IN THE MATTER OF	*	**BEFORE THE**
	*	
ADVENTIST HEALTHCARE, INC. d/b/a WASHINGTON ADVENTIST HOSPITAL	*	**MARYLAND HEALTH**
	*	
	*	**CARE COMMISSION**
	*	
Docket No.: 13-15-2349	*	
	*	

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Reviewer's Recommended Decision

December 17, 2015

(Released November 18, 2015)

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I. INTRODUCTION

A. The Applicant

Adventist HealthCare, Inc. ("AHC") d/b/a Washington Adventist Hospital is the applicant in this review. AHC traces its beginnings to 1903, when leaders of the General Conference of Seventh-Day Adventists founded a "sanitarium" in Takoma Park, a development associated with the relocation of the Seventh-Day Adventist Church headquarters from Michigan to Takoma Park (Montgomery County).

AHC currently operates two general hospitals in Maryland, AHC Washington Adventist Hospital ("WAH"), whose relocation is one of the subjects of this application, and AHC Shady Grove Medical Center. WAH is an acute general hospital located at 7600 Carroll Avenue in Takoma Park. WAH is currently licensed to operate 230 acute care beds, including 169 medical/surgical/gynecological/addictions ("MSGA") beds, 21 obstetric beds, and 40 acute psychiatric beds. AHC Physical Health & Rehabilitation operates a 24-bed special hospital unit for medical rehabilitation on the WAH campus. AHC Behavioral Health & Wellness provides acute inpatient psychiatric care in special hospitals located in Rockville (107 beds in Montgomery County) and Cambridge (15 beds in Dorchester County).

AHC's second Maryland acute general hospital, AHC Shady Grove Medical Center ("SGMC"), was established in Rockville (also in Montgomery County) in 1979 and is currently licensed to operate 290 acute care beds.

In Maryland, Adventist HealthCare also operates:

- Two residential treatment centers (88 beds in Rockville and 59 beds in Cambridge), in conjunction with its two psychiatric hospitals;

- A special hospital for medical rehabilitation, Adventist Rehabilitation Hospital of Maryland, with 87 beds split between two separate campuses, in Rockville and Takoma Park. Operationally, this latter facility, with 24 of the total 87 beds, is integrated within WAH;

- A home health agency, AHC Home Care Services, serving Montgomery and surrounding counties;

- A freestanding medical facility, providing emergency medical services as a satellite of the SGMC Emergency Department, the AHC Germantown Emergency Center, in Germantown (Montgomery County); and

- Other outpatient diagnostic and treatment centers.

B. The Project

AHC proposes to relocate and replace WAH, the general acute care hospital operated in Takoma Park, with the exception of acute psychiatric inpatient services and the separately licensed medical rehabilitation facility, to a new site of approximately 49 acres in the White Oak area of Silver Spring in Montgomery County, approximately 6.6 miles from the existing campus.

The 40 psychiatric beds will remain in expanded and renovated space inside the current Washington Adventist Hospital building on the Takoma Park campus, but its location on a separate campus from the general hospital means that it will no longer be operated as a psychiatric unit of WAH. Rather, these inpatient facilities will be operated by the Adventist Behavioral Health division of AHC as a special hospital-psychiatric. This approach was chosen to reduce the overall cost of the proposed replacement hospital. [1] Similarly, the separately-licensed special hospital for medical rehabilitation will continue to operate in Takoma Park within its current building space.

If the hospital relocation is implemented, AHC proposes to operate an urgent care center that would be developed in the space currently occupied by the WAH emergency department (ED). Additionally, the Takoma Park campus will continue to host a Federally Qualified Health Center that is independently operated by Community Clinic, Inc., and the Women's Center clinic, a maternity clinic serving low income women, which is operated by AHC. More information concerning these plans will be discussed later in this summary.

In explaining the need for the relocation and replacement of WAH, AHC stresses that the existing hospital is outdated, undersized for today's style of health care delivery and technology, and constricted on a relatively small campus that is difficult to access and also difficult to redevelop and reconfigure to establish more modern hospital facilities. Below is a summary of the challenges AHC identified as present at the current facility in Takoma Park. (Docket Item (DI) #27, pp. 20-23)

AHC: the existing hospital is outdated and undersized

- One third of inpatients are accommodated in a 1950s building in rooms that are undersized by current standards;
- The campus is configured for inpatient care, not the blend of inpatient and outpatient services that is needed today and in the future;
- Many departments are undersized according to architectural benchmarks for a modern hospital at WAH's current service volumes; and
- A majority of patient rooms are semi-private, designed for two beds. The current standard for hospitals is single occupancy rooms, for improved patient safety, privacy, and to facilitate family involvement in patient care.

[1] AHC's consideration of options is discussed later in this report under COMAR 10.24.10, the Cost Effectiveness standard of the Acute Care Chapter of the State Health Plan and under COMAR 10.24.01.08G(3), the Availability of More Cost Effective Alternatives criteria.

AHC: the existing site for the hospital is inadequate and is not well-located

- Travel access to the hospital is poor. Most approaches are on narrow, two-lane residential roads;
- It lacks sufficient space for parking.
- Trying to renovate in place to modernize the hospital is infeasible, as there is not enough available space to temporarily relocate functions to maintain operations while renovations proceed.
- It lacks space to accommodate physician offices, making recruiting doctors more difficult.

The proposed replacement hospital would have 170 private inpatient rooms, and thus 170 beds, consisting of 152 MSGA beds and 18 obstetric (post-partum) beds. It would also have 20 observation/clinical decision beds. The following table compares key service capacities of the current WAH and those proposed by AHC for the replacement general hospital and the special hospital and outpatient service campus proposed as the future of the existing Takoma Park campus.

Table I-1: Key Service Capacities of AHC and WAH Currently and Post-Project

Service	Existing Takoma Park Campus	Proposed	
		White Oak Campus	Takoma Park Campus
MSGA beds	241	124	0
Intensive/critical care beds	34	28	0
Obstetric beds	30	18	0
Psychiatric beds	40	0	40
Medical rehabilitation beds	24	0	24
Distinct unit observation beds	0	20	0
Emergency department treatment bays	26	32*	0
Operating rooms	11	8	0
Dedicated caesarean-section rooms	2	2	0
Procedure rooms	2	3	0
Angiography suites		6	0

*plus 2 mental health evaluation rooms
Sources: DI#27

Unlike the existing Takoma Park campus, AHC proposes that a central utility plant for the replacement hospital would be built by a third party, with the hospital buying power as an operating expense. This approach was also chosen to lower the capital expense required to implement the relocation project, which is estimated to save $12 to $16 million. (DI#43)

The estimated project cost is $330,829,524 for the relocation and replacement of the general hospital and $5,223,506 for the renovation/expansion of the existing behavioral health unit for a total of $336,053,030. AHC proposes to finance the project with approximately $245 million in borrowing, $55.6 million in cash equity, $20 million from contributed gifts, $11 million in contributed land, and $4.5 million in interest income. An itemized project budget follows (Table I-2).

Table I-2: Estimated Uses and Sources of Funds
Replacement and Relocation of the General Hospital Facilities of WAH

Uses of Funds			
	White Oak	**Behavioral Health Renovation**	**Total**
New Construction			
Building/Land Purchase/Site Preparation	$156,600,000		$156,600,000
Architect/Engineering Fees & Permits	13,900,000		13,900,000
Renovations			
Building Demolition/Renovations		$3,700,000	3,700,000
Architect/Engineering Fees & Permits		519,000	519,000
Major and Minor Equipment	33,800,000		33,800,000
Contingencies	11,200,000	200,000	11,400,000
Other Capital Costs	30,700,000	300,000	31,000,000
Capitalized Construction Interest	45,156,375		45,156,375
Inflation	10,100,000	400,000	10,500,000
Total Capital Costs	**$ 301,456,375**	**$ 5,119,000**	**$306,575,375**
Financing and Other Cash Requirements	$29,373,149	$104,506	$29,477,655
Working Capital	0	0	0
Total Uses of Funds	**$ 330,829,524**	**$ 5,223,506**	**$336,053,030**
Sources of Funds			
Cash	$50,575,175		$50,575,175
Gifts, bequests	20,000,000		20,000,000
Interest Income	4,504,349		4,504,349
Authorized Bonds	244,750,000	5,223,506	249,973,506
Transfer of Land from AHC	11,000,000		11,000,000
Total Source of Funds	**$ 330,829,524**	**$ 5,223,506**	**$336,053,030**

Source: DI#27, Ex. 1, Table E.

As noted, acute psychiatric inpatient services, including 40 psychiatric beds, and medical rehabilitation, will remain on the Takoma Park campus in renovated space in the existing hospital building. Space currently occupied by the ED will be converted to an urgent care facility. The to-be-established urgent care facility, as well as the two special hospitals, will continue to be served by on-campus ancillary services (laboratory, radiology). The Federally Qualified Health Center ("FQHC") on the Takoma Park campus is scheduled for an expansion that would triple its capacity.

It bears repeating that of the renovations proposed for the Takoma Park campus, only the renovation of the behavioral health space is a component of this project and CON application. The other investments on the campus, such as development of the urgent care capability, would not involve CON-regulated expenditures. They would be separately financed by AHC, at a cost of approximately $13.2 million. (DI#85)

C. Recommended Decision

I find that this project complies with the State Health Plan standards and that the hospital has demonstrated the need for the project, its cost-effectiveness, its viability, and is consistent with the remaining Certificate of Need review criteria. I recommend that the Commission APPROVE the Certificate of Need application with the following conditions:

1. Adventist HealthCare, Inc. must open an urgent care center on its Takoma Park campus coinciding with its closure of general hospital operations on that campus. The urgent care center must be open every day of the year, and be open 24 hours a day. Adventist HealthCare, Inc. may not eliminate this urgent care center or reduce its hours of operation without the approval of the Maryland Health Care Commission.

2. In the fourth year of operation of a replacement Washington Adventist Hospital, Adventist HealthCare, Inc. shall provide a report to the Maryland Health Care Commission on the operation of the specialty hospital for psychiatric services in Takoma Park. This report must review patient intake and transport issues, coordination of care for psychiatric patients between the White Oak and Takoma Park campuses, and the specific financial performance of the special hospital, exclusive of the operation of Adventist Behavioral Health and Wellness overall.

3. Adventist HealthCare, Inc. will not finish the shell space in the relocated Washington Adventist Hospital without giving notice to the Commission and obtaining all required Commission approvals.

4. Adventist HealthCare, Inc. will not request an adjustment in rates by the Health Services Cost Review Commission ("HSCRC") that includes depreciation or interest costs associated with construction of the proposed shell space at the relocated Washington Adventist Hospital until and unless Adventist HealthCare, Inc. has filed a CON application involving the finishing of the shell space, has obtained CON approval for finishing the shell space, or has obtained a determination of coverage from the Maryland Health Care Commission that CON approval for finishing the shell space is not required.

5. The HSCRC, in calculating any future rates for Adventist HealthCare, Inc. d/b/a Washington Adventist Hospital and its peer group, shall exclude the capital costs associated with the shell space until such time as the space is finished and put to use in a rate-regulated activity. In calculating any rate that includes an accounting for capital costs associated with the shell space, HSCRC shall exclude any depreciation of the shell space that has occurred between the construction of the shell space and the time of the rate calculation (i.e., the rate should only account for depreciation going forward through the remaining useful life of the space). Allowable interest expense shall also be based on the interest expenses going forward through the remaining useful life of the space.

II. PROCEDURAL HISTORY

A. Review of the Record

Please see Appendix 1, Record of the Review.

B. Interested Parties and Participating Entities in the Review

Three general hospitals are interested parties in this review, opposing approval of the proposed relocation and replacement of WAH. They are Holy Cross Hospital of Silver Spring ("HCH"), Laurel Regional Hospital ("LRH"),[2] and MedStar Montgomery Medical Center ("MMMC"). All three oppose the project based on some combination of: (1) the project's negative impact on their volume and financial performance; (2) their ability to handle a projected influx of emergency room patients resulting from the relocation of the hospital; and/or (3) the impact each believes the move would have on Takoma Park residents who depend on WAH for access to hospital services.

The City of Takoma Park ("Takoma Park") is a participating entity in this review. It has not opposed the relocation of the hospital, accepting that AHC must consider locations outside of Takoma Park in order to realize its goal of building a more modern hospital. However, Takoma Park expressed concern regarding the impact of a relocation on geographic access to health care for city residents and access to affordable health care for the city's indigent and uninsured residents, and asks the Commission to "require AHC to take all reasonable actions to mitigate the adverse impacts on Takoma Park residents' geographic and financial access to health care."

Takoma Park has also expressed concern that the plans AHC has outlined for continuing services in Takoma Park are not a formal part of the CON application and that, for this reason, AHC will not be accountable to the Commission to execute and maintain those plans. Further, Takoma Park noted that the financial projections for the services proposed to be offered at Takoma Park after the hospital relocation indicate the site will operate at a loss. The city is concerned that, if the financial performance of the replacement hospital is less positive than AHC anticipates, AHC will lack the financial ability to sustain the services proposed for the site. (DI #53)

C. Local Government Review and Comment

As noted, the City of Takoma Park is a participating entity that provided detailed comments in this review. Takoma Park's comments are summarized in this Recommended Decision under the particular standards and criteria to which they apply. Local government elected officials are among those who provided letters supporting this project, as further described below in Section D. Community Support.

D. Community Support

AHC provided many written expressions of support it received for relocating the hospital,

[2] I note that, on October 13, 2015, LRH gave formal notice in this review that it intends to cease the provision of inpatient services by the end of 2017 and convert to an ambulatory medical center. (DI #110)

both from individuals and organizations.

The United States Food and Drug Administration entered into a Memorandum of Understanding with AHC in order to advance opportunities for collaboration. (DI #27, Ex. 7)

More than 800 letters were filed that supported the hospital's relocation, including more than 730 "form" letters written by residents of the Riderwood Village continuing care retirement community in Silver Spring. This retirement community is located very near the proposed White Oak site.

Of the individual communications, all but one expressed support for AHC's project (the exception was a former patient who was not satisfied with the level of care he had received at Washington Adventist Hospital.) Of these individual communications, 45 were from physicians, other health care practitioners, and medical groups (DI #27, Ex. 85) Twelve letters were from individuals representing Montgomery County businesses, not-for-profit agencies such as CASA de Maryland, and community citizens' associations, such as the Greater Colesville Citizens Association and the Hillandale Gardens/Knollwood Adelphi Area Citizens Association. Thirty-three letters of support were from State and County elected officials and appointed members as discussed further below. (DI #27, Ex. 87)

The South of Sligo Citizens' Association ("SOSCA") echoed Takoma Park's concerns related to the availability of emergency care services in Takoma Park following relocation of the hospital to the White Oak area, and said that the proposed urgent care center "does not provide the same services as the emergency room" and that its lack of regulatory obligations means that those services "could be cut with no recourse for the community." Their letter also expressed a belief that a move of the facility could have a negative impact on property values and other "economic losses to the community."

Thirty-three letters were received from current and former elected officials and appointed members, including: former Governor Martin O'Malley; former Lt. Governor Anthony Brown; Congressman John P. Sarbanes (Maryland's Third Congressional District); Speaker of the Maryland House of Delegates, Michael E. Busch; Maryland Senators Brian Feldman, Karen Montgomery, Roger Manno, and Jamie Raskin (Montgomery County) and Joanne C. Benson (Prince George's County); fourteen members of the Maryland House of Delegates (Kathleen M. Dumais, David Fraser-Hidalgo, C. William Frick, Sheila Hixson, Tom Hucker, Anne Kaiser, Ariana Kelly, Susan C. Lee, Eric Luedtke, Aruna Miller, Heather Mizeur, Joseline A. Pena-Melnyk, Jeff Waldstreicher, and Craig Zucker); the Montgomery County Executive, Isiah Leggett; the President and the Vice President of the Montgomery County Council, Nancy Navarro and Craig Rice, respectively; six Montgomery County Council members as of September 20, 2013: Phil Andrews, Roger Berliner, Marc Elrich, Valerie Ervin, George Leventhal, and Hans Riemer; and the President of the East County Citizens Advisory Board, Peter Myo Khin. (DI #27, Ex. 86)

III. Background

A. Population Change, Race, and Income

Population Projections

Both the existing and the proposed WAH replacement hospital site are located in Montgomery County near the border with Prince George's County. The replacement hospital will rely on these two jurisdictions as the source for most of its patients. These counties are the two most populous jurisdictions in Maryland. At 494.6 and 486.4 square miles respectively, Montgomery and Prince George's are the fifth and sixth largest jurisdictions by land area.[3]

As shown in the summary tables below, Montgomery County's population is growing more rapidly than that projected for the State overall, while Prince George's County's projected rate of growth is somewhat lower than that projected for the State. Montgomery County's age distribution is similar to that of the State, while Prince George's County is somewhat younger.

More detailed demographic information is available in Appendix 2.

Table III-1: 2010 Population and Population Growth Rate Projections

	Population				Growth Rates at 5 year intervals		
	Montgomery	**Prince George's**	**Maryland**		**Montgomery**	**Prince George's**	**Maryland**
2010	971,777	863,420	5,773,552		--	--	--
2015	1,036,002	900,348	6,010,141		6.6%	4.3%	4.1%
2020	1,067,001	914,495	6,224,511		3.0%	1.6%	3.6%
2025	1,110,004	929,649	6,429,749		4.0%	1.7%	3.3%
2030	1,153,900	944,548	6,612,191		4.0%	1.6%	2.8%
2035	1,186,601	957,647	6,762,303		2.8%	1.4%	2.3%
2040	1,206,802	967,848	6,889,692		1.7%	1.1%	1.9%
Change 2010-2040	235,025	104,428	1,116,140		24.2%	12.1%	19.3%

Source: Maryland Department of Planning, 2014 Total Population Projections by Age, Sex and Race

[3] As reported by the Maryland Department of Planning. Available at: http://www.mdkidspage.org/counties/Density.htm#area.

Table III-2: 2010 and Projected Population Age Distribution

	Jurisdiction	0-14	15-44	45-64	65-74	75+
2010	Montgomery	19.8%	39.8%	28.0%	6.4%	5.9%
	Prince Georges	19.6%	44.9%	26.9%	5.8%	3.6%
	Maryland	19.2%	40.8%	27.7%	6.7%	5.6%
2020	Montgomery	18.7%	39.1%	26.4%	9.2%	6.6%
	Prince Georges	18.1%	43.5%	254.0%	8.5%	5.1%
	Maryland	18.0%	40.0%	26.2%	9.4%	6.4%
2030	Montgomery	18.9%	37.7%	24.3%	10.2%	9.0%
	Prince Georges	17.4%	42.7%	22.8%	9.7%	7.6%
	Maryland	17.9%	39.3%	23.1%	11.0%	9.0%
2040	Montgomery	18.6%	36.4%	24.8%	9.1%	11.1%
	Prince Georges	16.6%	41.8%	23.6%	9.0%	9.3%
	Maryland	17.4%	38.4%	23.8%	9.3%	11.2%

Source: Maryland Department of Planning, 2014 Total Population Projections by Age, Sex and Race

Racial Composition

Montgomery County's population is majority white (51.8%), with African Americans (18.8%) and Asian Americans (15.2%) comprising most of the remaining population. Prince George's County has a large African American population (64.7%) with the white population (26.4%) following as the second largest racial group. The Maryland Department of Planning estimates that while 9.3% of the State's total population is Hispanic, this group constitutes a substantially larger proportion of the populations residing in both Montgomery County (18.7%) and Prince George's County (16.9%).[4]

Table III-3: Population by Race
Montgomery and Prince George's Counties and Maryland, 2014

Jurisdiction	White	Black or African American	Asian	Other*	Two or More Races
Montgomery	51.8%	18.8%	15.2%	0.8%	2.2%
Prince George's	26.4%	64.7%	4.6%	1.2%	2.6%
Maryland	60.1%	30.3%	6.4%	0.7%	2.6%

Source: 2014 U.S. Census of Population
Note: All racial categories, with the exception of "two or more," reported as "alone."
*Other includes American Indian and Alaskan Native, Native Hawaiian and other Pacific Islander.

[4] Source: 2014 U.S. Census of Population: http://quickfacts.census.gov/qfd/states/24/24033.html

Economic Status

Montgomery County is one of the most affluent jurisdictions in the State, with an estimated median household income in 2010 of $88,559,[5] second only to Howard County at $100,992. Montgomery's income level was about 28.5% higher than the State median. Prince George's County's estimated median household income was around $69,524,[6] which was just under ($409) the State median. According to the 2010 census, Prince George's County was the wealthiest jurisdiction in the United States with an African-American majority population.[7]

In 2010, the U.S. Bureau of the Census reported that 9.9% of Maryland residents were poor, based on the Federal Department of Health and Human Services Poverty Guidelines. Table III-4 below shows the poverty rates for various segments of the population in Montgomery and Prince George's Counties. Both counties ranked in the middle tier with respect to the proportion of total residents living in poverty; Montgomery was tied for the ninth ranking among the state's 24 jurisdictions while Prince George's County ranked 12th. Considering the population under age 18, Montgomery had the 8th lowest and Prince George's the 12th lowest proportion of residents under the poverty level among Maryland jurisdictions.

Table III-4: Proportion (%) of Total Residents Living in Poverty, 2010*

	Montgomery	Prince George's	Maryland[8]
Residents living in poverty	7.5%	9.4%	9.9%
Under age 18 in Poverty	9.4%	12.3%	13.1%
Ages 5-17 in impoverished families	9.1%	11.8%	11.8%
Under age 5 in Poverty	n/a	n/a	15.6%
Median Household Income	$88,559	$69,524	$68,933

*Based on Federal Poverty Guidelines.

Between each census the U.S. Census Bureau provides a variety of estimates based on community surveys; often these results are compiled and reported for a time period (rather than for one point in time) to reduce sampling error. Economic indicators drawn from this source and shown in Table III-5 below provide a more recent snapshot of the region's economic well-being, and do not indicate major shifts since the 2010 census.

[5] Available at: http://www.census.gov/cgi-bin/saipe/saipe.cgi.
[6] *Ibid*.
[7] Howell, Tom Jr. (2006-04-18). "Census 2000 Special Report. *Maryland Newsline*, Census: Md. "Economy Supports Black-Owned Businesses". University of Maryland. Philip Merrill College of Journalism. http://www.newsline.umd.edu/business/specialreports/census/blackbusiness041806.htm. and Chappell, Kevin (November 2006). "America's Wealthiest Black County." *Ebony*. http://findarticles.com/p/articles/mi_m1077/is_1_62/ai_n16807718.
[8] Available at: http://www.census.gov/cgi-bin/saipe/saipe.cgi.

Table III-5: Indicators of Economic Well-Being *

	Montgomery	Prince George's	Maryland
Persons below poverty level, 2009-2013	6.7%	9.4%	9.8%
Homeownership rate, 2009-2013	67.3%	62.5%	67.6%
Median value of owner-occupied housing units, 2009-2013	$446,300	$269,800	$292,700
Per capita money income, past 12 months (2013 dollars), 2009-2013	$49,038	$32,344	$36,354
Median Household Income, 2009-2013	$98,221	$73,623	$73,538

*From US Census Bureau State & County Quickfacts, which reports data collected by the US Census Bureau for time frames between each 10 year census. http://quickfacts.census.gov/qfd/index.html

B. General Acute Care Hospitals

Montgomery and Prince George's County have a total of eleven general acute care hospitals.[9] Licensed acute care bed capacity, which is established in Maryland each year based on a retrospective look at average daily patient census, has been broadly declining throughout the state in recent years. In Montgomery County, it has declined 1.9% since 2010 despite the addition of a new general hospital, Holy Cross Germantown Hospital. Over the same period, Prince George's County's five hospitals saw a decline in licensed acute care beds of 15.2%. To put these numbers into statewide perspective, the number of licensed acute care beds in Maryland dropped from 10,880 in FY2010 to 9,800 in FY2016, a 9.9% decline.

Table III-6: Montgomery and Prince George's County General Acute Care Hospitals Licensed Acute Care Bed Inventories, FY 2016 (effective July 1, 2015)

General Hospitals	Location	Licensed Acute Care Beds – FY 2016					
		MSGA	Obstetric	Pediatric	Psychiatric		Total
Holy Cross Germantown	Germantown	75	12	0	6		93
Holy Cross	Silver Spring	317	84	22	0		423
MedStar Montgomery	Olney	89	11	2	20		122
AHC Shady Grove	Rockville	209	56	25	0		290
Suburban	Bethesda	209	0	3	24		236
AHC Washington Adventist	Takoma Park	169	21	0	40		230
Total Montgomery		1,068	184	52	90		1,394
Doctors Community	Lanham	163	0	0	0		163
Fort Washington	Ft. Washington	34	0	0	0		34
Laurel Regional	Laurel	46	5	0	9		60
MedStar Southern MD	Clinton	149	30	4	25		208
Prince George's	Cheverly	169	38	2	28		237
Total Prince George's		561	73	6	62		702
Total-Two Counties		1,629	257	58	152		2,096

Source: Maryland Health Care Commission

[9] In July 2005, Laurel Regional Hospital announced that it plans to phase out its inpatient general hospital operations within three years.

Table III-7: Change in Acute Care Bed Inventories, Montgomery and Prince George's County General Acute Care Hospitals FY2010-FY2016

	Licensed Beds FY 2010	Licensed Beds FY 2016	Change FY 2010-16	Reported Physical Bed Capacity
Holy Cross Germantown	--	93	--	93
Holy Cross	404	423	+4.7%	379
MedStar Montgomery	170	122	-28.2%	187
AHC Shady Grove	320	290	-9.4%	326
Suburban	239	236	-1.0%	247
AHC Washington	288	230	-20.1%	304
Total Montgomery	1,421	1,394	-1.9%	1,536
Doctors Community	190	163	-15.8%	218
Fort Washington	43	34	-20.9%	37
Laurel Regional	95	60	-36.8%	171
MedStar Southern MD	246	208	-15.4%	339
Prince George's	254	237	-6.7%	311
Total Prince George's	828	702	-15.2%	1,096
Total-Two Counties	2,249	2,096	-6.8%	2,628

Source: Maryland Health Care Commission

C. Hospital Utilization Trends

The tables below profile demand for acute hospital services in both Montgomery and Prince George's Counties from 2009-2014**.** I want to point out some important facts and trends for the period 2009-2014, which include:

<u>Acute care discharges are falling</u>

- Total acute care discharges declined by 11.5% in Montgomery County hospitals and 23.7% in Prince George's County hospitals, while declining by 19.5% statewide.

- In the two counties every hospital except Holy Cross of Silver Spring experienced a decline in discharges. The decline at WAH was the most precipitous, at almost 35%. In Prince George's County, every hospital's total acute care discharges declined by at least 15%.

- The average daily census (ADC) at Montgomery County hospitals fell 8% between 2009 and 2014, from 1,007 in 2009 to 925; in Prince George's County, ADC also declined by 13.8%, from 579 to 499. Statewide, the decline in ADC was 13.5% during this period.

- This decline in inpatient activity followed a ten-year period (1998-2008) in which ADC had risen by 10% in Montgomery County and 1.4% in Prince George's County.

Length of stay is increasing

- MSGA average length of stay (ALOS) is increasing. In 2014 it was 4.7 days in Montgomery County acute care hospitals, 4.6 days in Prince George's County acute care hospitals and 4.7 days across Maryland. The increases over 2009 were: 7.8% in Montgomery, 10.6% in Prince George's and 9.3% statewide.

- This reversal of a long term trend began almost imperceptibly in 2006 and accelerated in 2011.

- WAH was an outlier on MSGA ALOS, increasing from 4.4 in 2009 to 5.8 in 2014 (a 31.7% increase).

- Total acute care ALOS followed MSGA ALOS upward (MSGA discharges were 78.4% of total acute care discharges statewide in 2014), increasing 4.6% in Montgomery, 8.5% in Prince George's, and 7.7% statewide.

Taking the long view, I note that demand for acute care hospital beds in Maryland has resumed a downward trend that had been interrupted by growth between 1998 and 2008, following about 20 years of decline.

The three following tables provide detail regarding total acute care discharges, discharge days, and average length of stay for general acute care hospitals in Montgomery and Prince George's Counties from 2009-2014. Appendix 3 provides similar detail for MSGA, obstetric, pediatric, and psychiatric beds.

Table III-8a): Total Acute Care Discharges
Montgomery and Prince George's County Hospitals, CY 2009 – 2014

ACUTE CARE DISCHARGES						
	2009	**2010**	**2011**	**2012**	**2013**	**2014**
	Montgomery County General Hospitals					
HOLY CROSS OF SILVER SPRING	27,569	28,069	27,676	27,012	26,523	28,132
MEDSTAR MONTGOMERY	9,912	9,866	9,232	9,003	8,232	8,208
AHC SHADY GROVE	21,974	21,603	20,910	20,911	20,186	19,297
SUBURBAN	14,164	13,874	14,033	13,622	13,156	13,589
AHC WASHINGTON ADVENTIST	17,588	16,031	14,328	13,189	11,698	11,455
Total	91,207	89,443	86,179	83,737	79,795	80,681
	Prince George's County General Hospitals					
DOCTORS COMMUNITY	12,137	13,060	12,498	11,149	10,618	8,851
FORT WASHINGTON	3,038	2,987	2,270	2,059	2,293	2,169
LAUREL REGIONAL	6,353	5,527	5,161	5,206	5,456	4,345
PRINCE GEORGE'S	13,814	13,261	11,909	10,970	10,570	11,648
MEDSTAR SOUTHERN MARYLAND	16,930	16,715	16,363	15,524	13,478	12,867
Total	52,272	51,550	48,201	44,908	42,415	39,880
All Maryland Hospitals	701,185	660,928	636,575	615,161	588,718	564,733

Source: HSCRC Discharge Database.

Table III-8b): Total Acute Care Discharge Days,
Montgomery and Prince George's County Hospitals, CY 2009 – 2014

ACUTE CARE DISCHARGE DAYS						
	2009	2010	2011	2012	2013	2014
	Montgomery County General Hospitals					
HOLY CROSS OF SILVER SPRING	104,485	104,126	104,076	101,590	101,454	108,659
MEDSTAR MONTGOMERY	42,008	41,012	36,400	35,188	31,106	31,759
AHC SHADY GROVE	87,347	84,999	86,162	82,054	78,840	76,734
SUBURBAN	59,303	58,504	58,600	61,863	58,034	60,099
AHC WASHINGTON ADVENTIST	74,523	70,945	66,236	65,973	59,880	60,500
Total	367,666	359,586	351,474	346,668	329,314	337,751
	Prince George's County General Hospitals					
DOCTORS COMMUNITY	48,875	55,171	54,152	51,791	49,302	42,438
FORT WASHINGTON	10,984	10,793	8,777	7,785	8,569	8,257
LAUREL REGIONAL	26,737	21,422	20,293	20,247	19,682	16,354
PRINCE GEORGE'S	63,290	63,736	58,019	56,283	54,201	61,276
MEDSTAR SOUTHERN MARYLAND	61,572	60,323	63,096	61,229	55,139	54,001
Total	211,458	211,445	204,337	197,335	186,893	182,326
All Maryland Hospitals	2,919,904	2,719,672	2,715,091	2,649,410	2,559,400	2,527,350

Source: HSCRC Discharge Database.

Table III-8c): Total Acute Care Average Length of Stay
Montgomery and Prince George's County Hospitals, CY 2009 – 2014

ACUTE CARE AVERAGE LENGTH OF STAY						
	2009	2010	2011	2012	2013	2014
	Montgomery County General Hospitals					
HOLY CROSS OF SILVER SPRING	3.79	3.71	3.76	3.76	3.83	3.86
MEDSTAR MONTGOMERY	4.24	4.16	3.94	3.91	3.78	3.87
AHC SHADY GROVE	3.98	3.93	4.12	3.92	3.91	3.98
SUBURBAN	4.19	4.22	4.18	4.54	4.41	4.42
AHC WASHINGTON ADVENTIST	4.24	4.43	4.62	5.00	5.12	5.28
Total	4.09	4.09	4.12	4.23	4.21	4.28
	Prince George's County General Hospitals					
DOCTORS COMMUNITY	4.03	4.22	4.33	4.65	4.64	4.79
FORT WASHINGTON	3.62	3.61	3.87	3.78	3.74	3.81
LAUREL REGIONAL	4.21	3.88	3.93	3.89	3.61	3.76
PRINCE GEORGE'S	4.58	4.81	4.87	5.13	5.13	5.26
MEDSTAR SOUTHERN MARYLAND	3.64	3.61	3.86	3.94	4.09	4.20
Total	4.02	4.03	4.17	4.28	4.24	4.36
All Maryland Hospitals	4.16	4.11	4.27	4.31	4.35	4.48

Source: HSCRC Discharge Database

IV. REVIEW AND ANALYSIS

The State Health Plan

COMAR 10.24.01.08G(3)(a) State Health Plan.
An application for a Certificate of Need shall be evaluated according to all relevant State Health Plan standards, policies, and criteria.

The relevant State Health Plan chapters that need to be considered in the review of this project are: COMAR 10.24.10, Acute Care Hospital Services; COMAR 10.24.11, General Surgical Services; COMAR 10.24.12, Acute Hospital Inpatient Obstetric Services; COMAR 10.24.17, Specialized Health Care Services — Cardiac Surgery and Percutaneous Coronary Intervention Services; and COMAR 10.24.07, Psychiatric Services.

COMAR 10.24.10 - State Health Plan for Facilities and Services: Acute Care Hospital Services

COMAR 10.24.10.04A — General Standards.

(1) Information Regarding Charges. ***Information regarding hospital charges shall be available to the public. After July 1, 2010, each hospital shall have a written policy for the provision of information to the public concerning charges for its services. At a minimum, this policy shall include:***

- ***(a) Maintenance of a Representative List of Services and Charges that is readily available to the public in written form at the hospital and on the hospital's internet web site;***
- ***(b) Procedures for promptly responding to individual requests for current charges for specific services/procedures; and***
- ***(c) Requirements for staff training to ensure that inquiries regarding charges for its services are appropriately handled.***

Applicant's Response

The applicant states that Adventist has a written policy for the provision of information to the public concerning charges for its services. The policy requires a representative list of services and charges to be made available to the public in written form at the hospital(s) and on its website, http://www.washingtonadventisthospital.com/pdf/WAH-Billing-HospitalCharges.pdf. The policy also states that "individuals or their payor representative may make a request for an estimate of charges for any scheduled or non-scheduled diagnostic test or service." The policy specifies that the Patient Access department is responsible for ensuring that staff training is provided related to charge estimates and use of estimator tools and the applicant's Marketing Department ensures that the information is available to the public on the applicant's website. (DI #27, CON application, page 17)

Reviewer's Analysis and Findings

I find that the applicant meets this standard.

(2) Charity Care Policy ***Each hospital shall have a written policy for the provision of charity care for indigent patients to ensure access to services regardless of an individual's ability to pay.***

(a) The policy shall provide:

(i) Determination of Probable Eligibility. Within two business days following a patient's request for charity care services, application for medical assistance, or both, the hospital must make a determination of probable eligibility.

(ii) Minimum Required Notice of Charity Care Policy.

1. Public notice of information regarding the hospital's charity care policy shall be distributed through methods designed to best reach the target population and in a format understandable by the target population on an annual basis;

2. Notices regarding the hospital's charity care policy shall be posted in the admissions office, business office, and emergency department areas within the hospital; and

3. Individual notice regarding the hospital's charity care policy shall be provided at the time of preadmission or admission to each person who seeks services in the hospital.

(b) A hospital with a level of charity care, defined as the percentage of total operating expenses that falls within the bottom quartile of all hospitals, as reported in the most recent Health Service Cost Review Commission Community Benefit Report, shall demonstrate that its level of charity care is appropriate to the needs of its service area population.

Applicant's Response

Adventist states that a financial assistance screening process is conducted upon registration of a patient and that, if the patient is interested in filing for financial assistance, s/he is asked to provide basic financial information such as annual income and number of dependents. Based on the patient's response, the registration system automatically calculates a percentage of possible assistance based on the federal poverty levels and AHC's charity care policy, which is then communicated to the patient within two business days. A patient interested in financial assistance is also given a full charity care application that asks the patient for more detailed financial information, including verification of income, current assets, and available credit, which are all used to make a final eligibility determination. (DI #34)

The applicant also states that in 2013, Washington Adventist Hospital provided a total net community benefit of 11.1% of operating expense – ranking the hospital as the seventh highest among all general hospitals in Maryland. The statewide average in that year was 6.3%.[10] In my

[10] http://www.hscrc.state.md.us/documents/HSCRC_Initiatives/CommunityBenefits/cb-fy13/HSCRC-FY2013-CB-Data-Report.xlsx

review I consulted the Maryland Hospital Community Benefit Report for 2014[11] for updated information and found that WAH's total net community benefit for 2014 was 12% of operating expense, third highest in Maryland in that year. The State average for all hospitals was 6.2%.

Reviewer's Analysis and Findings

I find that the application is consistent with this standard.

(3) Quality of Care

An acute care hospital shall provide high quality care.

(a) Each hospital shall document that it is:

(i) Licensed, in good standing, by the Maryland Department of Health and Mental Hygiene;

(ii) Accredited by the Joint Commission; and

(iii) In compliance with the conditions of participation of the Medicare and Medicaid programs.

(b) A hospital with a measure value for a Quality Measure included in the most recent update of the Maryland Hospital Performance Evaluation Guide that falls within the bottom quartile of all hospitals' reported performance measured for that Quality Measure and also falls below a 90% level of compliance with the Quality Measure, shall document each action it is taking to improve performance for that Quality Measure.

Applicant's Response

Washington Adventist Hospital is licensed, in good standing with the Maryland Department of Health and Mental Hygiene, and is Medicare and Medicaid certified in good standing with respect to the conditions of participation. The applicant also stated that WAH is accredited by the Joint Commission and earned a "Gold Plus Get with the Guidelines – Stroke" quality award in 2013. The last full survey by the Joint Commission was successfully concluded on August 16, 2013, and named Washington Adventist Hospital a Top Performer on Key Quality Measures. (DI # 27, CON Application, p. 19).

AHC notes that other recent honors and awards conferred upon the hospital include: Three-Star rating for heart surgery by The Society of Thoracic Surgeons; accredited Chest Pain Center, Level IV with PCI, The Society of Cardiovascular Patient Care; designated Cardiac Interventional Center, Maryland Institute for Emergency Services Systems; designated Primary Stroke Center, Maryland Institute for Emergency Medical Services Systems; Stroke Gold Plus Quality Achievement Award and the Target: Stroke Honor Roll award from the American Heart Association; Mission: Lifeline Bronze Performance Achievement Award from the American Heart Association; accredited Cancer Program with Commendation, The Commission on Cancer (of the American College of Surgeons; accredited Radiation Oncology Program, American College of Radiation Oncology; Silver Performance Achievement Award from the American College of

[11] http://www.mhaonline.org/docs/default-source/advocacy/regulatory/hscrc/newsbreak-links/community-benefits-report-fy2014.pdf?sfvrsn=2

Cardiology Foundation's NCDR ACTION Registry - Get With the Guidelines Designated Center of Excellence Center of Distinction; and Healogics, Inc., The Center for Advanced Wound Care & Hyperbaric Medicine.

In responding to subpart (b) the applicant noted that, of 23 applicable measures in the Maryland Hospital Performance Evaluation Guide (June 28, 2013 posting[12]), Washington Adventist Hospital ranked at or above average on 21 measures. The hospital achieved 100% in 8 of the measures. The applicant stated that, for the measure "Surgery Patients Who Received Treatment at the Appropriate Time to Help Prevent Blood Clots," WAH achieved a 97% rating compared to a 98% state average. It was above the 90% level of compliance on all measures.

AHC also reported that WAH was 47 minutes beyond the standard for the measure "Median Time from Emergency Department Arrival to Emergency Department Departure for Admitted Patients" and 33 minutes beyond the standard for "Admission Decision Time to Emergency Department Departure Time for Admitted Emergency Department Patients." It noted the fact that the ED was designed for 30,000 visits/year and has been serving as many as 50,000 annually as a factor related to performance on these measures, and posited that the proposed project would have a positive impact on the time that elapses between a decision to admit an emergency department patient to an inpatient bed and that patient's arrival in a bed. Private rooms and observation and clinical decision unit beds are two features of the proposed relocated hospital that AHC states would improve ED times.

In support of its position, AHC points out that the relocated hospital would have all private rooms, in contrast to the existing hospital, which has a significant number of semi-private rooms. AHC notes that bed availability at the existing WAH is hindered by its inability to co-mingle male and female patients in semi-private rooms, as well as by the significant number of patients who need to be in isolation. AHC states that WAH seeks to place isolation patients in private rooms, but if that is not possible, the second bed of a semi-private room has to be blocked. The applicant notes that the proposed new facility remedies this challenge because all of the patient rooms are private.

AHC notes that, at the existing hospital, observation patients often must be placed in inpatient beds, whereas the relocated hospital will have an 8-bed dedicated observation unit that will free up inpatient beds for admitted inpatients. The proposed project also includes a 12-bed clinical decision unit adjacent to the emergency department to accommodate patients who are treated and released from the emergency department. AHC believes that a more efficiently designed and right-sized facility, with observation and clinical decision beds, will enhance its ability to move patients more rapidly from a decision to admit to a bed. (DI # 27)

Reviewer's Analysis and Findings

The applicant addressed WAH's rankings in the most recent report in the MHCC's Hospital Performance Evaluation Guide ("HPEG"), satisfactorily explaining how the replacement hospital will address problems in moving patients through the existing hospital's ED. I do want to note that

[12] This posting was the last set of performance metrics that MHCC posted in its Hospital Performance Evaluation Guide before transitioning to a new format for reporting hospital quality.

subpart (b) of this standard is essentially obsolete in that it requires an improvement plan for any measure that falls within the bottom quartile of all hospitals' reported performance on that measure as reported in the most recent Maryland HPEG. MHCC recently expanded its reporting of performance measures on an updated Maryland Health Care Quality Reports website, where hospitals' performance is reported by each measure. In its quality reports, MHCC now focuses on two priority areas: (1) patient experience, as reported by the Centers for Medicare and Medicaid Services (CMS) in its Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey; and (2) healthcare associated infections, as tracked by CDC's National Healthcare Safety Network ("NHSN"). I understand that staff will recommend amendments to the Acute Care Hospital Services chapter of the State Health Plan to reflect these changes when that chapter is updated.

I note that MHCC recently learned that WAH lost "deemed status" as a Medicare-certified hospital for a few months in the first half of 2015. This status allows a hospital to be deemed to be in compliance with Medicare's conditions of participation by virtue of its Joint Commission accreditation. Loss of this status results from a finding of a high level deficiency and means that the hospital is subject to full survey and certification procedures, under the joint administration of the CMS and the Maryland Department of Health and Mental Hygiene ("DHMH") in order to maintain Medicare certification, until the deficiency is determined to have been corrected. I learned from DHMH's Office of Health Care Quality that temporary loss of this status is not an unusual event; this temporary loss of deemed status by Maryland hospitals occurs an average of five to six times a year.

I conclude that the proposed project, with its expanded ED, single rooms, and clinical decision/observation beds will help WAH correct the issues the existing hospital had in 2013 with delays in seeing ED patients and in getting patients who need to be admitted into rooms more quickly.

I find that the applicant has met this standard.

COMAR 10.24.10.04B-Project Review Standards

(1) Geographic Accessibility

A new acute care general hospital or an acute care general hospital being replaced on a new site shall be located to optimize accessibility in terms of travel time for its likely service area population. Optimal travel time for general medical/surgical, intensive/critical care and pediatric services shall be within 30 minutes under normal driving conditions for 90 percent of the population in its likely service area.

Applicant's Response

Adventist described the analysis it performed to measure travel times from zip code areas within its likely service area to both the current Takoma Park location and the proposed White Oak location. AHC states that its methodology considered travel time gains or losses for each zip code area and the population within the respective zip code areas to arrive at the service area

population's aggregate net gain or loss in travel time related to the proposed hospital relocation. The applicant's methodology is described in the following box.

- Establish the zip code areas that would reside in the Primary Service Area (PSA) and Secondary Service Area (SSA).
- Identify the 30 minute travel time boundary in all directions for both the Takoma Park and White Oak locations.
- Overlay the 30 minute boundary on the PSA and Secondary Service Area (SSA) to identify locations that meet or exceed the 30 minute drive time standard.
- Identify distributed locations and a central location within each zip code area to serve as travel time data points.
- Enter each of the selected points into Google Maps as the "starting location" and the White Oak and Takoma Park campus locations as the "destination locations." (Google Maps was utilized for travel time mapping. Trips were calculated under normal conditions.)
- Calculate the average travel time of all of the identified data points. Multiply it by the service area population, resulting in the *Total Traveled Minutes*.
- Calculate the percentage of service area population that was a) within the 30 minute travel time standard, b) outside the 30 minute travel time standard.
- For service area locations that exceeded the 30 minute standard, travel times were calculated to the closest acute care hospital.

(DI#27, p.22)

AHC states that it found, as a result of this analysis, that just over 90% of the service area population of WAH, as operated at its current site, resides within a 30-minute travel time, under normal conditions and that just over 95% of the service area population for the relocated hospital at White Oak would reside within a 30-minute travel time of that site, under normal conditions. It concludes that aggregate drive time for the White Oak service area population would be lower (-4.9%) than that for the Takoma Park service area population.

Table IV-1: Service Area Travel Time Analysis Conducted by AHC Comparing WAH at Takoma Park and WAH at White Oak

	Takoma Park	White Oak
% of population > 30 min.	9.3%	4.8%
% of population < 30 min.	90.7%	95.2%
Population's aggregate drive time (minutes)	23,152,577	22,019,558

Source: DI #27, CON Application, Exh. 20.

AHC concludes that relocating its proposed replacement acute care general hospital will optimize accessibility and travel time for its likely service area population, with more than 90% of the population in its likely service area being within a 30 minute drive time under normal driving conditions for general medical/surgical and intensive/critical care services (inpatient pediatric services are not part of the current or new hospital services).

Interested Party and Participating Entity Comments

While none of the interested parties or the participating entity made comments under this

standard, each addressed related concerns under the Adverse Impact standard, COMAR 10.24.10.04B(4)(b), where each challenged the applicant's proposed relocation to White Oak because of an alleged failure to account for access issues that it might impose upon some residents of its existing service area, especially residents who are lower-income. I will describe and discuss those concerns in that section.

Reviewer's Analysis and Findings

This standard requires me to evaluate whether the proposed project is located to optimize accessibility in terms of travel time for its likely service area population, and defines optimal travel time as being within 30 minutes under normal driving conditions for 90 percent of the population in its likely service area.

AHC submitted a study comparing the travel times to both the current Takoma Park and proposed White Oak sites for its projected primary and secondary service area/population. That study showed a small aggregate net gain in travel time for the proposed and projected service area population.

I am particularly concerned about the effect that a relocation would have on the residents of the existing service area. Please see the table below, which illustrates the travel time from each of the 13 zip code areas that made up WAH's primary service area in 2013 (latest year for which the MHCC has both Maryland and District of Columbia hospital discharge data) to both the Takoma Park site and the proposed White Oak site. Sixty percent of WAH's discharges in 2013 originated from these zip code areas. I have also included the proximity rank, i.e., where it ranks compared to other hospitals in terms of proximity. The six zip code areas that are shaded are those that will now be at least 5 minutes further away from WAH if the hospital moves to White Oak. These zip code areas accounted for 51.5% of the total population of the 13 zip code areas in CY 2015.

Table IV-2: Travel Time from WAH 2013 Primary Service Area Zip Code Areas to WAH and the Proposed WAH Relocation Site at White Oak in Silver Spring

Zip Code	County/DC	Takoma Park Travel time	Proximity rank	White Oak Travel time	Proximity rank
20783	Prince George's	2.2	1	12.3	4
20912	Montgomery	1.1	1	14.7	6
20782	Prince George's	7.1	1	16.2	7
20903	Montgomery	5.4	2	8.9	2
20901	Montgomery	4.5	2	10.6	2
20904	Montgomery	13.7	3	4.3	1
20740	Prince George's	10.1	2	10.9	3
20910	Montgomery	10	2	32	7
20705	Prince George's	15.3	4	6.4	1
20011	District of Columbia	7.4	3	20.3	11
20737	Prince George's	11.4	3	16.3	6
20902	Montgomery	12	2	14.7	3
20770	Prince George's	14.1	3	13.1	3

While six of the zip code areas would be at least 5 minutes farther away from WAH if it relocates as proposed, four others would experience less than a five minute increase in travel time, and three zip code areas would be closer to WAH at White Oak. Only one would experience an increase in travel time in excess of 20 minutes, but that zip code area has six closer hospital alternatives. In summary, all but one of the 13 zip code areas comprising WAH's current service area will remain within 20 minutes' drive time.

I find the proposed project meets this standard.

(2) Identification of Bed Need and Addition of Beds

Only medical/surgical/gynecological/addictions ("MSGA") beds and pediatric beds identified as needed and/or currently licensed shall be developed at acute care general hospitals.

(a) Minimum and maximum need for MSGA and pediatric beds are determined using the need projection methodologies in Regulation .05 of this Chapter.

(b) Projected need for trauma unit, intensive care unit, critical care unit, progressive care unit, and care for AIDS patients is included in the MSGA need projection.

(c) Additional MSGA or pediatric beds may be developed or put into operation only if:

(i) The proposed additional beds will not cause the total bed capacity of the hospital to exceed the most recent annual calculation of licensed bed capacity for the hospital made pursuant to Health-General §19-307.2; or

(ii) The proposed additional beds do not exceed the minimum jurisdictional bed need projection adopted by the Commission and calculated using the bed need projection methodology in Regulation .05 of this Chapter; or

(iii) The proposed additional beds exceed the minimum jurisdictional bed

need projection but do not exceed the maximum jurisdictional bed need projection adopted by the Commission and calculated using the bed need projection methodology in Regulation .05 of this Chapter and the applicant can demonstrate need at the applicant hospital for bed capacity that exceeds the minimum jurisdictional bed need projection; or

(iv) The number of proposed additional MSGA or pediatric beds may be derived through application of the projection methodology, assumptions, and targets contained in Regulation .05 of this Chapter, as applied to the service area of the hospital.

Applicant's Response

AHC notes that the most recent published MSGA bed need projection for Montgomery County is for 2022 and ranges from a minimum of 805 to a maximum of 1,103 MSGA beds.[13] It points out that there were 1,024 licensed MSGA beds in the County in 2015 and notes that the 152 MSGA beds that AHC is proposing for the replacement hospital constitute a reduction of 19 MSGA beds that were licensed at the existing WAH in FY2015. (DI #27, p. 24)

Reviewer's Analysis and Findings

AHC's replacement CON application was submitted on September 29, 2014. At that time, there were 949 licensed MSGA beds located in five acute care general hospitals in Montgomery County and 75 additional beds approved for operation in Montgomery County at Holy Cross Germantown Hospital, a new general hospital that opened in October 2014. The county's hospitals, like all hospitals in Maryland, were allowed to reallocate their licensed bed complement effective July 1, 2015, based on the overall average daily census of acute care patients experienced during the twelve-month period ending on March 31.[14]

Table IV-3: Licensed MSGA Beds, Montgomery County FY's 2015 and 2016

Licensed MSGA and Total Licensed Acute Care Beds				
	FY 2015		FY 2016	
Hospital	MSGA	Total	MSGA	Total
Holy Cross Silver Spring	277	391	309	423
Holy Cross Germantown	75	93	75	93
MedStar Montgomery	87	120	89	122
Adventist Shady Grove	224	305	209	290
Suburban	190	220	209	236
Washington Adventist	171	232	169	230
TOTAL	1,024	1,361	1,060	1,394

Source: MHCC Acute Care Bed Inventory (FY 2015, FY 2016)

[13] The minimum reflects the combination of five and ten year trends in population use rate and average length of stay, adjusted for case mix, that generates the lowest bed demand forecast and the maximum reflects the combination of such trends that generate the highest bed demand forecast.

[14] Holy Cross Germantown is an exception. Because it had operated for less than one year on July 1, 2015, it is still licensed based on its physical capacity rather than observed census. It will be licensed in the same manner as all other acute care hospitals beginning in FY 2017.

The proposed replacement hospital will have 152 MSGA beds, 19 fewer MSGA beds than were licensed in FY 2015 and 17 fewer beds than are currently licensed. This number of beds represents a reduction in physical MSGA bed capacity for WAH of 87 beds. All of the 152 MSGA beds will be located in private rooms.

This standard provides that only beds identified as needed and/or currently licensed shall be developed at an acute care general hospital, and contains tests that apply to proposed additional beds. This application seeks to replace MSGA bed capacity that is currently licensed, and does not propose any additional beds. WAH currently has a physical capacity for 239 MSGA beds and has allocated 169 beds within its overall acute care license to MSGA services in FY 2016. AHC is proposing to develop a physical bed capacity for only 152 MSGA beds at White Oak.

I find that AHC has satisfied this standard.

(3) Minimum Average Daily Census for Establishment of a Pediatric Unit

An acute care general hospital may establish a new pediatric service only if the projected average daily census of pediatric patients to be served by the hospital is at least five patients, unless:

- ***(a) The hospital is located more than 30 minutes travel time under normal driving conditions from a hospital with a pediatric unit; or***
- ***(b) The hospital is the sole provider of acute care general hospital services in its jurisdiction.***

This standard is not applicable to this project since WAH does not operate an inpatient pediatric unit and AHC is not proposing to establish a pediatric unit. (DI #27, p. 25)

(4) Adverse Impact

A capital project undertaken by a hospital shall not have an unwarranted adverse impact on hospital charges, availability of services, or access to services. The Commission will grant a Certificate of Need only if the hospital documents the following:

(a) If the hospital is seeking an increase in rates from the Health Services Cost Review Commission to account for the increase in capital costs associated with the proposed project and the hospital has a fully-adjusted Charge Per Case that exceeds the fully adjusted average Charge Per Case for its peer group, the hospital must document that its Debt to Capitalization ratio is below the average ratio for its peer group. In addition, if the project involves replacement of physical plant assets, the hospital must document that the age of the physical plant assets being replaced exceed the Average Age of Plant for its peer group or otherwise demonstrate why the physical plant assets require replacement in order to achieve the primary objectives of the project; and

Applicant's Response

AHC's application contains financial projections that assumed a rate increase for the

replacement WAH of $19.7 million effective January 1, 2019. The applicant explained that the new Global Budget Revenue ("GBR") system discourages hospitals from funding capital improvements through volume growth, instead providing incentives to manage utilization in the most effective and efficient manner leading to overall reductions in the cost of care. AHC states that the implications of the realigned incentives, however,

> require capital funding through rates in order to achieve reasonable profitability…which in turn will allow the hospital the ability to continue to re-invest in the facility and continue to manage hospital utilization and patient care efficiently… [and that] the impact of a one-time permanent increase of $19.7M is far less than the impact to the overall Statewide system than if Washington Adventist Hospital was to seek additional volume growth to fund the project. (DI #27, pp. 25-26)

AHC also states that the average age of plant at WAH was 23.0 years, the second highest average age among 47 hospitals in the State, according to the most recent publicly available HSCRC annual filing (FY 2013).[15]

Reviewer's Analysis and Findings

In October 2015, WAH obtained a decision from the Health Services Cost Review Commission ("HSCRC"), contingent on approval of the proposed relocation and replacement project that is the subject of this Recommended Decision, that it was eligible for an increase in its permanent rate base of $15.39 million on January 1, 2019. This approval, while substantially smaller than the $19.7 million increase requested, was accepted by WAH, and, subsequent to the meeting, WAH responded to my request to provide an updated and revised financial schedule of revenues and expenses reflecting this decision. See discussion at standard 13, Financial Feasibility, later in this section, and at COMAR 10.24.01.08G(3)(d)-Viability of the Proposal.

The latest data compiled by HSCRC (covering 2013) shows that WAH had an adjusted charge level that was 7.01% lower than its peer group (based on a Reasonableness of Charges analysis). For this reason, AHC does not need to demonstrate that its Debt to Capitalization ratio is below the average ratio for its peer group. The latest available data compiled by HSCRC also showed WAH to have an Average Age of Plant of 26.7 years in 2014, older than all hospitals in the state excepting Upper Chesapeake–Harford Memorial Hospital and Fort Washington. This information supports my conclusion that significant physical plant modernization and/or replacement of WAH is reasonable.

I find that the applicant has met this standard.

[15] I note that HSCRC no longer calculates this measure. However, WAH's HSCRC Capital Adjustment Calculation was just 5.68% compared to the peer group average of 10.08%. The Capital Adjustment Calculation is accumulated depreciation divided by depreciation expenses. The relatively small size of this calculation is indicative of WAH's substantially depreciated asset base.

(b) If the project reduces the potential availability or accessibility of a facility or service by eliminating, downsizing, or otherwise modifying a facility or service, the applicant shall document that each proposed change will not inappropriately diminish, for the population in the primary service area, the availability or accessibility to care, including access for the indigent and/or uninsured.

Applicant's Response

AHC states that it planned and developed a project that would be located within its current primary service area, describing it as a project "that enhances its facilities and services while ensuring continued access to health care for all in its service area." (DI #27, p. 26) AHC states that road access will be easier, substituting major thoroughfares for "narrow, two-lane residential streets on which traffic backups occur regularly." The applicant states that its 2013 Campus Arrival Study concluded that 98% of people arrive at the current Takoma Park campus by private automobile or taxi, and that this data was consistent with previous studies performed in 2007 and 2011. (DI #27, p.27)

AHC concluded that relocating its proposed replacement hospital will optimize accessibility and travel time for its likely service area population, with the "population's aggregate drive time" being slightly shortened compared to Takoma Park (study by *The Traffic Group,* 9900 Franklin Square Drive, Baltimore, MD). (DI #27, Exh.18)

The applicant also said that public transportation options would be enhanced, stating that MetroBus, described by the applicant as the region-wide bus system in the Washington metropolitan area, does not travel to the hospital campus but will service the White Oak site. That campus will also be accessible by the Montgomery Ride-On bus system.

AHC said that the proposed replacement hospital would be augmented by continuation and enhancement of services currently offered on its Takoma Park campus. AHC notes that the following services will be offered at its Takoma Park campus subsequent to the relocation of WAH: (1) a Federally Qualified Healthcare Center (FQHC) operated by Community Clinic, Inc., with a current visit capacity of just under 4,370 will be expanded by the end of 2015 and its capacity will grow to approximately 17,500; (2) a Women's Center that provides prenatal and other services for the community, including low income women; (3) an urgent care ("UC") clinic operating 24/7 initially (operating hours would be reassessed over time, based on usage) to be established in the space currently occupied by WAH's emergency department when the general hospital moves to White Oak. Ancillary services would remain available to service the UC clinic and behavioral health facility; (4) existing inpatient psychiatric services will remain at Takoma Park but become part of Adventist Behavioral Health, a special hospital dedicated to psychiatric services; and (5) Adventist Rehabilitation Hospital would continue its present operations.
(DI#95)

AHC states that analysis of adverse impact must consider the negative impact on the community if WAH is not able to build a modern facility in a location with more accessible public transportation and more space for clinical services and physician offices, stating that "[a]

Washington Adventist Hospital continually crippled by an aging infrastructure on a small, difficult-to-access campus does not serve the community well."

Interested Party and Participating Entity Comments

Holy Cross Hospital of Silver Spring

Holy Cross Hospital of Silver Spring ("HCH") contests several aspects of the application relating to adverse impact. First, HCH commented that the proposed relocation will adversely impact residents of the service area, particularly by "adding undue duress to individuals in its long-standing Emergency Department (ED) service area, especially those who experience greater socio-economic barriers in accessing care, low income, less mobile individuals and families, many of whom are uninsured." Second, HCH also expresses concern that the proposed relocation would unduly burden it and perhaps other hospitals in WAH's current ED service area as patients would seek care not at the new WAH location, but at other hospitals that would remain closer to their residence. HCH states that its ED already operates near capacity, and forecasts increased demands on its already overburdened ED. Third, HCH questions AHC's commitment and financial ability to implement the urgent care and other services that AHC has said will be provided in Takoma Park, and recommends that AHC be compelled to establish a freestanding medical facility. [16]

> HCH: The proposed relocation will adversely impact residents of the WAH service area, particularly its long-standing Emergency Department service area.

HCH states that access for the population in WAH's existing service area would decrease, especially for patients who use the ED. HCH states that WAH's existing site is "far more accessible" for residents of WAH's eight zip code ED Primary Service Area ("PSA") than is the proposed partial replacement hospital in White Oak. HCH references the ED data presented in AHC's application concerning visit volume (DI #27, p. 57) and also presented comparative drive times to the current WAH, to its proposed White Oak site, and to HCH (in Exhibit 1). This information is summarized in the following table.

[16] While HCH's comments regarding impact on its ED will be summarized here, they will also be addressed, as is more applicable, under COMAR 10.24.01.08G(3)(f). COMAR 10.24.10.04A(4), the standard discussed in this section, examines the potential impact of a project on the availability and accessibility to the population in the primary service area of the applicant.

Table IV-4: HCH Analysis: Drive Time from Selected Zip Code Areas to Two Hospitals and the Site Proposed for Hospital Relocation

Zip Code Area	City	Medicaid/ Self-Pay & Charity as a Percentage of Total ED Visits (as drawn from HCH records)	ED Visits to WAH (2013)	Drive Time to WAH (Minutes)	Drive Time to White Oak (Minutes)	Drive Time to HCH (Minutes)
20783	Hyattsville	70%	8,523	9	15	13
20912	Takoma Park	65%	5,630	2	15	10
20782	Hyattsville	55%	3,955	9	18	18
20903	Silver Spring	70%	3,793	11	10	11
20901	Silver Spring	49%	2,236	8	10	6
20904	Silver Spring	54%	2,050	17	8	12
20910	Silver Spring	47%	1,926	11	13	7
20740	College Park	45%	1,218	15	14	14
		56%	25,376			

Source: DI #50, HCH comments, (referencing DI # 27, AHC application, p.55)

HCH comments that the impact of the WAH relocation will fall disproportionately on lower income and indigent residents. It points out that, if the MSGA market shifts assumed by WAH's application were applied to the ED visit volume, five of the 31 zip code areas in WAH's current ED total service area ("TSA") would result in no market share for a WAH ED in White Oak, and that these five zip code areas are among the eight zip code areas with the lowest average household income among the 31 total zip code areas in WAH's ED TSA. Further, HCH states that 20 of the 31 zip code areas in WAH's TSA have an average household income below $50,000; among those 20, AHC shows a negative average volume shift of 9%. HCH notes that, of the 11 zip codes with an average household income above $50,000, the applicant projects an average market shift gain of 4%.

HCH also criticizes AHC's lack of clarity regarding when the urgent care clinic would commence operations, and what hours it would operate. HCH states a belief that the services would not be available at Takoma Park until almost three years (33 months) after the current WAH closes, and that AHC has made no commitment to continuous 24/7 operation since it stated that the clinic will "initially" be open 24/7, but that the hours will be reevaluated.

Summarizing its argument, HCH cites the language of Standard .04B(4)(b) and states its position that AHC has failed to meet this requirement, and "should not be permitted to abandon a large and underserved portion of its current service area, leaving already underserved residents with less access, and foisting the burden of care for these residents on the other hospitals that currently serve this population."

HCH: WAH's proposed relocation would unduly burden HCH's ED

HCH states that its ED already operates near capacity, and expresses concern that the approval of WAH's move would allow it to "abandon zip code populations with large numbers of Medicaid and uninsured patients who [currently] seek care in WAH's ED," forecasting that this would increase demands on HCH's ED, which is overburdened. Further, HCH believes that these patients would be those whose needs "will also require additional resource support after receiving care in the ED."

If the proposed WAH relocation occurs, HCH projects a market shift that would result in 13,302 additional ED cases at HCH, a 15% increase over its three-year ED case average of 88,000 cases. HCH states that, in order to accommodate the resulting total of 100,000 annual visits, it would need to expand ED capacity, and that it has no space to expand beyond its existing footprint. (DI #50)

HCH: AHC's commitment and financial ability to implement urgent care in Takoma Park is questionable.

HCH calls the promised development of an urgent care clinic at Takoma Park "hollow" because AHC has stated that these services are not a formal element of its application. HCH also questions AHC's ability to fund these services, especially given that they are projected to operate at a loss. HCH states that since these plans are not part of AHC's CON application, the Commission will have no ability to require AHC to execute them.

HCH states that AHC's other priorities and financial pressures make it "unlikely AHC will renovate the Takoma Park campus," and referred to a passage from AHC's CON application responding to the *Viability* criterion, in which AHC stated, in its entirety, that it will continue to invest $25 to $40 million of routine capital annually in the other members of AHC. These capital investments can be deferred if necessary to ensure that cash is available to fund the equity contribution. (DI #27, p. 129)

HCH states that AHC's "willingness to possibly defer the capital needs of operating AHC facilities" indicates that it may not have the resources to "make new investments in communities it has abandoned…." HCH notes that the applicant's "own financials show that it would operate the Takoma Park campus at a loss," concluding that "AHC will not be in a financial position to fund the development and continued operation of new facilities and services in Takoma Park that will drain its already stressed resources."

MedStar Montgomery Medical Center

MMMC states that the application should not be approved because WAH has not mitigated the adverse impact on the availability of, or access to, health care services needed by the population in its current primary service area, including access for the indigent or uninsured. It states that the applicant has not shown that the facilities it proposes for the Takoma Park campus will be sufficient to meet these needs, and questions AHC's financial wherewithal to absorb both the costs of the proposed new hospital and costs associated with establishing and maintaining the proposed

services on the Takoma Park campus. Citing academic research, MMMC spoke to declines in hospital utilization related to increasing distance from a hospital, with the inference that the population in Takoma Park would suffer from this relationship.

MMMC suggests that analyzing impact on the service area population should be done at the census block group level rather than at the zip code level, stating that zip code areas are "too large and irregularly shaped to show these distinctions and too geographically dispersed to make meaningful comparisons," and noting that "at its current location, the existing WAH is the closest hospital to large concentrations of people who are indigent and vulnerable." MMMC submitted data gleaned at the census block group level and shown in the table below that it says shows that the population for whom the current WAH is the closest hospital "are demographically quite different than areas for which the proposed location is the closest hospital" (DI #52, p.13)

Table IV-5: Demographic
MMMC Analysis: Comparison of Census Block Groups in 2010 Base Year

	Takoma Park Area	White Oak/Fairland Area
Population	156,502	137,357
Projected Population Growth — 5 years	9,971 (6.4%)	4,672 (3.4%)
Median Household Income as a % of State Median	84%	112%
Head of Household Without High School Diploma	22.9%	12.4%
Percent of Households with HHI < 200% FPL	30.0%	19.7%
Percent of Households ≤ FPL	12.2%	7.4%

Source: MMMC comments, DI #52

In its comments on AHC's response to my request for an estimate of the proportion of WAH's ED patients who could be served in the proposed UC center, MMMC challenges AHC's estimate that all of the patients that rated Level 4 and 5 on the Emergency Severity Index ("ESI"), and 30% of those who rated Level 3, could be treated in urgent care. MMMC said "Level 3 patients … have higher resource needs than level 4 or 5 patients … include[ing] lab, EKG, X-rays, imaging, IV fluids" and that, for this reason "urgent care centers … treat level 4 and 5 patients and are not open 24 hours per day/7 days per week." (DI #107, p.4)

City of Takoma Park

CTP states its concern that AHC's application will have a substantial impact on the City of Takoma Park and its residents, including geographic access to health care for City residents and access to affordable health care by the City's indigent and uninsured residents. While stating its appreciation of the applicant's stated intent to keep some health services on the Takoma Park campus, it notes that AHC "makes no firm commitment to complete plans on the existing campus at Takoma Park, as AHC specifically states… (in) the CON Application that the plan for Takoma Park 'is not a formal element of this CON application.'" The City states a related concern that, if the projections for WAH at White Oak are not realized, financial pressures could jeopardize AHC's ability to provide and sustain the promised improvements and services in Takoma Park, especially since Takoma Park operations are projected to lose money.

In concluding its comments, the City said that it supports the grant of a Certificate of Need authorizing Washington Adventist Hospital to relocate to White Oak, if the Commission imposes conditions to mitigate the adverse impacts of the proposal, conditions that would obligate AHC to provide the promised services in Takoma Park and require AHC to explore the establishment of a Freestanding Medical Facility in Takoma Park. (DI #54, p.32)

Applicant's Response to Comments

AHC addressed two broad aspects of its project planning in responding to the comments of the interested parties and participating entity. First, it defends the adequacy of the mitigating actions it plans to take to reduce potential adverse impact on the community it currently serves. Secondly, it seeks to reinforce the sincerity of its commitment to the mitigation strategy and to demonstrate its financial ability to execute the strategy. (DI#59)

AHC: Mitigation of Adverse Impact

AHC's response begins with a recitation of its track record in providing care to the under-served, and cites an HSCRC report showing that WAH had the highest level of Community Benefit as a percent of total operating expense of any hospital in Montgomery County, "far higher than Interested Parties HCH and MMMC." The applicant notes that HSCRC reported the three organizations' respective community benefit levels as follows:

Total Community Benefit as a Percent of Operating Expense, FY 2013

Washington Adventist:	15.3%
Holy Cross/Silver Spring:	12.8%
MedStar Montgomery:	9.8%

(DI #59, p. 15, citing http://www.hscrc.maryland.gov/init_cb.cfm)

AHC also states that its analysis shows that WAH serves a larger indigent population (based on Medicaid & self-pay as identified sources of payment) within the current WAH TSA than any of the other commenting interested party hospitals, and presented the following data in support of this statement.

Proportion of Total Patients Reported as Medicaid or Self Pay, CY2013

Washington Adventist:	26.9%
Holy Cross/Silver Spring:	18.0%
MedStar Montgomery:	12.1%
Laurel Regional:	23.1%
Overall Average:	20.6%

(DI #59, p.18)

AHC also addresses HCH's and MMMC's comments suggesting that it was leaving a service area with more difficult demographics than the service area to which it was moving, characterizing claims that it is "abandoning the indigent and uninsured population that it currently serves… [as] statistically unsupported and contrary to the mission and programs offered by Adventist." It also states that HCH's analysis addressing AHC's anticipated reduction in market share in some of the zip code areas with the lowest income metrics highlighted just nine of the 25

zip code areas with expected market share reductions. It notes that a more complete analysis shows that 62.2% of the total reduced discharges were from zip code areas outside of the group with the lowest incomes. AHC states that it does not expect significant increases in market share in the zip code areas with the highest incomes. It also notes that the overall net impact was an increase of only 10 discharges in the zip code areas with the highest incomes.[17] (DI #59, p. 17)

AHC responded to the comments of the City suggesting the relocation will result in reduced access for the elderly and indigent by pointing out that its application demonstrates that 100% of WAH's likely service area population will be able to travel to a hospital within 30 minutes. It acknowledges that relocation of the hospital will result in less convenience for some, and more convenience for others, but pointed out that "'convenience' is not the standard, and it is inarguable that 'access' for the population in WAH's existing and likely service areas will remain well within the 30 minutes referenced in the Geographic Accessibility standard of the State Health Plan's Acute Care Services chapter (COMAR 10.24.10)."

In response to my July 10, 2015 request for additional information, AHC estimated the proportion of WAH's ED patients who could reasonably be served by an urgent care center, stratifying WAH's 2014 ED visitors using an Emergency Severity Index ("ESI"). That data is displayed in the following table.

Table IV-6: Severity of WAH ED Patients, 2014

ESI Level	Description	# of ED Patients
1	Resuscitation	360
2	Emergent	4,100
3	Urgent	28,795
4	Less Urgent	11,529
5	Non-urgent	310
Unlisted		2,824
Total		47,918

Source: DI #103, p.26

AHC estimates that 45% of the visits to its ED could be served in an urgent care setting, based on an assumption that all category 4 and 5 patients, and 30% of category 3 patients, could be appropriately treated at the proposed urgent care center.

AHC: Commitment and Financial Ability to Execute Its Mitigation Strategy

AHC states that it is committed to meeting the needs of the local community, citing the proposed Urgent Care Clinic and stating that it has committed to participate in the process of

[17]In response to HCH comments, AHC undertook an analysis (similar to that conducted by HCH) that considered: (i) median household income; (ii) median earnings per worker; and (iii) income per capita published in the U.S Census Bureau's Five-Year American Community Survey. AHC then ranked the 43 zip code areas identified in WAH's current MSGA service area based on the three metrics identified above and selected those zip code areas that had at least two out of the three metrics within the bottom 25th percentile ("Lowest Income Metrics") or top 75th percentile ("Highest Income Metrics"). (DI #59, p.16-17)

evaluating the need for an FMF in Takoma Park, and will "carefully evaluate the feasibility of expanding its Takoma Park urgent care services to include an FMF." (DI#59)

Speaking to comments that its commitments are unenforceable promises that might not be available for the first three years after relocation of the hospital, AHC points out that it already has established a Federally Qualified Healthcare Center ("FQHC") operated by Community Clinics, Inc. on its Takoma Park campus and that this FQHC will be doubling its clinical space in the near future. AHC confirmed the timeline in its May 29, 2015 response to my April 29, 2015 request for additional information, stating:

> The urgent care services on the Takoma Park campus will be available immediately following the relocation of the acute hospital services to the White Oak campus. There may be a short transitional period of complete renovation of the urgent care space, but AHC will provide urgent care services immediately upon the relocation of the Hospital, including during any renovation needed to complete full build-out of the space. (DI #85, p. 4)

AHC provided the budget estimate for the Takoma Park campus reconfiguration in its May 29 response, shown in the following table. I note that the source of funds was identified by AHC as borrowing. (DI #85, p.2)

Table IV-7: Estimated Cost for Reconfiguration of the WAH Takoma Park Campus

Total Budgeted Costs	Space to be Renovated (SF)	Cost Estimate
Renovate Behavioral Health Unit	15,900	$ 5,119,000
ED into an Urgent Care Center	7,000	$ 3,250,000
Women's Center Clinic	3,000	$ 1,381,000
Public Corridors	12,000	$ 2,110,000
Other Requirements		$ 3,940,000
Takoma Park Facility Upgrades		$ 2,300,000
Financing Costs		$ 369,278
Total	37,900	$ 18,469,278

Source: DI #85, p.2

Responding to concerns expressed by the City of Takoma Park with respect to AHC's ability to provide and sustain the promised improvements and services in Takoma Park, especially in light of the projections that Takoma Park operations will not generate positive income, AHC notes the financial projections it provided as part of its modified application. (DI #27, citing Exh. 30, pp.2-6). The positive margin generated by the combined White Oak and Takoma Park operations is identified by AHC as the source of financial support for the commitment to Takoma Park. The most recent schedule of revenue and expense projections submitted by AHC, submitted on October 21, 2015, continues to show Takoma Park operations generating a loss. AHC projects that, combined, the two campuses will generate income of $1.9 million in 2023, in current dollars, or $1.5 million, when inflation assumptions are incorporated.

Reviewer's Analysis and Findings

Concerning drive times, please reference the discussion under the *Geographic Accessibility* standard earlier in this section.

At question in the project review standard regarding adverse impact is whether AHC's proposed plan to relocate Washington Adventist Hospital will or will not "inappropriately diminish, for the population in the primary service area, the availability or accessibility to care, including access for the indigent and/or uninsured."

I have reviewed the ample supply of information and comments on this question that appears in the application, the comments filed by the interested parties and the participating entity, and the applicant's responses to those comments. I have also conducted a closer study of the issue of diminishment of availability and access to ED services at a more granular level, the census block-group, consistent with a comment filed by MMMC. Before describing that analysis and my findings, however, I will address the specific points raised in the submissions of the applicant and other parties.

Physical Access

Adventist presented data purporting to show that overall aggregate travel time for residents in WAH's current service area will actually be marginally improved, even as it concedes that some sectors will see more convenient access and others will have less convenient access. AHC cited its support for operation of an FQHC, a Women's Clinic, and an urgent care center in Takoma Park after the general hospital's relocation as initiatives that will substantially mitigate any negative impact on access that would be created by the hospital's relocation. AHC cited Emergency Severity Index level data and stated that 45% of the patients who came to WAH's current ED could be treated in an urgent care center setting. Despite disagreement on this point by MMMC, my review of the literature on this subject suggests that the proportion of ED visits to the typical hospital that can be adequately managed in an urgent care setting is substantial.[18]

CTP, MMMC, and HCH all commented that lower income households, the uninsured, and those lacking a motor vehicle for personal transportation are most vulnerable to experiencing a negative impact as a result of the proposed project. I reviewed HCH's submission of drive time and economic and demographic data for the eight zip code areas making up WAH's PSA. This data showed that:

- Three of the eight zip code areas are closer to the White Oak site than to the current WAH campus in Takoma Park;

- Two of the remaining five zip code areas are just two minutes farther away from the White Oak site than they are from the current WAH campus in Takoma Park (but both

[18] *Emergency Severity Index, Version 4: Implementation Handbook*, AHRQ, Agency for Healthcare Research and Quality; *Emergency Severity Index (ESI): A Triage Tool for Emergency Department*, AHRQ, Agency for Healthcare Research and Quality.

of these zip code areas are already closer to HCH than they are to the current WAH campus in Takoma Park, two minutes closer in one case and four minutes in the other);

- The three remaining zip code areas would see their driving time to WAH increase by six, nine, and 13 minutes if WAH relocates to White Oak. All three will be closer to HCH than to the current WAH if the hospital is relocated, making HCH the closest ED alternative for these areas, which are all now closer to the WAH ED in Takoma Park; and

- None of these zip code areas would be more than an 18 minutes away from HCH or a WAH ED at White Oak.

Financial Access

AHC maintains that it has mitigated access difficulties for those residents who might otherwise have issues with financial or geographic access by virtue of AHC's commitment to operation of a special hospital and outpatient service campus at the Takoma Park site after relocation of WAH to White Oak. Specifically, AHC notes that the remaining Takoma Park campus will include an expanded FQHC, a women's clinic targeting indigent women in need of obstetric and gynecological services, and a 24/7 urgent care center.

In my view, AHC's stated intentions are credible given its historically strong commitment to serving the disadvantaged and indigent population. It has consistently reported high levels of community benefit and charity care. AHC disputed statements by HCH and MMMC that it was leaving a poorer area for one that was better off, providing economic data for its proposed service area that showed only very marginal improvement in the economic and demographic profile of the WAH patient population post-project. Contrary to the opinions expressed by some commenters, I find that this marginal improvement in the economic well-being of the service area population that can be logically assumed for the replacement WAH at White Oak is incidental to the project rather than a strategic objective of the project. The evidence does not indicate that eliminating the level of disadvantage being created through this proposed hospital relocation is so great that MHCC should force AHC to undertake a modernization of WAH on its existing site or force it to find a site for relocation of WAH that will not change access to its hospital facilities in any material way. I find that the impacts are simply not that great and that AHC has committed to responsible actions that will ameliorate those impacts.

Census Block-Group Analysis

I considered the likely impact of this project on that segment of the Takoma Park population who might be most negatively affected by the hospital's potential relocation. I was receptive to the suggestion that analysis at a zip code area level might obscure this impact given the size and diversity of zip code area populations. Thus, my analysis looked at census block-groups ("CBGs") that were the most dependent upon the WAH ED in 2014. I defined "most dependent upon WAH" for ED services as a CBG in the top twenty of CBGs by volume of ED visits to WAH or a CBG sending $\geq$ 50% of its total ED visits to WAH. I looked at 52 CBGs with

an aggregate estimated population (2015) of 91,516. My key findings[19] follow:

- In every case, the closest hospital to the CBG had the largest market share of ED visits originating in that CBG;
- All but three CBGs sent at least 50% of their ED visits to WAH;
- 58.5% (16,204) of the visits went to WAH;
- 23.6% (6,645) of the visits went to HCH;
- The 52 CBGs that were most dependent on WAH for emergency services generated more than a third of WAH's total ED visits in 2014;
- 25 of these CBGs had a median household income that was below 85% of the 2013 Maryland median household income;
- All 52 CBGs were a shorter drive time to the existing WAH than to Holy Cross (HCH). All will be closer to HCH than to WAH if WAH moves to White Oak;
- None of these CBGs will be more than 15 minutes from an emergency room – and most will be much closer than 15 minutes, if the proposed project is implemented;
- 18 of these CBGs (34.5% of the population) will be no further than seven minutes from an emergency room if the project is implemented;
- 29 of these CBGs (56.5% of the population) will be between 7 and 12 minutes from an emergency room if the project is implemented; and
- The remaining five CBGs (with 9% of the total population) will be between 12 and 15 minutes from an emergency room if the project is implemented.

Based on my travel time analysis, I conclude that WAH's proposed move will not inappropriately diminish the accessibility of the population that may traditionally be the heaviest users of WAH's Emergency Department. While the incremental travel time this population would experience in traveling to a WAH ED at White Oak rather than to the existing WAH ED in Takoma Park is about 10 minutes in most cases, their travel times to an emergency room – Holy Cross in most cases – is less than or equal to 12 minutes for 91% of this population.[20]

[19] See Appendix 4 for a compilation table of the referenced data.

[20] See my discussion of the impact of the proposed project on HCH and other providers, at COMAR 10.24.01.08(3)(f), *infra,* p.159.

I am also persuaded that the proposed 24/7 urgent care center operated by AHC at the existing WAH site will be a viable option for a substantial proportion of the care dispensed by the WAH ED without any change in travel time. AHC's response to my question regarding ED acuity levels revealed that 11,839 of its ED patients were ESI level 4 or 5, acuity levels that no party disputes can be served (arguably, more appropriately served, in many cases) in an urgent care center ("UCC"). This represents 26% of the patients for whom an ESI level was recorded.[21] Given that the UCC would not be a brand new provider of service but would be operated by both a provider, AHC, and at the same location (the current ED at WAH) to which the community is accustomed as a source of urgent and emergent care, I believe that it stands a good chance of being well-utilized. I do not conclude that it is appropriate to require AHC to commit to a more expensive form of urgent and emergent care delivery, the freestanding medical facility model, at this time.

As a result of my analysis, I find that the travel time to hospital ED care is not appreciably or inappropriately compromised by this project and that the proposed UCC is likely to be able to serve at least 25 percent of the demand that would otherwise be handled by the WAH ED if that facility remained in place. I find that the expanded FQHC on the Takoma Park campus will also play an important role in insuring and enhancing access to primary medical care for the indigent population of the area.

For these reasons, I find that the project is consistent with this standard. However, since AHC's representations regarding its commitment to this UCC are such an important part of that finding, I am recommending that the Commission attach a condition related to this standard if it approves this project. That recommended condition is:

> Adventist Health Care must open an urgent care center on its Takoma Park campus coinciding with its closure of general hospital operations on that campus. The urgent care center must be open every day of the year, and be open 24 hours a day. Adventist Health Care may not eliminate this urgent care center or reduce its hours of operation without the approval of the Maryland Health Care Commission.

My analysis of access issues at the census block group level led me to find that HCH will become a more attractive alternative to a WAH ED in White Oak, in terms of travel time, for many residents of the Takoma Park area. This leaves open the question of the impact this project is likely to have on demand for ED services at HCH, a concern that HCH has strenuously advanced in its filings. This section of my Recommended Decision addresses the impact that a proposed project may have on the availability of or accessibility to services by the patient population in the facility's primary service area, if facilities are eliminated, downsized, or otherwise modified. It does not speak to the adverse impact a project may have on other providers. I will address that question later in this Recommended Decision, under COMAR 10.24.01.08G, *Impact on Existing Providers and the Health Care Delivery System*.[22]

[21] AHC reported that 2,824 of WAH's 47,918 ED patients were "unlisted" in its response to my April 29, 2015 questions. (DI #85)
[22] *Infra*, p.150.

(5) Cost-Effectiveness

A proposed hospital capital project should represent the most cost effective approach to meeting the needs that the project seeks to address.

(a) To demonstrate cost effectiveness, an applicant shall identify each primary objective of its proposed project and shall identify at least two alternative approaches that it considered for achieving these primary objectives. For each approach, the hospital must:

- ***(i) To the extent possible, quantify the level of effectiveness of each alternative in achieving each primary objective;***
- ***(ii) Detail the capital and operational cost estimates and projections developed by the hospital for each alternative; and***
- ***(iii) Explain the basis for choosing the proposed project and rejecting alternative approaches to achieving the project's objectives.***

(b) An applicant proposing a project involving limited objectives, including, but not limited to, the introduction of a new single service, the expansion of capacity for a single service, or a project limited to renovation of an existing facility for purposes of modernization, may address the cost-effectiveness of the project without undertaking the analysis outlined in (a) above, by demonstrating that there is only one practical approach to achieving the project's objectives.

(c) An applicant proposing establishment of a new hospital or relocation of an existing hospital to a new site that is not within a Priority Funding Area as defined under Title 5, Subtitle 7B of the State Finance and Procurement Article of the Annotated Code of Maryland shall demonstrate:

- ***(i) That it has considered, at a minimum, the two alternative project sites located within a Priority Funding Area that provide the most optimal geographic accessibility to the population in its likely service area, as defined in Project Review Standard (1);***
- ***(ii) That it has quantified, to the extent possible, the level of effectiveness, in terms of achieving primary project objectives, of implementing the proposed project at each alternative project site and at the proposed project site;***
- ***(iii) That it has detailed the capital and operational costs associated with implementing the project at each alternative project site and at the proposed project site, with a full accounting of the cost associated with transportation system and other public utility infrastructure costs; and***
- ***(iv) That the proposed project site is superior, in terms of cost-effectiveness, to the alternative project sites located within a Priority Funding Area.***

Applicant's Response

AHC: Process for Considering Project Alternatives

The applicant states that its Board of Trustees developed 19 objectives within seven domains by which it would evaluate the options for the future of Washington Adventist Hospital. The domains were: (1) financial considerations; (2) facility size, scope, and description; (3) regulatory implications; (4) clinical capacity and the patient/provider experience; (5) community implications; (6) impacts on AHC; and (7) adaptability to market changes.

The applicant states that its executive team was directed by AHC's Board to evaluate options that included staying on the Takoma Park campus as well as relocating to White Oak on a site within the hospital's existing primary service area.

AHC: Options Considered

Adventist developed four options that would allow it to continue providing services to its patient population, which were:

1. A limited capital project on the existing Takoma Park campus maintaining the current buildings;

2. Replacement hospital on the existing Takoma Park campus;

3. Relocation of all existing acute care hospital services, including behavioral health, to a new facility and campus in White Oak.

4. Relocation of all existing acute care hospital services to the new facility in White Oak except for behavioral health, which would stay in Takoma Park as a specialty hospital service.

These options are described below, along with the applicant's projection of project cost and projected operating margin at year five of project implementation for each option.

Table IV-8: AHC's Overview of Project Options Considered for Modernization of Washington Adventist Hospital

Options	Project Cost	Projected Operating Margin, at Year 5
Option 1: Limited capital project that would renovate the existing facilities on the Takoma Park campus **Description:** None provided beyond the above	Not provided	N/A
Option 2: Replacement hospital on the existing Takoma Park campus **Description:** A three-phased construction project to build a new facility at the current site with an estimated timeline to completion of 7 years. **Phase 1** - Develop a new bed tower, garage and central plant on an existing parking lot on the south end of the existing hospital. Construction would take 24 months. Upon completion, the following would be relocated from the oldest section of the hospital to the tower: cardiac care and heart center; labor and delivery; diagnostics; laboratory, pharmacy, and respiratory services; same day surgical services; and lobby. There would be a 4-month transition period for survey, relocation and demolition of the vacated portion to make room for Phase 2. **Phase 2** - Expected 24 months construction, resulting in new: medical surgical unit; critical care unit; maternity unit; surgical suite; G.I. endoscopy suite; emergency department; admitting and radiology areas; cafeteria; and parking structure. The last part of Phase 2 would relocate physicians' offices from the MOB at the north end of the site into current hospital space. Upon completion of Phase 2, hospital services would be activated over a 5 month period that would include survey, relocation, and demolition of the existing 1980's West Building to prepare for construction of Phase 3. **Phase 3** –Expected 18-month period involving demolition, renovation, and construction, resulting in: a new medical surgical unit; shell space for future bed capacity; new behavioral health unit and renovation of existing unit; additional surgical space to connect to the surgical space created in phase 2; new radiology space and a central warehouse.	$351.2M	($4.6 M)
Option 3: Relocation of all existing acute care hospital services, including behavioral health, to a new facility and campus in White Oak **Description:** Construct a new 210-bed hospital (all private rooms) for all acute care services in White Oak, including 40 inpatient psychiatric beds. A 750-car surface parking lot. In this option the 40 behavioral health beds would move to White Oak and be operated as acute hospital beds instead of staying in Takoma Park, licensed and operated as special hospital beds under Adventist Behavioral Health (as they would be under Option 4).	$353.2M	$4.9 M
Option 4: Relocation of all existing acute care hospital services to the new facility in White Oak except for behavioral health, which would stay in Takoma Park as a specialty hospital service and be operated by Adventist Behavioral Health. **Description**: With an estimated timeline to completion of 62 months, construct a new 170-bed acute care hospital in White Oak, with the existing 40 inpatient psychiatric beds to remain in renovated space in Takoma Park and be operated under the auspices of Adventist Behavioral Health as special hospital-psychiatric beds. Other services at the Takoma Park campus include: a Federally Qualified Health Center (FQHC) operated by Community Clinic, Inc.; the Women's Center, providing prenatal and other services for the community, including low-income women; walk-in primary care clinic; imaging and other ancillary services to support the clinical care provided on the campus. 55,000 square feet of space will be leased to Washington Adventist University.	$330.8M at White Oak and $5.2M at Takoma Park (behavioral health) Total: $336M	$5.0 M

Source: DI #27, pp 32-38.

AHC: Evaluation

The applicant reports that it evaluated the alternatives against the selection criteria (which it calls "domains") and arrived at a decision to construct a new hospital for all acute hospital services other than acute psychiatric and medical rehabilitation, renovating the existing Takoma Park facility, maintaining acute psychiatric and medical rehabilitation at their present locations, as detailed in Option 4.

AHC states that it rejected Option 1 "because it failed to materially address facility infrastructure challenges or access issues. It maintained the status quo, including the current, outdated buildings, providing no opportunity to enhance facilities and services for the community, and did not ensure the long term future of Washington Adventist Hospital." (DI #27, p.33) The applicant states that the on-campus alternative in Option 2 would encumber AHC with significant debt without addressing the access challenges that patients and staff face, such as negotiating narrow residential streets and limited public transportation options. AHC states that Option 2 would also have to be implemented in the midst of ongoing hospital operations, presenting a series of major disruptions over a prolonged period, presenting a host of unfavorable impacts and challenges during the construction and renovation periods. It notes that Option 2 does not earn a positive financial margin within five years, would not ensure the long term future of WAH, and would negatively impact the entire AHC organization. (DI #27, Exh. 27)

Options 3 and 4 differ only in that Option 4 would not relocate the inpatient psychiatric beds to White Oak, thus saving an additional capital investment of about $18M, which is $23M less the $5.2M that would be spent at Takoma Park to renovate the behavioral health unit. In addition, AHC concluded that under Option 4 the projected combined operating margin – comprised of positive results in White Oak and operating losses in Takoma Park – is marginally better. AHC also rated the impact of Option 3 on the community to be less promising than Option 4, since Option 4 would leave a more robust group of services in Takoma Park, and a greater level of health care activities and revenues. The applicant concluded that Option 4 provides the best alternative for ensuring the long term future of Washington Adventist Hospital and is the most cost effective because it: requires the lowest amount of capital expenditure among the three options that fully modernize the hospital physical plant; and generates the greatest revenue when factoring both the gain projected for White Oak and the losses projected for the reconfigured Takoma Park campus.

AHC: Site Selection

The applicant reports that it obtained real estate consulting assistance to identify possible relocation sites and ultimately evaluated five locations within a seven-mile radius of the existing Takoma Park campus (see table below), scoring each against twelve criteria: access to the campus/location; available acreage; availability for purchase; zoning; existing transportation; feasibility; location within existing primary service area; location within Montgomery County; area comparability; ease of development; natural setting for healing environment; and access to science and technology organizations. All but one of the sites were located in Silver Spring, with only one located within a mile of the existing facility.

AHC states that Site 5, the site it selected, scored well above the other four locations and is the only property that permitted complete site control through purchase and full ownership. (DI #27, p.37) The site, called the White Oak campus and located at 12100 Plum Orchard Drive in Silver Spring (Montgomery County), is stated by AHC to have met the majority of selection criteria and allowed for complete site control through purchase and full ownership.[23]

Table IV-9: AHC's Summary of Scoring for Site Options Considered for Relocation of Washington Adventist Hospital

Site	Location	Score
1	University Blvd., at Carroll Ave., Silver Spring, MD	4.8/10
2	College Park, MD	3.6/10
3	White Oak along New Hampshire Ave., Silver Spring, MD	5.6/10
4	25 acre site off Industrial Blvd. and Route 29, Silver Spring, MD	6.3/10
5	Plum Orchard, Silver Spring, MD	9.3/10

Source: DI #27, Exh. 31.

In response to Commission staff's questions during completeness review, Adventist explained its plan to allow a third party to construct and operate the Central Utility Plant (CUP) that would service the new campus. AHC said that this approach would save an estimated $12-$16 million of capital expenditure and would also increase energy efficiency and reliability. (DI #34, pp. 2-10)

Paragraph (c) of this standard requires hospital relocation sites to be within a Priority Funding Area, designated by the State as an acceptable site for development under "Smart Growth" plans. AHC notes that the White Oak site is located in a Priority Funding Area (DI #27, p.38)

Interested Party and Participating Entity Comments

MedStar Montgomery Medical Center

In its comments, MMMC agrees that WAH needs to build a replacement facility, but asserts that "another hospital is not needed in the White Oak/Fairland area," and that Adventist did not adequately explore an alternative that meets the needs of Takoma Park. MMMC states that the Commission should require the applicant to "conduct a meaningful analysis of alternatives in the Takoma Park area." MMMC believes that the applicant should have considered a tower construction option among its alternatives. Although MMMC acknowledges the limitations of the hospital's existing physical plant, it notes that such a solution had proven to be a viable option for other hospitals[24] and that such an alternative would be more compatible with the needs of the community. It also states that AHC failed to identify all possible relocation options within the City of Takoma Park, noting that in the past the City has supported retaining the hospital and was amenable to working with AHC to find a solution, suggesting that both the State and the County could exercise eminent domain to assemble a new site for AHC, with AHC funding the required acquisitions. (DI #52, pp.23-24)

[23] See Appendix 5 for details of AHC's scoring.

[24] MMMC noted that The Johns Hopkins Hospital, Saint Agnes Hospital, Mercy Medical Center, Frederick Memorial Hospital, Franklin Square Hospital, and Holy Cross Hospital all built replacement towers onsite "in an effort to uphold their community commitments…." (DI #52, p.1)

MMMC also states that the applicant: failed to provide the costs associated with the renovation of the Takoma Park campus in Option 4, thereby understating its actual capital expense; and did not include the timeline for completing the Takoma Park campus aspect of that option. (DI#52, p.9)

Lastly, MMMC criticizes the applicant's plan to have a third party construct and maintain the central utility plant ("CUP") and to enter into an energy services agreement rather than building and controlling the utility plant itself, alleging that it made no sense from an economic perspective, may not be appropriate from an accounting perspective, and could affect the opinions of rating agencies if lenders were to require that the CUP be capitalized. (DI #52, p.10)

Applicant's Response to Comments

In its response to MMMC's comments, Adventist states that modernizing on site would not solve

> the physical challenges that WAH faces on its current site – problems with access, a constrained site, limited parking, insufficient MOB on campus and a surrounding residential area -- would not and cannot be solved under any on site modernization program. Modernization simply would not allow the Hospital to achieve its stated objectives for providing the best possible patient care.
> (DI #59, p. 4)

AHC also notes that the Commission would need to take into account what the effect would be on the region's health care delivery system if AHC's application were to be denied. It points out that there are numerous examples where the Commission "has approved the relocation of an outmoded facility, including Upper Chesapeake, Western Maryland, Meritus and the Anne Arundel Medical Center's relocation out of a residential area in downtown Annapolis." AHC goes on to state that each of these moves upgraded the quality and level of patient care and ultimately resulted in a new equilibrium distribution of patients across those facilities, describing that as "an obvious public benefit and a strengthened regional health care delivery system."

The applicant addresses the criticism that it had failed to provide the timeline and budget for implementation of the urgent care center, pointing out that in its response to my April 29, 2015 request for information (DI #81), it stated that the urgent care center will be available immediately following the relocation of the acute care services to White Oak, saying that "there may be a short transitional period of complete renovation of the urgent care space, but AHC will provide urgent care services immediately upon the relocation of the hospital, including during any renovation needed to complete full build-out of the space." AHC notes that it provided a complete budget of approximately $18.5M for the Takoma Park renovation, with the funds being borrowed. (DI #85 pp. 2-4)

Regarding the construction of the CUP by a third party developer, AHC responded to MMMC's comments, maintaining that Energy Service Agreements (ESAs) or Provider Purchasing Agreements are "increasingly [being] used by hospitals and other organizations to provide an improved level of energy service and to avoid the significant capital cost related to a CUP," with

the utilities purchased being reflected as operating costs. Adventist pointed out that Upper Chesapeake Medical Center entered into an ESA with Clark Construction in 2014.

In its response to MMMC's critique of the appropriateness of its handling CUP transaction and the potential reaction of lenders and rating agencies, AHC cites accounting principles that it states show that an ESA does not have to be classified as a capital lease and thus "has been treated properly under both current and potentially prospective accounting standards and need not be included in debt ratios." (DI #59, p.14)

Reviewer's Analysis and Findings

I will first address the final point made by MMMC regarding AHC's decision to enter into an energy service agreement with a third party provider of utility services, I disagree with MMMC's assertion that this choice makes no sense from an economic perspective. I am concerned that AHC was unable to provide all of the information requested on the longer term operating cost of this option when compared with the conventional build, own, and-operate alternative. However, I recognize the desirability, from AHC's perspective, of the up-front savings of an estimated $12 to $16 million in capital expense. Therefore, at this time, I find that this alternative can make "economic sense," especially if outsourcing the service to a provider whose only business is providing utilities might be expected to also increase energy efficiency and reliability, as AHC maintains. (DI #34, pp. 2-10).

Next I will address the central purpose of this standard, which requires an applicant to specify the primary objectives of a proposed project and evaluate at least two alternative approaches for achieving the objectives.

Identification of Objectives

Since the proposed project involves the relocation of a facility, which will provide more than a single service, Paragraph (a) of this standard applies, but (b) does not. The proposed site for this project is within a Priority Funding Area.

In its evaluation, Adventist compared each option to a set of seven categories of objectives that would need to be satisfied to identify what it viewed as the optimal option that would meet both the needs of AHC and the needs of its service area population. The seven objectives that were identified by the applicant as desirable would result in an option that:

(1) Ensures positive financial feasibility and viability;
(2) Improves facility infrastructure, access and operability;
(3) Has an ability to improve or achieve regulatory compliance;
(4) Has an ability to improve the clinical experience (in and out-patient) capacity;
(5) Has positive community implications;
(6) Has minimal impact on operations; and
(7) Provides potential to expand services.

I view these as the primary objectives that Adventist identified and find that the applicant has evaluated at least two alternative approaches for achieving these objectives.

Evaluation of Alternatives

Given that this is a proposal to relocate a hospital with an aging physical plant from its current site to a new site, the primary cost effectiveness question is whether it is more cost effective to relocate the hospital or to modernize the hospital at its current site.

As noted above, it appears that AHC summarily dismissed the first option, consisting of a limited capital project because, as it stated, that option

> failed to materially address facility infrastructure challenges or access issues, ... maintained the status quo [of] outdated buildings, providing no opportunity to enhance facilities and services for the community, and did not ensure the long term future of Washington Adventist Hospital. (DI #27, p.33)

I cannot find fault with AHC's conclusion regarding its Option 1. This option does not appear to be a true alternative with respect to the requirement that an applicant consider alternative approaches to meeting the primary objectives of the project. It is not a vehicle for meeting those objectives because of the limitations of space and outdated building systems that are impossible or impractical to resolve with renovation.

AHC's Option 2, which involves on-site replacement, is a true alternative in the sense contemplated by this standard. I am sympathetic to the applicant's belief that this option would encumber Adventist with significant debt financing, present considerable ongoing disruption to operations, and still not address the challenges that AHC states the hospital site and location present – access via narrow residential streets, limited public transportation options, a small site making on-site replacement difficult and time-consuming and limiting opportunities for related development, such as medical office buildings. This option is estimated to cost more than the relocation option and is projected to perform less favorably. I find that AHC's conclusions with respect to the inferiority of this approach over the long term and the negative impact implications for the overall AHC system are well-founded. (DI #27, Exh. 27) I believe that AHC's rejection of this option is reasonable.

With respect to this option of on-site replacement and replacement site options, I view the positions expressed by the City of Takoma Park as important. CTP states that it "accepts that to fully realize the goal of a more modern hospital and of higher quality acute care services, AHC must consider locations outside of Takoma Park," even as the City expressed its concern about access for some city residents. (DI #54, p.1) I did not find MMMC's suggestion that Adventist should partner with CTP to replace WAH within the city to be persuasive. Use of eminent domain by the State and the County to assemble a new site for WAH (DI #52, p.24) is likely to be divisive, litigious, and expensive, and could take years to resolve with an uncertain outcome.

This leads me to conclude that off-site replacement is the unavoidable preferred choice. The chosen site, which was acquired by AHC a number of years ago, fits AHC's criteria, which I find to be reasonable.

Adventist described two options for using the White Oak site, with the only difference

being the relocation of the acute inpatient psychiatric beds. The chosen option of leaving this unit in Takoma Park eliminates the expense of replacing it, estimated to be approximately $17 million and offers modestly better projected operating results. AHC also argues that its Option 4 provides more of an anchor for the reconfigured Takoma Park campus. While I believe that there are practical operational advantages and less financial risk to providing acute psychiatric inpatient care as part of the general hospital campus, I recognize the challenges that AHC has had to face in containing the up-front cost of this project.

AHC has provided a detailed description of how it will coordinate and manage the operation of the acute psychiatric services on a campus that is separate from its general hospital and emergency department facilities, which I find to be reasonable. While I am willing to accept that this change can be implemented in a way that assures reasonable access, I also believe that the provision of acute psychiatric care in this new configuration needs to be monitored during the first few years of operation of the separate general and special hospital campuses to determine if the configuration is working, with respect to quality delivery of patient care, access to care, and financial feasibility. It may be preferable to relocate acute psychiatric services to White Oak at some future date and, if so, the expense involved in adding space for this program may be reasonable and feasible at that time. I find that the applicant has met this standard. Nevertheless, I recommend that the following condition be placed on any approval of this project:

> In the fourth year of operation of a replacement Washington Adventist Hospital, AHC shall provide a report to the Maryland Health Care Commission on the operation of the specialty hospital for psychiatric services in Takoma Park. This report must review patient intake and transport issues, coordination of care for psychiatric patients between the White Oak and Takoma Park campuses, and the specific financial performance of the special hospital, exclusive of the operation of Adventist Behavioral Health and Wellness overall.

(6) <u>Burden of Proof Regarding Need</u>

A hospital project shall be approved only if there is demonstrable need. The burden of demonstrating need for a service not covered by Regulation .05 of this Chapter or by another chapter of the State Health Plan, including a service for which need is not separately projected, rests with the applicant.

<u>Applicant's Response</u>

Under this standard, AHC referred to other parts of its CON application in which it addressed the need for beds, emergency department treatment capacity and space, and operating rooms.

<u>Interested Party and Participating Entity Comments</u>

While not specifically referencing this standard, MedStar Montgomery Medical Center and the City of Takoma Park made comments with reference to the Need criterion,COMAR 10.24.01.08G(3)(b).[25]

[25] See summary of those comments, the applicant's response, and my analysis and findings under COMAR

Reviewer's Analysis

I find that AHC has successfully demonstrated the need for this project, including the need for a comprehensive modernization of the WAH physical facilities and the need for the services and capacities proposed by AHC. I have concluded that this level of needed modernization is most cost-effectively achieved through relocation and replacement. I found AHC's assessment of these needs to be reasonable, reflecting thoughtful analysis of the likely changes in service area and market share associated with the proposed hospital relocation, and consistent with current trends in hospital use and the changing environment of hospital service delivery and payment for hospital services.

My findings with respect to AHC's demonstration of need for this project can be found in my review of the applicable review standards of the State Health Plan. These include: COMAR 10.24.10.04B(2),[26] Identification of Bed Need and Addition of Beds; COMAR 10.24.10.04B(5),[27] Cost-Effectiveness; COMAR 10.24.10.04B(14),[28] Emergency Department Treatment Capacity and Space; COMAR 10.24.10.04B(15),[29] Emergency Department Expansion; COMAR 10.24.10.04B(16),[30] Shell Space; COMAR 10.24.11B(2),[31] General Surgical Services; COMAR 10.24.12.04(1),[32] Obstetric Services; and COMAR 10.24.07(AP1a),[33] Psychiatric Services. I have also addressed need issues in this project review in my evaluation of general criteria at COMAR 10.24.01.08G(3)(b)[34] and (c).[35]

(7) Construction Cost of Hospital Space

The proposed cost of a hospital construction project shall be reasonable and consistent with current industry cost experience in Maryland. The projected cost per square foot of a hospital construction project or renovation project shall be compared to the benchmark cost of good quality Class A hospital construction given in the Marshall Valuation Service® guide, updated using Marshall Valuation Service® update multipliers, and adjusted as shown in the Marshall Valuation Service® guide as necessary for site terrain, number of building levels, geographic locality, and other listed factors. If the projected cost per square foot exceeds the Marshall Valuation Service® benchmark cost, any rate increase proposed by the hospital related to the capital cost of the project shall not include the amount of the projected construction cost that exceeds the Marshall Valuation Service® benchmark and those portions of the contingency allowance, inflation allowance, and capitalized construction interest expenditure that are based on the excess construction cost.

Applicant's Response

10.24.01.08G(3)(b), *supra*, p.117.

[26] See discussion, *supra*, at p.23.

[27] See discussion, *supra*, at p.43.

[28] See discussion, *infra*, at p.74.

[29] See discussion, *infra*, at p. 79.

[30] See discussion, *infra*, at p. 82.

[31] See discussion, *infra*, at p. 103.

[32] See discussion, *infra*, at p.88.

[33] See discussion, *infra*, at p.111.

[34] See discussion, *infra*, at p.130.

[35] See discussion, *infra*, at p.159.

AHC states that its Marshall Valuation Service ("MVS") analysis of the cost of relocating Washington Adventist Hospital shows that the costs are reasonable and consistent with current industry costs experienced within the State of Maryland. It further states that only costs applicable to the MVS definitions of construction cost for a standard acute care general hospital were included in this comparison. Thus, for MVS comparison purposes, project costs were adjusted to exclude costs not included in the MVS definitions of construction costs such as the cost of seeking and obtaining county approval, site development costs, the cost of hillside construction, the offsite cost of connecting to utilities including connection fees, and interest payments on debt during construction that will be used for equipment and other capital costs that will not be included in the contract to construct the hospital building. In addition, AHC adjusted the project costs to exclude extraordinary costs that it considered not to be comparable to the MVS standard, including the cost of canopies, the cost of redundant electric and water lines, and the cost of additional elevators to central sterile supply and the kitchen. These adjustments are detailed in Exhibit 33 of AHC's September 2014 replacement application. According to the applicant, the adjusted project cost is $371.37 per square foot ("SF"), which is about 1% below the MVS benchmark of $374.91 per SF, as calculated by the applicant. (DI #27, Vol. 1, pp. 39-41 and Vol. 2, Exhs. 32-35)

Reviewer's Analysis and Findings

This standard requires a comparison of the project's estimated construction cost with an index cost derived from the MVS, which is based on the relevant construction characteristics of the proposed project. The MVS includes the base cost per square foot for new construction by type and quality of construction for a wide variety of building uses, including hospitals. Separate base costs are specified for basements and mechanical penthouses. The MVS guide also includes a variety of adjustment factors, including adjustments of the base costs to the costs for the latest month, the locality of construction, as well as factors for the number of stories, height per story, shape of building (such as relationship of floor size to perimeter), and departmental use of space. The standard provides that, if the projected cost per square foot exceeds the MVS benchmark cost, any rate increase proposed by the hospital related to the capital cost of the project shall not include the amount of the projected construction cost that exceeds the MVS benchmark and those portions of the contingency allowance, inflation allowance, and capitalized construction interest expenditure that are based on the excess construction cost.

AHC's calculation of the benchmarks in the September 2014 replacement application used the MVS base cost for Class A, good quality construction as of November 2011, which was updated in November 2013. AHC's calculation of its benchmark used the update (current cost multiplier) as of October 2013 and a local multiplier for an uncertain date. The MVS current cost multiplier is updated monthly, with the latest available update being September 2015; the local multiplier is updated quarterly, with the most recent being July 2015.

I have calculated a revised MVS benchmark for the relocation of WAH based on the information submitted in September 2014 using separate MVS November 2013 base costs for floors one through seven, for the basement, and for the mechanical penthouse. I adjusted these base costs for the departmental uses proposed by AHC as detailed in Exhibit 35 of the September 2014 replacement application. (DI #27, Vol. 2, Exh. 35) I further adjusted these costs by applying

the perimeter, height per story, and multi-story multipliers calculated for the size and shape of the building proposed using the information contained in MVS's November 2013 update. Then these costs per square foot were adjusted by applying the appropriate current cost and local multiplier to bring the MVS benchmark up to date for September 2015 in Silver Spring, Maryland.

My calculation of the MVS benchmark for each component of the hospital structure is detailed in the following table.

Table IV-10: Calculation of Marshall Valuation Service Benchmark for Washington Adventist Hospital Relocation

	Main Floors	Basement	Penthouse	Total
Construction Class/Quality	Class A/Good Quality	A-B		
Number of Stories	7	1	1	9
Square Feet	353,626	70,931	3,105	427,662
Average Floor Areas (square feet)	50,518	70,931	3,105	
Average Perimeter (ft.)	1,316	1,876	494	
Average Floor to Floor Height (feet)	16.3	21	20	
Base Cost per SF (Nov. 2013)	**$354.99**	**$152.99**	**76.76**	
Elevator Add-on	Inc. above	0.11	2.61	
Adjusted Base Cost per SF	$354.99	$153.10	$79.37	
Adjustment for Dept. Cost Differences	1.062	1.07	1.0	
Gross Base Cost per SF	**$377.16**	**$164.30**	**$79.37**	
Multipliers				
Perimeter Multiplier	.9129	0.9157	1.2605	
Story Height Multiplier	1.0989	1.207	1.184	
Multi-story Multiplier*	1.025	1.025	1.025	
Combined Multiplier	**1.0283**	**1.3292**	**1.5298**	
Refined Cost per SF	**$387.84**	**$186.13**	**$121.42**	
Sprinkler Add-on	2.25	2.25	2.25	
Adjusted Refine Square Foot Cost	$390.09	$188.38	$138.94	
Update/Location Multipliers				
Current Cost Multiplier (Sept. 2015)	1.05	1.05	1.05	
Location Multiplier (Silver Spring, July 2015)	1.07	1.07	1.07	
Final Benchmark MVS Cost per SF	**$438.27**	**$211.65**	**$138.94**	
Total Building SF	**353,626**	**70,931**	**3,105**	**427,662**
MVS Building Cost	**$154,982,267**	**$15,012,412**	**$431,410**	**$170,426,086**
Final MVS Cost Per SF				**$398.51**

Source: AHC September 2014 replacement application (DI #27, Vol. 1, pp. 39-41 and Vol. 2 Exh. 32-35) and Marshall Valuation Service®, published by Marshall & Swift/Boeckh, LLC.
*Multi-story multiplier is .5% (.005) per floor for each floor more than three floors above the ground.

My calculation of the MVS benchmark for the hospital structure of $398.51 per SF, as detailed above, is $23.60 more than the $374.91 per SF calculated by AHC. This difference is primarily due to my use of more current base costs for the component parts of the building.

My comparison of AHC's projected cost for relocating the hospital to the MVS benchmark, detailed in the following table, reflects a higher construction financing cost allocation than that submitted by AHC ($28,248,645 versus $18,772,000). I included the loan placement fees of $4,503,149 specified in the budget for the WAH relocation that was omitted from AHC's comparison with an MVS benchmark, because MVS includes normal interest and processing fees. This explains some of the difference, but the primary difference is attributable to differences in the method used to allocate these costs for the MVS comparison. My method of allocating the construction period interest and loan placement fees for the MVS comparison is based on the percentage of project costs that are covered by the MVS benchmark ($140,050,000) to the total budget for current capital costs ($246,200,000), which excludes the value of the land.

Table IV-11: Comparison of Washington Adventist Hospital Relocation Budget for the Hospital as Modified to Marshall Valuation Service Benchmark

Project Budget Item	Estimated Cost by Applicant
Building	$135,200,000
Fixed Equipment	Include Above
Site Preparation	$10,400,000
Architectural Fees	$13,200,000
Permits	$700,000
Cap. Construction Int. & Finance Fees	$28,248,645
Total	**$187,748,645**
Total Adjustments to Cost	$19,450,000
Adjusted Total for MVS Comparison	**$168,198,645**
Total Hospital Square Footage	**427,662**
Adjusted Hospital Cost Per SF	**$393.53**
MVS Benchmark Cost Per SF	$398.51
Total Over (Under) MVS Benchmark	**($4.97)**

Source: AHC September 2014 replacement application (DI #27, Vol. 1, pp. 14-15, Vol. 2 Exh. 1, Table E, and Exh. 34) and AHC November 10, 2014 response to completeness questions (DI #34, p. 2).

Based on the revised comparison detailed above, AHC's proposed cost per square foot for the relocation of the hospital is $4.97 per SF less than the MVS benchmark. Therefore, there would not be any exclusion from any rate request submitted to the HSCRC for excessive capital cost of the hospital construction portion of this project.

(8) Construction Cost of Non-Hospital Space

The proposed construction costs of non-hospital space shall be reasonable and in line with current industry cost experience. The projected cost per square foot of non-hospital space shall be compared to the benchmark cost of good quality Class A construction given in the Marshall Valuation Service® guide for the appropriate structure. If the projected cost per square foot exceeds the Marshall Valuation Service® benchmark cost, any rate increase proposed by the hospital related to the capital cost of the non-hospital space shall not include the amount of the projected construction cost that exceeds the Marshall Valuation Service® benchmark and those portions of the contingency allowance, inflation allowance, and capitalized construction interest expenditure that are based on the excess construction cost. In general, rate increases authorized for hospitals should not recognize the costs associated with construction of non-hospital space.

Applicant's Response

AHC states that the project does not include construction of non-hospital space. (DI #27, p. 41)

Reviewer's Analysis and Findings

Given the fact that the proposed project does not include any non-hospital space, this standard is not applicable.

(9) Inpatient Nursing Unit Space

Space built or renovated for inpatient nursing units that exceeds reasonable space standards per bed for the type of unit being developed shall not be recognized in a rate adjustment. If the Inpatient Unit Program Space per bed of a new or modified inpatient nursing unit exceeds 500 square feet per bed, any rate increase proposed by the hospital related to the capital cost of the project shall not include the amount of the projected construction cost for the space that exceeds the per bed square footage limitation in this standard or those portions of the contingency allowance, inflation allowance, and capitalized construction interest expenditure that are based on the excess space.

Applicant's Response

Adventist states that none of the space for the inpatient nursing units exceeds 500 SF per bed. AHC reports that it determined the area for each nursing unit by adding up the interior areas of the patient rooms, support areas, and family support rooms for each unit. The tabulation excluded corridor circulation, stairs, elevators, shafts, utility rooms, structural columns, shear walls and exterior wall enclosure. (DI# 27, pp.43-44) A summary of the square feet per bed for the inpatient nursing units is as follows:

AHC: Inpatient Nursing Unit Space per Bed Summary, Proposed Replacement WAH

Unit Name	Unit Description	No. Beds	Unit Size (SF)	Square Feet per Bed
Floor 2	ICU / CCU	28	13,680	488.57
Floor 3	Cardiac	32	11,580	361.87
Floor 4	Post-Partum/Ante Partum/ Gen. Med/Surg	22	9,418	448.48
Floor 5	Gen Med / Surg	32	14,191	443.46
Floor 6	Gen Med / Surg	32	14,191	443.46
Floor 7	Gen Med / Surg	24	11,013	458.87
Floors 2-7	Total	170		

Source: DI #27, p.41

Reviewer's Analysis and Findings

The standard provides that the cost for space built or renovated for inpatient nursing units

that exceeds 500 square feet per bed be excluded from any rate increase related to the capital cost of the project.

I find that the proposed inpatient nursing unit spaces shows that all space alignments meet the ≤ 500 square feet per bed standard.

(10) Rate Reduction Agreement

A high-charge hospital will not be granted a Certificate of Need to establish a new acute care service, or to construct, renovate, upgrade, expand, or modernize acute care facilities, including support and ancillary facilities, unless it has first agreed to enter into a rate reduction agreement with the Health Services Cost Review Commission, or the Health Services Cost Review Commission has determined that a rate reduction agreement is not necessary.

Applicant's Response

The applicant notes that this standard is inapplicable because a new method for determining "high cost" hospitals has not yet been developed under the new Medicare waiver and payment model, initiated in 2014 and still undergoing elaboration. The applicant also states that "industry discussions indicate the need for a measure that focuses more on the overall efficiency of hospitals including both cost and quality."

Reviewer's Analysis and Findings

I agree that this standard is inapplicable in this review because the rate reduction agreements contemplated by the standard have been replaced by the Global Budget revenue model. I recommend that MHCC staff consider the ongoing validity of this standard in its next iteration of COMAR 10.24.10, the SHP chapter used in the review of general hospital projects.

I want to point out that, as previously discussed under COMAR 10.24.10B(4)(a), the latest data compiled by HSCRC (covering 2013) shows that WAH had a Reasonableness of Charge level that was approximately seven percent lower than the mean for its hospital peer group.

(11) Efficiency

A hospital shall be designed to operate efficiently. Hospitals proposing to replace or expand diagnostic or treatment facilities and services shall:

- ***(a) Provide an analysis of each change in operational efficiency projected for each diagnostic or treatment facility and service being replaced or expanded, and document the manner in which the planning and design of the project took efficiency improvements into account; and***
- ***(b) Demonstrate that the proposed project will improve operational efficiency when the proposed replacement or expanded diagnostic or treatment facilities and services are projected to experience increases in the volume of services delivered; or***
- ***(c) Demonstrate why improvements in operational efficiency cannot be achieved.***

Applicant's Response

In responding, AHC compares its proposed facility design of the replacement hospital to the existing WAH. AHC notes that its design team incorporated performance features into the design of the proposed replacement hospital in order to improve efficiency. These include: improving adjacencies of complementary departments and services; providing line of sight wayfinding from the main entrance; centrally locating patient supplies to optimize support staff movement between patient care departments and needed amenities; and centrally located elevators that will be dedicated to public or staff/service use. (DI #27, p.44)

The applicant states that examples of more efficient design and adjacencies described in the application include: supply rooms that will be centrally located on the patient floors to minimize nurse travel distances; support departments to be located on the cellar level, with easy access to both the clean dock and the staff/service elevators; Information Services adjacent to Health Information; Nursing Administration adjacent to Occupational Health and Human Resources; Labor and Delivery adjacent to the Post-Partum Unit; and Cardiology adjacent to the Telemetry Unit.

AHC lists other departments whose co-location is expected to improve operational efficiency, in contrast to the situation in the existing facility, as show in the following table. (DI# 27, pp.45-46)

Table IV-12 AHC: Co-location of Departments, Proposed White Oak WAH Campus

Department	Co-Location
Hospital Administration	All functions to a single floor
Nursing Units	All private rooms with central nursing workstations
Critical Care	Respiratory Care
Surgical Suite	Central Clean Core with direct elevator access to Central Processing
Endoscopy	Surgery
Cardiology	All functions to a single floor
Nursery	Intermediate Care Nursery
Dialysis	Nursing Unit Floor
Rehab Suite	Nursing Unit Floor
Pharmacy	Close proximity to service elevator core, cellar level

Source: DI # 27, p.46

The applicant states that both the flow of patients within the new facility and work process flow will improve in the new facility when compared to the existing hospital. The new facility design includes centrally located elevator banks that are dedicated to either public or staff and service use. In contrast, the existing hospital requires multiple elevator locations that serve specific areas of the hospital and often mix public, staff, and service traffic. The applicant maintains that the new design will reduce confusion, congestion, and travel time. The designation of a patient transfer elevator will allow for the movement of patients from the Emergency Department to Critical Care, Maternity, and Intermediate Care units without public congestion. (DI #27, p.45)

AHC notes that, at the replacement hospital, nursing stations and staff work areas will be located closer to the patients, reducing travel and transportation time and resulting in more efficient

service delivery. AHC projects that the more accommodating space configurations will result in increased staff efficiency and a decrease in the ratio of FTEs to adjusted occupied bed (AOB) over time as volume grows. AHC projects that, in the first year of operation in the new facility, FTEs/AOB ratios will improve from 4.34 projected for 2014 at the existing hospital to 4.20 at White Oak. Subsequently, assuming that volume grows in accordance with AHC projections, FTEs per AOB are projected to decline further, to 3.93 FTEs/AOB by 2023. (DI #27, pp.45)

Projected staffing changes are shown in the table below, comparing staffing at the time of the application to projected staffing through the last year of the financial projections (2023).

Table IV-13: AHC: Changes in Staffing Expected to Result From the Hospital's Replacement

Current Staff (2014)	Projected Changes as a Result of the Project	% Change
Administrative	**-0.4**	**-0.4%**
Direct Care	**-13.6**	**-1.9%**
Nursing	-11.0	
Ancillary	-4.0	
Imaging	+0.7	
Surgical/Cardiovascular	+0.7	
Support Staff	**-9.1**	**-5.4%**
Logistical Support	-4.5	
Nutrition Services	-4.6	
Total	**-23.1**	**-2.2%**

Source: AHC application (DI #27, Table L)

Reviewer's Analysis and Findings

AHC has identified design features of this project and contrasted them with existing conditions to illustrate a number of ways that operational efficiency is expected to improve at the replacement hospital. Key improvements include the co-location of complementary services, design of the nursing units, dedicated elevators, and private room layouts. The applicant attributes a projected 2.2% percent reduction in total staff FTEs from 2014 to 2020, the second year of operation for the replacement hospital.

I find that AHC's design of this project has taken operating efficiency into consideration, consistent with the requirements of this standard.

(12) Patient Safety

The design of a hospital project shall take patient safety into consideration and shall include design features that enhance and improve patient safety. A hospital proposing to replace or expand its physical plant shall provide an analysis of patient safety features included for each facility or service being replaced or expanded, and document the manner in which the planning and design of the project took patient safety into account.

Applicant's Response

Adventist identified a number of design features and operational characteristics in its proposed project that it believes will have a positive impact on patient safety. These are: (1) all private rooms will decrease the risk of infection by eliminating the threat of cross contamination between patients sharing rooms; (2) ICU-style breakaway doors in the preoperative PACU that will provide isolation and heightened infection control; (3) handwashing stations in more central locations throughout the corridors and inside the entry door of each patient room will reduce germ transferal between patient rooms and throughout the hospital; (4) patient rooms will have better lighting and be appropriately sized and designed to decrease the risk of patient falls by placing patient beds in closer proximity to the bathrooms and adding guardrails along the walls; (5) operating rooms will increase from 493 square feet at the Takoma Park facility to current size standards of 600 square feet at White Oak, providing needed equipment, supply and storage space, as well as space for movement of staff during procedures; (6) space will be realigned to group complementary services, thereby decreasing the potential for cross contamination incidents during a patient's transition from one service area to another; (7) HVAC systems will be updated, with equipment wires running under the floor rather than on the floor or from the ceiling, and compliant with current standards and utility codes that the present facility is not able to meet, thereby eliminating safety hazards; (8) computer stations will be positioned in two areas of each patient room, in the alcove and at patient bedside, to reduce the occurrence of PHI/HIPAA breaches and the chance of potential errors; and (9) new monitoring technology will improve patient monitoring, track critical equipment, and enhance the execution of hospital emergency lock down procedures. (DI #27, pp.46-48)

Reviewer's Analysis and Findings

Adventist appropriately considered patient safety when designing the new facility. The replacement hospital's modifications and design features reflect compliance with current hospital standards and AHC's efforts to improve the safety of its patients. I note the applicant's attention to the incorporation of design features intended to reduce the risk of infection, decrease disruptions, and improve area transitions, thereby enhancing the quality of care provided to patients. I find that the design of this hospital project meets the patient safety standard.

(13) Financial Feasibility

A hospital capital project shall be financially feasible and shall not jeopardize the long-term financial viability of the hospital.

(a) Financial projections filed as part of a hospital Certificate of Need application must be accompanied by a statement containing each assumption used to develop the projections.

(b) Each applicant must document that:

(i) Utilization projections are consistent with observed historic trends in use of the applicable service(s) by the service area population of the hospital or State Health Plan need projections, if relevant;

(ii) Revenue estimates are consistent with utilization projections and are based on current charge levels, rates of reimbursement, contractual adjustments and discounts, bad debt, and charity care provision, as experienced by the applicant hospital or, if a new hospital, the recent

experience of other similar hospitals;

(iii) Staffing and overall expense projections are consistent with utilization projections and are based on current expenditure levels and reasonably anticipated future staffing levels as experienced by the applicant hospital, or, if a new hospital, the recent experience of other similar hospitals; and

(iv) The hospital will generate excess revenues over total expenses (including debt service expenses and plant and equipment depreciation), if utilization forecasts are achieved for the specific services affected by the project within five years or less of initiating operations with the exception that a hospital may receive a Certificate of Need for a project that does not generate excess revenues over total expenses even if utilization forecasts are achieved for the services affected by the project when the hospital can demonstrate that overall hospital financial performance will be positive and that the services will benefit the hospital's primary service area population.

This standard is related to a general review criterion applicable to all health care facility projects requiring CON approval, COMAR 10.24.01.08G(3)(d), Viability of the Proposal, which instructs the Commission to consider the availability of financial and nonfinancial resources, including community support, necessary to implement the project within the time frames set forth in the Commission's performance requirements, as well as the availability of resources necessary to sustain the project. This standard was first incorporated into the State Health Plan in 2009 to provide specific guidance for hospitals on how to demonstrate financial feasibility of projects. In addressing this standard and the review criterion, some overlap is unavoidable, but I have attempted to minimize duplication in this Recommended Decision.

Applicant's Response

The assumptions made by AHC for WAH are summarized in the table below.

Table IV-14: AHC Assumptions Used in Modeling Financial Performance of WAH and the Proposed Project

Statistic	Assumption and Basis for Assumption
Service Volumes	Volume projections for WAH in the years prior to relocation (i.e., the years during which the replacement hospital would be under construction, if approved) were based on historical utilization trends in its present service area. Future volume projections for the hospital after relocation took into account estimated population growth of the service area population as well as projected market share shifts. AHC is assuming growth for WAH only related to population growth, there are no positive adjustments for market share in any years in the projections.
Revenue	Based on current allowable charge levels, incorporating current reimbursement methodologies employed by the HSCRC for Washington Adventist Hospital.
Global Budget Revenue Update	• **Update factor** for each year of the projection was estimated using the HSCRC approved update factor for FY 2015 as a baseline and reviewing the CMS Market Basket projections for the projection period. These projections show the four quarter moving average Inpatient Hospital Market Basket ranging between 2% and 3.2% during the projection period. Given this range and the update factor used by the HSCRC in the FY 2015 rate setting, an annual update factor of 2.3% was assumed for each year of the projection. • The **age adjusted population factor** used for rate updates was based on preliminary HSCRC Demographic Adjustment calculations for FY 2014 GBR rate setting at 50%. During the initial GBR rate setting, Washington Adventist Hospital's age adjusted population growth was estimated by the HSCRC to be 1.5%. Taking this at 50% yields the 0.75% used in the projection. • No **market share adjustment** was assumed in years with volume growth because the overall volume growth is assumed to be less than the population and demographic adjustment assumed. In years when the overall volume change is negative, 50% of the prior rate year decline in volume is applied to the subsequent rate year.
Market Share Shifts	• Used current market share as base for all facilities. • Started with home zip code for both current and proposed WAH and "worked our way out to the first ring of contiguous zip codes around the home zip codes and then out to the first ring of contiguous zip codes, then to the next level of zip codes." • For each zip code, made adjustment based on proximity and market share for each hospital serving that zip code. • Reviewed adjustments for consistency and compared the new estimated WAH share in each zip code against the range of WAH's current market share for zip codes with the same proximity rank in the current location. This approach allowed consideration of reasonableness of the adjustment without overriding current market dynamics. • Re-defined WAH service area based on newly-estimated market share. • Resulted in a tightening of the service area with several DC zip codes falling outside of the newly-defined service area.(DI #103)
Medicaid Reimbursement for Inpatient Psychiatric Care (in context of Maryland's loss of the Institution for Mental Diseases Exclusion)	Assumes continuation of current and historic payment levels. This is based on the experience of Adventist Behavioral Health (ABH), which has experienced no adverse financial impact as a result of the loss of the waiver. The Department continues to reimburse Medicaid services at a rate of 94% and has identified funding for the program at a level that allows for a cap that sufficiently covers ABH's Adult Medicaid population at levels without reduction in payments or services. AHC believes that, as the psychiatric hospital service in Takoma Park accepts involuntary patients, it is reasonable to project that current, necessary funding will be maintained. (DI#121)

Source: CON application, DI #27, unless otherwise noted.

AHC states that its utilization projections are consistent with observed historic trends in use of the applicable service(s) by the service area population of the hospital. It also states that its revenue estimates are consistent with utilization projections and are based on current charge levels, rates of reimbursement, contractual adjustments and discounts, bad debt, and charity care provision, as experienced by WAH. Additionally, AHC notes that staffing and overall expense projections are consistent with utilization projections and are based on WAH's current expenditure levels and reasonably anticipated future staffing levels. AHC concludes that the replacement hospital will generate excess revenues over total expenses (including debt service expenses and plant and equipment depreciation), if utilization forecasts are achieved for the specific services affected by the project within five years or less of initiating operations. (DI #27, p.50)

Interested Party and Participating Entity Comments

Holy Cross Hospital

Holy Cross Hospital of Silver Spring states that AHC did not show that its replacement hospital is financially feasible and viable, referring to AHC's financial projections as "inaccurate, incomplete, and fail[ing] to account for a number of necessary operational and financing costs." HCH states in its initial filing that AHC's central utility plant that will provide utilities through a third party developer was not accounted for as a capital lease, as it should have been, and that the AHC Obligated Group financial ratios are incorrect and overstated because they exclude this capital lease that should have been accounted for in forecasting long-term debt ratios. (DI #50, p.11)

HCH also notes that AHC improperly did not include the costs of safely decommissioning the current hospital. It also believes that AHC misrepresented the operating results and related debt covenant ratios of WAH and the Obligated Group, stating that

> the cash and the related debt covenant ratios for the Obligated Group are unrealistic due to AHC's artificial combination and/or exclusion of the controlled entities. For example, one of the excluded controlled entities is the Adventist Medical Group, according to the December 31, 2013 audited financial statements. (DI #50, p.13)

In addition, HCH notes that Adventist Medical Group has been losing approximately $10 million a year for two years and opines that there is no reason to think this will abate. HCH also points out that AHC's operating margins have "consistently declined from 3.83% in 2010 to 0.61% in 2013," and concludes that this trend "make[s] AHC's projections for dramatic turnaround in future years unrealistic."

Responding to AHC's revised financial projections filed in October 2015 to reflect the lower than requested budget increase related to this project that was approved by HSCRC, HCH stresses that the thinner margins resulting from the smaller budget increase make it even more likely that AHC would be unable to keep its Takoma Park commitments. (DI #129) HCH also

maintained that Maryland's loss of the IMD Exclusion Waiver[36] also threatened both ABH – Takoma Park's financial standing and AHC's ability to fund Takoma Park operations.

MedStar Montgomery Medical Center

In its initial comments (DI#52), MedStar Montgomery Medical Center notes that the various services AHC identified as features that will mitigate adverse impact on the community resulting from the relocation of WAH are not included in its financial feasibility analysis.

MMMC states that AHC's application is based on financial assumptions that "are not supported by historical data and audited financial reports." It notes that, although WAH lost $12.6 million from operations in FY 2013, WAH assumes that it will general $40 million in net operating revenue for 2015-2018 at its current location. (DI #52, p.2)

MMMC blended its comments on financial feasibility with comments on the *Viability* criterion, COMAR 10.24.01.08G(3)(d). It concludes that the project is not financially feasible or viable because it relies on assumptions that are "speculative, unprecedented and not supported by the data." In support of its summary, MMMC cites AHC's projection of: a turnaround by WAH from a negative to a profitable operating performance; an ability to secure financing despite a Moody's rating of Baa2 and current financial ratios that are below those required to keep even this rating; and receipt of HSCRC's approval of a $19 million capital rate increase.

In addition, MMMC questions AHC's ability to assemble the three main sources of funds for the project. It questions AHC's ability to raise donations of $20 million when commitments are just $2.1 million, noting that WAH has never achieved that level of philanthropy. It points out that such fundraising is less likely in WAH's less affluent area, which is also home to three other acute care hospitals. MMMC also concludes that AHC will not be able to contribute $50 million in cash, noting that, at the end of 2013, AHC "had less than 125 days cash on hand, or about $225 million … [which is] well below Moody's medians…." It concludes that, if AHC assigned $50 million to the project, its cash on hand would drop below 100 days, which would not support the financing of the project. (DI #52, p.6) Similarly, MMMC states that it is unrealistic to expect that WAH can successfully raise $245 million from the sale of bonds given that AHC's most recent audited performance yields key financial ratios that MMMC characterizes as being well below the Moody's medians.

MMMC notes that it is very unlikely that HSCRC would approve a $19 million increase for capital, and that "approval of only half that amount would result in significant, negative

[36] The federal IMD Exclusion prohibits Medicaid reimbursement for adults between the ages of 21 and 64 who are receiving services provided in "a hospital, nursing facility, or other institution of more than 16 beds that is primarily engaged in providing diagnosis, treatment, or care of persons with mental diseases, including medical attention, nursing care and treatment of individuals with mental diseases." Because of this non-payment policy, many Medicaid enrollees with acute psychiatric and addiction treatment needs are referred to hospital emergency departments and general acute care inpatient units, rather than smaller, community-based specialized providers with expertise to care for these individuals. Until August of this year Maryland had a waiver of this exclusion, and it is currently pursuing its renewal. http://dhmh.maryland.gov/newsroom1/Pages/Maryland-Medicaid-seeks-IMD-Exclusion-waiver.aspx

margins in post-project performance." (DI #52, p.8) It also questions the reliability of AHC's estimated construction costs for the replacement hospital, and whether a lender would require the capitalization of what MMMC characterizes as a long term lease of its central utility plant.

As for the services AHC proposes to maintain or establish in Takoma Park, MMMC states that the applicant did not include those capital and operating costs when addressing the financial viability of the project.

In subsequent comments, MMMC states that the applicant's "references [to] its CY 2014 improvement in operating performance as assurance that it can achieve a…turnaround from a $13 million loss in 2013 to a $10 million profit in 2018" are actually "indicative of financial problems (because)… [t] his 'turnaround' in 2014 was caused by a significant price/rate increase required to fund, under the GBR, a substantial decline in volume." (DI #62, p.6)

In response to AHC's revised financial projections, MMMC points out that these projections showed "a breakeven margin for the initial years and a modest 0.5% margin by Year 5…constitute[ing] the slimmest of margins which do not establish a financially sound or feasible project." (DI#128, p.3) MMMC also commented on the possible effects of loss of the IMD Waiver, pointing out not only its potential financial impact, but also the potential impact on Medicaid recipients needing mental health care, who – under DHMH's current guidance – would be diverted "to any open acute care general hospital psychiatry unit bed, whenever possible." MMMC points out that this policy could result in a Takoma Park citizen covered by Medicaid finding themselves "transported to wherever there is an open bed in an acute care hospital in the State, removing the patient from his or her family and support systems in the community and delaying the start of care."(DI#128, p.12) MMMC repeated comments characterizing this move as "abandon[ing] Takoma Park… [for a]…location in an affluent community outside the Beltway on a corporate campus adjacent to the United States FDA campus," and opining that "WAH should be required to do better." (DI #128, p. 13)

City of Takoma Park

In its initial comments, the City of Takoma Park states its belief that the number of ED visits (and thus revenues) projected by AHC are overstated because: (1) WAH is moving away from a concentrated elderly population, current WAH patients, who would likely go to HCH, the nearest hospital, for emergency services; and (2) EMS providers seeking the closest emergency department "will likely take most patients from Takoma Park ZIP codes (20712 and 20910), Hyattsville (ZIP code 20782), and the community of Chillum (located at the southern end of ZIP code 20783) to other hospitals…." (DI #54, p.17)

The City questions AHC's GBR revenue assumptions, stating that, because AHC's CON application indicates that the relocated WAH will not offer inpatient or outpatient cancer services, WAH is likely to have a lower GBR approved by HSCRC than that presented in its application. The City also states that the applicant relies upon a 7% capital increase, but did not provide evidence that HSCRC will approve the seven percent rate increase attributable to capital in 2019.

The City requests that the Commission require, as a condition of a CON awarded to AHC,

that it "explore the financial feasibility of a revised proposal" that includes "outpatient and emergency programs that coordinate care between Takoma Park and White Oak primary service areas [which] could sustain the WAH referral base, support proposed outpatient activity, and serve the Takoma Park community."

Commenting on AHC's revised projections in the wake of HSCRC's rate request decision, CTP states that this "financial information increased the City's concerns about loss of services… [since HSCRC] suggests that AHC may struggle to maintain both campuses … [and that] the proposed project will strain the resources of AHC." (DI #130, p. 3) The City requests that the Commission set conditions that require AHC: (1) to make a thorough exploration of an FMF that would operate under Medicare Outpatient Department rules; and (2) to operate the behavioral health program at Takoma Park as a unit of an acute care hospital.[37] (DI #130, pp. 5-6)

Applicant's Response to Comments

AHC responded to the HCH and MMMC comments by pointing to the $4.1 million operating profit generated by WAH in 2014, which it states was a $14.8 million turnaround from the prior year, pointing out that "WAH needs only to achieve an additional $1.6 million in annual improvement to attain the projected 2018 results," an amount that is "less than 0.8% of non-capital operating expenses." AHC also states that WAH achieved considerable cost reductions of $5.8 million in 2014. (DI #59, p.5).

The applicant responded to HCH's claims that its operating margins are decreasing, pointing out that AHC's 2014 results show that its "hospitals improved operating profitability from slightly more than $7 million to nearly $22 million [and that] … [o]perating profitability for all of AHC's services improved from a slight loss in 2013 to an operating profit in excess of $11 million in 2014." Furthermore, AHC's balance sheet also improved during this period, with total assets growing by nearly $7 million while liabilities decreased by more than $4.2 million.

AHC called MMMC's criticisms relating to volume changes misplaced, inferring that MMMC considered only the projected change in inpatient admissions, and noting that the applicant's projections include an annual decrease in readmissions of 6.78% between 2014 and 2018, "which accounts for nearly 80% of the inpatient admission decline year over year, and which WAH believes was a reasonable assumption consistent with the objectives of the new waiver program." (DI #101, p.10) AHC also responded to MMMC's comments doubting AHC's ability to raise donations of $20 million, stating that the comments are "entirely misplaced and reflect a misunderstanding of standard fundraising practices and strategies." AHC cited an article from the Association of Healthcare Philanthropy[38] which AHC states shows that "MMMC has posed the wrong questions and then criticized the application for not answering them." AHC argues that philanthropic goals should not be set based on the number of hospital beds and the affluence of the area or patient population, but rather on "the mission and vision of the organization and the

[37] The City of Takoma Park acknowledges that this would require waivers to current Maryland licensure rules.

[38] "Landmark Philanthropic Fundraising Studies Find Multiple Activities, Long-Term Donor Relationships, Are Keys to Success, AHP Performance Benchmarking Service Says" – NEWS, Association of Healthcare Philanthropy, April 3, 2008.

impact of the specific project." (DI#59, p.12)

According to AHC, HCH is wrong in its characterization of AHC's days of cash on hand. AHC notes that the term actually "includes all unrestricted cash and investments… [but that] HCH only has considered the $58,692,102 cash and cash equivalents that AHC and its controlled entities held as of December 31, 2013," while "the total cash on hand really was $187,334,289 as of December 31, 2013 (reflecting the $58,692,102 in cash and cash equivalents, plus $128,642,187 in short term investments)." (DI #59, p.8) In addition, AHC responds to HCH's criticism that it had artificially combined and/or excluded some of the controlled entities by pointing out that the

> covenants outlined in AHC's various debt agreements relate to the Obligated Group's financials, and ratios are presented as such to demonstrate that the Obligated Group will continue to meet its covenant requirements during all phases of the WAH relocation Project. To that end -- and in accordance with the asset transfer provisions governing the operations of the Obligated Group -- the cash amounts utilized by Adventist Medical Group (as well as any other AHC entity currently operating with negative cash flow) to fund their operations on an annual basis are well within the guidelines prescribed by AHC's covenants with its lenders.

Regarding its decision to propose use of a third party-developed central utility plant and the related accounting methods, AHC notes that this is a growing concept that benefits businesses by offering an improved level of energy efficiency, while preserving capital. The applicant points out that Upper Chesapeake Medical Center is one recent example of this model. As to the accounting proprieties, AHC states that the Statement of Financial Accounting Standards has "retained a dual approach that recognizes both capital and operating leases," and that Energy Service Agreements are "service-based agreements that are not treated as 'leases' under current or potential FASB standards." (DI #59, p.13)

AHC responds to the City's comments by stating that they reflect "misinterpretation and miscalculation of data and an apparent misunderstanding of the GBR process." Specifically, Adventist states that Takoma Park had misinterpreted the application's representation of ED volumes, pointing out that Takoma Park had misinterpreted data in the application, not recognizing that the number of ED visits reported referred only to visits that were purely outpatient ED visits. Regarding the City's claim of inconsistencies in the applicant's description of ED volumes in various application materials, AHC explains that each mention of visits referred to by Takoma Park referenced different time periods, as quoted below:

> There is no inconsistency…. [P]age 59 of the application says that WAH accommodated just under 49,000 visits in 2013 (not 2014), when total visits were 48,652. Similarly, the reference to more than 50,000 patients being treated was in 2012, when total visits were 50,840. The 46,930 visits represented total ED visits that were projected as of the time that the Completeness Answers were filed in November 2014, and Ex. 38's 37,677 reported visits were solely outpatient ED visits in 2014. (DI #59, p.20)

Adventist responded to the City's criticism that AHC's pro formas were overly optimistic because they did not take into account AHC's plans to eliminate inpatient and outpatient cancer care, thus triggering a downward adjustment in the total Global Budget Revenue for the facility, by stating:

> The City misunderstands both the data and AHC's intentions concerning inpatient and outpatient cancer care services. First, with respect to inpatient cancer care services, there are no plans to discontinue the current level of inpatient cancer care service. Second, outpatient radiation therapy will be moving to a non-rate-regulated building, and the pro formas do take into consideration the movement of that service outside of the Global Budget Revenue. Specifically, $3.2 million of radiation therapy revenue is moved outside of the global cap at the 50% variable cost factor in the year that the relocated Hospital opens, and then an additional downward market share adjustment of 0.32% is made in the following year for those services leaving the Hospital premises. (DI #59, p. 22)

The Health Services Cost Review Commission

On October 14, 2015, HSCRC acted on a partial rate application by WAH that sought additional revenue authority to help pay for the large capital cost increase associated with the construction of its proposed general hospital relocation and replacement. WAH had requested a permanent revenue increase of $19,700,000, or 7.3% of its current total approved permanent revenue. This requested revenue increase would have represented approximately 80 percent of the estimated additional depreciation and interest costs associated with the project. HSCRC staff recommended and HSCRC approved an increase of $15,391,282[39] to be added to WAH's permanent rate base at the time the new facility opens, which is projected to be January 1, 2019. This revenue adjustment is based on a projected borrowing rate of 6%, and will be reduced if the actual interest rate incurred is different. Citing AHC debt that was issued in 2014 with a rate of 3.56%, HSCRC expressed the opinion that the rate is likely to be lower, although, with capital market uncertainty, the 6% assumption was deemed not unreasonable. WAH accepted the HSCRC's action on its rate application and filed updated financial projections consistent with the HSCRC decision.

On November 6, 2015, HSCRC responded[40] to my August 31, 2015 memorandum formally asking that it review and comment on the financial feasibility and underlying assumptions related to this proposed project. In addition to the usual opinion regarding financial feasibility and viability that MHCC typically requests as part of its review process, I asked for HSCRC's opinion and comment on: the appropriateness and adequacy of the applicant's assumed sources of funds; the need for a 7% increase in the applicant's GBR; and the ability of the proposed replacement hospital to be competitively priced.

HSCRC staff's response is summarized in the following table.

[39] The HSCRC staff's recommendation on WAH's rate application is located at Appendix 7.
[40] HSCRC's memorandum is located at Appendix 8.

Table IV-15: HSCRC Comments on the Proposed Project

Factors	HSCRC Position
Revenue Projections	HSCRC staff concluded that the assumed increases are reasonable in light of the projected changes in population and approved revenue.
Expense Projections	HSCRC staff concluded that the assumptions used in the projections of ongoing annual expenses are reasonable and achievable. Regarding the project budget for capital expenses, WAH made an assumption that it would incur $2,700,000 in relocation costs for the move of the medical/surgical and obstetrics units and practically all outpatient services from the old facility to the new facility. The $2,700,000 estimated relocation costs seem low. WAH may incur costs at the new facility before it opens related to training, staffing, inventories, food, and other items related to relocation. There may also be transportation costs of moving patients and staff from the old facility to the new facility. If WAH needs to maintain some of the medical/surgical and obstetrics units and practically all outpatient services at the old facility after the new facility is open, then costs may be higher than the $2,700,000 WAH has projected.
Projected Volumes	Despite hospital global budgets being fixed and not sensitive to volume, HSCRC staff expressed concern about potential declines in volumes that may occur as care models are changed and as population health is improved…. One measure of the potential for utilization to fall is Potentially Avoidable Utilization (PAU). On a combined basis, the hospitals in Prince George's County had 18.5% of their patients classified as PAU's, while Montgomery County hospitals had 14.4% of their patients classified as PAUs…. HSCRC staff expressed a concern about future inpatient volume levels in the service area. If WAH is unable to achieve the projected volumes, the hospital would be less efficient and would have higher rates, which in turn could affect the overall feasibility of the project. HSCRC staff suggests that conservatism in bed need projection is warranted relative to project feasibility and efficiency, given the level of change in the delivery system that is underway nationally and in Maryland.
Financial Ratios	WAH provided the projected financial information and ratios for the obligated group of AHC. On a consolidated basis, AHI projects that it will meet the ratio levels required under its bond documents. Based upon these projected ratios, HSCRC staff concluded that AHI would be able to obtain financing for the project on terms that are consistent with those assumed in the plan of finance.
Appropriateness/ adequacy of assumed sources of funds	Given AHI's debt situation, staff concluded that WAH has provided a reasonable amount of equity contribution for the project to be financially feasible. A higher equity contribution would be more favorable so as to earn a lower interest rate on the debt, which would result in overall lower costs to the patients.
Need for a 7% increase to GBR	HSCRC staff recommended a $15.4 million (5.4%) increase to revenue instead of the $19.7 million (7.0%) requested. WAH had used projected operating results for FY 2014 in its original CON submission. Its actual operating results for 2014 were much better than those projected in the application, and were incorporated into the applicant's updated projections submitted on October 21, 2015. This improvement significantly offsets the impact of the lower approved revenue increase.
Ability to be competitively priced [41]	Charges at WAH's competitors were on average 13.3% below WAH's charges for inpatients and 6.1% below for outpatients based on actual charge data for the year ended June 30, 2014. With an additional 5.4% rate increase for capital, its competitors will have rates on average that may be more than 15% less than WAH's new rates based on the comparisons of actual FY 2014 charges. These comparisons do not take into account the cost differences that may be attributable to taking care of populations of lower socioeconomic status. When HSCRC staff compared adjusted charges using information from the most recent Reasonableness of Charges calculation (which utilized data from 2013 adjusted for revenue changes to 2014) WAH's adjusted charges were actually 7.5% lower than the peer group that includes HCH, MMMC, LRH, Suburban, Doctors Community, and Howard County General Hospital.

Source: DI #131.

[41] HSCRC staff analyses compared average inpatient charges per case by APR DRGs broken down between the 4 severity levels within each All Patient Refined Diagnosis Related Groups (APRDRG). HSCRC staff's analyses also compared average outpatient charges per case broken down by Ambulatory Patient Groups (APGs).

Reviewer's Analysis and Findings

Assumptions

In its initial application, AHC provided its assumptions and explanations of the rationale underlying the assumptions. After HSCRC action on its Partial Rate Application, AHC provided assumptions with its updated projections, on which the parties filed comments. As noted above, a lower revenue increase was approved by HSCRC than that assumed in the AHC CON application. I find that AHC has provided an adequate and reasonable set of assumptions as part its CON application to support the accompanying financial projections. I do note, however, the HSCRC caution that the estimate of relocation costs for the move to the new facility may be low.

Utilization Projections

The tables that follow in this section show actual and projected utilization of WAH and the proposed special hospital – psychiatric for the years 2014-2023. Table IV-16 shows the utilization of the current and proposed future WAH, while Table IV-17 shows the acute psychiatric statistics from the current hospital and for the projected acute psychiatric services that will remain in Takoma Park.

Table IV-16 Actual (2014) and Projected Utilization (2015-23) Assumed by WAH

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Medical/Surgical/Gynecological/Addictions (MSGA)										
Admissions	8,201	7,361	7,779	7,779	7,779	7,857	7,935	8,015	8,095	8,176
Patient Days	47,402	44,280	41,488	41,213	40,938	41,349	41,763	42,180	42,601	43,031
ALOS	5.78	6.02	5.33	5.30	5.26	5.26	5.26	5.26	5.26	5.26
Obstetric										
Admissions	1,691	1,770	1,779	1,788	1,797	1,815	1,833	1,851	1,870	1,888
Patient Days	4,002	4,189	4,210	4,231	4,252	4,295	4,338	4,381	4,425	4,469
ALOS	2.37	2.37	2.37	2.37	2.37	2.37	2.37	2.37	2.37	2.37
Acute Psychiatric (at WAH through 2018 and freestanding at Takoma Park from 2019-23)										
Admissions	1,566	1,551	1,559	1,567	1,574	1,582	1,590	1,598	1,608	1,614
Patient Days	8,926	8,686	8,729	8,773	8,817	8,859	8,904	8,948	9,005	9,038
ALOS	5.70	5.60	5.60	5.60	5.60	5.60	5.60	5.60	5.60	5.60
Total Acute Inpatient Care Utilization (at WAH through 2018 and at White Oak and Takoma Park (psychiatric services) from 2019-23										
Admissions	11,458	10,682	11,117	11,134	11,150	11,254	11,358	11,464	11,573	11,678
Patient Days	60,330	57,155	54,427	54,217	54,007	54,503	55,005	55,509	56,031	56,538
ALOS	5.27	5.35	4.90	4.87	4.84	4.84	4.84	4.84	4.84	4.84
Other Key Statistics										
Observation-No. of Patients	1,185	2,299	1,881	1,881	1,881	1,900	1,919	1,938	1,957	1,977
Observation-Hours	47,012	91,207	74,624	74,624	74,624	75,378	76,132	76,885	77,639	78,433
Outpatient Visits	56,675	56,945	57,686	57,930	58,175	59,558	60,956	62,398	63,880	65,399
Emergency Visits*	46,930	47,000	47,070	47,150	47,230	48,160	49,100	---	---	---

Source: Table created from information supplied in DI #118, *Hospital Application Tables* and DI #121, Exh. A
*Includes both outpatient-only ED visits as well as those resulting in admission

Inpatient admissions to WAH declined precipitously from 17,988 in 2009 to 11,698 in 2013, a 35% decline. During this period, discharges at all Montgomery County hospitals declined by 12.5%.[42] Admissions declined again, slightly, in 2014, to 11,458. Projections for 2015 show further erosion, to 10,682, a 6.8% decline year-to-year. WAH is projecting a large increase (94%) in observation patients between 2014 and 2023. However, this decease may be at least partially accounted for by a 94% increase of observation patients, from 1,185 to 2,299 from 2014 to 2015.

As shown in the table below, AHC projects a return to growth in total admissions in 2016, with very little change projected in demand for MSGA beds through 2023, modest growth in

[42] Source: HSCRC Discharge Database.

psychiatric admissions (which will continue to occur at Takoma Park), and growth of almost 12% in obstetric admissions over the nine-year period.

Table IV-17: WAH Actual (2014) and Projected (2015-23) Inpatient Admissions

Service	2014	2015	2016	2017	2018	2019	2020	20121	2022	2023	Change 2014-23
MSGA	8,201	7,361	7,779	7,779	7,779	7,857	7,935	8,015	8,095	8,176	-0.3%
OB	1,691	1,770	1,779	1,788	1,797	1,815	1,833	1,851	1,870	1,888	+11.6%
PSYCH	1,566	1,551	1,559	1,567	1,574	1,582	1,590	1,598	1,608	1,614	+3.1%
Total	11,458	10,682	11,117	11,134	11,150	11,254	11,358	11,464	11,573	11,678	+1.9%

Source: Table created from information supplied in DI #118, *Hospital Application Tables*

I note that HSCRC's November 6, 2015 Memorandum noted that "[t]he current environment of change in health care financing and delivery increase the probability that inpatient volumes will decline. WAH and the surrounding hospitals in the area presently have substantial volumes of PAUs. Staff recommends conservatism in evaluating need." (DI #131, p.12) Despite that caution, I find that AHC's projected volumes are reasonable, given that the Maryland Department of Planning projects Montgomery County's population to grow by 7% between 2015 and 2025 and by 11.4% between 2015 and 2030.[43] The County's population is also aging. The 65 and older population is projected to increase from 12.3% of the total County population in 2010 to 15.8% in 2020 and to 19.2% in 2030.

Staffing and Expense and Revenue Projections

AHC's financial projections for its proposed WAH general hospital operations are shown in the following table.

[43] Drawn from Table III-1: 2010 Population and Population Growth Rate Projections, *supra*, p.8, which was sourced from Maryland Department of Planning, 2014 Total Population Projections by Age, Sex and Race.

**Table IV-18: Actual Revenues and Expenses (2014)
and Projected Revenues and Expenses (2015-23)
WAH at Takoma Park, 2014 – 2018 and WAH at White Oak, 2019-23
Current Dollars**

Uninflated in (000s)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
REVENUE										
Gross Patient Service Revenues	$273,966	$275,097	$280,062	$280,411	$281,108	$283,825	$285,351	$287,155	$288,776	$290,393
Net Patient Services Revenue	209,909	221,018	225,013	225,053	225,607	227,734	228,960	230,448	231,751	233,049
NET OPERATING REVENUE	**$214,836**	**$225,932**	**$230,175**	**$230,216**	**$230,772**	**$232,434**	**$233,649**	**$235,125**	**$236,417**	**$237,702**
EXPENSES										
Total Salaries & Wages (incl. benefits)	$127,624	$131,096	$132,241	$131,751	$131,110	$123,630	$124,408	$125,049	$125,639	$126,203
Interest	2,537	2,179	2,559	2,533	2,466	15,348	15,335	15,315	15,298	15,268
Depreciation	8,589	8,547	8,701	8,420	8,361	14,964	15,209	15,347	15,570	15,871
Amortization				163	163	175	175	175	175	175
Supplies	35,408	38,156	38,812	38,977	38,959	38,853	39,324	39,805	40,295	40,791
Other Expenses	36,552	37,086	36,935	36,786	36,638	33,593	33,455	33,317	33,182	33,047
TOTAL OPERATING EXPENSES	**$210,710**	**$217,064**	**$219,248**	**$218,630**	**$217,697**	**$226,562**	**$227,904**	**$229,008**	**$230,158**	**$231,355**
INCOME										
NET INCOME (LOSS)	**$ 2,625**	**$ 7,554**	**$ 10,927**	**$ 11,586**	**$ 13,075**	**$ 5,872**	**$ 5,742**	**$ 6,117**	**$ 6,259**	**$ 6,347**

Source: DI #118

The Relocated WAH General Hospital

I find that the projected revenues are consistent with utilization projections and are based on current charge levels, rates of reimbursement, contractual adjustments and discounts, bad debt, and charity care provisions, as required by the standard. Likewise, the expense projections are reasonable compared to historic levels and the relationship between volume and costs. HSCRC staff concluded, in its opinion memorandum of November 6, 2015, that "the assumed increases are reasonable in light of the projected changes in population and approved revenue." (DI#131, p.2) and "the assumptions used in the projections of ongoing annual expenses are reasonable and achievable." (DI#131, p.4)

The Special Hospital-Psychiatric in Takoma Park

AHC projects a small loss at the Takoma Park special hospital-psychiatric in its first two years of operation and modest positive operating margins in later years.

Table IV-19: Revenue and Expense Statement 40-Bed Special Hospital for Psychiatric Care Inflated

in (000s)	2019	2020	2021	2022	2023
REVENUE					
Gross Patient Service Revenues	$14,324	$14,758	$15,164	$15,602	$16,053
Net Patient Services Revenue	11,333	11,682	11,998	12,345	12,701
NET OPERATING REVENUE	$ 11,333	$ 11,682	$ 11,998	$ 12,345	$ 12,701
EXPENSES					
Total Salaries & Wages (including benefits)	$6,308	$6,450	$6,595	$6,744	$6,992
Interest	791	933	916	901	875
Depreciation	1,338	1,394	1,321	1,269	1,250
Other Costs	1,236	1,273	1,310	1,350	1,388
Total Variable Expenses	9,673	10,050	10,142	10,264	10,505
Total Fixed Expenses	1,764	1,803	1,839	1,877	1,916
TOTAL OPERATING EXPENSES	$ 11,437	$ 11,852	$ 11,981	$ 12,140	$ 12,420
INCOME					
NET INCOME (LOSS)	$ (105)	$ (170)	$ 16	$ 205	$ 281

Source: DI #121.

I find that the projections of revenue and expense are reasonable, and cite HSCRC's opinion expressed in its November 6, 2015 memorandum regarding revenue projections that "WAH provided documentation showing that ABH has not been impacted by the reduction in Medicaid reimbursement, and that WAH, for a variety of reasons including the pending new waiver request, does not anticipate any reduction in projected Medicaid payments for the 40 bed psychiatric unit remaining in Takoma Park. Staff believes that the projected net revenues for the 40 bed psychiatric unit are reasonable, assuming that Medicaid does not reduce payments to free-standing psychiatric hospitals in the future." Clearly, there is a risk that Medicaid reimbursement policy could change if federal policy with respect to the IMD exclusion does not change and, if there are significant reductions in Medicaid reimbursement for freestanding psychiatric hospitals of the size of the Takoma Park special psychiatric hospital, a rethinking of how to provide acute psychiatric hospital care on a viable basis will be required.[44]

Having considered input from HSCRC staff, I find that the expense projections for the psychiatric hospital are reasonable. HSCRC staff's memorandum stated:

> Staff performed reasonableness tests of the direct costs for salaries and benefits and other expenses included in the December 12, 2014 pro forma for the 40 bed psychiatric unit… compar[ing] the projected 2019 costs per patient day in the pro forma to the regulated costs per patient day that ABH incurred during the year ended December 31, 2014 based on ABH's HSCRC Annual Report provided to the HSCRC. Staff inflated the actual ABH expenses for the year ended 2014 by 2.3% per year to 2019 based on the inflation assumptions included in WAH's CON.

[44] For this reason, at the conclusion of my review of this financial feasibility standard, I am recommending that the Commission require AHC to report on the performance of its Specialty Hospital – Psychiatric at the end of its fourth year of operation.

> The result of this analysis showed a significantly higher cost per patient day at Takoma Park compared to Adventist Behavioral Health (Rockville), with Takoma Park projecting a cost per patient day in 2019 of $1,112 compared to $837 at ABH.[45] . . . the overall expenses per day appear reasonable. Staff believes that ABH's management team will be able to bring cost in line where appropriate. (DI #131, p.11)

Financial Performance

This standard requires that hospitals document the ability to generate excess revenues over total expenses (including debt service expenses and plant and equipment depreciation), if utilization forecasts are achieved for the specific services affected by the project within five years or less of initiating operations. AHC has produced reasonable projections that show the replacement hospital generating the required excess revenues over total expenses. The Takoma Park campus planned for redevelopment after the relocation of WAH to White Oak will contain one service, re-licensed as a special hospital-psychiatric that is currently part of WAH, that will be separated from the general hospital operations and continue to operate in Takoma Park. As noted above, AHC has developed a reasonable forecast that this special hospital will be able to generate excess revenue over expenses within a few years after its transition from a general hospital unit to a freestanding special hospital.

Quite naturally, the City of Takoma Park and the interested parties have drawn attention to the broader plan for a special hospital and outpatient service campus in Takoma Park, as envisioned by AHC after 2018 and have questioned AHC's ability and commitment to this aspect of the post-hospital relocation plan. AHC has projected an average annual loss from operations of this campus of $4.8 million, in current dollars, over its first five years of operation. There is an understandable inclination to view the two campuses, the new White Oak general hospital campus and the reconfigure Takoma Park campus as a unified whole, given that the two sites are the result of the hospital move. AHC has provided financial projections that project a positive bottom line for the two campus operations combined, albeit a slim one, as shown in the following table.

Table IV-20: Consolidated TP and WAH Financial Projections Post-Project, Inflated and Uninflated (in $000s)

Uninflated					
	2019	**2020**	**2021**	**2022**	**2023**
WAH	$ 5,872	$5,745	$6,117	$6,259	$6,348
Takoma Park	($4,885)	($5,230)	($4,921)	($4,649)	($4,461)
Consolidated	$987	$515	$1,196	$1,610	$1,887
Inflated					
	2019	**2020**	**2021**	**2022**	**2023**
WAH	$ 5,361	$5,460	$6,084	$6,447	$6,738
Takoma Park	($5,359)	($5,772)	($5,528)	($5,322)	($5,199)
Consolidated	$2	($312)	$556	$1,124	$1,539

Source: Created from data supplied by AHC in DI#121

[45] The major differences were in depreciation and interest expense and "other."

Based on the projections made by the applicant, which I find to be reasonable, I find that this project meets the requirements of this standard, given that the regulated facility projects in this review are the relocation of the general hospital, and the resulting establishment of a special hospital for psychiatric services. I appreciate the concern expressed by the interested parties and participating entity with the small margins projected. However, I also conclude that the perspective provided through examining the combined operation of the two campuses is artificial. The proposed Takoma Park campus is most properly viewed as a new campus of Adventist HealthCare and not an appendage of WAH, although both are parts of AHC. As such, it is the overall financial performance of this system that is the most important indicator of AHC's ability to redevelop the Takoma Park campus as planned and maintain its operation as a system component, even though it may not generate excess revenue for AHC from the overall mix of facilities and services operated on the campus. I note that the audited financial statement for AHC for FY2013[46] identified income from operations of the Combined AHC obligated group in that fiscal year as $9.6 million. This was a year in which WAH had an operating loss of $10.7 million. For FY 2014, the Combined AHC obligated group is reported to have generated income from operations of $24.1, an improved performance aided by WAH's ability to move back into the black with $4.1 million in income from operations. (FY2014 Audited Financial Statement of AHC) In the long run, modernizing the WAH facilities is an important necessary step to assuring that AHC can continue to be financially strong and continue to play an important role in health care delivery in the Takoma Park and Silver Spring area of Montgomery County and the nearby communities of Prince George's County. AHC has put forth a plan to improve a weak component of its system that will face increasing problems over time without actions of the type proposed. While the plan carries risk and will alter the general hospital landscape in ways that create legitimate concern for WAH's historic service area population, I have concluded that the potential risks are manageable and that WAH's plans are feasible.

I recognize that one of the risks presented by this project is the permanent loss of Maryland's IMD Exclusion waiver. This makes the long-term viability of the psychiatric facility at Takoma Park more tenuous and the benefit of lower upfront capital cost that drove this part of AHC's plan more questionable. As I have considered my recommendation on this application, DHMH is again pursuing an IMD Exclusion Waiver[47] and, for now at least, the Maryland Medicaid program is continuing to provide funding at previous levels. I think it likely that, by the time the replacement hospital will go into operation at White Oak, a rational solution to this funding issue will be in place. Under a worst case scenario, AHC would have to reassess its ability to continue to viably serve all acute psychiatric patients in need of service and this reassessment would undoubtedly focus on bringing psychiatric beds back within the general hospital setting. If that turns out to be the ultimate solution to this potential future problem, I believe that AHC would have an excellent chance of being able to accomplish that change in direction. For these reasons, I believe it is reasonable to allow the plan for the psychiatric facility to proceed

I find that AHC has satisfied the financial feasibility standard. For reasons previously noted, I recommend that MHCC include the following condition if it awards AHC a Certificate of Need for the proposed relocation of WAH:

[46] AHC's September 2014 modified CON application (DI #27, Exh. 171)
[47] Located at: http://dhmh.maryland.gov/newsroom1/Pages/Maryland-Medicaid-seeks-IMD-Exclusion-waiver.aspx

In the fourth year of operation of the replacement Washington Adventist Hospital, AHC shall provide a report to the Maryland Health Care Commission on the operation of the specialty hospital for psychiatric services in Takoma Park. This report must review patient intake and transport issues, coordination of care for psychiatric patients between the White Oak and Takoma Park campuses, and the specific financial performance of the special hospital, exclusive of the operation of Adventist Behavioral Health and Wellness overall.

(14) Emergency Department Treatment Capacity and Space

(a) An applicant proposing a new or expanded emergency department shall classify service as low range or high range based on the parameters in the most recent edition of Emergency Department Design: A Practical Guide to Planning for the Future from the American College of Emergency Physicians. The number of emergency department treatment spaces and the departmental space proposed by the applicant shall be consistent with the range set forth in the most recent edition of the American College of Emergency Physicians Emergency Department Design: A Practical Guide to Planning for the Future, given the classification of the emergency department as low or high range and the projected emergency department visit volume.

(b) In developing projections of emergency department visit volume, the applicant shall consider, at a minimum:

- ***(i) The existing and projected primary service areas of the hospital, historic trends in emergency department utilization at the hospital, and the number of hospital emergency department service providers in the applicant hospital's primary service areas;***
- ***(ii) The number of uninsured, underinsured, indigent, and otherwise underserved patients in the applicant's primary service area and the impact of these patient groups on emergency department use;***
- ***(iii) Any demographic or health service utilization data and/or analyses that support the need for the proposed project;***
- ***(iv) The impact of efforts the applicant has made or will make to divert non-emergency cases from its emergency department to more appropriate primary care or urgent care settings; and***
- ***(v) Any other relevant information on the unmet need for emergency department or urgent care services in the service area.***

This standard requires an applicant to classify its ED as "low-range" or high-range" depending on selected indicators of how its service functions and the characteristics of its patients, and suggests appropriate numbers of treatment spaces based on volumes. It is based on planning guidelines published by the American College of Emergency Physicians ("ACEP").

Applicant's Response

Adventist indicated that its ED falls within the parameters for high-range services and submitted the information shown in the following table, which profiles the characteristics of its ED service using the ACEP indicators, as required by Paragraph (a) of the standard.

Table IV-21: AHC: Threshold Indicators for WAH Based on ACEP Guideline

Indicators for Adult ED	Low Range Threshold	High Range Threshold	WAH
ALOS	<2.5 hours	>3.5 hours	>3.5 hours
Location of observation beds	Outside ED	Inside ED	Both
Average time to admit	<60 minutes	>90 minutes	>90 minutes
Turnaround time for Testing	<31 minutes	>60 minutes	>60 minutes
% admitted patients	<18%	>23%	18%<WAH<23%
% non-urgent/% urgent	<1.1/1	>1/1.1	>1/1.1
Age of patient	<20% Age 65+	>25% Age 65+	<20% Age 65+
Admin/teaching space	Minimal	Extensive	Minimal
Imaging within ED	No	Yes	Yes
Specialty components	No	Yes	Yes
Flight/trauma services	No	Yes	No

Source: DI #27, p. 53; DI #34, p.15.

The applicant notes that the proposed replacement hospital would increase WAH's ED treatment space from 26 to 32 treatment rooms, and two mental health evaluation rooms, along with twelve short-stay clinical decision rooms for observation located adjacent to the ED. The new ED will have 22,784 DGSF,[48] not including the immediately adjacent radiology space. (DI #27, p.52) AHC points out that the vacated space in the existing Takoma Park facility will be redeveloped for use as an urgent care center, and will function as a part of AHC's initiative to divert patients with non-emergent conditions that do not require the resources of a hospital ED to more appropriate care settings and to maintain access to lower acuity, unscheduled medical service in Takoma Park.[49]

Regarding paragraph (b) of the standard, AHC addresses the proposed ED service area in projections for the White Oak location and compared that to its existing Takoma Park service area, using drive times of 15 minutes from both the projected White Oak service area and its existing Takoma Park service area. The projected new service area expands the existing service area in a northward direction, taking in zip code areas 20905 (Montgomery County) and 20759 (Howard County). The applicant notes that four current WAH service area zip code areas, D.C.'s 20018, 20019, 20002, and 20020, are not included in the service area AHC projects for the White Oak ED service area. (DI #27, p.56-57)

[48] The project design shows the radiology department adjacent to the ED with direct access to radiology and quick access to the CT and MRI facilities. Because that program area is not dedicated to the ED, it is included in the overall radiology services DGSF.

[49] A more complete description of these programs is provided in the following section, Emergency Department Expansion.

Table IV-22: AHC: Current and Proposed Service Areas (PSAs highlighted)
WAH in Takoma Park and the Proposed WAH in Silver Spring

Takoma Park Service Area			White Oak Service Area		
20783	20705	20722	20783	20910	20011
20912	20770	20707	20912	20770	20707
20782	20902	20020	20866	20902	20710
20903	20781	20710	20903	20781	20759
20901	20712	20002	20901	20706	20905
20904	20784	20019	20904	20712	20785
20910	20012	20743	20705	20708	20784
20740	20906	20708	20740	20737	20743
20011	20706	20018	20782	20706	20868
20737	20785	20017	20012	20002	20017
	20866				

Source: analysis of AHC's service area map (DI #27, p. 56-57).

AHC projects modest growth in ED visits through 2019 and annual growth of 2% after the relocation to White Oak. It attributes these increases to the White Oak site's relatively better accessibility, stating that it is "easier for emergency vehicles to reach and provides safer landing access for helicopters," than at the existing campus in Takoma Park. The applicant also states that the proportion of elderly and indigent persons in the White Oak community (including Hyattsville and Langley Park) will contribute to this increase in demand. (DI #27, p.53)

Table IV-23: AHC: Projected WAH ED Visits
for CY 2014 – CY 2020

Year	ED Visits	Percent Change (%)
2014	46,930	--
2015	47,000	0.1%
2016	47,070	0.1%
2017	47,150	0.2%
2018	47,230	0.2%
2019	48,160	2.0%
2020	49,100	2.0%

Source: DI #34, p.16

The applicant states that, based on the projected ED visit volume of 49,100 ED visits in 2020, its proposal to develop an Emergency Department of 22,784 departmental gross square feet, with 32 treatment spaces falls within the ACEP guidelines for a 40,000 visit ED. (DI#38, p.53)

Table IV-24: AHC: Emergency Department Square Footage &Treatment Space Ranges for an ED with 30-50K Visits

	Departmental Gross Square Feet		Treatment Spaces	
	Low Range	High Range	Low	High
30,000 ED Visits	17,500	22,750	20	26
40,000 ED Visits	21,875	28,875	25	33
50,000 ED Visits	25,500	34,000	30	40
AHC Proposed (49,100 ED Visits projected in 2020)	**22,784 DGSF**		**32**	

Source: DI #27, p.52-53.

Interested Party and Participating Entity Comments

City of Takoma Park

The City of Takoma Park believes that AHC's forecasted ED visits "appear overstated," questioning the inclusion of certain zip code areas in the proposed service area while excluding others at a similar distance from the proposed new site.[50] Further, the City states that the applicant "does not provide supporting data to show how AHC defined the new service area." Takoma Park notes that, "[g]iven the travel time from Takoma Park (20912) to White Oak and closer options (Holy Cross), it is unlikely that Takoma Park would remain in the WAH – White Oak ED primary service area." (DI #54, p.21)

Applicant's Response to Comments

In response to the City of Takoma Park's comments regarding the methodology used to determine the White Oak ED primary service area (PSA), AHC states that the proposed primary and secondary service areas were based upon a number of factors, including: location of the replacement hospital; proximity to other hospitals; drive times; major streets and highways; current market share levels of the hospitals; and physician relationships. The applicant notes that it hired Deloitte to conduct market share analyses by individual zip code area for acute care hospital providers. AHC also notes that its travel time study was submitted along with its application. (DI #34, pp.20-21, Exh. 24)

Reviewer's Analysis and Findings

Emergency Department visit demand has moderated in the suburban counties of Washington, DC in the last five years, and more broadly throughout Maryland. This is a welcome trend after strong and steady increases in demand during the previous two decades. The following table profiles ED visit demand in Montgomery County and Prince George's County hospitals and at the two freestanding medical facilities ("FMFs") in those counties in the current decade and for all Maryland hospital EDs and FMFs. Visit volume has declined by an average of 0.7% per year since 2011 for Montgomery County's hospital EDs and FMF, outpacing the overall state decline

[50] The City notes that "[t]ravel times from ZIP code 20910 to Plum Orchard Drive are the same as travel times from 20912, yet the methodology in the application kept 20912 in the WAH – White Oak ED primary service area and moved 20910 out." (DI #54, p.21)

of 0.4% per year over the same period. Prince George's County has seen steeper declines in use, an annual average drop of 2.3% since 2011. The tables immediately below show the trends in ED visit volume as well as the inventory and use of treatment rooms by hospital.

Table IV-25: Emergency Department Visits, All Maryland, Montgomery County, and Prince George's County General Hospitals and FMFs, FY 2011-2015

	2011	2012	2013	2014	2015	Average Annual Change in Visit Volume, 2011-2015
Maryland						
TOTAL MD Hospitals/FMFs	2,583,085	2,684,779	2,692,908	2,586,297	2,538,626	-0.4%
Montgomery County						
Holy Cross of Silver Spring	88,574	89,866	90,273	85,060	85,962	**-0.7%**
Adventist Shady Grove	73,417	73.529	75,737	71,553	61,515	**-4.1%**
Suburban	43,437	44,729	44,932	43,047	42,796	**-0.3%**
Washington Adventist	46,969	49,626	50,250	44,911	42,186	**-2.4%**
MedStar Montgomery	38,271	39,991	40,324	38,007	36,492	**-1.1%**
Adventist Germantown FMF	33,805	28,875	34,477	34,271	28,639	**-3.1%**
Holy Cross Germantown	-	-	-	-	17,088	-
TOTAL Montgomery County Hospitals/FMF	324,473	332,093	335,993	316,849	314,678	**-0.7%**
Prince George's County						
Doctors Community	59,259	54,191	50,859	51,359	56,363	-1.0%
MedStar Southern Maryland	61,769	65,038	64,038	59,149	52,094	-4.0%
Prince George's	48,885	52,618	52,378	50,238	45,742	-1.5%
Fort Washington	45,416	46,225	45,433	42,587	42,615	-1.5%
Bowie Health Center FMF	35,173	36,164	36,812	35,344	32,835	-1.6%
Laurel Regional	35,422	35,764	36,250	33,766	30,790	-3.3%
TOTAL Prince George's County Hospitals/FMF	285,924	290,000	285,770	272,443	260,439	-2.3%

Source: Analysis of HSCRC Discharge Database and Outpatient Database

Table IV-26: Emergency Department Visits/Treatment Spaces, and Visits per Treatment Space, All Maryland, Montgomery County and Prince George's County Hospitals FY 2014

	ED Visits	Treatment Spaces	Visits per Treatment Space
ALL Maryland Hospitals & FMFs	**2,586,297**	**2,131**	**1,214**
Montgomery County Hospitals and FMF			
Washington Adventist	**44,911**	**26**	**1,727**
Adventist Germantown FMF	**34,271**	**21**	**1,632**
Holy Cross of Silver Spring	**85,060**	**61**	**1,394**
Shady Grove Adventist	**71,553**	**64**	**1,118**
Suburban	**43,047**	**42**	**1,025**
MedStar Montgomery	**38,007**	**41**	**927**
TOTAL Montgomery County Hospitals & FMF	**316,849**	**255**	**1,243**
Prince George's County Hospitals & FMF			
Fort Washington	**42,587**	**18**	**2,366**
Bowie Health Center FMF	**35,344**	**15**	**2,356**
MedStar Southern Maryland	**59,149**	**41**	**1,443**
Prince George's	**50,238**	**46**	**1,092**
Laurel Regional	**33,766**	**31**	**1,089**
Doctors Community	**51,359**	**55**	**934**
TOTAL Prince George's County Hospitals & FMF	**272,443**	**206**	**1,323**

Source: MHCC, Annual Report on Selected Maryland Acute Care and Special Hospital Services, FY 2014

In its hospital relocation project, AHC is proposing an expansion of WAH's Emergency Department from 26 treatment bays at the Takoma Park campus to 32 treatment bays in White Oak, along with two mental health evaluation rooms. In addition, the replacement hospital will have 12 short stay clinical decision rooms adjacent to the ED for observation. Based on recent use and the ACEP guidelines, I find that the expansion of treatment capacity at WAH is warranted. In 2014, WAH operated at the highest level of treatment capacity among Montgomery County EDs, at almost 45,000 patients and 1,727 visits per treatment space, well above the County average of 1,243 visits per space and the overall use of capacity by EDs in Maryland.

AHC has indicated WAH's ED is in the high range threshold. I agree with AHC on this characterization and note that WAH's ED fits the high-range category on seven of eleven indicators, with one indicator falling in between. ACEP guidance on treatment space for an ED with 40,000 visits per year is 25 (Low-Range) to 33 (High-Range) spaces; for a 50,000 visit ED, those guidelines call for 30 (Low-Range) and 40 (High-Range). From 2011-2014, WAH's ED averaged 47,939 patients. Based on this volume and ED characteristics I conclude that the proposed number of treatment spaces is in harmony with the ACEP guidelines.

I come to this conclusion despite my belief that AHC's projected growth in ED volume may be somewhat overstated, given recent trends, even though I note that my review of information from the HSCRC Discharge and Outpatient Data Bases shows that WAH experienced

ED visit volume in the range of what it is projecting for 2020 as recently as 2012 and 2013. However, even if the trend in declining demand for ED services continues, the number of treatment spaces being proposed by AHC for the White Oak facility is acceptable, based on the ACEP guidelines. The space proposed for the ED (22,784 department gross SF) is also within the range of approximately 22,000 to 29,000 SF for an ED with 40,000 visits per year. Based on these factors, I find that both the space and the proposed number of treatment spaces are consistent with this standard.

The City of Takoma Park questioned the applicant's proposed ED service area and projected ED volumes, and commented on the need to reinvest in Takoma Park instead of expanding the ED at the new location. AHC, in responding, has explained CTP's misreading of the ED volume history as it was presented in the application, noting that the application form separates outpatient ED visits from those that result in admissions, leading the City to underestimate those volumes. I disagree with the City's statement that AHC did not provide data to support its definition of the replacement hospital ED's service area. The summary explanation provided by AHC in its application gives a reasonable basis for predicting market shifts and future volumes. The applicant explained that it identified the proximity of a zip code to all hospitals by distance and driving time, analyzed the current market share for hospitals relative to their location to the zip code, and approximated the shift in market share due to the relocation, acknowledging distance and current market presence in each zip code. (DI # 27, pp. 103-04) The travel time data presented by AHC is also relevant. (DI #27, Exh. 18)

I conclude that AHC's planning for ED facilities at the White Oak site is consistent with the most current ACEP guidelines. I find that the project complies with this standard.

(15) Emergency Department Expansion

A hospital proposing expansion of emergency department treatment capacity shall demonstrate that it has made appropriate efforts, consistent with federal and state law, to maximize effective use of existing capacity for emergent medical needs and has appropriately integrated emergency department planning with planning for bed capacity, and diagnostic and treatment service capacity. At a minimum:

- ***(a) The applicant hospital must demonstrate that, in cooperation with its medical staff, it has attempted to reduce use of its emergency department for non-emergency medical care. This demonstration shall, at a minimum, address the feasibility of reducing or redirecting patients with non-emergent illnesses, injuries, and conditions, to lower cost alternative facilities or programs;***
- ***(b) The applicant hospital must demonstrate that it has effectively managed its existing emergency department treatment capacity to maximize use; and***
- ***(c) The applicant hospital must demonstrate that it has considered the need for bed and other facility and system capacity that will be affected by greater volumes of emergency department patients.***

Applicant's Response

In addressing paragraph (a), which requires an applicant to detail efforts made in cooperation with its medical staff to reduce use of its emergency department for non-emergency

medical care, AHC points to the impact of The Center for Health Equity and Wellness, the Women's Center, and the federally qualified health center (FQHC) that operate – and will continue to operate – on the Takoma Park campus. AHC states that its model of care "is informed by and responds to current efforts and the existence of various partnerships directed at caring for the populations Washington Adventist Hospital serves in the best and most appropriate setting." (DI #27, p.59)

Among the initiatives and/or examples undertaken to lessen non-emergent use of WAH's ED are: (1) a bedside prescription delivery service and a 340B drug pricing program (through a partnership with Walgreens); (2) its on-site patient care at two Victory Towers and Holly Hall in Takoma Park; (3) its ED U-turn program (case management program to identify high ED utilizers); (4) its skilled nursing facility care coordination program (with customized care plans); (5) its Senior Peer Advocate program (a senior companionship program); (5) its Low-Income Breast Cancer Program (providing free mammograms and education); (6) a breast cancer screening program and a program for care beyond diagnosis (through partnership with Montgomery County Women's Cancer Control Program and the State of Maryland Breast and Cervical Diagnosis and Treatment Program); (7) its Cardiac & Vascular Outreach Program (provides screening and education); (8) its Colorectal Cancer Screening Program (supported by the Cigarette Restitution Fund to provide screening and education); and (9) various community health education programs. (DI #27, pp. 60-63) In response to staff questions during the completeness review process, AHC stated that it did not yet have quantifiable results regarding the impact these programs might be having on reducing ED use but that its population health program had begun an initiative to quantify the impact of these programs on ED utilization. (DI #34; p.17)

Addressing paragraph (b), the part of this standard requiring the applicant to demonstrate that it has made appropriate efforts to effectively maximize the use of its current ED space, Adventist states that WAH's current ED was originally designed to accommodate 30,000 visits and actually served almost 49,000 visits in 2013. AHC also notes that the program and design of the ED space in the proposed project were developed based upon projected service volume and ACEP guidelines. The plan also assumes that a portion of lower acuity visits will occur in the clinics on the Takoma Park campus. (DI#27)

In addressing paragraph (c) of the standard, which requires the applicant to show that its plans align "bed and other facility and system capacity" that would be affected by greater volumes of emergency department patients, Adventist stated that, although MSGA bed capacity is reduced in the proposed project, it believes that "utilization in response to emergency department volume fluctuations will be managed because of the efficiency gained from having all private beds, dedicated observation beds, and clinical decision beds in the new facility." AHC also pointed out that the proposed project includes 14,042 square feet of shell space for the hospital's future expansion needs. (DI# 34, pp. 17-18)

Interested Party and Participating Entity Comments

City of Takoma Park

The City of Takoma Park questions the expansion of the ED, stating that the forecasted

number of visits did not support the proposed size and number of rooms, citing a forecast of 34,960 ED visits in 2014 and 37,454 visits in 2020. The City also maintains that there are inconsistencies in the applicant's description of ED volumes in various application materials.

CTP questioned the number of observation beds, saying that for the projected 1,338 visits (in 2020) to justify the proposed 12 beds at 70% occupancy would mean that patients would be held in the beds "for at least two days [which would be] hardly desirable from the patient perspective [and is] inconsistent with statements elsewhere in the application that WAH is working to reduce the time between ED admission and placement in an acute care bed." (DI #54, p.20)

Applicant's Response to Comments

In its response to the City of Takoma Park's comments regarding ED volume, AHC states that the City misinterpreted data in the application, not recognizing that the number of ED visits reported referred only to visits that were purely outpatient ED visits. Regarding the City's assertion that there were inconsistencies in the applicant's description of ED volumes in various application materials, AHC explains that each mention of visits referred to Takoma Park referenced different time periods. (DI #59, p.20)

AHC also notes, in response to CTP's comment about observation beds, that the clinical decision observation beds that will be located near the ED are not part of the ED, but instead are "a critical element to manage patient through-put and avoidable admissions. . . but, rather, [constitute] a resource that serves the through-put demands of the entire clinical patient tower." (DI#59, p.21)

Reviewer's Analysis and Finding

AHC proposes 32 treatment bays at the replacement WAH's ED, an expansion from its 26-bay complement at the existing WAH. It also proposes an urgent care-level facility to provide low acuity walk-in medical services on a full-time basis at the existing Takoma Park campus after the hospital emergency department moves to White Oak.

I find that, as required by paragraph (a) of the standard, Adventist has demonstrated a range of efforts it has taken, sometimes in partnership with other organizations that can be effective in reducing use of its emergency department for non-emergency medical care that can be obtained in physician office and clinic settings. It has been directly involved in development of these kinds of alternatives. In addition, AHC has been involved in health education and screening programs aimed at preventing serious illness, detecting illness at an earlier, more-easily treatable stage, and/or facilitating more effective and less expensive use of health care resources by patients. Finally, AHC has established programs aimed at better management and coordination of patients with chronic illness that frequently used ED facilities or have potential for such usage.

With respect to Paragraph (b), I note that AHC has operated its ED services at a high ratio of visits per treatment bay. Its relatively long average treatment time is likely a natural consequence of an imbalance between supply and demand for treatment space. The replacement hospital's ED will be operating a larger complement of treatment bays and changing the way in

which it accommodates observation of patients awaiting final decisions on clinical disposition. The plan for the White Oak campus appropriately considers the need for beds and system capacity and is logical, based on reasonable ED demand projections for the replacement hospital and the planning guidelines adopted for use in this SHP chapter. I have also reviewed Takoma Park's comments regarding volume projections and conclude that AHC's methodology is sound.

I find that Adventist's application is consistent with each part of this standard.

(16) Shell Space.

(a) Unfinished hospital shell space for which there is no immediate need or use shall not be built unless the applicant can demonstrate that construction of the shell space is cost effective.

(b) If the proposed shell space is not supporting finished building space being constructed above the shell space, the applicant shall provide an analysis demonstrating that constructing the space in the proposed time frame has a positive net present value that:

(i) Considers the most likely use identified by the hospital for the unfinished space;

(ii) Considers the time frame projected for finishing the space; and

(iii) Demonstrates that the hospital is likely to need the space for the most likely identified use in the projected time frame.

(c) Shell space being constructed on lower floors of a building addition that supports finished building space on upper floors does not require a net present value analysis. Applicants shall provide information on the cost, the most likely uses, and the likely time frame for using such shell space.

(d) The cost of shell space included in an approved project and those portions of the contingency allowance, inflation allowance, and capitalized construction interest expenditure that are based on the construction cost of the shell space will be excluded from consideration in any rate adjustment by the Health Services Cost Review Commission.

Applicant's Response

AHC projects several possible future uses for the 14,042 square feet of shell space it proposes for the top (third) floor of the south wing of the replacement hospital. The application states the space could support 15 private MSGA patient rooms with sufficient support and storage space and is most likely to be used for that purpose. The applicant notes that the proposed project reduces the number of beds currently licensed for the existing hospital and provides finished bed capacity at a level it characterizes as "appropriately conservative in response to utilization assumptions tied to the newly implemented Global Budget Revenue system."

AHC identifies another possible use for the proposed shell space as expanded program space for cardiology and radiology, departments that are immediately adjacent to the shell space. Use for administrative services and training is also identified as an option. AHC states that the ultimate use of the space will be based on the demand for services that evolves at the new White Oak campus, and states that Commission approval of the finishing of the space is expected to be requested within three years of the opening.

As part of its demonstration that the construction of the proposed shell space has a positive net present value when compared to building the space in the future, AHC estimates that it will cost approximately 50 percent less to construct the space as part of the proposed project rather than three years after the replacement hospital opens. It notes that constructing the shell space as part of the proposed project will cost approximately $2.8 million and assigns "carrying cost" of keeping the space in shelled condition during the first three years of hospital operation of $260,415, bringing the total cost of the proposed option to $3.1 million. AHC projects that adding the space three years after the replacement hospital goes into operation, will cost $4.5 million.

AHC explains the factors it considered in arriving at its cost calculations for the two options. It notes that the later expansion option, would require removal and replacement of the roofing membrane to add the space above occupied floors. Because the work would be done while the hospital continued its operation, added costs would be incurred for overtime/shift differential and because of the longer period of construction. AHC also notes that the later construction option would be uneconomical in scale when compared with the initial construction of the hospital. The work would occur with more restricted physical access to the work site and the unit costs of general conditions and construction management would be higher for the smaller project. Finally, AHC includes projections of general escalation of construction costs over the next six to seven years in its calculation of the cost differential.

AHC states that constructing the proposed shell space at the time of initial construction is more cost effective because it provides the ability to fit out an interior project quickly, with minimal disruption, and with minimal risk. (DI#27, p. 67) AHC also notes that, because this space would be built above the surgery suite, adding it at after initial construction would be complicated by the noise, vibration, infection control, and other risks that working above a functioning surgery department would entail. The table below shows AHC's cost comparison.

Table IV-27: Cost Comparison of Building Space in Initial Project, or Later*

	At time of initial project	At future date
Construction cost/square foot	$200.00	$320.61
Construction cost	$2,808,400	$4,502,048
Year 1 carrying cost**	$84,252	--
Year 2 carrying cost	$86,780	--
Year 3 carrying cost	$89,383	--
Total	$3,068,815	$4,502,048

Source: DI #27, Exh. 40
*Assumes future build at three years after initial project opening
**Carrying cost assumed at $6/SF with 3% annual escalation

Interested Party Comments

City of Takoma Park

The City of Takoma Park states that the applicant did not provide substantive information to support the need for the shell space in the future, and predicts that the shell space will be used to increase the number of medical/surgical beds, replacing, in essence, the 31 beds this project proposes to remove from service. CTP states that this component of the project is unnecessary in the current health care climate, where the forecasted need for hospital expansions is declining. The City proposes that AHC reallocate the $2.8 million toward improvements to the Takoma Park campus. (DI #54, pp.23-23)

Applicant's Response to Comments

In response, AHC reiterated its commitment to meeting the needs of the residents of Takoma Park and states that it can meet its commitments without foregoing the inclusion of shell space in the initial construction of the hospital. AHC notes further that the amount of building space proposed for construction on the White Oak campus was informed by comprehensive market projections and provides a "right-sized" hospital capacity based on those market factors. (DI #59, p. 21, n.11)

Reviewer's Analysis and Findings

This standard requires an applicant to demonstrate that the construction of shell space in a project requesting CON approval is cost effective. For shell space like that in this project, which is on the top floor of the proposed replacement hospital, the applicant must demonstrate that constructing the space in the proposed time frame has a positive net present value, considering both the likely use of the space and the time frame for its use. Adventist has made a reasonable attempt to do this, identifying the addition of 15 MSGA beds as the most likely future use for the space or, if not, for the expansion of the adjacent cardiology and radiology services. It has provided estimates of the cost of constructing the space as part of the construction of the replacement hospital, projected to occur in the 2016 to 2018 time period and, alternatively, constructing the floor, as a vertical expansion of the existing tower, three years after the replacement hospital opens. This would be in 2022 based on an assumption that the replacement hospital opens in 2019.

The City of Takoma Park has expressed concern that AHC failed to substantiate the need for the shell space in the future, suggesting that it will be used to replace the beds that would be reduced with approval of this application. The City also expressed a belief that the $2.8 million would be better used if reallocated to the proposed investment in the Takoma Park campus. I note that, by definition, a hospital or any business incorporating shell space into a major building project cannot "substantiate" the need for the shell space. If a clear use existed at this time for the space in question, it would be proposed for construction as finished space. AHC is making a reasoned assumption that the space could be put to effective use after the replacement hospital has been open for three years. This can be thought of as "insuring" that WAH will have the option of putting additional building space, built on the most economical terms, into use around the time that it expects the replacement hospital to reach a stable level of operational activity. That is the point in

time at which AHC believes that needs for space not foreseen at this time will become apparent.

In order to compare the cost effectiveness of building the shell space now versus building the shell space when it is needed, a net present value analysis of shell space is required under this standard. This approach is widely accepted by financial analysts and economists as an appropriate approach to evaluating investments when the costs and benefits occur in different time periods. These calculations are possible through "discounting" costs and benefits that occur in different years, that is, accounting for the higher value of money that is available now and could be invested, resulting in a return on the initial investment in future years. The factor for calculating the equivalent amount of money across multiple time periods in net present value analysis is commonly referred to as the "discount rate".

I note that AHC's cost estimate does not account for the interest payments on the additional debt attributed to the construction of the shell space when the space is not occupied, and also does not account for associated budget contingency allowances, budgeted inflation, or financing costs. I included these items in my cost comparison estimates for the shell space.

Using AHC's estimates for the cost of construction, my analysis starts with the $2,808,400 current cost (2014[51]) of the shell space ($200 per SF times 14,042 SF). I then add in contingency allowances, budgeted inflation, and financing costs, which yields a total project cost of $3,410,579. My analysis also includes the present value of interest payments on debt attributed to the construction of the shell space as part of this project in 2019 and the carrying cost estimates provided by AHC, bringing the net present value of building the shell space as part of the construction of the replacement hospital to $4,145,195.

I compared net present value of building the shell space as part of the project to the cost of building the shell after the replacement hospital opens, assuming that this construction takes place in 2022. I estimate that the cost of constructing the third floor shell on top of the south wing after the construction of the hospital to be $4,502,006 ($320.61 per SF times 14,042 SF) in future dollars due to the additional costs detailed by AHC and described above. I added a contingency allowance comparable to that budgeted by AHC for the current project, which brings the estimated total project cost of constructing the shell space in 2022 to $4,708,022. The result has been discounted to 2019 using a 2% discount rate over a three-year period bringing the total cost of the alternative of building the shell floor three years after the hospital project is completed and opened to $4,419,853. This analysis shows that it is less expensive to construct the shell space now than it in 2022 as detailed in the following table.

[51] The current shell space cost is based on the estimated project cost in 2014, when the application was submitted

Table IV-28: Comparison of Constructing Third Floor as Shell Space Initial Project, or Later*

	Construct as part of project	Add three years later
Construction	$2,808,400	$4,502,006
Contingency	$128,515	$206,016
Allocated financing costs	$352,468	0
Inflation	$121,196	0
Total Project Cost (shell)	**$3,410,579**	**$4,708,022**
Carrying cost - Year 1	84,252	N/A
Interest paid - Year 1	$158,225	N/A
Carrying cost – Year 2	86,780	N/A
Interest paid in Year 2	$158,091	N/A
Carrying cost – Year 3	89,383	N/A
Interest paid in Year 3	$157,885	N/A
Total	$4,145,195	$4,708,022
Discounted to 2018	N/A	$288,169
2018 Net Present Value	**$4,145,195**	**$4,419,853**

Sources DI #27, Exh. 40; DI #43, pp.1-2; DI #118, p. 5
*Assumes future build at three years after initial project opening
Notes:
Contingency, inflation and financing costs assigned by Reviewer
Assumes building the space three years after initial project is paid out of cash
Annual carrying cost assumptions of $6/sq. ft. and 3% annual escalation provided by applicant
Interest costs assigned by Reviewer by pro rating the cost of the shell as a % of the total project cost.
2% discount rate assumed by applicant

AHC has presented a reasonable demonstration (although with less than desired detail) that it would cost less to build the additional space when the proposed replacement hospital is constructed than to add the space three years after the hospital project is completed

With inpatient hospitalization declining and with incentives in place to further that trend, the need for more bed space at the replacement hospital, the use AHC specifies as most likely, is uncertain. AHC predicts very small increases in demand for MSGA beds through 2023, but suggests other uses that can be made of the space. Not all changes in hospital care can be accurately predicted and the proposed shell space represents only 3.28% of the total 427,662 square feet of building space proposed for the WAH replacement hospital. Changes occur in need for and use of hospital space driven by changes in service technology and techniques, unanticipated changes in the way the population uses the hospital, and changes in payment for services, that change physician and hospital behavior. The recent announcement by Laurel Regional Hospital that it intends to transition to outpatient use before 2019 could increase the likelihood that an additional increment of MSGA beds might be needed in the southeast region of Montgomery County. In 2014, Laurel Regional Hospital had an average daily census of approximately 32 MSGA patients. The proposed WAH replacement hospital in White Oak, if built, would be the closest general hospital to the current Laurel Regional Hospital.

I find that AHC has met the requirements of this standard. Approval of this project should be accompanied by these conditions on the CON, which are standard conditions for hospital projects containing shell space.

1. Adventist HealthCare, Inc. will not finish the shell space in the relocated Washington Adventist Hospital without giving notice to the Commission and

obtaining all required Commission approvals.

2. Adventist HealthCare, Inc. will not request an adjustment in rates by the Health Services Cost Review Commission ("HSCRC") that includes depreciation or interest costs associated with construction of the proposed shell space at the relocated Washington Adventist Hospital until and unless Adventist HealthCare has filed a CON application involving the finishing of the shell space, has obtained CON approval for finishing the shell space, or has obtained a determination of coverage from the Maryland Health Care Commission that CON approval for finishing the shell space is not required.

3. The HSCRC, in calculating any future rates for Adventist HealthCare, Inc. d/b/a Washington Adventist Hospital and its peer group, shall exclude the capital costs associated with the shell space until such time as the space is finished and put to use in a rate-regulated activity. In calculating any rate that includes an accounting for capital costs associated with the shell space, HSCRC shall exclude any depreciation of the shell space that has occurred between the construction of the shell space and the time of the rate calculation (i.e., the rate should only account for depreciation going forward through the remaining useful life of the space). Allowable interest expense shall also be based on the interest expenses going forward through the remaining useful life of the space.

COMAR 10.24.12 - State Health Plan for Facilities and Services: Acute Hospital Inpatient Obstetrical Services

COMAR 10.24.12.04 - Review Standards.
(1) Need. ***All applicants must quantify the need for the number of beds to be assigned to the obstetric service, consistent with the approach outlined in Policy 4.1. Applicants for a new perinatal service must address Policy 4.1.***

Policy 4.1 of the Acute Hospital Inpatient Obstetrical Services Chapter, COMAR 10.24.12, provides that "[t]he burden of demonstrating need for additional obstetric program capacity rests with the applicant." It goes on to outline "minimum considerations" to be used by the Commission in "determining whether a new obstetric service should be established." These considerations include the conventional elements of any facility or program need assessment, such as the anticipated service area, data on the utilization of the service, the number of existing providers of the service in the service area, and the anticipated medical staff and their patient population. Also required are information on the insurance status, socioeconomic characteristics, and indicators of underservice or inadequate service in the service area population. The Commission is directed to consider "any data and/or analyses provided by the applicant outlining improvements in the delivery of obstetric services to the defined service area population anticipated to result from implementation of the proposed project, such as improvements in patient care outcomes, lower costs than those currently available in the service area, improvements in geographic or financial access to care, improvements in continuity of care, or improvements in the acceptability or cultural

competency of obstetric care for the defined service area population or specific segments of that population." Finally, the Commission is directed to consider alternative perspectives on the need for the project that an applicant may provide.

Applicant's Response

AHC correctly notes that this standard specifically references "the need for the number of beds to be assigned to the obstetric service," which is broadly applicable to a relocation project of this kind. However, Policy 4.1 addresses the establishment of a new obstetric service. AHC is proposing to relocate an obstetric service as part of the relocation of a general hospital and is proposing to reduce obstetric bed capacity. Thus, although the policy is not directly applicable to the proposed project, AHC is nonetheless required to demonstrate the need for the bed capacity it is proposing to relocate.

AHC identifies its existing obstetric service as one with 21 licensed beds, which is the number of licensed acute care beds that AHC has allocated to obstetric services in the current fiscal year that ends June 30, 2016. It reports a current unit configuration that would support 30 obstetric beds (i.e., physical bed capacity). It addressed obstetric bed need under the *Need* criterion of COMAR 10.24.01.08G(3)(b). It is proposing to operate 18 obstetric beds at the relocated WAH, within a 22-bed unit that will include four rooms and beds that it designates as medical/surgical beds. Thus, it can be viewed as proposing to reduce operational bed capacity by three beds (21 to 18) and the physical bed capacity of the postpartum unit by eight beds (30 to 22).

AHC identifies six zip code areas as its primary service area ("PSA"), accounting for 60% of its obstetric discharge volume and 18 zip code areas as its 85% relevance service area for obstetric services (the top contributing zip code areas for obstetric patients cumulatively accounting for 85% of total obstetric discharges). It reports a 22.5% market share for obstetric services in its PSA and a 17% market share for an area consisting of 22 zip code areas, slightly more expansive than its 85% relevance service area, which takes into account Laurel and Burtonsville zip code areas and 20905 in Silver Spring that AHC expects to be in the 85% service area for WAH in White Oak. AHC estimates that the relocation will position the hospital to increase its market share of this area from 17% to 18.3%. It also estimates reduced obstetric market share in eight zip code areas: Takoma Park, Hyattsville, Riverdale, Mount Rainier, and Silver Spring (20910). The applicant projects higher obstetric market share in nine zip code areas and no change in five zip code areas. Based on these estimated changes in market share and estimated discharges, AHC defines its expected total service area ("TSA") for WAH in White Oak. (DI #27, pp. 112-15) This service area consists of 16 zip code areas, 12 of which are among the 18 current top contributing zip code areas plus four additional zip code areas (two Laurel zip codes, the Burtonsville zip code, and an additional Silver Spring zip code) identified by AHC as the TSA for the relocated hospital's obstetric service. AHC does not expect six of the zip codes areas in its current service area to continue to be in the obstetric service area for the relocated hospital. (DI #103, Att. OB Excel Workbook)

AHC states that the female population aged 15-64[52] in the adjusted TSA increased 1.7%

[52] This is not the "child-bearing" female cohort traditionally used for obstetric bed need projection in Maryland health planning, which is women aged 15-44. WAH observes use rates of 0.3 to 0.5 obstetric

between 2009 and 2013. It also notes that obstetric discharges at WAH have declined 6.7% in the past five years. It calculates the number of obstetric discharges per female population in the adjusted TSA using two age tiers, the only important one, aged 15-44, which is gradually shrinking in the service area, and the negligible older group of women aged 45-64, a growing population but one that contributes less than one obstetric discharge per every 2,000 women. It finds that the obstetric discharge use rate in the adjusted TSA declined 8.2% from 2009 to 2013.

AHC assumes that use of obstetric services by the female population of the adjusted TSA will change course, increasing an average of 0.5% per year through 2023. It bases this assumption on projected growth in the newborn population by its demographic service, Nielsen Claritas. This trend of an increasing use rate, applied to a nearly static population,[53] is used to project a 5.4% increase in obstetric discharges in the adjusted TSA between 2013 and 2023 (described as an average annual growth rate of 0.5%). Finally, AHC assumes that the average length of stay ("ALOS") for obstetric discharges in 2023 will be 2.6 days, the ALOS observed in the adjusted TSA in 2013. At an assumed average annual bed occupancy rate of 65% (reported to be derived as a "conservative approximation of the average utilization for hospitals in Montgomery and Prince George's Counties), this produces a demand forecast of 84 obstetric beds for the adjusted TSA and a demand forecast of 78 beds for the nine Montgomery and Prince George's County hospitals that serve the bulk of these patients.[54] AHC uses market share assumptions derived from observations of market share of obstetric discharges[55] in the adjusted TSA to calculate that the nine subject hospitals provide only 76 beds to meet the demand from that service area. This two bed deficit, based on the 78 bed demand forecast is coupled with the bed reduction proposed for the relocated WAH to suggest an overall deficit of four beds for that segment of the adjusted TSA demand served by the nine hospitals. (DI #27, pp. 118-119)

Interested Party and Participating Entity Comments

The City of Takoma Park describes the obstetric PSA outlined by AHC in the application as "contrived." It is greatly concerned about the application's acknowledgement that "WAH will reduce obstetric inpatient service to Takoma Park residents." It specifically notes that AHC projects a 15 percentage point decline in WAH's obstetric service market share of zip code area 20912, Takoma Park after the relocation of WAH; a decline it describes as a "36 percent reduction in market share" of Takoma Park residents with "a high likelihood of being low income and/or underinsured."

Applicant's Response to Comments

AHC objects to the implication that it is "'abandoning" the community it serves" through this hospital relocation project, noting its history of providing care to the under-served, its relative

discharges per thousand women aged 45-64. This compares with use rates of 63.2 to 66.9 obstetric discharges per thousand women aged 15 to 44.

[53] Nielsen Claritas projects that the female population aged 15 to 64 will grow 0.6% between 2013 and 2023, with the 15 – 44 age group producing 99.6% of the OB discharges declining 4.6% over this same time period.

[54] A tenth hospital, Holy Cross Germantown, initiated obstetric services at its opening in October 2014.

[55] It appears that AHC uses 2013 market share assumptions, but does not specify the year.

high level of community benefit as a proportion of total operating expenses, as reported by HSCRC, and that the move of the hospital covers only six miles. The applicant states that its plan to maintain the Takoma Park campus and "invest in health care services for the benefit of the community" exemplifies its continued commitment to the provision of community benefit services.

Reviewer's Analysis and Findings

WAH's obstetric services volume has declined substantially in the past ten years, as shown in the following table, against a backdrop of more gradual overall demand for inpatient obstetric services in its home jurisdiction. WAH has had a small obstetric service relative to the two dominant Montgomery County OB providers, Holy Cross of Silver Spring and Adventist Shady Grove, which collectively account for about 85% of the obstetric average daily census among Montgomery County's five hospital providers of this service. From 2005 to 2009, WAH had an average daily obstetric census of 18.3 patients, about 13% of the Montgomery County hospital total. In the 2010 to 2014 period, WAH's average daily census of obstetric patients declined to 13.3, about 10.6% of the county hospital total.

Table VI-29: Obstetric Average Daily Census, WAH and All Montgomery County General Hospitals Providing Obstetric Services, 2005-2015

	2005	2006	2007	2008	2009	2010
Washington Adventist	16.8	17.2	20.6	17.7	19.1	17.1
Montgomery County Hospitals	133.8	143.9	143.9	143.7	143.8	139.6
	2011	**2012**	**2013**	**2014**		**2015**
Washington Adventist	13.1[1]	12.1[2]	11.7[2]	11.0[3]	12.5[4]	11.0[3]
Montgomery County Hospitals	129.6	120.5	117.4	119.2		

Sources: 2005-2010 ADC derived from HSCRC Discharge Data Base by MHCC; [1] AHC CON Application, October 4, 2013; [2] AHC response to completeness questions, October, 2014 (Q#30, page 2); [3] Projected by AHC, Modified CON application, Sept. 29, 2014; [4] Actual 2014 derived from HSCRC Discharge Data Base by MHCC.

Based on recent trends at WAH and in Montgomery County, it is appropriate for AHC to reduce its obstetric bed capacity at the proposed replacement hospital. The applicant projects that obstetric average daily census at the replacement hospital will gradually increase from 11 patients in 2015 to about 11.8 patients by 2023, based on the rate of change shown in the Statistical Projections accompanying its modified application. (DI#27, p. 117.) My analysis of the need for obstetric beds at WAH, described in detail later in this report, under the Need Criterion, yielded a smaller forecast of average daily census, a range of 8.6 to 10.4 obstetric patients by 2023. While my analysis indicates that a complement of 16 rather than 18 obstetric beds should be sufficient for WAH, this is not a difference that causes me concern. As noted, the unit design is for 22 beds in total, 18 designated for postpartum patients and four for medical/surgical patients. If my forecast of obstetric census is closer to the mark, AHC may operate the unit with a slightly different service mix. I conclude that substantial savings would not be achieved by requiring a redesign of the facilities. I also note that a general hospital obstetric and perinatal service near the White Oak site, at Laurel Regional Hospital, was closed in October 2015. Thus, a small additional increment of demand for obstetric services, not accounted for in the AHC analysis, may be expected to accrue to the replacement hospital as a result of this recent development.

The AHC analysis is generally reflective of Policy 4.1. Based on the probability distribution (cumulative normal) that has been traditionally used by MHCC for modeling demand for obstetric beds, an average daily census (ADC) of 11.8 patients would need 16.2 beds to confidently predict bed availability 90% of the time, 17.5 beds to assure that at least one bed would be available 95% of the time, and 19.8 beds for 99% confidence. At the high end of my forecast range, an ADC of 10.4 obstetric patients, 95% confidence would yield a need for 16 beds. Actual average bed occupancy achievable for obstetric beds in recent years is higher than this frequency distribution suggests because obstetric admissions have become more amenable to scheduling. I find that the applicant has quantified the need for the number of beds to be assigned to the obstetric service and its methods are reasonably consistent with the approach outlined in Policy 4.1.

With respect to the comments of the City of Takoma Park, I do not believe the work that AHC has done in analyzing the likely changes in its service area associated with the proposed relocation can be fairly described as "contrived." There is a logical basis for believing that the relocation will result in reduced market share for WAH in the zip code areas that have shorter travel times to the existing Takoma Park campus than they do to White Oak, higher market share in zip code areas that will have shorter travel times to the White Oak site than they do to the Takoma Park campus, and a market share that does not change or changes very little in zip code areas that are similar in travel times to both sites.

While it is true that average and median household incomes of some of the Silver Spring and other zip code areas that will be closer to a relocated WAH are higher than those of zip code areas that will be farther away from a relocated WAH, the distance of the proposed move and the assets that AHC is pledging to operate in Takoma Park do not support the scenario of adverse health outcomes experienced by an "abandoned" community, as the City asserts.

A broader analysis of AHC's projected likely obstetrics service area does not show major shifts in income status. Nielsen Claritas' estimates of 2014 zip code area household income obtained by MHCC indicate that 20912, Takoma Park, has the ninth highest average household income (and the thirteenth highest median income) among the 22 adjusted TSA zip code areas used by AHC in its OB service needs assessment. So it is not among the poorest of the poor.

Meanwhile, AHC is projecting that its market share of obstetric patients in two zip code areas with a lower average household income than Takoma Park (20705 and 20708) will increase as a result of WAH's proposed relocation, while the market share of seven other zip code areas with lower average or median household income will not change after the move (20706, 20740, 20770, 20903, 20740, 20770, and 20783.)

With respect to Takoma Park and obstetric services in particular, programs targeting the provision of prenatal care to the indigent will be operated on the Takoma Park campus that AHC proposes to maintain and reconfigure. Takoma Park residents and residents of nearby communities will have to travel further to deliver their babies at WAH and some are likely to choose alternative facilities, which is the basis for AHC's projection that market share in some of these areas will be lost to WAH as a result of its relocation. However, I believe that AHC is making a commitment to operating the Takoma Park campus that provides tangible benefits for indigent women in need of prenatal and other women's services in that area and that the impact of the relocation in this

regard is not one that offsets the benefits associated with having a modern general hospital in a more distant, but still relatively convenient, location.

For reasons noted above, I find that the application has met this standard.

(2) The Maryland Perinatal System Standards. ***Each applicant shall demonstrate the ability of the proposed obstetric program and nursery to comply with all essential requirements of the most current version of Maryland's Perinatal System Standards, as defined in the perinatal standards, for either a Level I or Level II perinatal center.***

AHC describes WAH as a provider of Level IIB Perinatal Services. This classification is outdated and the most recent iteration of the Maryland Perinatal System Standards, established in June 2014, no longer distinguishes sub-levels within Level II. Those standards describe Level II hospitals as having perinatal programs that:

> Provide specialty care to pregnant women and infants, as described by these standards (the Maryland Perinatal Systems Standards). These hospitals provide delivery room and acute specialized care for moderately ill infants ≥ 1500 grams and ≥ 32 weeks gestation with problems that are expected to resolve rapidly and are not anticipated to need subspecialty services on an urgent basis. Board-certified neonatal-perinatal medicine subspecialists have programmatic responsibility for the neonatal services. The neonatal services (special care nurseries) provide mechanical ventilation for up to 24 hours and/or continuous positive airway pressure. The neonatal services may provide limited pediatric subspecialty services. They do not provide emergent neonatal surgical specialty services. Maternal care is limited to term and preterm gestations of ≥ 32 weeks that are maternal risk appropriate. Board-certified obstetricians have responsibility for programmatic management of obstetrical services. These hospitals do not receive primary infant or maternal referrals.
> (*The Maryland Perinatal System Standards.* Revised June 2014. p.7)

AHC states that it has evaluated the service in the past three years, using a Maryland Institute of Emergency Medical Services Systems' ("MIEMSS") self-assessment tool and in consultation with MIEMSS staff, and operates the program of service in compliance with the Level II standards. In its application, AHC provides a recitation of the standards and an explanation regarding its compliance with each.

Reviewer's Analysis and Findings

Hospitals providing Level III or higher perinatal care are providers of neonatal intensive care unit ("NICU") services, a newborn service specifically regulated under Certificate of Need. WAH is not and does not propose to become a provider of NICU services. NICU service providers must be certified as referral centers for this service by MIEMSS. No mandatory certification requirements are applicable to Level I or II hospitals. I find that the application complies with the standard regarding the replacement hospital's Level II Perinatal Services.

(3) Charity Care Policy.

Each hospital shall have a written policy for the provision of charity care for uninsured and under-insured patients to promote access to obstetric services regardless of an individual's ability to pay.

(a) The policy shall include provisions for, at a minimum, the following:

(i) annual notice by a method of dissemination appropriate to the hospital's patient population (for example, radio, television, newspaper);

(ii) posted notices in the admissions office, business office and emergency areas within the hospital

(iii) individual notice provided to each person who seeks services in the hospital at the time of community outreach efforts, prenatal services, preadmission, or admission, and

(iv) within two business days following a patient's initial request for charity care services, application for medical assistance, or both, the facility must make a determination of probable eligibility.

(b) Public notice and information regarding a hospital's charity care policy shall be in a format understandable by the target population.

Applicant's Response

The applicant reiterated its discussion of the Charity Care Policy at COMAR 10.24.10.04A(2). I will address this standard in that section of this Recommended Decision.

(4) Medicaid Access. ***Each applicant shall provide a plan describing how the applicant will assure access to hospital obstetric services for Medical Assistance enrollees, including:***

(a) an estimate of the number of Medical Assistance enrollees in its primary service area, and

(b) the number of physicians that have or will have admitting privileges to provide obstetric or pediatric services for women and infants who participate in the Medical Assistance program.

Applicant's Response

In its application, AHC describes its partnerships with Mary's Center for Maternal and Child Care, Mobile Medical Care (or MobilMed), the Primary Care Coalition of Montgomery County, and Community Clinic, Inc., a federally qualified health center. These organizations provide access to health care for indigent, and many women who obtain prenatal care from these organizations often deliver their babies at WAH. AHC also notes that for nine years it has partnered with the Montgomery County Department of Health and Human Services' Maternity Partnership Program, which assists uninsured women in obtaining obstetric and gynecologic services. It states that this partnership relationship will continue post-project, with prenatal care taking place on the Takoma Park campus and delivery of babies taking place at the relocated hospital in White Oak. It states that it has the ability to provide care for 500 patients per year in this program.

The applicant describes the Women's Center program at WAH and its services, which are used by indigent women who have obtained access to services through the organizations noted in

the preceding paragraph. Program participants likely to deliver extremely premature babies are referred to other hospitals with NICU capabilities for delivery.

AHC identifies 4,459 obstetric discharges within WAH's current PSA in the latest available data year, 2,622 (59%) of whom were Medicaid enrollees. 876 of those – or 33% of the total Medicaid obstetric population – were treated at WAH. This comprised 87% of total WAH obstetric discharges. The applicant's analysis of this data for WAH's projected White Oak PSA shows that 58% of 4,077 obstetric discharges were Medicaid enrollees. AHC projects that WAH's proportion of Medicaid enrollees among obstetric patients will be similar to its current proportion, at 87.4%. The applicant reports that the WAH staff (including WAH employees) includes 23 maternal/fetal medicine or obstetrics and gynecology physicians and that 21 of these physicians participate in the Medicaid program. (DI#27, p.79)

Reviewer's Analysis and Findings

I find that the application is consistent with this standard.

(5) Staffing. ***Each applicant shall provide information on the proposed staffing, associated number and type of FTEs, projected expenses per FTE category and total expenses, for labor and delivery, postpartum, nursery services, and other related services, including nurse staffing, non-nurse staffing and physician coverage, at year three and at maximum projected volumes; if applicable, current staffing and expenses should also be included.***

AHC provided clinical staffing budgets for obstetric services for 2014, 2019, and 2023, itemizing staff FTEs by unit (labor & delivery, Nursery, OB, and OB Clinic) and providing average salary and total expenses by FTE category. It showed staffing declining over the next five years followed by a slight increase by 2023. In its modified application, AHC projected gradually increasing OB patient volume between 2014 and 2023. (See the discussion under Standard 1 of this SHP chapter above.) The following table summarizes the staffing budgets provided.

Table VI 30: Staffing and Expenses for OB and Perinatal Services at WAH (2014) and the Relocated WAH (2019 and 2023)

	2014	2019	2023
Total OB staff FTEs	80.1	79.3	81.6
Total Expense	$6.21M	$6.98M	$7.88M
Average Daily Census	11.0	11.3	11.8
FTEs per 100 Discharge Days	2.00	1.92	1.90

Source: DI # 27, Modified CON application, Sept, 2014, pp 80-81.

Reviewer's Analysis and Findings

I find that the application complies with this standard.

(6) Physical Plant Design and New Technology. ***All applicants must describe the features of new construction or renovation that are expected to contribute to improvements in patient safety and/or quality of care, and describe expected benefits.***

Applicant's Response

AHC identifies the following design features of the relocated WAH as contributing to improvements in patient safety and quality of care: all private rooms with standardized room set-up and design; electronic medical record access in all rooms and charting alcoves between rooms; advanced physical security systems for infant protection and patient safety; strategically located hand washing stations; "ample space" for accommodating and supporting families; labor and delivery rooms that include an "isolette zone" with appropriate support area; and postpartum rooms sized to accommodate "couplet care" (keeping mothers and infants together for the entire period of hospitalization.)

The applicant reports that the expected benefits of these design features are better infection and cross contamination control, better record keeping and charting, and fewer incidents in which patient safety is compromised leading to higher degrees of patient satisfaction and optimum patient outcomes. Beyond the obstetric unit itself, AHC notes that its design includes improvements in lighting, noise, and temperature control in its special care nursery and more access to natural light.

Reviewer's Analysis and Findings

I find that the applicant has met this standard.

Review Standards (7) through (14) of COMAR 10.24.12.

These standards are not applicable to this review. Each is specifically designed for the review of proposed new obstetric services. They include a standard for nursery services, community benefit planning, the source of patients, availability of physicians in non-metropolitan jurisdictions, designation of bed capacity for obstetric services, minimum admissions volume, impact on the health care system, and financial feasibility.

It is worth noting that the Obstetric Services Chapter's minimum volume standard for approval of a new hospital obstetric service in a metropolitan area is 1,000 admissions. WAH's program, while relatively small, is well within this standard.

(15) Outreach Program. ***Each applicant with an existing perinatal service shall document an outreach program for obstetric patients in its service area who may not have adequate prenatal care, and provide hospital services to treat those patients. The program shall address adequate prenatal care, prevention of low birth weight and infant mortality, and shall target the uninsured, under-insured, and indigent patients in the hospital's primary service area, as defined in COMAR 10.24.01.01B.***

Applicant's Response

AHC identifies the partnerships WAH has with programs that specifically seek out women in need of various types of assistance in obtaining adequate prenatal care and obstetric and perinatal services.

Reviewer's Analysis and Findings

AHC has demonstrated its commitment and service to low income and uninsured women in need of obstetric services and the role it plays in supporting the ability of those women to obtain prenatal care services from affiliated and partner organizations and programs.

I find that the application complies with this standard.

COMAR 10.24.11, State Health Plan for Facilities and Services: General Surgical Services.

.05A. General Standards.

The General Surgical Services chapter of the SHP, COMAR 10.24.11, guides CON reviews involving surgical facilities. That chapter supplements COMAR 10.24.10 ("Acute Care Hospital Services chapter") in the review of general hospital projects involving expenditures for surgical facilities, and provides that such hospital applicants "shall address all standards applicable to its proposed project" in both the acute care hospital services and the general surgical services chapters of the SHP "A hospital is not required to address standards in this Chapter that are completely addressed in its responses to the standards in COMAR 10.24.10."

AHC proposes to construct eight general and special operating rooms ("ORs") in the White Oak replacement hospital and two ORs dedicated to caesarean section ("C-section") procedures. It reports its current OR capacity to be eleven general and special purpose ORs and two C-section rooms. Several of the standards in the General Surgical Services chapter also appear in the Acute Care Hospital Services chapter, which AHC addressed in that section of the application. Those standards are COMAR 10.24.10.04A (1) *Information Regarding Charges,* .04A(2) *Charity Care Policy*, .04A(3) *Quality of Care*, and .04B(7) *Construction Cost of Hospital Space*, and .04B(13) *Financial Feasibility.* Therefore, the applicant does not need to address these same standards in this section.

(1) Information Regarding Charges.

Information regarding charges for surgical services shall be available to the public. A hospital or an ambulatory surgical facility shall provide to the public, upon inquiry or as required by applicable regulations or law, information concerning charges for the full range of surgical services provided.

Applicant's Response

The applicant referenced its discussion of *Information Regarding Charges* at COMAR 10.24.10.04A(1). I will address this standard in that section of this Recommended Decision.

(2) <u>Charity Care Policy.</u>

(a) Each hospital and ambulatory surgical facility shall have a written policy for the provision of charity care that ensures access to services regardless of an individual's ability to pay and shall provide ambulatory surgical services on a charitable basis to qualified indigent persons consistent with this policy. The policy shall have the following provisions:

(i) Determination of Eligibility for Charity Care. Within two business days following a patient's request for charity care services, application for medical assistance, or both, the facility shall make a determination of probable eligibility.

(ii) Notice of Charity Care Policy. Public notice and information regarding the facility's charity care policy shall be disseminated, on an annual basis, through methods designed to best reach the facility's service area population and in a format understandable by the service area population. Notices regarding the surgical facility's charity care policy shall be posted in the registration area and business office of the facility. Prior to a patient's arrival for surgery, facilities should address any financial concerns of patients, and individual notice regarding the facility's charity care policy shall be provided.

(iii) Criteria for Eligibility. Hospitals shall comply with applicable State statutes and HSCRC regulations regarding financial assistance policies and charity care eligibility. ASFs, at a minimum, must include the following eligibility criteria in charity care policies. Persons with family income below 100 percent of the current federal poverty guideline who have no health insurance coverage and are not eligible for any public program providing coverage for medical expenses shall be eligible for services free of charge. At a minimum, persons with family income above 100 percent of the federal poverty guideline but below 200 percent of the federal poverty guideline shall be eligible for services at a discounted charge, based on a sliding scale of discounts for family income bands. A health maintenance organization, acting as both the insurer and provider of health care services for members, shall have a financial assistance policy for its members that is consistent with the minimum eligibility criteria for charity care required of ASFs described in these regulations.

(b) A hospital with a level of charity care, defined as the percentage of total operating expenses that falls within the bottom quartile of all hospitals, as reported in the most recent Health Service Cost Review Commission Community Benefit Report, shall demonstrate that its level of charity care is appropriate to the needs of its service area population.

(c) A proposal to establish or expand an ASF for which third party reimbursement is available, shall commit to provide charitable surgical services to indigent patients that are equivalent to at least the average amount of charity care provided by ASFs in the most recent year reported, measured as a percentage of total operating expenses. The applicant shall demonstrate that:

(i) Its track record in the provision of charitable health care facility services supports the credibility of its commitment; and

(ii) It has a specific plan for achieving the level of charitable care provision to which it is committed.

(iii) If an existing ASF has not met the expected level of charity care for the two most recent years reported to MHCC, the applicant shall demonstrate that the historic level of charity care was appropriate to the needs of the service area population.

(d) A health maintenance organization, acting as both the insurer and provider of health care services for members, if applying for a Certificate of Need for a surgical facility project, shall commit to provide charitable services to indigent patients. Charitable services may be surgical or non-surgical and may include charitable programs that subsidize health plan coverage. At a minimum, the amount of charitable services provided as a percentage of total operating expenses for the health maintenance organization will be equivalent to the average amount of charity care provided statewide by ASFs, measured as a percentage of total ASF expenses, in the most recent year reported. The applicant shall demonstrate that:

(i) Its track record in the provision of charitable health care facility services supports the credibility of its commitment; and

(ii) It has a specific plan for achieving the level of charitable care provision to which it is committed.

(iii) If the health maintenance organization's track record is not consistent with the expected level for the population in the proposed service area, the applicant shall demonstrate that the historic level of charity care was appropriate to the needs of the population in the proposed service area.

The applicant referenced its discussion of *Charity Care Policy* at COMAR 10.24.10.04A(2). I will address this standard in that section of this Recommended Decision.

(3) <u>Quality of Care.</u>

A facility providing surgical services shall provide high quality care.

(a) An existing hospital or ambulatory surgical facility shall document that it is licensed, in good standing, by the Maryland Department of Health and Mental Hygiene.

(b) A hospital shall document that it is accredited by the Joint Commission.

(c) An existing ambulatory surgical facility shall document that it is:

(i) In compliance with the conditions of participation of the Medicare and Medicaid programs; and

(ii) Accredited by the Joint Commission, the Accreditation Association for Ambulatory Health Care, the American Association for Accreditation of Ambulatory Surgery Facilities, or another accreditation agency recognized by the Centers for Medicare and Medicaid as acceptable for obtaining Medicare certification.

(d) A person proposing the development of an ambulatory surgical facility shall demonstrate that the proposed facility will:

(i) Meet or exceed the minimum requirements for licensure in Maryland in the areas of administration, personnel, surgical services provision, anesthesia services provision, emergency services, hospitalization, pharmaceutical services, laboratory and radiologic services, medical records, and physical environment.

(ii) Obtain accreditation by the Joint Commission, the Accreditation Association for Ambulatory Health Care, or the American Association for Accreditation of Ambulatory Surgery Facilities within two years of initiating service at the facility or voluntarily suspend operation of the facility.

The applicant referred to its discussion of *Quality of Care* at COMAR 10.24.10.04A(3). I address this standard in that section of this Recommended Decision.

(4) <u>Transfer Agreements.</u>

(a) Each ASF and hospital shall have written transfer and referral agreements with hospitals capable of managing cases that exceed the capabilities of the ASF or hospital.

AHC states that it has a policy in place that provides guidelines for the transfer of patients either into or out of the hospital and addresses the appropriate methods of transport. This policy states that "the hospital will accept transfers from other health care facilities, and discharge and transfer patients to other facilities that are in accordance with state regulatory standards, payor considerations, and patient and/or family preference." (DI #27, Exh. 58).

(b) Written transfer agreements between hospitals shall comply with the Department of Health and Mental Hygiene regulations implementing the requirements of Health-General Article §19-308.2.

The applicant states that it has a policy in place that complies with Health-General Article §19-308.2 by providing guidelines governing the transfer of patients between hospitals in a medically appropriate manner and in accordance with the health care policies of the State.

I find that AHC complies with the standards regarding transfer agreements.

.05B. Project Review Standards.

(1) Service Area.

An applicant proposing to establish a new hospital providing surgical services or a new ambulatory surgical facility shall identify its projected service area. An applicant proposing to expand the number of operating rooms at an existing hospital or ambulatory surgical facility shall document its existing service area, based on the origin of patients served.

Applicant's Response

AHC states that WAH's service area for surgical services "does not differ materially" from the service area reported for inpatient MSGA services discussed at COMAR 10.24.01.08G(3)(b), Need. Adventist states that the new service area for the surgery program at the White Oak location will reflect and is similar to what it has projected for inpatient MSGA services. AHC notes that WAH's total service area for surgical services consists of 47 zip code areas, of which 19 are in Montgomery County, 23 in Prince George's County, and 5 in Washington, D.C.

The applicant reports that fifteen of those zip code areas account for 71% of surgical volume: seven are located in Montgomery County in Silver Spring and Takoma Park; seven are in Prince George's County in Beltsville, College Park, Hyattsville, Riverdale, and Lanham; and one zip code area contiguous to Maryland is located in the northeast quadrant of Washington, D.C.

The applicant proposes three fewer operating rooms.. The following table shows the current and proposed OR and Procedure Room complements for WAH.

Table IV-31: *Changes to Operating Room Inventory*
Before and After Project Completion

Type of Room	Current OR Inventory	After Project Completion
Mixed Use General Purpose ORs	8	6
Mixed Use Special Purpose ORs	3	2
Dedicated Cesarean Section ORs	2	2
Dedicated Cystoscopy Procedure Rooms	1	1
Dedicated Endoscopy Procedure Rooms	1	2

Source: DI #27, p. 86.

Interested Party and Participating Entity Comments

City of Takoma Park

The City of Takoma Park ("CTP" or "City") states a concern that the relocation of surgical services to WAH-White Oak "will reduce surgery service to Takoma Park residents, which is a great concern to the City." (DI #54, p. 25) CTP notes that the CON application indicates that the move of WAH to White Oak will decrease the market share and the use of surgical services by residents served in zip code area 20912 by 15%. (DI #27, p. 105) It concludes that this resulting decrease in market share for this zip code area represents a 25 percent reduction in market share for this zip code area (15% / 60.6% = 25%) resulting from the move to White Oak. CTP adds that "the residents left behind have a high likelihood of being low income and/or underinsured." (DI #54, p. 25)

Finally, the City Takoma Park states that, since WAH White Oak's service area for MSGA services is the same as that for surgical services, "Takoma Park area zip codes 20912, 20783, and 20782 will drop more than . . . forecast in the (CON) application." (DI #54, p. 25)

Applicant's Response to Comments

AHC responded to this critique by stating that its application and its answers to completeness questions explained its methodology for projecting market share, which took into account proximity and travel time, existing market share, and other factors. AHC referenced an excerpt from MHCC staff's December 4, 2014 completeness questions (DI#36), which stated (as part of a question asking the applicant to explain projected changes in market share in the WAH service area) that "Staff understands that there are multiple influences and that the weight attributed to each may vary by zip code, and that such projections involve both art and science." AHC said that it responded to this question with an explanation of its methodology and rationale for projecting changes in market share by zip code area in the format requested by MHCC staff. (DI#59, p.24)

Reviewer's Analysis and Findings

AHC has projected that the proposed relocation of WAH to White Oak will have an impact on the hospital's service area and the market share it commands in Takoma Park. (DI #27, p. 105) The applicant has projected that the zip code areas that lie on the southern end of the hospital's existing service area will be the most affected by the proposed relocation. Those localities include Takoma Park, Hyattsville, Silver Spring, Mount Rainier, Brentwood, Riverdale, and Washington, D.C.

I have reviewed the comments from City of Takoma Park regarding the negative impact that residents there will experience due to the proposed relocation of WAH's surgical facilities to White Oak. In considering these comments, I took into account that there are a number of factors that impact a patient's choice of when and where to have a surgical procedure. Insurance coverage, the type of surgical procedure needed, the surgeon, and the surgeon's preferred venue are all

among these factors.

Takoma Park has not demonstrated that patients will lack appropriate access to surgical facilities or lack a choice of surgical facility options if the proposed hospital relocation is implemented. Fewer Takoma Park residents may obtain surgical care at WAH if it relocates. However, that does not mean that they will be denied the availability and accessibility to needed surgical services. Six general hospitals provide surgical services in Montgomery County Prince George's County also has five general hospitals and D.C. has six. Most of these hospitals are not located at a great distance from the Takoma Park area and neither is the proposed replacement hospital in White Oak. Additionally, there are over one hundred licensed and certified ambulatory surgery centers operating in Montgomery and Prince George's Counties. Discussion of the impact of this proposed project on Takoma Park residents is discussed in depth in this Recommended Decision in section IV.A. under the *Adverse Impact* standard of the Acute Hospital Services chapter of the SHP and in section IV.F., *Impact on Existing Providers and the Health Care System.*

For reasons described above, there may be differences in interpretation of available data and resulting projections of utilization of surgical service by residents of the zip codes most impacted by the proposed project. However, there is no basis for finding that the applicant has failed to comply with this standard. Moreover, I am not convinced by the information provided by CTP that area residents will experience a lack of access to surgical services as a result of this project.

As the standard requires, the applicant has projected its expected surgical service area. The projected service area described by AHC is credible. I find that the applicant has complied with this standard.

(2) <u>Need - Minimum Utilization for Establishment of a New or Replacement Facility</u>.

An applicant proposing to establish or replace a hospital or ambulatory surgical facility shall demonstrate the need for the number of operating rooms proposed for the facility. This need demonstration shall utilize the operating room capacity assumptions and other guidance included in Regulation .06 of this Chapter. This needs assessment shall demonstrate that each proposed operating room is likely to be utilized at optimal capacity or higher levels within three years of the initiation of surgical services at the proposed facility.

(a) An applicant proposing the establishment or replacement of a hospital shall submit a needs assessment that includes the following:

(i) Historic trends in the use of surgical facilities for inpatient and outpatient surgical procedures by the new or replacement hospitals likely service area population;

(ii) The operating room time required for surgical cases projected at the proposed new or replacement hospital by surgical specialty or operating room category; and

(iii) In the case of a replacement hospital project involving relocation to a new site, an analysis of how surgical case volume is likely to change as a result of changes in the surgical practitioners using the hospital.

Applicant Response

The following table provides historic and projected use measures (CY 2011 – CY 2023) for the eight existing mixed use operating rooms at WAH in Takoma Park through 2019 and the six mixed use operating rooms proposed for White Oak from 2019 to 2023.

AHC states that the projected inpatient surgical volumes were calculated based on the historical cases per admission, the hospital's projected MSGA admissions, and the surgical minutes per case. (DI #27, p. 89) The applicant used WAH's CY 2013 inpatient surgery use as a basis for its forecast of use, observing a use rate of 29.9% of MSGA discharges for non-cardiac cases per discharge and 3.9% for cardiac cases per discharge. (DI #34, p. 26) In projecting outpatient surgery volumes, the hospital's projections were based on population growth adjusted for the migration of surgery cases to other settings, such as physician-owned surgical centers. Instead of using the general assumption in COMAR 10.24.11.06A(2)(a) of 25 minutes for an average turnaround time, AHC used 30 minutes. This assumption was based on the applicant's consultation with the project's health care planning and design team. (DI #34, p. 28)

Table IV-32: Washington Adventist Hospital
Historic and Projected Utilization of Mixed Use Operating Rooms, CY 2011-CY 2023

Calendar Year	Inpatient Cases	Outpatient Cases	Total Cases	Surgery Minutes-Inpatient	Inpatient Minutes/ Case	Surgery Minutes - Outpatient	Outpatient Minutes/ Case	Total Surgery Minutes	Turnaround Time Minutes[1]	Total Surgery Minutes	No. ORs Needed @ Optimal Capacity
	a	b	c = a+b	d	e = d/a	f	g = f/b	h = d + f	i = 30 * c	j =h + i	k=j/ (1,900[2]*60)
2011	2,675	3,359	6,034	224,692	84.0	216,598	64.5	441,290	181,020	622,310	5.5
2012	2,537	3,291	5,828	243,554	96.0	230,085	69.9	473,639	174,840	648,479	5.7
2013	2,509	3,067	5,576	213,205	85.0	260,583	85.0	473,788	167,280	641,068	5.6
2014	2,402	3,067	5,469	204,142	85.0	260,583	85.0	464,725	164,080	628,805	5.5
2015	2,366	3,098	5,464	201,027	85.0	263,189	85.0	464,216	163,901	628,117	5.5
2016	2,330	3,129	5,458	197,958	85.0	265,821	85.0	463,779	163,747	627,526	5.5
2017	2,287	3,160	5,447	194,376	85.0	268,479	85.0	462,855	163,420	626,275	5.5
2018	2,246	3,192	5,438	190,875	85.0	271,164	85.0	462,039	163,132	625,171	5.5
2019	2,269	3,223	5,492	192,783	85.0	273,875	85.0	466,658	164,764	631,422	5.5
2020	2,291	3,256	5,547	194,711	85.0	276,614	85.0	471,325	166,411	637,736	5.6
2021	2,314	3,288	5,602	196,658	85.0	279,380	85.0	476,038	168,075	644,113	5.7
2022	2,337	3,321	5,658	198,625	85.0	282,174	85.0	480,799	169,756	650,555	5.7
2023	2,361	3,354	5,715	200,611	85.0	284,996	85.0	485,607	171,454	657,061	5.8

[1]Average turnaround time of 30 minutes/case
[2]Optimal capacity of mixed use operating rooms at 80 percent of full capacity (1,900 hours/ year), as provided in COMAR 10.24.11.06A(1)(a)(ii).
Source: DI #27, p. 90; DI #34, p. 25.

AHC projects that WAH's inpatient case volume will continue to decline for the next three years, and by 16% over the eight-year period of 2011-2018. In contrast, outpatient surgical case volume is projected to return to growth in 2015, but not reach the annual case volume experienced in 2011 until 2023, a modest average increase of one per cent per year between 2016 and 2023.

The following table provides the historical utilization (CY 2011 – CY 2014) for the three existing special purpose (cardiac) operating rooms, and the projected utilization (CY 2019 – CY 2023) for the two special purpose (cardiac) operating rooms proposed for operation at the White Oak replacement hospital.

Adventist based the future projections for these two cardiac operating rooms on an optimal capacity of 1,188 hours per year for the two rooms, and an average turnaround time of 40 minutes per case. COMAR 10.24.11.06A(1)(c) provides that

> [t]he optimal capacity for a special purpose operating room is best determined on a case-by-case basis using information provided by an applicant regarding the population and/or facility need for each such operating room, the documented demand for each such operating room, and any unique operational requirements related to the special purpose for which the operating room will be used.

To support its projection of 1,188 hours per year for optimal capacity and a turnaround time of 40 minutes between cardiac surgery cases for the two cardiac surgery operating rooms, AHC states that it considered the historical experience of its cardiac surgery program, and the expertise of its design and medical planning team in determining that these were the most accurate measures to use in calculating the number of cardiac surgery operating rooms.

Table IV-33: Washington Adventist Hospital
Historical and Projected Utilization for Special Purpose (Cardiac) Operating Rooms
CY 2011 – CY 2023

Calendar Year	Inpatient Cases a	Total Cases B	Surgery Minutes - Inpatient c	Inpatient Minutes/ Case d = c/a	Total Surgery Minutes e	Turnaround Time Minutes[1] f = 40 * b	Total Surgery Minutes g = e + f	No. ORs Needed - Optimal Capacity h = g/(1,188*60)
2011	351	351	100,919	287.5	100,919	14,040	114,959	1.6
2012	342	342	95,313	278.7	95,313	13,680	108,993	1.5
2013	325	325	86,775	267.0	86,775	13,000	99,775	1.4
2014	311	311	83,050	267.0	83,050	12,447	95,497	1.3
2015	306	306	81,783	267.3	81,783	12,257	94,040	1.3
2016	302	302	80,534	266.7	80,534	12,070	92,604	1.3
2017	296	296	79,077	267.2	79,077	11,852	90,929	1.3
2018	291	291	77,652	266.8	77,652	11,638	89,290	1.3
2019	294	294	78,429	266.8	78,429	11,755	90,184	1.3
2020	297	297	79,213	266.7	79,213	11,872	91,085	1.3
2021	300	300	80,005	266.7	80,005	11,991	91,996	1.3
2022	303	303	80,805	266.7	80,805	12,111	92,916	1.3
2023	306	306	81,613	266.7	81,613	12,232	93,845	1.3

[1]*Average turnaround time of 40 minutes/case*
Source: DI #27, p. 90; DI #34, p. 25.

Similar to what it observed for inpatient surgical cases, AHC projects that the total number of cardiac cases and total surgical minutes will decrease from CY 2011 through CY 2018 (about 17.1%), with utilization modestly increasing after the relocation in CY 2019.

Reviewer's Analysis and Findings

AHC proposes to reduce the surgical capacity from eight mixed-use general purpose and three mixed-use special purpose ORs at the existing hospital in CY 2014, to six mixed-use general purpose and two mixed-use special purpose ORs at the replacement hospital, a reduction of three ORs. The number of dedicated C-section ORs proposed for the replacement hospital is two, unchanged from the current hospital inventory.

The reduction in surgical capacity is appropriate. WAH underutilized its eight general purpose operating rooms in recent years, with average utilization at approximately 70% of optimal capacity. The six general-purpose OR surgical suite proposed for White Oak is projected to operate at slightly over 90% of optimal capacity (defined as 1,900 hours/year for each of the six ORs) during the first four years of operation. This capacity use is based on relatively modest

assumptions in surgical case growth at the new location, about 4.1% overall (inpatient and outpatient) growth in OR time in the first four years

Table IV-34: Washington Adventist Hospital's Percentage of Optimal Capacity Used for Mixed Use Operating Rooms

Mixed Use Operating Rooms	Total Number Surgery Minutes a	Mixed Use Optimal Capacity b = 1,900[1] * 60	No. Mixed Use ORs c	% Optimal Capacity Used d = (a/b)/c
2011	622,310	114,000	8	68.2%
2012	648,479	114,000	8	71.1%
2013	641,068	114,000	8	70.3%
2014	628,805	114,000	8	68.9%
2015	628,117	114,000	8	68.9%
2016	627,526	114,000	8	68.8%
2017	626,275	114,000	8	68.7%
2018	625,171	114,000	8	68.5%
2019	631,422	114,000	6	92.3%
2020	637,736	114,000	6	93.2%
2021	644,113	114,000	6	94.2%
2022	650,555	114,000	6	95.1%
2023	657,061	114,000	6	96.1%

[1]Optimal capacity of mixed-use operating rooms at 80 percent of full capacity, which is 1,900 hours per year, as provided in COMAR 10.24.11.06A(1)(a)(ii).
Source: DI #27, p.90; DI #34, p.25 and COMAR 10.24.11.06.

From CY 2011 through CY 2014, the three cardiac ORs at WAH have seen a decline in use, from 54% of optimal capacity to 45%. From CY 2015 through CY 2018, the total number of surgery minutes for these ORs are projected to continue to decline by slightly over five percent. AHC projects stabilization of this trend and return to modest growth in the replacement hospital in 2019. Coupled with the reduction in OR capacity, this is projected to raise use of these two rooms to about 63% of optimal capacity (defined by the applicant as 1,188 hours/year for the two dedicated cardiac surgery ORs). The special purpose ORs will continue to be underutilized at the White Oak location, based on the SHP standard for general purpose rooms. However, the availability of the second cardiac room is appropriate for a cardio-thoracic program hospital, to assure adequate back-up capacity when needed.

Table IV-35: Washington Adventist Hospital's Percentage of Optimal Capacity Used for Special Purpose (Cardiac) Operating Rooms

Special Purpose (Cardiac) ORs	Total Number Surgery Minutes A	Special Purpose Optimal Capacity b = 1,188[1] * 60	No. Cardiac ORs c	% Optimal Capacity Used d = (a/b)/c
2011	114,959	71,280	3	53.8%
2012	108,993	71,280	3	51.0%
2013	99,775	71,280	3	46.7%
2014	95,497	71,280	3	44.7%
2015	94,040	71,280	3	44.0%
2016	92,604	71,280	3	43.3%
2017	90,929	71,280	3	42.5%
2018	89,290	71,280	3	41.8%
2019	90,184	71,280	2	63.3%
2020	91,085	71,280	2	63.9%
2021	91,996	71,280	2	64.5%
2022	92,916	71,280	2	65.2%
2023	93,845	71,280	2	65.8%

[1]Optimal capacity as reported by AHC for special purpose operation room, per COMAR 10.24.11.06A(1)(c).
Source: DI #27, P.90; DI #34, P.25.

Adventist has appropriately downsized surgical facility capacity in its proposed replacement hospital, bringing it in line with the decline it has experienced in the demand for OR time and the reasonable assumptions it has made about surgical service demand in the out years. I find that the proposed project is consistent with this standard.

(3) Need- Minimum Utilization for Expansion of Existing Facility.

This standard is not applicable to this project.

(4) Design Requirements.

Floor plans submitted by an applicant must be consistent with the current FGI Guidelines.

(a) A hospital shall meet the requirements in Section 2.2 of the FGI Guidelines.

Applicant's Response

The applicant provided floor plans for its surgical department.

(c) Design features of a hospital or ASF that are at variance with the current FGI Guidelines shall be justified. The Commission may consider the opinion of staff at the Facility Guidelines Institute, which publishes the FGI Guidelines, to help determine whether the proposed variance is acceptable.

Applicant's Response

The applicant states that its proposed facility does not include any design features that are at variance with the current FGI Guidelines.

Reviewer's Analysis and Findings Regarding Design Requirements.

Based on the applicant's assurance that the floor plans provided by AHC and the design feature of the proposed surgical suite are consistent with the requirements in the FGI Guidelines, and my conclusion that the plans appear consistent with the guidelines, I find that the applicant meets these standards.

(5) Support Services.
Each applicant shall agree to provide as needed, either directly or through contractual agreements, laboratory, radiology, and pathology services.

AHC states that the hospital currently provides and will continue to provide in-house services for laboratory, radiology, and pathology 24 hours-per-day. (DI #27, p. 92)

Reviewer's Analysis and Findings.

I find that AHC is consistent with this standard.

(6) Patient Safety.

The design of surgical facilities or changes to existing surgical facilities shall include features that enhance and improve patient safety. An applicant shall:

(a) Document the manner in which the planning of the project took patient safety into account; and

(b) Provide an analysis of patient safety features included in the design of proposed new, replacement, or renovated surgical facilities;

Applicant's Response

Adventist states that the current surgical department at WAH has a number of issues that the proposed project will address. These issues and the proposed solutions offered by AHC in the design of the replacement hospital are displayed in the following table.

Table IV-36: Surgical Facilities Design

Current Hospital	Replacement Hospital
Patients in the pre- and post-op areas must travel through a major public corridor to get to the operating rooms, which increases the risk for infection transmission and limits patient privacy.	The surgery suites will be directly connected with the post-anesthesia care unit ("PACU"). In addition, the Pre-Post procedure unit will be designed with more than half of the treatment spaces as enclosed private patient treatment spaces to enhance patient privacy and lower the risk of airborne infections. Staff will access this unit through an ICU-style breakaway door system designed for maximum observation and easy access to patients. (DI #27, pp. 48-49)
The existing facility pre-dates the 2008 version of the ASHRAE* Standard 170 that addresses Ventilation of Health Care Facilities and is referenced by the 2010 FGI Guidelines for Design and Construction of Health Care Facilities.	The new operating rooms will be designed to get the majority of equipment cords and gases off of the OR floor.
The current facility does not accommodate surgical booms that hold equipment and provide several types of outlets and gases in order to facilitate surgery, and staff has to maneuver around many electrical cords and outlets that can become a safety hazard resulting in tripping and injuries from falls.	The new ORs will place gases and outlets in strategic locations based on room standardization and patient orientation.
The existing ORs at Takoma Park do not meet current standards with regard to size. The largest existing OR is only 493 square feet (SF)**. The limited space within the existing ORs increases the potential for surgical field contamination. In a complex case that involves several surgical disciplines, the OR space becomes inadequate. With the introduction of new instrumentation and technology such as surgical microscopes and da Vinci® Robots, the current ORs present a challenge to surgeons and staff.	The eight ORs in the replacement hospital will include four rooms with 600 SF and four rooms at over 650 SF (DI #27, Exh 9) AHC states these eight ORs will be appropriately sized to handle state-of-the-art surgical equipment and booms.
As a result of the different sizes and arrangements for the ORs at Takoma Park, each room configuration has a differing capacity for supply and instrument storage. Since there is no standardized periodic automatic replenishment (PAR) level for supplies and equipment, there are delays in providing patient care. (DI #27, p. 48)	The surgical space in the replacement hospital will include standardized room sizes and shapes, which will result in better staff familiarity and orientation. AHC states that the configuration and design of the surgery department will "lead to efficiencies based on providing the correct supplies, instruments, and equipment at the right time during surgery."
The existing surgical department uses elevators outside this department to transport equipment and supplies to and from Central Sterile Services.	As designed, the Central Sterile Services in White Oak will have access to the Surgery department through a dedicated, direct elevator that will help reduce infection risk to patients and staff, and improve department efficiency.

*American Society of Heating, Refrigerating, and Air-Conditioning Engineers, a global society that focuses on building systems, energy efficiency, indoor air quality, refrigeration and sustainability within the industry. Available at: https://www.ashrae.org/about-ashrae.

**"[M]ost surgical suites built now in hospitals have an average OR size of at least 600 square feet versus the former standard of 400 square feet." *Healthcare Design*, May 31, 2007 "Trends in Surgery-Suite Design, Part One" http://www.healthcaredesignmagazine.com/article/trends-surgery-suite-design-part-one.

Reviewer's Analysis and Findings

The design of the proposed new surgical services department takes into account the safety of the patients and the physicians and staff who treat them. I find that AHC meets this standard.

(7) Construction Costs.

The cost of constructing surgical facilities shall be reasonable and consistent with current industry cost experience.

(a) Hospital projects.

(i) The projected cost per square foot of a hospital construction or renovation project that includes surgical facilities shall be compared to the benchmark cost of good quality Class A hospital construction given in the Marshall Valuation Service® guide, updated using Marshall Valuation Service® update multipliers, and adjusted as shown in the Marshall Valuation Service® guide as necessary for site terrain, number of building levels, geographic locality, and other listed factors.

(ii) If the projected cost per square foot exceeds the Marshall Valuation Service® benchmark cost, any rate increase proposed by the hospital related to the capital cost of the project shall not include:

1. The amount of the projected construction cost and associated capitalized construction cost that exceeds the Marshall Valuation Service® benchmark; and

2. Those portions of the contingency allowance, inflation allowance, and capitalized construction interest expenditure that are based on the excess construction cost.

Please see the discussion of *Construction Costs* at COMAR 10.24.10.04B(7).

(8) Financial Feasibility.

A surgical facility project shall be financially feasible. Financial projections filed as part of an application that includes the establishment or expansion of surgical facilities and services shall be accompanied by a statement containing each assumption used to develop the projections.

(a) An applicant shall document that:

(i) Utilization projections are consistent with observed historic trends in use of the applicable service(s) by the likely service area population of the facility;

(ii) Revenue estimates are consistent with utilization projections and are based on current charge levels, rates of reimbursement, contractual

adjustments and discounts, bad debt, and charity care provision, as experienced by the applicant facility or, if a new facility, the recent experience of similar facilities;

(iii) Staffing and overall expense projections are consistent with utilization projections and are based on current expenditure levels and reasonably anticipated future staffing levels as experienced by the applicant facility, or, if a new facility, the recent experience of similar facilities; and

(iv) The facility will generate excess revenues over total expenses (including debt service expenses and plant and equipment depreciation), if utilization forecasts are achieved for the specific services affected by the project within five years of initiating operations.

(b) A project that does not generate excess revenues over total expenses even if utilization forecasts are achieved for the services affected by the project may be approved upon demonstration that overall facility financial performance will be positive and that the services will benefit the facility's primary service area population.

As I previously mentioned, the service area for the general surgical services program will be similar to its MSGA service area. While AHC did not provide a response that directly addresses the *Financial Feasibility* standard in the General Surgical Services chapter, it provided a response that addresses the overall financial feasibility for the relocation of the hospital at COMAR 10.24.10.04B(1) and at COMAR 10.24.01.08G(3)(d), which is the appropriate level of consideration for this issue for this project.

I will discuss the project's compliance with this standard in my analysis of the project's consistency with COMAR 10.24.10.04B(13), *Financial Feasibility*, and with COMAR 10.24.01.08G(3)(d), *Viability of the Proposal*.

COMAR 10.24.17 State Health Plan for Facilities and Services: Specialized Health Care Services – Cardiac Surgery and Percutaneous Coronary Intervention Services

The proposed project will relocate an existing cardiac surgery and percutaneous coronary intervention ("PCI") service from Takoma Park to the White Oak area of Silver Spring. The State Health Plan chapter covering these services that was in effect when this application was filed was adopted in March 2004 and underwent some modification in 2009 and 2012. That plan made the following statement with respect to plan "applicability."

E. Applicability. This Chapter of the State Health Plan applies to:
(l) The establishment of new adult or pediatric cardiac surgery programs; and
(2) The establishment of percutaneous coronary intervention (PCI) programs.

A comprehensive update of the State Health Plan chapter for cardiac surgery and PCI services was established in August 2014, about one month before AHC submitted a modified CON

application and about 10 months after its initial application filing. This updated plan was a response to 2011 and 2012 legislation reforming regulatory oversight of cardiac surgery and PCI services in Maryland.

Given the timing of this application and the clear statement in the regulations in effect during the first ten months of this review that the regulations were only applicable to the establishment of new surgery or PCI programs, I am not considering these regulations or the updated regulations to be applicable in this project review. However, it is important to note that, at this time, there are no outstanding issues with respect to performance of WAH in the provision of the specialized cardiovascular treatment services regulated by MHCC. Under the 2012 legislation and the regulations adopted pursuant to that law, WAH and the other hospitals in Maryland that provide cardiac surgery and PCI services will be subject to periodic evaluation of their performance in providing these services, through a formal process called certificate of ongoing performance review. These reviews are scheduled to begin in 2016.

The nature of the proposed relocation is not one that would be anticipated to have an obvious impact on any other existing or proposed cardiac surgery or PCI programs. In Montgomery County, Suburban Hospital in Bethesda provides cardiac surgery and PCI services. Adventist Shady Grove Medical Center in Rockville provides emergency and elective PCI services and Holy Cross Hospital of Silver Spring provides emergency PCI only. In Prince George's County, Prince George's Hospital Center provides cardiac surgery and PCI services. Its cardiac surgery program has experienced very low case volume in recent years (an average of only 25 cases per year between 2008 and 2014) and the hospital is attempting to grow the program back to reasonable activity levels in a collaborative effort with the University of Maryland Medical System. MedStar Southern Maryland Hospital is a provider of both emergency and elective PCI services.

Statewide, after declining for over a decade, cardiac surgery case volume began growing at most hospitals providing this service in Maryland in 2013. Through 2014, WAH has not seen this change in the trend of declining cardiac surgery cases and case volume dipped below 300 cases at WAH in 2014. The current Cardiac Surgery and PCI Services chapter of the SHP, COMAR 10.24.17, requires hospitals providing this service to maintain a minimum volume of 200 cases per year.

One modification of surgical facilities proposed in this project that is related to the provision of cardiac surgery, and may also be related to the declining use of this service, is the designation of two operating rooms at the replacement White Oak hospital as cardiac surgery rooms, one less cardiac room than WAH currently operates in Takoma Park.

COMAR 10.24.07 State Health Plan for Facilities and Services: Overview, Psychiatric Services, and Emergency Medical Services

I considered the proposed project's compliance with the applicable standards in the Psychiatric Services section of COMAR 10.24.07. This chapter's provisions regarding psychiatric services are out of date due to changes in the use of psychiatric beds and the dramatic changes in the use of hospital psychiatric beds (especially with respect to average length of stay), as well as the role and scope of State psychiatric hospital facilities that have occurred since the chapter's development. I reviewed only those standards that are still relevant and applicable. The psychiatric standards were not the subject of comments filed by interested parties or the participating entity.

AHC's responses to this section reflect psychiatric services as they are currently provided in its 40-bed psychiatric unit at WAH, a general hospital, and as they would continue to be provided by Adventist Behavioral Health ("ABH"), also part of AHC, in a 40-bed unit at the Takoma Park campus, after the relocation of the general hospital to White Oak. The facility format will transition to a special hospital for psychiatric services at that time.

Standard AP 1a: Bed Need

The projected maximum bed need for child, adolescent, and adult acute psychiatric beds is calculated using the Commission's statewide child, adolescent, and adult acute psychiatric bed need projection methodologies specified in this section of the State Health Plan. Applicants for Certificates of Need must state how many child, adolescent, and adult acute psychiatric beds they are applying for in each of the following categories: net acute psychiatric bed need, and/or state hospital conversion bed need.

This standard requires an applicant to specify how many child, adolescent, and adult acute psychiatric beds it seeks so that the bed need for each age group can be assessed independently. AHC seeks to maintain its current program of acute psychiatric service in Takoma Park, which is limited to treating adults. The program operates 40 adult psychiatric beds and 40 adult beds will be relicensed as a special hospital for acute psychiatric services.

AHC addressed this *Psychiatric Bed Need* standard under the *Need* criterion, COMAR 10.24.01.08G(3)(b). Its response and my analysis and findings will be presented there.

Standard AP 2a: Procedures for Psychiatric Emergency Inpatient Treatment

All acute general hospitals with psychiatric units must have written procedures for providing psychiatric emergency inpatient treatment 24 hours a day, 7 days a week with no special limitation for weekends or late night shifts.

AHC has noted that the re-licensed unit will continue to provide emergency inpatient treatment 24 hours a day, seven days a week with no special limitation for weekdays or late night shifts. (DI #48, p. 2)

Reviewer's Analysis and Findings

If the project is approved, the licensure of the 40-bed psychiatric unit will change to special hospital – psychiatric that, while still part of AHC, will no longer be a psychiatric unit within an acute general hospital. AHC has agreed to comply with this standard, even though it technically is not applicable.

I find that AHC is consistent with this standard.

Standard AP 2b: Emergency Facilities

Any acute general hospital containing an identifiable psychiatric unit must be an emergency facility, designated by the Department of Health and Mental Hygiene to perform evaluations of persons believed to have a mental disorder and brought in on emergency petition.

Applicant's Response

AHC states that the Department of Health and Mental Hygiene has designated WAH as an Emergency Psychiatric Facility and that the proposed ABH Takoma Park special psychiatric hospital plans to retain this designation. (DI #48, p. 3) Licensed mental health professionals from ABH Takoma Park will perform face-to-face assessments of psychiatric patients on a 24 hours a day, seven days a week ("24/7") basis with no special time limitations on emergency petitions brought to the replacement WAH or to the Takoma Park special hospital. Mental health clinicians will determine emergency admission to the Takoma Park facility by performing assessments of prospective patients in accordance with Emergency Medical Treatment & Labor Act ("EMTALA") requirements.

Reviewer's Analysis and Findings

Although this standard, like AP2a (above), technically does not apply to a special hospital – psychiatric, AHC will continue with this designation after the 40-bed psychiatric unit's change in licensure.

The applicant satisfies this standard.

Standard AP 2c: Emergency Holding Beds

Acute general hospitals with psychiatric units must have emergency holding bed capabilities and a seclusion room.

Applicant's Response

AHC reports that, while the relicensed 40-bed acute psychiatric unit will not operate as part of an acute general hospital, Takoma Park will continue to have emergency holding beds and two seclusion rooms for use in emergency psychiatric situations. The applicant has proposed that the Emergency Department at the relocated WAH in White Oak will include a holding area for psychiatric evaluations, and that ABH staff will perform the psychiatric evaluations at the White Oak location. (DI #48, p. 3)

The special hospital – psychiatric unit will provide emergency inpatient treatment on a 24/7 basis with no special limitation for weekdays or late night shifts. The psychiatric unit at WAH is currently designated by DHMH as an Emergency Psychiatric Facility and the re-licensed unit will retain that designation. The relicensed acute psychiatric facility in Takoma Park will have emergency holding beds and seclusion rooms.

Reviewer's Analysis and Findings

Like AP2a and AP2b, this standard technically does not apply to a special hospital – psychiatric. Despite that, if the project is approved, AHC will continue to have emergency holding beds and two seclusion rooms for use in emergency psychiatric situations after the change in licensure of the psychiatric unit in Takoma Park.

I find that the applicant is consistent with this standard.

Standard AP 3a : Array of Services

Inpatient acute psychiatric programs must provide an array of services. At a minimum, these specialized services must include: chemotherapy, individual psychotherapy, group therapy, family therapy, social services, and adjunctive therapies, such as occupational and recreational therapies.

Applicant's Response

AHC states that pharmacotherapy, individual psychotherapy, group therapy, family therapy, social services and expressive therapies will be available to patients at the Takoma Park special hospital.

Reviewer's Analysis and Findings

I find that the application conforms to this standard.

Standard AP 3c: Psychiatric Consultation Services

All acute general hospitals must provide psychiatric consultation services either directly or through contractual arrangements.

Applicant's Response

Adventist states that WAH's existing behavioral health unit provides psychiatric consultation services through full- and part-time staff psychiatrists, and that this service will continue to be provided at WAH after the change in licensure of the unit in Takoma Park.

Reviewer's Analysis and Findings

I find that the applicant is consistent with this standard.

Standard AP 5: Required Services

Once a patient has requested admission to an acute psychiatric inpatient facility, the following services must be made available:

(i) intake screening and admission;
(ii) arrangements for transfer to a more appropriate facility for care if medically indicated; or
(iii) necessary evaluation to define the patient's psychiatric problem and/or
(iv) emergency treatment.

Applicant's Response

The applicant states that ABH Takoma Park's needs assessment clinical staff "will conduct the face-to-face evaluation to determine the psychiatric criteria and the most appropriate level of care for the patient, and will make the arrangements for an appropriate transfer only if the needed services are not available." (DI #48, p. 5) AHC notes that a physician will evaluate and determine whether a patient is medically stable to participate in psychiatric care. The applicant said that its needs assessment clinical staff will conduct these evaluations at both the Takoma Park and White Oak locations.

Reviewer's Analysis and Findings

I find the application to be consistent with this standard.

Standard AP 6: Quality Assurance

All hospitals providing care in designated psychiatric units must have separate written quality assurance programs, program evaluations and treatment protocols for special populations, including: children, adolescents, patients with secondary diagnosis of substance abuse, and geriatric patients, either through direct treatment or referral.

Applicant's Response

AHC states that WAH's existing psychiatric unit has a quality assurance program that is based upon the proposed ABH's performance improvement program. Adventist states that the "specific metrics are identified based upon the behavioral health patient population needs as well as accrediting and licensing body standards," and that these policies include the use of hospital-based inpatient psychiatric services core measures, readmissions, seclusion, restraint, outcomes, and other CMS requirements. (DI #48, p. 5) The applicant notes that the behavioral health unit has protocols and programming in place for co-occurring disorders such as substance abuse.

Reviewer's Analysis and Findings

The special hospital – psychiatric will, like the existing unit at WAH, have a written quality assurance program, program evaluations, and treatment protocols for special populations. I find that the application is consistent with this standard.

Standard AP 7: Denial of Admission Based on Legal Status

An acute general or private psychiatric hospital applying for a Certificate of Need for new or expanded acute psychiatric services may not deny admission to a designated psychiatric unit solely on the basis of the patient's legal status rather than clinical criteria.

Applicant's Response

AHC states that while it "is not proposing new or expanded psychiatric services, no individual will be denied psychiatric services based on one's legal status." (DI #48, p. 5)

Reviewer's Analysis and Findings

This standard, like others I have previously noted, technically is not applicable. Nevertheless, AHC has noted that it will continue to comply with its requirements.

I find that AHC is consistent with this standard.

Standard AP 8: Uncompensated Care

All acute general and private freestanding psychiatric hospitals must provide a percentage of uncompensated care for acute psychiatric patients which is equal to the average level of uncompensated care provided by all acute general hospitals located in the health service area where the hospital is located, based on data available from the Health Services Cost Review Commission for the most recent 12-month period.

Applicant's Response

AHC reports that WAH's 40-bed inpatient psychiatric unit provided approximately 19.5% uncompensated care for acute psychiatric patients during FY 2014. (DI #48, p. 6)

Reviewer's Analysis and Findings

I note that HSCRC reports each hospital's uncompensated care (the total amount of uncompensated care provided as a percentage of gross patient revenue) in total for a hospital, not by specialty or service line. The following table provides the percentage of total uncompensated care reported by acute care hospitals in Montgomery County and the State. As shown below, WAH provided the highest proportion of total uncompensated care (12.2%) in Montgomery County for FY 2014.

WAH's 12.2% level of uncompensated care compares favorably to the 8.1%[56] average of uncompensated care provided by the five acute care hospitals in Montgomery County. The second highest total was Holy Cross Hospital's 9.3%. The average uncompensated care amount provided by all hospitals within Maryland was 9.9%.

[56] Though not included in the table above, the Adventist Healthcare Behavioral Health & Wellness Services facility in Rockville provided approximately 9.8% uncompensated care for FY 2014.

Table IV-37: Total Uncompensated Care
Montgomery County Hospitals

Acute Care General Hospitals in Montgomery County, FY 2014 ($000s)	Bad Debt a	Charity Care b	Gross Patient Revenue c	Total Uncompensated Care % (a+b)/c
Washington Adventist Hospital	$ 22,529	$ 9,217	$ 260,310	12.2%
Holy Cross Hospital	15,487	30,739	497,855	9.3%
Shady Grove Medical Center	22,210	10,238	404,445	8.0%
MedStar Montgomery Medical Center	4,631	4,722	176,387	5.3%
Suburban Hospital	8,267	4,501	298,919	4.3%
Total - Montgomery County	$ 73,124	$ 59,418	$ 1,637,917	8.1%
Total - State of Maryland	$ 316,025	$ 219,419	$ 5,428,604	9.9%

Source: HSCRC 2014 Annual Report on Uncompensated Care

Reviewer's Analysis and Findings

I find that Adventist's inpatient psychiatric unit at Takoma Park provides in excess of the average level of uncompensated care provided by all of the acute general hospitals located in Montgomery County, and that the applicant is consistent with this standard.

Standard AP 12a: Clinical Supervision
Acute inpatient psychiatric services must be under the clinical supervision of a qualified psychiatrist.

AHC states that a board-certified psychiatrist will direct the multidisciplinary mental health professional team providing care at the unit when it is relicensed as special hospital – psychiatric. The applicant notes that the medical directors at WAH and at the proposed Takoma Park special hospital will evaluate and review the work and recommendations of all staff psychiatrists

Reviewer's Analysis and Findings

AHC is consistent with this standard.

Standard AP 12b: Staffing Continuity
Staffing of acute inpatient psychiatric programs should include therapists for patients without a private therapist and aftercare coordinators to facilitate referrals and further treatment. Staffing should cover a seven-day per week treatment program.

AHC states that the psychiatric patients at the proposed ABH Takoma Park "will receive therapeutic programming which provides active treatment in compliance with standard of practice, seven days per week." (DI #48, p. 7) The applicant notes that each patient's therapist will be responsible for coordinating aftercare planning, which includes making the appointments and referrals to outpatient providers, and will be responsible for ensuring that an aftercare plan with recommendations is transmitted to the patient's next level of care provider.

The applicant reports that the inpatient psychiatric program at the relicensed special hospital-psychiatric will be directed by a board-certified psychiatrist and the staff will include therapists who will have responsibility for the patient's aftercare planning and referrals.

Reviewer's Analysis and Findings

The application is consistent with this standard.

Standard AP 13: Discharge Planning and Referrals

Facilities providing acute psychiatric care shall have written policies governing discharge planning and referrals between the program and a full range of other services including inpatient, outpatient, long-term care, aftercare treatment programs, and alternative treatment programs. These policies shall be available for review by appropriate licensing and certifying bodies.

AHC states that it will follow discharge planning and referral policies in place "to ensure that the patient's next level of care needs are met through a variety of services that include inpatient, outpatient, partial hospitalization, aftercare treatment programs, and other alternative treatment programs." (DI #48, p. 7) The applicant will continue to make these policies available for review by the appropriate licensing and certification bodies.

Reviewer's Analysis and Findings

I find that the application is consistent with this standard.

B. COMAR 10.24.01.08G(3)(b) Need.

The Commission shall consider the applicable need analysis in the State Health Plan. If no State Health Plan need analysis is applicable, the Commission shall consider whether the applicant has demonstrated unmet needs of the population to be served, and established that the proposed project meets those needs.

The question of the need for this project is also addressed at COMAR 10.24.10.04B(5), and at COMAR 10.24.01.08G(3)(c), both of which deal with aspects of cost effectiveness.

Applicant's Response

AHC: The Need for Replacement and Relocation of WAH

In evaluating its options for modernizing WAH, AHC compares alternative approaches

using a set of seven clusters of objectives it wants to satisfy. AHC views the optimal alternative as one that: (1) would ensure positive financial feasibility and viability; (2) improve facility infrastructure, access and operability; (3) have the ability to improve or achieve regulatory compliance; (4) have an ability to improve the clinical experience for both inpatients and outpatients; (5) have positive community implications; (6) have minimal impact on operations; and (7) provide potential to expand services.

AHC outlines its analysis of the option of phased on-site replacement at the existing hospital campus and the option of relocation and replacement on a new campus, noting that it examined the ability of these options to achieve its primary project objectives and their costs. The applicant concludes that the on-site replacement option would be comparable in cost to the relocation option and highly disruptive to ongoing operations over a substantial time period while failing to address the problems presented by the small size of the campus and its location. (DI #27, p.32-38 and Exh. 27-31).

AHC: The Need for Beds at the Replacement Hospital:
Medical/Surgical/Gynecological/Addictions Beds

This proposed replacement hospital is designed to provide 152 Medical/Surgical/ Gynecological/Addictions ("MSGA") beds in private rooms, with 124 beds for general medical/surgical care and 28 for intensive care. AHC reports that the existing WAH has a physical capacity for 239 MSGA beds, 205 general medical/surgical beds in 136 rooms and 34 intensive care beds in 33 rooms. In the current fiscal year, WAH is licensed for 169 MSGA beds. AHC notes that through this replacement hospital project, it is proposing an 87-bed reduction in physical MSGA bed capacity, a 17-room reduction in MSGA patient rooms, and a physical bed capacity for MSGA beds that is 17 beds fewer than its current licensed MSGA bed capacity. (DI #27, vol. 2, Exh. 1, Table A)

Adventist HealthCare, Inc. notes that its MSGA bed need projections involve three general steps: (1) defining the service area of the replacement hospital; (2) establishing appropriate assumptions for forecasting demand for beds by the service area population; and (3) projecting bed need within the Washington Adventist Hospital/White Oak total service area ("TSA"). AHC determined that the existing hospital's CY2013 MSGA primary service area consisted of 13 zip code areas, six located in Montgomery County, six located in Prince George's County, and one located in the District of Columbia. AHC concludes that 43 zip code areas accounted for 85% of WAH's 2013 MSGA discharges, with 13 located in Montgomery County, 21 located in Prince George's County, one in Howard County, and eight located in the District of Columbia. AHC refers to this as WAH's total service area or TSA. (DI #27, pp. 101, 106)

Recognizing that even a short move of approximately six miles will have an impact on the current service area, AHC defines the relocated hospital's service area by considering location of the replacement hospital, proximity to other hospitals, drive times, major streets and highways, current market share of other providers, and physician relationships. AHC states that it: (1) first identified the proximity of the zip code areas in terms of drive time and distance to all acute care hospital providers; analyzed the relationship between current market share and distance or travel time to the zip code areas; and forecast the expected shift in market share that would result from

the proposed replacement hospital. It notes that it recognized both the distance and its current market presence within each zip code area. (DI #27, pp. 101-106)

The applicant states that all of the market dynamics above were considered and weighted into the adjustment, but due to the unique characteristics of each zip code area, a standard weighting formula was not applied to avoid flawed results. (DI #34, pp. 32-33) AHC states that it then identified the primary and secondary service area zip code areas for the relocated hospital, based on the estimated discharges that would have resulted from the shift in market share. As a result of this analysis, AHC determined that moving to the White Oak location would tighten WAH's current service area, reducing the number of TSA zip code areas from 43 to 33. AHC does not identify any new service area zip code areas that would result from the relocation. (DI #27, p. 106)

AHC reports that it performed a bed need analysis for this redefined service area, first considering recent discharge rate trends. AHC notes that MSGA discharges have declined in its expected White Oak service area by 10.7% between 2009 and 2013 with Medicare[57] discharges decreasing by 4.6% since CY2009 and non-Medicare discharges declining by 15.7%. The result has been a decline in the overall discharge rate (use rate) from 72.9 to 62.5 discharges per thousand adult population. AHC cites four factors underlying this decline in the MSGA use rate: (1) a shift from the inpatient to the outpatient setting for diagnosis and treatment of some conditions; (2) an increase in observation stays, substituting for admission of such patients for short, typically one-day, inpatient stays; (3) a loss of insurance coverage by patients due to poor economic conditions; and (4) an increased emphasis by payers and regulators on reducing readmission of patients recently discharged from the hospital. (DI #27, pp. 106-107)

The applicant states that, in addition to recognizing historic trends, it also considered the potential for changes due to the Affordable Care Act, and related health care reform legislation and the health of the baby boom generation. AHC assumes an annual decline in WAH's service area population use rate of five percent for the years 2014 through 2016, and a flattening of the use rate after 2016 through 2023. (DI #27, pp. 108-109 and DI #34, p. 36) AHC's resulting projected MSGA discharge rate, by age, for 2023 is as follows:

Table 38, AHC Use Rate Estimate and Projection by Age Cohort Originating in WAH's TSA

Ages	2013	2023	Total Change	Annual Change
15 - 44	23.1	19.6	-15.0%	-1.6%
45 - 64	63.4	53.9	-15.0%	-1.6%
65 - 74	133.3	113.8	-14.6%	-1.6%
75+	287.9	248.9	-13.6%	-1.4%
Total	**62.5**	**60.4**	**-3.4%**	**-0.3%**

Source: DI #27, p. 109.

[57] In AHC's analysis, MSGA patients over 65 were grouped into Medicare, and patients aged 15-64 into non-Medicare.

AHC notes that it made the following assumptions about population change in the service area using Nielsen Claritas population estimates and projections.

Table 39: AHC Population Estimates and Projections Originating in WAH's TSA

Ages	2013	2023	Total Change	Annual Change
15 - 44	453,329	441,124	-2.7%	-0.3%
45 - 64	280,566	312,681	11.4%	1.1%
65 - 74	72,949	123,271	69.0%	5.4%
75+	55,269	71,399	29.2%	2.6%
Total	**862,113**	**948,475**	**10.0%**	**1.0%**

Source: DI #27, p. 109.

The applicant's projected use rates, applied to the projected population by AHC, yielded a total service area projection of 57,317 MSGA discharges in CY2023, an increase of 6.3% (3,409 discharges) over the 10-year period. AHC projects that total Medicare discharges (patients 65 and older) will increase from 25,638 in CY2013 to 31,801 in CY2023, an increase of 24.0%, and that total non-Medicare discharges (patients 15 through 64) would decline from 28,270 in CY2013 to 25,516 in CY2023, a drop of 9.7%, as detailed in the following table.

Table 40: AHC MSGA Discharge Projections by Age Cohort Originating in WAH's TSA

Ages	2013	2023	Total Change	Annual Change
15 - 44	10,472	8,662	-17.3%	-1.9%
45 - 64	17,798	16,854	-5.3%	-0.5%
65 - 74	9,727	14,033	44.3%	3.7%
75+	15,911	17,768	11.7%	1.1%
Total	**53,908**	**57,317**	**6.3%**	**0.6%**

Source: DI #27, p. 109

AHC notes that it next analyzed average length of stay ("ALOS") trends over the past five years[58] in the expected service area for Maryland hospitals that serve the area and found that ALOS for non-Medicare patients had increased an average of 12.4% for non-Medicare patients, to 4.6 days, and 1.5% for Medicare patients, to 5.2 days. AHC did not project further increases in ALOS. It projects patient days for the total service area ("TSA") using the 2023 projected discharges and the most recent ALOS by the two payer groups, Medicare and non-Medicare. The applicant then divides the projected patient days by 365 to project MSGA average daily census ("ADC") and by a target occupancy rate of 80% to arrive at a projection of MSGA bed need for the TSA in 2023. AHC projects a need for 974 beds for Maryland hospitals that serve the area. (DI #27, pp. 110-12)

[58] Years 2009 through 2013.

AHC assumes that 20.2% of this bed need (196 beds) would be met by hospitals outside Montgomery and Prince George's Counties, based on historic experience, leaving the hospitals within those two jurisdictions with demand for 778 MSGA beds originating from the TSA. Based on each hospital's FY 2015 licensed MSGA bed complement (1,501 beds in total) and the proportion of each hospital's 2013 MSGA patient days originating from the TSA, AHC estimates that 756 beds in the two county's hospitals would serve the demand for MSGA beds originating in the TSA. AHC makes a further adjustment for the proposed 19-bed reduction in WAH's MSGA beds and the portion of WAH's days that originated in the service area, as shown in the following table. At its bottom line, AHC projects the need for an additional 36 MSGA beds by 2023 to serve the demand originating in the TSA. (DI #27, pp. 110-12)

Table 41: Adventist HealthCare Projected MSGA Bed Need for the Washington Adventist Hospital White Oak Expected Service Area

	Projected CY 2023 Discharges	Estimated Average Length of Stay	Projected Patient Days	Average Daily Census	Target Occupancy Rate	Bed Need
Medicare	31,801	5.2	166,565			
Non-Medicare	25,516	4.6	117,826			
Total			**284,391**	**779**	**80%**	**974**
CY 2013 Market Share Leaving Montgomery and Prince George's Counties (20.2%)						(196)
MSGA beds Needed in Montgomery and Prince George's Counties						778
Montgomery and Prince George's Hospital Beds Serving AHC/WAH-WO Expected Service Area						756
Additional MSGA Beds Needed based on 2015 Licensed Beds						22
Proposed WAH MSGA bed reduction						19
Adjusted for Percent of WAH Patient Days from Service Area (75.9%)						14
Net Bed Need						**36**

Source: DI #27, pp. 111-12.

AHC: Obstetric Beds[59]

AHC notes that its proposed replacement hospital is designed to provide 18 postpartum beds for obstetric patients, all in private rooms. AHC reports that WAH currently has a physical capacity for 30 obstetric beds in 20 rooms. For licensure purposes, WAH currently allocates 21 of its total 230 acute care beds to obstetric service.

The applicant assumes that use of obstetric services by the female population of an "adjusted" TSA will increase by an average of 0.5% per year through 2023. This service area consists of 16 zip code areas, 12 of which are among the 18 current top contributing zip code areas for obstetric patients that AHC reported to have cumulatively accounted for 85% of total obstetric discharges plus four additional zip code areas (two Laurel zip codes, the Burtonsville zip code,

[59] I summarized AHC's response to the need for obstetric services under COMAR 10.24.12.04(1), the need standard in the Acute Hospital Inpatient Obstetric Services Chapter, *supra*, p.86.

and an additional Silver Spring zip code) described by AHC as the service area for the relocated hospital's obstetric service. AHC does not expect six of the zip codes areas in its current service area to continue to be in the obstetric service area of the relocated hospital.

AHC bases its growth assumption for obstetric services on projected growth in the newborn population by its demographic service, Nielsen Claritas. A 5.4% increase in obstetric discharges in the adjusted TSA between 2013 and 2023 (described as an average annual growth rate of 0.5%) is projected. AHC assumes that the average length of stay for obstetric discharges in 2023 will be 2.6 days, the ALOS observed in the adjusted TSA in 2013. AHC assumes an average annual bed occupancy rate of 65%, characterized by AHC as a "conservative approximation of the average utilization for hospitals in Montgomery and Prince George's Counties,"[60] producing a demand forecast for 84 obstetric beds for the adjusted TSA and a demand forecast of 78 beds for the nine Montgomery and Prince George's County hospitals that serve the bulk of these patients. AHC uses market share assumptions[61] in the adjusted TSA to calculate that the nine subject hospitals provide only 76 beds to meet the demand from that service area. This two bed deficit, based on the 78 bed demand forecast, is coupled by AHC with the bed reduction proposed for the relocated WAH to suggest an overall deficit of four beds for that segment of the adjusted TSA demand served by the nine hospitals. (DI #27, pp. 117-19)

AHC: The Need for Emergency Department Treatment Capacity[62]

AHC reports that it designed the proposed replacement hospital to provide 32 Emergency Department treatment spaces. WAH currently operates 26 treatment spaces. The replacement facility is also proposed to contain two mental health evaluation rooms in the ED and 12 short-stay clinical decision rooms for observation, located adjacent to the ED.

AHC identifies an expected ED service area for the White Oak location, which represents a northward shift from the current hospital's ED service area, taking in two additional zip code area lying to the north of its current service area, one in Montgomery County and one in Howard County, and leaving out four zip code areas in WAH's current ED service area, all near the south end of the service area. (DI #27, pp. 54-57)

The applicant projects modest growth in ED visits through 2019 and annual growth of 2% after putting the White Oak replacement hospital into operation. It attributes this expected growth in service volume to the White Oak site's relatively better accessibility and the relatively higher proportion of elderly and indigent persons in the White Oak community (including Hyattsville and Langley Park). AHC projects an ED visit volume of 49,100 ED visits in 2020. The applicant states that its proposal to develop an Emergency Department with 32 treatment spaces falls within the ACEP guideline of 25 to 33 spaces for an ED with 40,000 to 50,000 annual visits. (DI #38, p.53)

[60] AHC's response to October 15, 2014 completeness questions (DI #34, p. 21)
[61] It appear that AHC uses 2013 market shares but does not specify the year.
[62] I summarized AHC's response to the need for ED treatment spaces under COMAR 10.24.10.04B(14), the project review standard regarding Emergency Department Treatment Capacity and Space in the Acute Hospital Services Chapter, *supra,* p.71.

AHC: The Need for Surgical Facilities[63]

AHC proposes to construct eight general and special operating rooms in the White Oak replacement hospital and two ORs dedicated to caesarean section procedures. It reports a current OR capacity of eleven general and special purpose ORs and two C-section rooms

Adventist expects that the service area for surgical patients at the replacement WAH will be similar to the service area for MSGA services. AHC states that it calculated projections of inpatient surgical volume based on the observed ratio of cases per admission, the hospital's projected MSGA admissions, and observed surgical minutes per case. (DI #27, p. 89 and DI #34, p. 26) In projecting outpatient surgery volume, projections were based on population growth adjusted for the migration of surgery cases to other settings, such as physician-owned surgical centers. Instead of using the general assumption in COMAR 10.24.11.06A(2)(a) of 25 minutes for an average turnaround time, AHC used 30 minutes. The applicant states that it made this assumption based on consultation with the project's health care planning and design team. (DI #34, p. 28)

AHC projects that WAH's inpatient case volume will continue to decline for the next three years, and by 16% over the seven-year period of 2011-2018. In contrast, outpatient surgical case volume is projected to return to growth in 2015, but not reach the annual case volume experienced in 2011 until 2023, an average increase of one per cent per year between 2016 and 2023.

AHC: The Need for Acute Psychiatric Beds

AHC states that WAH's current total service area ("TSA") for its 40-bed inpatient psychiatric unit consists of 50 zip code areas that account for 85.2% of discharges from the unit based on data from CY 2013, with 24 zip code areas located in Montgomery County, 18 in Prince George's County, and eight in the District of Columbia. AHC reports that the data shows that the primary service area ("PSA") consists of 18 zip code areas that account for 61.2% of discharges, which include 11 in Montgomery County and seven in Prince George's County. Two PSA zip code areas accounted for over 100 discharges each: 20912 (Takoma Park), with 115 discharges' and 20910 (Silver Spring), with 109 discharges. The remaining localities in the PSA include Hyattsville, Silver Spring, Rockville, Germantown, Gaithersburg, Greenbelt, Lanham, Riverdale, and College Park. (DI #48, pp. 8-10)

AHC is not proposing to relocate and replace the existing WAH psychiatric facilities in White Oak, but to leave them in place in Takoma Park. AHC states that, since Adventist Behavioral Health will operate the inpatient psychiatric beds as a special hospital for psychiatric services at the current Takoma Park site, the psychiatric bed need analysis using CY 2013 WAH's TSA for the psychiatric unit, with no adjustments for service area or market share, is appropriate. (DI #48, p. 11)

The following table provides AHC's assessment of the recent historical utilization for

[63] I summarized AHC's response to the need for operating rooms earlier in my review of the project's compliance with COMAR 10.24.11.05B(2), the General Surgical Services Chapter, *supra*, p.101.

inpatient psychiatric beds operating at acute care hospitals in Montgomery and Prince George's County.[64] During the five year period shown, acute psychiatric discharges in this setting dropped by 9.0%.

Table IV-42: AHC: Acute Care Hospitals in Montgomery and Prince George's County Acute Psychiatric Patient Discharges CY 2009 – CY 2013

Hospital	2009	2010	2011	2012	2013	5-Year Change
Washington Adventist	1,972	1,757	1,703	1,670	1,564	-20.7%
Holy Cross Silver Spring*	43	85	96	82	64	48.8%
MedStar Montgomery	1,213	1,234	1,223	1,123	1,054	-13.1%
Adventist Shady Grove*	38	42	29	38	36	-5.3%
Suburban	1,075	1,189	1,376	1,254	1,247	16.0%
Total – Montgomery Co.	4,341	4,307	4,427	4,167	*3.965*	*-8.7%*
Laurel Regional	764	800	892	719	793	3.8%
Prince George's	1,266	1,341	1,400	1,349	1,304	3.0%
MedStar Southern Maryland	1,280	1,289	1,221	1,057	907	-29.1%
Fort Washington*	7	6	8	4	5	-28.6%
Doctor's Community*	15	16	13	6	7	-53.3%
Total – Prince George's Co.	3,332	3,452	3,534	3,135	3,016	-9.5%
Total – Both Counties	7,673	7,759	7,961	7,302	6,981	-9.0%
Annual Change		1.1%	2.6%	-8.3%	-4.4%	

Source: DI #48, p. 12

*These general hospitals do not operate organized acute psychiatric programs and are only included here to provide a complete picture of demand. They account for less than two percent of the two-county area hospitals' total discharges.

[64] I note that Adventist Behavioral Health's special hospital for acute psychiatric services in Rockville is the two-county area's largest psychiatric hospital service provider with 107 beds. In contrast, the seven general hospitals in Montgomery and Prince George's County with acute psychiatric units, which AHC focuses on in its analysis, currently operate a total of 152 licensed acute psychiatric beds. The Department of Health and Mental Hygiene has allowed Adventist Behavioral Health's Rockville facility and a 15-bed special hospital on the Eastern Shore to operate under a single special hospital license. On a combined basis, these two facilities have seen utilization peak, in recent years, at just under 40,000 patient days in 2012. In 2014, they are reported to have provided, on a combined basis, 33,101 days of patient care, a decline of 16% since 2012. On a proportional basis, given the bed capacity of these facilities, this most recent use suggests that the Rockville hospital may have operated at an occupancy rate of approximately 74%. MHCC Annual Survey of General and Special Hospital Services and OHCQ licensure records.

AHC reports that WAH's 40-bed psychiatric unit experienced a 21% drop in acute psychiatric patient discharges from CY 2009 through CY 2013. In Montgomery County, Suburban Hospital's psychiatric unit had strong growth in demand over this time period (16.5%) but MedStar Montgomery Medical Center saw use decline (-13.1%). In Prince George's County, Dimension's two hospital units saw modest growth (3 to 4%) while MedStar's Clinton hospital had the sharpest decline in psychiatric patients (29.1%). As can be seen in the above table, the decline is demand for psychiatric hospitalization over this period was concentrated in two years, 2012 and 2013. (DI #48, p.12)

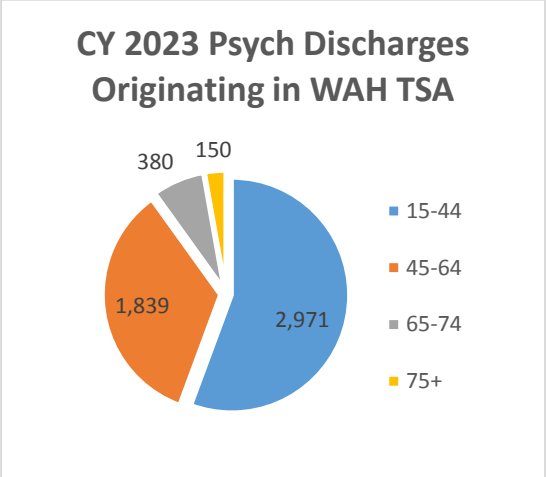
In projecting bed need for acute psychiatric services generated in WAH's psychiatric TSA, AHC assumes that the most recently observed use rates for general hospital psychiatric services will remain steady. (DI #48, p. 12) AHC states that the overall adult population within WAH's psychiatric TSA was approximately 1.4 million in CY 2010 and will reach about 1.5 million by CY 2018. (DI #48, p. 11) The applicant calculates that the overall increase in the population between CY 2010 through CY 2013 was approximately 3.7%.

In the following table, AHC projects that the number of inpatient psychiatric discharges originating in the TSA will increase 6.9%, an average of about 0.6% per year, between 2013 and 2023, an additional 344 discharges. (DI #48, p. 13)

Table IV-43: AHC: Projected 2023 Acute Psychiatric Discharges By Age Cohort For WAH Total Service Area

Ages	2013	2023	Total Change	Annual Change
15-44	3,022	2,971	-1.7%	-0.2%
45-64	1,626	1,839	13.1%	1.2%
65-74	224	380	69.6%	6.3%
75+	124	150	21.0%	1.9%
Total	*4,996*	*5,340*	*6.9%*	*0.6%*

Source: DI #48, p.13



AHC reports that ALOS for Medicare patients discharged from psychiatric facilities has been declining, a 17.4% decline between 2009 and 2013 and that the ALOS of the non-Medicare population increased (7.8%) over the same time period. (DI #48, p.13).

Table IV-44: AHC: ALOS for Acute Psychiatric Hospital Discharges – Medicare Patients
Montgomery and Prince George's County General Hospitals, CY 2009 - CY2013

Provider	2009	2010	2011	2012	2013	5-Year Change
Washington Adventist	7.7	6.9	7.1	9.0	7.1	-7.8%
Holy Cross Silver Spring	6.6	4.3	3.3	4.4	4.0	-39.4%
MedStar Montgomery	7.5	8.2	8.0	6.5	4.9	-34.7%
Adventist Shady Grove	5.7	4.9	2.4	4.3	4.3	-24.6%
Suburban	9.0	7.6	7.8	6.7	7.1	-21.1%
Laurel Regional	8.8	4.8	6.8	5.6	4.5	-48.9%
Prince George's	7.5	7.4	9.8	7.7	8.7	16.0%
MedStar Southern Maryland	9.6	4.7	5.5	8.3	3.7	-61.5%
Fort Washington	0.0	0.0	7.0	0.0	0.0	0.0%
Doctor's Community	3.0	2.0	1.3	3.5	0.0	-100.0%
Other Providers	14.0	15.3	19.2	19.1	12.1	-13.6%
Total	*8.6*	*7.8*	*8.6*	*8.3*	*7.1*	*-17.4%*

Source: DI #48, p. 13

Table IV-45: AHC: ALOS for Acute Psychiatric Hospital Discharges – Non-Medicare Patients
Montgomery and Prince George's County General Hospitals, CY 2009 - CY2013

Provider	2009	2010	2011	2012	2013	5-Year Change
Washington Adventist	4.8	5.1	5.2	5.8	5.6	16.7%
Holy Cross Silver Spring	3.7	2.7	5.0	3.1	5.3	43.2%
MedStar Montgomery	5.1	4.5	4.3	4.3	3.7	-27.5%
Adventist Shady Grove	4.1	2.9	3.1	2.9	4.2	2.4%
Suburban	5.1	5.1	4.7	4.9	5.0	-2.0%
Laurel Regional	4.0	3.3	4.0	4.4	4.2	5.0%
Prince George's	5.4	5.7	5.3	5.1	5.6	3.7%
MedStar Southern Maryland	4.8	4.3	5.7	4.5	5.1	6.3%
Fort Washington	3.0	2.0	0.0	0.0	3.0	0.0%
Doctors Community*	3.9	2.1	1.4	1.5	31.0	694.9%
Other Providers	7.7	8.1	10.6	8.8	9.9	28.6%
Total	*5.1*	*5.1*	*5.3*	*5.3*	*5.5*	*7.8%*

Source: DI #48, p. 14
*AHC states that Doctors' ALOS was based on one patient in CY 2013 who was discharged after 31 days.

Using a bed need methodology similar to the one it used to calculate MSGA bed need, AHC applies CY 2013 ALOS by the two payor groups to its CY 2023 discharge forecast of 5,340 to project patient days originating in the WAH TSA. The applicant assumes an average annual occupancy rate target of 70%, yielding a bed need forecast of 118 acute psychiatric beds for the WAH TSA in 2023, as shown in the following table. (DI #48, P.14)

Table IV-46: AHC: Acute Psychiatric Bed Need – 2023 Projection Based on Discharges Originating in WAH TSA

	CY 2023 Discharges a	ALOS b	Total Patient Days a x b = c	Occupancy d	Bed Need (c/365)/d
Medicare	531	7.1	3,749	70.0%	15
Non-Medicare	4,810	5.5	26,300	70.0%	103
Total	*5,340*	*5.6*	*30,050*	*N/A*	*118*
CY2013 Market Share Leaving Montgomery & Prince George's Co.				16.2%	(19)
Beds Needed in Montgomery & Prince George's County Hospitals					*99*

Source: DI #48, p. 15

WAH states that, historically, about 16.2% of acute psychiatric patient days originating in the WAH TSA use facilities outside of Montgomery or Prince George's County. By adjusting the total inpatient psychiatric bed need to take into account only the beds needed to serve the patients who receive inpatient psychiatric care in these two jurisdictions, AHC's methodology calculates a total need for 99 inpatient psychiatric beds for acute care facilities serving Montgomery and Prince George's County. (DI #48, P.14)

AHC calculates the number of licensed psychiatric beds in Montgomery and Prince George's County general hospitals currently serving the WAH TSA population, as shown in the following table.

Table IV-47: AHC: Licensed Psychiatric Beds Serving the WAH TSA

Provider	Days From WAH TSA a	Total Days b	% of Days From WAH TSA a/b = c	FY 2015 Licensed Beds d	Beds Serving TSA c * d
Washington Adventist	7,605	8,770	86.7%	40	35
Holy Cross Silver Spring	270	291	92.8%	-	-
MedStar Montgomery	2,713	3,953	68.6%	20	14
Adventist Shady Grove	136	147	92.5%	-	-
Suburban	4,407	6,457	68.3%	24	16
Laurel Regional	1,730	3,415	50.7%	14	7
Prince George's	5,333	7,342	72.6%	28	20
MedStar Southern Maryland	1,126	4,256	26.5%	25	7
Fort Washington	3	18	16.7%	-	-
Doctor's Community	31	48	64.6%	-	-
Total	*23,354*	*34,697*	*N/A*	*151*	*99*

Source: DI #48, p. 15

AHC states that its analysis supports the need for the continued operation of the 40 inpatient psychiatric beds currently licensed at WAH (DI #48, p.15). The applicant concludes, as shown in the following table, that the current inventory of psychiatric beds at Montgomery and Prince George's County general hospitals is in balance with the demand for beds that these hospitals will need to meet, based on the historic accommodation of demand from the WAH TSA, *i.e.*, there currently is neither an excess nor an undersupply of acute psychiatric beds.

Table IV-48: AHC: Net Psychiatric Bed Need for WAH-Takoma Park TSA

Net Psychiatric Bed Need for WAH - Takoma Park TSA	
	Psychiatric Bed Need
Psychiatric Beds Needed at Montgomery & Prince George's County Hospitals	99
Beds Available to Serve WAH TSA in Mont. & P.G. County	-99
Psychiatric Net Bed Need	0

Source: DI #48, p. 15

AHC also examined the expected impact of the six psychiatric beds at Holy Cross Germantown Hospital ("HCGH") that came into operation in October 2014. (DI #48, p. 16) AHC assumes that these six psychiatric beds will serve: patients already going to hospitals in Montgomery and Prince George's County; patients who otherwise would have migrated outside Montgomery and Prince George's County; or patients originating outside the service area who previously would have sought care in other counties. AHC states that it expects the HCGH entry into the market to increase the number of psychiatric patients originating in the WAH TSA who

will be accommodated by beds in Montgomery and Prince George's County for care,[65] or to increase the in-migration of patients originating outside of the TSA. In addition, AHC states that it expects that the methodology to adjust the number of psychiatric beds available to serve the WAH TSA downward accordingly to represent any lost market share to the new hospital from the existing hospitals' psychiatric programs operating in these two jurisdictions. (DI #48, p. 16)

Interested Party and Participating Entity Comments – Need Criterion

MedStar Montgomery Medical Center

Citing the Commission's statute, at Health General §19-114(c), MedStar Montgomery Medical Center states that the Commission's statute and regulations governing certificate of need review require an assessment of the public need for the proposed project. MMMC further states that there are two distinct parts of the proposed project that should be evaluated. The first part is the need to replace the existing physical plant, a need that MMMC believes has been sufficiently demonstrated. The second distinct part that MMMC believes the Commission should evaluate is the appropriateness of the proposed location to meet the needs of the population to be served. MMMC believes that the population currently being served is the population to be considered when evaluating the appropriateness of the proposed location. It concludes that AHC has failed to demonstrate that the needs of this population will be met by the proposed relocation to the White Oak site. MMMC states that the area surrounding the White Oak site is already well served by three acute care hospitals and that there is no need for additional acute care service in the proposed location. MMMC also notes that AHC's analysis of the need for beds at the proposed location does not "address the basic question for awarding the certificate of need: whether the White Oak/Fairland or the Takoma Park location is the more appropriate one to meet the needs of the population that WAH has historically served."[66] (DI #52, pp.19-21)

City of Takoma Park

In its February 9, 2015 comments, the City of Takoma Park states that the application presents an incomplete methodology for developing MSGA and ED service areas because the methodology does not adjust the service area to accurately reflect the change in travel to the hospital that would result from the relocation. CTP states that, had AHC used the methodology applied by MHCC in 2009 [sic][67], the primary service area would not include: zip code 20912 (Takoma Park); zip code 20910 (Silver Spring); and zip code 20782 (Hyattsville). (DI #5, pp. 25-28 and App. B) CTP also notes that AHC's responses to completeness questions regarding its methodology for developing its proposed MSGA service area indicated that the method involved qualitative assumptions. The City states that "AHC projects WAH MSGA market share for zip code 20782 will fall from 55 to 40 percent because 'WAH has the largest market share' currently and 'drive times and distance increase to WAH in White Oak." CTP believes that assuming this

[65] AHC assumes a reduction of out-migration of patients or, alternatively, what could be described as a higher patient retention rate.

[66] MedStar Montgomery Medical Center's February 9, 2015 comments on AHC's application (DI #52, p. 21).

[67] CTP appears to be referring to the methodology used by the Reviewer in the 2012 WAH Recommended Decision, which was withdrawn before Commission action.

decrease is arbitrary and not supported by the data driven approach used in the prior review. It notes that, if such a data driven approach were used, the market share for this zip code area would be closer to five percent. (DI #69, p. 6)

Applicant's Response to Comments – Need Criterion

While AHC did not specifically respond to MMMC's comments that the needs of population currently served by WAH will not be met by the proposed relocation to White Oak, AHC states that access for the population in WAH's existing and likely service areas will remain well within the State Health Plan standard of an optimal drive time of 30 minutes or less for general medical/surgical and intensive care services. (DI #59, pp. 15-16)

Regarding the comments of the City of Takoma Park that the application does not present a complete methodology for developing the proposed MSGA service area, AHC states that its responses to the December 4, 2014 completeness questions explain its methodology and rationale for the assumed changes in market share and AHC's conclusions. (DI #59, pp. 23-24) AHC states further that the City cites no data in support of its position that there is a "strong likelihood" that Takoma Park and parts of Hyattsville including zip code 20782 will no longer be in WAH's primary service area, and notes that changes in drive times and travel were considered in assessing the impact on market share for each zip code area within the hospital's total service area. AHC points out that its analysis indicates that both Takoma Park (zip code area 20912) and zip code area 20782 will remain in WAH's primary service area after the relocation. (DI #82, pp. 3-4)

Reviewer's Analysis and Findings

I first want to note that comments by the parties that addressed some aspect of need for this project or for proposed facility and service capacity are summarized and addressed in this Recommended Decision within other standards and criteria including: (1) COMAR 10.24.10.04B(5),[68] the Cost Effectiveness standard, in the Acute Hospital Services Chapter; (2) COMAR 10.24.12.04(1)[69] the Acute Hospital Inpatient Obstetric Services Chapter; (3) COMAR 10.24.10.04B(14),[70] the project review standard regarding Emergency Department Treatment Capacity and Space in the Acute Hospital Services Chapter; and (4) COMAR 10.24.11.05B(2),[71] the General Surgical Services Chapter. I will not repeat those responses, comments, and discussion here but refer the reader to those specific areas of this Recommended Decision to review those comments, both the applicant's initial response and response to comments, and my analysis and findings on the applicable need issues being addressed.

The need criterion requires the Commission to consider the applicable need analysis in the State Health Plan. Where there is no need analysis, the Commission is required to consider whether the applicant has demonstrated unmet needs of the population to be served, and

[68] See discussion of the Cost Effectiveness standard earlier in this Recommended Decision, beginning at p.39.
[69] See discussion of Obstetric Services earlier in this Recommended Decision, beginning at p.85.
[70] See discussion of Emergency Department Treatment Capacity and Space earlier in this Recommended Decision, beginning at p.71.
[71] See discussion of Need for Surgical Capacity, supra, p.100.

established that the proposed project meets those needs. Adventist responded to this standard in its September 29, 2014 replacement application by projecting the need for MSGA and obstetric beds and providing a detailed description of the method it used for each. The methodology used by AHC to project psychiatric bed need was submitted as part of the original application on October 4, 2013 and was updated in its January 23, 2015 responses to additional information questions. (DI #48, pp.8-16)

While AHC's response to this criterion focused on bed need for the two inpatient categories of services to be provided at the relocated hospital and the third acute inpatient service proposed to remain at Takoma Park, this criterion is broader. Therefore, although I will provide a detailed discussion of the bed need questions specifically addressed by the applicant under this criterion, I will also briefly summarize my other need-related findings here.

With respect AHC's determination that the relocation of WAH is preferable to alternative approaches to modernization, I found that AHC's conclusions with respect to the inferiority of the on-site replacement alternative are well-founded and that it adequately explained its process for evaluating and selecting the best alternatives. This led me to the conclusion that off-site replacement is the unavoidable preferred choice. The chosen site fits WAH's criteria, which I believe are reasonable.

I disagree with MedStar Montgomery Medical Center's comments that the needs of the population currently served by WAH will not continue to be met if the proposed project goes forward. MMMC contends that the area surrounding the White Oak site is already well served by three acute care hospitals and that there is no need for additional acute care service in the proposed location.[72] I find that the White Oak area is actually served by more than three general hospitals, one of which is WAH. I also find that the area surrounding Takoma Park overlaps with the area surrounding White Oak and is also served by several hospitals, one of which is WAH. MMMC characterizes this project as one that removes a general hospital from one distinct and discrete area to another distinct and discrete area, eliminating a hospital from an area where that hospital is needed to a different area where that hospital is not needed. I do not consider this to be a realistic characterization. In all likelihood, a general hospital in White Oak replacing the general hospital in Takoma Park will result in some changes to the catchment areas of the general hospitals in this region; however, it is important to recognize that it is a region with multiple general hospital sites located within reasonable travel times for the vast majority of the region's population.

I also note that Takoma Park will continue to be a hospital campus with acute psychiatric and rehabilitation inpatient services and with outpatient health care services being delivered on both a scheduled and unscheduled basis. Contrary to MMMC's assertion, I find that AHC has addressed, in this application, the basic question of whether the White Oak/Fairland or the Takoma Park location is the more appropriate one to meet the needs of the population that WAH has historically served. While the project will have an impact on availability and accessibility to hospital services that will have both positive and negative ramifications for different subareas of the larger region, I find that the evidence shows that any adverse impacts related to this project cannot be realistically portrayed as dire. CON applications cannot be considered in the absolutist

[72] It is apparent that one of these three hospitals referenced by MMMC is Laurel Regional Hospital. LRH announced in 2015 that it will not operate as a general hospital after 2017.

terms suggested by MMMC because, taking this type of logic as a guide, one could rarely if ever permit relocation of a hospital and other health care facilities, because all such moves will invariably reduce physical access to some services for some communities or neighborhoods. The population is not static and health care delivery is not static. I conclude that the Commission cannot approach questions about the supply and distribution of health care facilities from a perspective that the current or historic landscape of facilities must be maintained.[73]

Beyond the broader need to replace and relocate WAH, I previously addressed the need for regulated service capacities that are covered by applicable SHP chapters. With respect to operating room capacity, Adventist has proposed a reduction from 11 to 8 operating rooms. I addressed this proposed reduction in capacity under the Surgical Services Chapter of the SHP.[74] I found that AHC appropriately downsized surgical facility capacity in its proposed replacement hospital, bringing it in line with the decline it has experienced in the demand for operating room time, and that AHC used reasonable assumptions in forecasting surgical service demand in future years.

With respect to the Emergency Department at the replacement hospital, Adventist has proposed an increase in treatment spaces from 26 to 32. I evaluated the need for and reasonableness of the proposed number of treatment spaces and the size of the proposed department at COMAR 10.24.10.04B(14).[75] I found that the proposed 32 treatment rooms and 22,784 departmental gross square feet of ED space are consistent with the standard, which uses American College of Emergency Physician guidelines as benchmarks.

While I determined that the number of MSGA beds proposed is consistent with the SHP standard for MSGA beds, COMAR 10.24.10.04B(2), because AHC is proposing fewer MSGA beds than currently exist both on a licensed and physical bed capacity basis, my analysis and findings with respect to the need for the specific MSGA bed capacity proposed is addressed below by examining AHC's determination of WAH's expected MSGA service area in White Oak and by adapting the State Health Plan bed need methodology to what I have determined to be the hospitals expected MSGA service area.

Regarding obstetric services, I concluded that the applicant has quantified the need for the number of beds to be assigned to the obstetric service and its methods are consistent with the approach outlined in Policy 4.1 of that SHP chapter.[76] However, I will address the need for the specific number of obstetric beds proposed by adapting the Obstetric Services Chapter's bed need methodology for MSGA beds to the need for obstetric beds in an expected service area that I have determined is reasonable for this analysis. I will also address the need for the 40 acute psychiatric beds that will remain in Takoma Park as a Special Hospital - Psychiatric by evaluating the methodology used by AHC and adapting the MSGA bed need methodology to the need for psychiatric beds. It is important to recognize that psychiatric hospital facilities are not being altered by this proposed project, in any way other than with respect to the form of health care facility licensure. AHC proposes a relatively minor expenditure to alter these facilities.

[73] *See* COMAR 10.24.10.04B(5), *supra*, p.43, for my analysis and finding related to cost-effectiveness.
[74] *See* my analysis and findings regarding COMAR 10.24.11.05B(2), Surgical Services, *supra*, p.103.
[75] *See* my analysis and findings regarding COMAR 10.24.10.04B(14), Emergency Department Treatment Capacity and Space, *supra*, p.74.
[76] *See* my analysis and findings regarding COMAR 10.24.12.04(1), obstetric services, *supra* p. 88.

MSGA and Obstetric Bed Need

I have reviewed and analyzed Adventist's MSGA and obstetric bed need projections starting with the AHC's identification of the service area for the White Oak location, proceeding to its assumptions regarding the change in the rate of discharges and lengths of stay in the coming years, and culminating in the AHC's calculation of bed need. Regarding the identification of the service area for the proposed location, I am concerned that AHC was too conservative in its determination of the expected change in service area associated with this relocation. Specifically, AHC's definition of the new hospital's expected MSGA service area includes only 33 zip code areas, compared to WAH's current service area of 43 zip code areas. More importantly, I am concerned that the expected service area does not include any zip code areas that are not included in the current service area for the Takoma Park location. While the proposed change in location of the hospital is not great, I expected to see the addition of service area zip code areas to the north of the proposed location. AHC's identification of its expected obstetric service area does not raise the same level of concern. While the expected service area is smaller (15 zip code areas versus 18 for the current location), it does include three zip code areas to the north and northeast that were not included in WAH's 2013 obstetrics service area.

I acknowledge that AHC states that it considered the location of the replacement hospital, proximity to other hospitals, drive times, major streets and highways, current market share of other providers, and physician relationships in defining the new service areas. However, I share some of the City of Takoma Park's concerns with the methodology or at least with the explanation of the methodology. Specifically, I cannot see a clear, consistent relationship between the rationale provided for the changes in zip code market share and the projected market shares. (DI #43, pp. 3-8) While AHC claims that physician relationships were considered, the explanation of its methodology does not include any specifics on how these relationships were incorporated in the analysis. I also believe that physician relationships may change and that the construction of a new replacement hospital in a new location with new medical office building locations is likely to be a contributor to such changes.

In addition to my concerns with the identification of the service areas for the relocated hospital, I question AHC's assumptions regarding MSGA discharge and length of stay trends. AHC used five-year discharge and length of stay trends from 2009 through 2013 to project future discharges and patient days. The applicable bed need analysis for MSGA beds provides that the Commission consider this criterion using both five year and ten-year trends. I also question AHC's application of these trends to project future discharges and patient days. In the case of discharges, AHC assumed that the discharge rate would continue to decline for three years through 2016 and then level off. In the case of length of stay, AHC applied the 2013 average lengths of stay to the projected discharges for 2023. The MSGA bed need analysis projects discharge and length of stay trends to continue through a 10-year projection horizon.

Because of these concerns and questions, I undertook my own analysis of likely market share shifts to identify the likely service area zip code areas for MSGA and for obstetrics, projecting bed need for each of these services based on these service areas and adapting the SHP MSGA methodology to each service. There are three major components of my approach to projecting the changes in market shares that are likely to occur as a result of the relocation of WAH

and the effect on WAH's service areas. The components are: (1) 2013 market shares for selected zip code areas; (2) change in WAH's proximity ranking for those zip code areas; and (3) the total number of discharges from Maryland and District of Columbia hospitals to each zip code area and the changes that are likely to occur. I consider 2013 market shares to be a reliable indicator of current utilization patterns reflecting the factors that AHC states it considered in its determination of expected service areas, including the current proximity of hospitals to each zip code area and the extent of each hospital's physician relationships in each zip code area.

The second component is the change in WAH's proximity ranking that would occur as a result of the relocation and the likely changes in market share related to distance and travel time. I determined the proximity rankings based on the drive time from each zip code area to each Maryland and District of Columbia hospital relative to the drive times[77] to other Maryland and DC hospitals.

I identified possible zip code areas for inclusion in the future service areas including WAH's 2013 service area zip code areas, the zip code areas identified by AHC as the expected WAH-White Oak service area zip code areas, and zip code areas used by Laurel Regional Hospital and MMMC in their joint impact analysis. I also identified and included additional zip code areas for which WAH's proximity rank was equal to or less than WAH's proximity rank to zip code areas in its 2013 service areas. For MSGA, this occurred with the zip code areas for which WAH is the seventh closest Maryland hospital and the eleventh closest hospital when both Maryland and District of Columbia were included. For obstetrics, this occurred with the zip code areas for which WAH is the fourth closest Maryland hospital. Proximity to DC hospitals was not considered for obstetrics because no DC zip code area was included in WAH's 2013 obstetric service area and WAH is moving further away from DC. However, DC hospitals were included in my calculation of expected changes in market share when they had significant market share (greater than 3%) in a possible service area zip code area.

My next step was to derive an expected market share for each of these zip code areas after the relocation. This step involved two parts. First, for each possible service area zip code area, I identified an initial future market share for the relocated WAH based on its change in proximity rank, which I have called the target market share.[78] The basic rules for this target market share for Maryland zip code areas were as follows:

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[77] Spatial Insights generated the driving time from each Maryland and District of Columbia zip code to each Maryland and District of Columbia hospital. Drive time was determined from the population center (population weighted centroid) of each zip code area to each hospital using *Freeway 2013* drive-time analysis software. The population-weighted centroid of each zip code area was calculated based on the population distribution measured at the census block level, which is a smaller geographic area than the zip code area. The *Freeway* software then generated the drive time between each zip code area and each existing hospital and WAH's proposed new location. *Freeway* uses a compressed representation of the street network with road linkages divided into six categories: rural local; rural arterial; rural freeway; urban local; urban arterial; and urban freeway. The "heavy" traffic speeds were assigned to all links, *i.e.*, 20 miles per hours for urban local, 30 for urban arterial, and 40 for urban freeway. Heavy traffic conditions are described as rush hour in major metropolitan areas.

[78] The 2013 market share for each hospital in each possible zip code was calculated by dividing the hospital's discharges to that zip code by the total discharges to that zip code from all Maryland and District of Columbia hospitals.

Change in Proximity	Rules for Assigning Target Market Share
Decrease in Proximity Rank	Average 2013 market share for the MD hospital proximity rank after relocation unless WAH-TP's market share was higher for that zip code area in 2013, in which case the target market share is the 2013 market share
Proximity Rank would not change	Market share is the same as 2013
Increase in Proximity Rank	Average 2013 market share for the MD hospital proximity rank after relocation unless WAH-TP's market share was lower for that zip code in 2013, in which case the expected market share is the 2013 market share

For the DC zip code areas considered, WAH currently has proximity rankings from one (WAH is the closest hospital) to 10 when considering both Maryland and District of Columbia hospitals. Following relocation of WAH to White Oak, its proximity ranking will range from ninth to fourteenth. Since WAH's current proximity ranking for these zip code areas is no higher than 10 and it is the tenth most proximate hospital to only one of these zip code areas, its average market share for the zip code areas to which it is ninth and tenth ranked, 0.54%, was used as a target market share for all of the DC zip code areas. As for Maryland zip code areas, if a DC zip code area had a lower market share in 2013 than 0.54%, its 2013 market share was used as the expected market share.

I then adjusted the target market share for each hospital for each zip code area to account for the current relative strengths of the other hospitals based on their 2013 market share, in order to come up with the expected market share. This was done by assuming that total market share of WAH-White Oak, the interested party hospitals, and other hospitals with market shares greater than 3% for each zip code area would equal the total 2013 market shares of the same hospitals substituting WAH-Takoma Park ("WAH-TP") for WAH-White Oak. This step also adjusts each of the other hospital's expected market share in zip code areas where WAH's market share is expected to change as a result of the relocation. This part of the market share adjustment process had the effect of reducing the expected market share changes that would have resulted from only relying on the change attributable to the change in proximity ranking.

The final major component of this process was calculation of the expected discharges based on the expected market share estimate, as explained above, and the total discharges to each zip code area. The results were then sorted by zip code area from most discharges to least discharges in order to determine which zip code areas would most likely be included in the 85% service area[79] for the relocated WAH. This required an estimate of the total discharges that could reasonably be expected from the relocated WAH. This was accomplished by calculating the difference between WAH's total 2013 discharges for each service and the total discharges from all of the possible zip code areas and assuming that WAH would continue to discharge an equal number from outside the service area after relocation.

[79] The contiguous zip code from which the first 85% of the hospitals discharges for the particular services would have originated.

For MSGA, I determined that 85% of the WAH MSGA discharges would be accounted for from zip code areas that would have contributed 37 or more MSGA discharges to the relocated WAH if, in 2013, the hospital had been located at White Oak. I mapped the zip code areas contributing 37 or more discharges and determined that two of the zip code areas were not geographically contiguous with any of the other areas. Eliminating these zip code areas left 38 zip code areas that I estimated would have received 85% of WAH's MSGA discharges if the hospital had already relocated and been established in White Oak. The 38 zip code areas include five zip code areas to the north and northeast not included in AHC's expected service area. It also includes a Bowie zip code area and retains zip code 20910, which is Holy Cross's home zip code and is contiguous to WAH's current home zip code. My expected MSGA service area for the relocated WAH of 38 zip code areas falls between WAH's current total of 43 and AHC's expected service area of 33.

For obstetrics, I determined that 85% of the discharges would likely originate from 22 zip code areas with the last zip code area in this total service area ("TSA") contributing 23 discharges to the relocated WAH.[80] I also mapped these zip code areas and found them all to be contiguous. The 22 zip code areas are more than the 15 AHC included in its expected service area for obstetrics and more than WAH's current obstetric service area, which includes 18 zip code areas. It does not include three zip code areas in the current service area that were also excluded by AHC. It includes Riverdale (zip code 20737), Hyattsville (zip codes 20784 and 20785), and Silver Spring (zip code 20910) that were not included in AHC's expected service area. It also includes two Laurel zip code areas (20723 and 20724) and a Bowie zip code (20720) that are not currently in WAH's service area and were not included in AHC's expected service area.

I then projected the need for MSGA and obstetric beds for what I determined to be the reasonable expected service areas for the relocated hospital by adapting the MSGA and pediatric bed need methodology from the Acute Care Chapter of the SHP. In order to account for the significant use of Washington, DC hospitals, I developed and used minimum and maximum discharge rate trends for a composite service area comprised of the service areas of all Montgomery and Prince George's County hospitals as well as all Washington, DC hospitals, instead of using the Maryland statewide trends. I cannot directly compare the projected discharge rates for the composite service area to AHC's projected discharge rates because my discharges rates include discharges from DC hospitals and AHC's rates only include discharges from Maryland hospitals. I note that, while AHC projected decreases in these trends for MSGA patients of about 15% through 2023 (all between 2014 and 2016), my projections produced decreases ranging from approximately 20% to 38% by carrying the five- and 10-year trends forward for the 10-year periods through 2023. Given the emphasis on population health and efforts and incentives to reduce potentially avoidable utilization, it is reasonable to expect a continuation of the trend of lower discharge rates.

I multiplied the projected discharge rates, as adjusted in accordance with the SHP methodology by the 2023 projected population for my expected service areas, to arrive at the projected discharges in 2023 for the service area. I then multiplied the projected service area

[80] The 23 discharges would have brought the discharges to 86% of the estimated total.

discharges by WAH's projected market share (9.7% for MSGA) as calculated for the identified service area zip codes described above, which would be an increase over WAH's 2013 market share of 8.2%. The resultant number of projected discharges was then divided by 0.85 to account for the fact that the service area would only account for 85% of discharges. The result is projected 2023 discharges ranging from 7,229 to 9,283 compared to AHC's projection of 8,037 MSGA discharges.

The projected discharges were then multiplied by the projected average length of stay. Here I used WAH's length of stay trend for its own service area, adjusted as set forth in the SHP including adjustments for case mix-adjusted length of stay to project patient days. The results were longer lengths of stay than the 2013 ALOS used by AHC in its projections. My projection of increases in lengths of stay is reasonable and also to be expected given the emphasis on reducing avoidable inpatient use of hospitals that is likely to continue to reduce the shorter length of stay admissions. In addition, efforts to reduce the 30-day readmission rate is likely to increase lengths of stay for some admissions.

I projected a range of patient days and bed need for the relocated WAH at an 80% occupancy rate[81] as shown in the table below. Based on these projections I conclude that AHC's proposal for 152 MSGA beds in the relocated WAH is reasonable.

Table 49: Projected MSGA Patient Days and Bed Need for Washington Adventist Hospital in White Oak

	Patient Days	Average Daily Census	Bed Need at 80% Occupancy Rate
Minimum	44,353	121.5	152
Maximum	56,953	156.0	195
Adventist Projections and Proposal	45,009	123.3	152*

Source: Maryland Health Care Commission Bed Need Projections
*Number of proposed MSGA beds

My projection of obstetric discharge rates for the composite service area, based on the historic five- and ten-year trends, indicates a decrease in discharge rates of about 6% to 15%. These lower discharges rates and small projected decrease between 2013 and 2023 of about 1.8% in the female population 15 to 44 for my expected service area produced a small decrease in projected obstetric discharges for the service area, from approximately 11,200 in 2013 to a range of 9,300 to 10,300 discharges in 2023. At my expected WAH market share of 13.7%, WAH can be projected to obtain 1,275 to 1,414 obstetric discharges from the service area, but, since I estimated that this service area would account for 86% of WAH's discharges, the total discharges projected for WAH would range from 1,482 to 1,644. Based on the length of stay trends that I observed for WAH and the composite service area, I am projecting a somewhat lower ALOS (2.12 to 2.32 days) than assumed by AHC (2.42 days). While the results detailed below would support a unit of 16 rather than the proposed 18 beds for obstetric services, I do not believe this is a difference that would justify denying the project or requiring a redesign of the facility. As

[81] The use of the 80% occupancy for an average daily census of between 100 and 299 is prescribed in the Acute Hospital Services Chapter.

previously noted, the basic design of the unit is for 22 beds, with 18 of the beds designated as postpartum rooms and four designated as general medical/surgical beds, so the unit design is already intended to be flexible. Additionally, Laurel Regional Hospital closed its obstetric and perinatal services in October 2015. The LRH campus is approximately seven miles from the White Oak site and, in 2014, LRH had an average daily census of 4.4 obstetric patients. A general hospital in White Oak would be the closest alternative general hospital to the LRH campus. For this reason, I find the size of the replacement hospital obstetric unit is appropriate for meeting the needs of the population it proposes to serve.

Table 50: Projected Obstetric Patient Days and Bed Need for Washington Adventist Hospital in White Oak

	Discharges	Average Length of Stay	Patient Days	Average Daily Census
Adventist Projections and Proposal for 18 OB beds	1,774	2.42	4,290	11.8
Minimum	1,482	2.12	3,140	8.6
Maximum	1,644	2.32	3,813	10.4
Projected 2023 Bed Need				
At MSGA Occupancy Standard for ADC from 0 to 49				
Minimum at average annual occupancy rate of 70%				12
Maximum at average annual occupancy rate of 70%				15
Minimum at average annual occupancy rate of 65%				13
Maximum at average annual occupancy rate of 65%				16
Projected 2023 bed need assuming cumulative normal distribution				
Minimum At 95% confidence				13
Maximum at 95% confidence				16

Psychiatric Bed Need

AHC is not proposing to relocate its 40 psychiatric beds as part of this project. The beds will continue to operate as they historically have, providing acute psychiatric services to adults. However, because AHC proposes to separate this bed capacity from its general hospital facility, those beds will provide these services through a facility that is licensed differently,[82] the establishment of a special hospital-psychiatric is only a by-product of AHC's relocation of WAH and the inclusion in that relocation, of only two inpatient services, medical/surgical and obstetrical. No substantial expenditure is proposed that touches on psychiatric facilities. For this reason, I reviewed the bed need assessment provided by AHC to evaluate its validity.

In my review, I assumed, like AHC, that the recently observed service area for psychiatric discharges would not change. Unlike AHC's analysis, I incorporated consideration of the full range of acute psychiatric services for all ages and the use of DC hospitals by service area residents,

[82] As previously noted, these beds will become part of a special hospital for psychiatric services rather than be one component of a licensed general hospital.

identifying 5,066 discharges from Maryland hospitals in 2013 generated from the total service area ("TSA') and 4,972 discharges from DC hospitals in 2013 originating from the TSA. Use of the Nielsen Claritas population estimates for use rate calculation and its projections for a target year of 2023, and assuming that the psychiatric use rate in 2013 will be applicable to 2023, yields the following discharge projections.

Table 51: Total Projected Acute Psychiatric Discharges Originating in WAH TSA

	2013 Discharges				2023 Discharges		
Age Group	MD Hospitals	DC Hospitals	Total	Use Rate	MD Hospitals	DC Hospitals	Total
0-14	38	331	369	1.11	42	370	413
15-44	2,985	2,246	5,231	6.83	3,037	2,285	5,323
45-64	1,596	2,036	3,632	8.08	1,804	2,302	4,106
65-74	238	207	445	3.89	392	341	732
75+	209	152	361	4.16	272	198	471
Total	5,066	4,972	10,038		5,548	5,496	11,044

Source: Analysis of HSCRC Discharge Database

Using the observed 2013 average length of stay by payor group in the TSA, Medicare (6.45 days) and non-Medicare (4.73 days) and the 2013 market share for the TSA, I projected that the proposed WAH psychiatric hospital would be likely to experience 1,476 discharges in 2023 and 7,539 patient days, with an average daily census of 20.7 patients from the WAH TSA. Adjustment for the in-migration of psychiatric patients from outside the TSA yields an adjusted ADC of 24.4 patients. This yields a need for 28.7 beds at an assumed average annual occupancy rate of 85%[83] and 34.9 beds at the target occupancy rate suggested by AHC, of 70%.

While my analysis results in a projection of reduced demand for acute psychiatric beds at the WAH Takoma Park facility in 2023, there is no practical benefit in recommending a downsizing of this facility from 40 beds to a range of 30-35 beds, which is the bed capacity that my analysis implies would be more appropriate for the reduced level of demand I have forecast. As noted, only renovation expenditures are proposed for this facility and it will be staffed at the level of demand it will experience. An ($5.2 million) additional expenditure of unknown quantity would be needed to create a physically smaller hospital. Theoretically, the redesign entailed in creating a down-sized psychiatric facility could yield operational efficiencies but, given what AHC is currently proposing, that is not a reasonable requirement to place on approval of the proposed project. Finally, I note that Laurel Regional Hospital has announced that it plans to phase out inpatient services, including its inpatient psychiatric services by the end of 2017. (DI #110) The relocated WAH will be operating within approximately seven miles of the LRH campus. This could realistically mean that my projection is conservative and that some demand for acute psychiatric services that historically has been handled by LRH will shift to the AHC acute psychiatric facility in Takoma Park, thereby bringing future census fairly close to the 40-bed capacity proposed for operation.

[83] This occupancy rate target can be inferred from the current Acute Hospital Services Chapter, which establishes an operating threshold of 85% percent bed occupancy for facilities with 20-40 beds when such facilities propose to expand bed capacity.

Summary

I have reviewed all of the applicable need analyses in the State Health Plan, and considered whether the applicant has demonstrated unmet needs of the population to be served, and established that the proposed project meets those needs. I find that AHC has satisfied applicable need standards and the need criterion. It has proposed a project that is consistent with the applicable need analyses of the SHP and, where necessary and appropriate, has adequately demonstrated the need for the project and the facilities and services proposed as part of the project for the population it has historically served and will serve in the future.

C. Availability of More Cost-Effective Alternatives

COMAR 10.24.01.08G(3)(c) Availability of More Cost-Effective Alternatives.
The Commission shall compare the cost effectiveness of the proposed project with the cost effectiveness of providing the service through alternative existing facilities, or through an alternative facility that has submitted a competitive application as part of a comparative review.

Applicant's Response

AHC referred to information it presented in response to the Cost-Effectiveness project review standard at COMAR 10.24.10.04B(5), and reiterated its process of considering alternatives, including re-development on the existing Takoma Park campus. The applicant repeated its response to that standard that the cost projections and project timelines show that an on-campus option would cost more and would take much longer to execute.

AHC maintains that to fully achieve the objectives set by its Board of Trustees in Takoma Park "would be an immense challenge given the characteristics of the campus, the aging infrastructure, the lack of an 'empty chair' during construction, and other issues [and that] [f]ully re-developing the site consistent with what [could be] achieved with the proposed White Oak facility would take 12-15 years of intense construction and demolition, would be disruptive to the residential community and would be cost prohibitive." (DI#27, p.119) AHC also cited the existence of environmentally restricted areas, such as a stream buffer setback, that limit options for site development in Takoma Park.

AHC concluded that redevelopment of the hospital on its existing site falls significantly short of meeting the objectives set forth by the AHC Board[84] for the following stated reasons: (1) such redevelopment would deliver an effective modernization of most patient care spaces, but would not modernize the entire facility and significant portions of older structures would remain; (2) implementation in the midst of current operations presents a series of major disruptions over a very prolonged period of time and would in turn present a host of unfavorable impacts and challenges to financial viability and to the quality of care delivered during the prolonged construction and renovation periods; (3) the challenge of on-campus modernization along with the

[84] For a list and discussion of those objectives, see COMAR 10.24.10.04B(5), the Cost-Effectiveness standard *supra*, p.43.

disruption to operations and uncertainty of project financing render this option less cost effective than the relocation proposal; (4) the disruption caused by demolition, construction traffic, and rebuilding would have significant negative effects on the neighborhood; (5) it would not solve the problems of inferior access to the campus and the availability of parking; (6) land use approval process in Montgomery County is complex and lengthy, requiring a special exception for the Takoma Park campus with an uncertain outcome, while land use approvals for the White Oak campus have already been secured; and (7) the White Oak site is more central to WAH's total service area and, combined with the services to remain on campus, this option is far superior in terms of overall accessibility.

Reviewer's Analysis and Findings

Consistent with my finding that AHC met the cost-effectiveness standard in COMAR 10.24.10.04B(5), I find that the applicant has satisfied the cost-effectiveness criteria.

D. COMAR 10.24.01.08G(3)(d) Viability of the Proposal.

The Commission shall consider the availability of financial and nonfinancial resources, including community support, necessary to implement the project within the time frames set forth in the Commission's performance requirements, as well as the availability of resources necessary to sustain the project.

Applicant's Response

The estimated cost of this project cost is $330,829,524 for the relocation and replacement of the general hospital and $5,223,506 for the renovation of existing hospital space to a special hospital for behavioral health services for a total of $336,053,030. AHC proposes to finance the project with approximately $250 million in borrowing, $50.6 million in cash equity, $20 million of philanthropic contributions, $11 million in contributed land, and $4.5 million in interest income.

Table IV-52: Estimate Uses and Sources of Funds
Relocation of WAH and Establishment of the Existing WAH Psychiatric Unit as a Special Hospital

Uses of Funds			
	White Oak	**Behavioral Health Renovation**	**Total**
New Construction			
Building/Land Purchase/Site Preparation	$156,600,000		$156,600,000
Architect/Engineering Fees & Permits	13,900,000		13,900,000
Renovations			
Building Demolition/Renovations		$3,700,000	3,700,000
Architect/Engineering Fees & Permits		519,000	519,000
Major and Minor Equipment	33,800,000		33,800,000
Contingencies	11,200,000	200,000	11,400,000
Other Capital Costs	30,700,000	300,000	31,000,000
Capitalized Construction Interest	45,156,375		45,156,375
Inflation	10,100,000	400,000	10,500,000
Total Capital Costs	**$ 301,456,375**	**$ 5,119,000**	**$306,575,375**
Financing and Other Cash Requirements	$29,373,149	$104,506	$29,477,655
Total Uses of Funds	**$ 330,829,524**	**$ 5,223,506**	**$336,053,030**
Sources of Funds			
Cash	$50,575,175		$50,575,175
Gifts, bequests	20,000,000		20,000,000
Interest Income	4,504,349		4,504,349
Authorized Bonds	244,750,000	$5,223,506	249,973,506
Transfer of Land from AHC	11,000,000		11,000,000
Total Source of Funds	**$ 330,829,524**	**$ 5,223,506**	**$336,053,030**

Source: DI #27, Exh. 1, Table E, and Exh. 6

The applicant states that the AHC Obligated Group will continue to meet the bond covenants required by the Master Indenture and by certain agreements between one or more members of the Obligated Group and financial institutions providing credit support. The applicant does not anticipate that any bond holder consents would be required relating to construction of the new hospital. Shown below are the required ratios and AHC's status on each measure. (DI #27, p.128)

Table IV-53: Covenant Requirements Associated with AHC Bond Indebtedness

	Required	2013	Worst ratio projected through 2020
Debt service coverage	Not less than 1.25	1.8	1.8
Debt service coverage	Not less than 1.25	1.8	1.8
Days of cash on hand	Not less than 70 days	124.6	96.20 (2018)
Total Liabilities to Unrestricted Net Assets	Not greater than 2.5	1.23	1.43 (2016)

Source: CON application (DI #27,p.129)

Interested Party and Participating Entity Comments

Holy Cross Hospital

HCH states[85] that AHC did not comply with the viability criterion because it failed to address the viability of the special psychiatric hospital at the Takoma Park campus once the hospital relocates to White Oak. HCH also questions the project's financial feasibility, noting that AHC made inaccurate financial projections and inaccurately represented the operating results and related debt covenant ratios of WAH and the Obligated Group. HCH believes that AHC may not be able to secure traditional financing. (DI #50, pp.10-18)

In its October 2015 response to AHC's revised financial projections[86], HCH repeats many of the same themes, stressing that the thinner margins projected to result as a consequence of the HSCRC's action make it even more likely that AHC will be unable to keep its Takoma Park commitments. (DI #129). HCH notes that Maryland's loss of the IMD Exclusion Waiver also threatens both the financial standing of the special psychiatric hospital at Takoma Park and AHC's ability to fund Takoma Park operations.

MedStar Montgomery Medical Center

MMMC blends its comments on the viability criterion with its comments on the financial feasibility standard.[87] It questions the applicant's ability to reverse losses it showed in 2013 ($12.6 million loss from operations) and to realize the projected operating margin of $10.5 million in 2018. MMMC characterizes WAH's current financial state as dire, and its projected turnaround unrealistic. MMMC also questions AHC's proposed sources of funds – fundraising, cash, bonds – and predicts that HSCRC is unlikely to approve the requested $19 million capital rate increase. (DI#52, pp. 3-11) Further, MMMC states that the applicant's "references [to] its CY 2014 improvement in operating performance as assurance that it can achieve a…turnaround from a $13 million loss in 2013 to a $10 million profit in 2018" are actually "indicative of financial problems

[85] Also see the detailed summary of HCH's comments on AHC's response to the related SHP standard regarding financial feasibility, COMAR 10.24.10.04B(13), which included discussion of the viability criterion, *supra*, p. 57.

[86] AHC's revised projections responding to the lower revenue increase approved by HSCRC on October 14, 2015.

[87] See the detailed summary of MMMC's comments on AHC's response to COMAR 10.24.10.04B(13), which included its discussion of the viability criterion, *supra*, p. 58.

[because]… [t]his 'turnaround' in 2014 was caused by a significant price/rate increase required to fund, under the GBR, a substantial decline in volume." (DI #62, p.6)

In response to AHC's revised financial projections, MMMC points out that these projections show "a breakeven margin for the initial years and a modest 0.5% margin by Year 5 … constitut[ing] the slimmest of margins which do not establish a financially sound or feasible project." (DI #128, p.3)

City of Takoma Park

The City believes that the viability of the proposed WAH-White Oak replacement hospital, AHC, and the Takoma Park campus are inextricably linked, and opines that AHC's financial statements for the year ending Dec 31, 2013, provided in the CON Application, show a number of vulnerabilities. One of those is losses of $9.7 million in 2013 suffered by the Adventist Medical Group, which requires a subsidy from AHC. The City also observes that WAH operated at a loss of $10 million in 2013, while carrying more bond debt ($35M) than any other facility in the AHC group. CTP concludes that relocating WAH to the White Oak site will bring new debt obligations and increased operating costs to AHC. The City worries that increased financial pressures could cause AHC to eliminate services. CTP states that, because development of the Takoma Park campus is not a part of the CON, AHC's commitment is unenforceable, and that, for this reason, the application does not conform to COMAR 10.24.01.08(G)(3)(d). (DI #54, pp.29-37)

In subsequent filings, CTP continues to express these concerns over the project's economic feasibility, especially the plans for the Takoma Park site redevelopment, in light of projected losses at the proposed future Takoma Park campus. The City repeats its concern that there is no firm commitment to the Takoma Park plan that AHC has articulated. Because the services at Takoma Park are not part of the CON application, AHC cannot be required to carry out its plans. The City of Takoma Park questions AHC's ability to maintain the Takoma Park campus as a viable health care provider once the hospital relocates to White Oak, and expressed concern that if the HSCRC does not approve the proposed seven percent increase in the WAH budget proposed to fund the capital cost of the replacement hospital, WAH will not be able to increase its prices by the desired amounts, putting the financial viability of the proposed project at risk. (DI #69, pp.1-3, and 5) The City expresses similar concerns in its October 2015 comments on AHC's revised projections.[88] The City says that the "new AHC financial information increased the City's concerns about loss of services … [because it] suggest[s] that AHC may struggle to maintain both campuses … [and that] the proposed project will strain the resources of AHC." (DI #130, p.3)

Applicant's Response to Comments

AHC responds to the HCH and MMMC comments by noting that WAH generated $4.1 million in operating income in 2014 and its record of $5.8 million in expense reductions entailed in this turnaround.

[88] See the summary of the City's comments on AHC's revised financial projections at the financial feasibility standard, COMAR 10.24.10.04B(13), *supra*, p. 59.

AHC rejects HCH's claims that its operating margins are decreasing, again pointing to AHC's actual 2014 results. It notes that its "hospitals improved operating profitability from slightly more than $7 million to nearly $22 million.… [with] [o] perating profitability for all of AHC's services improv[ing] from a slight loss in 2013 to an operating profit in excess of $11 million in 2014." AHC points out that its balance sheet improved as well, with total assets growing by nearly $7 million, while its liabilities decreased by more than $4.2 million. (DI #59, p.9)

AHC calls MMMC's criticisms relating to volume changes misplaced, inferring that MMMC considered only the projected change in inpatient admissions, and that the applicant's projections include an annual decrease in readmissions of 6.78% between 2014 and 2018, "which accounts for nearly 80% of the inpatient admission decline year over year, and which WAH believes was a reasonable assumption consistent with the objectives of the new waiver program." (DI #59, p.7)

AHC concludes that HCH understated AHC's days cash on hand because HCH only counted cash and cash equivalents that AHC and its controlled entities held as of December 31, 2013. It notes that "cash" also "includes all unrestricted cash and investments," and that the total cash on hand really was $187,334,289 as of December 31, 2013 (reflecting the $58,692,102 in cash and cash equivalents, plus $128,642,187 in short term investments). (DI #59, p.8)

AHC notes that HCH's criticism that it had artificially combined or excluded some of the controlled entities is unfounded, stating that

> [t]here has been no artificial combination or exclusion of controlled entities…. The covenants outlined in AHC's various debt agreements relate to the Obligated Group's financials, and ratios are presented as such to demonstrate that the Obligated Group will continue to meet its covenant requirements during all phases of the WAH relocation Project. To that end – and in accordance with the asset transfer provisions governing the operations of the Obligated Group – the cash amounts utilized by Adventist Medical Group (as well as any other AHC entity currently operating with negative cash flow) to fund their operations on an annual basis are well within the guidelines prescribed by AHC's covenants with its lenders. (DI #59, p.8)

In response to the concerns expressed by the City of Takoma Park regarding accounting for site improvements to renovate the Takoma Park facilities, AHC states that it has been clear in all of its filings regarding the scope of planned renovations and the associated budget for those renovations, citing its filings that identified the services to remain in Takoma Park following relocation of the hospital. (DI #109, pp. 9-10)[89] AHC notes that it has described the remaining services, outlined the areas to be renovated, and the budget for each area. AHC states that it has been specific and transparent in its intent for the continued use of the Takoma Park campus and that it intends to occupy 250,000 square feet of space and provide 24/7 patient care services at the Takoma Park campus following relocation of WAH to White Oak.

[89] AHC cited Exh. 6 of its modified application (DI #27) and its May 29, 2015 letter. (DI# 85)

Reviewer's Analysis and Findings

This criterion requires consideration of three questions that I will consider in the following order: availability of resources to implement the proposed project; the availability of resources necessary to sustain the proposed project; and community support for the proposed project.

Availability of Resources to Implement the Proposed Project

A review of the (2013) audited financial statements of The Obligated Group showed that in excess of $97 million in "cash and cash equivalents" and $128.6 million in short-term investments. Current assets totaled $378.75 million against current liabilities of $201.1 million. (DI#27, exhibit 71, p.45) AHC is committing $50.5 million in cash to the project, and appears able to do so. A comprehensive view of the Adventist HealthCare Obligated Group's financial position is offered below.

Table IV-54: Adventist HealthCare Obligated Group
Key Financial Information and Ratios
Updated Projections Reflecting the Budgeted Revenue Increase Approved by HSCRC for the Capital Costs Associated with this Project

	Years Ending December 31, (in millions)							
	2013	2014	2015	2016	2017	2018	2019	2020
Operating Income	$8.7	$22.5	$34.4	$32.7	$28.4	$29.1	$17.4	$16.0
Operating Margin	1.2%	3.1%	5.1%	4.8%	4.1%	4.1%	2.4%	2.1%
Excess of Revenue over Expenses	$12.1	$25.8	$42.7	$41.8	$37.8	$38.7	$27.2	$25.9
Excess Margin	1.7%	3.5%	6.3%	6.1%	5.5%	5.5%	3.7%	3.4%
Operating Cash Flow	$54.2	$71.1	$74.7	$74.5	$70.9	$72.5	$87.4	$87.9
Operating Cash Flow Margin	7.7%	9.7%	11.1%	10.9%	10.3%	10.3%	11.8%	11.6%
Debt Service Coverage-Projected	1.80x	2.13x	2.39x	2.08x	2.00x	2.04x	2.52x	2.79x
Debt Service Coverage --Required	1.25x	1.25x	1.25x	1.25x	1.25x	1.25x	1.25x	1.25x
Cash and Equivalents	$225.9	$245.1	$213.5	$226.4	$230.3	$196.3	$212.7	$229.2
Days Cash on Hand –Projected	124.6	132.4	127.8	133.8	133.2	111.1	114.8	120.6
Days Cash on Hand-Required	70	70	70	70	70	70	70	70
Long Term Debt	$321.2	$319.8	$299.2	$523.5	$504.7	$502.7	$482.7	$464.1
Net Assets	$396.0	$419.0	$432.8	$480.4	$519.8	$575.4	$587.5	$604.0
Debt to Capitalization-Projected	44.8%	43.3%	40.9%	42.1%	49.3%	46.6%	45.1%	43.4%
Total Liabilities to Unrestricted Net Assets-Projected	1.23x	1.15x	1.03x	1.38x	1.22x	1.11x	1.07	1.03
Total Liabilities to Unrestricted Net Assets-Required	2.50x	2.50x	2.50x	2.50x	2.50x	2.50x	2.50x	2.50x

Source: HSCRC Memorandum (DI #131, p.5)(citing data provided by WAH on November 2, 2015).

AHC plans to issue almost $250 million in bonds to implement the project. AHC's projections included an assumption that the interest rate on these bonds would be 6%, which HSCRC views as a conservative assumption

I note that MMMC has questioned AHC's ability to raise $20 million for this project. In its application AHC stated that as of July 2014 it had raised just over $2.1M toward this goal. AHC also said that it has experience in conducting successful campaigns, having raised over $30 million over the last 10 years. AHC enumerated several of those projects, with the goal and fundraising performance. I show that below.

Project	Amount Raised
"Building Greater Care Together" (Tower Expansion Campaign)	$15.25M (Exceeding target goal of $12M)
Barbara Truland Butz Healing Garden	$1.5M (Exceeding target goal of $1.25M)
Jerome & Edna Goldberg Cardiac, Vascular and Interventional Radiology (CVIR) Suite	$5.2M (Initial target goal of $5.0M)
Aquilino Cancer Center & Life Beyond Cancer Programs	Currently in progress, $6.0M raised toward a goal of $10M

This track record suggests that Adventist has the experience to succeed in this endeavor.

I find that AHC will have the resources necessary to implement this project. I do, however, strongly suggest[90] that its resources be carefully marshaled to ensure that adequate resources are devoted to AHC's planned redevelopment of the Takoma Park campus.

Availability of Resources Necessary to Sustain the Proposed Project

WAH returned to a positive margin in 2014..As described in HSCRC Staff's recommendation on WAH's Partial Rate Application, "WAH improved its financial situation between 2013 and 2014, primarily as a result of increasing revenue and improving overall expense efficiencies."

Table IV-55: WAH's Year-End Audited Financial Results, 2012-2014
Regulated Revenue Only

Year Ending	Net Operating Revenue	Net Operating Profit (regulated)	Operating Margin (regulated)	Net Profits (Loss)
2012	$206,488,551	$3,310,437	1.6%	($7,395,620)
2013	$199,999,850	$969,950	0.5%	($12,230,680)
2014	$211,284,900	$16,639,700	7.9%	$2,625,900

Source: HSCRC Staff's recommendation on WAH Partial Rate Application (DI #__)

As has been pointed out by interested parties and Takoma Park, projected operating margins for the components of this proposed project and the related initiatives on the current campus are -thin. I note that the relocation and replacement of WAH, the renovation of the

[90] I have recommended that the Commission, if it adopts my Recommended Decision, include a condition aimed at ensuring that AHC follow-through on its commitment. See my analysis and findings regarding COMAR 10.24.10.04B(4) *supra*, p.38.

psychiatry unit and its establishment as a special hospital – psychiatric, as well as development of the urgent care center at Takoma Park are initiatives backed by AHC. They, these plans are not solely reliant on the performance of WAH to be achievable. As I concluded in my review of the Financial Feasibility standard, AHC is a large enough organization to provide optimism that it will be capable of fulfilling all these obligations..

Community Support

As detailed at length earlier, AHC provided many written expressions of support for relocating the hospital that it received, both from individuals and organizations. More than 800 letters supported the hospital's relocation, including more than 730 "form" letters written by residents of the Riderwood Village, a continuing care retirement community located very near the proposed White Oak site. Of the individual communications, 45 were from physicians, other health care practitioners, and medical groups. (DI #27, Exh. 85) Twelve letters were from individuals representing Montgomery County businesses, not-for-profit agencies such as CASA de Maryland, and community citizens' associations, such as the Greater Colesville Citizens Association and the Hillandale Gardens/Knollwood Adelphi Area Citizens Association. Thirty-three letters of support were from State and County elected officials and appointed members, as discussed further below. (DI #27, Ex. 87) Thirty-three letters were received from current and former elected officials and appointed members, including: former Governor Martin O'Malley; former Lt. Governor Anthony Brown; Congressman John P. Sarbanes (Maryland's Third Congressional District); and Speaker of the Maryland House of Delegates Michael E. Busch. (DI #27, Ex. 86) Of the individual communications, all but one expressed support for AHC's project, with the exception being a former patient who was not satisfied with the level of care he had received at Washington Adventist Hospital

The United States Food and Drug Administration supported the proposed project, noting that it had entered into a Memorandum of Understanding with AHC in order to advance opportunities for collaboration (DI #27, Ex. 7)

The South of Sligo Citizens' Association ("SOSCA") echoed Takoma Park's concerns related to the availability of emergency care services in Takoma Park. Its letter also expressed its belief that a move of the facility could have a negative impact on property values and cause other "economic losses to the community."

Conclusion

AHC has demonstrated that it has the resources to implement the project and has substantial community support. I have also concluded that, while not without risk, the project can achieve lasting viability and the two hospital campuses can become a supportive component of the AHC system. For these reasons, I find that this proposal project is viable.

E. Compliance with Conditions of Previous Certificates of Need

COMAR 10.24.01.08G(3)(e), Compliance with Conditions of Previous Certificates of Need. ***An applicant shall demonstrate compliance with all terms and conditions of each previous***

Certificate of Need granted to the applicant, and with all commitments made that earned preferences in obtaining each previous Certificate of Need, or provide the Commission with a written notice and explanation as to why the conditions or commitments were not met.

Applicant's Response

Adventist provided the following listing of CON applications and performance, stating that Adventist HealthCare, Inc. has complied with all conditions applicable to all previously issued Certificates of Need.

> Adventist HealthCare, Inc. was issued a CON by the Commission to build a rehabilitation hospital on April 14, 1995.
>
> Adventist Health Care, Inc. was issued a CON by the Commission on September 10, 1996 to create the Shady Grove Adventist Hospital Neonatal Intensive Care Unit (NICU).
>
> Adventist HealthCare, Inc. was exempted from CON review to establish a 20-bed hospital-based subacute care unit by the Commission on November 12, 1996. This unit operated as Care-Link at Washington Adventist Hospital.
>
> Adventist HealthCare, Inc. was exempted from CON review by the Commission on February 20, 2003 to relocate and consolidate 15 of the 20 comprehensive care beds operated at Care-Link at Washington Adventist Hospital to the existing 82-bed complement at Fairland Nursing and Rehabilitation Center, expanding its bed capacity to 97 beds. The remaining five beds were relinquished.
>
> Adventist HealthCare, Inc. was issued a CON by the Commission on June 19, 2003 for 22 medical rehabilitation beds.
>
> Adventist HealthCare, Inc. was issued a CON on February 16, 2005 to expand the patient tower at Shady Grove Adventist Hospital.
>
> Washington Adventist Hospital was issued a CON on November 18, 2005 to establish the Washington Adventist Surgery Center. The CON was relinquished on August 18, 2006.

Reviewer's Analysis and Findings

The list of CON applications provided by AHC shows that it complied with all terms and conditions of the CONs granted for those projects and met all commitments made that earned preferences in obtaining any CON.

I find that the applicant is consistent with this criterion.

F. Impact on Existing Providers and the Health Care Delivery System

COMAR 10.24.01.08G(3)(f) Impact on Existing Providers.
"An applicant shall provide information and analysis with respect to the impact of the proposed project on existing health care providers in the service area, including the impact on geographic and demographic access to services, on occupancy, on costs and charges of other providers, and on costs to the health care delivery system."

Applicant's Response

AHC: General Impact

AHC states that its plans to relocate WAH from Takoma Park to the White Oak sections of Montgomery County, while retaining the campus in Takoma Park for some health care services, will have a positive impact on the health care system. The general hospital's patients will benefit from private rooms, more efficient clinical space and improved access to outpatient services, improved public transportation, and improved parking, among other enhancements. Further, AHC says that the services that will remain on the Takoma Park campus will provide continued health care services to patients in the immediate area and that the project will have a positive impact on the health care delivery system through better aligning WAH's facilities and operations with the new realities of hospital care delivery and payment. Specifically, it notes that the project's downsizing of inpatient bed capacity and its ability to increase access to outpatient services will enhance the provision of population- based care. (DI #27, Vol. I, p. 133)

AHC: Impact on Existing Health Care Providers

AHC believes that the impact of WAH's relocation on existing hospitals will not be substantial and, in some cases, expects that the other hospitals may experience an increase in discharges related to the relocation. In arriving at this conclusion, AHC took into account a number of factors in projecting the impact on existing providers, including changes in population and use rates, and the reduced number of beds proposed for construction at the White Oak location. In its modified application, AHC provides an impact analysis of how medical/surgical and obstetric service volumes generated by the service area (expected to provide 85% of the WAH White Oak hospital's inpatients) are likely to change over the next few years and the first five years after the White Oak hospital campus is in operation. The applicant notes that two inpatient services will be provided at the replacement hospital. It quantifies the changes specifically resulting from the relocation and also makes predictions about how population changes and use of hospitals will combine with the relocation to produce a "net" forecast of volume changes at the region's Maryland hospitals. (DI #27, p.133-142)

AHC states that population projections[91] show that significant aging of the population will occur in what it foresees as the replacement hospital's White Oak Total Service Area (TSA) over a 10-year period from 2013 – 2023. While the 15-44 population is expected to decline in the TSA in that period, the population aged 65-74t is projected to grow by 44% (average annual growth of3.7%). AHC states that the increase in the elderly population will exert pressure for higher levels

[91] Nielsen Claritas is AHC's vendor of demographic estimates and projection.

of service that will result in net growth in demand for its replacement hospital's inpatient health care facilities, despite the decline in use rates likely to continue from the health care reforms currently being implemented with increased emphasis on alternatives to inpatient hospital services. AHC projects that WAH's inpatient discharges will grow about 6.3% from 53,908 in 2013 to 57,317 in 2023, a projection that assumes relocation to White Oak, and thus the White Oak TSA, in 2019. (DI #27, Vol. I, p. 133)

AHC states that its analysis shows that between now and CY2023 there is more than enough growth in demand for MSGA hospital admissions to offset volume reductions attributable to declining use rates or the relocation. If the replacement hospital were open today, Washington Adventist Hospital White Oak would gain MSGA cases from other area hospitals, such as Holy Cross of Silver Spring, MedStar Montgomery, Suburban and Laurel Regional. Other area general hospitals, such as Prince George's and Doctors Community, would gain cases from the move. There would be a total of 1,423 cases within the Washington Adventist Hospital/White Oak TSA that would move to the relocated hospital, with the majority of those cases coming from Holy Cross of Silver Spring. (DI #27, Vol. I, p. 137)

The applicant reports that Holy Cross of Silver Spring had a total of 10,947 MSGA discharges in CY 2013 that originated from the proposed White Oak TSA.[92] AHC states that, if it had operated in White Oak in CY 2013, Holy Cross would have had 1,102 fewer MSGA discharges, but with incremental growth (985 discharges), AHC projects that HCH will have 10,829 discharges in 2023, a decline in MSGA discharges of only 1.1% over the ten-year period. AHC states that MedStar Montgomery had 3,404 MSGA discharges from the White Oak TSA in CY 2013 and that WAH's relocation would have reduced this number by 91 (2.7%). However, using assumptions similar to those used in evaluating likely impact on Holy Cross of Silver Spring, the number of discharges at MMMC are projected to increase to 3,645 by 2023. AHC projects that Prince George's Hospital Center would see an increase in MSGA discharges of around 7.1% attributable to the relocation of WAH. (DI #27, Vol. I, p. 133)

[92] A description of how AHCs identified its proposed TSA (85% service area) can be found under the *Need* criterion, 10.24.01.08G(3)(b), *supra*, p-118.

Table IV-56: AHC's Projections of 2023 MSGA Discharges Originating from the White Oak TSA Defined by AHC Montgomery and Prince George's County Hospitals

Providers	CY2013 (1)		Adjustments		CY2023 Discharges (4)	
	Discharges	Market Share	Location Adj (2)	Incremental Growth (3)	Discharges	Market Share
Holy Cross	10,947	20.31%	(1,102)	985	10,829	18.89%
Montgomery General	3,404	6.31%	(91)	331	3,645	6.36%
Shady Grove Adventist	2,801	5.20%	0	280	3,081	5.38%
Suburban Hospital Center	2,739	5.08%	(79)	266	2,926	5.10%
Laurel Regional Hospital	2,857	5.30%	(95)	276	3,038	5.30%
Prince Georges Hospital Ctr	4,887	9.07%	63	495	5,445	9.50%
Southern Maryland	2,441	4.53%	0	244	2,685	4.68%
Fort Washington Hospital	148	0.27%	0	15	163	0.28%
Doctors Community Hospital	8,096	15.02%	63	816	8,975	15.66%
Other Providers	9,114	16.91%	(183)	893	9,824	17.14%
Washington Adventist	**6,474**	**12.01%**	**1,423**	**(1,193)**	**6,705**	**11.70%**
Total	53,908	100.00%	-	3,409	57,317	100.00%

Notes:
(1) Actual CY2013 discharges and market share within the WAH - White Oak TSA
(2) Adjustment to market share assuming a relocation to White Oak
(3) Incremental growth by provider indicates slight increases in market share for all providers due to actual projected discharges for WAH.
(4) CY2023 discharges = CY2013 discharges + location adj + calculated incremental growth.
Source: DI #27, p.137

AHC reports that it conducted an analysis of obstetric market shares by zip code area to understand the likely impact of the proposed relocation of WAH to White Oak. AHC estimates the changes in obstetric market share (at the zip code area level) that other hospitals in Montgomery and Prince George's County will experience as a result of the relocation of WAH. The applicant points out that, while the move of approximately six miles will result in some redistribution of cases among hospitals serving the TSA, its analysis shows that between now and CY2023, growth in demand for obstetric services will offset most of the volume lost as a result of the relocation. AHC states that its analysis shows that, if the replacement WAH had opened in 2013, the White Oak hospital would have gained obstetric cases from Holy Cross of Silver Spring, MedStar Montgomery, Adventist Shady Grove and Laurel Regional; Prince George's Hospital would have also gained obstetric cases. (DI #27, p. 141)

AHC bases its projection of growth in demand on the projected growth in the "newborn" population, provided by Nielsen Claritas. It notes that Nielson Claritas predicts a decline of about five percent in the primary child-bearing age group of 15 to 44 year old females in the White Oak TSA between 2013 and 2023. A similar increase in the newborn population is projected over the same time period. AHC projects that the number of obstetric discharges generated by the White Oak TSA population will grow by 5.4% between 2013 and 2023. (DI #27, p.180)

Based on its assumptions regarding growth in demand for obstetric services, AHC predicts that obstetric volume will grow over the ten-year period being forecast at four of the six hospitals that obtain substantial numbers of obstetric discharges from the White Oak TSA AHC's predictions of net reductions for MedStar Montgomery and Adventist Shady Grove are small (11

and 17 discharges), just from the limited proportion of total obstetric volume coming to these hospitals from the White Oak TSA. (DI #27, Vol. I, pp. 141-42)

Table IV-57: AHC's Projections of 2023 Obstetric Discharges Originating from the White Oak TSA Defined by AHC Montgomery and Prince George's County Hospitals

Providers	CY2013 (1)		Adjustments		CY2023 Discharges (4)	
	Discharges	Market Share	Location Adj (2)	Incremental Growth (3)	Discharges	Market Share
Holy Cross	4,026	54.31%	(143)	172	4,055	51.88%
Montgomery General	273	3.68%	(26)	11	258	3.30%
Shady Grove Adventist	403	5.44%	(30)	17	389	4.98%
Suburban Hospital Center	1	0.01%	-	0	1	0.01%
Laurel Regional Hospital	502	6.77%	(4)	22	521	6.66%
Prince Georges Hospital Ctr	381	5.14%	84	21	485	6.21%
Southern Maryland	15	0.20%	-	1	16	0.20%
Doctors Community Hospital	10	0.13%	-	0	10	0.13%
Fort Washington Hospital	1	0.01%	-	0	1	0.01%
Other Providers	532	7.18%	1	24	557	7.12%
Washington Adventist	1,269	**17.12%**	**118**	**137**	**1,523**	**19.49%**
Total	7,413	100.00%	-	404	7,817	100.00%

Notes:
(1) Actual CY2013 discharges and market share within the WAH - White Oak TSA
(2) Adjustment to market share assuming a relocation to White Oak
(3) Incremental growth by provider indicates slight increases in market share for all providers due to actual projected discharges for WAH.
(4) CY2023 discharges = CY2013 discharges + location adj + calculated incremental growth.
Source: DI #27, p.141

AHC: Impact on Costs and Charges of Existing Providers and on Costs to the Health Care Delivery System

AHC further states that it attempted to quantify potential gross revenue impacts, but since it is not assuming any increase in revenues attributable to increased market share, it is not projecting a negative impact on revenues of other area hospitals.[93] AHC adds that the $19.7 million rate increase it requested from HSCRC is estimated to be less than 0.11% of the statewide allowable increase of 3.58%, adjusted for population growth, that Maryland is committed to achieving under the new Medicare waiver model implemented in 2014. AHC states that this one-time permanent increase of just under $20 million is far less impactful to other hospitals than a scenario in which AHC was counting on large volume shifts to enable the project to cover the increase in capital spending caused by the project.[94] (DI #27, p. 142-143)

[93] I note that the payment model for hospitals in Maryland, which was initiated in 2014, recognizes market shifts in updating global budget revenues. System-wide, the model is evolving in a way that would make such recognized shifts revenue neutral (i.e., hospitals capturing market share from other hospitals will be able to make upward adjustments in their charges to gain approved revenue increases while the hospitals losing market share will have to reduce charges to stay within budgeted revenue totals adjusted downward. The volume changes AHC projects appear likely to result in such adjustments.

[94] On October 14, 2015, HSCRC acted on AHC's request for a rate adjustment for this proposed project

Interested Party and Participating Entity Comments

Before summarizing interested party and participating entity comments, I want to note that, in a motion filed on October 13, 2015, Laurel Regional Hospital gave formal notice in this review that,

> [o]n July 31, 2015, LRH announced that it will replace its acute inpatient hospital due to continued declines in inpatient; a decline of 20 percent since 2013, and a multi-year trend of unsustainable operating losses. … Accordingly, LRH will replace the hospital with an ambulatory medical center in order to focus its resources on community-based ambulatory care." (DI #110, p. 1)

LRH further stated that it "plans to have the Ambulatory Medical Center established by 2018" and that,

> [w]hile the regulatory approval process for the closure is undertaken, LRH has started the transition away from inpatient care by temporarily delicensing its obstetrics beds and a portion of its medical/surgical beds and plans to phase out all but 30 of its medical/surgical beds by the end of 2015. (DI #110, p. 2 & n.1)

Although I denied LRH's motion to file additional comments, I assured it that "in this review, I will consider its stated plans to cease the provision of inpatient services and to convert to an ambulatory medical center." For this reason, I will not address no-longer-relevant comments regarding the impact of AHC's proposed project on the inpatient services that LRH provided at the time it filed comments and that it either has ceased providing (obstetrics) or has stated that it will not continue to provide after 2017. However, I will discuss comments that LRH made about AHC's analysis and other still relevant matters.

Holy Cross Hospital of Silver Spring

Holy Cross of Silver Spring ("HCH") takes issue with AHC's claim that the impact of the relocation of WAH will not have a substantial impact on other providers. HCH states that the proposed partial relocation of WAH will increase HCH's Emergency Department volume and result in insufficient access for patients, particularly those with the greatest need for emergency care. HCH projects that its ED will experience a significant increase in volume as a result of the relocation. Based on a nine-month projection of actual ED utilization for CY 2014, HCH projects that the relocation will result in a total shift of approximately13,300 additional cases, or a 15% increase over its three-year ED case average of 88,000 cases, a shift that would bring its yearly volume of ED cases to more than 100,000. To accommodate more than 100,000 ED visits annually, HCH would need to expand ED capacity. However, HCH notes that it already expanded its ED several times and that, at this point, there is no space to expand beyond the existing footprint on the existing site. (DI #50, pp. 19-20)

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and, on a contingent basis, approved a budget adjustment of $15.3 million for the project, which AHC has accepted. (DI #111) AHC has since provided adjusted and updated projections of revenues and expenses to demonstrate feasibility and viability going forward, (DI #118).

HCH reports that over the first six months of FY 2015 ED visits increased 4.6% and that it expects volume to continue to grow despite steps to curb growth in inappropriate utilization. HCH believes that growth will continue for the following three reasons: (1) growth of the senior population; (2) patterns of care seeking by the newly insured that will skew toward use of the ED; and (3) substantial numbers of persons remaining uninsured who are ineligible for federal assistance. (DI #84, p. 2)

HCH states that it based its projection of the impact on ED volume on AHC's market share adjustments. HCH notes that it also considered other factors that affect ED volume such as changes in provider relationships, changes in market shares among other existing providers, and changes in travel distance to existing facilities and to the proposed WAH relocation site. (DI #50, pp.20-21) HCH used AHC's projection of MSGA market shift and applied this projection to the ED volumes to establish a low end of the projected impact because HCH believes that AHC's "analysis assumes dramatic shifts to WAH's ED which are not likely."[95] HCH cites WAH's assumed market share shift for zip code 20904, the zip code area of the proposed White Oak site, from 11% to 57%. HCH believes that a market share shift for this zip code area is not only unlikely, but implausible, given that the drive time difference advantage WAH would gain over HCH is only an average of four minutes and that HCH is currently the market leader with a market share of 66% compared to WAH's 18%. (DI #84, p. 6 and Att.) The following table provides examples of HCH's analysis.

Table IV-58: HCH: Analysis of the Impact of Washington Adventist Hospital Relocation on Emergency Department Visits at HCH

Zip Code	Area	WAH 2014 Market Share	Total Est. 2014 ED Visits(1)	Assumed WAH Market Share After Move	Annual Increase (WAH Loss) In HCH ED Visits
20783	Hyattsville	60.3%	14,073	3.0%	5,081
20912	Takoma Park	66.2%	8,121	3.3%	3,778
20782	Hyattsville	53.1%	7,216	2.7%	1,384
20903	Silver Spring	40.5%	7,829	2.0%	2,470
20904	Silver Spring	11.7%	17,432	28.3%	(1,974)
20910	Silver Spring	18.0%	9,709	0.9%	1,331

Source: DI #50, Exh. 5.
Note: Total estimated 2014 ED visits based on 9 months of actual data.

In addition to concern about crowding of the HCH Emergency Department as a result of a relocation-related shift in volume, HCH is concerned that there will be a negative impact on its payer mix. HCH states that 56% of the ED patients are either uninsured or under-insured in the eight zip code areas to which the relocation of WAH is projected to result in a shift of ED volume. HCH notes that, not only do these patients frequently use the ED for primary care, but they require more hospital resources than other patients. (DI #50, p. 22)

HCH questions whether AHC's urgent care center will be able to treat all the conditions treated at WAH's existing ED, and expects that patients who previously sought emergency care at

[95] HCH's May 29, 2015 response to my April 29, 2015 request for additional information (DI #84, p. 6).

WAH's existing ED will seek future treatment at neighboring EDs or will be transferred from the walk-in clinic. HCH notes that its ED will be the closest for a large portion of WAH's current primary service area; therefore, as detailed above, HCH expects to receive a significant percentage of patients who choose to visit an ED rather than the proposed Takoma Park walk-in clinic and almost all of the patients redirected from the walk-in clinic when the resources of a hospital ED are needed. (DI #98, pp. 5-6) In support of its feared results of the WAH relocation, HCH notes that the addition of 25 urgent care centers established in Montgomery County since 2012 (plus 15 existing centers) has not reduced hospital ED volume. HCH believes that, while convenient to patients, urgent care centers have a limited scope of services and limited hours of availability and for these reasons, the addition of urgent care centers do not significantly impact ED volume. HCH believes that the same is true of Federally Qualified Health Centers. Therefore, HCH concludes the FQHC operated by Community Clinic, Inc. on the Takoma Park campus will not reduce ED volume increases at HCH resulting from the WAH relocation. (DI #102, pp. 3-5)

Laurel Regional Hospital/MedStar Montgomery Medical Center

Laurel Regional Hospital[96] states that AHC's market share analysis does not provide a consistent methodology or a statistically-based analysis that correctly uses formulas to support its findings or conclusions. LRH believes that AHC's allocation of increases and decreases in WAH's market shares at a zip code area level were not formulated in a methodologically consistent manner. For example, LRH cites WAH's projection of a 5% increase in its market share in zip code area 20707 and associated market share decreases of 2% for HCH and 3% for LRH in spite of 2013 market shares of 43.9% for LRH and 8.0% for HCH. LRH points out it has a market share in this zip code area that is 5.5 times that of HCH but AHC is projecting that the impact on LRH would be 1.5 times the impact on HCH. (DI #92, pp. 2-3)

LRH states that the relocation of WAH to the White Oak/Fairland area will have an unwarranted negative impact on LRH and MedStar Montgomery Medical Center because the White Oak/Fairland area is a significant part of each hospital's primary service area. LRH and MMMC state that they jointly applied the methodology developed by the Reviewer in the prior CON review of a proposed relocation of WAH to the White Oak site (Docket No. 09-15-2295)[97] to estimate the impact of the relocation on patient volumes at the two hospitals. The analysis also estimated the impact on revenues of the two hospitals. (DI #51, pp. 1-2; DI #52, p. 24) This analysis was initially submitted in LRH's February 9, 2015 comments, in which LRH reported that its application of the methodology indicates that, after accounting for population growth heavily weighted to the population aged 65 and older, over and the declining hospital discharge rates (11.2% for MSGA patients and 2.0% for OB patients) between 2013 and 2023, MMMC would lose 284 patients (3.7% of its otherwise expected 2023 discharges) as a result of the WAH relocation. (DI #51, p. 2 and Exh. 4) LRH and MMMC also submitted their analysis of the impact of expected volume losses on revenues, expenses, and operating margins. MMMC included losses in outpatient revenue based on its expected losses in inpatient revenue based on the 2014 relationship of outpatient revenue to inpatient revenue at each hospital, 91% for MMMC.

[96] See my discussion page 154, *supra*, regarding LRH's announced intention to cease providing inpatient services by 2018.

[97] Note that the 2012 Reviewer's Recommended Decision did not result in a Commission decision since the applicant withdrew the application before MHCC action.

Applying the 50% HSCRC market share shift adjustment factor and each hospital's 2014 collection ratio, they concluded that MMMC would suffer a reduction in net revenue of $2.26 million.. They reached an estimated expense reduction of $1.3 million for MMMC by applying the expected collection ratio (86% for MMMC and variable expense reductions of 29% for MMMC). By subtracting the estimated expense reductions from the estimated revenue losses, MMMC calculated an estimated net impact on operating margin of $952,000 for MMMC. (DI #83, Excel Workbook #2)

Table IV-59: MMMC
Impact of Lost Volume Due to WAH Proposed Relocation
2014 Dollars (in $000's)

Line		MedStar MMC	Note
1	Projected Discharge Reduction	(284)	
2	FY 2014 Average Charge Per Discharge	$ 9,712	(1)
3	Inpatient Revenue Reduction (A)	$ (2,758,000)	(2)
4	Outpatient Revenue to Inpatient Revenue	91%	(3)
5	Outpatient Revenue Reduction (B)	$ (2,511,000)	(4)
6	Total Revenue Reduction (A + B)	$ (5,269,000)	(5)
7	Expected HSCRC Market Share Adjustment Factor	50%	
8	Expected Collection Ratio	86%	(6)
9	Net Revenue Impact (A)	$ (2,257,000)	
10	Projected Revenue Reduction	$ (5,269,000)	
11	Expected Collection Ratio (1)	86%	
12	Composite Variable Cost Assumption	29%	
13	Net Expense Change (B)	$ (1,305,000)	
14	Net impact on Operating Margin (A-B)	$ (952,000)	
15	Total FY 2014 Actual Revenue	$166,918,000	(7)
16	Net Revenue Impact as Percent of Total Revenue (Line 9/Line 15)	-1.35%	

Source: DI #83 Excel Workbook #2 (Sources and Notes as listed by LRH/MMMC)
Notes: (1) HSCRC Inpatient Abstract Data Set for the twelve months ended June 30, 2014 & computation is total inpatient charges divided by total actual discharges.
(2) Line 3 equals Line 1 (discharges) times Line 2 (average charge per discharge).
(3) HSCRC Inpatient and Outpatient Abstract Data Set for the twelve months ended June 30, 2014. Computation is Outpatient Revenue divided by Inpatient.
(4) Line 3 (Inpatient Revenue Reduction) times Line 4 (Outpatient revenue percentage) to compute the corresponding outpatient revenue impact of volume loss.
(5) Total Revenue Reduction (line 6) equals IP Revenue reduction (line 3) plus OP revenue reduction (line 5)
(6) FY 2014 HSCRC Annual Filing RE Schedule
(7) HSCRC Inpatient and Outpatient Abstract Data. The total inpatient and outpatient revenue for the twelve months ended June 30, 2014. Data excludes LRH's Specialty Unit revenue.

In separate comments, MedStar Montgomery Medical Center states that the proposed project should not be approved at the proposed location because it will unnecessarily duplicate existing health resources. Specifically, MMMC believes "that another hospital is not needed in the White Oak/Fairland area because there are three other hospitals already in the service area"[98] and another hospital will create excessive structural costs. MMMC also states that approval of the project will unnecessarily increase costs to the health care delivery system because it will shift

[98] MMMC comments on AHC application (DI #52, p. 25)

volume from a lower cost hospital, MMMC, to a higher cost hospital, WAH. (DI #52, p. 25)

City of Takoma Park

The City of Takoma Park states that relocating WAH to White Oak would leave 12,000 to 15,000 ED visits to be absorbed by other facilities. CTP believes that, given the travel time, the proposed shuttle bus service for patients, visitors, and employees from Takoma Park to the White Oak campus may not be an attractive option for ED patients, but that the planned 24/7 urgent care center could conceivably absorb many of these visits. (DI #54, p. 21 and 31)

Applicant's Response to Comments

AHC states that the relocation of WAH will enhance and strengthen the region's health care system, as the Commission's approvals of relocated, outmoded facilities for Harford County (Upper Chesapeake Medical Center), Allegany County (Western Maryland Regional Medical Center), Washington County (Meritus Medical Center), and Anne Arundel County (Anne Arundel Medical Center), similarly resulted in "an increased level of quality and patient care and, ultimately, a new equilibrium distribution of patients across those facilities, something that results in an obvious public benefit and a strengthened regional health care delivery system."[99] AHC states that the Commission must consider what the effect would be on the region's health care delivery system if this application were denied. (DI #59, p. 4)

Regarding the interested parties' claims that the relocation of WAH will have an unwarranted negative impact on their hospitals, AHC states that the methodologies relied upon by HCH, LRH, and MMMC in their claims of negative impact are flawed, unsupported, and wholly unreliable. Therefore, AHC believes the interested parties have failed to offer any basis for the Commission to conclude that the relocation of WAH would result in an unwarranted negative impact to any of them. (DI #95, p. 1)

AHC states that regardless of the impact of the relocation on LRH and MMMC discharges, there will be no adverse impact because any such decreases will be offset by increases resulting from population growth. (DI #59, p. 2) AHC also states that the relocation will not result in any unwarranted impact on the other hospitals' profitability. Specifically, AHC believes that the analysis of the impact on profitability prepared by LRH and MMMC is based on variable cost assumptions that are unreliable. AHC analyzed the recent experience of both LRH and MMC from FY 2013 to FY 2014 using annual filing data prepared by the Maryland Hospital Association. AHC observed that MMMC experienced a volume decrease of slightly more than 5% and reduced direct care expenses by a little more than 5% indicating a variable expense factor of 89%, which is also significantly more than the 50% used by MMMC. (DI #95, pp. 2-6) AHC then calculated an aggregate variable cost factor for each hospital to account for non-patient care direct expenses as well as direct patient care expenses using a direct care cost factor of 90% for Laurel because AHC felt that the 112% is unsustainable. AHC calculated variable expense factors of 51.8% for MMMC. AHC then calculated its own estimate of the impact on the profit margins of MMMC using the two hospitals' analysis of volume impact and projected that the decrease in operating margin would be $78,779 for MMMC. (DI #95, pp.6-7)

[99] AHC response to comments of interested parties and participating entity (DI #59, p. 4)

AHC takes issue with HCH's claim that HCH's emergency department volume will increase dramatically following WAH's relocation pointing to the fact that WAH's ED will be new with improved patient privacy. AHC states that HCH has failed to properly account for the planned urgent care center on the Takoma Park campus and the FQHC that is currently being expanded. AHC notes that HCH discounts the potential impact of the urgent care center on ED volumes while pointing to its own efforts to divert low level ED volume to alternative locations. AHC responds to HCH's claim that its ED is more accessible by public transportation by pointing to the small percentage of patients (1.7%) that arrive by public transportation. (DI #95, pp. 7-9)

AHC says that Holy Cross of Silver Spring's citation of proximity as a major reason why patients will flock to its ED contradicts the discounting of proximity by HCH as a reason why patients who currently go to HCH might shift to WAH, claiming that the WAH location will not be much closer than the HCH ED and that HCH ED patients have established travel habits and relationships. AHC also states, that "HCH applied unwarranted and extremely aggressive decreases in WAH market share without considering offsetting increases that would occur when it relocated into a redefined service area."[100] AHC cites the example of three zip code areas, two where WAH has market shares of over 60% and one for which it has a market share of 53%, where HCH ignored current market presence and estimated that WAH's market share after relocation would be reduced to 3%. AHC notes that in one of the zip code areas (20782), the drive time to HCH and WAH in White Oak would be the same. Another of the three zip code areas is 20912, WAH's current home zip code, where it will continue to have connections to the urgent care center and other services that will remain on the campus. In summary, AHC states that "HCH assumed an increase of 20% or greater in 10 zip codes but did not assume that WAH would realize an increase in market share of 20% or greater in any zip codes, not even its new home zip code 20904."[101] (DI #95, pp. 7-10)

Reviewer's Analysis and Findings

This criterion requires an applicant to provide information and analysis with respect to the impact of the proposed project on existing health care providers in the service area. The criterion requires that this information include the impact on geographic and demographic access to services, on occupancy, on costs and charges of other providers, and on costs to the health care delivery system. In considering this criterion, I want to first note that I have considered the impact of this project on geographic and demographic accessibility under the related Geographic Accessibility and Adverse Impact standards, COMAR 10.24.10.04B(1) and (4).[102] I concluded that the proposed relocation is consistent with the Geographic Accessibility standard and would not inappropriately diminish either access for the population in the primary service area or the availability or accessibility to care, including access for the indigent and uninsured because I found that other hospitals are reasonably accessible to these populations and that some services would likely continue to be available on the Takoma Park campus through the existing Federally Qualified Health Center and the establishment of an urgent care center. Thus, as is the case with other criteria established in regulation for CON project reviews, the State Health Plan standards,

[100] AHC June 29, 2015 response to data submitted by HCH, LRH and MMM (DI #95, p. 10).
[101] DI #95, p. 10.
[102] See discussions at pages 22 and 26, *supra.*

the subject of the first review criterion, includes applicable standards for this review that bear on the issue here, impact of the project. For this reason, this Recommended Decision must be read beyond this section to obtain a full review of this issue.

Regarding the impact on volume of other providers, the applicant projected relatively small decreases in volume at other hospitals as a result of this project and projects that, when coupled with gains attributable to population growth and aging, will not translate into actual reductions in volume for most hospitals during the ten year preceding 2023, by which time the relocation adjustments will have occurred. MMMC questions the methodology used by AHC to project the impact of the proposed relocation of WAH on market share and discharge volumes and state that the relocation will have an unwarranted negative impact on its general hospital operations. LRH and MMC jointly prepared their own projections using a methodology based on that used by an MHCC Reviewer in a prior review of a similar relocation of WAH to the same White Oak site (Docket No. 09-15-2295). LRH reports that MMMC would lose 284 (3.7% of its total) as a result of the relocation.

I have reviewed both the methodology used by the applicant and the methodology used by LRH and MMMC to project the impact of the proposed relocation on MSGA and obstetric discharges. As I pointed out in my analysis and findings under the *Need* criterion, I am concerned that AHC's determination of the expected service area was too conservative and resulted in an expected service area for the new location that is too small and not as different from the present service area as would seem likely. I share the interested parties' questions about the applicant's methodology, as well as the concerns expressed by the City of Takoma Park. I explained my concern with the statement that I cannot see a clear, consistent relationship between the rationale provided for the changes in zip code market share and the projected market shares. While I am more comfortable with the methodology used by MMMC because of its prior use, it was only used in a single Recommended Decision that was not acted on by the Commission because the application was withdrawn.

My review of the use by LRH and MMMC of an earlier Reviewer's methodology raises questions about the number of zip code areas included and the proximity rank of some them. I am also concerned with the projection of future volumes on a zip code area level by age group. I am concerned that projections for such small market segments is less reliable on a year-to-year basis. I recognize that the methodology used in the prior recommended decision also projected discharges at a zip code level; however, I have chosen to project discharges on a service area basis to minimize the year–to-year fluctuation that can occur when using smaller areas. While I have concerns about the earlier methodology, I do not agree with AHC's charge that the earlier analysis ignores the proximity of other hospitals to WAH's new location. My review indicates that there is an adjustment for the current market shares of other hospitals in each zip code area analyzed by LRH and MMC. I also disagree with AHC's statement that the shift in discharges to DC hospitals makes no sense. It appears reasonable to me that some discharges would shift from WAH to DC hospitals when WAH moves approximately six miles to the north, especially from DC zip code areas that are in WAH's current MSGA service area.

Given my questions and concerns with the competing approaches to projecting impact, I have performed my own analysis. While this analysis is based on the one used in the prior

Recommended Decision, I determined expected services areas as described under the *Need* criterion. My impact analysis used these service areas and the expected market shares for all relevant hospitals, the determination of which was also described under the *Need* criterion. To arrive at the discharge impact that one would have expected to occur in 2013, if WAH had been operating in White Oak, I multiplied the expected market share for each hospital for each zip code area by the total discharges from all Maryland and DC hospitals generated from that zip code area. I then subtracted each hospital's actual 2013 discharges originating in that zip code area to estimate the impact of the relocation. The result for MSGA discharges is an estimated loss of 291 discharges from MMMC (4.6% of discharges), and 773 from HHC (4.6% of discharges). For obstetrics my estimate of the loss that would have occurred in 2013 is 20 for MMC and 79 for HCH. Therefore, my estimate of the total loss of discharge volume attributable to the relocation of WAH is 311 discharges for MMMC and 852 for HCH.

I recognize that my estimates of likely market shifts and projected volume changes are much closer to those projected by MMMC than the changes projected by AHC. However, I cannot conclude that the impact is unwarranted. First, LRH has already terminated provision of obstetric and perinatal services, and has noted in this review that it will not be providing inpatient services after 2017. (DI #110) Second, MMMC's calculation of the impact of such decreases in volume is questionable. One question is whether outpatient volume would decrease in proportion to the projected decrease in inpatient volume. No basis for this assumption was submitted. Another question is the calculation of the impact of the estimated decreases on each hospital's profitability. Both AHC and HSCRC questioned these calculations and the variability assumptions used. HSCRC questioned the assumption of a 60% rate for supplies and drugs stating that these cost should be close to 100% variable with volume and that use of a higher variability factor would reduce the estimated project impact. (DI #131, p. 12). AHC did its own calculation of variable cost factors, as explained above, and determined that for MMMC, a more appropriate assumption is 51.8% rather than 29%. I have concluded that the impact on MMMC profitability, if any, is likely to be much less than MMMC has projected.

With respect to Holy Cross Hospital's comments on volume impacts, HCH is concerned that increases in the volume of ED visits will overwhelm its resources. It has not registered concerns with declining volume negatively affecting its profitability. While HCH projects a 15% increase in ED volume (13,302 additional visits) as a result of the relocation of WAH, AHC claims that HCH applied extremely aggressive assumptions with respect to decline in WAH market share in zip code areas close to Takoma Park, but did not assume similar increases in market share in zip code areas "moving closer" to WAH after it relocates. I reviewed HCH'S market share assumptions as summarized above and carefully considered AHC's response. Ultimately I determined it was necessary to conduct my own market share analysis to settle the conflicting claims. My analysis indicates that it can be reasonably predicted that HCH's Emergency Department may lose volume as a result of the relocation of WAH, rather than gain considerable visit volume, as it predicts.

I modeled this analysis on the analysis of MSGA market share shifts described earlier in this Recommended Decision under the *Need* criterion. One major difference is that market share shifts are only based on visits to Maryland hospitals, and not DC hospitals, because data of the same currency on outpatient visits to DC hospitals is not available. For that reason I only

considered the change in proximity rank among Maryland hospitals. As in the MSGA analysis, I included a large number of zip code areas in this analysis, including 80 Maryland zip code areas. I included all the zip code areas identified by AHC as being in WAH's current service area and the expected service area. I also determined the zip code areas that contributed to the first 85% of WAH's 2014 visit volume and any other zip code areas of comparable proximity rank to the existing WAH and the proposed WAH, which occurred with the zip code areas for which WAH is the sixth closest Maryland hospital.

I used the same rules for determining the target market share of Maryland zip code areas that I used for examining the need for MSGA bed capacity. For the DC zip code areas, WAH currently has a proximity ranking that ranges from one (WAH is the closest hospital) to 10 when considering both Maryland and District of Columbia hospitals. Following relocation of WAH to White Oak, its proximity ranking will range from ninth to fourteenth. Since WAH's current proximity ranking for these zip code areas is no higher than 10 and it is the tenth most proximate hospital ED to only one of these zip code areas, its average market share for the zip code areas for which it is ninth and tenth ranked hospital, which was 4.6% of all visits to Maryland hospitals, was used as a target market share assumption for all DC zip code areas. As for MD zip code areas, if a DC zip code area had a lower market share in 2014 than 4.6%, its 2014 market share was used as the expected market share.

The target market share for each hospital for each zip code area was then adjusted to account for the current relative strengths of the other hospitals based on their 2014 market share, in order to arrive at an expected market share. This was done by assuming that total market share of WAH-White Oak, the interested party hospitals and other hospitals would equal the total 2014 market shares of the same hospitals substituting WAH-Takoma Park for WAH-White Oak.[103] This step also adjusts each of the other hospital's expected market share in zip code areas where WAH's market share is expected to change as a result of the relocation. This part of market share adjustment process has the effect of reducing the expected market share changes that would have resulted from only relying on the change attributable to the change in proximity ranking.

In the last steps of my analysis, I calculated the expected impact of WAH's relocation by multiplying the expected market shares for each hospital for each zip code area times the total 2014 ED visits from that zip code area to all MD hospitals and subtracted the hospitals actual 2014 visits from that zip code area. I then summed the changes for each hospital for all the zip code areas. The result is that I would expect Holy Cross to lose approximately 2,700 ED visits, which would have been 3.1% of its 86,453 visits for 2014. The table below sets forth my finding regarding expected ED market shares for the relocated WAH and HCH in key zip code areas and the change in visits to HCH that would have resulted.

[103] No DC hospitals were included in this step because the number of outpatient ED visits to those hospitals is not available. All Maryland hospitals were included as opposed to those with over 3% market share that were used in the MSGA analysis. This was done for ease of data management and has no significant impact on the analysis because of the small market shares.

Table IV-60: Comparison of 2014 and Expected Emergency Department Visits Market Shares and Impact on Visits to Holy Cross Hospital Visit

Zip Code	Total 2014 ED Visits to MD Hospitals	2014 ED Market Shares		WAH Proximity Rank		Expected WAH ED Market Shares Per HCH	Expected WAH ED Market Shares Per MHCC	HCH Expected Increase (Decr.) In HCH ED Visits	Reviewer Expected Increase (Decr.) In HCH ED Visits
		WAH	HCH	TP	WO				
20705	7,737	12.5%	30.2%	4	1	12.9%	53.2%	0	(1,086)
20707	11,567	2.3%	5.8%	5	2	7.2%	19.7%	(34)	(120)
20782	7,507	52.4%	17.7%	1	4	2.7%	28.4%	1,384	672
20783	13,944	59.2%	25.2%	1	2	3.0%	43.2%	5,081	1,373
20866	3,599	5.6%	33.5%	4	1	20.5%	56.0%	(190)	(645)
20901	10,019	21.9%	64.7%	2	2	11.2%	21.9%	911	0
20903	8,092	40.5%	48.6%	2	2	2.0%	40.5%	2,470	0
20904	17,787	11.6%	59.0%	3	1	28.3%	53.5%	(1,974)	(4,970)
20905	4,392	4.3%	27.7%	4	1	NA	56.7%	NA.	(666)
20906	23,486	2.4%	38.2%	5	4	7.4%	2.4%	(455)	0
20910	9,880	17.6%	65.5%	2	3	0.9%	7.75%	1,331	785
20912	7,963	65.0%	25.5%	1	3	3.3%	44.2%	3,778	1,209

Source: Maryland Discharge Data Base, Maryland Outpatient Data Base, Spatial Insights Drive Time Matrix, HCH February 9, 2015 Comments on Application (DI #50, Exh. 5).

Based on the above analysis, I tend to agree with AHC that HCH applied extremely aggressive decreases in WAH's market shares. Specifically, as pointed out by AHC, the decreases in market share for zip code areas 20782, 20783, and 20912 from more than 50% to approximately 3.0% appear extreme. I also think that the projected decrease in WAH's market share from around 40% to 2.0% is extreme for a zip code area for which WAH's proximity ranking will not change. I also agree that HCH's treatment of what would be WAH's home zip code area is inconsistent with HCH's treatment of WAH's current home zip code area. In conclusion, I find that Holy Cross Hospital is unlikely to experience an increase in Emergency Department visits of the magnitude it predicts as a result of the relocation of Washington Adventist Hospital. This finding is bolstered by my conclusion regarding COMAR 10.24.10.04B(4), the *Adverse Impact* standard of the Acute Hospital Services Chapter, that the urgent care center that AHC plans to establish and operate on the Takoma Park campus is likely to be able to serve at least a quarter of the demand that would otherwise be handled by the WAH ED if that facility remained in place.

I also considered the impact of the relocation on LRH's ED volume. My analysis indicates that LRH would have lost approximately 4,098 of its 32,720 ED visits in 2014, a loss of 12.5%, if the replacement WAH had already been established in White Oak. I note that this analysis estimates the impact on LRH's ED volume as a part of an acute care hospital with inpatient services. I believe the impact on an alternative emergency care facility in Laurel, which is freestanding and not part of a general hospital ED, would not be as great. .LRH has announced that it will transition the LRH campus to one that is limited to providing outpatient services with a freestanding emergency service capability. The implementation of that plan could reduce visit volume in Laurel regardless of whether WAH relocates because the LRH campus will not be able to serve the highest acuity patients. However, low and mid-range acuity patients are a substantial portion of any hospital's ED visits, and, with appropriate public information and education, most such patients could be expected to use the LRH emergency care center if it is more convenient,

rather than opting to go further to a hospital ED that may not be necessary for the patients' needs and is likely to be less convenient, in terms of wait time.

I note that AHC indicates that 45% of the WAH ED visits could be treated at an urgent care center. I expect that the percentage for the facility proposed by Laurel would be higher. Freestanding emergency services at Laurel would have the same advantages as the establishment of the urgent care center by AHC in Takoma Park, in that Laurel is an established location with a patient population familiar with the location, which as an emergency center would have the added advantage of being able to treat mid-range acuity patients. While AHC's 45% estimate is based on treating level I and II patients and some level III patients, I considered the experience of existing Freestanding Medical Facilities, as reported in the Commission's February 1, 2015 report.[104] I note that for Germantown Emergency Center ("GEC"), in FY 2014, 57.7% of the visits were level III and 19.6% were level IV and that for Bowie Health Center ("BHC"), the percentages were 53% and 22.5% respectively. GEC was nine miles from the nearest hospital[105] and BHC is 9.2 miles from the nearest hospital. The relocated WAH will be seven miles from LRH. I further note that, in FY 2014, there were 37,247 visits to GEC and 35,344 visits to BHC. Based on the current utilization and the location of LRH in an area with population density similar to that of GEC and BHC, I believe that, after its transition, the emergency center and ambulatory medical campus located on the site of LRH will be able to maintain a high percentage of its current volume, given sufficient efforts to inform and educate the public, regardless of the relocation of WAH.

I have also considered MMMC's comments regarding the impact of the proposed relocation on the cost of the health care delivery system. MMMC asserts that the relocation to the White Oak/Fairland section of Montgomery County would duplicate existing resources and add unnecessary costs to the health care delivery system. MMMC claims that this area is already served by three other hospitals. Its comment appears to ignore the fact that WAH's proposed location is in zip code area 20904, which is already in WAH's primary service area. This claim is also misleading in that zip code area 20904 is in the primary service area of two other hospitals, not the three claimed by MMMC. While zip code area 20904 is in LRH's 85% service area, it is not in its primary service area. I also find that WAH is the second most important hospital for this zip code area in that it had the second most MSGA discharges from the zip code area in 2013.

Based on my findings under COMAR 10.24.10.04B(5),[106] the *Cost Effectiveness* standard, that the relocation of WAH is the most cost effective solution to its physical plant problems and that the proposed site, located within WAH's primary service, is reasonable, I do not agree that the proposal is an unnecessary duplication of hospital resources. Regarding MMMC's assertion that the relocation will unnecessarily increase health care delivery costs, I take special note of HSCRC's comments on WAH's charges relative to other hospitals, taking into account cost differences attributable to the relative socioeconomic status of its service area population. I note that HSCRC found that, while MMMC's charges for FY 2014 were 12.3% lower than WAH's, they were 10.4% higher when the estimated impact of these population differences on costs are factored into the comparison. (DI #131, pp.8-9)

[104] Report on the Operations, Utilization, and Financial Performance of Freestanding Medical Facilities
[105] GEC is now 1.7 miles from the nearest hospital with the opening of Holy Cross Germantown Hospital in October 2014.
[106] See discussion at p.43, *supra.*

In summary, WAH's relocation six miles to the north of its current site, to a site within its current primary service area, will not duplicate existing hospital resources. While I find that MMMC is likely to see fewer inpatients and less revenue than it would otherwise experience without the relocation of WAH, I find that the impact of any such decrease in volume on MMMC's profitability should be significantly less than it has projected. Moreover, it does not appear that any shift in volume from MMMC to the relocated WAH will increase health system costs as a result of the relative charge structure of the two institutions. While the relocation will add costs to the health care delivery system in the form of a capital cost increase to WAH's revenue budget, such an increase is necessary to modernize an obsolete and poorly functioning hospital resource that is still an important component of the regional health care delivery system. Therefore, I do not consider the likely impact of the relocation of WAH on other hospitals or the cost to the health care delivery system related to this relocation to be a factor that would justify denial of this application.

I conclude that, from a broad health care delivery system perspective, WAH plays a very important role in providing services to the residents of southeastern Montgomery County and western and northern portions of Prince George's County. Its current operation in an outdated physical plant, as discussed in detail under the *Cost-Effectiveness* standard,[107] makes its future survival and ability to perform well dependent on its relocation and replacement. Relocation in an urban area with competitive hospitals is inevitably going to have an impact on service areas and market share.

I find that the application is consistent with this criterion and that both the health care delivery system and the population in WAH's service area will benefit from having a modern hospital that can thrive and better serve the region.

V. SUMMARY OF RECOMMENDED DECISION

The basis for my recommendation that the MHCC approve AHS' application is summarized as follows:

A. COMPLIANCE WITH APPLICABLE STATE HEALTH PLAN STANDARDS

COMAR 10.24.10 – Acute Hospital Services

General Standards

(1) Information Regarding Charges
(2) Charity Care Policy
(3) Quality of Care

I found that the applicant has complied with these general standards.

Project Review Standards

[107]See my analysis regarding the cost effectiveness standard, COMAR 10.24.10.04B(5), *supra*, p.43.

(1) Geographic Accessibility

This standard requires me to evaluate whether the proposed project is located to optimize accessibility in terms of travel time for its likely service area population, and defines optimal travel time as being within 30 minutes under normal driving conditions for 90 percent of the population in its likely service area. AHC's analysis found that just over 90% of the service area population of WAH, as operated at its current site, resides within a 30-minute travel time, under normal conditions; also that just over 95% of the service area population for the relocated hospital at White Oak, would reside within a 30-minute travel time of that site, under normal conditions. It concludes that aggregate drive time for the White Oak service area population would be lower (-4.9%) than that for the Takoma Park service area population.

While AHC's analysis was focused on its projected new service area, I was concerned about the effect that a relocation would have on the residents of the existing service area. My analysis showed that of the 13 zip code areas making up WAH's PSA, six would be at least 5 minutes farther away from WAH if it relocated as proposed; four others would experience less than a five minute increase in travel time; and three zip code areas would be closer to WAH at White Oak. Only one would experience an increase in travel time in excess of 20 minutes, but that zip code area has six closer hospital alternatives. In summary, all but one of the 13 zip code areas comprising WAH's current service area will remain within a 20 minute drive time of a hospital ED.

I find the proposed project meets this standard.

(2) Identification of Bed Need and Addition of Beds

The proposed replacement hospital will have 152 MSGA beds, 19 fewer MSGA beds than were licensed in FY 2015 and 17 fewer beds than are currently licensed. This number of beds represents a reduction in physical MSGA bed capacity for WAH of 87 beds. All of the 152 MSGA beds will be located in private rooms.

This standard provides that only beds identified as needed and/or currently licensed shall be developed at an acute care general hospital, and contains tests that apply to proposed additional beds. This application seeks to replace MSGA bed capacity that is currently licensed, and does not propose any additional bed capacity. WAH currently has a physical capacity for 239 MSGA beds and has allocated 169 beds within its overall acute care license to MSGA services in FY 2016. AHC is proposing to develop a physical bed capacity for only 152 MSGA beds at White Oak

I find that AHC has satisfied this standard.

(3) Minimum Average Daily Census for Establishment of a Pediatric Unit – Not applicable.

(4) Adverse Impact

This standard says that capital projects undertaken by hospitals shall not have an unwarranted adverse impact on hospital charges, availability of services, or access to services. In October 2015, WAH obtained a decision from the Health Services Cost Review Commission, contingent on approval of the proposed relocation and replacement project that is the subject of this Recommended Decision, that it was eligible for an increase in its permanent rate base of $15.39 million on January 1, 2019. This approval, while substantially smaller than the $19.7 million increase requested, was accepted by WAH. The latest data compiled by HSCRC (covering 2013) shows that WAH had an adjusted charge level (based on HSCRC's Reasonableness of Charges comparison methodology) that was 7.01% lower than its peer group. For this reason, AHC does not need to demonstrate that its Debt to Capitalization ratio is below the average ratio for its peer group under this standard. The latest available data compiled by HSCRC also showed WAH to have an Average Age of Plant of 26.7 years in 2014, older than all hospitals in the state excepting Upper Chesapeake–Harford Memorial and Fort Washington. This information supports my conclusion that significant physical plant modernization and/or replacement of WAH is reasonable, and satisfies this portion of the standard.

The second part of this standard – its impact on the availability or accessibility to care for the population in the primary service area – drew much comment from the interested parties and the City of Takoma Park, a participating entity. Holy Cross Hospital also said that the move would inundate its ED with additional visits that it would struggle to accommodate. I performed an analysis at the census block-group (CBG) level to assess the likely impact of this project on that segment of the Takoma Park population who might be most negatively affected by the hospital's potential relocation. I found that none of these CBGs will be more than 15 minutes from an emergency room – and most will be much closer than 15 minutes, if the proposed project is implemented. In addition, since the applicant has committed to transforming its current ED into a 24/7/365 urgent care center if/when it moves to White Oak, my analysis shows that anywhere from 25% to 45% of the visits to its ED could be served in an urgent care setting, and thus could continue to access this facility.

Given the importance of this UCC to mitigating impact, as well as the concerns expressed by interested parties and Takoma Park, I am recommending a condition be attached to an approval of this project that obligates AHC to maintain 24/7/365 UCC access unless it receives approval from MHCC to reduce its hours of operation.

I found AHC met this standard.

(5) Cost-Effectiveness

In its evaluation, Adventist compared each of four options – two on-site renovation/expansions and two options at the White Oak location -- to a set of seven categories of objectives that would need to be satisfied to identify what it viewed as the optimal option that would meet both the needs of AHC and the needs of its service area population. The option chosen was to build a replacement hospital in White Oak, without replacement of the acute psychiatric beds, which will remain on the Takoma Park campus in expanded and renovated space, and operate

as a special hospital-psychiatric as part of Adventist Behavioral Health. Late in my review, this part of the plan became a matter of concern given the expiration of Maryland's waiver of the Institutions for Mental Diseases Medicaid Exclusion; however, I am satisfied that either that public policy issue will be resolved by the time this project is built and/or AHC will be able to manage within it.

I find that the applicant has met this standard. However, given my concern about separating the psychiatric beds from the general hospital, I recommend that a condition be placed on any approval of this project obligating AHC to provide a report to the Maryland Health Care Commission on the operation of the specialty hospital for psychiatric services in Takoma Park that will review patient intake and transport issues, coordination of care for psychiatric patients between the White Oak and Takoma Park campuses, and the specific financial performance of the special hospital, exclusive of the operation of Adventist Behavioral Health and Wellness overall.

(6) Burden of Proof Regarding Need

I found that AHC has successfully demonstrated the need for this project. This includes the need for a comprehensive modernization of the WAH physical facilities. I have concluded that this level of needed modernization is most cost-effectively achieved through relocation and replacement. It also includes the need for the services and capacities proposed by AHC. I found AHC's assessment of these needs to be reasonable, reflecting thoughtful analysis of the likely changes in service area and market share associated with the proposed hospital relocation, and consistent with current trends in hospital use and the changing environment of hospital service delivery and payment for hospital services. This standard is one requiring an overall assessment of the applicant's demonstration of need with respect to the project and various aspects of the project. As such, my finding reflects an evaluation of how AHC responded to several SHP standards and general review criteria.

(7) Construction Cost of Hospital Space

AHC's proposed cost per square foot for the relocation of the hospital is $4.97 per SF less than the MVS benchmark. Therefore, there would not be any exclusion from any rate request submitted to the HSCRC for excessive capital cost of the hospital construction portion of this project. Applicant has met the standard.

(8) Construction Cost of Non-Hospital Space – Not applicable in this review.

(9) Inpatient Nursing Unit Space

The standard provides that the cost for space built or renovated for inpatient nursing units that exceeds 500 square feet per bed be excluded from any rate increase related to the capital cost of the project. I find that the proposed inpatient nursing units are sized to be less than 500 square feet per bed.

(10) Rate Reduction Agreement

The applicant notes that this standard is inapplicable because a new method for determining "high cost" hospitals under the new Medicare waiver and payment model is still under development. The applicant also noted that "industry discussions indicate the need for a measure that focuses more on the overall efficiency of hospitals including both cost and quality."

(11) Efficiency

AHC has identified design features of this project and contrasted them with existing conditions to illustrate a number of ways that operational efficiency is expected to improve at the replacement hospital. Key improvements include the co-location of complementary services, design of the nursing units, dedicated elevators, and private room layouts. The applicant projects a 2.2% percent reduction in total staff FTEs from 2014 to 2020, the second year of operation for the replacement hospital. I find that AHC's design of this project has taken operating efficiency into consideration, consistent with the requirements of this standard.

(12) Patient Safety

Adventist appropriately considered patient safety when designing the new facility. The replacement hospital's modifications and design features reflect compliance with current hospital standards and AHC's efforts to improve safety for its patients. I note the applicant's attention to the incorporation of design features intended to reduce the risk of infection, decrease disruptions, and improve area transitions, thereby enhancing the quality of care provided to patients. I find that the design of this hospital project meets the patient safety standard.

(13) Financial Feasibility

Based on the projections made by the applicant, which I find to be reasonable, I find this project meets the requirements of this standard, given that the regulated facility projects in this review are the relocation of the general hospital, and the resulting establishment of a special hospital for psychiatric services. The proposed Takoma Park campus is most properly viewed as a new campus of Adventist HealthCare, and as such, it is the overall financial performance of this system that is the most important indicator of AHC's ability to redevelop the Takoma Park campus as planned and maintain its operation, even though it may not generate excess revenue for AHC from the overall mix of facilities and services operated on the campus. The audited financial statement for AHC for FY2013 showed income from operations of the Combined AHC obligated group to be $9.6 million, despite this being a year in which WAH had an operating loss of $10.7 million. For FY 2014, the Combined AHC obligated group is reported to have generated income from operations of $24.1 million, an improved performance aided by WAH's ability to move back into the black with $4.1 million in income from operations. In the long run, modernizing the WAH facilities is an important necessary step to assuring that AHC can continue to be financially strong and continue to play an important role in health care delivery in the Takoma Park and Silver Spring area of Montgomery County and the nearby communities of Prince George's County. AHC has put forth a plan to improve a weak component of its system that will face increasing problems over

time without actions of the type proposed. While the plan carries risk and will alter the general hospital landscape in ways that create legitimate concern for WAH's historic service area population, I have concluded that the potential risks are manageable and that WAH's plans are feasible.

I note that one of the risks attendant to this project is the permanent loss of Maryland's IMD Exclusion waiver, which would make the long-term viability of the psychiatric facility at Takoma Park more tenuous and the benefit of lower upfront capital cost that drove this part of AHC's plan more questionable. DHMH is again pursuing an IMD Exclusion Waiver and, for now at least, the Maryland Medicaid program is continuing to provide funding at previous levels. I am hopeful that by the time a replacement hospital would go into operation at White Oak, a rational solution to this funding issue will be in place. Under a worst case scenario, AHC would have to reassess its ability to continue to viably serve all acute psychiatric patients in need of service and this reassessment would undoubtedly focus, first and foremost on bringing psychiatric beds back within the general hospital setting. If that does turn out to be the ultimate solution to this potential future problem, I believe that AHC would have an excellent chance of being able to accomplish that change in direction. For this reason, I believe it is reasonable to allow the plan for the psychiatric facilities to go forward at this time. I am, however, recommending a condition that will require AHC to provide MHCC with a report on the operation of the specialty hospital for psychiatric services in Takoma Park.

(14) Emergency Department Treatment Capacity and Space

In 2014, WAH operated at the highest level of treatment capacity among Montgomery County EDs, at almost 45,000 patients and 1,727 visits per treatment space, well above the County average of 1,243 visits per space and the overall use of capacity by EDs in Maryland. The project would increase WAH's ED treatment space from 26 to 32 treatment rooms, and two mental health evaluation rooms. Measuring this project against the guidelines promulgated by the American College of Emergency Physicians (ACEP) shows that WAH's ED fits the "high-range" category on seven of eleven indicators, with one indicator falling in between. ACEP guidance on treatment space for an ED with 40,000 visits per year is 25 (Low-Range) to 33 (High-Range) spaces; for a 50,000 visit ED, those guidelines call for 30 (Low-Range) to 40 (High-Range). From 2011-2014, WAH's ED averaged 47,939 patients. Although their projections of ED visits may be somewhat high, I note that information from the HSCRC Discharge and Outpatient Data Bases shows that WAH experienced ED visit volume in the range of what it is projecting for 2020 as recently as 2012 and 2013. Based on this volume and WAH's ED characteristics I conclude that both the space proposed for the ED (22,784 department gross SF) and the proposed number of treatment spaces is in harmony with the ACEP guidelines and the application is consistent with this standard.

(15) Emergency Department Expansion

Adventist has demonstrated a range of efforts it has taken, sometimes in partnership with other organizations that can be effective in reducing use of its emergency department for non-emergency medical care that can be obtained in physician office and clinic settings, and has been directly involved in development of such alternatives. In addition, it has been involved in health education and screening programs aimed at preventing serious illness, detecting illness at an

earlier, more-easily treatable stage, and/or facilitating more effective and less expensive use of health care resources by patients. WAH has operated its ED services at one of the highest ratio of visits per treatment bay in the state, and its relatively long average treatment time is likely a natural consequence of an imbalance between supply and demand for treatment space.

The replacement hospital's ED will be operating a larger complement of treatment bays and changing the way in which it accommodates observation of patients awaiting final decisions on clinical disposition. The plan for the replacement hospital appropriately considers the need for beds and system capacity. I find that Adventist's application is consistent with each part of this standard.

(16) Shell Space

This standard requires an applicant to demonstrate that the construction of shell space in a project requesting CON approval is cost effective by demonstrating that constructing the space in the proposed time frame has a positive net present value, considering both the likely use of the space and the time frame for its use. Adventist has identified the potential addition of MSGA beds as the most likely future use for shell space it proposes to construct at the highest level of the building tower that contains medical/surgical nursing units. The space could also be used for expansion of the adjacent cardiology and radiology services. The space comprises about three percent of the total building space proposed for construction.

AHC presented a reasonable demonstration that it would cost less to build the additional space when the proposed replacement hospital is constructed than to add the space three years later. With inpatient hospitalization declining and with incentives in place to further that trend, the need for more bed space at the replacement hospital, the use AHC specifies as most likely, is not certain. However, the recent announcement by Laurel Regional Hospital that it intends to transition to outpatient use before 2018 increases the likelihood that additional MSGA beds will be needed in the southeast region of Montgomery County. In 2014, Laurel Regional Hospital had an average daily census of approximately 32 MSGA patients, and the proposed WAH replacement hospital in White Oak would become the closest general hospital to the current Laurel Regional Hospital. I find that AHC has met the requirements of this standard. Any approval of this project should be accompanied by MHCC's standard conditions for hospital projects containing shell space.

COMAR 10.24.12 - Obstetric Services

(1) Need

AHC is proposing to reduce obstetric bed capacity as it relocates the service to a replacement hospital. Its application shows its existing obstetric service to have 21 licensed beds within a unit capable of supporting 30 beds. It is proposing to operate 18 obsteric beds at the relocated WAH, within a 22-bed unit that will include four rooms and beds that it designates as medical/surgical beds. Thus, it can be viewed as proposing to reduce operational bed capacity by three beds (21 to 18) and the physical bed capacity of the postpartum unit by eight beds (30 to 22). My analysis of obstetric bed need yielded a lower range forecast – a maximum of 16 obstetric

beds. The two-bed difference between my findings and the proposed 18 obstetric beds is not significant enough to warrant a call for redesign of this unit.

(2) The Maryland Perinatal System Standards

WAH provides Level II perinatal care, below the level of neonatal intensive care, a newborn service specifically regulated under Certificate of Need. WAH does not propose to become a provider of NICU services. NICU service providers must be certified as referral centers for this service by MIEMSS. No mandatory certification requirements are applicable to Level I or II hospitals. I find that AHC's application complies with this standard.

(3) Charity Care Policy

The applicant complies with this standard, as previously addressed at COMAR 10.24.10.04A(2).

(4) Medicaid Access

AHC described partnerships it has with organizations that provide improved access to care for the indigent. These include: Mary's Center for Maternal and Child Care, MobilMed, the Primary Care Coalition of Montgomery County, and Community Clinic, Inc., a federally qualified health center. Women obtaining prenatal care from these organizations often deliver their babies at WAH. AHC also has partnered for nine years with the Montgomery County Department of Health and Human Services' Maternity Partnership Program, which assists uninsured women in obtaining obstetric and gynecologic services. It states that these partnerships will continue post-project. AHC projects that Medicaid will still be the payor for 87.4% of obstetric patients originating in its PSA at the White Oak replacement hospital. 21 of 23 maternal/fetal medicine or obstetrics and gynecology physicians on WAH's staff participate in the Medicaid program.

I find that AHC is consistent with this standard.

(5) Staffing

I find that AHC's application complies with this standard.

(6) Physical Plant Design and New Technology

A number of design features of the relocated WAH are expected to contribute to improvements in patient safety and quality of care, including all private rooms with standardized room set-up and design, electronic medical record access in all rooms and charting alcoves between rooms, advanced physical security systems for infant protection and patient safety, strategically located hand washing stations, "ample space" for accommodating and supporting families, labor and delivery rooms that include an "isolette zone" with appropriate support area, and postpartum rooms sized to accommodate "couplet care" (keeping mothers and infants together

for the entire period of hospitalization.) Expected benefits include better infection and cross contamination control, better record keeping and charting, and fewer incidents in which patient safety is compromised. I find that the applicant has met this standard.

(7) Outreach Program

See Review Standard 4, Medicaid Access. Applicant has met this standard.

COMAR 10.24.11 – General Surgical Services

General Standards

(1) Information Regarding Charges
(2) Charity Care Policy
(3) Quality of Care

I found that the applicant has met these standards, which are the same general standard addresser earlier under COMAR 10.24.10.

(4) Transfer Agreements

AHC has a policy in place that complies with Health-General Article §19-308.2 by providing guidelines governing the transfer of patients between hospitals in a medically appropriate manner and in accordance with the health care policies of the State. I find that AHC complies with the standards regarding transfer agreements.

Project Review Standards

(1) Service Area

As the standard requires, the applicant has projected its expected surgical service area. The projected service area described by AHC is credible. I find that the applicant has complied with this standard.

(2) Need – New or Replacement
(3) Need – Expansion of Existing Facility

Adventist has appropriately downsized surgical facility capacity in its proposed replacement hospital from eight mixed-use general purpose and three mixed-use special purpose ORs at the existing hospital to six mixed-use general purpose and two mixed-use special purpose ORs at the replacement hospital, a reduction of three ORs. This rightsizing brings it in line with the decline it has experienced in the demand for OR time and the reasonable assumptions it has

made about surgical service demand in the out years. I find that the proposed project is consistent with this standard.

(4) Design Requirements

The applicant provided floor plans for its surgical department which are in harmony with the current FGI Guidelines.

(5) Support Services

WAH currently provides, and the replacement hospital will also provide, in-house services for laboratory, radiology, and pathology 24 hours-per-day. I find that AHC is consistent with this standard.

(6) Patient Safety

The design of the proposed new surgical services department includes a number of features that will enhance the safety of the patients and the physicians and staff who treat them. I find that AHC meets this standard.

(7) Construction Costs

I found that the applicant has met this standards, which is incorporated by reference from COMAR 10.24.10.04B(7).

(8) Financial Feasibility

AHC stated that the service area for the general surgical services program will be similar to its MSGA service area. While AHC did not provide a response that directly addresses the Financial Feasibility standard in the General Surgical Services chapter, it provided a response that addresses the overall financial feasibility for the relocation of the hospital at COMAR 10.24.10.04B(1) and at COMAR 10.24.01.08G(3)(d), which is appropriate.

(9) Preference in Comparative Reviews – Not applicable.

COMAR 10.24.07.17 – Cardiac Surgery and Percutaneous Coronary Intervention Services

A comprehensive update of the State Health Plan chapter for cardiac surgery and PCI services was established in August 2014, in response to 2011 and 2012 legislation reforming regulatory oversight of cardiac surgery and PCI services in Maryland. This was about one month before AHC submitted a modified CON application and about 10 months after its initial application filing.

Given that the regulations in effect during the first ten months of this review were only applicable to the establishment of new surgery or PCI programs, neither these regulations, nor the updated regulations are applicable in this project review.

However, it is important to note that, at this time, there are no outstanding issues with respect to performance of WAH in the provision of the specialized cardiovascular treatment services regulated by MHCC. Under the 2012 legislation and the regulations adopted pursuant to that law, WAH and the other hospitals in Maryland that provide cardiac surgery and PCI services will be subject to periodic evaluation of their performance in providing these services through a formal process called certificate of ongoing performance review. These reviews are scheduled to begin in 2016.

COMAR 10.24.07-Standards for Psychiatric Services Availability

The State Health Plan chapter governing Psychiatric Services -- COMAR 10.24.07 – has not been updated to reflect significant changes in both the use of hospital psychiatric beds (especially the average length of stay) and the role and scope of State psychiatric hospital facilities that have occurred since the chapter's development. Thus, I reviewed only those standards that are still relevant and applicable. The psychiatric standards were not the subject of comments filed by interested parties or the participating entity.

AHC's responses to this section reflect psychiatric services as they are currently provided in its 40-bed psychiatric unit at WAH, a general hospital, given that these facilities would continue to be provided by Adventist Behavioral Health ("ABH") in a 40-bed unit at the Takoma Park campus, after the relocation of the general hospital to White Oak. The facility format will transition to a special hospital for psychiatric services ("ABH Takoma Park") at that point in time.

(AP1a) Bed Need

AHC addressed this standard under the Need criterion, COMAR 10.24.01.08G(3)(b). Its response and my analysis and findings are presented there. I found that maintenance of the existing 40-bed facility, which is only undergoing renovation as part of this project, is reasonable, although recent trends indicate that utilization levels in the future may not require this number of beds. Redesigning the existing facility to reduce bed capacity is not practical, in the context of this project, given that it would require a higher level of capital spending.

(AP2a) Procedures for Psychiatric Emergency Inpatient Treatment

If the project is approved, the licensure status of the 40-bed psychiatric unit will change to special hospital – psychiatric. It will continue to be operated by AHC's Behavioral Health and Wellness Division but will no longer be a psychiatric unit within an acute general hospital. AHC has agreed to comply with this standard, even though, technically, it is not applicable.

(AP2b) Emergency Facilities

Although this standard, like the one immediately above, does not fit the transition to special hospital – psychiatric status that is part of this proposed project, AHC states that it will continue with this designation after the 40-bed psychiatric unit's change in licensure. The applicant satisfies this standard.

(AP2c) Emergency Holding Beds

Like AP2a and AP2b, this standard is written to apply to general hospital psychiatric units. Despite that, if the project is approved, AHC will continue to have emergency holding beds and two seclusion rooms for use in emergency psychiatric situations after the change in licensure of the psychiatric facility in Takoma Park. I find that the application is consistent with this standard.

(AP3a) Array of Services

AHC stated that pharmacotherapy, individual psychotherapy, group therapy, family therapy, social services and expressive therapies will be available to patients at ABH Takoma Park. I find that the application conforms to this standard.

(AP3c) Psychiatric Consultation Services

The existing behavioral health unit provides psychiatric consultation services through full- and part-time staff psychiatrists, which the ABH Takoma Park facility will provide to WAH at the White Oak location. I find that the applicant is consistent with this standard.

(AP5) Required Services

The application states that ABH-Takoma Park's clinical staff will conduct the face-to-face evaluation to determine the psychiatric criteria and the most appropriate level of care for the patient, and will make the arrangements for an appropriate transfer only if the needed services are not available. A physician will evaluate and determine whether a patient is medically stable to participate in psychiatric care. The clinical staff will conduct these evaluations at both the Takoma Park and White Oak locations. I find the application to be consistent with this standard.

(AP6) Quality Assurance

The special hospital – psychiatric will, like the existing unit at WAH, have a written quality assurance program, program evaluations, and treatment protocols for special populations. I find that the application is consistent with this standard.

(AP7) Denial of Admission Based on Legal Status

AHC stated that no individual will be denied psychiatric services based on one's legal

status. The prospective ABH - Takoma Park, along with ABH in Rockville, will remain as one of the two psychiatric facilities in Montgomery County accepting adult involuntary admissions. I find that AHC is consistent with this standard.

(AP8) Uncompensated Care

I find that Adventist's inpatient psychiatric unit at Takoma Park provides in excess of the average level of uncompensated care provided by all of the acute general hospitals located in Montgomery County, and that the applicant is consistent with this standard.

(AP12a) Clinical Supervision

A board-certified psychiatrist will direct the multidisciplinary mental health professional team providing care at the unit when it is relicensed as a special hospital – psychiatric. AHC is consistent with this standard.

(AP12b) Staffing Continuity

The inpatient psychiatric program at the relicensed special hospital-psychiatric will be directed by a board-certified psychiatrist and the staff will include therapists who will have responsibility for the patient's aftercare planning and referrals. The application is consistent with this standard.

(AP13) Discharge Planning and Referrals

AHC has discharge planning and referral policies in place "to ensure that the patient's next level of care needs are met through a variety of services that include inpatient, outpatient, partial hospitalization, aftercare treatment programs, and other alternative treatment programs." I find that the application is consistent with this standard.

B. NEED

With respect to the need for relocation and replacement of WAH rather than alternative approaches to modernization, I found that AHC's conclusions with respect to the inferiority of the on-site replacement alternative are well-founded and that it adequately explained its process for evaluating and selecting the best alternatives. This led me to the conclusion that off-site replacement is the unavoidable preferred choice. The chosen site fits WAH's criteria, which I believe are reasonable.

Beyond the broader need to replace and relocate WAH, I have addressed the need for regulated service capacities that are covered by applicable SHP chapters. With respect to operating room ("OR") capacity, Adventist has proposed a reduction from 11 to 8 ORs. I addressed this proposed reduction in capacity under the Surgical Services chapter of the SHP. I concluded that AHC appropriately downsized surgical facility capacity in its proposed replacement hospital, bringing it in line with the decline it has experienced in the demand for OR time and that AHC has

used reasonable assumptions in forecasting surgical service demand in future years.

With respect to the proposed Emergency Department, Adventist has proposed an increase in treatment spaces from 26 to 32. I evaluated the need for and reasonableness of the proposed number of treatment spaces and the size of the proposed department previously in this Recommendation under Project Review Standard 14 of the Acute Hospital Services chapter of the SHP (COMAR 10.24.10). I concluded that the proposed 32 treatment rooms and 22,784 departmental gross square feet of ED space is consistent with the standard, that uses American College of Emergency Physician guidelines as benchmarks.

While I determined that the number of MSGA beds proposed is consistent with the SHP standard for MSGA beds [COMAR 10.24.10.04B(2)], because AHC is proposing fewer MSGA beds than currently exist both on a licensed and physical bed capacity basis, I undertook my own analysis with respect to the service area and market share changes likely to result from this project and created a bed need forecast based on this analysis modeled on the methodology found in the Acute Hospital Services SHP chapter, in order to understand whether the bed capacity being proposed for the White Oak site is appropriate. I projected a range of patient days which encompassed the AHC forecast, near the low end of my range. Thus, at an 80% occupancy rate assumption, I was able to conclude that AHC's proposal for 152 MSGA beds in the relocated WAH is reasonable.

Under the State Health Plan chapter for Obstetric Services, COMAR 10.24.12.04(1), I concluded that the applicant quantified the need for the number of beds to be assigned to the obstetric service and its methods are consistent with the approach outlined in Policy 4.1 of that SHP chapter. However, similar to my approach in evaluating MSGA bed need, I also addressed the need for obstetric beds at the replacement hospital by adapting the State Health Plan bed need methodology for the service area from which I anticipate the hospital will draw obstetric patients. In this case, the AHC forecast fell above my forecast range but only by two beds (18 beds compared to the 16 at the top of my forecast). In this case, I believe it is reasonable to accept the AHC's hospital design, which designates 18 OB beds within a 22 bed unit. My forecast would indicate that AHC may need to operate fewer than 18 OB beds but I also note that Laurel Regional Hospital, located approximately seven miles from the White Oak site, closed it obstetric service in October of this year.

I also addressed the need for the 40 acute psychiatric beds that will remain in Takoma Park as a Special Hospital - Psychiatric by evaluating the methodology used by AHC and adapting the MSGA bed need methodology to the need for psychiatric beds. However, it is important to recognize that psychiatric hospital facilities are not being altered by this proposed project in any way other than with respect to the form of health care facility licensure. No substantive expenditure to alter these facilities is being proposed. Here again, recent trends suggest that AHC may not need the 40 beds currently operating in Takoma Park. But it is not practical to suggest that this facility needs to be altered as part of this project, which would require additional capital spending. As with obstetric services, it is also noteworthy that Laurel Regional has stated an intention to eliminate inpatient services, which include psychiatric care, by 2018.

C. COST AND EFFECTIVENESS OF ALTERNATIVES

As previously noted, I found that AHC demonstrated compliance with the Cost-Effectiveness standard of COMAR 10.24.10, the Acute Hospital Service chapter of the State Health Plan. AHC maintained that to fully achieve its facility-related objectives through an on-site replacement would be too costly, disruptive, and time-consuming to be favorably compared with the green field replacement alternative and would not alleviate the fundamental deficiencies of the small campus size and its accessibility within the region. My evaluation of the AHC project objectives and the detail underlying its assessment of alternatives led me to agree that off-site replacement is the most cost-effective alternative for addressing the obsolescence of WAH's physical facilities.

D. VIABILITY

As previously noted, I found the proposed project to be financially feasible, under the applicable standard of COMAR 10.24.10 and my conclusions were informed by the financial feasibility opinion provided by HSCRC and that agency's action on the capital funding request of AHC related to this project. I found that AHC demonstrated that it has the resources to implement the project, with sufficient cash and access to the capital markets that will allow it to execute its financing plan. I also concluded that it has the resources necessary to sustain the proposed project. AHC is financially stronger than it was a few years ago, when it first proposed a relocation project and it has put together a lower cost project alternative. My assessment is that the project has substantial community support. While not without risk, I have concluded that the project can achieve lasting viability and the two hospital campuses emerging as a result of this project can become a supportive component of the AHC system.

E. COMPLIANCE WITH TERMS AND CONDITIONS OF PREVIOUS CONs

AHC's historic track record in implementing capital projects authorized by MHCC is good.

F. IMPACT

WAH's relocation six miles to the north of its current site, to a site within its current primary service area, will not duplicate existing hospital resources. While I find that MMMC is likely to see fewer inpatients and less revenue than it would otherwise experience without the relocation of WAH, I find that the impact of any such decrease in volume on MMMC's profitability should be significantly less than it has projected. Moreover, it does not appear that any shift in volume from MMMC to WAH will increase health system costs as a result of the relative charge structure of the two institutions. While the relocation will add costs to the health care delivery system in the form of a capital cost increase to WAH's revenue budget, such an increase is necessary to modernize an obsolete and poorly functioning hospital resource that is still an important component of the regional health care delivery system. Therefore, I do not consider the likely impact of the relocation of WAH on other hospitals or the cost to the health care delivery system related to this relocation to be a factor that would justify denial of this application.

I conclude that, from a broad health care delivery system perspective, WAH plays a very important role in providing services to the residents of Southeastern Montgomery County and western and northern portions of Prince George's County. Its current operation in an outdated physical plant, as discussed in detail under the Cost-Effectiveness standard, makes its future survival and ability to perform well dependent on its relocation and replacement. Relocation in an urban area with competitive hospitals is inevitably going to have an impact on service areas and market share.

I find that the application is consistent with this criterion and that both the health care delivery system and the population in WAH's service area will benefit from having a modern hospital that can thrive and better serve the region.

VI. REVIEWER'S RECOMMENDATION

Based on my review and analysis of this Certificate of Need application, I recommend approval of this project, with the following conditions:

1. Adventist HealthCare, Inc. must open an urgent care center on its Takoma Park campus coinciding with its closure of general hospital operations on that campus. The urgent care center must be open every day of the year, and be open 24 hours a day. Adventist HealthCare, Inc. may not eliminate this urgent care center or reduce its hours of operation without the approval of the Maryland Health Care Commission.

2. In the fourth year of operation of a replacement Washington Adventist Hospital, Adventist HealthCare, Inc. shall provide a report to the Maryland Health Care Commission on the operation of the specialty hospital for psychiatric services in Takoma Park. This report must review patient intake and transport issues, coordination of care for psychiatric patients between the White Oak and Takoma Park campuses, and the specific financial performance of the special hospital, exclusive of the operation of Adventist Behavioral Health and Wellness overall.

3. Adventist HealthCare, Inc. will not finish the shell space in the relocated Washington Adventist Hospital without giving notice to the Commission and obtaining all required Commission approvals.

4. Adventist HealthCare, Inc. will not request an adjustment in rates by the Health Services Cost Review Commission ("HSCRC") that includes depreciation or interest costs associated with construction of the proposed shell space at the relocated Washington Adventist Hospital until and unless Adventist HealthCare, Inc. has filed a CON application involving the finishing of the shell space, has obtained CON approval for finishing the shell space, or has obtained a determination of coverage from the Maryland Health Care Commission that CON approval for finishing the shell space is not required.

5. The HSCRC, in calculating any future rates for Adventist HealthCare, Inc. d/b/a Washington Adventist Hospital and its peer group, shall exclude the capital costs associated with the shell space until such time as the space is finished and put to use in a rate-regulated activity. In calculating any rate that includes an accounting for capital costs associated with the shell space, HSCRC shall exclude any depreciation of the shell space that has occurred between the construction of the shell space and the time of the rate calculation (i.e., the rate should only account for depreciation going forward through the remaining useful life of the space). Allowable interest expense shall also be based on the interest expenses going forward through the remaining useful life of the space.

APPENDIX 1

RECORD OF THE REVIEW

On August 2, 2013, a letter of intent was filed by Joyce Newmyer, President of Washington Adventist Hospital ("WAH"), on behalf of Adventist HealthCare Inc. ("AHC") and WAH to construct a new replacement 252-bed hospital in the White Oak section of Silver Spring, Maryland, at the southwestern bend of Plum Orchard Drive, to be known as WAH, consisting of 180 MSGA, 22 obstetric, and 50 psychiatric beds. On August 6, 2013, Ruby Potter acknowledged this intent. She also noted that the submission date for Certificate of Need applications was October 4, 2013 and that the Pre-Application Conference had been scheduled for August 14, 2013. (Docket Item ["DI"] #1)

On October 3, 2013, a Modified Letter of Intent was filed by Joyce Newmyer, President of WAH, on behalf of AHC and WAH amending the quantity and types of beds involved from 252 to 241, with 180 MSGA, 21 obstetric, and 40 acute psychiatric beds for the replacement hospital. (DI #2)

On October 4, 2013, Howard L. Sollins, counsel for AHC, submitted eight copies of the Certificate of Need Application (with large plans) and electronic copies of the CON application and exhibits on flash drives. (DI #3)

On October 7, 2013, Ruby Potter sent a letter to Robert Jepson, Vice President of AHC, acknowledging receipt of the Certificate of Need application. (DI #4)

On October 7, 2013, Ruby Potter sent a request to the Washington Times for Montgomery County and to the Maryland Register to publish notice of receipt of the application. (DI's #5 and #6)

Letters of support variously dated from October 16, 2013 through March 2, 2015 were received from Governor Martin O'Malley, Speaker Michael Busch, members of the Montgomery, Prince George's and Anne Arundel County delegations of the Maryland Senate and House of Delegates, and the Montgomery County Council in support of AHC's application. (DI #7)

On October 23, 2013, Paul Parker, the Commission's Director of the Center for Health Care Facilities Planning and Development, sent a letter to Robert Jepson of AHC, requesting completeness and additional information on the CON application. (DI #8)

On October 28, 2013, The Washington Times, certified publication for daily circulation in Montgomery County of the Commission's Notice of Receipt of Applications for Washington Adventist Hospital, Matter No. 13-15-2349, relocation and construction of a new hospital, on October 21, 2013. (DI #9)

On October 29, 2013, Ruby Potter responded to Thomas C. Dame's request of October 23, 2013 on behalf of Holy Cross Hospital that he receive copies of all future filings in reference to AHC. (DI #10)

On November 4, 2013, Ruby Potter responded to Richard McAlee's request of October 29, 2013 on behalf of MedStar Health that he receive copies all future filings in reference to AHC. (DI #11)

On November 5, 2013, Ruby Potter responded to Susan Silber's request of October 30, 2013 on behalf of the City of Takoma Park that she receive copies all future filings in reference to AHC. (DI #12)

On November 5, 2013, Kevin McDonald, the Commission's Chief of Certificate of Need, granted an extension of time to November 20, 2013 for AHC to respond to completeness questions (DI #13)

Also on November 5, 2013, Kevin McDonald provided clarification of information requested in completeness questions to Robert Jepson, AHC. (DI#14)

The Commission received two letters (one from a physician and the other from a Montgomery County resident) written in opposition to the proposed relocation of WAH on November 12 and November 15, 2013. (DI#15)

On November 20, 2013, the Commission received AHC's response to completeness questions and additional information. (DI#16)

On December 5, 2013, Ruby Potter acknowledged a request from Nancy Lane, President of PDA Consultants, to receive copies of all filings in this matter on behalf of the City of Takoma Park. (DI#17)

On December 10, 2013, Rebecca Goldman, Health Policy Analyst for the Commission, requested additional information from AHC by letter to Robert Jepson. (DI#18)

Howard Sollins requested an extension of time to respond to the additional completeness questions, which was granted to February 14, 2014 by letter from Kevin McDonald on December 20, 2013. (DI#18A)

On January 15, 2014, the Commission received an additional 28 letters of support for AHC's application, including a letter from Lt. Governor Anthony Brown dated October 3, 2014 and 27 others having various dates from September 1, 2013 through November 15, 2013 from members of the Maryland Senate, House of Delegates, physician groups, community organizations, and residents of Montgomery County. (DI#19)

On February 14, 2014, Howard Sollins, on behalf of AHC, submitted responses to the second round of completeness questions of December 10, 2013 to Rebecca Goldman. (DI #21)

Ms. Goldman replied to Mr. Sollins and Mr. Jepson that the Commission would respond to their submissions on March 4, 2014. (DI #22)

On March 4, 2014, Rebecca Goldman, Health Policy Analyst for the Commission, requested additional information from AHC by letter to Robert Jepson. . (DI #23)

On March 7, 2014, Howard Sollins, on behalf of AHC, requested an extension of time to respond to the Commission's additional completeness questions. (DI#24)

On April 18, 2014, both the MHCC and HSCRC received a letter of from a concerned citizen supporting the new hospital location while expressing concern about the effect of the proposed relocated hospital on Laurel Regional Hospital. (DI#25)

On May 29, 2014, Robert Jepson, on behalf of AHC filed zip code maps of the existing and proposed new services areas, which were acknowledged by Commission staff on June 2, 2014. (DI#26)

On September 29, 2014, Howard Sollins, on behalf of AHC, submitted Volumes 1, 2, and 3 of the Modified Application for Certificate of Need. (DI#27)

On October 14, 2014, Kevin McDonald, the Commission's Chief of Certificate of Need, corresponded by email with Robert Jepson regarding draft additional completeness questions and sent additional completeness questions to AHC on October 15, 2014. (DI's #28, #29, and #30)

On October 24, 2014, Howard Sollins, on behalf of AHC, requested an extension of time for responding to the additional completeness questions. (DI#31)

On October 30, 2014, MedStar Health requested that the Commission change the contacts for all communications in this matter to Lee A. Bergman and Pat Cameron. (DI #32)

On November 4, 2014, LABQUEST Partnership expressed its strong support for AHC's application for CON. (DI#33)

On November 10, 2014, Howard Sollins submitted responses to the Commission's additional completeness questions. (DI#34)

On November 17, 2014 Susan Silber, on behalf of the City of Takoma Park, submitted additional completeness questions for AHC to Kevin McDonald. (DI#35)

On December 4, 2014, Kevin McDonald, requested additional information and answers to completeness questions by letter and by email to Robert Jepson to clarify Commission staff's requested information. (DI's #36 and #37)

On December 12, 2014, Howard Sollins submitted AHC's responses to the Commission's additional completeness questions. (DI#38)

On December 19, 2014, Ruby Potter sent a request to the Maryland Register to publish notice of the formal start of the Commission's review of this matter. (DI#39)

On December 22, 2014, Kevin McDonald, notified AHC that its application would be docketed for review effective January 9, 2015 and that notice of docketing would appear in the Maryland Register on that day. In addition, Mr. McDonald requested additional clarification of information that AHC had submitted on December 12, 2014. Howard Sollins, on behalf of AHC, requested additional time to respond to the additional clarification questions on December 23, 2014. (DI's #40 and #41)

On December 23, 2014, Ruby Potter sent a request to the Washington Times to publish notice of the formal start of the Commission's review of this matter for Montgomery County circulation. (DI#42)

On January 6, 2015, Howard Sollins submitted AHC's responses to the Commission's additional clarification questions. (DI#43)

On January 9, 2015, Ruby Potter sent a request to the Maryland Register to publish a corrected notice of the formal start of the Commission's review of this matter and on January 12, 2015, Ms. Potter sent a request to the Washington Times to publish a corrected notice of the formal start of the Commission's review of this matter for Montgomery County circulation. (DI's #44 and #45)

On January 13, 2015, Ruby Potter sent a request for Review and Comment of this matter to Ulder Tillman, Health Officer for Montgomery County, Maryland. (DI#46)

On January 10, 2015, The Washington Times, certified publication of the Commission's Formal Start of Review of this matter for daily circulation in Montgomery County on January 5, 2015 and certified publication of the corrected notice of the Commission's Formal Start of Review of this matter for daily circulation in Montgomery County on January 26, 2015. (DI's #47 and #49)

On January 23, 2015, Howard Sollins submitted AHC's responses to the Commission staff's additional clarification questions. (DI#48)

On February 9, 2015, Thomas C. Dame submitted Holy Cross Hospital of Silver Spring's Comments; Marta D. Harting submitted Comments of Laurel Regional Hospital; Kurt J. Fischer submitted Comments of Interested Party MedStar Montgomery Medical Center on the Modified CON Application. (DI's #50, #51, and #52, respectively)

On February 9, 2015, Catherine S. Tunis, President of the South of Sligo Citizens' Association, and Susan Silber, City Attorney, and Kenneth Sigman, Assistant City Attorney, City of Takoma Park, submitted comments in this matter. (DI's# 53 and #54, respectively)

On February 9, 2015, Thomas C. Dame submitted Holy Cross Hospital of Silver Spring's Request to Dedocket the Modified Certificate of Need Application filed by AHC. (DI#55)
On February 23, 2015, Thomas C. Dame submitted Holy Cross Hospital of Silver Spring's Request for an Evidentiary Hearing; Marta D. Harting submitted Laurel Regional Hospital's Request for an Evidentiary Hearing; and Kurt J. Fischer submitted MedStar Montgomery Medical Center's Request for an Evidentiary Hearing, or in the Alternative, Request for Oral Argument, in this matter (DI's #56, #57 and #58, respectively)

On February 24, 2015, John F. Morkan III submitted AHC's Responses to Comments of the Interested Parties and Participating Entity and Response to Holy Cross Hospital's Motion Seeking to Cause the De-Docketing of the Certificate of Need Application. (DI's #59 and #60)

On March 4, 2015, John F. Morkan III submitted AHC's Responses to Interested Parties'

Request for Evidentiary Hearing. (DI#61)

On March 11, 2015, Kurt J. Fischer submitted MedStar Montgomery Medical Center's Reply to the Responses of Adventist Healthcare, Inc. to Comments of the Interested Parties and Participating Entity. (DI#62)

On March 18, 2015, Thomas C. Dame submitted Holy Cross Hospital of Silver Spring's Reply in Support of Request to De-Docket the Modified Certificate of Need Application. (DI#63)

On March 18, 2015, Howard Sollins submitted AHC's Motion to Strike. (DI#64)

On March 23, 2015, Kurt J. Fischer submitted MedStar Montgomery Medical Center's Answer to Adventist HealthCare, Inc.'s Motion to Strike and Motion of Interested Party MedStar Montgomery Medical Center for Leave to File a Reply to the Responses of Adventist HealthCare, Inc. to Comments of Interested Parties and Participating Entity. (DI's #65 and #66)

On March 30, 2015, MHCC Commissioner Frances B. Phillips provided notice of her appointment as Reviewer in this matter; denied the Request to De-docket the modified CON application; notified the parties that she would rule on the Interested Parties' requests for an evidentiary hearing or, in the alternative, an opportunity to present oral argument regarding AHC's modified application at a later date; and requested that all filings be submitted in .pdf format via email to the parties in this review, as well as to SOSCA, Dr. Tillman, Ruby Potter, and other members of the Commission's staff. (DI#67)

On March 30, 2015, Howard Sollins submitted AHC's Response to MedStar Montgomery Medical Center's Motion for Leave to File a Reply Motion to Strike. (DI #68)

On March 30, 2015, Susan Silber submitted City of Takoma Park's Motion for Leave to File Reply to the Reponses of Adventist Healthcare, Inc. to Comments of the Interest Parties and Participating Entity and its Reply to the Responses of Adventist Healthcare, Inc. to Comments of the Interest Parties and Participating Entity. (DI's #70 and 69, respectively)

On April 6, 2015, John F. Morkan III submitted AHC's Motion to Strike the Reply of the City of Takoma Park and AHC's Response to City of Takoma Park's Motion for Leave to file a Reply. (DI#'s 71 and #72)

On April 6, 2015, John F. Morkan III on behalf of AHC, invited Commissioner Phillips, members of the Commission's staff, and representatives of the Interested Parties and Participating Entity to visit both WAH's current facility and the proposed relocation site. (DI#73)

On April 20, 2015, Commissioner Phillips notified counsel for the parties in this matter that she would conduct a site visit of WAH and the proposed site of the replacement hospital. (DI#74)
On April 22, 2015, Thomas C. Dame, on behalf of Holy Cross Hospital, and Susan Silber, on behalf of the City of Takoma Park, provided dates of availability for the site visit. (DI's #75 and #76)

On April 23, 2015, John F. Morkan III on behalf of AHC, and Marta D. Harting on behalf of MedStar Montgomery Medical Center and Laurel Regional Hospital, provided dates of availability for the site visit. (DI's #77 and #78)

On April 23, 2015, Suellen Wideman, AAG for the Commission, by email to all parties, confirmed the site visit for June 9, 2015. (DI#79)

On April 28, 2015, Commissioner Phillips provided additional information regarding areas that she would like to visit and requested site plans/floor plans of AHC. (DI#80)

On April 29, 2015, Commissioner Phillips requested additional information from AHC and the interested parties. (DI#81)

On May 14, 2015, John F. Morkan III, on behalf of AHC, submitted AHC's Sur-Reply to the Replies of MedStar Montgomery Medical Center and the City of Takoma Park. (DI#'s 82)

On May 29, 2015, Kurt Fischer, on behalf of Laurel Regional Hospital and MedStar Montgomery Medical Center, provided additional information requested by Commissioner Phillips in connection with the Comments filed by the Interested Parties. (DI#83)

On May 29, 2015, Thomas C. Dame, on behalf of Holy Cross Hospital, submitted HCH's Response to Commissioner Phillips' Question Regarding Detailed Analysis Supporting the Likely Impact on Its Emergency Department. (DI #84)

On May 29, 2015, John F. Morkan III, on behalf of AHC, submitted its Response to Commissioner Phillips' Additional Information Requests of April 29, 2015. (DI#85)
On June 1, 2015, Howard Sollins, on behalf of AHC, submitted the Takoma Park campus site and floor plans and a proposed site visit agenda. (DI's #86 and #87, respectively)

On June 1, 2015, Kurt J. Fischer, Thomas C. Dame, and Susan Silber notified Commissioner Phillips regarding the planned site visit attendees for Laurel Regional Hospital and MedStar Montgomery Medical Center; Holy Cross Hospital; and City of Takoma Park. (DI's #88, #89, and #90, respectively)

On June 2, 2015, Commissioner Phillips provided an itinerary, a list of attendees, and instructions for the parties attending the June 9, 2015 site visit. (DI# 91)

On June 29, 2015, Marta D. Harting submitted Comments of Interested Party, Laurel Regional Hospital, to Additional Information Submitted by Adventist Healthcare; and Kurt J. Fischer submitted MedStar Montgomery Medical Center's Motion for Permission to Submit Additional Information as well as Comments of Interested Party, MedStar Montgomery Medical Center, to Additional Information Submitted by AHC. (DI's #92, #93 and #94, respectively)

On June 29, 2015, John F. Morkan III submitted AHC's Comments on the Data Submitted by the Interested Parties, and submitted Affirmations that support AHC's Comments on the Data Submitted by the Interested Parties. (DI's #95 and #96)

On June 29, 2015, Susan Silber submitted City of Takoma Park's Response to Information Submitted as Interested Party Responses on April 29, 2015 and Response to Questions from Commissioner Phillips' Request for Additional Information dated April 29, 2015. (DI#97)

On June 29, 2015, Thomas C. Dame submitted Holy Cross Hospital of Silver Spring's Comments on Adventist Healthcare's Additional Information Submitted in Response to Reviewer's Questions. (DI#98)

On July 10, 2015, Commissioner Phillips sent a letter to John F. Morkan III requesting additional information from AHC. (DI#99)

On July 14, 2015, John F. Morkan III submitted AHC's Response to MedStar Montgomery Medical Center's Motion for Permission to Submit Additional Information and AHC's Response to Comments of the Interested Parties and Participating Entity Concerning Data and Information Submitted by Adventist HealthCare, Inc. (DI's #100 and #101)

On July 15, 2015, Ella R. Aiken submitted Holy Cross Hospital of Silver Spring's Reply to Adventist HealthCare's Comments on Additional Information Submitted in Response to the Reviewer's Questions. (DI#102)

On August 10, 2015, John F. Morkan III submitted AHC's Provision of Additional Information Requested by the Reviewer's Letter of July 10, 2015. (DI#103)

On August 31, 2015, Commissioner Phillips wrote to Donna Kinzer, Executive Director, and Jerry Schmith, Deputy Director, of the Health Services Cost Review Commission, requesting review and comment on the proposed project's financial feasibility and reasonableness of the assumptions. (DI#104)

On September 8, 2015, Susan Silber submitted the Response of Participating Entity, the City of Takoma Park, to the Additional Information Submitted by AHC on August 10, 2015. (DI#105)
On September 9, 2015, Kenneth Sigman submitted a corrected Certificate of Service for the City of Takoma Park's September 8, 2015 submission. (DI#106)

On September 9, 2015, Kurt J. Fischer submitted MedStar Montgomery Medical Center's Reply to Adventist HealthCare, Inc.'s Provision of Additional Information Requested by the Reviewer's July 10, 2015 Letter. (DI#107)

On September 9, 2015, Thomas C. Dame submitted Holy Cross Hospital of Silver Spring's Comments on Adventist HealthCare's Responses to the Reviewer's Questions dated July 10, 2015. (DI#108)

On September 24, 2015, John F. Morkan III submitted AHC's Reply to the Interested Parties and the City of Takoma Park's Comments in Response to the Provision of Additional Information Requested by the Reviewer's Letter of July 10, 2015 (DI#109)

On October 13, 2015, Marta D. Harting submitted a Motion by Laurel Regional Hospital for Leave to File Additional Comments on Modified CON Application (DI#110)

On October 14, 2015, the Health Services Cost Review Commission approved the addition of $15,391,282 to WAH's permanent rate base at the time the new facility opens. (DI#111)

On October 16, 2015, John F. Morkan III submitted AHC's Response to Laurel Regional Hospital's Motion for Leave to File Additional Comments on Modified CON Application (DI#112)

On October 16, 2015, Commissioner Phillips requested that AHC update its financial projections in light of the action taken by HSCRC. (DI#113)

On October 16, 2015, Suellen Wideman, AAG for the Commission, clarified the revised projections of revenues and expenses that Commissioner Phillips requested. (DI#114)

On October 19, 2015, Suellen Wideman specified the tables needed in the revised projections of revenues and expenses that Commissioner Phillips requested. (DI#115)

On October 20, 2015, Commissioner Phillips Denied the Motion of Laurel Regional Hospital to Submit Additional Comments (DI#116)

On October 20, 2015, John F. Morkan III informed Suellen Wideman that AHC would submit revised financial projections and supporting assumptions on October 21, 2015. (DI#117)

On October 21, 2015, John F. Morkan III submitted AHC's revised financial projections and the Affirmations that support the updated projections and assumptions. (DI's #118 and 119)

On October 22, 2015, Commissioner Phillips requested that AHC clarify the projections related to the proposed special hospital and the recent loss by Maryland's Medicaid program on the waiver from the Institutions for Mental Diseases (IMD) exclusion. (DI#120)

On October 26, 2015, John F. Morkan III submitted AHC's Response to Questions Concerning Revised Revenue and Expense Projections. (DI#121)

On October 26, 2015, Commissioner Phillips requested that the interested parties and participating entity file comments regarding the information submitted by AHC no later than November 5, 2015. (DI#122)

On October 27, 2015, the HSCRC requested that AHC submit actual and projected financial ratios. (DI#123)

On October 30, 2015, John F. Morkan III submitted AHC's updated ratios consistent with the revisions that it had recently made to its financial projections to MHCC and HSCRC. (DI#124 and DI #125)

On November 2, 2015, Commissioner Phillips denied a request by the City of Takoma Park to extend the date upon which the interested parties and participating entity may file comments on the information filed by AHC. (DI#126)

On November 3, 2016, John F. Morkan III submitted AHC's updated schedule adding operating and total margin percentages to the to the ratios provided to the HSCRC. (DI#127)

On November 5, 2015, Kurt J. Fischer submitted MedStar Montgomery Medical Center's Comments on the October 21, 2015 Financial Projections and the October 26, 2015 Answers to Questions submitted by AHC. (DI#128)

On November 5, 2015, Thomas C. Dame submitted Holy Cross Hospital's Comments on the AHC's Revised Financial Projections and Assumptions Submitted at the Request of the Reviewer. (DI#129)

On November 5, 2015, Kenneth Sigman filed City of Takoma Park's Comments on Response to Questions Concerning Revised Rate Cap, Behavioral Health Reimbursement and HSCRC Review Questions. (DI#130)

On November 6, 2015, the HSCRC submitted its review and comment on the financial feasibility and underlying assumptions on AHC's proposed project. (DI#131)

On November 12, 2015 by email from Suellen Wideman to the parties, Commissioner Phillips conveyed the HSCRC's comments on AHC's application and noted that she did not want to receive comments regarding HSCRC's memorandum. (DI #132)

APPENDIX 2

POPULATION DATA

- **Population Change, Montgomery County - 2010 to 2040**
- **Population Change, Prince George's County - 2010 to 2040**
- **Population Change, Maryland - 2010 to 2040**

Population Change, Montgomery County
2010 to 2040

2010 Population and Projected Population by Age Group, 2015 - 2040						
	0-14	**15-44**	**45-64**	**65-74**	**75+**	**Total**
2010	192,695	386,851	272,462	62,541	57,228	971,777
2015	198,110	408,442	285,787	82,584	61,079	1,036,002
2020	199,814	417,353	281,635	98,009	70,190	1,067,001
2025	207,368	429,837	277,119	109,577	86,103	1,110,004
2030	217,833	435,456	279,796	117,546	103,269	1,153,900
2035	222,658	438,663	288,920	116,265	120,095	1,186,601
2040	224,534	439,542	298,784	110,332	133,610	1,206,802
Projected Change in Population by Age Group, 2010 - 2040						
Year	0-14	15-44	45-64	65-74	75+	Total
2010-2015	2.8%	5.6%	4.9%	32.1%	6.7%	6.6%
2015-2020	0.9%	2.2%	-1.5%	18.7%	14.9%	3.0%
2020-2025	3.8%	3.0%	-1.6%	11.8%	22.7%	4.0%
2025-2030	5.1%	1.3%	1.0%	7.3%	19.9%	4.0%
2030-2035	2.2%	0.7%	3.3%	-1.1%	16.3%	2.8%
2035-2040	0.8%	0.2%	3.4%	-5.1%	11.3%	1.7%
2010-2020	3.7%	7.9%	3.4%	56.7%	22.7%	9.8%
2020-2030	9.0%	4.3%	-0.7%	19.9%	47.1%	8.1%
2030-2040	3.1%	0.9%	6.8%	-6.1%	29.4%	4.6%
2010-2040	16.5%	13.6%	9.7%	76.4%	133.5%	24.2%

Source: Maryland Department of Planning, 2014 Total Population Projections by Age, Sex and Race

Population Change, Prince George's County
2010 to 2040

2010 Population and Projected Population by Age Group, 2015 - 2040						
	0-14	**15-44**	**45-64**	**65-74**	**75+**	**Total**
2010	168,969	387,755	225,183	50,100	31,413	863,420
2015	168,319	395,623	233,042	65,336	38,028	900,348
2020	165,230	397,322	228,136	77,281	46,526	914,495
2025	163,112	401,849	220,046	85,386	59,256	929,649
2030	163,868	403,207	214,858	91,252	71,363	944,548
2035	162,513	405,260	217,837	89,845	82,192	957,647
2040	160,364	404,717	228,660	83,760	90,347	967,848
Projected Change in Population by Age Group, 2010 - 2040						
Year	**0-14**	**15-44**	**45-64**	**65-74**	**75+**	**Total**
2010-2015	-0.4%	2.0%	3.5%	30.4%	21.1%	4.3%
2015-2020	-1.8%	0.4%	-2.1%	18.3%	22.4%	1.6%
2020-2025	-1.3%	1.1%	-3.6%	10.5%	27.4%	1.7%
2025-2030	0.5%	0.3%	-2.4%	6.9%	20.4%	1.6%
2030-2035	-0.8%	0.5%	1.4%	-1.5%	15.2%	1.4%
2035-2040	-1.3%	-0.1%	5.0%	-6.8%	9.9%	1.1%
2010-2020	-2.2%	2.5%	1.3%	54.3%	48.1%	5.9%
2020-2030	-0.8%	1.5%	-5.8%	18.1%	53.4%	3.3%
2030-2040	-2.1%	0.4%	6.4%	-8.2%	26.6%	2.5%
2010-2040	-5.1%	4.4%	1.5%	67.2%	187.6%	12.1%

Source: Maryland Department of Planning, 2014 Total Population Projections by Age, Sex and Race

Population Change, Maryland

2010 to 2040

2010 Maryland Population and Projected Population by Age Group, 2015 - 2040						
	0-14	**15-44**	**45-64**	**65-74**	**75+**	**Total**
2010	1,110,385	2,357,553	1,597,972	386,357	321,285	5,773,552
2015	1,106,568	2,409,248	1,655,351	493,826	345,148	6,010,141
2020	1,119,381	2,490,172	1,630,621	584,116	400,221	6,224,511
2025	1,143,279	2,571,215	1,565,281	658,770	491,204	6,429,749
2030	1,184,538	2,600,959	1,526,682	715,532	584,480	6,612,191
2035	1,200,660	2,624,928	1,555,264	698,164	683,287	6,762,303
2040	1,201,604	2,644,554	1,636,879	637,546	769,109	6,889,692

Projected Change, Maryland Population by Age Group, 2010 - 2040						
Year	**0-14**	**15-44**	**45-64**	**65-74**	**75+**	Total
2010-2015	-0.3%	2.2%	3.6%	27.8%	7.4%	4.1%
2015-2020	1.2%	3.4%	-1.5%	18.3%	16.0%	3.6%
2020-2025	2.1%	3.3%	-4.0%	12.8%	22.7%	3.3%
2025-2030	3.6%	1.2%	-2.5%	8.6%	19.0%	2.8%
2030-2035	1.4%	0.9%	1.9%	-2.4%	16.9%	2.3%
2035-2040	0.1%	0.8%	5.3%	-8.7%	12.6%	1.9%
2010-2020	0.8%	5.6%	2.0%	51.2%	24.6%	7.8%
2020-2030	5.8%	4.5%	-6.4%	22.5%	46.0%	6.2%
2030-2040	1.4%	1.7%	7.2%	-10.9%	31.6%	4.2%
2010-2040	8.2%	12.2%	2.4%	65.0%	139.4%	19.3%

Source: Maryland Department of Planning, 2014 Total Population Projections by Age, Sex and Race

APPENDIX 3

Acute Care Hospital Data for Montgomery and Prince George's Counties, 2009-2014:

MSGA, OBSTETRICS, PEDIATRICS, and PSYCHIATRY

- **DISCHARGES**
- **DISCHARGE DAYS**
- **AVERAGE LENGTH OF STAY**

Table III-9(a): MSGA Discharges

MEDICAL/SURGICAL/GYNECOLOGICAL/ADDICTIONS (MSGA) DISCHARGES						
	2009	2010	2011	2012	2013	2014
	Montgomery County General Hospitals					
HOLY CROSS OF SILVER SPRING	17,160	17,554	17,465	17,037	16,834	18,242
MEDSTAR MONTGOMERY	7,751	7,741	7,148	6,977	6,367	6,292
AHC SHADY GROVE	14,960	15,081	14,773	14,833	14,249	13,600
SUBURBAN	12,956	12,535	12,519	12,199	11,806	12,197
AHC WASHINGTON ADVENTIST	13,143	11,988	10,613	9,699	8,453	8,089
Total	65,970	64,899	62,518	60,745	57,709	58,420
	Prince George's County General Hospitals					
DOCTORS COMMUNITY	12,066	12,905	12,392	11,074	10,537	8,807
FORT WASHINGTON	3,012	2,959	2,240	2,030	2,264	2,150
LAUREL REGIONAL	4,832	3,766	3,189	3,437	3,695	2,920
PRINCE GEORGE'S	9,632	9,049	8,014	7,218	6,951	7,855
MEDSTAR SOUTHERN MARYLAND	13,471	13,077	12,606	12,111	10,682	10,065
Total	43,013	41,756	38,441	35,870	34,129	31,797
ALL Maryland Hospitals	565,607	528,189	505,764	487,361	465,538	442,751

Table III-9(b): MSGA Discharge Days

MSGA DISCHARGE DAYS						
	2009	2010	2011	2012	2013	2014
	Montgomery County General Hospitals					
HOLY CROSS OF SILVER SPRING	74,669	74,291	77,091	76,118	76,659	82,928
MEDSTAR MONTGOMERY	33,270	32,892	28,732	27,893	25,090	25,750
AHC SHADY GROVE	67,522	66,987	68,425	66,133	63,652	62,363
SUBURBAN	53,369	51,771	51,480	54,916	51,321	53,220
AHC WASHINGTON ADVENTIST	57,733	55,572	52,173	51,701	46,681	46,792
Total	286,563	281,513	277,901	276,761	263,403	271,053
	Prince George's County General Hospitals					
DOCTORS COMMUNITY	48,717	54,845	53,928	51,598	49,071	42,311
FORT WASHINGTON	10,941	10,750	8,708	7,727	8,489	8,195
LAUREL REGIONAL	21,852	16,448	13,955	14,475	14,089	11,968
PRINCE GEORGE'S	47,258	47,529	42,933	42,312	40,759	45,978
MEDSTAR SOUTHERN MARYLAND	49,720	48,494	50,093	49,985	45,747	44,486
Total	178,488	178,066	169,617	166,097	158,155	152,938
All Maryland Hospitals	2,432,669	2,242,671	2,238,951	2,188,470	2,111,259	2,079,349

Table III-9(c): MSGA Discharge Average Length of Stay

MSGA AVERAGE LENGTH OF STAY (ALOS) (DAYS)						
	2009	2010	2011	2012	2013	2014
	Montgomery County General Hospitals					
HOLY CROSS OF SILVER SPRING	4.35	4.23	4.41	4.47	4.55	4.55
MEDSTAR MONTGOMERY	4.29	4.25	4.02	4	3.94	4.09
AHC SHADY GROVE	4.51	4.44	4.63	4.46	4.47	4.59
SUBURBAN	4.12	4.13	4.11	4.5	4.35	4.36
AHC WASHINGTON ADVENTIST	4.39	4.64	4.92	5.33	5.52	5.78
Total	4.33	4.34	4.42	4.55	4.57	4.67
	Prince George's County General Hospitals					
DOCTORS COMMUNITY	4.04	4.25	4.35	4.66	4.66	4.80
FORT WASHINGTON	3.63	3.63	3.89	3.81	3.75	3.81
LAUREL REGIONAL	4.52	4.37	4.38	4.21	3.81	4.10
PRINCE GEORGE'S	4.91	5.25	5.36	5.86	5.86	5.85
MEDSTAR SOUTHERN MARYLAND	3.69	3.71	3.97	4.13	4.28	4.42
Total	4.16	4.24	4.39	4.53	4.47	4.60
All Maryland Hospitals	4.30	4.25	4.43	4.49	4.54	4.70

Source: HSCRC Discharge Database.

Table III-10(a): Obstetric Discharges

OBSTETRIC ("OB") DISCHARGES						
	2009	2010	2011	2012	2013	2014
	Montgomery County General Hospitals					
HOLY CROSS OF SILVER SPRING	9,371	9,523	9,258	9,105	9,003	9,252
MEDSTAR MONTGOMERY	872	773	742	759	737	786
AHC SHADY GROVE	5,339	5,268	5,272	5,321	5,231	5,027
SUBURBAN*	14	15	17	15	9	12
AHC WASHINGTON ADVENTIST	2,464	2,263	1,987	1,796	1,664	1,797
Total	18,060	17,842	17,276	16,996	16,644	16,874
	Prince George's County General Hospitals					
DOCTORS COMMUNITY*	57	110	81	43	55	32
FORT WASHINGTON*	19	21	17	14	17	3
LAUREL REGIONAL	755	954	1,074	1,045	960	700
PRINCE GEORGE'S	2,713	2,816	2,430	2,366	2,275	2,395
MEDSTAR SOUTHERN MARYLAND	1,960	2,138	2,386	2,236	1,843	1,603
Total	26,042	26,159	25,268	24,511	23,467	23,416
All Maryland Hospitals	77,271	76,960	75,190	74,013	71,830	72,427

Source: HSCRC Discharge Database.
*Hospital does not operate an organized obstetric service or have licensed OB beds.

Table III-10(b): Obstetric Discharge Days

OB DISCHARGE DAYS						
	2009	2010	2011	2012	2013	2014
	Montgomery County General Hospitals					
HOLY CROSS OF SILVER SPRING	27,402	27,712	24,727	23,469	22,942	23,918
MEDSTAR MONTGOMERY	2,386	1,990	1,869	1,903	1,874	1,923
AHC SHADY GROVE	15,714	15,217	15,577	14,111	13,696	12,851
SUBURBAN*	33	36	33	43	31	34
AHC WASHINGTON ADVENTIST	6,974	6,261	5,109	4,463	4,309	4,578
Total	52,509	51,216	47,315	43,989	42,852	43,304
	Prince George's County General Hospitals					
DOCTORS COMMUNITY*	112	189	143	84	112	73
FORT WASHINGTON*	28	23	30	16	30	6
LAUREL REGIONAL	1,819	2,403	2,684	2,450	2,148	1,591
PRINCE GEORGE'S	8,041	8,152	7,117	6,531	5,936	6,393
MEDSTAR SOUTHERN MARYLAND	5,095	5,497	6,323	6,064	4,972	3,943
Total	15,095	16,264	16,297	15,145	13,198	12,006
All Maryland Hospitals	218,761	212,804	206,334	195,078	185,896	184,797

Source: HSCRC Discharge Database.
* Hospital does not operate an organized obstetric service or have licensed OB beds.
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Table III-10(c): Obstetric Discharge Average Length of Stay

OB ALOS (DAYS)						
	2009	2010	2011	2012	2013	2014
	Montgomery County General Hospitals					
HOLY CROSS OF SILVER SPRING	2.92	2.91	2.67	2.58	2.55	2.59
MEDSTAR MONTGOMERY	2.74	2.57	2.52	2.51	2.54	2.45
AHC SHADY GROVE	2.94	2.89	2.95	2.65	2.62	2.56
SUBURBAN*	2.36	2.40	1.94	2.87	3.44	2.83
AHC WASHINGTON ADVENTIST	2.83	2.77	2.57	2.48	2.59	2.55
Total	2.76	2.71	2.53	2.62	2.75	2.60
	Prince George's County General Hospitals					
DOCTORS COMMUNITY*	1.96	1.72	1.77	1.95	2.04	2.28
FORT WASHINGTON*	1.47	1.10	1.76	1.14	1.76	2.00
LAUREL REGIONAL	2.41	2.52	2.50	2.34	2.24	2.27
PRINCE GEORGE'S	2.96	2.89	2.93	2.76	2.61	2.67
MEDSTAR SOUTHERN MARYLAND	2.60	2.57	2.65	2.71	2.70	2.46
Total	2.28	2.16	2.32	2.18	2.27	2.34
All Maryland Hospitals	2.83	2.77	2.74	2.64	2.59	2.55

Source: HSCRC Discharge Database.
* Hospital does not operate an organized obstetric service or have licensed OB beds.

Table III-11(a): Pediatric Discharges

PEDIATRICS DISCHARGES						
	2009	2010	2011	2012	2013	2014
	Montgomery County General Hospitals					
HOLY CROSS OF SILVER SPRING	995	846	816	753	581	522
MEDSTAR MONTGOMERY	32	46	57	71	30	40
AHC SHADY GROVE	1,636	1,193	831	698	660	621
SUBURBAN	117	112	90	106	72	58
AHC WASHINGTON ADVENTIST *	2	2	1	1	---	---
Total	2,782	2,199	1,795	1,629	1,343	1,241
	Prince George's County General Hospitals					
DOCTORS COMMUNITY	---	4	---	2	2	2
FORT WASHINGTON *	---	---	---	---	----	---
LAUREL REGIONAL *	1	---	---	1	---	---
PRINCE GEORGE'S	200	48	44	23	23	3
MEDSTAR SOUTHERN MARYLAND	187	151	93	92	35	33
Total	388	203	137	118	60	38
All Maryland Hospitals	24,738	20,536	19,487	18,797	16,922	15,372

Source: HSCRC Discharge Database.
* Hospital does not operate an organized pediatric service or have a licensed pediatric bed.

Table III-11(b): Pediatric Discharge Days

PEDIATRIC DISCHARGE DAYS						
	2009	2010	2011	2012	2013	2014
	Montgomery County General Hospitals					
HOLY CROSS OF SILVER SPRING	2,219	1,618	1,690	1,593	1,291	1,179
MEDSTAR MONTGOMERY	70	74	101	110	54	72
AHC SHADY GROVE	3,985	2,556	2,051	1,559	1,293	1,326
SUBURBAN	179	160	139	191	134	96
AHC WASHINGTON ADVENTIST*	2	8	1	2	.	.
Total	6,455	4,416	3,982	3,455	2,772	2,673
	Prince George's County General Hospitals					
DOCTORS COMMUNITY*	---	9	---	5	4	11
FORT WASHINGTON*	---	---	---	---	---	---
LAUREL REGIONAL*	0	---	---	2	---	---
PRINCE GEORGE'S	1,006	130	103	38	42	8
MEDSTAR SOUTHERN MARYLAND	378	363	234	215	90	86
Total	1,384	502	337	260	136	105

Source: HSCRC Discharge Database.
* Hospital does not operate an organized pediatric service or have a licensed pediatric bed.

Table III-11(c): Pediatric Discharge Average Length of Stay

PEDIATRIC ALOS (DAYS)						
	2009	2010	2011	2012	2013	2014
	Montgomery County General Hospitals					
HOLY CROSS OF SILVER SPRING	2.23	1.91	2.07	2.12	2.22	2.26
MEDSTAR MONTGOMERY	2.19	1.61	1.77	1.55	1.80	1.80
AHC SHADY GROVE	2.44	2.14	2.47	2.23	1.96	2.14
SUBURBAN	1.53	1.43	1.54	1.80	1.86	1.66
AHC WASHINGTON ADVENTIST*	1.00	4.00	1.00	2.00	---	---
Total	1.88	2.22	1.77	1.94	1.96	1.97
	Prince George's County General Hospitals					
DOCTORS COMMUNITY*	---	2.25	---	2.50	2.00	5.50
FORT WASHINGTON*	---	---.	---	---	---	---
LAUREL REGIONAL*	---	---	---	2.00	---	---
PRINCE GEORGE'S	5.03	2.71	2.34	1.65	1.83	2.67
MEDSTAR SOUTHERN MARYLAND	2.02	2.40	2.52	2.34	2.57	2.61
Total	3.53	2.56	2.43	2.00	2.20	2.64
All Maryland Hospitals	3.30	3.24	3.31	3.29	3.66	3.60

Source: HSCRC Discharge Database.

* Hospital does not operate an organized pediatric service or have a licensed pediatric bed.

Table III-12a): Psychiatric Discharges

PSYCHIATRIC DISCHARGES						
	2009	2010	2011	2012	2013	2014
	Montgomery County General Hospitals					
	N	N	N	N	N	N
HOLY CROSS OF SILVER SPRING	43	146	137	117	105	116
MEDSTAR MONTGOMERY	1,257	1,306	1,285	1,196	1,098	1,090
AHC SHADY GROVE	39	61	34	59	46	49
SUBURBAN	1,077	1,212	1,407	1,302	1,269	1,322
AHC WASHINGTON ADVENTIST	1,979	1,778	1,727	1,693	1,581	1,569
Total	4,395	4,503	4,590	4,367	4,099	4,146
	Prince George's County General Hospitals					
DOCTORS COMMUNITY	14	41	25	30	24	10
FORT WASHINGTON	7	7	13	15	12	16
LAUREL REGIONAL	765	807	898	723	801	725
PRINCE GEORGE'S	1,269	1,348	1,421	1,363	1,321	1,395
MEDSTAR SOUTHERN MARYLAND	1,312	1,349	1,278	1,085	918	1,166
Total	3,367	3,552	3,635	3,216	3,076	3,312
All Maryland Hospitals	33,569	35,243	36,134	34,990	34,428	34,183

Source: HSCRC Discharge Database.

*Holy Cross Hospital, Shady Grove Adventist Hospital, Doctors Community Hospital, and Fort Washington Hospital do not operate an organized psychiatric service or have a licensed psychiatric bed. Adventist Behavioral Care Center is a freestanding acute psychiatric hospital operated by AHC and located in Rockville near the Shady Grove Adventist Hospital campus.

Table III-12b): Psychiatric Discharge Days

PSYCHIATRIC DISCHARGE DAYS						
	2009	2010	2011	2012	2013	2014
	Montgomery County General Hospitals					
HOLY CROSS OF SILVER SPRING	195	505	568	410	562	634
MEDSTAR MONTGOMERY	6,282	6,056	5,698	5,282	4,088	4,014
AHC SHADY GROVE	126	239	109	251	199	194
SUBURBAN	5,722	6,537	6,948	6,713	6,548	6,749
AHC WASHINGTON ADVENTIST	9,814	9,104	8,953	9,807	8,890	9,130
Total	22,139	22,441	22,276	22,463	20,287	20,721
	Prince George's County General Hospitals					
DOCTORS COMMUNITY	46	128	81	104	115	43
FORT WASHINGTON	15	20	39	42	50	56
LAUREL REGIONAL	3,066	2,571	3,654	3,320	3,445	2,795
PRINCE GEORGE'S	6,985	7,925	7,866	7,402	7,464	8,897
MEDSTAR SOUTHERN MARYLAND	6,379	5,969	6,446	4,965	4,330	5,486
Total	16,491	16,613	18,086	15,833	15,404	17,277
All Maryland Hospitals	186,716	197,597	205,348	203,971	200,374	207,881

Source: HSCRC Discharge Database.

*Holy Cross Hospital, AHC Shady Grove Medical Center, Doctors Community Hospital, and Fort Washington Medical Center do not operate an organized psychiatric service or have a licensed psychiatric bed. Adventist Behavioral Health & Wellness r is a freestanding acute psychiatric hospital operated by AHC and located in Rockville near the AHC Shady Grove Medical Center campus.

Table III-12c): Psychiatric Discharges - Average Length of Stay

PSYCHIATRIC ALOS (DAYS)						
	2009	2010	2011	2012	2013	2014
	Montgomery County General Hospitals					
HOLY CROSS OF SILVER SPRING	4.53	3.46	4.15	3.50	5.35	5.47
MEDSTAR MONTGOMERY	5.00	4.64	4.43	4.42	3.72	3.68
AHC SHADY GROVE	3.23	3.92	3.21	4.25	4.33	3.96
SUBURBAN	5.31	5.39	4.94	5.16	5.16	5.11
AHC WASHINGTON ADVENTIST	4.96	5.12	5.18	5.79	5.62	5.82
Total	4.61	4.51	4.38	4.62	4.84	4.81
	Prince George's County General Hospitals					
DOCTORS COMMUNITY	3.29	3.12	3.24	3.47	4.79	4.30
FORT WASHINGTON	2.14	2.86	3.00	2.80	4.17	3.50
LAUREL REGIONAL	4.01	3.19	4.07	4.59	4.30	3.86
PRINCE GEORGE'S	5.50	5.88	5.54	5.43	5.65	6.38
MEDSTAR SOUTHERN MARYLAND	4.86	4.42	5.04	4.58	4.72	4.70
Total	4.79	4.50	4.88	4.87	4.89	4.98
All Maryland Hospitals	4.98	4.85	4.91	5.05	4.97	5.09

Source: HSCRC Discharge Database.

* Holy Cross Hospital, AHC Shady Grove Medical Center, Doctors Community Hospital, and Fort Washington Medical Center do not operate an organized psychiatric service or have a licensed psychiatric bed. Adventist Behavioral Health & Wellness is a freestanding acute psychiatric hospital operated by AHC and located in Rockville near the AHC Shady Grove Medical Center campus.

APPENDIX 4

Census Block-Group Data for Block Groups Most Dependent on Washington Adventist Hospital for Emergency Department Use

Census Block-Group Data for Block Groups Most Dependent on Washington Adventist Hospital for Emergency Department Use

Blockgrp	Pop 2015	Median HH Income 2015*	Total ED Visits	WAH Visits	WAH Mkt Share	2nd hospital	2nd hospital visits	2nd hospital mkt share	Drive Time WAH-TP	Drive Time WAH-WO	Drive Time HCH	DriveTime LRH	DriveTime DCH
240317018001	1,994	$49,972	1611	1,066	0.66	Holy Cross	343	0.21	0.78	14.03	6.10	17.57	16.82
240338057002	1,954	$63,478	1604	890	0.56	Holy Cross	352	0.22	2.80	12.03	7.08	15.42	14.57
240317016021	2,219	$59,388	1189	476	0.40	Holy Cross	574	0.48	4.97	10.43	6.73	13.53	13.60
240338060001	2,514	$63,092	960	475	0.50	PGHC	124	0.15	5.75	15.82	11.77	18.92	12.58
240317017021	2,619	$62,722	927	562	0.61	Holy Cross	228	0.25	1.12	13.05	5.12	16.97	16.57
240338056022	1,292	$53,166	842	538	0.64	Holy Cross	165	0.20	2.33	12.53	7.60	15.63	13.90
240338056013	2,476	$45,484	841	535	0.64	Holy Cross	237	0.28	1.77	11.92	6.45	15.02	14.87
240338058021	2,567	$61,102	793	481	0.61	Holy Cross	172	0.22	3.13	13.90	8.93	17.00	14.08
240317020001	2,266	$47,423	786	397	0.51	Holy Cross	310	0.39	2.42	11.62	5.62	14.72	14.57
240317020003	2089	$48,308	757	356	0.47	Holy Cross	336	0.44	2.25	12.58	5.68	15.68	15.70
240338058012	1703	$58,805	727	427	0.59	Holy Cross	170	0.23	4.92	15.28	10.52	18.38	14.48
240338058011	2,639	$85,693	720	432	0.60	Holy Cross	175	0.24	3.73	13.37	9.00	16.47	13.15
240317019001	1,704	$34,999	665	365	0.55	Holy Cross	251	0.38	1.95	12.35	4.93	16.25	16.10
240338057003	2,332	$43,680	658	416	0.63	Holy Cross	165	0.25	3.25	12.20	8.50	15.30	13.15
240338059041	2,128	$68,823	631	325	0.52	Holy Cross	185	0.29	4.92	10.83	9.22	13.93	13.40
240338056021	3,687	$65,356	616	407	0.66	Holy Cross	152	0.25	2.42	12.30	6.83	15.40	14.73
240338052021	1,586	$63,213	590	348	0.59	Holy Cross	71	0.12	2.53	14.80	8.67	17.90	15.07
240338060002	2,603	$46,874	568	318	0.56	Holy Cross	94	0.17	6.05	16.88	12.07	19.98	13.58
240317017012	1,908	$69,508	555	359	0.65	Holy Cross	139	0.25	1.10	14.57	6.63	17.88	16.93
240338057001	1,925	$60,285	553	311	0.56	Holy Cross	150	0.27	2.50	11.50	5.93	14.60	14.45
240338052012	2,430	$50,850	549	337	0.61	Holy Cross	111	0.20	2.75	15.33	8.70	18.43	16.27
240338050002	1,878	$78,477	529	293	0.55	Holy Cross	93	0.18	3.98	15.98	10.12	19.08	15.95
240338051011	2,133	$51,026	516	324	0.63	Holy Cross	103	0.20	4.05	15.30	10.07	18.40	14.45
240338056011	2,038	$46,110	464	324	0.70	Holy Cross	104	0.22	2.55	11.65	6.60	14.75	14.60
240338052011	1,809	$50,178	463	286	0.62	Holy Cross	92	0.20	3.17	15.75	9.12	18.85	16.13
240317017031	1,474	$85,775	449	292	0.65	Holy Cross	118	0.26	1.08	12.70	6.62	15.80	14.98
240338055002	1,743	$54,576	434	288	0.66	Holy Cross	93	0.21	2.73	12.95	8.00	16.05	13.33
240338055001	1,923	$91,694	433	286	0.66	Holy Cross	83	0.19	2.05	13.77	8.18	16.87	14.32
240338049001	1,753	$39,411	432	223	0.52	Holy Cross	58	0.16	5.55	17.13	11.68	20.23	16.48
240338052022	2,241	$51,623	428	280	0.65	Holy Cross	83	0.19	1.87	14.33	8.00	17.43	16.05
240338050003	2668	$63,717	425	235	0.55	Holy Cross	67	0.16	5.38	16.77	11.45	19.87	16.65
240338056012	1,648	$42,549	410	277	0.68	Holy Cross	89	0.22	2.08	12.78	7.35	15.88	14.12

240338058022	1,681	$64,478	409	258	0.63	Holy Cross	72	0.18	3.48	14.73	9.50	17.83	13.95
240317017041	1,375	$100,749	374	251	0.67	Holy Cross	67	0.18	0.83	13.78	6.97	16.88	15.93
240338059062	1,530	$45,683	372	213	0.57	Holy Cross	111	0.30	4.25	9.68	6.62	12.78	12.85
240338061001	1,853	$83,374	363	181	0.50	Holy Cross	59	0.16	6.30	15.27	12.32	18.37	11.85
240338059042	1,323	$53,213	329	166	0.51	Holy Cross	114	0.35	4.83	10.20	8.12	13.30	13.15
240317017042	1,661	$87,239	325	227	0.70	Holy Cross	67	0.21	2.13	14.85	7.80	17.95	16.57
240338050001	960	$72,383	324	185	0.57	Holy Cross	56	0.17	3.85	15.43	9.98	18.53	15.37
240338059081	1,432	$62,395	323	168	0.52	Holy Cross	82	0.25	6.00	15.77	12.02	18.87	13.03
240338059071	830	$63,124	309	154	0.50	Holy Cross	102	0.33	3.47	10.22	6.60	13.32	13.17
240317017033	1,345	$49,999	289	181	0.63	Holy Cross	77	0.27	1.55	12.93	7.35	16.03	15.03
240338048012	988	$39,608	275	158	0.58	PGHC	29	0.16	7.38	18.65	13.52	21.75	14.87
240317017011	774	$33,484	273	187	0.69	Holy Cross	60	0.22	2.05	15.43	7.22	18.83	17.82
240317018002	184	$49,166	248	156	0.63	Holy Cross	64	0.26	1.62	13.82	5.88	18.13	17.65
240317017032	1,107	$135,637	235	140	0.60	Holy Cross	47	0.20	0.52	13.53	6.65	16.63	15.82
240338072004	1,254	$69,999	232	129	0.56	Holy Cross	34	0.15	7.00	10.60	10.22	13.70	9.07
240338048022	1211	$37,904	209	105	0.5	Holy Cross	25	0.12	8.50	18.02	14.35	21.12	14.08
240317019002	701	$74,582	203	110	0.54	Holy Cross	59	0.29	1.20	12.98	5.37	16.38	16.23
240317019003	846	$70,713	168	118	0.70	Holy Cross	29	0.17	0.53	13.37	5.70	16.47	15.98
240338048021	1,542	$37,646	166	95	0.57	HCH/PGHC	25	0.15	7.47	17.67	13.48	20.77	13.92
240317017013	976	$159,027	151	93	0.62	Holy Cross	38	0.25	2.13	15.52	7.58	18.62	17.23
Total	**91,516**		**27,702**	**16,204**	**58.49%**								

Drive Time to an ED			# Pop	% Pop Drive Time to ED/ Pop 2015
	≤7 min.		31,597	34.5%
	> 7 ≤ 12 min.		51,722	56.5%
	> 12 < 15 min.		8,197	9.0%

*MD median HH income= $73,971

APPENDIX 5

Washington Adventist Hospital Site Selection Decision Grid

Washington Adventist Hospital Site Selection Decision Grid
Exhibit 31 from the CON Application

	Site #1	Site #2	Site #3	Site #4	Site #5
Location	University Blvd. at Carroll Ave. ~ 1 mile from existing site, Silver Spring MD	College Park, MD	White Oak along New Hampshire Ave, Silver Spring MD	25 acre site off Industrial Blvd and Rout2 29, Silver Spring MD	Plum Orchard, Silver Spring MD
Estimated Distance from Existing Site	1 mile	4 miles	4 miles	6.5 miles	6.5 miles
Control of Property	Not Likely - Privately owned by multiple entities and would require school relocation	No - State owned	No - Federal Government owned	No - Local Government owned	Yes
Scope	Split Campus - partial relocation	Full Relocation	Full Relocation	Full Relocation	Full Relocation
Score Criteria	**Score**	**Score**	**Score**	**Score**	**Score**
Score	3	3	7	10	
Access to the Campus / Location	10	5	5	4	10
Available Acreage	1	1	1	1	10
Purchase to Own	5	5	5	5	10
Zoning	10	7	4	2	8
Existing Public Transportation	1	1	1	4	5
Feasibility	10	5	10	10	10
Within Existing Primary Service Area	10	1	10	10	10
Within Montgomery County	2	4	7	10	10
Area Compatibility	1	5	2	5	10
Ease of Development	2	2	5	5	10
Natural Setting for Healing Environment	3	4	10	10	8
Access to Science and Technology Organization(s)	**4.8**	**3.6**	**5.6**	**6.3**	10
Total Score					**9.3**

Scale: 1 to 10 where 1 is worst and 10 is best

Scoring Rationale
Higher score given to options with greater access to major (lane or greater) roadway(s). Options served by multiple major roadways scored higher whereas options served by minor roadways (2 lane) scored lower.
Higher score given to options with greater control of 20 or more developable acres. Only options 1, 5 met this to the fullest extent. The significance here is the ability to develop a well-organized site plan that maximizes area in support of operational and development objectives. Lower scoring options provide limited ability to meeting these objectives.
Higher score given to options with full control of site through land ownership. Only option #5 provides this ability to the fullest extent. All other options score low because land ownership was limited or not possible.
Higher score given to options with pre-existing and approved development entitlements (sub-division, adequate public facilities, zoning classification etc.). Although all options have zoning that would allow a hospital through special exception, option #5 had favorable zoning and entitlements at purchase, whereas the others didn't and would require more extensive development review process and approval.
Higher score given to options with higher level (bus, rail etc.) of public transportation service. Option #5 currently receives a mid-level rating for Metrobus service, however upon occupancy, bus routes and frequency will increase per discussion with MCDOT.
Higher score given to options providing ownership, previously approved development entitlements, sites residing within Montgomery County, not dependent upon or a component of mixed use master plans. Option #5 meets these characteristics to the fullest extent.
Higher score given to options located within the hospitals primary service area and within Montgomery County. Options #1,3,4,5 within Montgomery County whereas option #2 within Prince Georges County.
Higher score given to options located within Montgomery County.
Higher score given to options holding existing adequate public facilities approvals and located within a non-residential zone and where the site plan is in accordance with the regional master plan. Options #4 ,5 are located within the Fairland Master Planning Area and meet this characteristic to the fullest extent.
Higher score given to options providing ownership, greenfield site, and development characteristics in harmony with surrounding area. Option #5 provides meets these characteristics to the fullest extent.
Higher score given to options providing direct access or adjacency to elements of nature such as, trees, gardens, water features. Option #5 is a forested green field site containing a 4 acre pond and extensive environmentally protected area.
Higher score given to options providing proximity to planned or established development focused on the life sciences. Options #3, 4, 5 are located near the newly consolidating US FDA and the prEoposed Montgomery County "East County Center for Science and Technology".

APPENDIX 6

DHMH Advisory re: Changes to the Department's Process for admitting Adult Psychiatric Patients to Institutions for Mental Diseases (IMDs)

STATE OF MARYLAND

DHMH

Maryland Department of Health and Mental Hygiene

Larry Hogan, Governor - Boyd K. Rutherford, Lt. Governor - Van T. Mitchell, Secretary

August 24, 2015

Dear Colleague:

We are writing to bring to your attention recent changes to the Department of Health and Mental Hygiene's (the Department) process for admitting adult psychiatric patients to Institutions for Mental Diseases (IMDs) within the Public Behavioral Health System.

For the past three years, the Department has participated in a Medicaid Emergency Psychiatric Demonstration that made Medicaid funds available to private free standing psychiatric hospitals (IMDs) for emergency inpatient psychiatric care provided to Medicaid enrollees aged 21 to 64.[1] These IMDs include, but are not limited to, Sheppard Pratt, Adventist Behavioral Health, and Brook Lane.

This three-year federal demonstration ended on June 30, 2015, and effective July 1, 2015, all adult psychiatric admissions to IMDs must now be paid with state general funds only. The state general funds budgeted for adult admissions to IMDs is significantly lower than the cost projected for fiscal year 2016. Therefore, for all adults presenting to an acute care general hospital Emergency Department (ED), in need of an inpatient psychiatry admission, every effort will be made to admit the individual to an Acute Care General Hospital. To accomplish this, all acute care general hospitals will be instructed to participate in and use the Maryland Psychiatric Bed Registry. All EDs will need to use the Bed Registry to find the nearest acute care general hospitals with an open psychiatric bed and coordinate the admission with the receiving hospital and VO. Please advise your admissions department to work collaboratively with acute care general hospitals and VO to divert Medicaid admissions to any open acute care general hospital psychiatry unit bed, whenever possible.

If the ED is unsuccessful in admitting the patient to their own or another acute care general hospital using the Bed Registry, the ED must call no less than four (4) acute care general hospitals to find an open psychiatric bed prior to requesting authorization from VO for admission to an IMD. If these calls have not been completed, VO will instruct the ED to attempt to admit the patient to an acute care general hospital by making these calls before it will authorize admission to an IMD. Ultimately, admissions to IMDs will be considered as a last resort in situations where no community hospital psychiatric bed is available and emergency psychiatric inpatient treatment is indicated.

We understand that this change is difficult for these organizations. Please note that the Department is seeking a federal waiver from the IMD Exclusion. If approved by the Centers for Medicare and Medicaid Services (CMS), Maryland would have the ability to reimburse IMDS for the treatment of Medicaid enrollees aged 21-64 with acute psychiatric and substance-use-related needs and would receive federal

[1] The Medicaid Emergency Psychiatric Demonstration was established under Section 2707 of the Affordable Care Act. The District of Columbia and 11 states, including Maryland were selected to participate in the Demonstration.

matching dollars. A copy of the waiver application and supporting documentation can be accessed at: http://dhmh.maryland.gov/SitePages/IMD%20Exclusion%20Waiver.aspx

Moreover, CMS is seeking public comment on Maryland's waiver application until September 11, 2015. We encourage you to submit comments here: https://public.medicaid.gov/connect.ti/public.comments/viewQuestionnaire?qid=1878723

Should you have any questions or concerns regarding this policy, please contact Dr. Zereana Jess-Huff, CEO to ValueOptions, Inc., Maryland by dialing 410-691-4000 or Zereana.jess-huff@valueoptions.com.

Sincerely,

Gayle Jordan-Randolph, M.D.
Deputy Secretary
Behavioral Health

Shannon McMahon
Deputy Secretary
Health Care Financing

Institutions for Mental Disease (IMD) Exclusion Waiver

Proposal

- The Institutions for Mental Disease (IMD) exclusion is one of the few instances where Medicaid is not permitted to provide payment for medically-necessary services. It excludes states from receiving federal matching dollars for services provided by IMDs for individuals between 21 and 64 years old. An IMD is defined as a facility with more than 16 beds that is primarily engaged in providing diagnosis, treatment, or care of persons with mental diseases and chemical dependency disorders.

- Maryland is seeking an amendment to its HealthChoice §1115 demonstration that would allow for Medicaid payments for services in IMDs. Our request of an "IMD exclusion waiver" would target private IMDs treating individuals with either psychiatric care or substance use treatment needs and allow adults age 21 to 64 to continue to receive services in less costly IMDs rather than in general acute-care hospitals.

Background

§1115 Waiver Authority

- The Centers for Medicare and Medicaid Services (CMS) has approved IMD exclusion waivers in the past. CMS approved IMD exclusion waivers that targeted facilities treating individuals with psychiatric needs. Maryland, along with nine other states, has previously received an IMD exclusion waiver. The other states include: Arizona, Delaware, Hawaii, Iowa, Massachusetts, Oregon, Rhode Island, Tennessee, and Vermont.

- Maryland's IMD exclusion waiver began in 1997 and allowed adults between 21 and 64 with acute episodes of mental illness to receive Medicaid-covered treatment in IMDs rather than general acute hospitals. This is important for two reasons: first, general acute hospitals often lack the resources or expertise to provide the type of care psychiatric patients need; second, acute care hospitals are not the most cost effective way of providing psychiatric care to patients.

- CMS phased out the use of IMDs beginning in FY 2006. Maryland received 100 percent of the expected Federal Financial Participation for FY 2006, 50 percent for FY 2007 and 0 percent for FY 2008.

Affordable Care Act Demonstrations

- The Medicaid Emergency Psychiatric Demonstration, established under Section 2707 of the Affordable Care Act, makes Medicaid funds available to private psychiatric hospitals for emergency inpatient psychiatric care provided to Medicaid enrollees aged 21 to 64. The District of Columbia and 11 states were selected to participate in the Demonstration. Maryland was one of the states selected. The Demonstration is scheduled to sunset December 2015.

Recent Action

- On April 23, 2015, the Breaking Addiction Act of 2015 was introduced in the US House of Representatives. This legislation directs the Secretary of Health and Human Services (HHS) to accept applications to waive the IMD exclusion from states that seek to provide comprehensive addiction treatment.

Why Request an IMD Exclusion Waiver?

- The IMD exclusion waiver will be instrumental in promoting access to high quality care and relieving some pressure on overcrowded general hospital emergency departments. Additionally, both Maryland and CMS will save money, since IMDs are lower cost facilities than acute hospitals.

APPENDIX 7

HSCRC Staff Recommendation on WAH Partial Rate Application

IN RE: THE PARTIAL RATE APPLICATION OF	*	BEFORE THE HEALTH SERVICE COST REVIEW COMMISSION
WASHINGTON ADVENTIST	*	DOCKET: 2015
HOSPITAL	*	FOLIO: 2110
TAKOMA PARK, MARYLAND	*	PROCEEDING: 2300R

* * * * * * * * * * * * *

STAFF RECOMMENDATION

October 14, 2015

I. OVERVIEW

Washington Adventist Hospital (WAH, or the Hospital) filed a rate application requesting that its rates be increased in 2019 to help pay for a large capital cost increase associated with the construction of a replacement facility in a new location in Montgomery County. This partial rate application is being filed during the Certificate of Need (CON) review, which is underway at the Maryland Health Care Commission (MHCC). This rate request is being filed in advance of CON approval because WAH represented in its CON application that it will require a rate increase to make its project financially feasible. In order for the Maryland Health Services Cost Review Commission (HSCRC) and MHCC to evaluate the financial feasibility of the proposed project, it is necessary to first determine the amount of funds that would be provided to WAH for the additional capital costs. Once the rate application is acted upon, the HSCRC will need to complete a feasibility evaluation and provide comments to MHCC regarding the feasibility of the project. MHCC will determine whether to grant a CON based on its own review. Finally, WAH will need to seek a Comfort Order from HSCRC since it expects to finance the project through the Maryland Health and Higher Educational Facilities Authority (MHHEFA).

II. BACKGROUND AND REQUEST

WAH filed a partial rate application with the HSCRC on June 8, 2015 for capital related to a CON project to relocate the facility from Takoma Park, Maryland to White Oak, Maryland. WAH filed a CON application with MHCC on November 20, 2013 (as amended on September 29, 2014) to seek approval for the relocation and construction of a replacement facility. MHCC is

currently in the process of reviewing WAH's CON application, including volume projections, and will act on the CON request after its review is completed. HSCRC staff are in the process of reviewing the financial feasibility of the CON project.

The total cost of the proposed project is $330,829,524. WAH proposes to contribute $50,575,175 in cash and $11,000,000 in land toward the project. It will also fundraise an additional $20,000,000, and finance the remainder with the sale of $244,750,000 in bonds and $4,504,349 of related interest earnings.

WAH is owned and operated by Adventist Healthcare Incorporated (AHI). In addition to WAH, AHI owns and operates the following facilities in Maryland: Shady Grove Adventist Hospital, Adventist Behavioral Health Services, and Adventist Rehabilitation Hospital of Maryland. WAH intends to finance the bonds associated with the project through AHI.

WAH is requesting a permanent revenue increase of $19,700,000, or 7.3 percent of its current total approved permanent revenue. WAH is requesting that 50 percent of the revenue increase be effective on January 1, 2019, the anticipated opening date of the new facility in White Oak. WAH is requesting that the remaining 50 percent of the revenue increase be effective on July 1, 2019. The requested revenue increase represents approximately 80 percent of the estimated additional depreciation and interest costs associated with the project.

The project consists of a replacement hospital to be built on approximately 49 acres in White Oak. The new facility will have 427,662 total square feet with seven stories above grade and one story below grade. It will have a full complement of acute care services, including 170

private inpatient rooms, emergency services with 32 treatment bays, 8 general operating rooms, observation services, and other acute care services. WAH will reduce its licensed bed capacity for medical/surgical and obstetrics services from the current 192 beds to the 170 proposed beds once the new facility is opened. The existing Takoma Park facility will continue to house 40 behavioral health beds and non-acute services, including a federally qualified health center, a women's center providing prenatal and other services for the community, and a walk-in primary care clinic.

In its CON application, WAH projects an annual *decrease* in admissions of approximately 1.1 percent from 2014 to 2018. Once the new facility opens in 2019, it projects that admissions will *increase* by 1 percent annually. WAH anticipates a small decrease in market share from 2013 through 2018. Once the new facility opens, WAH anticipates that it will maintain its market share moving forward and that population growth and aging will account for the projected 1 percent annual growth in volume. WAH projects that population growth and aging through 2023 will lead to incremental growth in volumes in its service area, offsetting the loss of volumes due to reductions in potentially avoidable utilization (PAU).

The CON application projects that the Hospital's length of stay will remain constant through 2020 and that emergency department visits will increase by 2 percent annually after the new facility is opened.

WAH projects net profits of $5,465,000 in 2019 and $6,897,000 in 2020, the first two years of operation after the new facility opens. These projected net profits include the assumption that the requested revenue increase of $19,700,000 is approved.

III. HOSPITAL RATE HISTORY

WAH entered into a Global Budget Revenue (GBR) agreement effective July 1, 2013. Under the GBR agreement, WAH received the following adjustments:

Table 1. WAH's GBR Adjustments, 2014 Final and 2015 Preliminary

	July 1, 2014 (in 1,000s) Final	July 1, 2015 (in 1,000s) Preliminary
Initial Approved Revenue	$254,864	$256,326
Update factor for inflation	5,359	5,325
Population/Market Shift		1,965
Change in Mark-up	(1,832)	(1,956)
Infrastructure Adjustment		2,625
Change in One-Time Assessments	(2,065)	(1,376)
Total Approved Revenue	$256,326	$262,909

IV. HOSPITAL FINANCIAL SITUATION

WAH's fiscal year ends on December 31. For the past three years, it has reported the following audited results:

Table 2. WAH's Year-End Audited Financial Results, 2012-2014

Year Ending December 31	Net Operating Revenue (Regulated)	Net Operating Profit (Regulated)	Operating Margin (Regulated)	Net Profits (Loss)
2012	$206,488,551	$3,310,437	1.6%	($7,395,620)
2013	$199,999,850	$969,950	0.5%	($12,230,680)
2014	$211,284,900	$16,639,700	7.9%	$2,625,900

WAH improved its financial situation between 2013 and 2014, primarily as a result of increasing revenue and improving overall expense efficiencies. The table below lists the number of inpatient admissions, equivalent inpatient admissions (EIPAs), and the average regulated expenses per EIPA for the last three audited years:

Table 3. WAH's Inpatient Admissions and EIPAs, 2012-2014

Year Ending December 31	Inpatient Admissions	EIPAs	Regulated Expense Per EIPA
2012	13,111	19,124	$10,624
2013	11,648	18,392	$10,821
2014	11,472	18,043	$10,758

V. STAFF ANALYSIS

In October 2003, the Commission adopted the staff's recommendation for revisions to the HSCRC's Inter-Hospital Cost Comparison (ICC) and Reasonableness of Charges (ROC) methodologies. Specifically, the Commission approved policies regarding full rate reviews and permitted partial rate applications for additional capital costs associated with a CON-approved major project. The ICC standard methodology is based on the average charges of a comparable group of hospitals adjusted to take into account variations among the hospitals for the percentage of mark up, poor patients, labor market differences, capital and teaching commitments, and case mix. In addition, the percentage of profit generated on HSCRC-regulated services is eliminated from the standard, but the ICC standard used for reviewing capital cost increases is not reduced for the 2 percent productivity adjustment that is applied for full rate reviews.

The focus of a partial capital-related rate application review is to allow a hospital that has a large capital cost increase associated with a major project to obtain some level of rate relief to the extent that the hospital's rates are determined to be reasonable under an HSCRC-defined methodology. The Commission's policy is that the ICC standard applied in the case of a partial

rate review for capital be the current ICC analysis (retaining the profit strip) without the 2 percent productivity adjustment. This policy was meant to generate rate relief for a hospital with low charges relative to its peers and is undertaking a major capital project. Under this modified ICC standard, efficient hospitals will be able to generate profits through cost savings related to operational efficiencies.

HSCRC staff are in the process of evaluating methodologies to incorporate additional measures of operational efficiency under the framework introduced by the new All-Payer Model that became effective on January 1, 2014. This may include standards for and reductions in PAU, as well as per capita efficiency measures, among others. While this partial rate application would establish an expected amount of incremental funding for capital costs, it does not affect the application of other HSCRC policies, including any efficiency polices that might be adopted between the time of this staff recommendation and the date in which the new facility becomes operational.

The HSCRC's current methodology allows the subject hospital to estimate capital costs as reflected by the depreciation and interest associated with the CON-approved project and the estimated routine annual capital replacement over the project period. WAH's rate application requests that the HSCRC grant a revenue increase equal to 80 percent of the projected incremental capital costs associated with the project. The CON includes a projected first-year interest costs of $14,685,000, first-year depreciation costs of $9,769,000, and first-year amortization costs of $175,000 for a total of $24,629,000 in incremental capital costs.

As stated above, WAH is requesting that 80 percent of the $24,629,000 in incremental capital costs, or $19,700,000, be placed into rates. WAH is requesting that 50 percent of the costs be added to rates on January 1, 2019, and that the remaining 50 percent be added to rates on July 1, 2019. The January 1, 2019 rate increase coincides with the anticipated opening date of the new hospital. The total rate increases for the two dates equate to approximately 7.3 percent of projected total permanent revenue.

WAH assumed an interest rate of 6.0 percent for the project. The Hospital is proposing to finance the project under the AHI Obligated Group. According to the notes in WAH's December 31, 2014 Audited Financial Statements, AHI issued debt in 2014 with a fixed coupon rate of 3.56 percent. Staff contacted Annette Anselmi, Executive Director of MHHEFA, regarding the use of such a high interest rate in WAH's projections. Ms. Anselmi indicated that, with the uncertainty in the market and indications that interest rates will possibly rise in the near future, the 6 percent interest rate is a reasonable assumption.

Staff believe that the actual interest rate on the debt associated with this project will be less than the 6 percent assumed in the CON. If the actual interest rate for the debt is lower than the assumed interest rate, then the annual interest cost would be reduced. The lower interest costs could reduce the requested rate increase by as much as 2 percent.

WAH was 7.01 percent below the peer group average of a ROC comparison and 0.92% below the average of the modified ICC comparison that was calculated based on 2014 data. Based on the Annual Cost Schedule (ACS) from the Hospital's 2013 Annual Report of Revenue and Expenses, WAH had $2,272,818 in HSCRC-regulated interest expenses, $8,153,219 in

regulated depreciation and amortization expenses, and $869,404 in regulated capital lease expenses, for a total of $11,300,441 in capital expenses. The $11,300,441 represents 5.68 percent of WAH's total 2013 regulated expenses.

As stated above, WAH is projecting $14,685,000 in annual interest expenses and $9,944,000 in annual depreciation and amortization expenses related to the new project in the CON. WAH is also projecting an additional $5,852,000 in depreciation expenses related to assets at the AHI corporate offices that will continue to be allocated to the Hospital after the new facility is opened. Total projected capital costs at that time will be $30,481,000, representing 12.4 percent of WAH's projected 2019 total costs. The difference between WAH's current capital cost of $11,300,441 and the projected $30,481,000 in capital costs after the new facility is opened is $19,180,559, or approximately $500,000 less than the $19,700,000 revenue increase requested.

VI. IMPACT OF GLOBAL BUDGETED REVENUE AND PAU

Under the new All-Payer Model and the associated global budget rate-setting agreements, Maryland hospitals are focused on reducing PAU that can result from care improvements and reductions in unplanned admissions. Revenues are increased for changes in population and in other limited circumstances, but volume growth is not a factor in determining revenue. Further, hospitals can no longer plan on increasing volumes to pay for capital improvement projects.

As part of the HSCRC's annual calculation of allowable rate increases by hospitals, an adjustment is incorporated to account for hospitals' ongoing performance in reducing PAU. In

the latest calculations updating statewide revenues as of July 1, 2015, WAH's PAU was 16.47 percent, compared with a statewide average of 13.65 percent. This comparison of PAU has not yet been adjusted for socioeconomic status or other health disparities. In the most recent ROC calculations WAH had 29.3% of its patients classified as disproportionate share (poor patients) compared to an average of 17.8% for the total hospitals in the comparison group. WAH's significantly higher than the average disproportionate share is likely contributing to the higher than average percentage of PAU.

VII. CALCULATION OF CAPITAL ADJUSTMENT

The HSCRC's current policy on revenue increases related to new capital projects calls for WAH to receive a revenue increase for a portion of the new capital costs offset by the percentage amount that it exceeds the ICC methodology. Since WAH was 0.92 percent below the modified ICC standard, no reduction will be applied.

The 2014 capital costs of the 28 hospitals included in WAH's ICC group represented 10.08 percent of total costs according to the Schedules of Revenues and Expenses submitted by the hospitals. Staff are recommending that WAH receive a rate increase equal to the difference between (1) the average of the ICC group hospitals' 10.08 percent capital costs and WAH's projected capital costs after the new facility is opened and (2) WAH's current capital costs of 5.68 percent. This would result in an approved revenue increase of $15,391,282 to WAH's permanent approved GBR.

VIII. Recommendation

Staff recommend that $15,391,282 be added to WAH's permanent rate base at the time the new facility opens, estimated to be January 1, 2019. This revenue adjustment will be reduced if the actual interest rate incurred is different from the projected 6 percent used in these calculations. Also, the staff's recommended revenue is based on, among other things, the information and representations contained within the Hospital's CON application. Should the information or representations change materially in the view of HSCRC staff, staff reserve the right to bring the matter back to the HSCRC for reevaluation and potential modification to the revenue approved herein.

WAH will continue to be subject to any revenue adjustments related to the GBR or any new rate-setting system developed in response to changes in health care delivery or payment methodologies in Maryland. As noted above, staff are in the process of developing new rate methodologies over the next few years that will account for operational efficiencies and ongoing efforts to reduce PAU.

This staff recommendation should not be construed in any way as staff's rendering any opinion at this time on the financial feasibility of the capital project. Staff's opinion on financial feasibility will follow a thorough analysis and will be provided to the MHCC in writing, consistent with the advisory role that the HSCRC staff have historically played in CON applications. As noted, the final determination of whether or not a CON is to be granted rests within the authority of the MHCC. Rate approval for a facility granted a CON rests within the

authority of the HSCRC. HSCRC staff may ultimately conclude that a project is financially feasible. On the other hand, HSCRC staff may determine otherwise, in which case it may recommend against the issuance of a Comfort Order by the HSCRC.

APPENDIX 8

HSCRC Letter Commenting On the Project

Memorandum

Date: November 6, 2015

To: Frances B. Phillips
Commissioner/Reviewer, MHCC

From: Gerard J. Schmith
Deputy Director, Hospital Rate Setting, HSCRC

Subject: Relocation of Washington Adventist Hospital ("WAH") and Establishment of a Special Psychiatric Hospital on the Existing Takoma Park Campus
Docket No. 13-15-2349

****

On August 31, 2015 you requested that we review and comment on the financial feasibility and underlying assumptions of the relocation of WAH from its existing location in Takoma Park to the White Oak area and establishment of a Special Psychiatric Hospital on the existing Takoma Park Campus. Adventist HealthCare Incorporated, ("AHI"), the owner and operator of WAH, submitted an amended CON on September 29, 2014 with additional supplemental information including a letter dated July 27, 2015 from James Lee, Executive Vice President and CFO of AHI.

This memorandum provides our general comments and addresses your specific questions regarding the project.

General Comments on Financial Feasibility

Data Reviewed

We reviewed the revised financial portions submitted on October 21, 2015 as well as other pertinent supplemental information associated with the CON provided by WAH prior to that date. The information submitted included audited financial data for the fiscal years ending December 31, 2013 and 2014, actual and budgeted data for fiscal year ending 2015, and projected data for the fiscal years ending 2016 through 2020 (the second full year after the completion of the project.) Along with these financial projections, we have also reviewed WAH's audited financial statements for the year ended December 31, 2014 and the expected financing plan for this project.

Revenue Projections

We have reviewed the assumptions regarding the projections of operating revenue. The assumed annual HSCRC approved revenue increases listed in the CON assumptions provided by WAH that were the basis for the revenue increases shown in the table below are as follows:

Table 1 - Summary of Projected HSCRC Approved Revenue Increases
Washington Adventist Hospital

	Years Ending June 30,					
	2015	2016	2017	2018	2019	2020
Update Factor	2.21%	2.17%	2.30%	2.30%	2.30%	2.30%
Age Adjusted Population Growth	0.00%	.56%	.56%	.56%	.56%	.56%
Population Infrastructure	0.00%	1.05%	0.00%	0.00%	0.00%	0.00%
Market Shift	0.0%	.23%	0.00%	0.00%	0.00%	-.05%
Other Reversals, One Time Adj, etc.	-.75%	0.00%	0.00%	0.00%	0.00%	0.00%
Total	1.46%	4.01%	2.86%	2.86%	2.86%	2.81%

Source: Updated financial information and projections submitted by WAH on October 21, 2015.

In addition to the revenue increases shown above, WAH assumed that revenue would increase by $15,391,282 (5.4%) on January 1, 2019 to reflect the HSCRC approved capital increase.

Staff believes that the assumed increases are reasonable in light of the projected changes in population and approved revenue.

WAH projected that charity write offs would equal 6.5% of gross patient revenue from 2015 through 2020, an increase of .5% from the 2014 actual 6.0%. WAH projected that bad debt expenses would equal 5.0% of gross patient revenue less Uncompensated Care Fund payments from 2015 to 2020, which represents a 1.7% decrease from the 2014 actual of 6.7%. WAH attributes these changes to the changes brought about by the Affordable Care Act.

WAH's actual other deductions from revenue equaled 11.8% of gross patient revenue in 2014. WAH projected that its other deductions from revenue would decrease to 9.5% of gross patient revenue in 2015, decreasing to 9.4% from 2016 through 2018, and then decreasing to 9.3% in 2019 and 2020. WAH attributes this improvement to engaging a revenue cycle management firm to manage the revenue cycle operations and the reduction in HSCRC assessments due to the elimination of the Maryland Health Insurance Program (MHIP).

The HSCRC staff also reviewed WAH's projections of other operating revenue. The projected other operating revenue is considered reasonable and achievable. WAH did not project any non-operating revenue associated with this project.

Expense Projections

Staff reviewed the assumptions regarding the projection of expenses. WAH stated that it applied the following variable expense change assumptions in the CON projected financial statements

Table 2 - Summary of Assumed Expense Increases
Washington Adventist Hospital Revised CON Projections

	Years Ending December 31,					
	2015	2016	2017	2018	2019	2020
Salaries Excluding Overhead:						
Inflation	2.3%	2.2%	2.3%	2.2%	2.3%	2.2%
Change in FTE's	2.0%	1.8%	-.2%	-.4%	1.8%	.8%
Supplies Excluding Overhead:						
Inflation	8.2%	2.0%	3.5%	3.5%	3.5%	3.5%
Volume	-.4%	1.8%	0.4%	-.1%	.7%	1.2%
Contract labor Excluding Overhead:						
Inflation	2.3%	2.2%	2.3%	2.2%	2.3%	2.2%
Change in FTE's	17.1%	-12.5%	-.2%	-.4%	1.8%	0.0%
Purchased Services Excluding Overhead:						
Inflation	-10.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Volume	2.6%	0.0%	0.0%	0.0%	-.2%	.7%

Source: Updated financial information and projections submitted by WAH on October 21, 2015.

For fixed expenses, WAH assumed a series of inflation factors for 2016 to 2020 ranging from 0% for professional fees to 2.5% for administrative and general expenses. For 2015 inflation, WAH assumed 0.0% for professional fees, 11.5% for building and maintenance expense, negative (1.9%) for the overhead allocation from AHI, a negative (.2%) for general and administrative costs, and a negative (7.7%) for insurance costs.

WAH assumed that it would reduce building and maintenance operating costs by 20%, or approximately $1,800,000, after the move to the new White Oak facility. WAH has stated that it will contract with an unrelated party to provide utility services to the new White Oak facility through a Centralized Utility Plant (CUP).

WAH is projecting that its number of FTE's per Average Equivalent Occupied Beds (AEOB) will increase from an actual 4.1 in 2014 at the existing WAH facility to a projected 4.7 in 2020 at the new White Oak facility. The reason for the large increase in projected FTE's per AEOB is due to the fact that approximately 16% of WAH's patient days are related to the psychiatric patients who will remain at the existing WAH facility. The 2014 FTE's per AEOB for other neighboring Montgomery and Prince Georges County hospitals range from 5.0 at Montgomery General Hospital to 5.8 at Prince Georges General Hospital. Part of the reason for WAH's lower FTE's per AEOB is due to the fact that WAH does not report FTE's for all of the shared services that it purchases from AHI including patient billing and Information Technology Services.

Staff calculated the projected overall annual expense percentage variability with volume based on the percentage change in uninflated revenue compared to the annual change in total expenses including depreciation and interest depreciation and interest. The results of staff's analyses were as follows:

Table 3 – Projected Expenses Percent Variability with Volume
Washington Adventist Hospital Revised CON Projections

	Years Ending December 31,				
	2016	2017	2018	2019	2020
Including Depreciation and Interest	104.0%	14.2%	97.3%	-11.8%	97.2%

Source: Updated financial information and projections submitted by WAH on October 21, 2015.

The average variable cost change averages approximately 90% over the 5 year period. However, since the overall volume change is very small during this period, any change to the variable cost percent would have little impact on the overall projection of expenses. Staff believes that the assumptions used in the projections of ongoing annual expenses are reasonable and achievable.

In the project budget for capital expenses, WAH made an assumption that it would incur $2,700,000 in relocation costs for the move of the medical/surgical and obstetrics units and practically all outpatient services at the old facility to the new facility. The $2,700,000 estimated relocation costs seem low. WAH may incur cost at the new facility before it opens related to training, staffing, inventories, food, and other items related to relocation. There may also be transportation costs of moving patients and staff from the old facility to the new facility. If WAH needs to maintain some of the medical/surgical and obstetrics units and practically all outpatient services at the old facility after the new facility is open, then costs may be higher than the $2,700,000 WAH has projected.

Financial Ratios

WAH states on Page 128 of the CON that AHI will secure financing for the project pursuant to its amended and restated master trust indenture dated February 1, 2003. WAH provided the projected financial information and ratios for the obligated group of AHI. On a consolidated basis AHI projects that it will meet the ratio levels required under its bond documents.

Listed below are the AHI projected ratios and the required ratios per the bond covenants provided by WAH:

Table 4 - Adventist HealthCare Obligated Group Key Financial Information and Ratios
Washington Adventist Hospital Revised CON Projections

	Years Ending December 31, (in millions)							
	2013	2014	2015	2016	2017	2018	2019	2020
Operating Income	$8.7	$22.5	$34.4	$32.7	$28.4	$29.1	$17.4	$16.0
Operating Margin	1.2%	3.1%	5.1%	4.8%	4.1%	4.1%	2.4%	2.1%
Excess of Revenue over Expenses	$12.1	$25.8	$42.7	$41.8	$37.8	$38.7	$27.2	$25.9
Excess Margin	1.7%	3.5%	6.3%	6.1%	5.5%	5.5%	3.7%	3.4%
Operating Cash Flow	$54.2	$71.1	$74.7	$74.5	$70.9	$72.5	$87.4	$87.9
Operating Cash Flow Margin	7.7%	9.7%	11.1%	10.9%	10.3%	10.3%	11.8%	11.6%
Debt Service Coverage-Projected	1.80x	2.13x	2.39x	2.08x	2.00x	2.04x	2.52x	2.79x
Debt Service Coverage --Required	1.25x	1.25x	1.25x	1.25x	1.25x	1.25x	1.25x	1.25x
Cash and Equivalents	$225.9	$245.1	$213.5	$226.4	$230.3	$196.3	$212.7	$229.2
Days Cash on Hand –Projected	124.6	132.4	127.8	133.8	133.2	111.1	114.8	120.6
Days Cash on Hand-Required	70	70	70	70	70	70	70	70
Long Term Debt	$321.2	$319.8	$299.2	$523.5	$504.7	$502.7	$482.7	$464.1
Net Assets	$396.0	$419.0	$432.8	$480.4	$519.8	$575.4	$587.5	$604.0
Debt to Capitalization-Projected	44.8%	43.3%	40.9%	42.1%	49.3%	46.6%	45.1%	43.4%
Total Liabilities to Unrestricted Net Assets-Projected	1.23x	1.15x	1.03x	1.38x	1.22x	1.11x	1.07	1.03
Total Liabilities to Unrestricted Net Assets-Required	2.50x	2.50x	2.50x	2.50x	2.50x	2.50x	2.50x	2.50x

Source: Data Provided by WAH on November 2, 2015

Based upon these projected ratios, Staff believes that AHI would be able to obtain financing for the project on terms that are consistent with those assumed in the plan of finance.

Projected Volumes

Even though hospital global budgets are fixed and are not sensitive to volume, Staff is concerned about potential declines in volumes that may occur as care models are changed and as population health is improved. Even without these initiatives, there has been a steady decline in inpatient hospital utilization over decades, in spite of an aging population. The introduction of DRGs, technological advances in surgery, radiation therapy, and new medications have contributed to this change. While costs have not decreased, services have moved to outpatient settings. Nationally and in Maryland, payment and delivery models are changing. These models are likely to accelerate these trends toward lower inpatient utilization. Our advice is that attention should be directed to making sure that bed need projections account for these trends and changes while the State is evaluating the size of the facility. There is a risk that excess capacity could develop, and that this excess capacity could affect the feasibility of the WAH project. For example, several of the TPR hospitals saw intensive inpatient volume decreases resulting in excess capacity, including capacity in new facilities.

One measure of the potential for utilization to fall is Potentially Avoidable Utilization (PAU). This is a measurement of categories of unplanned hospital utilization that can be reduced through better care,

better care coordination, and other interventions. Staff is measuring several categories of PAUs. Not all PAUs are avoidable, but Staff has not yet identified all categories of utilization that are avoidable. Staff is currently working with recognized national experts to add to the categories of avoidable utilization.

In HSCRC's recent calculations of PAUs used to update statewide revenues as of July 1, 2015, WAH's percentage of PAU's was 16.47% versus a statewide average of 13.65%. This comparison of PAU's has not yet been adjusted for socioeconomic status or other health disparities. In the most recent ROC calculations, WAH had 29.3% of its patients classified as disproportionate share (poor patients) compared to an average of 17.8% for the total hospitals in its comparison group. WAH's significantly higher than average percentage of disproportionate share patients is likely contributing to its higher than average percentage of PAU's.

On a combined basis, the hospitals in Prince Georges County had 18.50% of their patients classified as PAU's, while Montgomery County hospitals had 14.43% of their patients classified as PAUs. Therefore, not only does WAH have a high proportion of PAU's but the hospitals surrounding WAH also have high proportions of PAU's. Staff believes the potential for volume declines in WAH's service area related to future reductions in PAUs should be considered when evaluating bed need projections as potentially affecting feasibility. We understand that MHCC carries the responsibility for this effort and that it is difficult to predict the exact impact of change. Nevertheless, Staff believes conservatism is warranted. WAH is projecting the following discharges and observation patient volumes for CYs 2015 through 2020:

Table 5 – Projected Volumes
Washington Adventist Hospital Revised CON Projections

	Year Ended December 31,						
	Actual	Projected					
	2014	2015	2016	2017	2018	2019	2020
Inpatient Discharges Excl. Psych.	9,892	9,131	9,558	9,567	9,576	9,672	9,768
Outpatient Observation Patients	1,185	2,299	1,881	1,881	1,881	1,900	1,919
Totals	11,077	11,430	11,439	11,448	11,457	11,572	11,687

Source: Updated financial information and projections submitted by WAH on October 21, 2015.

Included in WAH's construction plans are 8 dedicated Short Stay Observation Beds in the lower tower and 12 Clinical Decision beds adjacent to the Emergency Department for a total of 20 additional beds to treat patients classified as observation patients. WAH is projecting 76,132 observation hours in 2020, the second year of operations at the new White Oak facility. Dividing these hours by 24 hours per day results in 3,172 days of observation care, or an average daily census of 8.7 patients. Many patients stay less than 24 hours, so we are not certain how this translates into bed need or occupancy.

Adding the 20 observation beds to the 152 proposed medical surgical (MSGA) beds results in a total of 172 beds to take care of patients requiring inpatient MSGA services at the new White Oak facility. Adding the projected 3,172 observation patient days to the projected 41,763 MSGA days projected for 2020 results in a total of 44,935 patient days to be treated in the 172 total MSGA beds for an average occupancy rate of 71.6% in 2020. For the 152 proposed MSGA inpatient beds only, WAH is

projecting an occupancy rate of 75.3% in 2020. The State Health Plan calls for a minimum occupancy level of 80% for hospitals with 100 to 299 medical surgical beds. The use of all private rooms may increase the level of occupancy that can occur. We understand that MHCC will evaluate occupancy in its review of bed need.

Staff is concerned about future inpatient volume levels in the service area. If WAH is unable to achieve the projected volumes, the Hospital would be less efficient and would have higher rates, which in turn could affect the overall feasibility of the project. In summary, Staff is suggesting that conservatism in bed need projection is warranted relative to project feasibility and efficiency, given the level of change in the delivery system that is underway nationally and in Maryland.

Responses to Specific Questions:

1. Are the sources of funds assumed by the applicant appropriate? In your opinion, is the equity contribution and the proportion of other non-debt sources of project funding adequate?

WAH intends to finance the total project costs of $330,829,524 by incurring $244,750,000 in debt, fund raising $20,000,000, contributing cash of $50,575,175, and earning $4,504,349 in interest income during construction. All of the $330,829,524 project cost is related to capital costs with no allowance made for working capital costs or transition costs.

In addition to the $20,000,000 assumed fund raising and $50,575,175 cash contribution, WAH is assuming that the $11,000,000 previously expended for the purchase of the land for the project will also be a source of funds leaving the total equity contribution at $81,575,175, or approximately 25% of the project costs.

Staff spoke with representatives of the Maryland Health and Higher Educational Facilities Authority (MHHEFA) who stated that AHI has a Baa2 debt rating. WAH has assumed an interest rate of 6% for the debt associated with this project, which seems to be high given current interest rates. If the actual interest rate is less than that assumed, the rate adjustment approved by the HSCRC would be modified to reflect the lower interest rate.

Additionally, while the estimated annual depreciation, amortization, and interest is $24.6 million, the HSCRC only approved an additional $15.4 million revenue increase. Therefore, AHI will be financing a significant portion of the borrowing.

Given AHI's debt situation, staff believes that WAH has provided a reasonable amount of equity contribution for the project to be financially feasible. Ideally staff would like to see higher equity contributions so that the interest rate might be lower on the debt issued for the project resulting in overall lower costs to the patients.

2. As you know, one of the applicant's assumptions is that it will obtain a 7% increase in the hospital's global budget revenue to account for the increased capital costs resulting from this project. In your opinion, is this increase necessary for this project to be feasible and for the replaced and relocated WAH to be financially viable? If, in your opinion, this increase is not necessary for project feasibility and the viability of WAH, please provide the basis for this opinion.

The 7.0% rate increase assumed by WAH represents approximately 80% of the additional depreciation and interest related to the new project. As stated above, Staff has recommended a $15.4 million (5.4%) increase to revenue instead of the 7.0% requested. WAH had used projected operating results for FY 2014 in its original CON submission. Its actual operating results for that year were much better than projected. These results were incorporated in its projections submitted on October 21, 2015. This improvement significantly offsets the impact of the lower approved revenue increase.

3. Based on your analysis and the experience of HSCRC to date in implementing the new payment model for hospitals, what is the ability of the proposed replacement hospital to be competitively priced, when compared with general hospitals in its region of the state and when compared with similar (peer-group) hospitals throughout the state, if the project is implemented as proposed and the applicant's utilization projections are realized?

Competitive rates for proposed hospital – In order to evaluate the proposed rates of the relocated hospital, we developed a comparison of how WAH's inpatient and outpatient hospital charges compared to its local competitors for the year ended June 30, 2014. Staff's analyses compared average inpatient charges per case by APRDRG broken down between the 4 severity levels within each APRDRG. Staff's analyses also compared average outpatient charges per case broken down by APG.

Listed below are the percentage variances between WAH's average charges per inpatient case and outpatient case and its neighboring hospitals for the year ended June 30, 2014:

Table 6
Comparison of Average Inpatient and Outpatient Charges per Case
Washington Adventist Hospital and Neighboring Competitors
Using Actual Charge Data
Year Ended June 30, 2014

Hospital	Percent Variance from WAH Average Inpatient Charges per Case	Percent Variance from WAH's Average Outpatient Charges per Case	Combined Percent Variance from WAH's Average Charges per Case
Doctors Hospital	(8.4%)	(4.3%)	(7.5%)
Howard County	(13.6%)	(21.9%)	(17.9%)
Montgomery Medical Center	(13.1%)	(8.4%)	(12.3%)
Suburban Hospital	(18.4%)	(4.3%)	(14.4%)
Holy Cross Hospital	(14.1%)	(7.8%)	(12.8%)
Laurel Regional Medical Center	(12.0%)	6.6%	(5.7%)
Average Difference	(13.3%)	(6.1%)	(11.6%)

Source: HSCRC Market share data base. Percentages were determined by first comparing to statewide averages and then comparing to WAH variances from statewide average.

As this table indicates, the charges at WAH's competitors were on average 13.3% below WAH's charges for inpatients and 6.1% below for outpatients based on actual charge data for the year ended June 30, 2014. Once WAH is granted an additional 5.4% rate increase for capital its competitors will have rates on average that may be more than 15% less than WAH's new rates based on the comparisons of actual FY 2014 charges. However, these comparisons do not take into account the cost differences that may be attributable to taking care of populations with lower socioeconomic status. The ROC comparison discussed below includes an adjustment to estimate the impact on costs of these population differences.

Staff compared adjusted charges using information from the most recent ROC calculation, which utilized data from 2013 adjusted for revenue changes to 2014. The adjusted charge comparison from the ROC data is as follows:

Table 7
Comparison of Average Combined Inpatient and Outpatient Charges per Case
Washington Adventist Hospital and Neighboring Competitors
Using Adjusted ROC Charges
Year Ended June 30, 2014

Hospital	Percent Variance from WAH's Average Combined Adjusted Charges per Case
Doctors Hospital	12.5%
Howard County	.5%
Montgomery Medical Center	10.4%
Suburban Hospital	9.9%
Holy Cross Hospital	(9.5%)
Laurel Regional Medical Center	(6.4%)
Average Difference	7.5%

Source: HSCRC ROC data. Percentages were determined by first comparing to statewide averages and then comparing to WAH variances from statewide average.

As noted above, the ROC analysis takes into account that WAH has a greater percentage of poor patients than the average of the hospitals in its peer group, which tends to cause higher costs and rates.

Other requests:

You also asked to receive comments on the financial feasibility of providing acute psychiatric hospital services in Takoma Park as a 40-bed special hospital. The project budget, five year pro forma schedule of revenues and expenses, and assumptions for this proposed special hospital were submitted on December 12, 2014. Note that the project budget erroneously indicated that the source of funds for renovating space for behavioral health would be cash. The correct source of funds is debt, as specified in Exhibit 6 of the September 29, 2014 replacement application. This was confirmed by WAH in its response to my April 29, 2015 request for additional information.

Financial Feasibility of 40 bed special psychiatric hospital on Takoma Park campus.

Staff reviewed the pro forma income statement provided by WAH in the December 12, 2014 supplemental submission letter for the 40 bed psychiatric unit that will remain at WAH after the relocation of the other beds to White Oak. The 40 bed unit will be owned and operated by Adventist Behavioral Health (ABH), a psychiatric specialty hospital owned by AHI that is located in Rockville Maryland. The pro forma is only for the 40 bed psychiatric unit and does not include any information on the other services that will exist at WAH after the relocation such as the 24-hour urgent care clinic and the Women's Health Clinic.

On August 24, 2015, the Maryland Medicaid program reduced reimbursements to free-standing psychiatric facilities larger than 16 beds because CMS withdrew a waiver that had been approved for the State of Maryland, which had allowed Maryland Medicaid to reimburse these facilities for acute psychiatric services. Maryland's Department of Health and Mental Hygiene is currently seeking a new federal waiver that would significantly expand the scope of treatment options available to Medicaid enrollees with substance abuse and mental health disorders. WAH provided documentation showing that ABH has not been impacted by the reduction in Medicaid reimbursement, and that WAH, for a variety of reasons including the pending new waiver request, does not anticipate any reduction in projected Medicaid payments for the 40 bed psychiatric unit remaining in Takoma Park. Staff believes that the projected net revenues for the 40 bed psychiatric unit are reasonable, assuming that Medicaid does not reduce payments to free-standing psychiatric hospitals in the future.

Staff performed reasonableness tests of the direct costs for salaries and benefits and other expenses included in the December 12, 2014 pro forma for the 40 bed psychiatric unit. Staff compared the projected 2019 costs per patient day in the pro forma to the regulated costs per patient day that ABH incurred during the year ended December 31, 2014 based on ABH's HSCRC Annual Report provided to the HSCRC. Staff inflated the actual ABH expenses for the year ended 2014 by 2.3% per year to 2019 based on the inflation assumptions included in WAH's CON.

The results of staff's analysis are presented below:

Table 8 - Comparison of Projected Takoma Park Psychiatric Unit Costs to Adventist Behavioral Health Actual Costs on a per Equivalent Inpatient day Basis

	Cost per Equivalent Inpatient Day		
Expense Category	Takoma Park Psychiatric Unit Projected FY 2019	Adventist Behavioral Health YE 12/31/2014 Inflated to 2019	Percent Variance
Salaries and benefits	$574	$600	4.5%
Depreciation and interest	186	27	(85.5%)
Other	352	229	(65.1%)
Total Costs	$1,112	$837	(24.7%)
Equivalent inpatient days	10,578	32,467	

Sources: HSCRC Annual Report for the Year Ended December 31, 2014 and additional WAH CON information submitted December 12, 2014.

Although Staff would expect that there would be economies of scale causing lower salary and benefits per patient day at ABH than at the Takoma Park site, the overall expenses per day appear reasonable. Staff believes that ABH's management team will be able to bring cost in line where appropriate.

The income statements in the CON include projected net income of $5,465,000 in 2019 and $6,897,000 in 2020 for the new White Oak facility. The pro forma for the 40 bed psychiatric unit included a $210,000 projected profit in the first year of operations after the White Oak facility opens. The projected income statements provided by WAH in the July 27, 2015 letter from James Lee for both the White Oak facility and the services remaining at WAH show projected net income of only $747,000 in 2019 and $1,770,000 in 2020. The approximate annual $5,000,000 difference between the two sets of projected financial statements represents the annual projected loss on the other services that will remain at Takoma Park.

Staff reviewed additional information provided by WAH regarding the projected financial operations of services remaining at Takoma Park. This financial information appears reasonable.

Finally, you asked that we comment on Laurel Regional Hospital's and MedStar Montgomery Medical Center's submission of an analysis of the impact of the relocation on their discharges and the impact of such a reduction in volume on their revenues and bottom line profit. While you did not necessarily agree with the hospitals' assessments of the impact on volume and you did not ask for our opinion on their calculation of the expected loss in discharges, you did ask for our comments on the methodology used to convert such losses in volume to reductions in revenue and impact on the hospitals' bottom line profit (the relevant analysis submitted by the interested parties on May 29, 2015 was attached).

Laurel Regional Hospital and MedStar Montgomery Medical Center Comments

The major issue with the analysis prepared on behalf of Laurel Regional Hospital (LRH) and MedStar Montgomery Medical Center (MMC) is that LRH and MMC are projecting a far greater number of discharges moving from their facilities than WAH has projected. WAH is projecting that 95 discharges will move to their new White Oak facility from LRH, while 91 discharges will move from MMC to the new White Oak facility. LRH is projecting that it will lose 582 discharges to the new WAH facility at White Oak. MMC is projecting that it will lose 284 discharges to the new WAH facility.

Assuming that all of LRH's and MMC's assumptions regarding revenue, collection percentages, and variability of expenses are accurate, but substituting WAH's projected changes in discharges, the estimated impact at LRH would then decrease from ($1,123,000) annually to ($183,000.) At MMC, the impact would be reduced from ($952,000) annually to ($305,000) if WAH's projected changes in discharges are accurate.

Another less important issue is the assumption of variability in expenses for supply and drug costs. Both LRH and MMC assume that supply and drug costs would vary at a 60% rate with changes in volumes. Normally supplies and drugs should vary at or near 100% with changes in volumes. Assuming a higher variability factor for supplies and drugs would also reduce the projected impact on LRH and MMC.
We also note that the submission by LRH may be irrelevant, given its recent announcement of facility reconfiguration and plans to eliminate much of the acute inpatient capacity of the hospital.

Summary

Staff believes that the overall assumptions regarding the financial viability of the new facility at White Oak are reasonable and achievable depending on WAH attaining the volumes projected in the CON. The current environment of change in health care financing and delivery increase the probability that inpatient volumes will decline. WAH and the surrounding hospitals in the area presently have substantial volumes of f PAUs. Staff recommends conservatism in evaluating need. If WAH does not attain the projected volumes in the CON its overall rate and revenue structure may be viewed as inefficient and may affect the overall financial viability of the project.