected to spend approximately \$382 million in annual expenses for staff and clinical care costs to operate its eleven (11) operating facilities across the State. If no changes are made, this cost will escalate to \$456 million in the year 2030 and to \$545 million in the year 2040. These operational costs include staff, maintenance, utilities, security, and housekeeping, but do not include ongoing maintenance and repairs.

The costs identified in the Plan are calculated using an assumed escalation factor of 2% per year. The escalation factor is built into all operating costs.

Projected costs in the Recommendations Section incorporate the costs for partnering with local health care providers. It is assumed that MDH will continue to pay for the care of patients that are transitioned to other healthcare providers or the community. Partnering is recommended to transition services currently being provided at (4) active campuses (Western Maryland Hospital Center, Deer's Head Hospital Center, Spring Grove Hospital Center, and Potomac Center) to provide an improved patient care environment that supports projected future care models.

The operating costs are a compilation of general administrative, maintenance, dietary, and clinical functions. Maintenance includes management of the physical plant and the grounds, housekeeping, fire and safety services, transportation, and laundry/linen services. Services such as fiscal, volunteer, procurement, IT/communication, workshops, and administrative are rolled up into general administrative costs. These costs are most often relatively fixed and generally are not fluctuating with the patient census.

Clinical services provided at the bedside and therapy services are directly related to patient care and are more dependent on the census. Rehabilitative, alcohol and drug treatment, dental, and social services are a few examples of the care provided for the patients.

If MDH and the State of Maryland adopt and implement the recommendations of the Plan within the identified phases, by 2041, savings could reach \$42.1 million annually (as measured in 2020 dollars). The projected annual savings is derived from three categories.

- \$20.4 million: Consolidation of services and economies of scale based on the projected bed need could result in savings up to \$20.4 million annually*
- \$19.8 million: Savings for transitioning services
- \$1.9 million: Divestiture of MDH non-operating facilities

* Savings attributed to economies of scale gained through consolidation of services and modernization of healthcare infrastructure.

In addition to the annual savings, MDH and the State will realize a one-time capital cost avoidance of approximately \$24.1 million (as measured in 2020 dollars).

Ongoing Maintenance and Operational Savings

In the near term, MDH will incur costs to complete ongoing maintenance at facilities to maintain operations during the implementation of the Plan. The total maintenance costs are tied directly to the phasing of implementation. Delays in implementing the Plan will increase cost over time and reduce projected savings. Conversely, ongoing maintenance and operational costs may be reduced and eliminated if the implementation of the Plan is accelerated.

Recommendations

A. New Capital Projects

The following charts detail the Plan recommendations, broken down by phase. Each phase lists the new capital projects at the top. The projects include seven (7) new construction projects and one (1) renovation project. The total project costs are shown in 2020 dollars and include both the estimated construction cost and a 1.7 multiplier (as recommended by the 2020 DGS/DBM approved rates for overhead, profits, and contingencies) to account for planning and design, testing and inspection, specialty items, and contingency. The estimated project costs also include general conditions, site demolition, materials, labor, construction overhead, a 10% architect/engineer's fee, 10% general contractor's profit allocation, a 30% construction contingency, and a 10% design contingency. The costs include limited permanent equipment and furnishings, such as residential equipment for breakrooms (ex. microwaves and coffee machines), commercial kitchen equipment (ex. refrigerators), and window treatment furnishings. All other owner supplied furniture and equipment is excluded.

B. Divestiture of Non-Operating Facilities

Next, the Plan recommends the divestiture of three (3) non-operating facilities by the end of Phase 1. These campuses are Crownsville Hospital Center, Upper Shore Community Mental Health Center, and RICA Southern Maryland. All divestitures will be in accordance with State regulations at the time of divestiture.

It is important to note that the divestiture cost, includes optional demolition costs. If the future owner prefers building reuse, this could substantially reduce or eliminate these costs, depending on the scope of work. The potential cost variance is reflected in the Divestiture sections with cost ranges. For example, Crownsville is shown as “\$0-34.2 MM,” depending on the scope of work prior to divestiture.

More specifically, divestiture costs include construction general conditions and sitework and demolition, which includes erosion control, utility work, building and foundations demolition (excludes hazardous materials abatement and removal), grading, stabilization, and traffic control. The overall site acreage, building footprints, and conditions of the buildings determine the impact of these costs. Furthermore, the costs also include design and construction fees, and conservative contingencies, which account for approximately 43% of the estimated divestiture costs.

C. Ongoing Maintenance

Ongoing maintenance projects include parts or equipment within the facility that need to be serviced or replaced. For example, this includes, but is not limited to, the following: boiler replacement, central heating/cooling replacement, chiller replacement, pump repairs, windows replacement, fencing replacement, road repairs, and storm water system repairs.

Some of these items may be more extensive within a campus, depending on the age of the buildings. However, there is opportunity to expedite projects to avoid deferred maintenance costs. Therefore, the sooner buildings are replaced, the greater the cost savings.

D. Savings for Partnering/Community

The savings associated with partnering with health care providers to transition services are assumed at one-third of the existing state funded operating expenses. Partnering/Community savings are shown in the phase that they are assumed to take place. The savings are annual and added to the total savings for the subsequent phases.

Facility Master Plan Recommendations ¹							
Phase 1 (FY 2022 - 2026)							
Projects	GSF	Region	Planning	Construction	Total Costs	Total Savings	
					Project Total	One-Time Savings	Annual Savings
Phase 1 - New Capital Projects (in 2020 dollars)							
New Crisis Center (Western Maryland)	14,400	Western	\$1.0	\$7.2	\$8.2		
New Crisis Center (Eastern Shore)	14,400	Eastern Shore	\$1.0	\$7.2	\$8.2		
New Crisis Center (Central Maryland)	14,400	Central	\$1.0	\$7.2	\$8.2		
New Crisis Center (Southern Maryland)	14,400	Southern	\$1.0	\$7.2	\$8.2		
Phase 1 - Divestiture of Non-Operating Facilities							
Divest Crownsville Hospital Center		Southern			\$0 - \$34.2		\$1.3 ²
Divest Upper Shore Community Mental Health Center		Eastern Shore			\$0		\$0.6 ²
Divest RICA Southern Maryland		Southern			\$0		N/A
Phase 1 - Ongoing Maintenance							
Western Maryland Hospital Center	209,000	Western			\$7.8		
Deer's Head Hospital Center	196,814	Eastern Shore			\$3.0		
Spring Grove Hospital Center	1,056,063	Central			\$27.4		
Potomac Center	111,680	Western			\$12.1		
Springfield Hospital Center	829,224	Central			\$24.6		
Clifton T. Perkins Hospital Center	312,646	Central			\$6.0		
Eastern Shore Hospital Center	115,450	Eastern Shore			\$2.7		
Thomas B. Finan Center	185,450	Western			\$6.0		
RICA Baltimore	163,389	Central			\$1.9		
John L. Gildner RICA	119,239	Western			\$4.0		
Holly Center	164,559	Eastern Shore			\$2.5		
Savings for Transitioning Services							
Western Maryland Hospital Center		Western					\$4.8 ³
Deer's Head Hospital Center		Eastern Shore					\$4.8 ⁴
Subtotals for Phase 1 (all costs per mission "MM")					\$130.8 - \$165 MM		\$11.5 MM/year

¹ All costs abbreviated for millions.

² Based on 2020 dollars

³ Savings start once TBI, LTACH, and SNF patients are transitioned. Costs are based on 2020 operational costs.

⁴ Savings start once LTACH and SNF patients are transitioned. Costs are based on 2020 operational costs.

Figure 40 Facilities Master Plan Recommendations Phase 1

Facility Master Plan Recommendations ¹							
Phase 2 (FY 2027 - 2031)							
Projects	GSF	Region	Planning	Construction	Total Costs	Total Savings	
					Project Total	One-Time Savings	Annual Savings
Phase 2 - New Capital Projects (in 2020 dollars)							
New 28 Bed SETT on grounds of Clifton T. Perkins Hospital Center	36,400	Central	\$2.3	\$16.7	\$19.0		
Replacement Hospital Building at Springfield Hospital Center	48,000	Central	\$4.4	\$32.4	\$36.8		
Facility for Children in Central Maryland region	20,800	Central	\$1.6	\$11.4	\$13.0		
Phase 2- Divestiture of Non-Operating Facilities							
None identified							
Phase 2 - Ongoing Maintenance							
Western Maryland Hospital Center	209,000	Western				\$5.5	
Deer's Head Hospital Center	196,814	Eastern Shore				\$8.0	
Spring Grove Hospital Center	1,056,063	Central			\$6.8		
Potomac Center	111,680	Western			\$0.0		
Springfield Hospital Center	829,224	Central			\$0.9		
Clifton T. Perkins Hospital Center	312,646	Central			\$0.0		
Eastern Shore Hospital Center	115,450	Eastern Shore			\$13.4		
Thomas B. Finan Center	185,450	Western			\$11.7		
RICA Baltimore	163,389	Central			\$1.6		
John L. Gildner RICA	119,239	Western			\$0.0		
Holly Center	164,559	Eastern Shore			\$0.34		
Savings for Transitioning Services							
None identified							
Subtotals for Phase 2 (all costs per mission "MM")					\$103.5 MM	\$13.5 MM	\$11.5 MM/year²

¹ All costs abbreviated for millions

² Includes \$11.5MM per year savings from Phase 1

Figure 41 Facilities Master Plan Recommendations Phase 2

Facility Master Plan Recommendations ¹							
Phase 3 (FY 2032 - 2041)							
Projects	GSF	Region	Planning	Construction	Total Costs	Total Savings	
					Project Total	One-Time Savings	Annual Savings
Phase 3 - New Capital Projects (in 2020 dollars)							
Renovate Holly Center	36,400	Eastern Shore	\$2.2	\$16.6	\$18.6		
Phase 3 - Divestiture of Non-Operating Facilities							
None identified							
Phase 3 - Ongoing Maintenance							
Spring Grove Hospital Center	1,056,063	Central				\$9.6	
Potomac Center	111,680	Western				\$1.0	
Springfield Hospital Center	829,224	Central			\$27.9		
Clifton T. Perkins Hospital Center	312,646	Central			\$7.5		
Eastern Shore Hospital Center	115,450	Eastern Shore			\$1.9		
Thomas B. Finan Center	185,450	Western			\$3.5		
RICA Baltimore	163,389	Central			\$3.0		
John L. Gildner RICA	119,239	Western			\$6.4		
Holly Center	164,559	Eastern Shore			\$9.5		
Savings for Transitioning Services							
Spring Grove Hospital Center	1,056,063	Central					\$9.9 ²
Potomac Center	111,680	Western					\$0.3 ²
Subtotals for Phase 3 (all costs per mission "MM")					\$78.3 MM	\$10.6 MM	\$21.7 MM/year³

¹ All costs abbreviated for millions

² Savings start once patients are transitioned. Costs are based on 2020 operational costs.

³ Includes \$11.5MM per year savings from Phase 1. Based on 2020 dollars

Figure 42 Facilities Master Plan Recommendations Phase 3

Alternatives Considered

Multiple alternatives were analyzed in the development of this set of recommendations. The alternatives ranged from a baseline of maintaining operations, as they are today, to maximum partnering to transition services to health care and community providers. The following section outlines three operational alternatives that were considered, followed by the alternatives considered for each physical location:

A. Maintain Current Locations of Care and Operations

This alternative would maintain all eleven existing facilities and their current level of operations. Since some of the facilities are aging, this would be the highest cost alternative and would not result in an optimal environment of care for patients considering some facilities may not be able to meet projected future models of care. Staffing and clinical costs associated with this alternative serve as strong evidence that action needs to be considered by the State going forward in order to manage escalating health care costs.

B. Maximum Partnership and Transitioning of Care

This alternative would involve partnering for the transition of a maximum number of the State's patients to other health care and community providers. While this would provide care at the lowest cost for the State's patients, it was deemed to be challenging to implement. MDH assessed the feasibility of transitioning care of patients through strategic partnerships as part of the planning process. The concern is that partners may not be willing to provide care for certain acute patients who require intensive management and hospital stays of unknown length of time. The State will likely need to continue to provide care for intensive management patients in the future which makes this a challenging alternative to fully implement.

C. Hybrid Partnership and Transition of Care

This alternative would recommend transitioning services and care for a limited number of patients through strategic partnerships, or reintegration into the community as appropriate. The facilities and their patient populations would be evaluated to determine the service lines and patients that could be integrated to the community or other health care providers.

D. Alternatives for Each Facility

The three alternatives considered for the future of each facility:

1. Maintain and Renovate – maintain and repair current facility operations, renovate as needed over time.
2. Replace or Build New – renovate existing facilities as required, construct new buildings on the existing site to replace obsolete buildings or for added capacity.
3. Partnerships for Transition of Care – partner with health care providers or community providers to transition care for patients.

The following section provides a description of the alternatives by location and the impact each alternative has on the Maryland Department of Health's ability to meet its mission.

Springfield Hospital Center

Maintain and Renovate – Recommendation

Springfield Hospital Center will meet the patient population needs for the current budgeted and future growth projections for patients. The facility and clinical costs per patient were comparable with costs at the State's other Inpatient Behavioral Health facilities, with the exception of the Clifton T. Perkins Hospital Center facility.

Specifically, the Salomon and Hitchman buildings operationally met the needs of the patient population. These buildings were constructed in the 1980's, and with routine maintenance and scheduled system replacements, will continue to operate effectively for another 20 years.

However, the McKeldin building is aging and nearing the end of its projected useful life. In addition, all systems in the McKeldin building will need to be replaced. Furthermore, the current footprint of the building was not conducive to accommodate layouts that meet the projected future standards of care.

Replace or Build New – Recommendation - Replace McKeldin Building

There is available land adjacent to the existing patient care buildings to construct new buildings, which would allow a systematic approach to construct new state of the art facilities for future needs, while maintaining current operations in the existing buildings, and eventually replacing obsolete buildings.

The Salomon and Hitchman buildings will function effectively for the next 20 years, making replacement of those buildings cost prohibitive. However, the McKeldin building will exceed its life expectancy and its current systems will need to be replaced in the near future. Accordingly, it would be more cost effective to replace the McKeldin building.

Springfield Hospital Center could accommodate additional growth and still meet regional patient care needs while maintaining effective levels of cost of care.

Partnerships for Transition of Care

Even at 30 years old, Springfield Hospital Center had two of the newer patient care facilities for the State in this Region that will function effectively for the next 20 years. It would not be cost-effective to transition services to other providers.

Clifton T. Perkins Hospital

Maintain and Renovate - Recommendation

The Clifton T. Perkins Hospital Center met current bed capacity and had capital projects already in line for future major development, which will permit all units of the facility to accommodate maximum-security patients. The facility and its systems will need some upgrades but will be able to continue to meet projected future models of care cost-effectively for the patient population over the next 20 years. In addition, there was room for expansion or renovation on the site, with little disruption to existing facilities.

Furthermore, the existing facility was able to serve patients cost-effectively. The facility operating and clinical care costs were the most efficient when compared to the State's other Inpatient Behavioral Health sites and would be able to continue to meet best practices, cost-effectively for the population served.

Replace or Build New

As noted above, there was room for expansion on the site, and additions or new facilities could be constructed with little disruption to the existing facilities. However, since the facility met the current bed capacity and has an ongoing capital project, there will be no need to replace the entire facility.

Partnerships for Transition of Care

This facility is the only maximum-security facility operated by the State, and there are no other facilities to accommodate these patients in the community. Therefore, there are no other health care or community providers capable of accommodating these patients within the State.

Eastern Shore Hospital Center

Maintain and Renovate - Recommendation

The Eastern Shore Hospital Center met both current and projected bed needs. The facility was constructed in 2001 and there was no need for major renovations in the near future. It will operate effectively for another 20 years with routine maintenance and scheduled system replacements. The facility also needed maintenance to its stormwater management systems.

In addition, the existing facility was able to serve patients cost-effectively. The facility operating and clinical care costs were comparable to the State's other Inpatient Behavioral Health facilities.

Replace or Build New

There was room for expansion on the site, and additions or new facilities could be constructed with little disruption to the existing facilities. However, the facility met the current and future goals to serve patients in the Eastern Region of Maryland, so there will be no need for replacement.

Partnerships for Transition of Care

This is the newest MDH Inpatient Behavioral Health Facility and is capable of meeting the future projected needs for this region. Therefore, it would not be cost-effective to transition services to other providers.

Spring Grove Hospital Center

Maintain and Renovate

Spring Grove Hospital Center had several architectural issues that would be costly to renovate. Some of the issues included roof replacements, door failures, and repair/replacement to one of the bridges. The physical layout of the buildings may not meet projected future models of care. The majority of the patient buildings are aging and are at or near the expected useful life, and will be costly to renovate or replace.

Moreover, the facility had outdated mechanical and electrical infrastructure. Although an energy performance contract was initiated in 2007, much of the building's air handling units, ductwork, and electrical distribution will still need to be replaced.

Replace or Build New

Due to rolling topography, the site was geographically challenged in the ability to economically co-locate all patient care and resident buildings. In addition, prior to co-locating new buildings on the site, the facility would also need to demolish some existing structures, which would incur additional cost.

Furthermore, most of the buildings on the campus are in poor condition, and replacing them in kind would not be cost-effective.

Partnerships for Transition of Care - Recommendation

The aging patient buildings at this facility make it cost prohibitive to renovate or construct new buildings on this campus. MDH could partner with regional healthcare and community providers to transition services at this facility, which would result in cost effective care of patients in an optimal patient care environment.

Thomas B. Finan Center

Maintain and Renovate - Recommendation

The Thomas B. Finan Center will meet its current budgeted need of 88 patients and can accommodate the future growth projections. While the building structure was aging, much of the infrastructure was upgraded as part of a new Energy Performance Contract and therefore, would not need major replacements. The facility will operate effectively for another 20 years with routine maintenance and scheduled system replacements.

The campus also had vacant space that could be used for swing space. However, a full renovation of the facility was not warranted since different cottages served different purposes. Although the existing facility was able to meet the current needs of the patient population, the State should plan for selective renovations to accommodate more acute patients.

Moreover, the facility and clinical costs per patient were comparable with costs at the State's other Inpatient Behavioral Health facilities, with the exception of the Clifton T. Perkins Hospital Center facility.

Replace or Build New

Replacing the facilities on the existing site would result in high costs, as much of the available building area was on steep topography. Also, as previously stated, the existing buildings could remain effectively operational for another 20 years, therefore this approach would not meet the project goal of providing a cost-effective solution.

Partnerships for Transition of Care

This facility will function effectively for the next 20 years. It would not be cost-effective to transition services to other providers. In addition, there may be a lack of available health care and community providers that can adequately care for these patients in this geographic region.

RICA - Baltimore

Maintain and Renovate - Recommendation

RICA Baltimore is able to effectively serve patients and meet both current and future projected bed needs. The facility was constructed in 1995 and was in fair to good condition. It also had several facility renewal projects over the past 10 years and did not need any major renovations; however, the improvements identified in the Infrastructure Assessment should be considered.

The facility will operate effectively for another 20 years with routine maintenance and scheduled system replacements. Moreover, there was room for expansion or renovation on the site.

Replace or Build New

The facility campus had ample space to allow additions or new replacement facilities to be constructed with little disruption to existing facilities. However, the facility met the needs of patients in the Central Region of Maryland and did not need to be completely replaced.

Partnerships for Transition of Care

RICA Baltimore can continue to serve its target patient population over the next 20 years without the need for major upgrades. In addition, there is likely a lack of available health care and community providers that can care for RICA Baltimore patients in the Central Maryland Region.

John L. Gildner RICA

Maintain and Renovate - Recommendation

John L. Gildner RICA was able to effectively serve patients and meet both current and future projected bed needs. The facility was constructed in 1979 and was in fair condition and did not require any major renovations. However, the improvements identified in the Infrastructure Assessment should be considered. The facility will operate effectively for another 20 years with routine maintenance and scheduled system replacements.

Replace or Build New

Due to site constraints, the existing buildings would need to be demolished prior to the construction of new replacement buildings. This would also mean that the existing patients would need to temporarily relocate to another facility during construction. However, the facility met the needs of patients in the Southern Region of Maryland, therefore a complete facility replacement will not be necessary.

Partnerships for Transition of Care

This facility can continue to serve its target patient population over the next 20 years without the need for major upgrades. In addition, there is likely a lack of available health care and community providers that can care for RICA Baltimore patients in the Southern Maryland Region.

Holly Center

Maintain and Renovate - Recommendation

The Holly Center is able to effectively serve its existing intellectually and developmentally disabled patient population. Based on the bed projection for 2040, the facility would have excess capacity, as the census could decrease substantially over time.

The facility was in fair condition and well maintained. It had also just completed a mold remediation project. In addition, the facility did not need any major renovations; however, the improvements identified in the Infrastructure Assessment should be considered.

In 2018, new HVAC systems were installed in portions of the facility as part of an Energy Performance Contract. The facility will adequately function for the next 20 years with routine maintenance and scheduled replacements of key systems.

The Plan recommends a capital construction project to renovate the existing residential cottages at the Holly Center.

Replace or Build New

The site had the capacity for future development however, there was no programmatic need for additional developmental disability beds, therefore a complete facility replacement would be unwarranted.

Partnerships for Transition of Care

The anticipated volume of developmental disability patients is projected to decline over the next 20 years, and the Holly Center can accommodate the expected demand for the State. This facility can continue to serve its target patient population without the need for major upgrades. It would not be cost effective to transition services to healthcare providers and the community.

Potomac Center

Maintain and Renovate – Recommendation

The Potomac Center was in fair condition and able to effectively serve its existing developmentally disabled population. However, based on the bed projection for 2040, the Center would have excess capacity, as the census is projected to decrease significantly.

Renovations were recently made for the relocation of the SETT program to the site. However, based on the anticipated decline in bed need, future major renovations would not meet the goal of providing the best service at lower costs. Additionally, with routine maintenance and scheduled replacement of building systems, the facility could be adequately maintained until there is a substantial decline in occupancy.

Replace or Build New

The remaining developable area on the site was steeply graded and would be costly to add new replacement buildings without demolishing others.

The facility met the goals to serve current patients in the Western Region and due to the anticipated decline in bed need, a complete facility replacement would not be cost effective.

Partnerships for Transition of Care - Recommendation

The Plan recommends construction of a new SETT facility in the Central Maryland Region. The SETT patients currently located at the Potomac Center can be relocated to the new SETT facility after construction is completed. Since the projected census for the facility is expected to decrease significantly over time, it would be cost effective to integrate services into the Holly Center and also transition services to regional healthcare and community providers.

Western Maryland Hospital Center

Maintain and Renovate

The Western Maryland Hospital Center had the highest operational and clinical care cost per patient among all of the State's facilities. In addition, these operational costs would continue to remain high under this scenario.

The existing facility rated poorly and would require substantial architectural improvements and upgrades. In addition, the facility was too large for the clinical programs onsite at the facility. The current bedroom and bathroom ratios need attention and major mechanical and electrical systems have reached their life expectancy. Moreover, portions of the building could not be used for patient care due to failed plumbing systems, building thermal performance, and the age of the mechanical and electrical infrastructure. Major renovations would be required to meet projected future standards of care. Even after major renovations, the State would have to pay high operational costs to maintain an excess capacity, which would outweigh the benefit.

Replace or Build New

The site had ample space to accommodate new or replacement construction in alternate locations. Moreover, new right-sized facilities would improve operational costs, but not necessarily clinical care costs.

Partnerships for Transition of Care - Recommendation

The aged Western Maryland Hospital Center facility will require extensive renovations to meet projected future standards of care and is oversized for the number of patients that will be treated at this facility. MDH could partner with regional healthcare and community providers to transition services at this facility, which would result in cost effective care of patients in an optimal patient care environment.

Deer's Head Hospital Center

Maintain and Renovate

Deer's Head Hospital Center had the second-highest operational and clinical care cost per patient among all of the State's facilities.

Despite the State's recent completion of an extensive mold remediation project, the age of the building, type of construction, and capacity of the mechanical systems would make it difficult to meet projected future standards of care. In addition, the current bedroom and bathroom ratios need attention, exterior balconies were unusable, and mechanical and electrical systems had reached their life expectancy. The facility would need major renovations to continue to care for chronic care patients over the next 20 years.

Additionally, major renovations would necessitate displacement of the current patients or the need for a multi-phased renovation project, resulting in higher costs. Moreover, while major renovations would help to alleviate some of the operational costs per patient, this would not necessarily reduce the cost of clinical care.

Replace or Build New

The site had enough space to accommodate new or replacement construction in alternate locations, however some parts of the site were leased which restricts the amount of developable acreage on the site.

Partnerships for Transition of Care - Recommendation

The Deer's Head Hospital Center facility will require extensive renovations to meet projected future standards of care and is oversized for the reduced projected census over the next 20 years. MDH could partner with regional healthcare and community providers to transition services at this facility, which would result in cost effective care of patients in an optimal patient care environment.

Conclusion

MDH engaged stakeholders in a rigorous review of facility data, market/utilization data, current care assessment, and industry benchmarks/best practices to develop this Master Plan. The Plan presents the results of that statewide assessment and provides recommendations in a phased approach over the next twenty years, which include a combination of construction, divestiture, strategic partnerships, and ongoing operations/maintenance to meet patient care needs for the future. This approach adheres to the Guiding Principles of realigning health care delivery, improving the patient care environment, implementing efficiencies, and fulfilling existing requirements. MDH will continue to engage with patients and their families, employees, elected officials, and community partners on strategies to implement this plan.