



COMMONWEALTH of VIRGINIA

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November 10, 2015

The Honorable Walter A. Stosch, Co-Chair
The Honorable Charles Colgan, Co-Chair
Senate Finance Committee
10th Floor, General Assembly Building
910 Capitol Street
Richmond, VA 23219

Dear Senator Stosch and Senator Colgan:

Item 307. R. of the 2015 Appropriations Act required the Department of Behavioral Health and Developmental Services to “*undertake a review of Piedmont Geriatric and Catawba Hospitals. This review shall evaluate the operational, maintenance and capital costs of these hospitals, and study alternate options of care, especially geriatric psychiatric care for patients residing in these hospitals.*”

Please find enclosed the report in accordance with Item 307.R. Please do not hesitate to contact me if you have any questions about this report.

Sincerely,

A handwritten signature in blue ink that reads "Jack Barber, M.D.".

Jack Barber, M.D.

Enc.

Cc: William A. Hazel, Jr., M.D.
Joe Flores
Susan E. Massart
Mike Tweedy



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The Honorable S. Chris Jones, Chair
House Appropriations Committee
General Assembly Building
P.O. Box 406
Richmond, VA 23218

Dear Delegate Jones:

Item 307. R. of the 2015 Appropriations Act required the Department of Behavioral Health and Developmental Services to “*undertake a review of Piedmont Geriatric and Catawba Hospitals. This review shall evaluate the operational, maintenance and capital costs of these hospitals, and study alternate options of care, especially geriatric psychiatric care for patients residing in these hospitals.*”

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Virginia Department of
Behavioral Health &
Developmental Services

**Study of Piedmont Geriatric
and Catawba Hospitals
(Item 307.R)**

**To the Governor and the Chairmen of the
House Appropriations and Senate Finance Committees**

November 10, 2015

*Study of Piedmont Geriatric
and Catawba Hospitals*

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I. Introduction and Background

This report was developed in accordance with 307.R of the 2015 Appropriation Act which requires the Department of Behavioral Health and Developmental Services (DBHDS) to undertake a review of Piedmont Geriatric and Catawba Hospitals.

R. The Department of Behavioral Health and Developmental Services shall undertake a review of Piedmont Geriatric and Catawba Hospitals. This review shall evaluate the operational, maintenance and capital costs of these hospitals, and study alternate options of care, especially geriatric psychiatric care for patients residing in these hospitals. The department shall develop recommendations and report to the Chairmen of the House Appropriations and Senate Finance Committees by November 1, 2015.

To support the report requirements, DBHDS engaged Public Consulting Group, Inc. (PCG) to conduct system-wide research, provide consultation on national best practices, and to assist with recommendations for the future of Virginia's behavioral health services system. PCG engaged with staff at all levels including those based at DBHDS central office, as well as those located at each of DBHDS' eight adult mental health hospitals, including PGH and Catawba. The research also involved extensive analysis of data supplied by DBHDS central office and facilities, as well as publicly available data regarding utilization and cost of behavioral health services in Virginia and other states. A sample of 'peer states' were examined for more detailed comparison with Virginia. Appendix B provides information about Virginia's publicly funded behavioral health system, including numbers served by state mental health hospitals and through the Commonwealth's 40 community services boards. Appendix C provides a national perspective about the state inpatient bed capacity, community capacity and funding for the states selected as Virginia's peer states.

While the Appropriations Act language is focused on PGH and Catawba, in order to generate comprehensive and responsible recommendations for alternate options of care, DBHDS found it necessary to consider PGH and Catawba in the broader landscape of the other state-run hospital facilities and community-based services. The end result of this comprehensive analysis includes findings related to the behavioral health system, as well as options for re-aligning the delivery of needed services to the targeted population.

Highlights among the findings include:

1. Virginia's adult state hospital capacity of 17.3 beds per 100,000 people is higher than national averages (15 per 100,000) and considerably higher than peer states and states with county or locally-based community service systems (12.4 beds per 100,000). Additionally, the percentage of state hospital beds in Virginia as a percentage of total public and private beds (45.2 percent) is higher than the national average (40.6 percent).
2. Virginia's per capita expenditure on mental health ranks 31st among the 50 states, has not kept pace with state spending overall, and has marginally declined over time.¹ Total department expenditures were \$93 per capita in 2013, while peer states range from \$41 in Texas to \$287 in Pennsylvania. The national average for per capita spending is \$130.

¹ Virginia 2013 NRI State Mental Health Agency Data

3. State mental health hospital (“state hospital”) spending consumes a disproportionate share of Department funds. In 2013, inpatient state hospital spending comprised nearly half (46 percent) of overall state mental health agency spending in Virginia. This exceeds the national average (29 percent) and the highest proportion of such spending among peer states (36 percent in Georgia and Texas). DBHDS maintained this level of spending on inpatient state hospital beds from \$332 million in 2009 to \$340 million in 2013. These funds support nine state hospitals housing an average daily population of 134 individuals per facility or, on average, 5,259 individuals.²
4. Virginia has not transitioned behavioral health funding from institutional care to community treatment as thoroughly as peer states or national trends. While Virginia spends approximately 41 percent of its behavioral health budget on community services, at \$47 per capita, nationwide expenditures on community services make up 75 percent of total spending, with an average of \$89 spent per capita.³
5. Virginia’s funding structures and organization of community services continue to prioritize inpatient care over community treatment, resulting in inadequate access to services and significant deficiencies in the continuum of care. While total spending on mental health services in Virginia (approximately \$726 million annually) is on par with peer comparisons, the distribution of spending between community and institutional care is quite disparate (see section 3 and 4 above). The systems of care are not sufficiently coordinated or supportive of each other, and the opportunity cost of this is significant; a Virginia Office of the State Inspector General report from 2014 states that the annual average cost of care per recipient in the Virginia state hospital system is \$231,161, while community services cost the Department \$27,027 per individual.⁴ Although Virginia has seen a modest expansion of specialized services in targeted areas, such as Crisis Intervention Teams, PACT teams, and crisis stabilization programs, there has not been a concentrated focus on building a consistent continuum of care in each community. This results in a continued heavy reliance upon an inpatient system.
6. With recent census increases, Virginia’s hospital infrastructure would require significant investment and modification in order to meet current demand and exercise its full potential, including:
 1. Expanding capacity at certain locations may be required, necessitating additional staffing,
 2. Investing in physical plants to modernize facilities and maximize efficiency,
 3. Considering consolidation options, and
 4. Addressing the quality of care considerations, adequacy of staffing, and increased risks to patient and staff safety which are persisting challenges for facilities operating at above 85 percent capacity through increased funding for staff, enhanced community discharge options, and changes in bed capacity to adjust to current demand.
7. Due to age and deferred maintenance at several state hospitals within the last decade, significant investment will be needed to retain or replace Virginia’s current facility infrastructure and bed capacity, at considerable expense to the Commonwealth. Catawba and PGH alone will require an estimated \$94.1 million in capital outlay funding simply to continue to operate the hospitals at current levels.
8. Analysis of hospital utilization patterns in the state reveals wide variation in local demand for beds, both regionally and by CSB. CSB utilization varies from less than 3 beds per 100,000 to

² 2012-13 CMHS Uniform Reporting System and 2013 State Hospital Analysis

³ NRI State Profile data, FY 2013.

⁴ Virginia Office of the State Inspector General, “Discharge Assistance Program Performance Review”, <https://osig.virginia.gov/media/2475/2014-bhds-005dap.pdf>, February 14, 2014, accessed August 31, 2015.

more than 46 beds per 100,000, pointing to inconsistent utilization management statewide. Rural localities utilize state hospital beds at higher rates than urban localities, reflecting both the scarcity of private inpatient beds and alternative community services.

9. Virginia's extraordinary barriers to discharge list (EBL) indicates that 10-15 percent of state hospital patients are clinically ready for discharge and could be appropriately treated in a community setting. This number includes 150 people on the EBL (who have been clinically ready for discharge in excess of 30 days) and another 60-70 individuals who have been clinically ready for discharge for less than one month.
10. Hospital utilization and waitlist patterns demonstrate that the demand for acute care and forensic beds is greater than geriatric beds within Virginia's state hospital system. Based on the EBL, geriatric individuals account for approximately 30 percent of the persons on the EBL, indicating the need for additional community capacity to serve older adults in the community.
11. Forensic admissions to state hospitals have increased by 13.5 percent in the past year, and individuals with criminal justice involvement use 38 percent of state hospital beds. Forensic services will continue to be an issue in the future and the configuration of beds will need to be adjusted to accommodate this trend.
12. Current fiscal policy regarding admissions and discharges encourages behavioral health providers to use state hospital beds. Because state hospital care is "free" to the communities, fiscal incentives are misaligned with the goal of a strong, consistent, and adequately sized community-oriented system.
13. The continuum of care is also limited by a lack of consistent funding for services across the life span and the fact that the Code only requires the CSBs to provide three services: emergency services; discharge planning; and case management when funds allow. This permits significant variations in local priorities, capacities, and funding. An additional factor may be the insufficient coordination of service provider groups.
14. State hospital overall utilization rates have steadily increased in the year following the civil commitment reforms, moving from 88 percent to 90 percent within 14 months.

II. Current Context

The Supreme Court's landmark decision in *Olmstead v. L.C.* and the Americans with Disabilities Act (ADA) of 1990 require that individuals are served in the most integrated setting with the goal of people with disabilities living, working and thriving alongside individuals without disabilities.

The result of these actions across the nation has been a renewed emphasis on home and community-based care, prompting many states to transition their geropsychiatric care to the community. Additionally, the U.S. Centers for Medicare & Medicaid Services (CMS), which finances a large percentage of geropsychiatric care, has increasingly emphasized community-based care over care that is provided in institutional settings.

This paradigm shift reflects not only the legal imperative to comply with both *Olmstead* and the ADA but also a corresponding national movement away from institutional treatment settings to a system of smaller, more integrated, community based services and supports that promotes greater system efficiency and financial sustainability.

In 2012, the U.S. Department of Justice (DOJ) found that Virginia had failed to provide integrated living opportunities for individuals with intellectual and developmental disabilities. The resulting Settlement Agreement with the Commonwealth requires that Virginia offer services to individuals with intellectual and developmental disabilities in the least restrictive and most integrated setting appropriate to meet their needs, and that Virginia meet the goals of community integration, self-determination, and quality services.

DBHDS believes that the legacy of the Olmstead decision, the ADA, and the requirements of the DOJ Settlement Agreement will reverberate throughout the services system. As a result, DBHDS has focused on developing a full array of individualized, varied and robust community treatment options for individuals across disabilities, across the lifespan and across the Commonwealth.

Impact of Involuntary Commitment Reforms

During the 2014 legislative session, the General Assembly enacted several key reforms to strengthen the safety net for individuals experiencing psychiatric crises. These statutory changes have had a highly positive impact in securing access to emergency services for individuals with behavioral health disorders and their families. In fact, since the 2014 reforms have been implemented, no individual meeting the criteria for a temporary detention order (TDO) has gone without a hospital bed for crisis treatment. While this represents a major achievement in behavioral health policy, these changes have significantly increased demands on the behavioral health system.

In particular, SB 260 (Chapter 691, 2014 Acts of Assembly), related to emergency custody and temporary detention of adults and minors experiencing behavioral health emergencies, was designed to guarantee that everyone who needed temporary detention was able to access this care. Salient features of SB 260 are described below:

- **Eight hour maximum period of emergency custody:** The maximum period of the emergency custody order (ECO) was doubled, from four to eight hours. The two-hour extension was eliminated.
- **Law officer notification:** SB 260 specified that a law enforcement officer who executes an ECO must notify the appropriate community services board (CSB) of the execution of the emergency custody order “as soon as practicable” after execution.
- **State hospitals are “last resort” for temporary detention:** State hospitals are now required to admit any individual for temporary detention who is not admitted to an alternative treatment facility, such as a community private psychiatric hospital, prior to the expiration of the new eight hour emergency custody period. The state hospital may not refuse such an admission. Other provisions in these sections require the CSB to notify the state hospital when an ECO is executed, and to contact the state hospital again following their examination of the individual.
- **72-hour maximum period of temporary detention:** The maximum period of temporary detention prior to a hearing was extended from 48 hours to 72 hours.
- **Acute Psychiatric Bed Registry:** DBHDS is required to operate an acute psychiatric bed registry to provide real-time information on bed availability so that CSBs, inpatient psychiatric facilities, public and private residential crisis stabilization units, and health care providers working in an emergency

room of a hospital or clinic or other facility rendering emergency medical care can access the bed registry and this information.

As a result of these changes, admissions to state hospitals increased 19 percent overall and TDO admissions increased by 38.9 percent during the first year of implementation. Some facilities demonstrated a much higher increase. For example, Catawba experienced an 87 percent increase in TDO admissions while Eastern State Hospital (ESH) saw more than a 100 percent increase in the number of admissions and a 350 percent increase in TDO admissions. Further, statewide utilization (i.e., the percentage of beds occupied by an individual receiving services), of state hospitals steadily increased, moving from 88 percent to 90 percent within 14 months. The 19 percent increase in total admissions, when compared to the 2 percent increase overall state hospital bed utilization, reflect the dramatic increase in flow through (e.g., significantly shorter lengths of stays and rapid discharges) which the hospitals have achieved and sustained to accommodate these changes. Adding more complexity to the situation, this population can be difficult to discharge, especially if the requisite community supports are not available.

Extraordinary Barriers to Discharge List (EBLs)

Another significant pressure on Virginia's behavioral health hospitals is the high number of individuals on the Extraordinary Barriers to Discharge List (EBL). The EBLs are maintained by each facility and reflect the number of individuals who are clinically ready for discharge, but for whom there is a non-clinical impediment to their discharge. The EBLs currently indicate that approximately 10 percent of the individuals in state hospital at any given time would be more appropriately treated in a community-based setting, but cannot be released because resources are insufficient to support their care in the community.

Nationally, states that are struggling with an overreliance on state bed use report housing as the barrier to successful transition to community services. In Virginia as well, the most common barrier preventing transition to the community is the lack of affordable housing including supervised residential services and permanent supported housing. CSBs also cite lack of guardianship and its associated costs as significant barriers to discharge. While some regions are using Discharge Assistance Program (DAP) funds to mitigate this shortage, it is insufficient to address the requisite community needs to eliminate the EBLs.

Reclassification of Hancock Geriatric Treatment Center

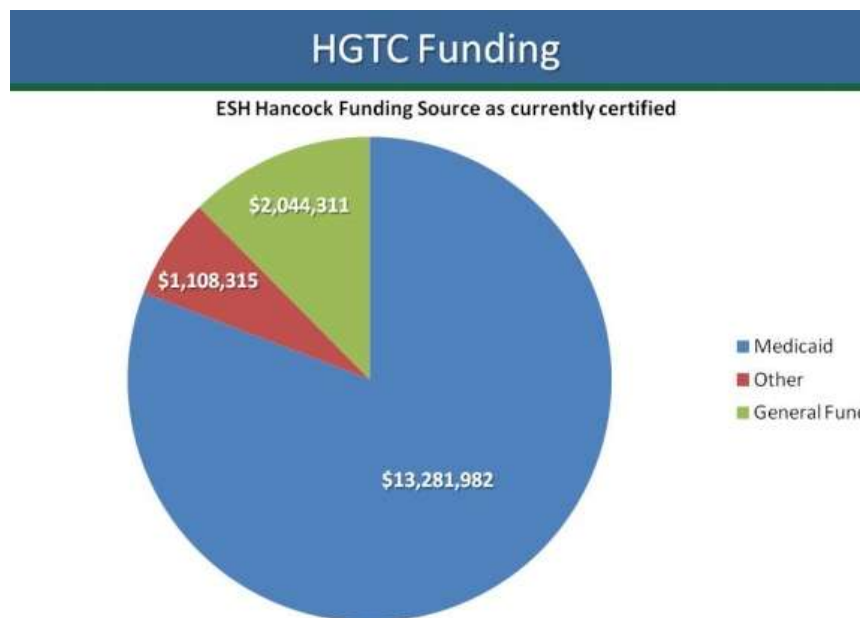
Hancock Geriatric Treatment Center (HGTC), one of three dedicated state-operated geropsychiatric facilities in Virginia, consists of four 20 bed units located within Eastern State Hospital. Hancock has been certified as a nursing facility since 1970. In February 2015, a routine survey by CMS resulted in the unexpected determination by CMS that Hancock no longer meets the criteria of a nursing facility.

This determination was based on the fact that most of the individuals were on an involuntary status and virtually all had a mental health diagnosis. In addition, CMS currently requires that nursing facilities allow residents to possess a variety of items (e.g., razors that pose the risk of harm in this environment) and for residents to have guests and come and go as they wish. Such requirements are inconsistent with obligations to keep individuals with high-risk behaviors under involuntary commitment safe at Hancock.

Hancock remains focused on providing effective treatment for a) individuals with serious and persistent mental illness (SPMI) who are at risk of harm to themselves or others *and* b) individuals with dementia who are unable to maintain necessary self-care or protect themselves from harm. Under this new paradigm and in order to meet certification requirements as a nursing facility, Hancock would be required to make significant changes to its clinical care and operational procedures that would be inconsistent with the needs of the current population, making substantial compliance infeasible. Further, after careful review and consultation with CMS and national experts, DBHDS determined that there is no current CMS certification option that accurately reflects the care provided or clinical needs of the patient population at Hancock.

As Hancock’s primary source of funding is Medicaid, this determination by CMS has a considerable fiscal impact on the facility’s finances.

Figure 1. Hancock Geriatric Treatment Center (HGTC) Funding



The loss of funding for new admissions, effective May 26, 2015, was predicted to result in a loss of \$546,123. In an attempt to mitigate this impact, DBHDS suspended new admissions on this date with the exception of those related to the “last resort” legislation. Additionally, termination of the DBHDS provider agreement would result in a loss of approximately \$10 million in Medicaid funds and \$3.3 million in other state funds, for a total annual loss in FY 2016 of \$13.3 million.

All of these above issues combined paint a compelling picture of what is happening throughout Virginia’s behavioral health system. This snapshot reveals two important realities:

1. Recent emergency services legislation has been very successful in strengthening the safety net. The consequent increase in admissions has, however, posed operational challenges with respect to waiting lists and more crowded units. Such impacts have essentially shifted the overall system in the direction of more institutionalization.
2. The various components of our system are profoundly interdependent. Changes in one area have far-reaching impacts in other areas. For example, increases in TDOs results in increased numbers on the

EBLs and wait lists for forensic services. The bed of last resort legislation, while an extremely important piece in securing the safety net, incentivizes care away from private facilities, and into state hospitals, further increasing the imbalance of our system towards crisis services.

III. Geriatric Trends and Optional Care Models for the Future of Services for Older Adults

On a national scale, the main theme of the past 50 years in behavioral health systems has been the shift from long-stay public hospitals to acute care provided in private settings. Given the variety of alternative funding strategies available, most states have reduced funding for state hospital beds and reinvested those resources in accessible community-based services⁵ According to the National Association of State Mental Health Program Directors, half of the states no longer provide state hospital beds for geriatric individuals. These states have developed an array of community based services for older adults, including specialized crisis intervention and stabilization services to care for individuals in psychiatric crisis rather than treating them in state operated hospitals.

As other states have shifted funding from hospital settings into community based services, the focus has been on designing a system of supports and services that enables seniors to age in place to the fullest extent possible for as long as possible. This necessitates the need for services in the individuals' homes such as in home assessments, respite care, and family caregiver education on working with and communicating with individuals with dementia. It also involves local crisis options that include good medical screenings for commonly occurring medical conditions such as urinary tract infections and other conditions that impact cognition, orientation, and behavior. As individuals need greater care, partnerships with memory care units of assisted living facilities and nursing home placements must be available. Providers of care must have access to expert consultation to adequately serve those with psychiatric needs. Mobile support teams can assist those assisted living facilities, nursing homes, and loved ones with addressing emerging psychiatric issues without removing an individual from a familiar setting and causing further disruption and confusion.

In Virginia, optional models of care would be built upon a thorough assessment of the complex and interrelated medical, nursing, psychiatric, and behavioral needs of the individuals currently being served in the geriatric units of the state hospitals. These assessments would provide the blueprint for the community-based services infrastructure and the array of services that would need to be in place prior to the transition of those individuals currently in state hospital geriatric units into the community. Without such a system of care in place prior to community placement, these vulnerable individuals would be at significant risk of receiving less than adequate services accompanied by an increased risk of both medical and psychiatric re-hospitalization. An effective and comprehensive system of care for older Virginians would be founded on evidenced based practices⁶ and include the following services, policy, and funding priorities:

- strategies for behavioral health wellness that seek to improve the quality of life for older adults;
- outreach services, including community education and training, prevention and early intervention efforts, and screening and early identification in the individual's home community;

⁵Sharstein, S.S. & Dickerson, F.B. (2009). Hospital Psychiatry for the Twenty-First Century. *Health Affairs*, 28, no.3, 685-688, Retrieved October 21, 2015 from <http://content.healthaffairs.org/content/28/3/685.long>

⁶ Adapted from Health America (2015). Position Statement 35: Aging Well. 11/9/2015/15 from www.mentalhealthamerica.net/positions/aging-well

- multidisciplinary, geriatric behavioral health treatment teams who can provide expert consultation and support to community-based providers;
- an array of living options which include living in one's own home, living with family, sponsored homes, and assisted living facilities and nursing homes with specialty care units;
- integrated, comprehensive services including primary care, specialty care, case management, peer and consumer-run services, caregiver supports, crisis services, inpatient psychiatric care, and long-term care; and
- policy and funding changes focused on the development of a culturally competent workforce capable of providing community based, multi-disciplinary, and integrated services for an aging population.

Nationally, the utilization of managed care within Medicaid has provided an additional opportunity for states to develop the comprehensive systems of care described above and achieve cost savings through coordination of care for older adults. Best practices and compliance with the Americans with Disability Act and the *Olmstead* decision have shaped the provision of acute psychiatric care across the lifespan.

Developments in state behavioral health safety net systems include a movement to enhance services in a community-based continuum of care, the sub-specialization of hospital psychiatry practice among private providers, an increasing emphasis on patient choice, supporting older adults to age in the community, and a commitment that individuals can and do live a life of recovery from serious mental illness in the community.⁷ The future of state behavioral health safety net systems for older adults (individuals aged 60 and above) requires a substantial realignment of priorities and funding to support the clinical needs of older adults within the community.

III. Analysis

Operational, Maintenance and Capital Costs at Piedmont Geriatric Hospital and Catawba

Recent actions by the U.S. Centers for Medicare & Medicaid Services (CMS) have substantially impacted Medicaid and Medicare reimbursement for DBHDS. Prior to January 2015, PGH and Catawba Hospital were certified by Medicare as Acute Care Hospitals and by Medicaid as Acute Psychiatric Hospitals. Accordingly, DBHDS received both Medicaid and Medicare revenues under this dual designation. In a letter dated March 10, 2014, the U.S. Health and Human Services Office of the Inspector General took issue with the dual certification, based on an audit covering January 2006 through December 2010. The HHS Office of Inspector General recommends:

Piedmont (PGH)

- DMAS refund \$36.9 million to CMS for Medicaid payments outside the regulatory gap period.
- DMAS work with CMS to determine if an additional \$2.5 million should be refunded for Medicaid payments during the regulatory gap period.

Catawba

- DMAS refund \$17.4 million to CMS for Medicaid payments outside the regulatory gap period.
- DMAS work with CMS to determine if an additional \$1.2 million should be refunded for Medicaid payments during the regulatory gap period.

⁷ Sharstein, S.S. & Dickerson, F.B. (2009). Hospital Psychiatry, 28, no.3, 685-688

To date, CMS has not sought the payback of the funds noted above. Although DBHDS voluntarily relinquished its Medicare certification for both hospitals effective December 31, 2014, it continues to bill Medicaid for geriatric services at PGH and Catawba as long-term care psychiatric facilities as it has in previous years. Therefore, the Commonwealth's potential payback amount increases daily.

To address findings from the HHS Office of Inspector General, the 2015 Appropriation Act directed each facility to seek Medicaid nursing facility certification similar to the Hancock Geriatric Treatment Center (HGTC) at Eastern State Hospital. Both facilities started the process with the Virginia Department of Health (VDH) in February 2015. Chapter 665 appropriated \$9.0 million in additional general fund support in FY 2016 to offset the reduction in Medicaid and Medicare revenue that was projected as the result of both hospitals becoming nursing facilities.

However, in June 2015, correspondence with the VDH regarding Catawba Hospital's current policies and procedures indicated that the facility did not demonstrate nursing home functionality and thus could not be certified as a nursing home. Anticipating the same finding for PGH, DBHDS withdrew both certification requests.

On February 26, 2015, CMS conducted a routine survey at HGTC. Based on the results of this survey, CMS deemed that HGTC was not in sufficient compliance with the definition of a nursing facility as identified in the Code of Federal Regulations. DBHDS appealed this decision but the appeal was denied. Effective, with dates of service after September 25, 2015, DBHDS is no longer receiving Medicaid reimbursement for HGTC residents. Because the treatment and operation at Hancock is similar to both PGH and Catawba geriatric beds, DBHDS assumes that eventually CMS will survey PGH and CH and issue the same findings.

Capital Considerations

Of the eight adult mental health hospitals operated by DBHDS, Catawba Hospital, Central State Hospital and PGH are the oldest and have a number of structural deficiencies. The remaining five facilities are less than 40 years old or have undergone major renovations/replacements of their buildings within the last 25 years excepting. Appendix A provides an overview of the geographical areas and populations served by each state hospital, capacity, trends in admissions and bed utilization, and a description of the physical plant.

The physical layout of the main hospital buildings at PGH and Catawba are very similar: both are laid out with long main corridors flanked by patient rooms, with common toilet rooms and central bathing facilities. The patient rooms have large windows to allow for light and fresh air. A relatively small dayroom is provided on the wing.

State facilities have a greater role in crisis management and treatment after the passing of the "last resort legislation" in 2014. As a result, the need for state inpatient beds has increased and DBHDS is also requesting \$22.3 million to add one more wing (56 beds) onto the new Western State Hospital (WSH). The facility infrastructure was designed and constructed to support an additional patient care unit. A copy of the capital budget request for this proposed project is attached. The construction of this addition is integral if a decision is made to close Catawba.

Capital Synopsis – Catawba Hospital

Catawba has had no major renovations since before its acceptance into the mental health system in 1972. The overall condition of the facility has been assessed and it has been given a Facility Condition Index (FCI) rating of 0.61. (The FCI is a relative indicator of condition that equals the cost of current maintenance, repair and replacement deficiencies divided by the replacement value of the facility. An FCI greater than 0.30 is considered “critical.”)

The requirement to meet critical deferred maintenance needs has been calculated to exceed \$25 million. All building systems must be replaced and hanging hazards eliminated. The scope of needed work includes the following:

- HVAC – equipment is beyond its useful life; there are insufficient outside air and air changes, and control systems are antiquated, inoperable and inefficient.
- Electrical systems – inadequate and dated distributed power within the building; inefficient lighting; transformers that have exceeded their useful life; and a transformer vault that does not meet the National Electrical Safety Code.
- Replace high voltage distribution system throughout the campus, from the meter to the buildings. This includes both overhead and underground conductors, campus wide.
- Replace plumbing systems to meet current codes, including replacement of “gang” toilets with private or semi-private toilets to comply with privacy and safety standards.
- Renovations to comply with ADA standards, including elevator renovations.
- Replace windows in patient areas with impact resistant units.
- Renovate interior finishes to include flooring, walls and ceilings.

DBHDS submitted a capital request seeking \$61 million for renovations/improvements needed for the continued use of the facility. The capital request is attached in Appendix E.

Capital Synopsis – Piedmont Geriatric Hospital (PGH)

PGH came into the mental health system in 1967. Its basic layout, patient rooms off a central corridor, is unchanged. Only limited renovations have been made and the building has a Facility Condition Index (FCI) rating of 0.45.

The scope of needed work includes the following:

- Building renovations to comply with ADA, including elevators.
- Replacement of HVAC, fire alarm and electrical wiring and panels, all of which are beyond their useful life.
- Removal of hanging hazards.
- Interior renovations to improve operating efficiency, including relocation of offices to allow social workers and therapists easier access to patients; more accessible dental and medical suites; and improved patient access to programs such as recreational, vocational and music therapy.
- Replace plumbing systems to meet current codes, including replacement of common bathroom areas with private or semi-private bathrooms to comply with privacy and safety standards.

PGH’s lower FCI score compared to Catawba’s is due in part to work already completed or underway at the PGH. Windows in the patient living areas have been replaced with impact resistant units and

hanging hazards in patient rooms have been removed. A capital project for replacement of windows in other areas of the building is in the detailed planning stage, with construction anticipated to start within 18 months. Recent installation of a new cooling tower and rooftop units that introduce outside air into the hospital are expected to defer replacement of HVAC systems for approximately five years. The requirement to meet critical deferred maintenance needs has been calculated to exceed \$32 million. DBHDS submitted a capital request seeking \$43.1 million for renovations/improvements needed for the continued use of the hospital. The capital request is attached in Appendix E.

Decisions about the future of PGH and Catawba must reflect the reality that changes in capacity or services at any one hospital will reverberate through the behavioral health services system.

DBHDS has identified two potential options for consideration of the future of the geriatric services system. Section VI discusses two options for keeping the facilities open or closing them. Both options will require new general fund support and assume that any unneeded general fund match is transferred back to DBHDS from DMAS.

IV. Options Related to Piedmont Geriatric and Catawba Hospitals

OPTION 1: Keep Catawba Hospital and PGH open.

OPTION 2: Close Catawba this biennium, close PGH next biennium and construct a 56-bed wing at Western State Hospital.

Impact

Table 1 on the following page provides detail of the general fund and capital costs for these two options.

Chapter 665 assumed the two facilities would be certified as nursing homes and general fund dollars were appropriated to offset revenue losses. The \$3.6 million of the \$9.0 million provided would no longer be needed, if DBHDS continues to bill as currently certified. This however risks increasing the potential payback to CMS.

Table 1. General Fund and Capital Costs for Options 1 and 2

OPTIONS	Capital Costs	FY 2016 GF Cost	FY 2017 GF Cost	FY 2018 GF Cost	Three Year Cost	FY 2019 GF Cost	FY 2020 GF Cost	FY 2021 GF Cost (Annual)	FY 2021 (ANNUAL) GF Appropriation
OPTION 1: Keep Both Catawba and PGH Open, Continue Billing	\$94,050,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$33,874,148
OPTION 2: Close Both Catawba and PGH	\$22,311,000	\$0	\$14,779,271	\$20,331,223	\$34,029,764	\$23,636,066	\$9,793,942	\$6,930,425	\$37,489,105

Table 2 below shows the derivation of the Option 2 funding requirements associated with closing both Catawba and PGH.

Table 2. Option Two Funding Requirements

PIEDMONT + CATAWBA	FY 17	FY 18	FY 19	FY 20	FY 21
OPERATING + WTA	\$48,704,841	\$41,327,394	\$19,866,834	\$4,312,768	\$1,658,176
RETENTION BONUS	\$1,500,000	\$3,000,000	\$1,500,000	\$0	\$0
ENERGY PERFORMANCE CONTRACT	\$167,000	\$167,000	\$1,032,165	\$167,000	\$167,000
TOTAL	\$50,476,384	\$44,807,783	\$22,712,388	\$4,688,694	\$1,825,176
NON IPT	FY 17	FY 18	FY 19	FY 20	FY 21
Operational Expenditures	\$50,476,384	\$44,807,783	\$22,712,388	\$4,688,694	\$1,825,176
Projected Medicaid Revenue	\$25,760,232	\$21,596,028	\$6,428,904	\$0	\$0
Other Revenue	\$2,734,567	\$2,044,266	\$967,119	\$0	\$0
GF at PIEDMONT + CATAWBA	\$15,508,314	\$15,508,314	\$15,508,314	\$15,508,314	\$15,508,313
GF at DMAS	\$2,170,251	\$4,252,352	\$11,835,915	\$15,050,366	\$15,050,367
GF Savings/Need	\$4,303,021	\$1,406,823	-\$12,027,862	-\$25,869,986	-\$28,733,504
Community Supports	FY 17	FY 18	FY 19	FY 20	FY 21
Geropsychiatric Team (5 teams)	\$1,507,500	\$2,638,125	\$3,768,750	\$3,768,750	\$3,768,751
Case Managers (27 case managers)	\$660,000	\$1,140,000	\$1,620,000	\$1,620,000	\$1,620,000
Funding For Guardians	\$258,750	\$429,525	\$776,250	\$776,250	\$776,250
Provider Development/ Training	\$250,000	\$750,000	\$750,000	\$750,000	\$750,000
LIPOS	\$1,000,000	\$2,490,000	\$4,500,000	\$4,500,000	\$4,500,000
DAP	\$4,000,000	\$5,500,000	\$10,500,000	\$10,500,000	\$10,500,000
Day Support Rehab Services	\$800,000	\$1,328,000	\$2,400,000	\$2,400,000	\$2,400,000
Program Development	\$2,000,000	\$2,820,000	\$4,500,000	\$4,500,000	\$4,500,000
Total Community	\$10,476,250	\$17,095,650	\$28,815,000	\$28,815,000	\$28,815,001
WSH Expansion Capital Project	FY 17	FY 18	FY 19	FY 20	FY 21
BOND	\$22,311,000				
WSH Operations and Maintenance	FY 17	FY 18	FY 19	FY 20	FY 21
Operations and Maintenance		\$ 1,828,750	\$ 7,315,000	\$ 7,315,000	\$ 7,315,000
Positions			102	102	102
Revenue Associated with 56 Beds			\$ 466,072	\$ 466,072	\$ 466,072
TOTAL GF REQUIRED	\$14,779,271	\$20,331,223	\$23,636,066	\$9,327,870	\$6,930,425

More detailed information about Options 1 and 2 are included below:

OPTION 1: Keep both Catawba Hospital and PGH open.

One option for the future of PGH and Catawba Hospitals is keeping both facilities open, and to keep billing Medicaid as the hospital are currently certified. Both hospitals would continue to receive CMS Disproportionate Share Hospital (DSH) payments. Continued billing of Medicaid under current certification and acceptance of DSH payments increases the state's potential payback to the federal government.

While there are some immediate advantages to pursuing this plan, there could be significant long-term fiscal and legal consequences. This option is counter to national trends of integration and community-based care and, based on the current trajectory and activities of both CMS and the U.S. DOJ, this option risks action similar to Virginia's experience with the current DOJ Settlement Agreement.

OPTION 2: Close Catawba this biennium, close PGH next biennium and construct a 56-bed wing at Western State Hospital.

The strengths of this option include the declarative shift to community based services, the demonstrable shift of funds from facility to community use, adopting an approach consistent with the expectations of CMS and DOJ with respect to the Olmstead decision and ADA provisions, and avoiding the large capital expenditures pending for both Catawba and PGH.

Closing Catawba and PGH will require a three year planning and implementation process to address financial and operational considerations and develop the necessary community infrastructure to appropriately and responsibly meet the needs of the patient populations of each facility.

Should both facilities close it will require funding to continue operations as the facilities are downsized while simultaneously building community supports for the populations to be discharged. This "bridge" funding will allow for the safe transition of individuals from the hospitals to the community. However for several of the transition years it will require funding two systems, resulting in higher annual costs. By 2019 both facilities will be closed and the operational costs for the 56 beds at WSH and the community supports will be required. To fully implement this option will require \$6.9 million annually of new general fund dollars plus \$11 million dollars in unused general fund match to be transferred from DMAS to DBHDS, and existing general fund dollars already allocated to PGH and Catawba.

In addition, this option would require DBHDS to pay off or transfer the cost of energy performance contracts for Catawba and PGH at the time of the hospital closures. An Energy Performance Contract (EPC) is paid for through a bank loan which is secured through the Virginia Department of the Treasury and paid from the savings accrued to the facility through installation of higher efficiency mechanical and electrical systems (lighting, water supply, HVAC, controls, insulation, etc.). Typically these loans have a term of 15 years. Each facility pays the annual loan amount from the operating budget of the facility. Closing a facility eliminates the operating budget and requires that the remainder of the loan be paid in full or transferred to another operating entity.

- In the case of Catawba Hospital, there is no other entity to which the loan payment can be transferred, thus, it must be paid in full at closure.

- In the case of PGH, the majority of the Energy Performance Contract involved improvements to the central boiler plant, which serves the campus where both PGH and the Virginia Center for Behavioral Rehabilitation (VCBR) are located. Closing PGH will mean that the operation of the boiler plant will be transferred to VCBR. Payments for the Energy Performance Contracts will also be transferred to VCBR until the loan is retired.

By FY 2019, the remaining balance on the energy performance contract will be \$865,165. This amount is included in the FY 2019 cost projection table provided above. As PGH and VCBR share capital infrastructure, this option would include an addition of \$167,000 to the budget to pay for the energy performance contract when PGH closes. This option also assumes a transfer of \$1.6 million from PGH to VCBR to cover the cost of shared services on the Burkeville campus.

In order to allow ample time for appropriate patient care planning and placements, Catawba patients would begin to be discharged in the 4th quarter of FY 2017, with all patients discharged by mid FY 2018. PGH patients would begin being discharged in the fourth quarter of FY 2018 with all patients discharged by end of FY 2019. This option assumes that the 56-bed expansion at WSH will be approved by the 2016 General Assembly and completed in the second half of FY 2018.

Staff would be brought online prior to the transfer of Catawba residents in the last two quarters of FY 2018, depending on project progress and updated completion date. The expansion at WSH would provide 56 total beds that are certified as intensive psychiatric hospital (IPH). Twenty-eight of these beds would be considered for the geriatric population and 28 for adult psychiatric care.

The remaining residents who do not meet the criteria and level of need for inpatient psychiatric care would be transitioned into the community. This would require \$28.8 million in general fund support for community options in the regions served by Catawba and PGH. This funding would come from general fund resources currently allocated for existing facilities, Medicaid match at DMS, and new funds being requested. Community supports include geropsychiatric teams, case managers, Local Inpatient Purchase of Services (LIPOS), Discharge Assistance Planning (DAP), day support rehab services, and program development. Three full-time restricted positions at DBHDS Central Office would need to be hired to help with the closure of Catawba and PGH.

Cost Model Assumptions (for both options)

It is important to note several cost models of assumptions that could bear significant impact on the decision that is made. Neither of the options takes into consideration any future funding increases associated with salary and benefit increases at the state and local level, nor are any inflationary increases built in. Six months of personnel costs were used to estimate Workforce Transition Act (WTA) amounts for employees laid off. All employees were assumed to be laid off, except for some staff at PGH who will be required to continue support services at VCBR.

DBHDS based projected facility savings on a quarterly reduction in census and corresponding beds evenly spread across quarters until closure, with a six month lag between discharges and realized savings as staffing reductions and associated savings lag the census reduction. DBHDS methodology is based, in part, on its experiences in the closure of other state facilities. As beds are closed, community supports must be built to safely transfer individuals to the community when facilities close. Therefore community supports must be developed and funded before discharges can occur. This results in a period

of time in which dual systems must be funded. Revenue estimates are based on historic amounts and assume a continued mix of population and ability to pay.

Facility operating costs used FY 2016 budget assumptions for both facilities. This does not include central account actions, which will increase the operational costs due to salary increases and rate changes. Additionally, state facilities will continue to have increases in costs due to benefit rate changes and potential salary increases.

Workforce Impact

Closure of PGH and Catawba will impact the workforce in each community, and DBHDS understands that planning for such facility transitions must incorporate recognition of the economic impact closures could have on individuals, families, and communities. DBHDS has significant experience addressing these problems with the closing of our training centers. DBHDS has developed and implemented a comprehensive outplacement program for employees displaced by the closures, which has included partnerships with the Virginia Community College System, Rapid Response Team, DHRM, and other state agencies (VEC, VRS, EAP, etc.) A progressive retention bonus plan has been implemented to retain critical staff until closure and was included in the cost model above. Services have included establishing career centers as an informational resource and offering classes in resume writing, interviewing skills, basic computer skills, and stress management; holding job fairs with public and private organizations; conducting employee forums and informational sessions on services provided to dislocated workers; employee newsletters to enhance career development opportunities; and human resources offices expanding hours of operation in order to effectively meet the needs of impacted staff on all shifts. DBHDS would use the same practices for the closure of Catawba and PGH. Another opportunity that is under review is the transition of facility employees to community providers prior to closure of the facility (transition employee partnership).

PGH Employee Potential Options

The planned closing of PGH closely coincides with the completion of the expansion of the VCBR. Although staffing requirements for the expanded VCBR are still being reviewed, it is likely that the additional jobs will more than offset the number of jobs lost from the closing of PGH. Most PGH clinical staff resides in the Chesterfield area. Many can likely obtain similar positions in the Richmond area or could possibly fill openings at Hiram Davis Medical Center or Central State Hospital in Petersburg. Moreover, many PGH employees are long-term employees and will have the advantage of enhanced retirement.

Catawba Employee Potential Options

Healthcare is the largest industry employer in the Roanoke Valley (20 percent of all jobs are healthcare related) with three of the top four largest employers being the VA Medical Center, Carilion Health System and HCA Lewis-Gale System. The list of largest employers also includes two long term care centers based in the Valley – Friendship Manor/Retirement Center and Richfield Nursing Center. Additionally, it is not uncommon to be competing with employment advertisements from West Virginia, Central Virginia and even the border of North Carolina, almost two hours south of Catawba's location. In short, there are many private sector options for staff transitions.

IV. CONCLUSION

Virginia's current range of geriatric services, including PGH and Catawba Hospitals, present enormous challenges for DBHDS and the Commonwealth. However, it also represents a great opportunity for DBHDS, the legislature, providers and stakeholders to work together to further develop community capacity and competency across the Commonwealth, and transition our geropsychiatric services to a home and community based model of care. DBHDS believes that this report can be a tool for creating a 21st century behavioral health system that is value-driven, outcome-oriented, and promotes wellness across the Commonwealth. The recommendations offered for consideration will move Virginia to a high quality, legally responsible, and economically sustainable model of care.

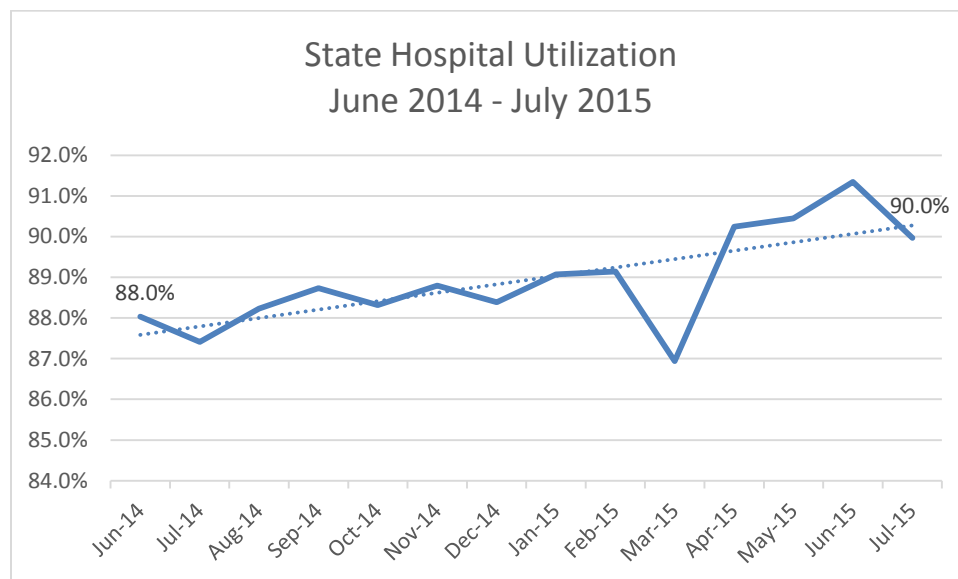
Appendix A: Overview of Virginia State Adult Mental Health Hospitals

DBHDS operates eight state mental health hospitals for adults: Catawba Hospital near Salem, Central State Hospital in Petersburg, Eastern State Hospital in Williamsburg, Piedmont Geriatric Hospital in Burkeville, Northern Virginia Mental Health Institute in Falls Church, Southern Virginia Mental Health Institute in Danville, Southwestern Virginia Mental Health Institute in Marion, and Western State Hospital in Staunton. State hospitals provide highly structured and intensive inpatient services, including psychiatric, psychological, psychosocial rehabilitation, nursing, support, and ancillary services, and specialized programs for older adults, children and adolescents, and individuals with a forensic status.

This section provides an overview of the geographical areas and populations served by each hospital, capacity, trends in admissions and bed utilization, and a description of the physical plant. When examining the utilization and admission graphs it is important to bear in mind that there was an increase in admissions in the second half of FY 2014 during the discussions of the “last resort” legislation and internal adjustments within DBHDS, followed by a further increase once the legislation was passed. The data also reflect an increase in forensic admissions even though the “last resort” legislation did not apply to individuals in jail who needed inpatient treatment or evaluation.

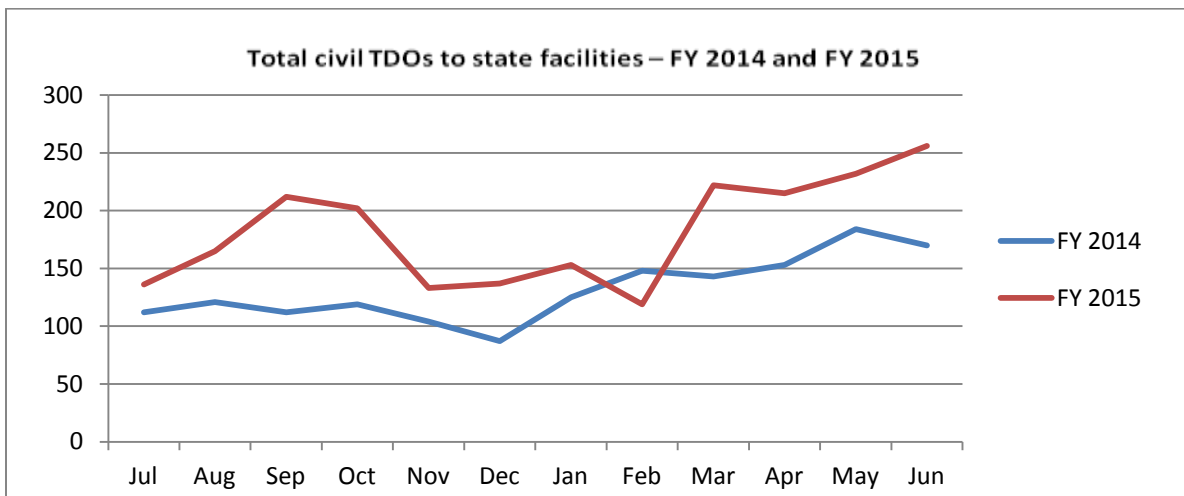
Following the implementation of the “last resort” legislation contained in SB 260 from the 2014 Acts of Assembly, admissions to state hospitals under a TDO as well as overall admissions have increased significantly, leading to an overall uptick in state hospital bed utilization. Shown in Figure 1, statewide utilization of inpatient treatment beds steadily increased in the year following these statutory reforms, moving from 88 percent to 90 percent within 14 months. The 19% increase in total admissions, when compared to the 2% increase overall state hospital bed utilization, reflect the dramatic increase in flow through (e.g., significantly shorter lengths of stays and rapid discharges) which the hospitals have achieved and sustained to accommodate these changes.

Figure 1. State Hospital Utilization – June 2014 – July 2015



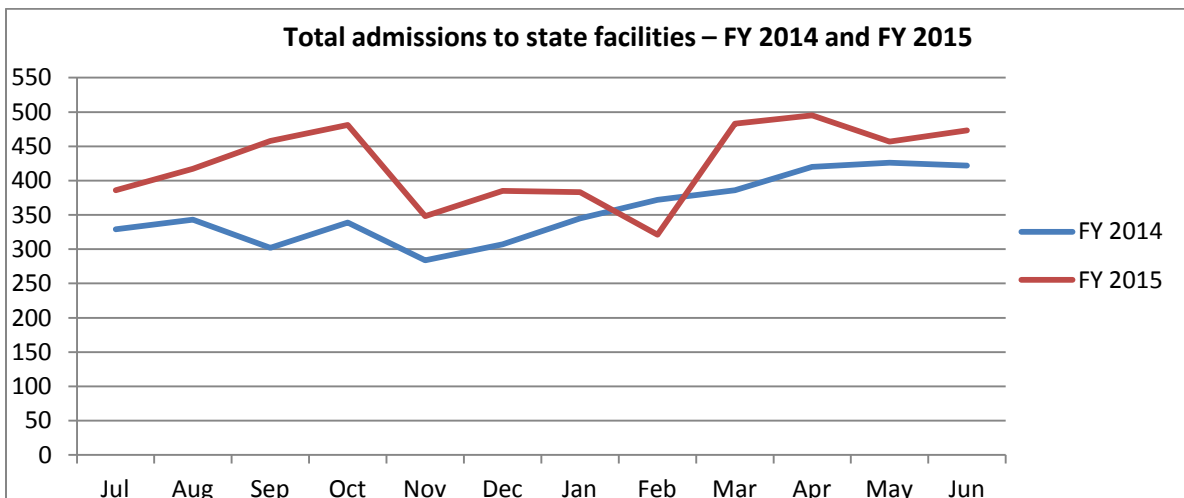
Shown in Figure 2, admissions under a TDO to state hospitals has grown by 38.9 percent in FY 2015 when compared with admissions in FY 2014.

Figure 2. Total Civil TDOs to State Facilities – FY 2014 and FY 2015



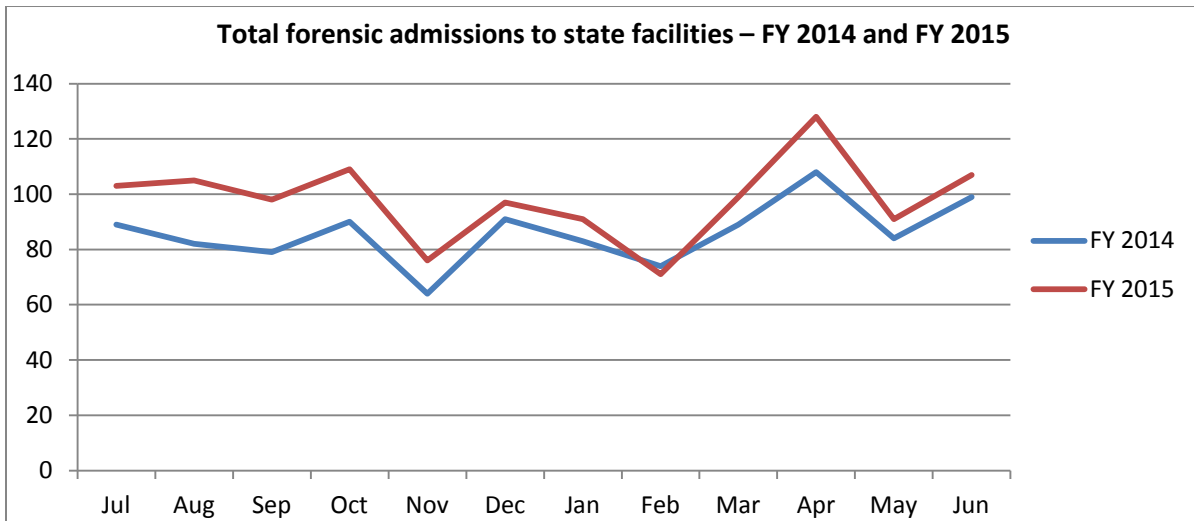
Shown in Figure 3, admissions to state hospitals overall has grown by 19 percent when compared with admissions overall in FY 2014.

Figure 3. Total Admissions to State Facilities – FY 2014 and FY 2015



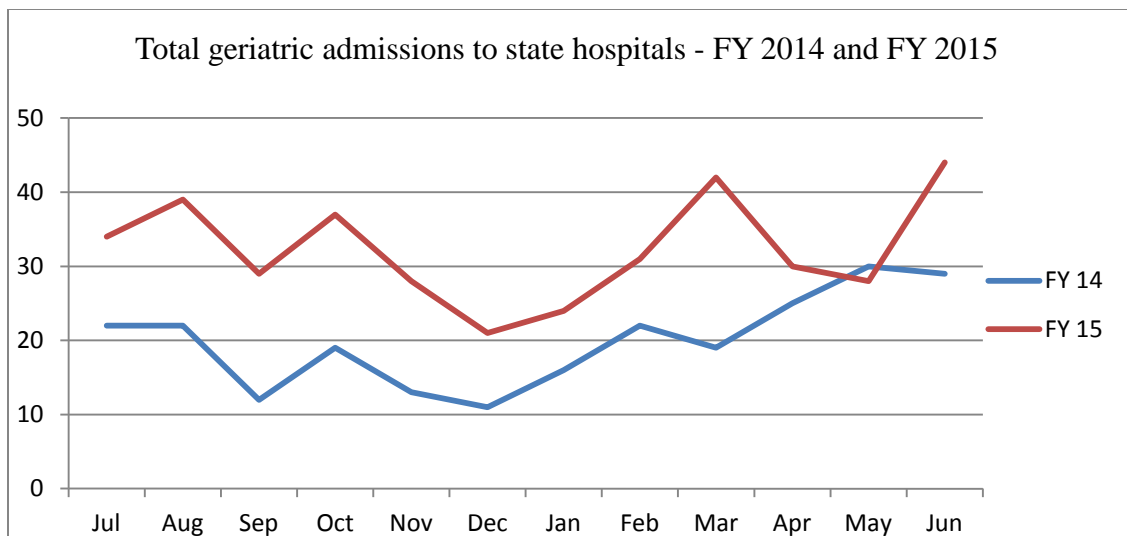
Shown in Figure 4, admissions under a forensic status to state hospitals overall has grown by 13.5 percent when compared with admissions under a forensic status in FY 2014.

Figure 4. Total forensic admissions to state facilities – FY 2014 and FY 2015



As shown below in Figure 5, geriatric admissions to state hospitals has grown by 61 percent in FY 2015 when compared with the number of admissions in FY 2014.

Figure 5. Total Geriatric Admissions to State Hospitals – FY 2014 and FY 2015



Catawba Hospital

Catawba Hospital, located in Roanoke County, serves forensically and civilly committed adults and geriatric individuals needing behavioral health care. The first priority for the facility is to help individuals regain and maintain their highest level of mental and physical functioning, with the ultimate goal of returning to community living. Catawba primarily provides treatment to adults in Partnership Planning Region VII, which includes one CSB, Blue Ridge Behavioral Health. Catawba Hospital serves geriatric patients from Alleghany-Highlands CSB, Blue Ridge Behavioral Healthcare, Horizon Behavioral

Health, Harrisonburg-Rockingham CSB, New River Valley CSB, Northwestern CSB, Piedmont CSB, Rockbridge Area CSB, and Valley CSB.

Capacity and Utilization Snapshot

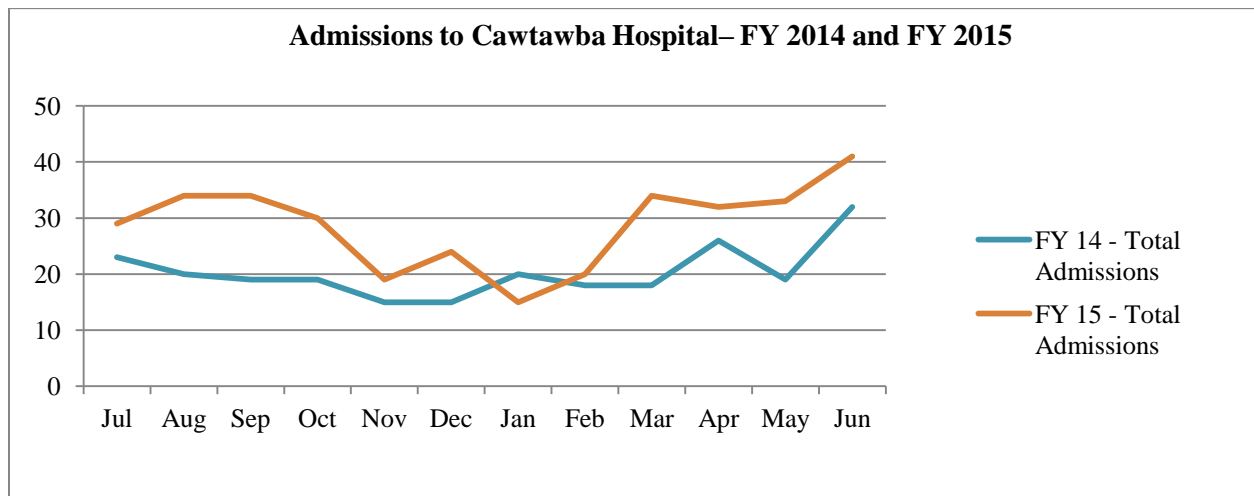
Catawba has an operating capacity of 110 beds. There are both Chronic Disease and Acute Intensive Psychiatric Certified beds in the facility. Currently, 12 percent of the Catawba capacity is used by 14 individuals who have been clinically ready for discharge more than 30 days, but have extraordinary barriers that prevent them from being reintegrated in their community in a timely manner. Individuals on the extraordinary barriers list for this facility ranged from 31 to 302 days. There are no individuals waiting for transfer from jail. The breakdown of Catawba’s bed capacity is summarized in Table 1.

Table 1. Catawba Bed Capacity

Bed Type	Operating Capacity
Chronic Disease	60
Acute Intensive Psych Certified	50
Total	110

At Catawba, the average total utilization in the first week of the month during the review period of FY 2012 through FY 2015 was 84 percent, which is slightly lower than the statewide average of 86 percent. However, utilization at Catawba has increased steadily over the past four years and peaked in FY 2015 at 93 percent, which is 14 percent higher than in FY 2012 (79 percent). Catawba had 244 admissions in FY 2014 and 345 in FY 2015, which constituted a 41 percent increase in admissions over FY 2014. This trend is shown in Figure 6.

Figure 6. Admissions to Catawba Hospital – FY 2014 and FY 2015



Physical Facility

Catawba occupies 670 acres of property in a rural area of Roanoke County. It contains approximately 25 buildings constructed from 1910 to 1990. The main hospital building is an eight-story structure

constructed in 1953 and contains approximately 140,000 square feet. Several of the hospital floors are not currently occupied.⁸ The building recently received a major security systems and fire alarm system upgrade, which are critical to assure safety. The building roof has also recently been replaced. However, the mechanical systems are beyond their useful life and will require major renovation to bring them into compliance with modern standards. The heating, ventilation, and air-conditioning systems are particularly challenging due to low floor-to-ceiling height in the building. While the windows were replaced several years ago and are very energy efficient, the windows on the patient floors lack the security imposed in modern structures at Eastern and Western State Hospitals.

Due to the remote nature of the site, this hospital has its own water treatment and sewage treatment facilities. The facility owns an extensive high voltage distribution system that must be maintained and makes it especially vulnerable to outages. The facility is served by its own steam plant that is operated on fuel oil. While the facility is extremely well-maintained and operates with low energy usage, its inherent energy cost makes it one of the most expensive facilities to operate in the entire DBHDS system. In addition to the main hospital, there are approximately 25 other buildings on campus, constructed between 1912 and 1996. The building in the best condition is the most recently constructed, the 9,000 square foot Patient Activities Building. Many of the older buildings are vacant and abandoned. Efforts are underway to demolish several of the older buildings that are in a serious state of decay and contain hazardous materials.

Despite the recent upgrades to its security and fire alarm systems, Catawba's mechanical systems are in need of major renovations and the overall condition of the facility is fair. The capital cost to bring those systems up to modern standards and make the renovations necessary for Catawba to operate in the future is approximately \$45.9 million.

Central State Hospital

Central State Hospital (CSH), located in Dinwiddie County, Virginia, responds to the mental health needs of individuals in Health Planning Region IV. While the facility does not maintain an acute admissions unit, they collaborate with Richmond Behavioral Health Authority, Chesterfield CSB, Crossroads CSB, District 19 CSB, Goochland-Powhatan CSB, Hanover CSB, and Henrico Area CSB to serve as a safety net for individuals under temporary detention orders. The hospital has the only maximum-security forensic psychiatry unit for the entire Commonwealth. The civil adult treatment program provides extended treatment to adults and provides services ranging from short term, quick re-entry to the community, to long-term intensive treatment for individuals with serious and persistent mental illness.

Capacity and Utilization Snapshot

CSH operates at its maximum capacity of 277 beds. The facility has four different types of beds: Community Prep, Long Term Rehabilitation, Forensic Services-Medium, and Forensic Maximum Security. Currently, 7 percent of the CSH capacity is used by 20 individuals who have been clinically ready for discharge more than 30 days, but have extraordinary barriers that prevent them from being reintegrated in their community in a timely manner. Individuals on the extraordinary barriers list for this facility ranged from 32 to 549 days. As of October 8, 2015 there were 24 individuals in jail waiting for

1. DBHDS report to the legislature dated 12-1-2014

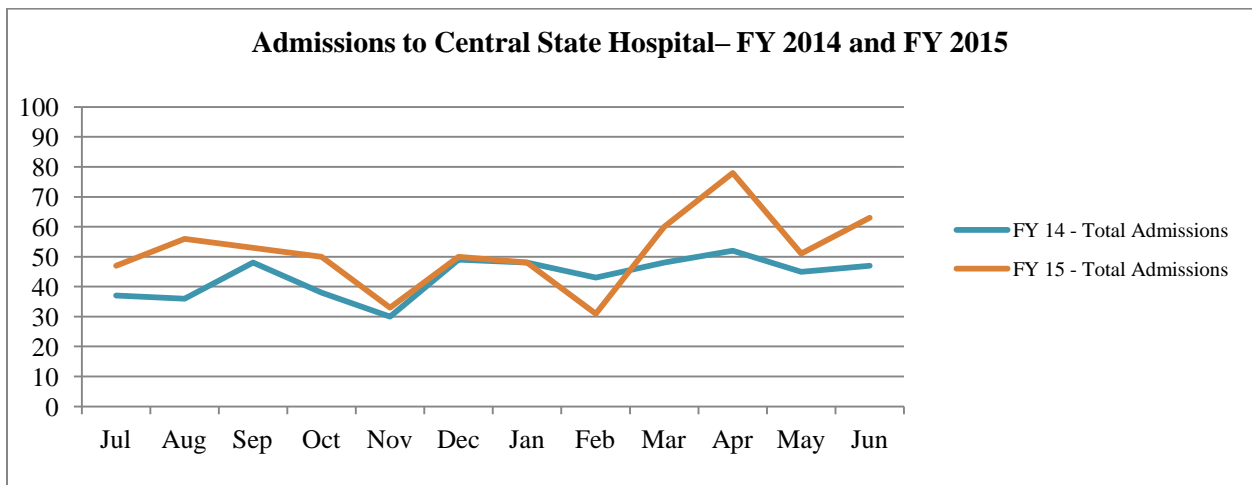
admission to CSH for evaluation or treatment to restore competency to stand trial. The bed capacity is broken down in the following Table 2.

Table 2. Central State Hospital (CSH) Capacity

Bed Type	Operational Capacity
Community Preparation – Psychosocial	50
Long Term Rehabilitation	50
Forensic Maximum Security	111
Forensic Medium Security	66
Total	277

At CSH, the average total utilization of civil, medium, and maximum security units in the first week of the month during the review period of FY 2012 through FY 2015 was 75 percent, which is much lower than the statewide average of 86 percent. However, while utilization at CHS steadily decreased from FY 2012 to FY 2014 to a low of 66 percent, it increased significantly in FY 2015 to 79 percent. This is an increase of 13 percent and brings CHS utilization almost back to the FY 2012 rate of 81 percent. In FY 2014, Central State Hospital had 521 admissions and 620 in FY 2015 which constituted a 19 percent increase in admissions over FY 2014. This trend is shown in Figure 7.

Figure 7. Admissions to Central State Hospital – FY 2014 and FY 2015



Physical Facility

CSH operates in many buildings that are old and beyond their useful life. Pre-planning funds have been approved to replace many of these buildings with a 300-bed facility similar to the new Western State Hospital. The current condition of this facility is poor and the cost of the replacement is estimated to be \$137.1 million.

Eastern State Hospital

Eastern State Hospital (ESH) is located in James City County. As part of Virginia's public mental health system, ESH serves adults, between the ages of 18 and 64, as well as geriatric patients age 65 and above. The hospital primarily provides treatment for individuals in nine CSBs including Chesapeake, Colonial Behavioral Health, Eastern Shore, Hampton-Newport News, Middle Peninsula-Northern Neck, Norfolk, Portsmouth, Virginia Beach, and Western Tidewater.

Capacity and Utilization Snapshot

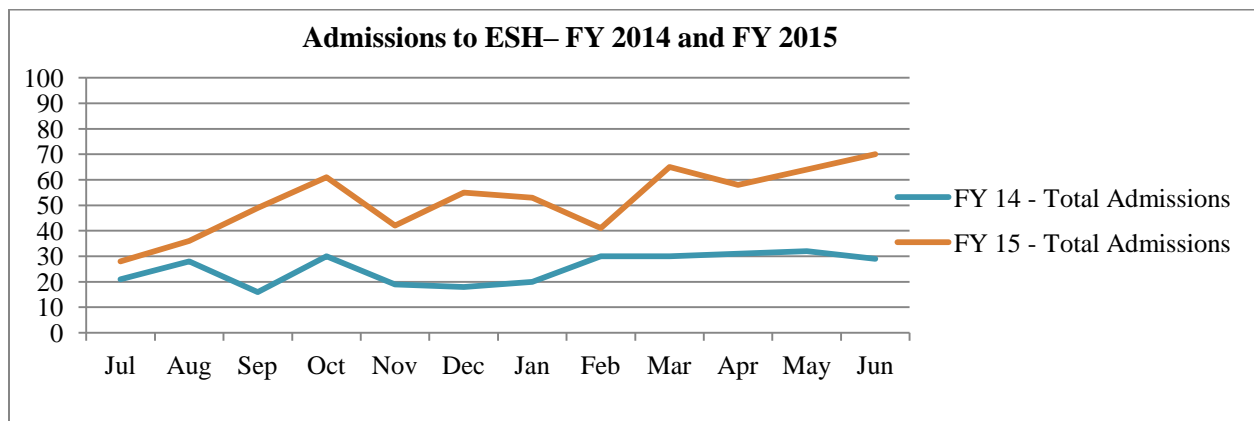
ESH currently has a maximum capacity of 302 beds. This total includes the addition of 20 beds, added at the end of 2014. The facility has four types of beds: Acute Admissions, Forensic Services – Medium, Long Term Rehabilitation, Community Preparation and Nursing Facility. Currently, 15 percent of ESH's capacity is used by 44 individuals who have been clinically ready for discharge more than 30 days, but have extraordinary barriers that prevent them from being reintegrated in their community in a timely manner. Individuals on the extraordinary barriers list for this facility ranged from 31 to 1,804 days. As of October 8, 2015 there were 35 individuals in jail waiting for admission to ESH for evaluation or treatment to restore competency to stand trial. Bed capacity is broken down in Table 3.

Table 3. ESH Capacity

Bed Type	Operating Capacity
Acute Admissions (IPT)	40
Forensic Services - Medium	127
Community Prep	55
Nursing Home	40
Total	302

At ESH, the average total utilization in the first week of the month during the review period of FY 2012 through FY 2015 was 89 percent, which is slightly higher than the statewide average of 86 percent. Utilization at ESH was relatively constant from July 2012 through July 2014 with an average of 88 percent; however, since 2014, the utilization rate has been rising and in FY 2015 the rate increased to 93 percent. Eastern State Hospital had 304 admissions in FY 2014 and 622 in FY 2015, a 105 percent increase in admissions over FY 2014. This trend is shown in Figure 8.

Figure 8. Admissions to Eastern State Hospital – FY 2014 and FY 2015



Physical Facility

The ESH campus currently contains approximately 747,000 square feet of buildings, of which 284,000 square feet has been declared surplus. That surplus is in the process of being sold. The remaining 463,000 square feet includes the Hancock Geriatric Center, which opened in 2008, and the Adult Mental Health Treatment Center, which opened in 2010. Those two newer centers account for 300,000 square feet of space and are in excellent condition. The remaining 163,000 square feet consist of older structures that are used for support functions and will need modernization in the near future. The overall condition of the ESH facility is very good. While there are no planned repairs or renovations with distinct costs, the planned Phase III expansion of ESH has an estimated cost of \$30 million.

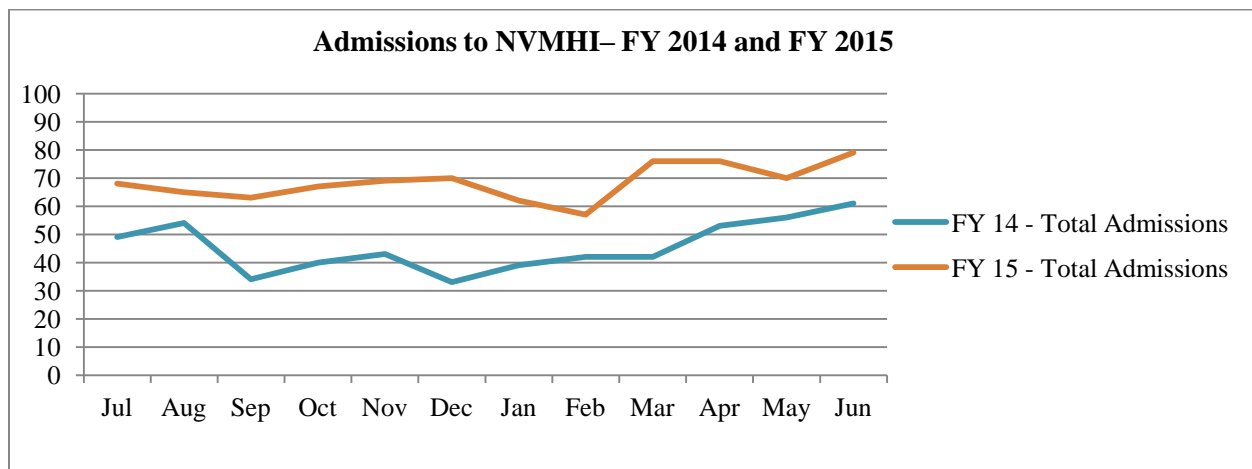
Northern Virginia Mental Health Institute

Northern Virginia Mental Health Institute (NVMHI) established in January 1968 and located in Falls Church, serves civil, forensic and voluntary adults between the ages of 18 and 65 years old who are in need of acute psychiatric treatment. Individuals eligible for treatment usually reside in one of the following five CSBs: Arlington, Alexandria, Fairfax-Falls Church, Loudoun, and Prince William. NVMHI accepts individuals on involuntary and voluntary admission status.

Capacity and Utilization Snapshot

NVMHI is classified as having Acute Admissions (IPT) beds. The current operating capacity is 134 beds. This total includes an additional 11 bed which was added at the end of 2014. Currently, 12 percent of the NVMHI capacity is used by 16 individuals who have been clinically ready for discharge more than 30 days, but have extraordinary barriers that prevent them from being reintegrated in their community in a timely manner. Individuals on the extraordinary barriers list for this facility ranged from 92 to 802 days. There are no individuals waiting for transfer from jail. At NVMHI, the average total utilization in the first week of the month during the review period of FY 2012 through FY 2015 was 88 percent, which is slightly higher than the statewide average of 86 percent. Utilization has risen steadily since FY 2012 (86 percent) and peaked in FY 2015 at 91 percent, a 5 percent increase. NVMHI had 546 admissions in FY 2014 and 822 in FY 2015, a 51 percent increase in admissions over FY 2014. This trend is shown in the Figure 9.

Figure 9. Admissions to NVMHI – FY 2014 and FY 2015



Physical Facility

The original structure of NVMHI was constructed in 1975. It received a major addition and renovation in 1997. Additionally, a re-roofing project was recently completed. The building is in good condition, although the mechanical systems are generally beyond the midpoint of their expected life. NVMHI's facilities will need ongoing maintenance commensurate with the building's age, but there are no plans to make any major changes to the building's structure or conduct any major renovations at this time. It is important to note that the building is located on 10 acres of property with no opportunity for growth or expansion. It is surrounded on three sides by residential development.

Piedmont Geriatric Hospital

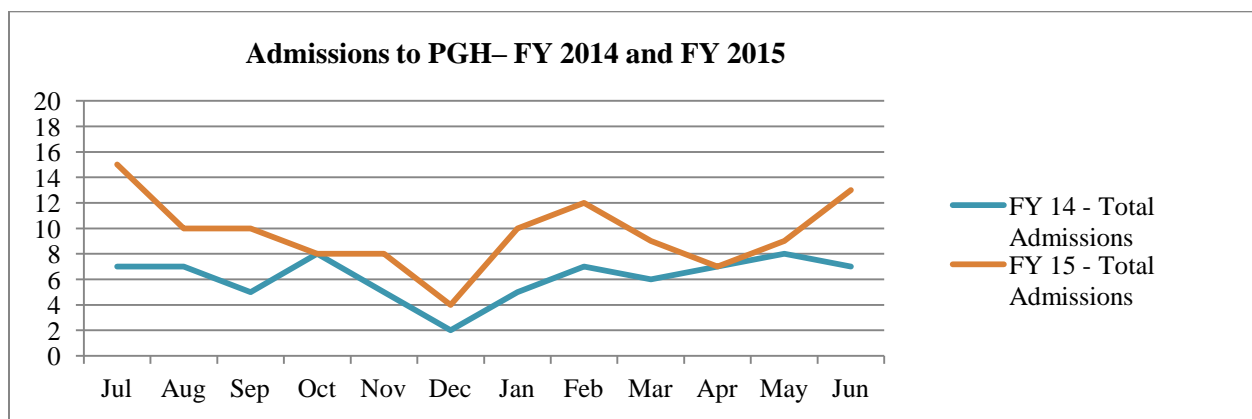
Piedmont Geriatric Hospital (PGH) located in Burkeville, is the only state facility that exclusively treats geriatric patients 65 years of age or older. PGH serves the following CSBs: Arlington, Alexandria, Fairfax-Falls Church, Loudoun, Prince William, District 19, Goochland-Powhatan, Hanover, Henrico, Richmond Behavioral Health Authority (RBHA), Danville-Pittsylvania, Southside, Rappahannock Area, Rappahannock-Rapidan, and Region 10. The patient population consists of individuals who:

- are in need of inpatient treatment for mental illness;
- meet the requirements for voluntary or involuntary admission as determined by their mental health center; and
- do not have a medical condition that requires priority treatment in an acute care hospital.

Capacity and Utilization Snapshot

PGH has a maximum capacity of 123 beds. Currently, 16 percent of the PGH capacity is used by 20 individuals who have been clinically ready for discharge more than 30 days, but have extraordinary barriers that prevent them from being reintegrated in their community in a timely manner. Individuals on the extraordinary barriers list for this facility ranged from 40 to 694 days. As of October 8, 2015 there were three individuals waiting for admission to PGH for evaluation or treatment to restore competency to stand trial. At PGH, the average total utilization in the first week of the month during the review period of FY 2012 through FY 2015 was 88 percent, which is slightly higher than the statewide average of 86 percent. Utilization at PGH has increased steadily since FY 2012 (85 percent) and peaked in FY 2015 at 95 percent, a 10 percent increase. Piedmont Geriatric Hospital had 74 admissions in FY 2014 and 115 in FY 2015, a 55 percent increase in admissions over FY 2014. This is shown in Figure 10.

Figure 10. Admissions to Piedmont Geriatric Hospital – FY 2014 and FY 2015



Physical Facility

The main hospital was constructed in 1939 and contains 27,000 square feet. In 1951, a 103,000 square foot addition added the north and west wings. After an extensive audit, the facility showed numerous hanging hazards and other unsafe conditions. Upgrades were made to the patient care area in 2011 to comply with the “Plan of Correction” approved by the Centers for Medicare & Medicaid Services. Kitchen upgrades have also been made as needed. While the mechanical, electrical, and plumbing systems are in adequate condition, they are well beyond the midpoint of their expected life and will be in need of replacement in the near future. Furthermore, the exterior envelope of the building is failing and requires extensive renovation. Planning for this renovation has been completed, and final design will be completed as funds are released.

The second active PGH building houses administration functions and contains approximately 35,000 square feet. It was constructed in 1950 as a nurse dormitory and has since been adapted to its current use. Its mechanical systems are beyond their useful life and the building windows are in need of replacement. The remaining 23 buildings on campus range in age from 1924 to 1952. Many are vacant and unused. Additionally, the boiler plant was recently renovated to allow the facility to use renewable energy sources such as wood waste (i.e., sawdust) and native warm season grasses (i.e., switchgrass). This plan serves both PGH and the neighboring Virginia Center for Behavioral Rehabilitation.

The overall condition of PGH is fair. While recent upgrades have made improvements, the main hospital and administrative buildings have structural concerns caused by aging and deferred maintenance that need to be addressed promptly. PGH will require \$38.8 million of renovations within the next five years.

Southern Virginia Mental Health Institute

SVMHI, in Danville, provides services to civil and forensic adults between the ages of 18 and 64 with serious mental illness for Danville-Pittsylvania CSB, Piedmont CSB, and Southside CSB. Treatment is person-centered, using the principles of recovery to promote hope, self-determination, and empowerment. The primary goal is to maximize favorable outcomes for individuals served to ensure their successful reentry to their chosen community. Essential elements of treatment focus on self-direction, respect, responsibility, and the use of peer support.

Capacity and Utilization Snapshot

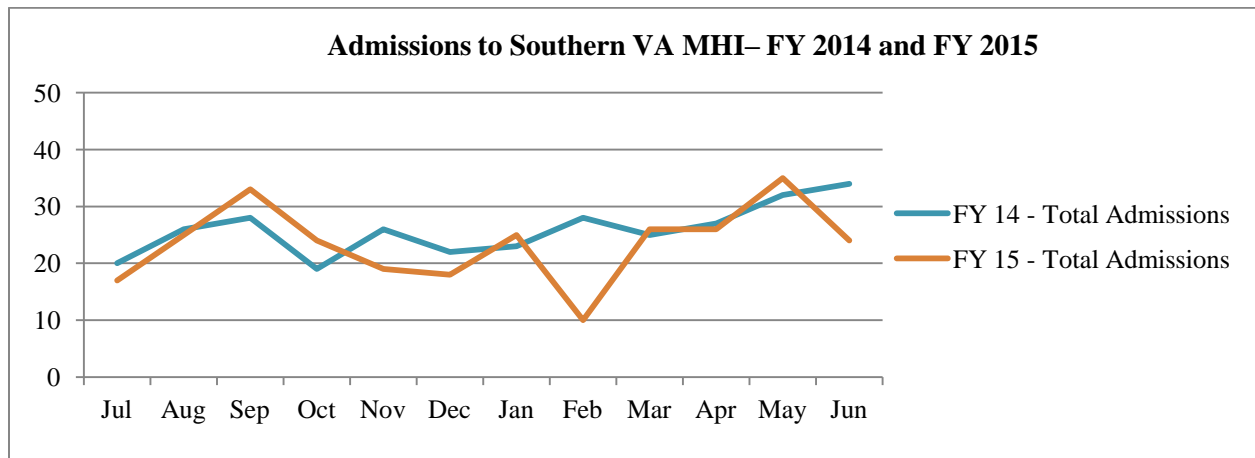
SVMHI has an operational capacity of 72 beds. The hospital has two types of certified beds, Acute Admissions (IPT) and Forensic Services – Medium. Currently, 18 percent of the SVMHI capacity is used by 20 individuals who have been clinically ready for discharge more than 30 days, but have extraordinary barriers that prevent them from being reintegrated in their community in a timely manner. Individuals on the extraordinary barriers list for this facility ranged from 32 to 942 days. There are no individuals waiting for transfer from jail. The bed capacity is shown in Table 4.

Table 4. SVMHI Capacity

Bed Type	Operational Capacity
Acute Admissions (IPT)	48
Forensic Services - Medium	24
Total	72

At SVMHI, the average total utilization in the first week of the month during the review period of FY 2012 through FY 2015 was 83 percent, which is slightly lower than the statewide average of 86 percent. Utilization at SVMHI has increased steadily from FY 2012 (74 percent) to FY 2014 (93 percent), nearly a 20 percent increase, but decreased to 84 percent in FY 2015. However, this is still a 10 percent increase from FY 2012. SVMHI had 310 admissions in FY 2014 and 282 in FY 2015, a 9 percent decrease in admissions from FY 2014. This trend is shown in the Figure 11.

Figure 11. Admissions to SVMHI – FY 2014 and FY 2015



Physical Facility

SVMHI’s structure was built in 1975. It received a major upgrade of its mechanical systems and interior finishes in 2010. Additionally, the building received a new roof several years ago. The facility contains 70,000 square feet and is situated on approximately 20 acres of land. The main parking lot is in need of replacement, as are the fire alarm and security systems. Design is already underway for the replacement of those systems, although there are no plans yet to replace the parking lot. Overall, the condition of the facility is very good and will require \$10.2 million in renovations in the next five years.

Southwestern Virginia Mental Health Institute

Southwestern Virginia Mental Health Institute (SWVMHI), located in Marion, provides treatment for individuals in the following six CSBs: Cumberland Mountain, Dickenson County, Highlands, Mount Rogers, New River Valley, and Planning District 1. The facility treats adults over the age of 18 as well as a number of individuals over the age of 65.

Capacity and Utilization Snapshot

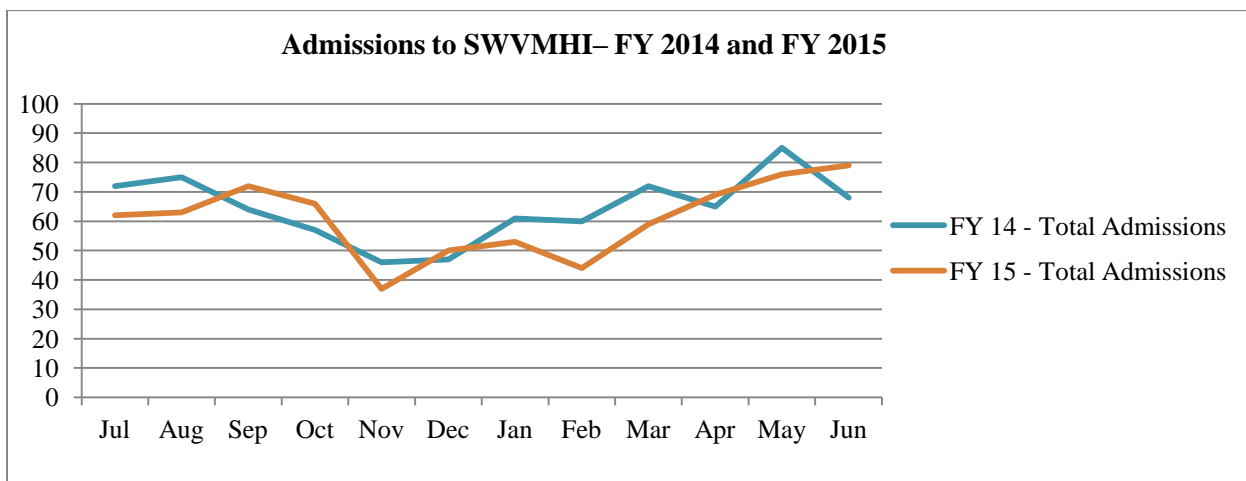
SWVMHI has Intermediate Care, Acute Psychiatric, and Community Preparation beds available. The facility currently has an operational capacity of 179 beds. This total includes an additional 17 bed which were added in FY 2014 and FY 2015. Currently, there are no individuals on the extraordinary barriers to discharge list. As of October 8, 2015 there was 1 individual on a jail transfer wait list. The breakdown of capacity by bed type is included in Table 5.

Table 5. SWVMHI Capacity

Bed Type	Operational Capacity
Intermediate Care	20
Acute Admissions (IPT)	92
Community Prep	67
Total	179

At SVMHI, the average total utilization in the first week of the month during the review period of FY 2012 through FY 2015 was 92 percent, which is higher than the statewide average of 86 percent. However, while utilization at SWVMHI has remained relatively constant from July 2012 through July 2015, the rate has remained at about 90 percent or above during that period. SVMHI had 772 admissions in FY 2014 and 730 in FY 2015, a 5 percent decrease in admissions from FY 2014. This trend is shown in the Figure 12.

Figure 12. Admissions to SWVMHI – FY 2014 and FY 2015



Physical Facility

The main treatment area of SWVMHI contains approximately 100,000 square feet and was constructed in 1988. The building has recently received a new fire alarm and security system. While the main treatment building was built relatively recently, the main administration offices are housed in a building that is listed on the National Historic Registry and was constructed in 1887. That building received a new roof and skylight in 2014. In addition to these two buildings, the 110-acre SWVMHI campus contains 15 other buildings that vary in year of construction from 1910 to 1970. Some of these buildings have been vacated and are no longer in use. The campus water supply system is extremely old and in need of complete replacement. While the campus will continue to need maintenance reserve funding commensurate with the age of the structures, the overall condition of the SWVMHI is good.

Western State Hospital

Western State Hospital (WSH) is located in Staunton. In 2013, a new state-of-the-art, \$140.5 million facility opened and patients were successfully transitioned from the old facility to the new one. The design of the new hospital incorporates special features that facilitate the delivery of highly-specialized, recovery-oriented treatment and provides a secure environment. This new setting not only enhances the provision of treatment, but also supports the development of the life skills needed for living independently within the community upon discharge. WSH treats forensic and civil committed adults' ages 18 to 64 years old. The facility primarily provides treatment for individuals in eight CSBs which include Horizon, Harrisonburg –Rockingham, Northwestern, Rappahannock Area, Rappahannock-Rapid an, Region Ten, Rockbridge Area, and Valley. WSH has also provided treatment for jail transfers from Arlington, Fairfax-Falls Church, and Prince William.

Capacity and Utilization Snapshot

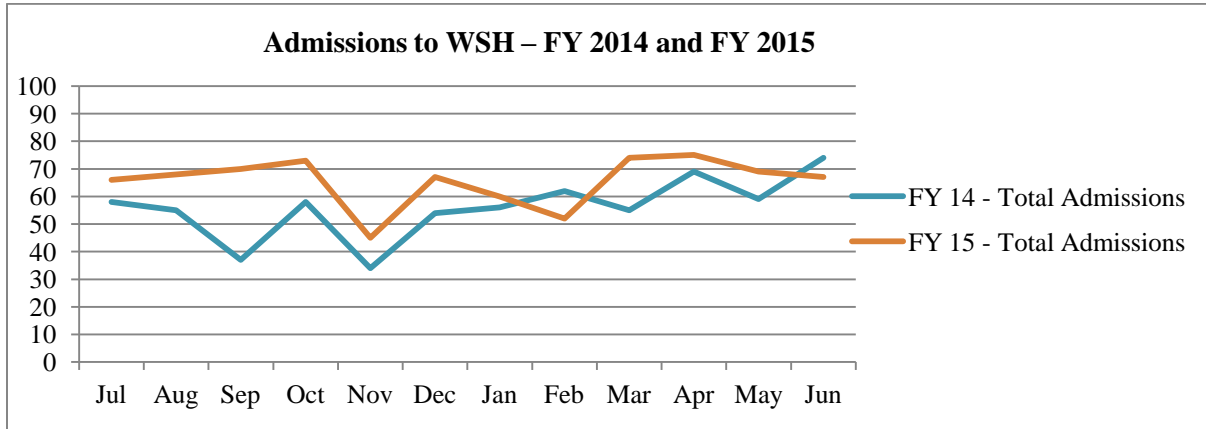
WSH currently serves four different levels of care: Clinical Evaluation, Forensic Services – Medium, Long Term Rehabilitation, and Acute Intensive Psychiatric. The capacity of WSH is 246 total beds. Currently, 11 percent of the WSH capacity is used by 27 individuals who have been clinically ready for discharge more than 30 days, but have extraordinary barriers that prevent them from being reintegrated in their community in a timely manner. Individuals on the extraordinary barriers list for this facility ranged from 34 to 523 days. As of October 8, 2015 there were seven individuals waiting for admission to WSH for evaluation or treatment to restore competency to stand trial. Table 6 contains a breakdown of capacity by bed type.

Table 6. WSH Capacity

Bed Type	Operating Capacity
Clinical Evaluation	22
Forensic Services - Medium	28
Long Term Rehabilitation	112
Acute Admissions (IPT)	84
Total	246

At WSH, the average total utilization in the first week of the month during the review period from FY 2012 through FY 2015 was 90 percent, which is well above the statewide average of 86 percent. However, while utilization at WHS steadily decreased from FY 2012 to FY 2014 to a low of 86 percent, it increased significantly in FY 2015 to 94 percent. This is an increase of 8 percent. WSH had 671 admissions in FY 2014 and 786 in FY 2015, a 17 percent increase in admissions over FY 2014. This trend is shown in Figure 13.

Figure 13. Admissions to WSH – FY 2014 and FY 2015



Physical Facility

In 2013, WSH opened a new \$140.5 million facility and patients were transferred from the old facility into the new one. The new campus provides approximately 360,000 square feet of the most modern and clinically appropriate mental health facilities in the country. The overall condition of WSH is excellent, and anticipated capital costs for the planned 56-bed expansion total \$20.1 million.

Appendix B: Virginia's Public Behavioral Health System

The publicly funded behavioral health system in the Commonwealth provides services to individuals with mental health or substance use disorders, intellectual disability, or co-occurring disorders through state hospitals and training centers operated by DBHDS, hereafter referred to as state facilities, and 39 community services boards (CSBs) and one behavioral health authority, hereafter referred to as CSBs. CSBs were established by Virginia's 133 cities or counties pursuant to the Code of Virginia. CSBs provide services directly and through contracts with private providers, which are vital partners in delivering behavioral health (mental health and substance abuse) and developmental services. CSBs function as the single points of entry into publicly funded behavioral health and developmental services, including access to state facility services through preadmission screening, case management and coordination of services, and discharge planning for individuals leaving state facilities. CSBs advocate for individuals who are receiving or are in need of services. CSBs also act as community educators, organizers, and planners and advise their local governments about behavioral health and developmental services and needs.

While not part of DBHDS, CSBs are key operational partners with the department and its state facilities. DBHDS contracts with, funds, monitors, licenses, regulates, and provides leadership, guidance, and direction to CSBs.

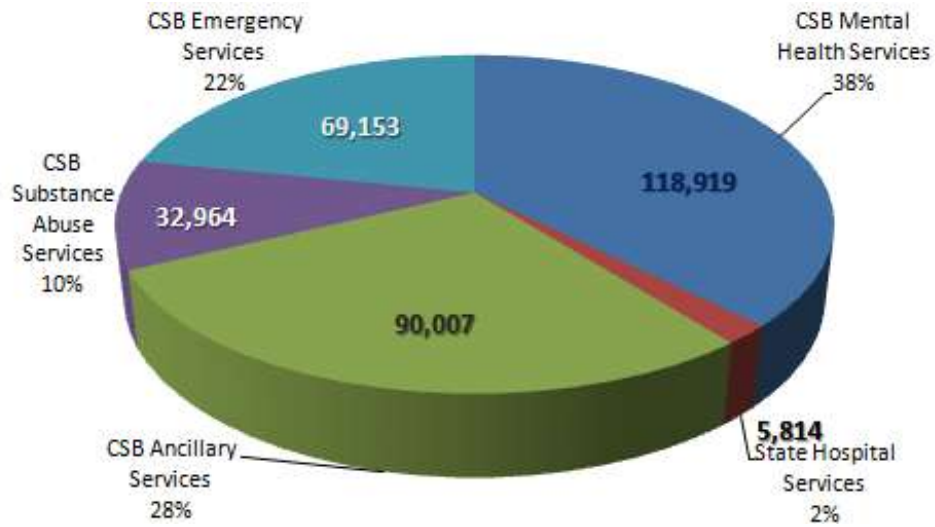
DBHDS operates eight state hospitals for adults. Appendix A provides an overview of the geographical areas and populations served by each hospital, the capacity of each hospital, and trends in admissions and bed utilization, as well as a description of the physical plant.

Title 37.2 of the *Code of Virginia* establishes DBHDS as the state authority for Virginia's publicly funded behavioral health and developmental services system. The DBHDS central office provides leadership that promotes strategic partnerships among and between CSBs and state facilities and with other agencies and providers. It supports provision of accessible and effective behavioral health and developmental services and supports by CSBs and other providers and oversees the delivery of services and supports in state hospitals and training centers. The central office also protects the human rights of individuals receiving services and assures that public and private providers adhere to DBHDS licensing standards.

Individuals Who Received CSB or State Facility Services

In FY 2015, 316,857 individuals received services in the publicly operated behavioral health services system: 311,043 individuals received services from CSBs and 5,814 individuals received services from state facilities. These figures are unduplicated within each CSB or state facility, but not across CSBs because an individual may have received services from more than one CSB; not between state facilities because an individual may have received services from more than one state hospital or training center; and not between CSBs and state facilities because an individual may have received services from both. Figure 1 below depicts the numbers of individuals who received mental health, substance abuse, emergency or ancillary services (e.g., motivational treatment, consumer monitoring, early intervention, and assessment and evaluation) from CSBs or state facilities and the respective percentages.

Figure 1. Individuals Receiving Behavioral Health Services in FY 2015



The following figure and table provides detail about the ages of individuals who received services from CSBs in each program area, emergency services, and ancillary services.

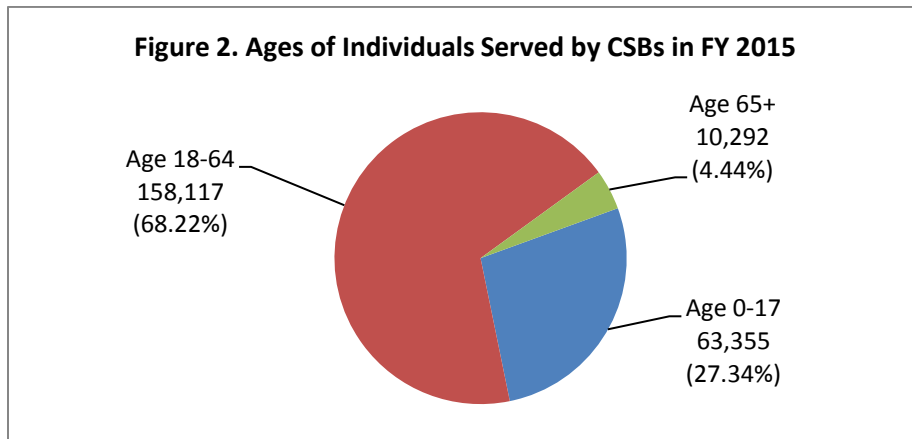


Table 1. Ages of Individuals Who Received Services from CSBs in FY 2015

Age Range	Mental Health Services	Substance Abuse Services	Emergency Services	Ancillary Services
0 – 17	36,034 (30.3%)	2,035 (6.2%)	11,784 (17.0%)	33,632 (37.4%)
18 – 64	77,777 (65.4%)	30,652 (93.0%)	52,347 (75.7%)	54,576 (60.6%)
65+	5,092 (4.3%)	274 (0.8%)	4,737 (6.9%)	1,775 (2.0%)
Unknown	16	3	285 (0.4%)	24
Total	118,919 (100%)	32,964 (100%)	69,153 (100%)	90,007 (100%)

Table 2 displays more information about and the types of conditions experienced by older adults seeking services and the numbers of these individuals who received services from CSBs or state hospitals.

Table 2. Individuals with Alzheimer’s Disease or Related Dementias Who Received Services from CSBs and State Hospitals in FY 2015

Diagnosis	CSB Mental Health Services	Total Unduplicated CSB Individuals	State Hospitals
Individuals 18 - 64	77,777	158,117	4,948
Other Dementias	29	42	10
Alzheimer’s	168	260	41
Dementia	147	241	36
Unduplicated Total	335	529	79
Percent of 18 - 64	0.43%	0.33%	1.60%
Individuals 65+	5,092	10,292	807
Other Dementias	76	148	117
Alzheimer’s	221	645	151
Dementia	265	902	67
Unduplicated Total	538	1,645	267
Percent of 65+	10.56%	15.98%	33.09%

Diagnoses data for individuals served by Catawba and PGH indicates that Alzheimer’s and Dementia are among the top diagnoses for geropsychiatric patients further burdened by chronic medical conditions and significant behavioral issues. Many elderly individuals experience depression, changes in behavior or mood, anxiety, fear or other behavioral health concerns, some of which lead to aggressive behaviors. For those assessed as requiring supervision, placements may include a:

- Nursing Facility
- Assisted Living Facility
- Group Home
- Hospice
- Family

Community services in many areas of the state are not fully developed to meet needed service complement or demand. Supervised housing options are among the most challenging to access or locate due to a shortage of assisted living facilities, group homes and nursing homes willing to accept individuals with difficult behavioral needs or persons who are on certain anti-psychotic medications, and/or have complicated medical issues. This has been an ongoing challenge of transitioning older adults from state hospitals to the community.

Addressing the needs of individuals with Alzheimer’s disease or related dementias is becoming increasingly important because of the significant growth in Virginia’s older adult population and in the numbers of individuals with these dementias. As DBHDS and state policy makers consider the future of Virginia’s geriatric services, it is crucial to consider and develop a strategic plan for the demand the aging generation will have on all state agencies.

Appendix C: A National Perspective

An analysis of peer state funding and transition to community-based services among states with service delivery systems similar to Virginia’s CSB-based community services provides context for assessing the current safety net for individuals with behavioral health conditions. Maryland, North Carolina, Ohio, and Texas were selected as the peer states for comparison with Virginia. These states were selected based on comparability on factors including size, geography, delivery system and administrative structure, prevalence of inpatient psychiatric care, and experience with deinstitutionalization.

Table 1. State Psychiatric Hospitals and Bed Capacity Nationwide, 2010

State	Population	Bed Capacity	Beds per 100K
North Carolina	9,535,483	761	7.98
Ohio	11,536,504	1,058	9.17
Maryland	5,773,552	1,058	18.32
Texas	25,145,561	2,129	8.47
Virginia	8,001,024	1,407	17.59

Sources: U.S. Census Bureau; Torrey et al. (2012) "Shortage of Public Hospital Beds for Mentally Ill Persons"; NRI State Profiling System 2010

Table 2. Hospital Bed Capacity Sample (2014)

State	Population	Bed Capacity	Beds per 100K
North Carolina	9,943,964	812	8.2
Ohio	11,594,163	1,067	9.2
Texas	27,695,284	2,501	9.0
Maryland	5,976,407	970	16.2
Virginia	8,326,289	1443	17.3

Source: State website search, HCRIS

Among the identified peer states, all but Maryland operate community service delivery systems in which county or local entities are primarily responsible for providing direct services. Maryland operates a system in which the state authority ensures service provision by contracting with private providers and a limited set of public providers. Virginia has the second highest number of beds per capita of any state in the country other than Oregon. In contrast to Virginia’s 17.3 beds per 100,000, the peer states collectively maintain only 9.3 beds per 100,000.

While Virginia spends approximately 41 percent of its behavioral health budget on community services, at \$47 per capita, nationwide expenditures on community services make up 75 percent of total spending, with \$89 spent per capita.⁹ In Virginia, state hospital spending consumes a disproportionate share of DBHDS funds. In 2013, inpatient state hospital spending comprised nearly half (46 percent) of overall state mental health agency spending in Virginia. This exceeds the national average (29 percent) and the highest proportion of such spending among peer states (36 percent in Texas).

⁹ NRI State Profile data, FY 2013.

Table 3. Proportion of State MH Funding for Inpatient Care Among Identified Peer States

State	FY 2013 Proportion of State Mental Health Agency Funding Inpatient Care
MD	23%
NC	34%
OH	19%
TX	36%
VA	45%
U.S. Average	29%

Source: Virginia 2013 NRI State Mental Health Agency Data

Maryland

Maryland has a population of more than six million residents. It is the sixth most densely populated state in the U.S., with the most populous of its 24 counties located in the Washington, D.C. and Baltimore metropolitan areas. Behavioral health and developmental disability services are provided by the counties through 19 Core Service Agencies (CSAs). Maryland expanded Medicaid through the Affordable Care Act (ACA) and has enrollment of 1.3 million individuals who are served by eight managed care organizations with membership ranging from 24,000 to 261,000 members. Ninety-five percent of the population served by the Maryland mental health system is Medicaid-enrolled. This is the highest proportion of Medicaid-enrolled consumers among the peer states and is far higher than the national average of 64 percent and the corresponding proportion in Virginia (53 percent). Total state funding for mental health services has increased from \$805 million to \$1.081 billion, 31 percent, from 2003 to 2013. The bulk of this increase was in spending for community services, which saw a 46 percent increase over the same period. The proposed Behavioral Health Authority budget for 2016 is \$1.7 billion.

BHA operates and funds a full continuum of community-based services with the blend of funds from Medicaid, state appropriations and federal block grants. All community-based services are coordinated through the CSAs. State hospitals are funded by direct appropriation from the State Legislature. Maryland has the highest capacity of state beds in the peer group (16.2 per 100,000 population), but lower than that of Virginia (17.34).

Deinstitutionalization in Maryland has included significant transition of resources to community services. Since 2004, four state hospitals have been closed and many have undergone significant bed consolidation. Maryland demonstrates effective transition of resources from state hospitals to community services. State spending prioritizes community services but allocates more resources to each patient in state hospitals, treating patients for longer periods of time with less bed turnover and readmission. Maryland has one of the lowest proportions of total state spending allocated to state hospital care (23 percent) in the peer group, much lower than Virginia (45 percent), and the highest per beneficiary costs for community services (\$5,153) in the peer group. Per beneficiary spending for community services is \$3,500 in Virginia and the national average is \$4,000.

North Carolina

North Carolina has a population of 10 million residents, the 10th largest in the United States. Behavioral healthcare delivery is provided at the individual county level or by groups of counties consolidated into behavioral health management organizations, called Local Management Entities (LMEs). There are 100

counties of variable size, with the largest populations in the metropolitan areas around Charlotte, Raleigh-Durham, Winston-Salem, and Wilmington. North Carolina has not pursued Medicaid expansion under the Affordable Care Act and offers very limited Medicaid coverage to adults. Sixty-eight percent of consumers served in North Carolina's public mental health programs are Medicaid-enrolled. This is higher than the proportion in the Virginia system (53 percent) and the peer state and national average (64 percent).

LMEs deliver mental health, substance abuse and developmental disability services in North Carolina communities under contracts with the Department of Health and Human Services (DHHS). Total DHHS funding for mental health services has increased by 127 percent between 2003 and 2013 or from \$417 million to \$945 million. Most of this increase fell on the community services side, which saw growth in spending from \$133 million to \$578 million or 331 percent. The FY 2015-17 proposed DHHS budget includes an increase of 1.5 percent for behavioral health care. This includes an increase of \$42 million for community services from the previous biennium. Cost savings resulting from the implementation of managed care are reportedly being reinvested in the system to support some of the alternative services listed above, such as respite and supported employment.

Spending in the North Carolina system places greater priority on community services and yields better outcomes for those services than Virginia. Outpatient spending as a proportion of total spending (58 percent) is under the peer state average (61 percent) but better than outpatient spending as a proportion of total spending in Virginia (50 percent). Total hospital spending per beneficiary is the second highest in the peer group (\$97,000), well over the peer state average (\$64,000) and the Virginia per beneficiary spending for state hospital consumers (\$57,000). Community services spending per beneficiary are low (\$2,700), lower than the national average (\$4,000), and lower than those in Virginia (\$3,500).

Ohio

Ohio is one of the largest of the Midwestern industrial states with a population of 11.5 million. Ohio expanded Medicaid under the ACA. Therefore, the proportion of consumers served in the public mental health system that are Medicaid-enrolled is 79 percent, higher than the peer state average (64 percent) and much higher than the corresponding proportion in Virginia (53 percent). Ohio utilizes Medicaid managed care through five managed care organizations serving 1.8 million members.

Publicly funded behavioral health services are provided through 53 local county mental health (MH) or mental health and substance abuse (MHSA) boards that manage and deliver community-based outpatient mental health and substance abuse services.

Between 2003 and 2013, total funding for public mental health in Ohio has increased from \$750 million to \$1.75 billion or by 133 percent. Funding for Ohio community services increased from \$540 million to \$787 million or by 46 percent. State hospitals are funded directly through Ohio's Department of Mental Health & Addiction Services (DMHAS). Ohio has the lowest total expenditures for private inpatient beds in the peer group (\$5.3 million), below that of Virginia (\$9.5 million), which is also on the low end of the peer group on this indicator.

Ohio spends the largest proportion of total public mental health dollars on community services (80 percent) among states in the peer group, allocating only 19 percent of dollars to state inpatient care. Again, Virginia spends 51 percent of its total funding on community services. Ohio spends more than any peer state on outpatient care as well, both in dollars and as a proportion of total community services spending. Per beneficiary expenditures for state hospital care are relatively low in Ohio (\$31,000) as are

per beneficiary expenditures for community services (\$2,400), compared to corresponding per beneficiary costs among peers (\$64,000 and \$3,000) and in Virginia (\$57,000 and \$3,500).

Texas

Texas is the second most populous state with a population of 27 million residents. As of May 2015 there were 3.7 million Medicaid enrollees. The state has opted not to expand Medicaid, and benefits to working age adults are very limited. Only 45 percent of the population served by the public mental health system in Texas is enrolled in Medicaid. This is the lowest such proportion in the peer group, far lower than the peer average (64 percent) and somewhat lower than the proportion on Medicaid enrollees served by the Virginia system (53 percent).

There are 254 counties in Texas organized into 37 Local Mental Health Authorities (LMHAs) which are responsible for providing community-based mental health and substance services to the uninsured and Medicaid enrollees in their service area. Funding to the public mental health system grew by 25 percent from 2003 to 2013, from \$858 million to \$1.07 billion. Most of this growth was in community services spending, which went from \$480 to \$639 million over the same time period, an increase of 33 percent. Two Texas agencies fund mental health services: the Health and Human Services Commission (HHSC) and the Department of State Health Services (DSHS). The former is the state Medicaid authority and the latter holds responsibility for the treatment of the uninsured and priority mental health populations.¹⁰

Texas spends a lower proportion of its total mental health funding on state hospital care (37 percent) than Virginia (45 percent) but more than the national average (20 percent). Per beneficiary spending on community services and state hospitalization are the lowest in the peer group (\$2,100 and \$24,000, respectively) and are much lower than corresponding figures in Virginia (\$3,500 and \$57,000). The community services penetration rate is the lowest of the peer group at 12.18, just under that of Virginia (13.52).

¹⁰ Priority adult populations include adults who have severe and persistent mental illnesses such as schizophrenia, major depression, bipolar disorder, or other severely disabling mental disorders which require crisis resolution or ongoing and long term support and treatment.

Appendix D: Citations

- 2012-13 CMHS Uniform Reporting System and 2013 State Hospital Analysis
- Virginia Office of the State Inspector General, “Discharge Assistance Program Performance Review”, <https://osig.virginia.gov/media/2475/2014-bhds-005dap.pdf>, February 14, 2014, accessed August 31, 2015.
- Department of Behavioral Health & Developmental Services, Item 314.B.1., “Report on the Commonwealth’s Utilization of State Hospitals” to the Governor and Chairmen of House Appropriations and Senate Finance Committees, November 5, 2014
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- NRI State Profile data, FY 2013.
- Sharstein, S.S. & Dickerson, F.B. (2009). Hospital Psychiatry for the Twenty-First Century. *Health Affairs*, 28, no.3, 685-688, Retrieved October 21, 2015 from <http://content.healthaffairs.org/content/28/3/685.long>
- [United States Department of Justice, Civil Rights Division \(2015\). *Olmstead: Community Integration for Everyone* \(2015\) Retrieved October 22, 2015 from http://www.ada.gov/olmstead/](http://www.ada.gov/olmstead/)

Appendix E: DBHDS Capital Budget Request for Catawba, PGH and WSH Expansion

CapitalBudgetRequest

Renovate Catawba Hospital	
Overview	
Agency	Department of Behavioral Health and Developmental Services (720)
Project Code	none
Project Type	New Construction/Improvement
Biennium	2016-2018
Budget Round	Initial Bill
Request Origin	Previously Submitted
Project Location	
Facility/Campus	Catawba State Hospital
Source of Request	Agency Request
Infrastructure Element	
Contains significant technology costs? No	
Contains significant energy costs? No	
Agency Narrative	
<p>Agency Description</p> <p>Catawba Hospital (CH) is located in Catawba, Virginia on the grounds of what was, in the 1860's, a Victorian Resort property known as Red Sulfur Springs. This facility is part of the Commonwealth of Virginia's public behavioral health system and specializes in serving adults, including geriatric individuals, who are in need of mental health services. CH was founded in 1909 as the first tuberculosis sanatorium in Virginia. In 1972, it was integrated into what was then the Department of Mental Health and Mental Retardation. Although this campus contains more than 43 buildings, patient services are provided in three primary buildings: the main hospital (Building 15), constructed in 1953; the dining hall (Building 16), constructed in 1922; and the Patient Activities Building, built in 1995. This project will involve the renovation of the main hospital building and the connected dining hall, a total of approximately 157,100 square feet.</p> <p>The main hospital building at Catawba Hospital has had few major building or system renovations since built. Constructed of masonry, the main hospital building is multi-story. This project proposes a total building renovation to accommodate consolidated functions and insure the long-term viability of this 270-bed hospital by updating the building envelope, mechanical and electrical systems, and finishes.</p> <p>The existing building does not meet current codes and certification standards. Among the issues to be addressed during this renovation are the following:</p> <ol style="list-style-type: none"> 1) Replace HVAC system in its entirety. <ul style="list-style-type: none"> • The existing system does not meet current standards and is beyond its useful life. • The control system uses antiquated pneumatic controls which need to be converted to digital controls. • The system does not provide sufficient air changes; does not provide sufficient outside air; and does not have the proper directional flow in patient rooms. 2) Update the electrical service, including lighting systems throughout the building. 3) Improve the Security System. Technology advancements now make retrofitting systems necessary to address concerns, including: <ul style="list-style-type: none"> • building access, • patient egress alarms, • patient tracking systems and • staff duress system. 4) Upgrade existing plumbing to comply with VUSBC codes; 5) Ensuring all areas are in compliance with ADA standards; 6) Renovate restroom facilities from non-compliant public or "gang" bathrooms to bathrooms which afford privacy and safety. 7) Replace windows in patient areas. The current windows are excellent for non-patient areas and are in good condition, but do not provide the needed security and safety in patient rooms. These need to be replaced with impact resistant windows. 8) Replace the main electrical Service. <ul style="list-style-type: none"> • The transformers serving Building 15 are the beyond their useful life and could fail any time. • The transformer vault does not meet the current National Electrical Safety Code. • The hospital owns and operates a high voltage distribution system from the meter at the edge of campus to the buildings. It includes both overhead and underground conductors. Large portions of this must be replaced. 9) Renovate interior finishes to include flooring and walls of both the main hospital building and the dining hall. 10) Renovate the serving line to a more "food court" style delivery, with multiple food stations, signage, etc. 	

Catawba Hospital's Building 15 is a Hill-Burton era hospital (1946 to 1980) which employed a medical model consistent with its use as a sanitarium. At the time of its construction, it was a state of the art hospital facility. Many advances in mental health facility design have occurred since then. This major renovation project will include an analysis of the layout and use of the building. This analysis will be used to design and construct interior improvements to increase efficiency and functionality of the building. In general, this renovation will provide a more therapeutic environment, enhanced patient privacy, a safer, code compliant facility, and improve the quality of service delivery.

The overall condition of CH has been assessed and has been given a Facility Condition Index (FCI) rating of 0.61 (65%). The FCI is a relative indicator of condition that equals the cost of current maintenance, repair and replacement deficiencies of a facility divided by the current replacement value of the facility. The book, "Managing the Facilities Portfolio," published by the National Association of College and University Business Officers, where the FCI metric was first published, provided a set of ratings:

- Good – under 5% (0.05)
- Fair – 5% to 10% (0.05 – 0.10)
- Poor – 10% to 30% (0.10 to 0.30)
- Critical – greater than 30% (30+)

CH is well beyond the "critical" category. FICAS indicates that the deferred maintenance requirement exceeds \$16 million.

Alternatives Considered

DBHDS has considered several alternatives to this project. Options include the following:

1. Construct a new facility. The cost of renovation compares favorably to new construction (estimated to be less than twice the cost). Although the operational costs of a new facility may be lower due to improved staff efficiency and reduced energy usage, the proposed renovation will provide significant efficiency improvements. Hill Burton hospitals design was a very efficient foot print. Models similar to Western State Hospital improve on these earlier designs.

2. Do nothing. The facility is currently working well and serving the need. It will continue to need an infusion of capital resources as systems continue to fail. Mechanical and electrical systems are beyond their useful life and will need to be replaced in the near future. The current window system is energy efficient, but lacks the security which is being implemented at other hospitals in the system and does present a risk to patients and staff. Recent investments in the Life Safety and Security systems have improved the functionality of the building. The cost of maintenance and upkeep continues to increase.

Justification

The first priority of CH is to help patients regain and maintain their highest level of mental and physical functioning, with the goal of returning to productive community living. As such, it performs a vital service to its catchment area, which serves nearly one million residents of the Commonwealth. The facility has undergone minimal renovations or improvements in the 40+ years it has been utilized by DBHDS. The mechanical system is failing. Electrical distribution and infrastructure need to be improved and the water and sewage system (both owned and operated by Catawba) are in need of improvement. Failure to accomplish these renovations will jeopardize the operation of this facility. Failure to replace the window systems in the patient areas could lead to serious injury to patients and staff. Broken windows are a source of elopement and the glass shards area source of weapons which can be used against themselves, other patients or staff.

The new HVAC system would provide air flow in a direction which minimizes contamination from one bedroom to another. Meeting code requirements for air changes and provision of outside air would prevent the build-up of noxious odors. This can cause severe reaction in some patients and can induce serious setbacks to their treatment.

A failure in the high voltage electrical distribution system would force the facility to consider relocating patients to an alternative site. While the main hospital has a stand-by generator for short duration outages, a major disruption in the facility-owned system would take significant time to repair, since the high-voltage expertise is contracted and not on staff.

Alternatives Considered

Costing Methodology

The cost of this renovation was estimated using recent, similar projects for a comparison.

Agency Funding Request				
Phase	Year	Fund	Subject	Requested Amount
Construction	2017	0100 - General Fund	2328 - Construction, Buildings Improvements	\$50,950,000
Total				\$50,950,000
Project Costs				
Cost Type			Total Project Costs	Requested Funding
				DGS Rec

Acquisition Cost			
Building & Built-in Equipment	\$37,500,000	\$37,500,000	
Sitework & Utility Construction	\$6,000,000	\$6,000,000	
Construction Cost Total	\$43,500,000	\$43,500,000	
DESIGN & RELATED SERVICE ITEMS			
A/E Basic Services	\$4,350,000	\$4,350,000	
A/E Reimbursables	\$40,000	\$40,000	
Specialty Consultants (Food Service, Acoustics, etc.)			
CM Design Phase Services			
Subsurface Investigations (Geotech, Soil Borings)	\$40,000	\$40,000	
Land Survey	\$25,000	\$25,000	
Archeological Survey	\$10,000	\$10,000	
Hazmat Survey & Design	\$10,000	\$10,000	
Value Engineering Services	\$40,000	\$40,000	
Cost Estimating Services	\$40,000	\$40,000	
Other Design & Related Services	\$10,000	\$10,000	
Design & Related Services Total	\$4,565,000	\$4,565,000	
INSPECTION & TESTING SERVICE ITEMS			
Project Inspection Services (inhouse or consultant)	\$380,000	\$380,000	
Project Testing Services (conc., steel, roofing, etc.)	\$20,000	\$20,000	
Inspection & Testing Services Total	\$400,000	\$400,000	
PROJECT MANAGEMENT & OTHER COST ITEMS			
Project Management (inhouse or consultant)			
BCOM Services	\$20,000	\$20,000	
Advertisements	\$5,000	\$5,000	
Printing & Reproduction	\$10,000	\$10,000	
Moving & Relocation Expenses	\$75,000	\$75,000	
Non Built-In Data and Voice Communications	\$90,000	\$90,000	
Signage			
Demolition	\$85,000	\$85,000	
Hazardous Material Abatement	\$20,000	\$20,000	
Utility Relocations			
Commissioning			
Miscellaneous Other Costs	\$5,000	\$5,000	
Project Management & Other Costs Total	\$310,000	\$310,000	
Furnishings & Movable Equipment			
Construction Contingency	\$2,175,000	\$2,175,000	
TOTAL PROJECT COST	\$50,950,000	\$50,950,000	

Capacity

Cost Type	Unit of Measure	Units	Cost Per Unit
Acquisition Cost		0	\$0
Construction Cost		130,600	\$0

Operating and Maintenance Costs (Agency)

Cost Type	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
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Planned start date of new O&M costs (if different than the beginning of the fiscal year):---

Supporting Documents

No supporting documents for this adjustment

Workflow History

User Name	Claimed	Submitted	Step Name
Scott Castro	05/27/2015 12:45 PM	05/27/2015 12:45 PM	Enter Capital Budget Request
Scott Castro	05/27/2015 12:45 PM	06/15/2015 10:34 AM	Continue Drafting
Scott Castro	06/15/2015 11:02 AM	06/15/2015 11:24 AM	Agency Review Step 1
Scott Castro	06/15/2015 12:27 PM	06/15/2015 12:33 PM	Agency Review Step 1
Scott Castro	06/15/2015 02:26 PM	06/15/2015 02:26 PM	Agency Review Step 1
Scott Castro	06/15/2015 02:26 PM	06/15/2015 02:27 PM	Agency Review Step 1
Scott Castro	06/15/2015 03:02 PM	06/15/2015 03:02 PM	Agency Review Step 1
Scott Castro	06/16/2015 08:16 AM	06/16/2015 08:16 AM	Ready for DPB Submission
Emily Ehrlichmann	09/23/2015 01:26 PM	09/23/2015 01:27 PM	DPB Review
			DPB Review

Capital Budget Request

Renovate Main Hospital Building and Building 29 at Piedmont Geriatric Hospital

Overview

Agency	Department of Behavioral Health and Developmental Services (720)
Project Code	none
Project Type	Improvements-Infrastructure Repairs
Biennium	2016-2018
Budget Round	Initial Bill
Request Origin	Previously Submitted
Project Location	Central Virginia
Facility/Campus	Piedmont Geriatric Hospital
Source of Request	Agency Request
Infrastructure Element	Hospital / Medical Center

Contains significant technology costs? No

Contains significant energy costs? No

Agency Narrative

Agency Description

Piedmont Geriatric Hospital (PGH), located on 128 acres in Nottoway County, was originally constructed 82 years ago, in 1933, as a tuberculosis sanitarium with the North and West Wings added 65 years ago, in 1950. DBHDS assumed control of the approximately 130,600 square foot facility in the early 1950's and has operated it as a geriatric mental health facility since that time. The facility has an operational capacity of 135 patients. This reflects a reduction in patient population from a previous census of 210 (certified beds), that is consistent with PGH's Facility Master Plan and the strategic plan of the Agency. PGH shares a campus and some support functions with the Virginia Center for Behavioral Rehabilitation (VCBR). Administrative support services, including personnel, fiscal, training, and environmental services for both facilities are housed in Building 29, located proximate to both VCBR and PGH. Building 29 was constructed as a residence for nursing staff in 1950 and encompasses approximately 30,500 square feet.

This project proposes the renovation of the main hospital building to respond to changes in treatment modalities and Department of Justice (DOJ) standards for active and separated program space, and to building 29 to renew existing systems that have reached the end of their useful life. Renovations in building 29 include the installation of a centralized HVAC system (the building currently relies on window air conditioning units) and reconfiguration of interior spaces to improve building efficiency. As the program within VCBR continues to grow, their need for administrative support also increases. The proposed reconfiguration allows this to occur without having to provide additional square footage.

The overall condition of PGH has been assessed and has been given a Facility Condition Index (FCI) rating of 0.45 (45%). The FCI is a relative indicator of condition that equals the cost of current maintenance, repair and replacement deficiencies of a facility divided by the current replacement value of the facility. The book, *Managing the Facilities Portfolio*, published by the National Association of College and University Business Officers, where the FCI metric was first published, provided a set of ratings:

- Good – under 5% (0.05)
- Fair – 5% to 10% (0.05 – 0.10)
- Poor – 10% to 30% (0.10 to 0.30)
- Critical – greater than 30% (0.30+).

PGH is well beyond the "critical" category. Building systems, including HVAC, fire alarms and electrical have exceeded their useful life. While anti-ligature issues have been addressed in the residential units in response to citations from the Center for Medicare and Medicaid Services (CMS), large portions of the main hospital building continue to be plagued by hanging hazards. Both the main hospital building and building 29 are not in compliance with ADA and some portions of the building code. Under this project, renewal of building systems will include replacement of the HVAC, electrical system and elevators. An elevator would be installed in Building 29. The building will be made more accessible to handicapped persons with renovations to the main entrance, bathrooms and elevators. Existing, original, single-pane, metal-frame windows in building 29 will be replaced with new, energy efficient windows. The windows in the main hospital building are being replaced under another capital project.

During the design process, the interior layout of Building 29 and the east wing of the hospital will be evaluated, and changes made to provide improved operating efficiency. In the main hospital, offices will be provided near the patient units to allow social workers and other staff to be near clients, rather than housed in a separate building (Building 29). A new handicapped accessible medical suite will be created to include a new dental suite, adjacent to other medical treatment services. The pharmacy, currently "making do" in a series of small rooms, will be relocated to a renovated space that will improve efficiency. Handicapped accessible recreational, vocational and music therapy areas will also be provided along with appropriate storage for necessary equipment. The front of the building, including administration, lobby and auditorium, will be

renovated with new windows, made accessible for handicapped persons and made compliant with the code. New finishes will be provided throughout. The interior layout of building 29 will be evaluated, and changes made to remove walls, create some office suites, and allow more staff to be housed in the same space, with improved communications and work flow, without adding square footage. The additional space is needed to serve the continued growth of VCBR. Renovations will also include installation of an elevator and new interior finishes.

Work will also be undertaken on the outside of the building with the provision of a secure patient area outside the building, to allow patients who present a security or flight risk (including those with dementia) to have access to the outside. A covered pavilion area will be included to allow those patients on photo-sensitive medications to enjoy access.

Alternatives Considered

DBHDS has considered several alternatives to this project. Options include the following:

1. Close the facility. The staff and programs are specialized in and for geriatric care and are responsive to the unique needs of this population.
2. Construct a new facility in lieu of renovating the existing. The cost of renovation compares favorably to new construction (estimated to be approximately twice the cost). Although the operational costs of a new facility will be lower due to improved staff efficiency and reduced energy usage, the proposed renovation will increase the efficiency over the current operation.

Justification

Piedmont Geriatric Hospital is the only facility within the DBHDS system of care dedicated to the care of elderly persons (65+ years of age) who are in need of inpatient treatment for mental illness; meet the requirements for voluntary or involuntary admission as determined by their mental health center (CSB) and do not have a medical condition that requires priority treatment in an acute care hospital. Patients are typically admitted to Piedmont Geriatric Hospital after multiple courses of community and psychiatric in-patient treatment has not met their needs and their treatment options have been exhausted.

This facility has not undergone a major renovation in more than 50 years. Since that time improvements to the facility have been limited in scope. Recently, the ground floor was reorganized with the installation of a satellite kitchen and, after a citation from CMS, the patient residential wing of the building was renovated to alleviate hanging hazards. Building 29 has had no major renovations since its construction in 1950.

The mechanical systems in both buildings are beyond their useful life and in need of immediate replacement. The electrical system is the original system, with the exception of a stand-by generator which was added recently. The wiring and panels are beyond their useful life and present a real hazard. Hanging hazards persist in many of the areas of the hospital building and need to be removed so that staff can focus their attention on treatment of illness rather than protection from hazards. This center for excellence in geriatric treatment needs an environment where the staff can concentrate on returning individuals to the community or home setting from which they come. Renovations to building 29 are required to provide space to serve the growing administrative needs of VCBR without constructing additional administrative space.

The initial planning would also provide a master plan of development which would integrate the medical and social services more closely with the patients for greater effectiveness and efficiency. The implementation of such a plan would remove barriers and enhance services beyond that for which the original floor plan was designed. This would vastly improve patient treatment and patient care.

This project will be the first to address the hospital building as a whole with the intent to create a more efficient and therapeutic environment, as well as improve building systems. Execution of this project will allow the patients greater access to programs and the staff easier access to the patients. It will also improve the administrative functioning of both PGH and VCBR and alleviate the need to construct office space. This project is vital to the continued high performance of this outstanding facility.

Alternatives Considered

Costing Methodology

The cost of this renovation was estimated using recent, similar projects for a comparison.

Agency Funding Request					
Phase	Year	Fund	Subobject	Requested Amount	
Construction	2016	0100 - General Fund	2328 - Construction, Buildings Improvements	\$43,100,000	
Total				\$43,100,000	
Project Costs					
Cost Type		Total Project Costs		Requested Funding	DGS Rec
Acquisition Cost					
Building & Built-in Equipment		\$28,600,000		\$28,600,000	
Sitework & Utility Construction		\$1,550,000		\$1,550,000	
Construction Cost Total		\$30,150,000		\$30,150,000	

DESIGN & RELATED SERVICE ITEMS			
A/E Basic Services		\$3,316,500	\$3,316,500
A/E Reimbursables		\$29,500	\$29,500
Specialty Consultants (Food Service, Acoustics, etc.)		\$260,000	\$260,000
CM Design Phase Services		\$150,000	\$150,000
Subsurface Investigations (Geotech, Soil Borings)		\$10,000	\$10,000
Land Survey		\$19,500	\$19,500
Hazmat Survey & Design		\$29,000	\$29,000
Value Engineering Services		\$45,000	\$45,000
Cost Estimating Services		\$45,000	\$45,000
Other Design & Related Services		\$135,000	\$135,000
Design & Related Services Total		\$4,039,500	\$4,039,500
INSPECTION & TESTING SERVICE ITEMS			
Project Inspection Services (inhouse or consultant)		\$510,000	\$510,000
Project Testing Services (conc., steel, roofing, etc.)		\$50,000	\$50,000
Inspection & Testing Services Total		\$560,000	\$560,000
PROJECT MANAGEMENT & OTHER COST ITEMS			
Project Management (inhouse or consultant)		\$590,000	\$590,000
BCOM Services		\$62,000	\$62,000
Advertisements		\$12,000	\$12,000
Printing & Reproduction		\$25,000	\$25,000
Moving & Relocation Expenses		\$95,000	\$95,000
Non Built-In Data and Voice Communications		\$150,000	\$150,000
Signage		\$25,000	\$25,000
Hazardous Material Abatement		\$20,000	\$20,000
Utility Relocations		\$69,000	\$69,000
Commissioning		\$165,000	\$165,000
Miscellaneous Other Costs		\$30,000	\$30,000
Project Management & Other Costs Total		\$1,243,000	\$1,243,000
Furnishings & Movable Equipment		\$5,600,000	\$5,600,000
Construction Contingency		\$1,507,500	\$1,507,500
TOTAL PROJECT COST		\$43,100,000	\$43,100,000

Capacity

Cost Type	Unit of Measure	Units	Cost Per Unit
Acquisition Cost		0	\$0
Construction Cost		130,600	\$231
Total Project Cost		0	\$0

Operating and Maintenance Costs (Agency)

Cost Type	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Planned start date of new O&M costs (if different than the beginning of the fiscal year):---						

Supporting Documents

No supporting documents for this adjustment

Workflow History

User Name	Claimed	Submitted	Step Name
Scott Castro	05/28/2015 12:52 PM	05/28/2015 12:52 PM	Enter Capital Budget Request

Scott Castro	05/28/2015 12:53 PM	06/15/2015 09:25 AM	Continue Drafting
Scott Castro	06/15/2015 03:04 PM	06/15/2015 03:05 PM	Agency Review Step 1
Scott Castro	06/16/2015 08:15 AM	06/16/2015 08:15 AM	Ready for DPB Submission
Emily Ehrlichmann	08/26/2015 03:22 PM	08/26/2015 03:34 PM	DPB Review
Emily Ehrlichmann	09/23/2015 01:25 PM	09/23/2015 01:26 PM	DPB Review
			DPB Review

CapitalBudgetRequest

Construct 56 Additional Beds at Western State Hospital

Overview

Agency	Department of Behavioral Health and Developmental Services (720)
Project Code	none
Project Type	New Construction
Biennium	2016-2018
Budget Round	Initial Bill
Request Origin	Previously Submitted
Project Location	Shenandoah Area
Facility/Campus	Western State Hospital
Source of Request	Agency Request
Infrastructure Element	

Contains significant technology costs? No

Contains significant energy costs? No

Agency Narrative

Agency Description

The new Western State Hospital (WSH) replacement facility was occupied in October/November of 2013. The design of the new facility allows for a future, two-story, patient care unit to be added to the structure. All central utilities and support service spaces were designed to accommodate the additional beds and space. The design of the new patient care unit has a capacity of 56 beds. This project will construct a new patient care unit at Western State Hospital (see the attached floor plan of WSH). The two-story, 52,000 square foot addition would be similar to the patient care units which are currently being used. This unit will be capable of accepting patients from anywhere in the system.

The central support systems in the new WSH have been designed to accept the new addition without substantial change to the central services. Most of the space required at the centralized level for support services has been constructed to accommodate this addition, including the following:

- Pharmacy
- Food Services
- Laundry
- Housekeeping
- Building and Grounds
- Transportation
- Medical Records
- Warehouse
- Outdoor and indoor recreation
- Clinics (Medical, Dental, OT/PT, Neuropsychology, Audiology, Lab, XRay, etc.)

In addition, the central utilities and services in the building have been sized for the addition; this includes:

- Central cooling and heating
- Electrical power (normal and stand-by)
- Fire Alarm
- Security
- Information Technology including wireless network expansion
- Storm water drainage
- Water and waste water
- Parking

The two-story addition, with some adjustment to the cafeteria and additional classroom space in the mall, would be similar to the patient care units which are currently being used. This design better supports recovery-oriented, person-centered therapy and helps ensure the best possible care promoting psychosocial rehabilitation and recovery.

The new addition will be designed and constructed to meet LEED® Silver standards for energy conservation and sustainability. The new patient care unit will be attached in a manner that flows seamlessly from the other patient care units. The basic design of the patient care unit has been reviewed and approved by the Bureau of Capital Outlay Management. Minimum effort will be needed in the pre-planning and schematic design to

obtain approval to proceed with the preliminary and final designs.

Alternatives Considered

(1) Do nothing. This does not provide additional beds that may be needed due to the most recent legislative actions and increase pressure on the use of LIPOS funding.

(2) Defer until the 2018-2020 biennium. This merely delays the implementation and could exacerbate the difficulties with finding available beds in the system. Also, costs are again increasing in the construction industry and this will increase the expenditure.

Justification

With the last resort legislation (SB260) passed in the 2014 General Assembly session, state facilities have a greater role in the crisis management and treatment across the state. As a result, the need for state inpatient beds has gone up. This expansion will increase the state's overall number of psychiatric inpatient beds and help carry out the intent of the general assembly as expressed in the recently passed legislation. At WSH alone, admissions have escalated 47 percent and Civil Temporary Detention Orders (TDOs) have increased fivefold since FY 2013. Forensic Admissions and TDOs have also increased 52 percent and 93 percent respectively since FY 2013. Statewide, the increase in admission rates has increased 20 percent since this legislation was passed.

In addition to the impact of SB260, there has been an increasing demand for forensic beds. Thirty-five percent of our hospital beds are now committed to forensic populations. Their legally-required long-term stays (average of 6.5 years for NGR1 persons) reduce bed availability for ready access for those persons requiring civil admission. At times in the past few years these dynamics have led to long waits for access, especially at Eastern State Hospital, where the civil and forensic beds are routinely full. Frequently, similar conditions exist at Southern, Southwestern, and Northern Virginia Mental Health Institutes. The geographic location of Western Hospital allows it to assume overflow from all areas of the state. Patients from other facilities may be relocated to this new patient care unit, thus providing DBHDS with the flexibility to downsize or close costly, older facilities. Rather than continuing to invest in old facilities, the investment can be made in a modern, state of the art facility at WSH.

Alternatives Considered

Costing Methodology

The estimate is based on a cost figure for the future expansion that was received at the time of the original construction and supplemented by recent cost estimates from the contractor. Escalation has been added to adjust for the current rising cost of construction.

Agency Funding Request

Phase	Year	Fund	Subobject	Requested Amount
Full Funding	2017	0100 - General Fund	2195 - Undistributed Property and Improvements	\$22,311,000
Total				\$22,311,000

Project Costs

Cost Type	Total Project Costs	Requested Funding	DGS Rec
Acquisition Cost			
Building & Built-in Equipment	\$15,500,000	\$15,500,000	\$15,408,000
Sitework & Utility Construction	\$660,000	\$660,000	\$1,541,000
Construction Cost Total	\$16,160,000	\$16,160,000	\$16,949,000
DESIGN & RELATED SERVICE ITEMS			
A/E Basic Services	\$1,616,000	\$1,616,000	\$1,616,000
A/E Reimbursables	\$40,000	\$40,000	\$40,000
Specialty Consultants (Food Service, Acoustics, etc.)			\$0
CM Design Phase Services			\$52,000
Subsurface Investigations (Geotech, Soil Borings)	\$8,000	\$8,000	\$8,000
Land Survey			\$0
Archeological Survey			\$0
Hazmat Survey & Design			\$0
Value Engineering Services	\$42,000	\$42,000	\$0
Cost Estimating Services	\$23,000	\$23,000	\$0
Other Design & Related Services			\$0
Design & Related Services Total	\$1,729,000	\$1,729,000	\$1,716,000

INSPECTION & TESTING SERVICE ITEMS				
Project Inspection Services (inhouse or consultant)		\$390,000	\$390,000	\$254,500
Project Testing Services (conc., steel, roofing, etc.)		\$680,000	\$680,000	\$97,500
Inspection & Testing Services Total		\$1,070,000	\$1,070,000	\$352,000
PROJECT MANAGEMENT & OTHER COST ITEMS				
Project Management (inhouse or consultant)				\$262,800
BCOM Services		\$62,000	\$62,000	\$85,200
Advertisements		\$8,000	\$8,000	\$4,000
Printing & Reproduction		\$18,000	\$18,000	\$52,000
Moving & Relocation Expenses				\$0
Non Built-In Data and Voice Communications		\$100,000	\$100,000	\$100,000
Signage		\$6,000	\$6,000	\$6,000
Demolition				\$0
Hazardous Material Abatement				\$0
Utility Connection Fees				\$0
Utility Relocations				\$0
Commissioning		\$350,000	\$350,000	\$350,000
Miscellaneous Other Costs				\$0
Project Management & Other Costs Total		\$544,000	\$544,000	\$860,000
Furnishings & Movable Equipment		\$2,000,000	\$2,000,000	\$2,000,000
Construction Contingency		\$808,000	\$808,000	\$339,000
TOTAL PROJECT COST		\$22,311,000	\$22,311,000	\$22,216,000

Capacity

Cost Type	Unit of Measure	Units	Cost Per Unit
Acquisition Cost		0	\$0
Construction Cost		0	\$0
Total Project Cost		0	\$0

Operating and Maintenance Costs (Agency)

Cost Type	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
GF Dollars	\$0	\$0	\$7,315,000	\$7,315,000	\$7,315,000	\$7,315,000
NGF Dollars	\$0	\$0	\$0	\$0	\$0	\$0
GF Positions	0.00	0.00	102.00	102.00	102.00	102.00
NGF Positions	0.00	0.00	0.00	0.00	0.00	0.00
GF Transfer	\$0	\$0	\$0	\$0	\$0	\$0
GF Revenue	\$0	\$0	\$0	\$0	\$0	\$0
Layoffs	0	0	0	0	0	0

Planned start date of new O&M costs (if different than the beginning of the fiscal year):---

Supporting Documents

No supporting documents for this adjustment

Workflow History

User Name	Claimed	Submitted	Step Name
Scott Castro	05/27/2015 11:53 AM	05/27/2015 11:53 AM	Enter Capital Budget Request
Scott Castro	05/27/2015 11:53 AM	06/12/2015 12:59 PM	Continue Drafting
Scott Castro	06/12/2015 01:45 PM	06/12/2015 01:46 PM	Agency Review Step 1

Scott Castro	06/15/2015 11:04 AM	06/15/2015 11:24 AM	Agency Review Step 1
Scott Castro	06/15/2015 02:28 PM	06/15/2015 02:28 PM	Agency Review Step 1
Scott Castro	06/15/2015 03:03 PM	06/15/2015 03:03 PM	Agency Review Step 1
Scott Castro	06/16/2015 08:16 AM	06/16/2015 08:16 AM	Ready for DPB Submission
Emily Ehrlichmann	06/26/2015 12:17 PM	06/26/2015 12:18 PM	DPB Review
Emily Ehrlichmann	08/26/2015 03:35 PM	08/26/2015 03:45 PM	DPB Review
Emily Ehrlichmann	09/23/2015 10:39 AM	09/23/2015 10:40 AM	DPB Review
			DPB Review