OBER KALER
Attorneys at Law

Ober, Kaler, Grimes & Shriver
A Professional Corporation

100 Light Street
Baltimore, MD 21202
410.685.1120 Main
410.547.0699 Fax
www.ober.com
Howard L. Sollins
hlsollins@ober.com
410.347.7369 / Fax: 443.263.7569

Offices In
Maryland
Washington, D.C.
Virginia

November 10, 2014

VIA HAND DELIVERY

Kevin McDonald, Chief
Certificate of Need
Maryland Health Care Commission
4160 Patterson Avenue
Baltimore, Maryland 21215

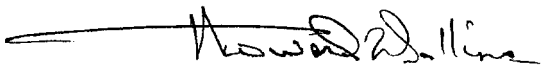
Re: **Adventist Healthcare, Inc. d/b/a Washington Adventist Hospital**
Docket No. 13-15-2349
Response to Completeness Questions Dated October 15, 2014

Dear Mr. McDonald:

On behalf of Adventist Healthcare, Inc. d/b/a Washington Adventist Hospital (WAH), we are hereby submitting the required six (6) copies of our Response to Completeness Questions referenced in your October 15th letter regarding the above-referenced project. We will also provide an electronic copy of our response and exhibits.

I hereby certify that a copy of this response has also been forwarded to the appropriate local health planning agency, as noted below.

Sincerely,



Howard L. Sollins

HLS/tjr
Enclosures
cc: Paul Parker, Director
Joel Riklin, Program Manager
Suellen Wideman, Assistant Attorney General
Ms. Ruby Potter, Health Facilities Coordination Office
Patricia Tomsko Nay, MD, CMD, CHCQM, FAAFP, FAIHQ, FAAHPM
Medical Director, Office of Health Care Quality
Maryland Department of Health and Mental Hygiene
Donna Kinzer, Executive Director
Health Services Cost Review Commission
Ulder Tillman MD, MPH, Health Officer
Montgomery County

cc: Terry Forde, President,
Adventist HealthCare
Eric Wangsness, President, Washington Adventist Hospital
Robert E. Jepson, Vice President, Business Development
Geoffrey Morgan, VP for Expanded Access
Pat Cameron (E-copy only)
Thomas Dame, Esquire (E-copy only)
Susan Silber, Esquire (E-copy only)

Washington Adventist Hospital

A Member of Adventist HealthCare

Response to Completeness Questions Dated October 15, 2014

Relating to the Modified Certificate of Need Application
Filed on September 29, 2014

Matter No. 13-15-2349

November 10, 2014

Washington Adventist Hospital

7600 Carroll Ave.

Takoma Park, MD 20912

301-891-7600

www.AdventistHealthCare.com

October 15, 2014 Completeness Questions for Adventist Healthcare, Inc., d/b/a Washington Adventist Hospital Replacement of Washington Adventist Hospital and Reconfiguration of the former Washington Adventist Hospital Campus in Takoma Park – Matter No. 13-15-2349

PROJECT DESCRIPTION

1. **Please explain the nature of and progress toward developing the clinically integrated physician network described on p. 10 to align physician and hospital incentives around cost and quality goals.**

Applicant Response

A clinically integrated network (CIN) is a collaborative arrangement among physicians, hospitals and others who, while remaining independent entities, strive to improve health care quality, efficiency and cost in a coordinated manner. As a separate legal entity, the CIN can work together with insurers and have joint responsibility toward delivering high quality, cost-efficient coordinated care, such as effectively managing chronic disease and implementing care management for patients as they access various aspects of the health care system, whether a physician's office or a hospital.

As noted in the attached article, "Ending the Blame Game: The Case for Clinical Integration," published earlier this year in *Group Practice Journal* (Exhibit 90), "clinical integration can and should be a viable model to connect physicians, payers, hospitals and the community within a system that supports improved care at a sustainable cost."

The Adventist HealthCare clinically integrated network, known as One Health Quality Alliance, is in the developmental stage with individual and group meetings taking place with local providers. Adventist HealthCare is actively working with physicians and we expect the CIN to be operational in early 2015.

PROJECT BUDGET

2. **Explain how the gross interest (part of the Non Current Capital Cost) and interest income (among the sources of funds for the proposed project on page 15) and the project budgets for Options 2 and 3 were arrived at. (In responding, take note of your response to the first completeness letter, your response to question #3 of the second completeness letter, and questions 2a and b of the March 4, 2014 completeness letter.)**

Applicant Response

The attached schedules (Exhibit 91) show detail for both gross interest and interest income for all options. For option 4, the amount of $45,156,375 represents the current estimate of total interest that will be paid on the bond debt during construction period to the opening of the hospital. The same is true for the gross interest amount for the other options presented. Additionally, the $4,504,349 represents estimated interest to be earned from investment of the bond proceeds until such funds are used for the project.

3. **Explain why the amounts budgeted for legal and CON consulting fees submitted in the original application are not carried over on this updated project budget.**

Applicant Response

The amounts shown in the original application for legal and CON consulting fees are included in the modified application, but are included as part of the amount labeled "Loan Placement Fees". These amounts are estimated at $250,000 for legal fees (CON related) and $145,000 for consulting fees. If these amounts were to be broken out, the updated loan placement fees would be $4,503,149. Thus, both the original and modified applications include amounts for legal and consulting fees, but they are classified differently.

4. **The central utility plant (CUP) to be constructed by a third party should be included as part of this project, with its cost reflected in the project budget and the third party investment included in the sources of funds. Please revise PART II – PROJECT BUDGET accordingly.**

Applicant Response

Throughout this CON process Washington Adventist Hospital has carefully sought to ensure its project is correctly sized to community needs and state objectives for acute care hospital facilities, while also using health care capital resources appropriately. The reduction in bed size and the central utility plant project are two of many examples of attention to these twin goals. Please refer to the response to question 13 for a detailed explanation of Washington Adventist Hospital's decision to purchase utilities and the benefits of this agreement.

The Central Utility Plant (CUP) will be developed under the requirements of a Power Purchase Agreement (PPA) with another, unrelated third party. This type of agreement is also known as an Energy Services Agreement (ESA). It is increasingly used by hospitals and other organizations to provide an improved level of energy service and to avoid the significant capital costs related to a CUP. Examples of other organizations utilizing this approach are included in the response to question 13.

Upon commissioning and occupancy of the building, the hospital will purchase utilities from the third party under the rates and terms agreed to in the PPA/ESA. The purchase of utilities is similar to the hospital purchasing utilities directly from local public utilities, except that the PPA includes specific parameters for performance and delivery along with guarantees by the provider to meet that performance.

Under a PPA/ESA, there is no transfer of ownership of equipment in the central plant. The cost of the plant and the maintenance responsibility reside with the other party. There is no capital expenditure or debt incurred by Washington Adventist Hospital or Adventist HealthCare to develop the central utility plant and there is no source of funds being provided to the organization for this purpose. The cost of the utilities purchased is calculated in the future operating costs of the Washington Adventist Hospital White Oak facility just as would the purchase of energy from a public utility. For these reasons, we

believe recording the cost for the CUP would be an inaccurate rendering of the capital costs Washington Adventist Hospital will incur.

CONSISTENCY WITH GENERAL REVIEW CRITERIA (COMAR 10.24.01.08G(3)))

a) The State Health Plan

COMAR 10.24.10 – ACUTE HOSPITAL SERVICES standards

Charity Care Policy

5. **The financial assistance policy (Exhibits 11 and 12) state that probable eligibility will be communicated within two business days of submission of an application for charity care. Please submit a copy of the application form and explain how the determination of probable eligibility is made.**

Applicant Response

A financial assistance screening process is conducted upon registration of a patient. If the patient is interested in filing for financial assistance, he or she 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 Washington Adventist Hospital's charity care policy, which is then communicated to the patient. A patient interested in financial assistance is also given a full charity care application (see Exhibit 92) where the patient is asked for more detailed financial information including verification of income, current assets and available credit, which are all used to make a full determination.

Quality

6. **The application references the engagement of a consultant (IMA) whose charge is to work with physicians and staff to improve the length of stay. Please provide a brief description of their (IMA) background and qualifications. Have they made recommendations re: ER throughput and has WAH implemented any? Are any results apparent yet?**

Applicant Response

IMA Consulting is a professional service firm that provides revenue, expense and interim management services exclusively to the health care industry. The assigned consultant was a registered nurse with a master's degree in nursing administration. Besides investigating the hospital average length of stay issue, her major responsibility was to provide day-to-day leadership to the Case Management department. Her engagement started in June 2013 and ended on March 2014, when the hospital hired a Case Management director.

IMA tracked avoidable days during the engagement period and pointed out three areas of improvement opportunities: (1) discharge disposition, (2) coordinated plan of care and (3) physician communication.

There were no specific recommendations regarding emergency throughput. The hospital has implemented the following major improvements:

(1) Follow through with new protocol for outpatient dialysis instead of keeping the patient in-house for dialysis only;
(2) Establish population health functions to address health issues at their root causes;
(3) Pursue agreements with non-acute providers in a timely and economic fashion as an alternative to prolonged hospitalization;
(4) Daily multidisciplinary rounds at the bedside on all major nursing units;
(5) Restructure the utilization management process and engage an outside utilization review vendor to ensure appropriate admission and discharge; and
(6) Restructure the Case Management staffing model to a team-based, unit-based model with one registered nurse and one social worker to be paired on each unit to improve continuity of care and timely discharge.

The hospital is currently reviewing its hospitalist program and will make the appropriate adjustments as needed. We believe there will be improvements in the hospital's average length of stay as we continue to address operating efficiency issues and communication among physicians, staff and patients. However, as we continue to successfully execute our population health initiatives outside the hospital, we believe this will increase the average length of stay since the hospital will be caring for sicker patients.

7. **Please address and explain the expected impact of the proposed project on the time from ED arrival to departure for patients who are treated and released, and from admission decision to a bed for patients who are admitted.**

Applicant Response

The proposed project will have a positive impact on the time from admission decision to an inpatient bed for patients who are admitted. Patient placement from the time of the decision to admit to actually leaving the emergency department is dependent upon a number of factors, including inpatient bed availability. Washington Adventist Hospital currently has a significant number of semi-private rooms. Bed availability is hindered by the inability to co-mingle male and female patients in semi-private rooms and the significant number of patients we treat who need to be in isolation. The hospital seeks to place isolation patients in private rooms, but that is not always possible which means the second bed of a semi-private room has to be blocked. The new facility remedies this challenge because all of the patient rooms are private. Furthermore, inpatient beds in the current facility often have to be used to care for observation patients. The 8-bed dedicated observation unit in the new facility will free up inpatient beds in the new facility for patients who are admitted.

A more efficiently designed and right-sized facility, including the 12 bed clinical decision unit adjacent to the emergency department, will help in caring for patients who are treated and released from the emergency department. However, population health initiatives influenced by the Global Budget Revenue model in Maryland to appropriately reduce the number of unnecessary emergency department

visits and prevent avoidable hospital admissions will in turn increase the overall acuity of patients presenting to the White Oak facility. This overall increase in acuity will create challenges in reducing the overall length of stay for patients who are treated and released from the emergency department.

Adverse Impact

8. **Please provide documentation for the statement that the most recent publicly available HSCRC annual filing (FY 2013), Washington Adventist Hospital's average age of plant is 23.0 years, second highest average age among 47 hospitals in the State of Maryland (p. 26 of the application).**

Applicant Response

The Maryland Hospital Association (MHA) compiles each hospital's HSCRC annual filing data into a statewide file. The Fiscal Year 2013 filings were compiled by MHA and provided to Washington Adventist on September 11, 2014, and subsequently posted to MHA's website found at http://www.mhaonline.org/finance/data-reports. A summary of the 2012 and 2013 data follows showing Washington Adventist Hospital as the second highest average age of plant among the 47 acute care hospitals in the state.

Summary of Statewide Capital Costs
Source: FY 2012/2013 HSCRC Annual Filing
Average Age of Plant

Hospital Name	2012 Age of Plant	2013 Age of Plant
Ft. Washington	35.3	40.3
Washington Adventist	22.7	23.0
Harbor	19.6	20.7
Harford Memorial	18.3	18.9
Holy Cross	16.7	17.6
Bon Secours	18.5	17.1
Laurel Regional	17.5	16.1
Prince Georges	16.5	15.9
Union Mem.	14.2	15.7
Dochester General	15.7	14.4
MD General	14.0	14.2
Shady Grove	7.5	13.0
Kernan	14.6	12.8
G.B.M.C	12.4	12.7
Good Samaritan	12.3	12.4
Doctors Community	10.9	11.4
Peninsula Regional	10.2	11.1
University of Maryland	7.1	11.0
Northwest	9.7	10.8
Frederick Memorial	11.9	10.7
Bayview	10.4	10.6
Carroll	10.0	10.6
Union of Cecial	9.8	10.5
Atlantic General	10.8	10.4
Calvert Memorial	9.9	10.3
Montgomery General	10.0	10.3
Franklin Square	9.9	10.3
McCready	8.9	9.9
BWMC	6.5	9.7
Sinai	7.8	9.5
St. Agnes	7.7	8.7
Suburban	13.2	8.5
Mercy	7.6	8.4
University of Maryland Shock Trauma	11.3	8.4
Chester River	7.5	8.3
St. Marys	-	8.0
Upper Chesapeake	8.5	7.7
Civista	10.0	7.4
Western Maryland Regional	8.6	7.3
Garrett Memorial	11.1	6.5
Meritus Medical	4.1	6.0
Howard County General	-5.1	5.9
Anne Arundel	4.8	5.8
Johns Hopkins	6.5	4.5
Easton	8.3	1.0
Southern Maryland	10.1	0.7
St.Joseph	14.8	0.5
Statewide Average	11.2	11.2
Statewide Median	10.1	10.4

Source: Statewide HSCRC Annual Filing data compiled by MHA
Found at: http://www.mhaonline.org/finance/data-reports

9. **Please address the part of standard 4(a) that states:** ***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 full 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.***

Applicant Response

This part of the standard is no longer applicable as written because the hospital is no longer reimbursed under the charge per case methodology, nor is any other acute care hospital in the state. Additionally, with increased consolidations and mergers in the state, it is very difficult to ascertain the true debt to capitalization for any single hospital, as many health systems account for their debt differently. Without insight into the detailed accounting for hospitals that are part of a system, it is impossible to compare debt to capitalization ratios to other hospitals.

10. **Please provide the exhibits 24 and 25 (at least the travel distance/time tables) in a format such as Excel so that they can be read more easily by freezing column and row panes.**

Applicant Response

An Excel file containing the Travel Time Study Table data is provided with the file name: MHCC Q. 10 Travel Time Study Table.xlsx

Cost-Effectiveness

11. **Please provide a detailed explanation of the assumptions made in preparing the financial projections for Options 2 and 3, including volumes, rates, charges and expense and inflation assumptions.**

Applicant Response

Detailed assumptions for both inflated and current dollar projections for Options 2, 3, and 4 can be found at Exhibit 93.

12. **For the financial projections for each option in Exhibit 30 specify the size of any rate increase for capital and the effective date.**

Applicant Response

For comparative purposes, the amount of the rate increase is assumed constant at $19.7M in each of the options. For options 3 and 4, the rate update is assumed effective January 1, 2019. For option 2, the rate increase is assumed effective January 1, 2021.

13. **Explain the decision to allow a third party to construct the Hospital's CUP, and to purchase the utility services from that third party, comparing the cost effectiveness of that approach to the hospital's construction and ownership of the facility. Are you aware of other hospitals that followed this approach, and their experience with it?**

Applicant Response

Washington Adventist Hospital plans to enter into a Power Purchase Agreement (PPA) with a third-party developer. Under a PPA, the developer sells utilities to the occupant. This is an emerging trend ((Exhibits 94, 95, 96) for hospitals and other organizations, and the advantages of this arrangement and examples of Maryland organizations using this approach are described in this response.

Washington Adventist Hospital originally considered the 'traditional' approach of incurring this capital expenditure with its own resources. However, after close examination and thoughtful deliberation, the decision to pursue a PPA/ESA approach (Exhibit 97) was made for the following reasons:

- Lower capital costs for Washington Adventist Hospital; additional debt is not incurred.
- Tax incentives and utility rebates are incorporated into the CUP development costs.
- Higher efficiency in utility production results in lower operating costs.
- Lower, more predictable energy costs over the long term.
- Reduces energy demand charges from the local utility.
- The reliability and redundancy of the hospital utility system is enhanced.
- During an area power outage, it provides an additional, reliable source of power. This supplemental power can be used for systems that are not on the emergency power system, such as the cooling system.
- It allows the hospital to reliably function as a Disaster Emergency Center for the County and/or State during significant disruptive weather events or other crises.
- CUP, with Combined Heat and Power (CHP), reduces reliance on the local energy grid, reducing grid congestion and carbon footprint.
- The PPA provides performance guarantees by the developer.
- The developer has responsibility for operation and maintenance, thereby avoiding hospital FTE and maintenance costs.
- A DHHS proposed rule (Federal Register Vol. 78 No. 249) would require hospitals to have alternate sources of energy to maintain temperatures to protect patient health and safety and for the safe and sanitary storage of provisions. This would meet the rule standard.

As mentioned, the PPA approach will enable Washington Adventist Hospital to reduce the hospital's capital expenditure and use energy resources more efficiently. Given the hospital's non-profit status, certain tax incentives for energy efficiency may not be available. Prime examples of these are State Tax Credits, Federal accelerated depreciation, and the Investment Tax Credit, which can be 10% of the value of the CUP development. A separate, third-party private developer who builds and owns the CUP is able to receive these tax benefits and pass along the savings to the hospital in the form of lower energy costs

in the rate agreement. An example of a utility company rebate is the Upper Chesapeake Medical Center PPA which received $1.5M from BG&E's energy efficiency program in 2014.

The intended PPA arrangement would have higher efficiency, thus generating more utilities at a lower cost than purchasing directly from a public utility. Having a set rate schedule also protects the hospital from volatile grid prices over the long run.

Furthermore, the County and State would benefit from the intended PPA agreement. The PPA is anticipated to include a Combined Heat and Power (CHP) element. The CHP will provide on-site generated electricity in a more efficient way. This greatly reduces the hospital's dependence on the local grid, reducing the demand charges from the local grid. This provides a cost benefit to the hospital, and benefits the surrounding community by increasing electrical reliability and reducing greenhouse gases.

More importantly, the enhanced utility flexibility allows the hospital to operate at a higher level during local power outages, major weather events, or other crises because the on-site electrical generation will supplement the capacity of the emergency generator system. This additional power provides for more reliability and also allows other systems, such as the cooling system, to continue to operate during difficulties from the electrical grid. This is important as hospitals have an obligation to the community to be centers of relief during emergencies. The benefit of having a CHP system to supplement the emergency generator system became apparent in the prolonged aftermath of Hurricane Sandy when hospitals with generator-only systems were challenged when the diesel supply was unable to be replenished. The hospitals with a CHP component functioned at a higher level. (Exhibit 98) Finally, the PPA agreement increases the quality of utility available to the hospital by requiring performance guarantees from the utility provider regarding uptime, savings, and response times. With these clauses, the provider has a clear incentive to provide the utilities at the required service levels. The public utility companies do not provide such guarantees.

Other Maryland organizations have successfully entered into PPAs, most notably the University of Maryland Medical Systems (UMMS), which has at least two PPAs.

Upper Chesapeake Medical Center (UCMC), an affiliate of UMMS, recently executed a PPA with a third-party developer (Exhibits 98, 99, 100, 101, 102). The project was initiated in 2012 and began delivering power to UCMC in 2014, with expected savings of $9 million over 20 years. The UCMC project received $1.5 million of funds under the Empower Maryland CHP incentive program. The savings resulted in lower energy costs for the hospital. (Representatives from Washington Adventist Hospital's Program Management and Real Estate Management team , Heery International and AtSite, consulted with representatives from UCMC and others as part of the extensive due diligence for this project.) In addition, UMMS has a PPA agreement with Bithenergy for a facility that produces 4.7 million kWh per year for use in other facilities they operate (Exhibit 103).

Other Maryland healthcare and research facilities that utilize a CHP are Johns Hopkins University, the National Institutes of Health and the Food and Drug Administration in White Oak.

Power Purchase Agreements are an emerging trend that helps health care organizations save on capital expense and receive an improved level of energy service. There are many examples of their use in Maryland and around the country. The decision to pursue this approach was based on the advantages noted above, as well as the successful implementation at other organizations such as UMMS.

Construction Cost of Hospital Space

14. Please provide the following clarifications for the data presented in Exhibits 32 through 35:

a. Submit the calculations that resulted in an unadjusted interest cost of $21,378,750 allocated to the building funds. MHCC staff calculated the interest and financing cost for MVS comparison to be $28,473,339. MHCC staff calculated the project costs for MVS comparison building costs net of interest to be $140,050,000, if all of the WAH's identified extraordinary costs are accepted. The $140,050,000 is 56.9% of the total current capital cost $246,200,000. 56.9% of the WAH estimated gross interest plus loan placement fee of $50,054,524 is $28,473,339.

Applicant Response

The calculations for the unadjusted interest cost of $21,378,750 are attached as Exhibit 104

b. Submit the calculations that resulted in extraordinary capitalized construction interest of $2,607,000.

Applicant Response

Interest for extraordinary items was based on the extraordinary items as a percentage of the construction costs:

($21,378,750 * ($19,450,000 / ($135,200,000 + $10,400,000 + $13,200,000 + $700,000))) = ($21,378,450 * ($19,450,000 / $159,500,000)) = ($21,378,450 * .12194357) = $2,606,965, rounded to $2,607,000.

c. Explain why $150,000 in signs is considered an extraordinary cost (Exhibit 33) for purposes of comparison to the MVS benchmark when interior and exterior signs are budgeted under the other line of the project budget (p. 14) which is not included in the $180,000,000 unadjusted cost used in the comparison with the MVS benchmark on page 40.

Applicant Response

The $150,000 budget item is allocated for site signage (monument signs, street signs, external wayfinding devices, etc.), which will be constructed at entryways into and around the site. This also includes the building sign at the top of the building. These are all unique items determined by the specific conditions of each site and zoning ordinances.

The budget item under "Other – Interior and Exterior Signage" is intended for typical signage that will provide wayfinding inside the building and identify room numbers, and also includes signage that will appear on the exterior of the building to identity the main entrances.

d. Describe the penthouse in terms of construction material and use of the space. Explain why the MVS base cost for mechanical penthouses (Section 15, page 19) was not used for the 3,105 sq. ft. penthouse.

Applicant Response

The rooftop areas include two stairways and two elevator areas. The stairway areas serve a circulation and egress function and total approximately 800 SF. The elevator areas provide for the overrun of the elevator shafts and house the hoisting machinery and electrical gear. These areas total approximately 2,300 SF, as shown on the exterior elevations in Exhibit 9 of the modified application. The exterior construction of the stairway and elevator areas is similar to other areas of the building and consist mainly of concrete masonry unit veneer (CMU) and Phenolic panels (EP). Some curtainwall is also employed at one of the elevator overruns. Other rooftop equipment, such as air handling units, is not housed in these areas and is not fully enclosed.

As noted by MHCC, the 3,105 SF was not calculated in a separate MVS buildup for "Penthouse." Rather, the stair spaces were considered as part of circulation and the overruns of the elevator shafts were considered as part of the gross-up factor, similar to the treatment of other mechanical shafts. The SF amounts for these spaces were included in the figures contained in Exhibit 32 that resulted in the GSF amount of 427,662.

e. What is the wall height of the penthouse?

Applicant Response

The enclosed penthouse is 20'-0" from slab to slab. There is a parapet above the roof of the penthouse that will be 3'-0" above the slab.

15. There appears to be a discrepancy between the square footage reported in Exhibit 35—Marshall Valuation Service Departmental Cost Factors—and that included in the table at the top of page 42 (e.g., the departmental cost factor calculation lists the ICU/CCU as 19,930 sq. ft. while the table at the top of page 42 indicates that it will be 13,680 sq. ft.). Please explain.

Applicant Response

The ICU/CCU area (square feet) on page 42 (13,680) is not the gross area, it is a calculation of the space for inpatient units, excluding such items as corridor circulation, stairs, shafts, utility rooms, columns, etc. The area indicated in Exhibit 35 is a departmental calculation and includes the areas excluded on page 42.

Patient Safety

16. **Why are only half of the pre/post surgery spaces designed as private if those features are important for infection control and privacy as stated? (p48)**

Applicant Response

Traditional pre/post-surgical designs include open cubicles to facilitate the clinician's ability to observe and access patients, particularly post-surgical patients. While the Facility Guidelines Institute's guidelines do not require an airborne infection isolation room in the preoperative, PACU or Phase II recovery areas, it was the consensus of the clinical staff to incorporate a number of enclosed rooms to address the isolation and infectious needs. At these rooms, ICU-style breakaway doors have been incorporated to maintain the direct observation and access of the clinical staff to these patients.

Financial Feasibility

17. **Please provide the following additional information and clarifications:**
    a. **Reconcile the 2014 and 2015 patient revenues set forth in Tables J and K with the Global Budget Revenue agreement.**

Applicant Response

Washington Adventist Hospital is on a calendar year fiscal year. A detailed revenue analysis between Calendar Year and Fiscal Year can be seen below. For rate year 2014, Washington Adventist Hospital's approved GBR revenue plus Uncompensated Care pool payment was $262,516,036. For rate year 2015, Washington Adventist Hospital's approved GBR revenue plus Uncompensated Care pool payment is $272,837,858.

Reconciliation to Approved GBR Revenue
FY 2014 and FY 2015

	CY 2013		CY 2014		CY 2015	
		FY 2014		FY 2015		
	Jan - June	July - Dec	Jan - June	July - Dec	Jan - June	July - Dec
Allowed GBR Revenue	$123,828,481	$122,111,688	$132,830,522	$129,332,186	$129,332,186	$135,219,433
UCC pool payments	1,815,801	3,052,455	3,666,000	7,126,507	7,734,300	7,761,958
Amortization of Prior Year Price Variances	1,238,321	1,238,321	-	-	-	-
	$126,882,603	$126,402,464	$136,496,522	$136,458,693	$137,066,486	$142,981,391
Calendar Year Total		$253,285,067		$272,955,215		$280,047,877
Fiscal Year Total			$262,898,986		$273,525,179	
Approved Rate Order + UCC Pool Pmts			261,582,675		$272,837,858	
Variance			*($1,316,311)* (1)		*($687,321)* (2)	

(1) Washington Adventist Hospital recognizes revenue at the approved revenue amount rather than actual charges. The variance in FY 2014 Revenue to the GBR allowable revenue is attributable to the amortization of prior year price variances and immaterial rounding.

(2) The variance in FY 2015 projected revenue is due to a significant reduction in the assessment amount being reduced in rates. in the final rate order. An equal variance will be present in the deduction from revenue section because the Assessment % is held constant at FY 2013 levels, in both the amounts in rates and the payment throughout the projection. Because these assessments are pass-thru (built into rates and subsequently paid out) this variance will have no impact on profitability.

b. In the financial assumptions (Exhibit 37), please explain the basis for the update factor, age adjusted population growth, market share, deferred revenue, and other reversals as they relate to current HSCRC policy considerations. Provide calculations where necessary to reconcile with projected Global Budget Revenue.

Applicant Response

The update factor used in 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 found at www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/MedicareProgramRatesStats/Downloads/mktbskt-summary.pdf. 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% in each year of the projection was determined to be reasonable. As such, overall non-capital related expense inflation is also approximately 2.3% during the projection period.

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. This assumption is likely conservative in that the final demographic adjustment factor calculation for FY 2015 yielded a result of 1.99% for Washington Adventist Hospital. In years with overall volume decline (2014 and 2015), no population or demographic factor has been assumed.

There is no market share adjustment 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.

Other miscellaneous adjustments occur in rate year 2014 and are assumed for rate year 2016. For rate year 2014, which was the first year under the GBR methodology, there were significant reversals of prior year one-time adjustments. These included reversal of prior year quality adjustment of $2,505,571 and prior year price variance of $4,575,144 for a total reversal (addition back to rates of $7,020,715). Additionally, in the initial GBR rate setting for Washington Adventist Hospital, the rates were reduced prospectively for volume decline. A potential provision for deferred revenue was projected by the HSCRC for FY 2016, if volumes stabilize and targets and model parameters are met.

c. **Provide the expense assumptions used in these projections explaining why they are reasonable.**

Applicant Response

We prepared pro forma expenses in Table K using Washington Adventist Hospital's 2014 budget expenses and 2015 expense targets as a starting point. We applied assumptions as shown in Exhibit 93. These expense assumptions are reasonable because they reflect our actual experience in dealing with fixed and variable hospital expenses. Current manpower (Full Time Equivalent employees) and assumptions about changes in manpower through the last year of the projections are shown in Table L. Benefits are held constant at 21% of salaries. Supplies per adjusted admission and assumed inflation factors are shown on Exhibit 93 line 133. Purchased services are varied with MSGA admission and Observation visit, also shown in Exhibit 93, line 143.

To test the reasonableness of operating expense assumptions, we evaluated the Salaries, Benefits, Contractual Services, Supplies and Other Expenses (exclusive of interest, amortization and depreciation) per adjusted admission. The expense per adjusted admission increases modestly (by 1.1% to 2.5% in the years prior to the project.) In the first year of the project, expense per adjusted admission increases by 9.8%, as the adjusted admission volume drops by 12%. In years 2 through 4 of the project, the expense per adjusted admission rises by 1.8% to 1.7%. (See Exhibit 93.)

Emergency Department Treatment Capacity and Space

18. **The tables and prose associated with the Parameters Determining Size for Emergency Department portion of the application (pp. 52,53) are not at all clear (the second table in that series may be mislabeled?). Please explain the story the tables tell about ED space needs.**

Applicant Response

The second part of the table presenting the ACEP Parameters was indeed mislabeled and contained incorrect information. The corrected table below is a replacement to that provided in the modified application. This table is included in order to be responsive to section (14) Emergency Department

Treatment Capacity and Space, where the applicant is instructed to classify its service as low range or high range based on the parameters in the most recent edition of the *Emergency Department Design: A Practical Guide to Planning for the Future* from the American College of Emergency Physicians. The completed ACEP table below provides the information needed in order to provide the classification which, along with service area projections, informs the program of space proposed in the project design. In the case of Washington Adventist Hospital's proposed replacement hospital, the table below indicates an ED for the replacement facility to be in the high range category.

Low Range Parameter	**Applies to Washington Adventist Hospital**
ALOS for all ED patients <2.5 hours	NO
Observation /Evaluation Beds located outside ED	YES
Time to admit <60 minutes after disposition	NO
Average turnaround time for diagnostic test results <30 minutes	NO
Less than 18% of patients are admitted to the Hospital	NO
Non-urgent patients outnumber urgent patients by more than 10 %	NO
Less than 20% of patients are age 65+	NO
Minimal Need for offices or teaching spaces	NO
Imaging studies are not performed within the department	NO
No specialty components or departments	NO
Flight/trauma services support areas not included	YES
High Range Parameter	
ALOS for all ED patients >3.5 hours	YES
Observation/evaluation beds will be located within the ED	YES
Time to admit >90 minutes after disposition	YES
Average turnaround time for diagnostic test results in >60 minutes	YES
More than 23% of patients are admitted to the Hospital	NO
Need for offices or teaching spaces, such as a university teaching hospital	NO
Imaging studies are performed within the department	YES
Specialty components or departments (pediatric ED, large number of psychiatric patients)	YES – psychiatric Patients, geriatric
Flight/trauma services support areas included	NO

19. **What is the projected ED visit volume through 2020 (including not just the outpatients but also those who are admitted)? Discuss the basis for the projections.**

Applicant Response

Total ED visits projected for Washington Adventist Hospital are as follows:

2014:	46,930
2015:	47,000
2016:	47,070
2017:	47,150
2018:	47,230
2019:	48,160
2020:	49,100

We evaluated the change in visits over the last 4 years, with our year-to-date actual visit volume for 2014. While visits grew at an average rate of 1.4% annually from 2009 to 2013, visits in 2014 will decline by 4% as evidenced by our year-to-date volume. Given this change in direction, we applied a growth rate of only 0.1% for 2015 and 2016 and 0.2% for 2017 and 2018.

We believe a new emergency department will have some impact on visits, and have applied a 2% rate of growth which equals the age adjusted population rates as calculated by the HSCRC for 2015. We have applied this 2015 population growth rate in the first years of the new facility projection.

20. **Do the ratings presented vis a vis the parameters for high and low range reflect current operations or those expected after the proposed relocation to White Oak?**

Applicant Response

The ratings in the revised ACEP tables provided in response to question #18 reflect the projected state after relocation to White Oak, which is consistent with the MSGA TSA analysis performed and discussed in the modified application at section 10.24.01.08G(3)(f) beginning on p. 132. The projected White Oak operations as reflected in the ACEP tables are not significantly different than what is currently experienced in Takoma Park, however, the acuity of operations projected for White Oak is expected to increase as lesser acuity patients will be managed in more appropriate settings, such as the health care services provided on the Takoma Park campus.

21. **From these tables it appears that the ALOS for all ED patients is not expected to improve (with the proposed project) to less than 3.5 hours. Please explain why the ALOS should not improve to at least less than 3.5 hours and ideally less than 2.5 hours?**

Applicant Response

As mentioned in the response to question #20, Adventist HealthCare is committing to population health strategies which include robust primary care and Federally Qualified Health Center (FQHC) services in

the Washington Adventist Hospital service area. While this strategy is critical to enhancing access to important health care services and will divert less acute patients to a more appropriate setting, it will result in an increase in the acuity of patients seen in White Oak. A more efficiently designed and right-sized facility will certainly support efforts aimed at reducing ALOS, but efforts to appropriately reduce the number of unnecessary emergency department visits and prevent avoidable hospital admissions will in turn increase the acuity of patients presenting to the White Oak facility, creating challenges in reducing ALOS.

22. **With regard to the population health programs designed to *reduce use of emergency department for non-emergency medical care,* have any of the programs discussed on pages 60 through 63 yielded any quantifiable evidence of impacting ED volume? If yes, please submit.**

Applicant Response

Though we believe the programs identified do have an impact in reducing non emergency visits to the ED, the hospital currently does not have quantifiable evidence. The hospital's population health department is beginning an initiative to quantify the impact of population health programs on emergency department utilization. Two of the population health programs – the ED case management program and the Senior Peer Advocate Program – are initiatives which started very recently. An additional initiative, the Transitional Care Program, started in October 2014. As part of the Transitional Care Program, a registered nurse will visit the patient's home to assess needs after the hospital stay.

23. **Please speak to WAH's having considered the need for beds and other facility system capacity that will be affected by greater volume of ED patients as required by subpart (c) of standard 15.**

Applicant Response

In its recent modified filing, Washington Adventist Hospital proposes a reduced MSGA bed capacity and associated services program, which reflects the analysis and assumptions derived by revising the project according to the Global Budget Revenue model in Maryland. However, the hospital's capacity is consistent with the projected emergency department volumes.

Washington Adventist Hospital projects modest growth in its emergency department, with total visits of 48,160 in the first full year of operation (2019) to 52,060 in its fifth year of operation, 2023.

The hospital's capacity is enhanced by moving to an all-private room facility, which avoids the inefficiencies of the current facility and its high number of semi-private rooms. (Currently, bed availability is hindered by both the inability to co-mingle male and female patients in semi-private rooms and the number of patients we treat who need to be in isolation. Some isolation patients have to be placed in semi-private rooms which means the second bed is blocked.) In addition to moving to private rooms, capacity in the new hospital will be enhanced by a dedicated observation unit in the patient tower, as well as clinical decision beds adjacent to the emergency department. Along with the more efficient utilization of MSGA beds that private rooms provide, designated observation beds will allow for the management of shorter stay cases in a focused and dedicated location without occupying licensed MSGA bed capacity, as is the case in the existing facility.

In summary, although the MSGA bed capacity is reduced in the modified application, Washington Adventist Hospital believes the capacity to be appropriate and 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. The Washington Adventist Hospital application also includes 14,042 square feet of shell space, which is a likely area for increased MSGA bed capacity and addressed specifically in the application and in completeness question #24.

Shelled Space

24. **The standard requires an estimate of the likely timeframe for using the shelled space. It appears that Exhibit 40 assumes that timeframe to be three years. Please confirm this and explain that expectation.**

Applicant Response

In addition to the information in Exhibit 40, the response to the shell space standard, beginning on page 64 of the modified application, describes the likely timeframe for using the shelled space. Since the likely use for the shell space is the addition of MSGA beds, the three-year timeframe is determined by the MSGA projections (refer to Exhibit #1, Table I) for occupancy at the new facility. Using these projections, once the replacement facility achieves an average occupancy of 78%, the 140% licensing law, in conjunction with Commission approvals, would allow for the build-out within the third year of operations. According to the projections, the replacement facility would exceed the 78% MSGA occupancy threshold within three years (2021) and would allow for increased MSGA bed capacity that the shell space would provide.

25. **Please explain the reference (under *Program Flexibility* on page 64) to a 28,000 sq. ft. reduction in this iteration of the proposal, given that the current total proposed square footage is 427,662 while the prior plan was for 428,412 sq. ft.**

Applicant Response

The figure of 28,000 square feet is a reference to the reduction in functional program, not gross square feet. We have discovered that this calculation is not correct and the actual program reduction is 14,042 square feet. The reduction of 31 patient rooms is correct. The revised plan shows a building of 427,662 Gross Square Feet, which includes 14,042 square feet of shell space. The shell space is not functional program space and is contingent space based on need and approval by the Maryland Health Care Commission.

COMAR 10.24.12 – ACUTE HOSPITAL INPATIENT OBSTETRIC SERVICES standards

26. Is there a letter or certificate documenting the result of the November 2012 site visit DHMH cited on page 66? Are such site visits a routine, periodic practice, or was the visit precipitated by an event or program change?

Applicant Response

The language used in the response on page 66 was imprecise; site visits are not performed for Level IIB perinatal programs. Rather, a self-assessment tool was sent by MIEMSS for the hospital to complete, followed by a meeting with MIEMSS staff to review the responses to the assessment. No formal certificate or letter was received as a result of this meeting.

27. Explain why the relocated hospital would not attract sufficient Obstetric volume from each of the following zip codes to be included in the expected service given their proximity to the proposed location and/or their location in relation to other zip codes that are expected to be in the service area: 20720, 20721, 20723, 20724, 20860, 20868, and 20895.

Applicant Response

All surrounding zip codes were considered in analyzing the changes in the service area for OB. While we expected a slight lift in market share for most of the zip codes listed, the impact would not have been large enough to meet the defining criteria for the total service area. The table below presents WAH's current discharges originating from the listed zip codes:

WAH 2013 Discharges by Zip Code

Zip Code	WAH Discharge
20720 - Bowie	8
20721 - Bowie	5
20723 - Laurel	2
20724 - Laurel	3
20860 - Sandy Spring	2
20868 - Spencerville	1
20895 - Kensington	6

As a result of our market share analysis, the zip code within the re-defined service area with the least amount of discharges is 20905 (Silver Spring) with 16 discharges. This zip code is contiguous with the White Oak home zip code 20904 (Silver Spring) and closer to the White Oak location than any of the zip codes identified above. One would have had to project growth in discharges within each zip code in the table above ranging from 100% to 1,600%, depending on the zip code selected, to have sufficiently been included in the re-defined service area. In addition, we considered the nature of OB services, in which the physician has significant influence on where a mother delivers her child, and did not believe improving travel times by 0-7 minutes would have indicated such a significant increase in discharges within any of the zip codes.

28. **Explain why the need analysis includes the female population 45 through 64 when obstetric projections are typically only based on the female population 15 through 44.**

Applicant Response

Although the use rate for the 45 through 64 age cohort is well below that of women within the typical child bearing ages (15 through 44), we included the cohort to appropriately represent the entire population that would be driving OB admissions. In addition, trends indicate that women are having children later in life, therefore we included **all** potential child bearing ages in our analysis. In projecting discharges, we applied the respective use rates per age cohort, thereby weighting the results proportionately. In considering materiality, the discharges of women over 44 in CY 2013, only represented 0.4% of total OB discharges. We believe the methodology is valid, but if we were to remove discharges related to women over 44, we would have reached the exact same estimated net bed need.

29. **On page 113 the application cites an analysis performed by WAH "to understand the differences in market share by zip code as a result of the proposed relocation to White Oak." You stated that that analysis took into account the location of the new hospital, proximity of other hospitals, drive times, major streets and highways, current market share of other providers and physician relationships. Please explain how each of these considerations were weighted and how they affected the resulting market share adjustments for each zip code in the expected service area as detailed on page 114.**

Applicant Response

Each zip code was evaluated independently on how its market share would be impacted as a result of the proposed relocation to White Oak. We did consider 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 when evaluating market share changes as a result of the relocation to White Oak.

Specifically, the following steps were performed to estimate the market share adjustments applied to each zip code:

- Identification of proximity of zip code to all acute care hospital providers, including drive time and distance
- Analysis of current market share for acute care hospital providers relative to their location to the zip code
- Approximation of the shift in market share as a result of the proposed replacement hospital, recognizing both the distance and current market presence within each zip code

Deloitte was engaged to perform an assessment, at the zip code level, of the market share changes that would occur as a result of the proposed relocation. They estimated the impact based on all the market factors identified above, including their experience and knowledge of studying market share adjustments that result from a new hospital or a relocated hospital in a new market. All of the market dynamics above were considered and weighted into the adjustment but, due to the unique characteristics of each zip code, a standard weighting formula was not applied to avoid flawed results.

Each zip code is unique and while proximity to the zip code including drive times and distance would be the main factor in one zip code, physician relationships may have a stronger influence over proximity in another.

The example below demonstrates the methodology showing that not any single market dynamic can be used to estimate a change in market share, but that all market dynamics need to be considered to best estimate changes in market share from the proposed relocation to White Oak. For example, zip code 20707, Laurel, is the home zip code to Laurel Regional Hospital, yet the hospital has only 18.0% market share, while Holy Cross Hospital is ranked 3rd in distance but has the largest market share of 43.5%. Howard County General is ranked as the second closest hospital, but only has 16.8% market share. If Washington Adventist Hospital relocates to White Oak, it is estimated that it will take an additional 5% of the market as a result of its proximity to Laurel, drive times, current market share, the proximity to other area hospitals, but not ignoring the fact that Holy Cross has a strong market presence and most likely strong physician relationships in the zip code.

Hospital	Discharges	Market Share	Ranked - Closest hospital by proximity
Laurel Regional Hospital	78	18.0%	1
Howard County General	73	16.8%	2
Holy Cross	189	43.5%	3
Washington Adventist	15	3.46%	4
Prince George's Hospital Ctr	12	2.76%	5
St Agnes	11	2.53%	6
Shady Grove Adventist	11	2.53%	7
Anne Arundel Medical Center	16	3.69%	8
Others	29	6.68%	-
Total	**434**	**100.0%**	

30. Explain why a 65% occupancy rate was assumed for projecting <u>service area</u> need (as differentiated from a single hospital's need) for obstetric beds.

<u>Applicant Response</u>

We acknowledge that there is not a need formula for obstetric beds in the State Health Plan. For the purposes of the general need criterion analysis, our goal was to identify a useful benchmark against which the Washington Adventist Hospital OB unit in White Oak could be compared. The selected 65% occupancy rate for OB services represents a conservative approximation of the average utilization for hospitals in Montgomery and Prince George's counties.

CY2012 OB Occupancy at Montgomery & Prince Georges Hospitals

Provider	CY2012 ADC	FY2013 Licensed Beds	Occupancy
Washington Adventist	12.1	21	57.8%
Holy Cross	64.1	88	72.8%
Montgomery General	5.2	11	47.4%
Shady Grove Adventist	38.5	56	68.8%
Laurel Regional Hospital	6.7	10	66.5%
Prince George's Hospital Center	17.8	36	49.3%
Southern Maryland	16.4	30	54.6%
Total	**160.8**	**252**	**63.8%**

CY2013 OB Occupancy at Montgomery & Prince George's Hospitals

Provider	CY2013 ADC	FY2014 Licensed Beds	Occupancy
Washington Adventist	11.7	21	55.8%
Holy Cross	62.6	88	71.1%
Montgomery General	5.1	11	46.6%
Shady Grove Adventist	37.5	56	66.9%
Laurel Regional Hospital	5.9	10	58.5%
Prince George's Hospital Center	16.1	36	44.6%
Southern Maryland	13.5	30	44.9%
Total	**152.3**	**252**	**60.4%**

We also note that the licensed beds for Prince George's Hospital Center has increased from 36 licensed OB beds in FY2014 to 38 licensed beds in FY2015, although the prior year's occupancy was 44.6%.

31. Submit a step by step explanation and calculation of the 7817 discharges projected for 2023 (p.117)

Applicant Response

1. Population - Nielson Claritas provided population statistics for CY2000 and CY2010, and population estimates for CY2013 and CY2018 by zip code and by varying demographic groups. We performed the following steps to estimate the population of females aged 15-44 and 45-64 ("Age Cohorts") for each zip code within the White Oak Total Service Area (TSA):
    a. Calculated the compound annual growth rate ("CAGR") between the projected CY2013 and CY2018 population estimates by zip code and age cohort.
    b. Calculated 2014 through 2023 population estimates by applying the calculated CAGR to the prior year's population estimate beginning with the estimate Nielson Claritas provided for CY2013.
2. Use Rates - Calculated utilization rates in CY2013 by zip code and age cohort based on actual discharges and population estimates. Projected OB utilization rates annually by zip code and age cohort considering the expectation that use rates will increase 1% annually.

3. Discharges - Calculated discharges by zip code and age cohort by applying the projected utilization rates (step 2) to the population estimates (step 1). Added the discharges estimated by zip code to determine the total discharges estimated for the White Oak TSA.

32. Page 116 contains this statement: *"Population estimates, sourced from Nielsen Claritas, for the Female – Childbearing population and newborns within the Washington Adventist Hospital – White Oak TSA were examined. It was found that although the majority of the Female – Childbearing population, women ages 15-44, are estimated to decrease approximately 0.5% annually, newborns are expected to increase 0.5% annually. Therefore, an increase in the use rate of 1.0% was applied each year to consider the expected higher rate of births within the Washington Adventist Hospital – White Oak TSA."* Was this apparent contradictory projection from Claritas explored or vetted for likely accuracy?

Applicant Response

The population projections were explored further and the result of our research indicated that this information was not contradictory but an indication that birth rates would increase over the next ten years. Claritas' estimates presented a perspective that has been shared by others indicating that birth rates have hit bottom in 2013 after years of decline during the recession, and that delays in having children during this time, as well as trends in which women are having babies at an older age, is leading to future increases in childbirths overall. See Exhibit 105.

33. Please provide the 2012, 2013, and the 2023 female population ages 15 to 44 and 45 to 64 by zip code.

Applicant Response

Patient Service Area:	CY2012			CY2013			CY2023		
	15-44	45-64	Total	15-44	45-64	Total	15-44	45-64	Total
20904 - Silver Spring	11,579	7,950	19,529	11,605	8,113	19,718	11,762	9,146	20,907
20783 - Hyattsville	9,896	4,361	14,257	9,804	4,417	14,221	8,990	4,986	13,976
20903 - Silver Spring	4,901	2,429	7,330	4,890	2,478	7,368	4,710	2,907	7,617
20902 - Silver Spring	10,537	6,532	17,069	10,540	6,655	17,195	10,402	7,600	18,003
20906 - Silver Spring	12,363	8,823	21,186	12,331	8,921	21,252	11,871	9,366	21,238
20901 - Silver Spring	7,622	5,249	12,871	7,581	5,330	12,911	7,169	5,842	13,010
20912 - Takoma Park	5,618	3,456	9,075	5,546	3,492	9,038	4,896	3,728	8,624
20705 - Beltsville	5,645	3,557	9,202	5,623	3,602	9,225	5,405	3,873	9,278
20706 - Lanham	8,203	5,546	13,749	8,146	5,574	13,720	7,706	5,453	13,159
20707 - Laurel	7,377	4,573	11,950	7,362	4,664	12,026	7,036	5,410	12,445
20770 - Greenbelt	6,101	3,641	9,742	6,047	3,696	9,743	5,498	4,115	9,613
20782 - Hyattsville	7,243	3,610	10,853	7,197	3,651	10,848	6,742	4,037	10,779
20740 - College Park	7,643	2,350	9,993	7,626	2,363	9,989	7,402	2,526	9,927
20708 - Laurel	6,399	3,121	9,520	6,308	3,155	9,463	5,483	3,515	8,998
20866 - Burtonsville	3,135	2,260	5,395	3,115	2,306	5,421	2,949	2,592	5,542
20905 - Silver Spring	3,113	3,339	6,452	3,138	3,362	6,500	3,441	3,286	6,727
Total	117,374	70,797	188,172	116,859	71,779	188,638	111,462	78,382	189,844

34. Which of the design features of the OB unit described on p. 81 are upgrades over the present facility? Explain the advantage offered by each of these features.

Applicant Response

The post-partum rooms in the White Oak facility are all private, which enhances patient experience and improves infection control over the semi-private rooms in the current facility. Additionally, all the LDR and post-partum rooms are designed to meet the current FGI requirements, which require significantly more space than the current facility provides. The triage suite of rooms in the design will enhance patient flow and room utilization – a space that the current facility does not have.

35. The tables at the top of p. 117 need further explanation. Extracting data elements from them seems to yield the following for the assumed White Oak TSA in 2013.

Females of childbearing age	**188,638**
Newborns	**38,884**
OB discharges	**7,413**

a) Does this mean that 1 of every 4.85 females of childbearing age delivered a baby in 2013?

b) **How is it that there were 38,884 newborns but just 7,413 OB discharges?**

The same anomaly appears in tables on pp. 140, 141.

Applicant Response

"Newborns" as presented in the table actually represents the population aged 0 through 4 within the White Oak TSA and more clearly should have been identified as such. This age cohort was the youngest provided by Nielson Claritas and was used to analyze the expected growth of births which was considered in our use rate projections. We did not use this information to consider utilization statistics or the ratio of births to OB discharges.

COMAR 10.24.11 GENERAL SURGICAL SERVICES standards

Need – Minimum Utilization for Establishment of a New or Replacement Facility

36. **In accordance with standard 2(a)(i) please provide historical trends for both WAH and the expected service area. For WAH, provide at least the CY2011 and CY2012 surgical utilization data for the mixed use and special cardiac operating rooms.**

Applicant Response

We are unable to analyze historical trends within the expected service area as outpatient data is not available by zip code. Refer to the tables below for CY2011 and CY2012 surgical utilization data.

CY2011 Utilization Statistics (Cardiac Services)

Statistic	Inpatient	Outpatient
MSGA Discharges	10,647	N/A
Cases	351	N/A
Minutes	100,919	N/A
Case/Admission	3.3%	N/A
Minutes/Case	288	N/A

CY2011 Utilization Statistics (Mixed Use)

Statistic	Inpatient	Outpatient
MSGA Discharges	10,647	N/A
Cases	2,675	3,359
Minutes	224,692	216,598
Case/Admission	25.1%	N/A
Minutes/Case	84	64

CY2012 Utilization Statistics (Cardiac Services)

Statistic	Inpatient	Outpatient
Discharges	9,694	N/A
Cases	342	N/A
Minutes	95,313	N/A
Case/Admission	3.5%	N/A
Minutes/Case	279	N/A

CY2012 Utilization Statistics (Mixed Use)

Statistic	Inpatient	Outpatient
Discharges	9,694	N/A
Cases	2,537	3,291
Minutes	243,554	230,085
Case/Admission	26.2%	N/A
Minutes/Case	96	70

37. **Subparagraph (2)(a)(iii) asks for an analysis of how surgical case volume is likely to change as a result of changes in the surgical practitioners using the hospital in the case of a replacement hospital project involving relocation to a new site. Please speak to this.**

Applicant Response

Washington Adventist Hospital did not project a change in surgical practitioners using the hospital. The hospital projects only a slight growth in surgical cases for the new hospital.

38. **For the Mixed Use and Specialty Cardiac tables on p.90, provide the assumptions and information used to project the number of inpatient, outpatient, and cardiac cases from 2014 through 2023. Please explain the rationale for the assumption that the average minutes per case will remain at 85 minutes per case for mixed use and 267 minutes for cardiac cases over this ten year period?**

Applicant Response

Inpatient surgical cases were estimated based on the projected MSGA discharges and CY2013 non-cardiac and cardiac cases per discharge of 29.9% and 3.9%, respectively. MSGA admissions were projected considering the following key factors:

- Reduction in inpatient admissions as a result of strategies to avoid unnecessary utilization from CY2015 through CY2018
- Net conversion of inpatient to outpatient, evolving standards of care, and 2-midnight rule from CY2015 through CY2018
- Population growth partially offset by prevention of unnecessary utilization from CY2019 through CY2023

We projected outpatient surgeries based on population growth less the migration of surgeries to other settings, such as physician-owned surgical centers.

The table on p. 90 reflects Washington Adventist Hospital's projections for surgical cases based on historical trends, current operations, and future assumptions, consistent with other sections in the application. The projections reflect only a modest change in the number and types of surgical cases to be performed during this period. The presence of ambulatory surgery centers in the region and the incentives of the Global Budget Revenue agreement mean the mix and volume of cases are not projected to change significantly throughout the projection period. These factors result in acuity of surgical cases at the hospital that is rather high and will experience only modest improvement at the new facility. For these reasons, the average minutes per case are expected to remain consistent through the projection period.

39. **In Exhibit 38, the number of minutes for outpatient surgery for 2013, (237,123) differs from the 260,583 minutes reported for the six mixed use ORs on p. 89. Please explain.**

Applicant Response

Exhibit 38 reflects the volumes reported to the HSCRC on a fiscal year (July 1, 2012 – June 30, 2013) basis consistent with the rate year. Page 89 reflects calendar year volumes (January 1, 2013 – December 31, 2013) from the discharge abstract data.

Operating Room Capacity and Needs Assessment – Assumptions Regarding Operating Room Capacity

40. **Please provide the assumptions and data used to arrive at the optimal capacity of 1,188 hours per year (1,485 hours per year for full capacity) for the Projected Operating Room Statistics (Specialty Cardiac) table on p. 90. This should include any information related to the population and/or facility need for each operating room, the documented demand for each operating room, and any unique operational requirements related to the special purpose operating room used as the basis to support a rate of 1,188 hours per year for optimal capacity.**

Applicant Response

According to COMAR 10.24.11 section .06 A. (1) (c), Special Purpose Operating Room, *"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."* In developing the appropriate response to this standard, Washington Adventist Hospital considered its historical experience with the program, planning expertise of the design and medical planning team, and other resources like the *Future of the Operating Room, Strategic Forecast and Investment Blueprint* by the Innovations Center at the Advisory Board Company and the *SpaceMed Guide: A Space Planning Guide For Healthcare Facilities*. The special purpose operating rooms for the replacement Washington Adventist Hospital are proposed as dedicated cardio-thoracic operating rooms to support the hospital's cardiac surgery program. Case and demand projections are provided in the table (Projected Operating Room Statistics: Specialty Cardiac) at the bottom of page 90 in the modified application.

A standard response to the question of cardiac surgery operating room capacity for programs like Washington Adventist Hospital's is one room to cover the projected cases and one room for backup. This application provides a thoughtful review and a capacity projection that demonstrates projected utilization, and does not propose a third special purpose room to serve as back-up. The optimal capacity of 1,188 hours per year is based on a maximum capacity of 2,375 hours per year and a room efficiency factor of 50%. Regional cardiac surgery programs, like Washington Adventist Hospital, must be nimble enough to manage both scheduled and unscheduled cases. The hospital operates busy interventional cardiology and electrophysiology programs, both of which depend on emergency special purpose operating room capacity. Moreover, the cardiac surgery program at Washington Adventist Hospital is a

regional program serving as back-up to multiple hospitals that perform primary and elective PCI procedures but do not have on-site cardiac surgery programs. As a regional provider, Washington Adventist Hospital must ensure available cardiac focused special purpose operating room capacity to meet this responsibility. The number of rooms proposed reflects all of these considerations.

41. **Paragraph .06(A)A(2) assumes "an average room turnaround time of 25 minutes" but also allows *An applicant that proposes an alternative to these assumptions as a more appropriate basis for determining the need for operating room capacity* the opportunity to *fully explain and justify the basis for the alternative assumptions.* Please provide the assumptions and justify the basis for using a turnaround time of 30 minutes for the 6 mixed use ORs and 40 minutes for the 2 Specialty Cardiac ORs.**

Applicant Response

Washington Adventist Hospital consulted COMAR 10.24.11 paragraph .06(A)a(2), as well as other industry resources, in determining the appropriate average room turnaround time for the mixed use and special purpose operating rooms. We determined that a 30-minute turnaround time for mixed use operating rooms is appropriate because the 25-minute time assumed in chapter .06(A)a(2) is representative of surgical programs that have a greater proportion of lower acuity cases. Washington Adventist Hospital projects only a modest improvement in case mix and type through the projection period and, as such, will not experience a favorable offset to the average case time that an increased mix of lower acuity cases would provide. Industry planning resources including this project's health care planning and design team, as well as the *Future of the Operating Room, Strategic Forecast and Investment Blueprint* by the Innovations Center at the Advisory Board Company and the *SpaceMed Guide: A Space Planning Guide For Healthcare Facilities* were consulted in making these turnaround time determinations.

Regarding the 40-minute turnaround time for the two special purpose operating rooms, paragraph .06(A)a does not provide a turnaround time standard, rather it states "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." The design team health planners and the additional resources discussed above were consulted and the determination was made that the 40-minute standard is the most accurate project capacity for the proposed special purpose operating rooms in the replacement hospital.

42. **The line diagram presented in the application identifies one of the mixed use ORs measuring 685 sq. ft. as a "hybrid OR." What types of cases will occur in this OR?**

Applicant Response

A hybrid OR is used for cardiac, vascular and orthopedic procedures requiring catheter-based, image-guided intervention that can require the case to proceed from "closed to open."

This includes specific cases such as:

- Minimally invasive cardiac surgical procedures
- Thoracic aneurysm stent grafts
- Diagnostic and therapeutic percutaneous vascular procedures
- Abdominal aneurysm stent grafts
- Combined open and endovascular procedures

COMAR 10.24.17 Cardiac surgery standards

43. **On p. 95 the application states that the quality metrics are measured through the Society of Thoracic Surgeons (STS) Cardiac Surgery Registry and reviewed quarterly with the entire Cardiac Surgery team. What are the metrics and what are the results?**

Applicant Response

The Society of Thoracic Surgeons (STS) quarterly data analysis contains numerous quality metrics including, but not exclusive to, the following:

- Risk-Adjusted Major Procedures Mortality
- Any Re-operations
- Deep Sternal Wound Infections
- Cerebrovascular Accident
- Renal Failure
- Prolonged Ventilator Time
- 30 Day Readmission

Please see the attached STS data analysis for the full report for Washington Adventist Hospital. In addition, STS Star Rating is publicly reported through Consumer Reports. Please see attached articles and listing (Exhibit 106) for details.

44. **Provide the list of indications and contraindications for cardiac surgery referenced on p. 96.**

Applicant Response

Decisions are based upon clinical assessment of the patient and guidelines and recommendations set forth by the Society of Thoracic Surgeons, The American College of Cardiology, and the American Heart Association. General indications include:

- Patient is at increased risk for an adverse event
- Angina relief
- Prevention of infarction
- Improved survival
- Percutaneous Coronary Intervention (PCI) is not feasible
- Short and Long Term benefits of Coronary Artery Bypass Grafting (CABG) are superior to PCI

Clinical indicators for CABG are also individually based and include:

- Class III-IV chronic stable angina refractory to medical therapy
- Acute coronary syndrome, including unstable angina and Non ST Elevation Myocardial Infarction (NSTEMI)
- Acute ischemia or hemodynamic instability following attempted PCI
- Acute evolving ST Elevation Myocardial Infarction (STEMI)
- Markedly positive stress test
- Ischemic pulmonary edema
- Coronary anatomic findings :
    - Left Main stenosis >50%
    - Three-vessel disease with ejection fraction (EF) <50%
    - Three-vessel disease with ejection fraction (EF) >50% and significant inducible ischemia on stress testing
    - Two-vessel disease with involvement of proximal Left Anterior Descending (LAD) artery and EF<50% or significant inducible ischemia on stress testing
    - One- and Two-vessel disease not involving the LAD with extensive myocardium in jeopardy but lesions not amenable to PCI

CABG is not recommended when the following conditions are present:

- Imminent death
- Patient does not meet anatomic or physiological criteria for revascularization
- Co-morbidities are such that risk would not outweigh clinical benefit

Clinical/diagnostic findings that could contraindicate CABG include:

- 1 or more coronary stenoses that are not anatomically or functionally significant , involve only the left circumflex or right coronary artery, or subtend only a small area of viable myocardium
- Persistent angina and a small area of viable myocardium with hemodynamic stability

45. Provide samples of the educational materials distributed to patients about treatment options.

Applicant Response

Please see Exhibit 107 for samples of treatment option educational materials.

46. The table labeled *Risk-Adjusted Major Procedures Mortality* includes several terms that we would like defined. They are:

a. The column heading "like" (assumed to "like hospitals," but how are like hospitals defined/selected?)

b. "in hospital mortality"

c. "operative mortality"

Applicant Response

Requested definitions for the STS terms are as follows:

- *Like:* Hospitals with the same annualized volume with or without a surgical residency
- *In Hospital Mortality:* Expired during the same hospitalization in which the surgery occurred
- *Operative Mortality:* Expired within 30 days of the initial surgery (includes any *In Hospital Mortality)*

47. With regard to the section of the standards requiring a program to "Establish and review compliance with physician minimum volume guidelines recommended by the American College of Cardiology, the American College of Surgeons, or other appropriate professional organization.":

a. The application states an inability to find a definitive published minimum volume guideline for cardiac surgery. Please document that search with appropriate citations from the literature and/or professional societies.

Applicant Response

The Society for Thoracic Surgeons (STS) has recommended that surgeon quality should be based on individual results that are risk adjusted and compared to other surgeons. Also, they have emphasized the importance of evaluating processes of care over volume. Articles citing these points include:

- Crawford FA Jr, Anderson RP, Clark RE, Grover FL, Kouchoukos NT, Waldhausen, JA, Wilcox BR. "Volume requirements for cardiac surgery credentialing: a critical examination". The Ad Hoc Committee on Cardiac Surgery Credentialing of The Society of Thoracic Surgeons. Ann Thorac Surg. 1996 Jan;61(1):12-6. PubMed PMID: 8561536.
- Joseph S. Carey, Joseph P. Parker, Claude Brandeau, Zhongmin Li, The "occasional open heart surgeon" revisited, The Journal of Thoracic and Cardiovascular Surgery, Volume 135, Issue 6, June 2008, Pages 1254-1260.
- Personal correspondence with David M. Shahian, M.D., Professor of Surgery at Harvard Medical School, Vice President of the Massachusetts General Hospital (MGH) Center for Quality and Safety, Associate Director of the MGH Codman Center for Clinical Effectiveness in Surgery, and Chair of the Society of Thoracic Surgeons (STS) workforce on National Databases and it Quality Measurement Task Force, confirmed no known documentation of a minimum volume requirement for a cardiothoracic surgeon annually.

The American College of Cardiology/American Heart Association Guidelines for Coronary Artery Bypass Graft Surgery also emphasizes the use of outcome tracking, especially in institutions and operators performing less than 110 cases per year, however they do note that risk adjusted mortality rates vary widely and that some low volume institutions do maintain excellent results. This is cited in:

- Eagle, KA, et al. ACC/AHA "Guidelines for Coronary Artery Bypass Graft Surgery: Executive Summary and Recommendations". A Report of the American College of

Cardiology/American Heart Association Task Force on Practice Guidelines (Committee to Revise the 1991 Guidelines for Coronary Artery Bypass Graft Surgery). Circulation. 1999; 100: 1464-1480.

The American College of Surgeons state a similar opinion in their guidelines:

- www.facs.org/about-acs/guidlines/cardiac-surgery, February, 1997

b. The application does speak to minimum volumes set by WAH. Those prescriptions (exhibit 67) allow lower volumes for more senior members of the staff. Please define the rationale for this stratification.

Applicant Response

In the absence of national guidelines for Cardiac Surgery volumes, the volume requirements for surgery credentialing at Washington Adventist Hospital were developed taking years of experience into account. This acknowledges the depth and development of skill over time with more experienced physicians. This consideration of cumulative experience allows for stratification of volume requirements in the credentialing process.

(b) Need

MSGA beds

48. **On page 103 the application states that when estimating likely market share changes that would result from the hospital's relocation, factors that were judged likely to have an impact were drive times, major streets and highways, current market share of other providers, and physician relationships. Please explain how each of these considerations affected the market share adjustments for each zip code detailed on page 105.**

Applicant Response

Each zip code was evaluated independently on how its market share would be impacted as a result of the proposed relocation to White Oak. We did consider 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 when evaluating market share changes as a result of the relocation to White Oak.

Specifically, the following steps were performed to estimate the market share adjustments applied to each zip code:

- Identification of proximity of zip code to all acute care hospital providers, including drive time and distance
- Analysis of current market share for acute care hospital providers relative to their location to the zip code

- Approximation of the shift in market share as a result of the proposed replacement hospital recognizing both the distance and current market presence within each zip code

Deloitte was engaged to perform an assessment, at the zip code level, of the market share changes that would occur as a result of the proposed relocation. They estimated the impact based on all the market factors identified above, including their experience and knowledge of studying market share adjustments that result from a new hospital or a relocated hospital in a new market. All of the market dynamics above were considered and weighted into the adjustment, but due to the unique characteristics of each zip code a standard weighting formula was not applied to avoid flawed results. Each zip code is unique and while proximity to the zip code including drive times and distance would be the main factor in one zip code, physician relationships may have a stronger influence over proximity in another.

The example below demonstrates the methodology showing that not any single market dynamic can be used to estimate a change in market share, but that all market dynamics need to be considered to best estimate changes in market share from the proposed relocation to White Oak. For example, zip code 20866, Burtonsville, is closest to Laurel Regional Hospital yet Laurel has only 11.9% market share while Holy Cross Hospital is ranked 3rd in distance but has the largest market share of 33.3%. MedStar Montgomery is ranked as the second closest hospital but only has 9.4% market share. If Washington Adventist Hospital relocates to White Oak, it is estimated that it will take an additional 15% of the market as a result of its proximity to Burtonsville, drive times, current market share, the proximity to other area hospitals but not ignoring the fact that Holy Cross has a strong market presence and, most likely, strong physician relationships in the zip code.

Zip Code 20866 – Burtonsville		
	To Washington Adventist Hospital - Takoma Park	To Washington Adventist Hospital - White Oak
Distance	12.1 miles	6.0 miles
Drive time	22.0 minutes	12.0 minutes

Source: Based on Travel Time Study (Exhibit 24)

Hospital	Market Share	Ranked - Closest hospital by proximity
Laurel Regional Hospital	11.9%	1
MedStar Montgomery	9.4%	2
Holy Cross Hospital	33.3%	3
Washington Adventist Hospital	6.7%	4
Doctors Community Hospital	1.3%	5
Suburban Hospital	4.4%	6
Prince Georges Hospital Center	0.6%	7
Shady Grove Adventist Hospital	2.3%	8
Southern Maryland	0.3%	9
Others	29.9%	-
Total	100.0%	

49. **To supplement the information regarding changes in the service area cited on page 106, please identify:**

    a. The zip codes that will no longer be in either the primary or secondary service area;

Applicant Response

- Shifted from primary service area ("PSA") to outside the service area – *20910*
- Shifted from secondary service area ("SSA") to outside the service area – *20722, 20019, 20017, 20020, 20002, 20018, 20877, 20874, 20001*

    b. The zip codes which are in WAH's current PSA, but are expected to slide to the secondary service area after the relocation to White Oak.

Applicant Response

- Shifted from PSA to SSA – *20011, 20737, 20902, 20770*
- Shifted from SSA to PSA – *20906*

50. **In response to question 29b of the October 23, 2014 *(sic)* completeness letter WAH stated that consideration was given to including zip codes 20868, 20777, 20759, and 20723 to the expected service area but they were not included as they did not meet the definition of primary or secondary service area. Please respond to the following questions about these and other zip codes that are adjacent to the expected service as shown on page 106:**

    a. It appears that zip code 20723 is included in the expected service area after all. Please explain the apparent change in assumptions.

Applicant Response

In the modified application we updated all market analyses to reflect the most current calendar year. As such, there were slight shifts in the current WAH total service area that were reflected in our analysis. Discharges originating from zip code 20723 (Laurel) admitted to WAH increased from 23 discharges in CY2012 to 34 discharges in CY2013, which met the definition of the secondary service area. After we applied a positive adjustment to recognize the expected increase in market share, the zip code remained in the redefined service area for White Oak

    b. Explain why each of these excluded zip codes did not meet the definition of primary and secondary service area.

Applicant Response

The table below presents WAH's current MSGA discharges by Zip Code:

WAH CY2013 MSGA Discharges by Zip Code

Zip Code	WAH Discharge
20868 - Spencerville	3
20777 - Highland	8
20759 - Fulton	5

In CY2013, there were only 38 discharges total going to any hospital in Maryland originating from zip code 20868. For the zip code 20868 to have been included in WAH's total service area, WAH would need 89.5% of the market share, which indicates an increase in market share of 81.6% or 31 discharges. We do not believe that an adjustment of that magnitude was appropriate and, therefore, the zip code did not meet the definition for the total service area.

Zip code 20777 is located in Howard County and primarily served by Howard County General, Montgomery MedStar, and Johns Hopkins. Only 29.9% of patients originating in 20777 chose hospitals within Montgomery County and Prince George County and 18.5% of those patients in CY2013 were admitted to Montgomery MedStar, which is closer to the zip code than the proposed White Oak location. For the zip code 20777 to have been included in WAH's total service area, Washington Adventist Hospital would need to capture all of the market share from the other Montgomery County and Prince George's County hospitals, as well as another 7.1% market share from other hospitals outside Montgomery County and Prince George's County. We did not believe that would have been appropriate and, therefore, the zip code did not meet the definition for the total service area.

With 89.1% of patients originating in zip code 20759 going to hospitals outside of Montgomery County and Prince George's County, and WAH only discharging 5 patients in CY2013, we determined that an adjustment significant enough to shift the zip code into the total service area was not appropriate.

51. **Explain why the relocated hospital would not attract sufficient volume from each of the following zip codes to be included in the expected service given their proximity to the proposed location and/or their location in relation to other zip codes that are expected to be in the service area: 20716, 20720, 20724, 20769, 20832, 20860, and 20895.**

Applicant Response

The results of our distance and drive time analysis for zip codes 20716, 20720, 20769, and 20895 indicated that there would not be a material benefit in proximity at the White Oak location and, therefore, no adjustment was applied to these zip codes. With the tightening of the service area that was observed as a result of our analysis, these zip codes remained outside the 85% definition for the service area.

The remaining zip codes 20724, 20832, and 20860 were not included in our defined service area as Washington Adventist Hospital had only between 2% and 4% market share historically. While we expect to maintain our current market share and possibly experience an increase in volumes from these zip codes, we did not expect the increase to be sufficient to be included in the 85% definition for our service area. This is not to say that volumes are not expected from these zip codes, but those volumes will fall into the 15% of volumes coming from outside our service area (primary and secondary).

52. **On page 109 (3rd paragraph) the application states: "this assumption ... indicate(s) a total use rate change of approximately negative 15% between 2013 and 2016;" the table on the same page (*Use Rates by Age Cohort Originating in WAH's TSA)* shows that 15% decrease occurring between 2013 and 2023. Does this mean an assumption that use rates will only decline through 2016, and then flatten? Is the math on that table correct? The total looks smaller than the component cohort.**

Applicant Response

That is correct. We assumed that use rates in each age cohort would decline 15% through 2016 and remain flat thereafter through 2023. The math on the table is correct. While each age cohort is declining approximately 15%, the overall population is aging. For example, in 2013 only 14.9% percent of the population is above 65 years old, but in 2023 that percentage increases to 20.5%. Understanding that shift is a key component/fact that was understood and factored into the planning of this project. Even though use rates may decline by 15% on average, as the population ages that does not translate into total use rates declining since those over 65 years old have much higher use rates than those under 65 years old. In summary, declines in use rates at the age cohort level are being offset as the overall population ages and utilizes more health care services.

(d) Viability of the Proposal

53. **Please reconcile the numbers for 2013 (dollars and ratios) on page 129 with the audited financial statement especially the consolidated schedules at the back of the audited financial statements on pages 45 through 47. Note that the table on page 129 shows an operating income of $8.7 million and excess of revenue over expenses as$12.1million for 2013; meanwhile on page 47, those numbers are $9.6 million and $13.2 million, respectively.**

Applicant Response

(dollars in thousands)	Modification to Application for CON page 129	AHC 2013 Audited Financials page 45-47	Difference	Ref
Operating Income	$ 8,704	$ 9,622	$ (918)	A
Excess of Revenue over Expenses	12,143	13,284	(1,141)	B
Cash	225,947	225,947	-	C
Long-Term Debt	321,193	321,193	-	D
Net Assets	$ 396,045	$ 396,045	$ -	

Footnotes

A Represents operating income for Hackettstown Regional Medical Center for 2013
B Represents excess of expenses over revenue for Hackettstown Regional Medical Center for 2013

C See page 45 of the audit. This amount represents the total of Cash and cash equivalents of $97,304,709 and Short-term investments of $128,642,187
D See page 46 of the audit. This amount represents the total of the categories under Long-Term Obligations, Net plus current portion of long-term obligations and long term debt subject to remarketing and repayment arrangements

As explained in the note to the table of Key Financial Indicators on page 129, per applicable accounting guidance (Accounting Services Codification (ASC) 205-20-45-1), the AHC 2013 audited financial statements show HRMC as discontinued operations. Under this guidance, the comparative AHC audited financial statements as of December 31, 2013 and 2012 show the revenue and expenses for HRMC as a net amount below income from continuing operations. In order to show a consistent comparison to prior periods and since HRMC was part of AHC during 2013, it seemed appropriate for purposes of the financial ratios, to include HRMC revenue & expenses as part of the totals and not as a net amount at the bottom of the financials.

54. Please submit the calculation of each financial ratio (for 2013) on page 129, referencing and reconciling the inputs to the calculation with the audited financial statements and explaining any discrepancies.

Applicant Response

(dollars in thousands)	Modification to Application for CON	AHC 2013 Audited Financials		
	page 129	page 45-47	Difference	Ref
	2013 Column			
Debt Service Coverage Ratio				
Excess of Revenue over Expenses	$ 12,143	13,284	(1,141)	A
Add: Depreciation & Amortization	$ 35,760	30,727	5,033	B
Interest	$ 9,752	8,363	1,389	C
Income Available for Debt Service	$ 57,655	*formula*		
Maximum Annual Debt Service	$ 32,103			
Maximum Annual Debt Service Coverage Ratio	**1.80**	*formula*		
Days Cash on Hand				
Unrestricted Cash and Investments	$ 225,947	225,947		
Total Operating Expenses	697,759	608,503	89,256	D
less: Depreciation and Amortization	(35,760)	(30,727)	(5,033)	B
Adjusted Operating Expenses	$ 661,999	*formula*		
Days in period	365			
Daily expense	$ 1,814	*formula*		
Days cash on hand		*formula*		

(dollars in thousands)	Modification to Application for CON	AHC 2013 Audited Financials		
	124.58			
Debt to Capitalization				
Long Term Debt	321,193	321,193		
Unrestricted Fund Balance	396,045	396,045		
Ratio	**44.8%**			
Total Liabilities to Unrestricted Net Assets				
Total Liabilities	$ 494,143	494,143	-	
Reduced by:				
Self-insurance professional liability	$ (8,122)	(8,122)	-	
	$ 486,021	*formula*		
Unrestricted Net Assets	$ 396,044	396,044		
Ratio	**1.23**	*formula*		

Footnotes:

A Represents excess of expenses over revenue for Hackettstown Regional Medical Center for 2013

B Represents depreciation and amortization for Hackettstown Regional Medical Center for 2013

C Represents interest expense for Hackettstown Regional Medical Center for 2013

D Represents operating expenses for Hackettstown Regional Medical Center for 2013

55. Explain the significant increase in operating revenue and excess of revenue over expenses that begins with 2014 as shown on the table on page 129.

Applicant Response

The increase in operating revenue and excess of revenue over expenses beginning in 2014 is related to several factors, primarily at Washington Adventist Hospital. In the Global Budget Revenue (GBR) initial rate setting for FY14, there was approximately $7M added back to rates for prior year reversals as detailed in the response to completeness question 17b. Given that the GBR agreements were not finalized until February 2014, this entire amount was recognized in the first half of calendar year 2014. In addition, there were updates and changes in the UCC methodology that increased Washington Adventist Hospital's funding amount by $5.9M in 2014 over 2013. Expenses are projected at levels that are consistent with prior periods, with minimal increases. Finally, the levels of operating revenue and excess of revenue over expenses presented appear reasonable when compared to annualized obligated group performance as of 9/30/2014.

Exhibits Table of Contents

Exhibit Number	
90	Group Practice Journal Article
91	Interest Tables for Options 2 and 3
92	Financial Assistance Application
93	Financial Assumptions for Options 2, 3 and 4
94	Healthcare Energy Guidebook
95	American DG Energy Data Sheet
96	U.S. Department of Energy CHP Fact Sheet
97	PEPCO C&I Energy Savings Program
98	The Benefits of Cogeneration: Upper Chesapeake Medical Center
99	MDH2E Seminar Presentation by CFSG
100	Maryland Hospitals for a Healthy Environment June 2014 Newsletter
101	Maryland Hospitals for a Healthy Environment March 2014 Newsletter
102	Upper Chesapeake Medical Center Cogeneration Presentation
103	Energy Manager Today April 23, 2013
104	Option 3 Capitalized Construction Interest
105	Birth Rate Articles AP News May 29, 2014 NCHS Data Brief No. 152, May 2014 Nation at a Glance: First Births to Women aged 40-44
106	Cardiac Program STS Ratings Consumer Reports June 2014 Hospital Ratings Consumer Reports August 2014 Excerpts from Data Analyses of The Society of Thoracic Surgeons
107	Educational Materials Provided to Cardiac Surgery Patients