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October 11, 2016

VIA EMAIL & HAND DELIVERY

Ms. Ruby Potter
ruby.potter@maryland.gov
Health Facilities Coordination Officer
Maryland Health Care Commission
4160 Patterson Avenue
Baltimore, Maryland 21215

Re: UM Shore Regional Health
Modified CON Application for Replacement and Relocation of
University of Maryland Shore Medical Center at Easton
Matter No. 12-20-2339

Dear Ms. Potter:

On behalf of applicant UM Shore Regional Health, we are submitting six copies of its Modified Certificate of Need Application and related exhibits, along with two sets of full-size project drawings. Also enclosed is a CD containing searchable PDF files of the application and exhibits, WORD versions of the application and available exhibits, and native EXCEL spread-sheets of the MHCC tables and available exhibits.

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

Please sign and return to our waiting messenger the enclosed acknowledgment of receipt.

Sincerely,

Thomas C. Dame

TCD:blr
Enclosures

#571467
012516-0003

cc: Kevin McDonald, Chief, Certificate of Need
Paul Parker, Director, Center for Health Care Facilities Planning & Development, MHCC
Joel Riklin, Program Manager
William Chan, Health Policy Analyst, HSP&P/CON
Suellen Wideman, Esq., Assistant Attorney General, MHCC
Fredia Wadley, M.D., Health Officer, Talbot County Health Department
Kenneth D. Kozel, President & CEO, UM Shore Regional Health
Patti Willis, Regional Senior Vice President, Strategy and Communications, UM Shore Regional Health
Robert A Chrencik, President and CEO, UMMS
Alison G. Brown, Senior Vice President & Chief Strategy Officer, UMMS
Dana Farrakhan, Vice President, Strategy and System Program Development, UMMS
Darryl Mealy, Vice President Construction and Facilities Planning, UMMS
Ruth Ann Jones, Senior Vice President Patient Care Services & Chief Nursing Officer, UM Shore Regional Health
JoAnne Hahey, CPA, Senior Vice President, Finance and Chief Financial Officer, UM Shore Regional Health
William Huffner, Senior Vice President Medical Affairs & Chief Medical Officer, UM Shore Regional Health
Robert Frank, Senior Regional Vice President Operations, UM Shore Regional Health
Kathleen McGrath, Regional Director Outreach and Business Development, UM Shore Regional Health
Gary Jones, Regional Director Cardiovascular and Pulmonary Services, UM Shore Regional Health
Shannon Kraus, Principal, HKS
Jeanette Cross, Managing Director, Berkeley Research Group, LLC
Andrew L. Solberg, A.L.S. Healthcare Consultant Services
Mallory Montgomery, Esq.

IN THE MARYLAND HEALTH CARE COMMISSION

MODIFIED
APPLICATION FOR CERTIFICATE OF NEED

for the
Replacement and Relocation of
University of Maryland Shore Medical Center at Easton
Matter No. 12-20-2339

Applicant

Shore Health System, Inc.

October 11, 2016

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For internal staff use

12-20-2339

MATTER/DOCKET NO.

DATE DOCKETED

MARYLAND HEALTH CARE COMMISSION

HOSPITAL
APPLICATION FOR CERTIFICATE OF NEED

PART I - PROJECT IDENTIFICATION AND GENERAL INFORMATION

1. FACILITY

Name of Facility: University of Maryland Shore Medical Center at Easton

Address:

10000 Longwoods Rd	Easton, Maryland	21601	Talbot
Street	City	ZIP	County

Name of Owner (if differs from applicant):

2. OWNER

Name of owner: Shore Health System, Inc.

3. APPLICANT.

If the application has co-applicants, provide the detail regarding each co-applicant in sections 3, 4, and 5 as an attachment.

Legal Name of Project Applicant
Shore Health System, Inc.

Address:

219 S. Washington St.	Easton	21601	MD	Talbot
Street	City	ZIP	State	County

Telephone: 410-822-1000

Name of Owner/Chief Executive: Kenneth Kozel, President/CEO

4. NAME OF LICENSEE or proposed licensee, if different from applicant

---

5. LEGAL STRUCTURE OF APPLICANT (and LICENSEE, if different from applicant).

Check ☑ or fill in applicable information below and attach an organizational chart showing the owners of applicant (and licensee, if different).

A.	Governmental	☐	
B.	Corporation		
	(1) Non-profit	☒	
	(2) For-profit	☐	
	(3) Close	☐	State & date of incorporation Maryland - ___/___/____
C.	Partnership		
	General	☐	
	Limited	☐	
	Limited liability partnership	☐	
	Limited liability limited partnership	☐	
	Other (Specify):		
D.	Limited Liability Company	☐	
E.	Other (Specify):		
	To be formed:	☐	
	Existing:	☐	

6. PERSON(S) TO WHOM QUESTIONS REGARDING THIS APPLICATION SHOULD BE DIRECTED

A. Lead or primary contact:

Name and Title: Patti Willis, Senior Vice

Mailing Address:
University of Maryland Shore Regional Health

219 South Washington St.	Easton	21601	MD
Street	City	ZIP	State

Telephone: 410-822-1000

E-mail Address (required): Patti.Willis@umm.edu

Fax: 410-822-7834

B. Additional or alternate contact:

Name and Title: Andrew L. Solberg
Mailing Address:
A.L.S. Healthcare Consultant Services

5612 Thicket Lane	Columbia	21044	MD
Street	City	ZIP	State

Telephone: 410-730-2664
E-mail Address (required): asolberg@earthlink.net
Fax: 410-730-6775

Name and Title: Thomas C. Dame, Esq.
Mailing Address:
Gallagher Evelius & Jones LLP

218 N. Charles St. Ste. 400	Baltimore	21201	MD
Street	City	ZIP	State

Telephone: 410-347-1331
E-mail Address (required): tdame@gejlaw.com
Fax: 410-468-2786

Name and Title: Mallory L. Montgomery, Esq.
Mailing Address:
Gallagher Evelius & Jones LLP
218 N. Charles St. Ste. 400
Street
Telephone: 410-951-1417
E-mail Address (required): mmontgomery@gejlaw.com
Fax: 410-468-2786

7. TYPE OF PROJECT

The following list includes all project categories that require a CON under Maryland law. Please mark all that apply.

If approved, this CON would result in:

(1) A new health care facility built, developed, or established ☐
(2) An existing health care facility moved to another site ☒
(3) A change in the bed capacity of a health care facility ☐
(4) A change in the type or scope of any health care service offered by a health care facility ☐
(5) A health care facility making a capital expenditure that exceeds the current threshold for capital expenditures found at: http://mhcc.maryland.gov/mhcc/pages/hcfs/hcfs_con/documents/con_capital_threshold_20140301.pdf ☒

8. PROJECT DESCRIPTION

A. Executive Summary of the Project: The purpose of this BRIEF executive summary is to convey to the reader a holistic understanding of the proposed project: what it is; why you need/want to do it; and what it will cost. A one-page response will suffice. Please include:

(1) Brief description of the project – what the applicant proposes to do;
(2) Rationale for the project – the need and/or business case for the proposed project;
(3) Cost – the total cost of implementing the proposed project; and
(4) Master Facility Plans – how the proposed project fits in long term plans.

As explained more fully in the Comprehensive Project Description below, the proposed project involves the replacement and relocation of University of Maryland Shore Medical Center at Easton. The proposed replacement hospital will be relocated about three miles to the north of the existing facility and it will have 95 acute care beds, 14 special hospital rehabilitation beds, and 10 observation beds. The facility is proposed to have six operating rooms and 28 emergency department treatment spaces. The total project cost is estimated to be $ 349,904,500. The replacement hospital is needed to address the aging, inefficient, and obsolete existing hospital building.

B. Comprehensive Project Description: The description must include details, as applicable, regarding:

(1) Construction, renovation, and demolition plans;
(2) Changes in square footage of departments and units;
(3) Physical plant or location changes;
(4) Changes to affected services following completion of the project; and
(5) If the project is a multi-phase project, describe the work that will be done in each phase. If the phases will be constructed under more than one construction contract, describe the phases and work that will be done under each contract.

COMPREHENSIVE PROJECT DESCRIPTION

I. UNIVERSITY OF MARYLAND SHORE MEDICAL CENTER AT EASTON

Emergency Hospital, a 32-bed predecessor of University of Maryland Shore Medical Center at Easton ("UMSMC-E" or the "Hospital"), officially opened its doors on January 28, 1907, on South Washington Street in Easton. One of the driving forces for opening a hospital in the Mid-Shore Region of Maryland was that physicians wanted to treat their patients close to home instead of referring them to Baltimore for care. From its beginnings, Emergency Hospital was a regional provider of medical care, serving people in Talbot, Caroline, and Queen Anne's Counties.

In 1915, following the largest fundraising effort the community had ever seen, a new hospital was built on South Washington Street, a structure that is still part of the Hospital complex. After two expansions in 1920 and 1929, the name of the hospital was changed to The Memorial Hospital at Easton, in 1943, to honor local men and women who served in both world wars and the many volunteers whose service helped establish the Emergency Hospital.

Over many years, the Hospital building was expanded and today's building includes components dating from 1915, 1975, 1982, and 2006.

In 1996, the Hospital merged with Dorchester General Hospital to form Shore Health System, Inc. ("SHS"), a unified network of medical services with the combined resources of community hospitals, physicians, and outpatient centers. Today, Dorchester General Hospital is known as University of Maryland Shore Medical Center at Dorchester ("UMSMC-D"). In 2006, SHS affiliated with the University of Maryland Medical System ("UMMS"), and, as of July 1, 2013, SHS joined with the University of Maryland Shore Medical Center at Chestertown ("UMSMC-C") and other facilities to become University of Maryland Shore Regional Health, Inc. ("UM SRH"). UM SRH is the sole corporate member of SHS.

II. UNIVERSITY OF MARYLAND SHORE REGIONAL HEALTH

The UM SRH network serves the five counties of the Mid-Shore region, which includes Caroline, Dorchester, Kent, Queen Anne's, and Talbot counties. Team members, consisting of more than 2,600 employees, a medical staff of 390, board members, and volunteers, work with various community partners to fulfill the organization's mission of Creating Healthier Communities Together.

A. Facilities and Services

UM SRH includes three hospitals — UMSMC-C, UMSMC-D, and UMSMC-E with 209 acute care beds, including a 20-bed acute rehabilitation unit at UMSMC-E and a 24-bed behavioral health unit at UMSMC-D. In addition to its three hospitals, UM SRH includes the University of Maryland Shore Emergency Center at Queenstown — Maryland's only rural freestanding emergency center, the University of Maryland Shore Nursing and Rehabilitation Center at Chestertown, and a broad array of inpatient and outpatient services in locations throughout the five-county region.

UM SRH offers specialty services for cancer care, surgery, pain management, diabetes management, wound healing, medical rehabilitation, behavioral health, joint replacement, digestive health, sleep disorders, and home health care. Cardiovascular and pulmonary services include testing and procedures, cardiac catheterization and an accredited cardio-pulmonary fitness and wellness program. Surgical services include minimally invasive and robotic assisted surgical procedures and an ambulatory surgery center in Easton and Queenstown.

UM SRH also includes a network of outpatient centers offering diagnostic imaging and laboratory testing, primary care and specialty treatment, and rehabilitation services in Caroline, Dorchester, Kent, Queen Anne's, and Talbot counties. In partnership with the University of Maryland Medical Center and the University of Maryland School of Medicine, UM SRH operates kidney transplant and dialysis vascular access clinics to help people who are candidates for kidney transplant and dialysis prepare for these treatments.

UM SRH's inpatient critical care services are supported by the UM eCare ICU telemedicine program that provides remote critical care physician and nursing expertise and monitoring of patients in the ICUs at all three UM SRH hospitals.

B. Physician Practices

UMSMC-C, UMSMC-D, and UMSMC-E have a unified medical staff called the UM SRH Medical Staff. It includes physicians, physicians' assistants, nurse midwives, and nurse practitioners. Physicians who practice at UMSMC- C, UMSMC-D, and UMSMC-E specialize in a full range of clinical specialties, including internal medicine, emergency medicine, cardiology, gastroenterology, oncology, pediatrics, pulmonology, radiology, orthopedics, obstetrics, gynecology, anesthesiology, surgery, neurology, infectious disease, physical medicine and rehabilitation, hospitalists' medicine, and ophthalmology.

University of Maryland Community Medical Group ("UMCMG") provides medical practice management for employed physicians and practices. UMCMG physicians provide primary care at offices in Easton, Chestertown, Centreville and Denton, as well as pediatric care at practices in Easton and Cambridge, and UMCMG Physicians also provide specialty care in otolaryngology, general surgery, endocrinology, psychiatry, obstetrics, gynecology, urology, neurosurgery, neurology, physical medicine and rehabilitation, and sleep medicine.

C. Honors and Accreditations

In addition to meeting all applicable Joint Commission standards, UMSMC-E maintains accreditation in many clinical areas, including diabetes education, stroke care, ultrasound and mammography, cardiovascular and pulmonary rehabilitation, clinical laboratory testing, blood bank, sleep medicine, and vascular and echocardiography testing. The Requard inpatient rehabilitation unit is also accredited by the Commission on Accreditation of Rehabilitation Facilities ("CARF"). Requard was accredited as of 2012 in both comprehensive rehabilitation and specifically for stroke rehabilitation. CARF is an independent, nonprofit accrediting body with a mission to promote the quality, value and optimal outcomes of rehabilitation services provided in hospitals and nursing homes.

In 2014, UMSMC-E achieved Magnet® reaccreditation for excellence in nursing services from the American Nurses Credentialing Center's Magnet Recognition Program. This was UMSMC-E's second consecutive time earning this achievement, which followed intensive preparation and documentation to demonstrate that the hospital provides the best nursing care, the highest quality patient care, and the most supportive and innovative working environment for nursing professionals.

The Commission on Cancer of the American College of Surgeons has granted a three-year reaccreditation with commendation to the Shore Regional Cancer Program in 2015. The Commission on Cancer accreditation program acknowledges cancer treatment facilities that deliver quality patient care with a focus on prevention, early diagnosis, pre-treatment evaluation, optimal treatment, rehabilitation, surveillance for recurrent disease, support services and end-of-life care. The Shore Regional Cancer Program, which includes the Requard Radiation Oncology Center, the Lenny Satchell Chemotherapy Suite, and the Shore Regional Health Clark Comprehensive Breast Center, combines sophisticated technology and skilled clinical practitioners and social workers who guide patients through diagnosis and treatment while providing the social and financial resources they need to transition to life as a cancer survivor.

The Cancer Program is also accredited by the American College of Radiology (2015) and by the National Accreditation Program for Breast Centers (2014), further signifying adherence to stringent quality and care requirements for cancer treatment.

In 2015, the Requard Center for Acute Rehabilitation earned a renewal of its three-year CARF accreditation. The Requard Center is part of a comprehensive network of rehabilitation services that include inpatient acute physical, occupational and speech therapy, and outpatient centers for continued treatment in Easton, Denton, Cambridge, and Queenstown. Physical therapists at the Balance Center in Cambridge assists physicians in the diagnosis and treatment of patients with balance problems associated with dizziness/vertigo, musculoskeletal disorders, and neurologic conditions. The Requard Center's 2012 CARF accreditation includes CIIRP (Comprehensive Integrated Inpatient Rehabilitation Program) and SSP (Stroke Specialty Program).

UMSMC-E is designated as a Primary Stroke Center by the Maryland Institute for Emergency Medical Management Systems. In 2016, the Primary Stroke Center earned a Silver Plus Achievement Award from the American Heart Association and American Stroke Association. The award recognizes hospitals that demonstrate compliance with the seven Get With The Guidelines® stroke achievement measures. The Silver Plus Achievement Award acknowledges that UMSMC-E has met the guidelines for providing the highest standards of stroke care for 12 consecutive months. The Stroke Center also earned the Target Stroke Honor Roll for meeting or exceeding the American Stroke Association's quality measures for timely treatment and outcomes.

The Joint Replacement Center at UMSMC-E is a CareFirst BlueCross BlueShield Blue Distinction Center for Knee and Hip Replacement. The specialty center is also a UnitedHealth Premium® Specialty Center for Total Joint Replacement. In addition to positive patient outcomes, the selection criteria used in evaluating the Joint Replacement Center for these distinctions were the experience, training, and number of cases performed by the center's orthopedic surgeons; the use of proven best medical practices, such as surgical checklists and other standardized processes to streamline patient care; and the preoperative education available to patients.

SHS won the 2012 Minogue Award for Safety Innovation from the Maryland Patient Safety Council.

In 2016, UMSMC-E was ranked by *US News and World Report* as the thirteenth best hospital in Maryland. (See http://health.usnews.com/best-hospitals/area/md).

D. Community Support

Volunteers from UMSMC-C, UMSMC-D, and UMSMC-E donate time, talent, and money that support programs and services made available to the community at the three UM SRH hospitals and at outpatient centers around the region.

III. THE UNIVERSITY OF MARYLAND MEDICAL SYSTEM

UMMS was created in 1984 when the state-owned University Hospital became a private, nonprofit organization. It has evolved into a regional healthcare system with academic, community and specialty service missions reaching every part of the state and beyond. UMMS's

impact on the health and well-being of Marylanders is significant by any measure. UMMS comprises 12 member hospitals whose affiliated physicians and care teams are dedicated to delivering world-class care. UMMS member hospitals employ nearly 24,000 people. The medical system has a combined total of 2,405 licensed beds and recorded 115,049 patient admissions in fiscal year 2015, along with 395,583 emergency visits and 1.5 million outpatient visits. The medical system and all member hospitals promote health and wellness outside of the walls of the member hospitals to improve the quality of life of the community. UMMS member hospitals partner with community organizations to build, train and support a strong workforce. UMMS also provided more than $345 million in community benefits in fiscal year 2015. These community services included medical education, subsidized programs, community funding, civic involvement, community service programs, and charity care reported annually on the Community Benefits Report.

UMMS includes the following institutions:

- The University of Maryland Medical Center ("UMMC") is the flagship of UMMS and the heart of the medical system's downtown Baltimore campus. The 772-bed hospital provides tertiary and quaternary care, with more intensive care beds than any hospital in the state and internationally recognized programs in trauma, cancer care, cardiac care, neurocare, women's and children's health, and organ and tissue transplantation. UMMC also provides comprehensive care for the West Baltimore community, in coordination with its second location, UMMC Midtown Campus. In addition to a house staff of 929 resident physicians, UMMC has 1,163 attending physicians who are faculty members at the UM School of Medicine.

    - University of Maryland Medical Center Midtown Campus, located in Baltimore's cultural center near the historic Mount Vernon neighborhood, provides access to a full range of medical and surgical care. The 187-bed UMMC Midtown Campus is a second location of UMMC.

- University of Maryland Baltimore Washington Medical Center offers innovative procedures and exceptional services for the Baltimore-Washington Corridor community. Since joining UMMS in 2000, the 303-bed medical center has continually been recognized as a leader in high quality patient care on an annual basis, with an active medical staff of more than 700.

- University of Maryland Rehabilitation & Orthopaedic Institute is Maryland's largest and most comprehensive rehabilitation and orthopaedic specialty hospital. Founded nearly 120 years ago, the 141-bed hospital today provides highly specialized care to people recovering from stroke and neurological diseases as well as spinal cord, brain or other traumatic injury. The hospital is a leader in neurological conditions, sports medicine, musculoskeletal disease, robotic technologies to improve movement, and research. As part of the University of Maryland Rehabilitation Network, the hospital is an integral component of UMMS, and the 200-member medical staff includes faculty physicians at the University of Maryland School of Medicine.

- University of Maryland Charles Regional Medical Center has provided excellence in health care for Charles County and the surrounding southern Maryland area

since 1939. The 110-bed hospital has an active medical staff of 167. Originally built in response to a devastating tornado, the hospital has a long tradition of serving the community and providing award-winning care for generations of families.

- UM Upper Chesapeake Health ("UM UCH") affiliated with UMMS in 2009. It includes two acute care hospitals — UM Upper Chesapeake Medical Center ("UM UCMC") in Bel Air and UM Harford Memorial Hospital ("UM HMH") in Havre de Grace — with a combined medical staff of 551 and 264 licensed beds. UM UCH operates the Upper Chesapeake Health Foundation, the Klein Ambulatory Care Center and two medical office buildings on its Bel Air campus. It also owns and operates the Senator Bob Hooper House, an assisted-living community specializing in hospice care in Forest Hill.

    - UM HMH in Havre de Grace is a non-profit acute care facility located in Havre de Grace, Maryland. UM HMH is an 83 licensed-bed facility.

    - UM UCMC in Bel Air is a 181 licensed-bed hospital that serves residents of northeastern Maryland.

- UM SRH is a regional, nonprofit, medical delivery care network formed on July 1, 2013, through the consolidation of two University of Maryland partner entities, Shore Health System and the former Chester River Health. With more than 2,600 employees, 390-member medical staff and hundreds of volunteers, UM SRH is the primary provider of healthcare services in the five-county Mid-Shore region, offering a full range of primary and specialty care services to more than 100,000 people.

    - UMSMC-E is a 132 licensed-bed hospital, which includes the 20-bed Requard Center for Acute Rehabilitation. The hospital serves the residents of Caroline, Dorchester, Talbot, Queen Anne's, and Kent Counties.

    - UMSMC-D is a 46-bed hospital, providing 24-hour emergency services. The hospital principally serves the residents of Dorchester County while also serving as the regional provider of inpatient adult acute behavioral health services.

    - UMSMC-C is a 26-bed acute care hospital located in rural Kent County; it serves residents of Kent and Queen Anne's counties. The hospital is affiliated with a 97-bed nursing and rehabilitation center.

- Mount Washington Pediatric Hospital specializes in family-centered treatment of children with serious, chronic and/or complex medical needs. The hospital is a jointly owned affiliate of UMMS and Johns Hopkins Medicine. Treating more than 8,000 patients a year on an inpatient and outpatient basis, the 102-bed post-acute hospital has locations in Baltimore and Prince George's County and a medical staff of 132.

- University of Maryland Community Medical Group ("UM CMG") was formed in 2015 for the purpose for establishing one consolidated medical group comprised of primary and specialty care physicians and advanced practice providers previously employed by the UMMS community hospitals.

- UMMS Health Plans is a new subsidiary of UMMS established in 2015 through the acquisition of Riverside Health, Inc. currently operating a Medicaid Managed Care Organization and Medicare Advantage HMO insurance products.

UMMS is governed by a board of directors and is neither owned by the State of Maryland nor governed by the University of Maryland. UMMC is the System's academic medical center, serving the region and Baltimore City with a full continuum of services.

IV. THE PROPOSED PROJECT

Today, UMSMC-E is a regional medical center. UMSMC-E's Primary Service Area ("PSA") includes ZIP Codes in Talbot, Dorchester, Caroline, and Queen Anne Counties, as does its Secondary Service Area ("SSA"). (See Figure 1) In fact, the majority of acute admissions to UMSMC-E come from outside of Talbot County.

The proposed project involves relocating the Hospital to a site approximately 3.5 miles north of the present location. The proposed new location is on Longwoods Road near the intersection of U.S. Route 50, as shown in Figure 2 below.

Figure 1
Primary and Secondary Service Areas—UMSMC-E
FY 2016

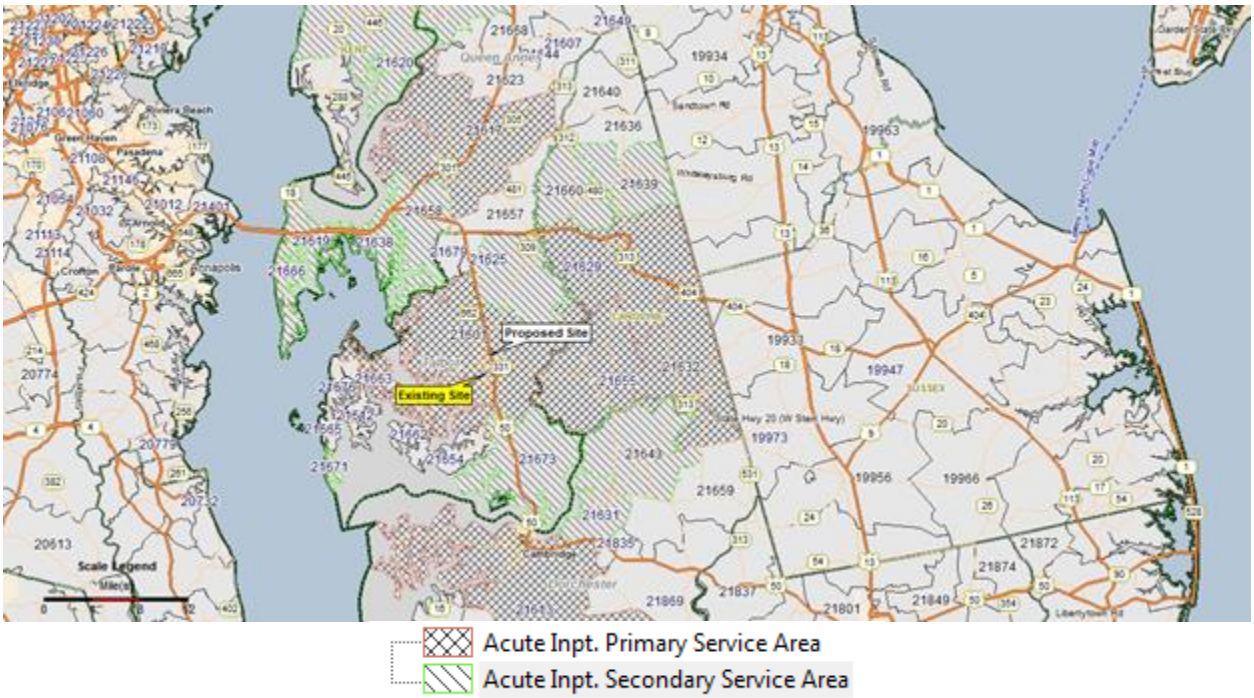
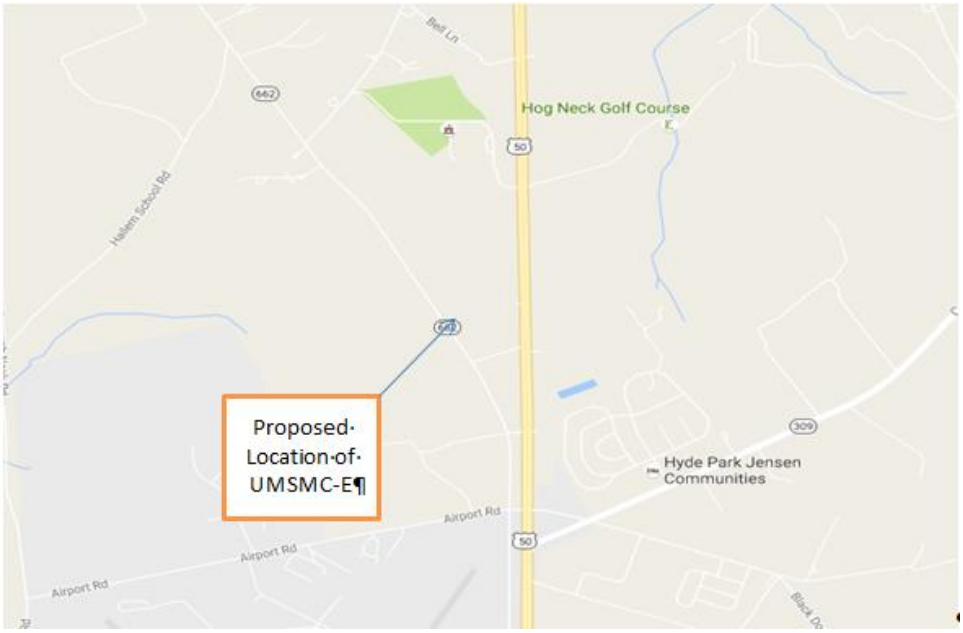


Figure 2
Location of Proposed Replacement Hospital



A. Summary of the Existing Hospital

The existing facility is comprised of four components from different eras. A small portion of the building was built in 1915. The majority of the building, including most of the inpatient units, was constructed in 1975. A smaller five story inpatient addition was added in 1982. Lastly, a one story ambulatory and emergency wing was constructed in 2006. However, the majority of the building was constructed in 1975 and 1982. (A diagram showing the existing building and the years when the different components were constructed is included in **Exhibit 3**.) As explained fully in the discussion of need in response to the need review criterion (COMAR 10.24.01.08G(3)(b)), the existing hospital building is aged and obsolete.

B. Detailed Description of the Replacement Hospital

The new facility will be located on approximately 200 acres at the intersection of Longwoods Road and Route 50, just north of the Easton Municipal Airport and adjacent to the Talbot County Community Center. The site is predominantly a "green-fields" site, not all of which will be used for the Hospital. The remainder of the parcel will be used for future development.

The replacement hospital is proposed to be licensed for 95 acute care beds, 14 special hospital rehabilitation beds, and 10 observation beds. The configuration of the acute care beds will be as follows: 77 MSGA beds, 16 obstetric beds, and two pediatric beds. The new facility will include six floors.

The first floor will include:

- Registration
- Lobby
- Patient Advocacy/Guest Relations
- Imaging
- Cardiovascular Services
- Emergency Department (28 treatment spaces)
- Observation Unit
- Outpatient Clinics
- Infusion Center
- Support Services
- Human Resources
- Kitchen
- Dining
- Gift Shop
- Security

The second floor will include:

- Sterile Processing
- Information/Technology
- Pharmacy / Labs
- Catheterization & E.P. Labs
- PACU
- Surgery Suite (six operating rooms)
- Prep/Stage II Recovery
- Nursing Administration
- Chapel

The third floor will include:

- MSGA Unit
- OB, Delivery, C-Section, and Nursery

The fourth floor will include:

- MSGA Unit including 2 Pediatric beds
- 14 Bed Requard (Rehabilitation) Unit
- Dialysis

The fifth floor will include:

- ICU
- MSGA Unit
- Respiratory Therapy

The sixth floor will include:

- Administrative Space

UM SRH is also planning to build a Medical Office Building ("MOB") adjacent to the replacement hospital on the same site as indicated on the Architectural Site Plan. The MOB is not part of this CON project. The MOB is planned to accommodate a full service lab, that will not only serve the replacement hospital but also other community based medical facilities located off campus. Space will also be allocated in the MOB for education and conference center functions. These flexible multi-purpose classrooms and conference rooms will support clinical staff needs as well as community services. The remaining area will accommodate a variety of professionals with medical office space.

UM SRH has not yet determined the use of the existing campus. The Planning Committee of the UM SRH Board has directed President and CEO Kenneth Kozel to convene a special study group to begin the process to analyze and direct the disposition of the existing hospital site. UM SRH plans to start the planning process this fall after submission of the modified CON application.

Complete the DEPARTMENTAL GROSS SQUARE FEET WORKSHEET (Table B) in the CON TABLE PACKAGE for the departments and functional areas to be affected.

9. CURRENT PHYSICAL CAPACITY AND PROPOSED CHANGES

Complete the Bed Capacity (Table A) worksheet in the CON Table Package if the proposed project impacts any nursing units.

10. REQUIRED APPROVALS AND SITE CONTROL

A. Site size: 199.123 acres. The total area conveyed under a deed from Talbot County to Shore Health System, Inc., dated October 23, 2015, is 223.3 acres in eleven parcels described in the deed. Four of the eleven parcels (199.123 acres) comprise the developable site. The remaining seven parcels (24.182 acres) will be transferred to an adjoining landowner or the State Highway Administration for storm water management or road right-of-way.

B. Have all necessary State and local land use approvals, including zoning, for the project as proposed been obtained? YES _____ NO __X__ (If NO, describe below the current status and timetable for receiving necessary approvals.)

The 2010 Town Comprehensive Plan designates the project site for future development as a "regional-scale", "campus-style facility" containing a new hospital, medical offices and related services. Similarly, the 2005 County Comprehensive Plan, as amended by County Resolution No. 159, designates the Property as a "primary growth area" or "Priority Development Area" appropriate for "a regional medical health care facility and related uses." The Talbot County Comprehensive Water and Sewer Plan designates the project site for immediate service by the Town of Easton's water and sewer systems. The project site was

annexed by the Town of Easton on January 21, 2010. The Town adopted a new, specialized zoning district that is intended to facilitate the development of a regional medical campus, including a hospital. Concurrent with annexation, the Town amended its zoning map to apply the new Regional Healthcare (RH) zoning district to the entire project site. Pursuant to Article 23A, Section 9(c) of the Annotated Code of Maryland, the Talbot County Council expressly approved the RH rezoning of the project site.

The proposed hospital is a permitted use under the RH zoning district. As such, the applicant must obtain site plan approval from the Town of Easton Planning Commission, but no variances, special exceptions, or legislative land use approvals are required for development of the project. The applicant negotiated a Developers Rights and Responsibilities Agreement (DRRA) with both the Town and County. The DRRA became effective on October 14, 2014 and is recorded among the Land Records of Talbot County, Maryland in Liber MAS 2304, folio 266. It contractually vests the applicant's rights in the existing RH zoning for a period of 30 years and memorializes the parties' responsibilities for infrastructure required for the project.

Compliance with Town and State forest conservation regulations and permitting for wetland impacts were address prior to the acquisition of the site. Sketch site plan approval for the prior project design was granted by the Easton Planning Commission on November 15, 2012. The revised plans that are the subject to this application will be reviewed by the Planning Commission to update the prior site plan approval. The Town site plan review process will be initiated shortly after submission of this modified CON application. The timeframe for completion of this process is dependent, in part, on the nature and extent of public participation and municipal comments and revisions, but is expected to require three to six months. Following reapproval of the sketch site plan by the Planning Commission, review and approval of the "development site plan" or construction drawings are completed by Town staff. All other State and local approvals incidental to the development approval process, such as stormwater management, sediment and erosion control, and local and State Highway Administration access permitting, will be obtained or modified concurrent with the site plan review process.

C. Form of Site Control (Respond to the one that applies. If more than one, explain.):

(1) Owned by: Shore Health System, Inc.
Please provide a copy of the deed. A copy of the deed dated October 23, 2015, which is recorded among the Land Records of Talbot County, Maryland in Liber MAS 2304, folio 432, is attached as **Exhibit 4**.

(2) Options to purchase held by: _____
Please provide a copy of the purchase option as an attachment.

(3) Land Lease held by: _____
Please provide a copy of the land lease as an attachment.

(4) Option to lease held by: _____
Please provide a copy of the option to lease as an attachment.

(5) Other: _____
Explain and provide legal documents as an attachment.

11. PROJECT SCHEDULE

In completing this section, please note applicable performance requirement time frames set forth at COMAR 10.24.01.12B & C. Ensure that the information presented in the following table reflects information presented in Application Item 7 (Project Description).

	Proposed Project Timeline	
Single Phase Project		
Obligation of 51% of capital expenditure from CON approval date	18	months
Initiation of Construction within 4 months of the effective date of a binding construction contract, if construction project	4	months
Completion of project from capital obligation or purchase order, as applicable	36	months
Multi-Phase Project for an existing health care facility (Add rows as needed under this section)		
One Construction Contract		months
Obligation of not less than 51% of capital expenditure up to 12 months from CON approval, as documented by a binding construction contract.		months
Initiation of Construction within 4 months of the effective date of the binding construction contract.		months
Completion of 1st Phase of Construction within 24 months of the effective date of the binding construction contract		months
Fill out the following section for each phase. (Add rows as needed)		
Completion of each subsequent phase within 24 months of completion of each previous phase		months
Multiple Construction Contracts for an existing health care facility (Add rows as needed under this section)		
Obligation of not less than 51% of capital expenditure for the 1st Phase within 12 months of the CON approval date		months
Initiation of Construction on Phase 1 within 4 months of the effective date of the binding construction contract for Phase 1		months
Completion of Phase 1 within 24 months of the effective date of the binding construction contract.		months

To Be Completed for each subsequent Phase of Construction		
Obligation of not less than 51% of each subsequent phase of construction within 12 months after completion of immediately preceding phase		months
Initiation of Construction on each phase within 4 months of the effective date of binding construction contract for that phase		months
Completion of each phase within 24 months of the effective date of binding construction contract for that phase		months

12. PROJECT DRAWINGS

A project involving new construction and/or renovations must include scalable schematic drawings of the facility at least a 1/16" scale. Drawings should be completely legible and include dates.

Project drawings must include the following before (existing) and after (proposed) components, as applicable:

A. Floor plans for each floor affected with all rooms labeled by purpose or function, room sizes, number of beds, location of bathrooms, nursing stations, and any proposed space for future expansion to be constructed, but not finished at the completion of the project, labeled as "shell space".

B. For a project involving new construction and/or site work a Plot Plan, showing the "footprint" and location of the facility before and after the project.

C. For a project involving site work schematic drawings showing entrances, roads, parking, sidewalks and other significant site structures before and after the proposed project.

D. Exterior elevation drawings and stacking diagrams that show the location and relationship of functions for each floor affected.

Applicant Response

See **Exhibit 2.**

13. FEATURES OF PROJECT CONSTRUCTION

A. If the project involves new construction or renovation, complete the Construction Characteristics (Table C) and Onsite and Offsite Costs (Table D) worksheets in the CON Table Package.

B. Discuss the availability and adequacy of utilities (water, electricity, sewage, natural gas, etc.) for the proposed project, and the steps necessary to obtain utilities. Please either provide documentation that adequate utilities are available or explain the plan(s) and anticipated timeframe(s) to obtain them.

Utilities (water, electricity, sewage, etc.) must be brought to the property line. Costs are included in the project budget to do so. The applicant has already begun speaking with the County and with utility companies to assure that this will be accomplished in time for construction of the new buildings.

A. Water: A new 12-inch water loop will be extended from the terminus of the existing water main at the Goldsborough Neck Road/Hailem School Road intersection along the easterly edge of Hailem School Road to the north end of the project site. The main will then follow the northerly property line to the proposed 400,000 gallon elevated water storage tank. A second new main will be extended up relocated Longwoods Road, following the northerly property line to the proposed water tank to complete the system loop. Two (2) independent service laterals to the hospital, one from the water main along the northern property line and a second from Longwoods Road, will enter the building at the central plant, near the truck loading dock. The proposed water system is designed to deliver 1,600 gpm at 20 psi for fire suppression with a 90-minute duration, as mandated by the University of Maryland Medical System insurance provider. The average daily domestic water demand is estimated to be 225,000 gpd.

B. Sanitary Sewer: The first phase of the sanitary sewer will consist of a conventional gravity sewer with pumping station and force main. The gravity sewer will consist of a PVC main and pre-cast concrete manholes set at intervals along the sewer main. Some manholes will be stubbed out for future use. The pump station will be constructed out of concrete and have two (2) pumps for pumping wastewater through a 12" force main to the Town of Easton's existing sewer collection system. Phase II will consist of a conventional gravity sewer that will receive wastewater from future facility and development around the hospital and will connect into the Phase I sewer system.

C. Storm Drains: Catch basins will be located as required to intercept surface runoff from the drives and parking lots. Roof drain connections are anticipated along the perimeter of the hospital. Pipe for storm drains will typically be smooth interior HOPE. Reinforced concrete pipe may be used in public rights-of-way as required by the Town of Easton and/or State of Maryland. The increase in hard surface areas will require the design and installation of a stormwater management system to reduce discharge rates to those presently exiting the site into the receiving channels. Water quality treatment will be provided onsite by BMPs (Best Management Practices) such as bio-retention areas, landscape infiltration, grass swales, and stormwater planters. Quantitative management and channel protection will be provided in extended detention dry ponds in compliance with Maryland Department of the Environment (MDE) and Federal Aviation Administration (FAA) stormwater requirements.

D. Natural Gas: Natural gas is provided by Easton Utilities (EU). EU has indicated there is sufficient pressure and quantity of natural gas to serve this project.

E. Electric Power: EU is the electric utility. As mentioned above, overhead electric lines will be relocated underground and adequate electric service will be brought to the hospital site.

F. Telephone: Verizon is the principal telephone service provider in this area. Existing overhead lines on existing Route 662 will be relocated underground along the revised Route 662 alignment and adequate phone service will be provided for the

hospital campus.

PART II - PROJECT BUDGET

Complete the Project Budget (Table E) worksheet in the CON Table Package.

Note: Applicant must include a list of all assumptions and specify what is included in all costs, as well the source of cost estimates and the manner in which all cost estimates are derived.

PART III - APPLICANT HISTORY, STATEMENT OF RESPONSIBILITY, AUTHORIZATION AND RELEASE OF INFORMATION, AND SIGNATURE

1. List names and addresses of all owners and individuals responsible for the proposed project.

   Owner: Shore Health System, Inc.
   Responsible Individual: Kenneth D. Kozel, MBA, FACHE, President and CEO, University of Maryland Shore Regional Health and Shore Health System, Inc.

   Address: 219 South Washington St., Easton, Maryland 21601

2. Is any applicant, owner, or responsible person listed above now involved, or has any such person ever been involved, in the ownership, development, or management of another health care facility? If yes, provide a listing of each such facility, including facility name, address, the relationship(s), and dates of involvement.

   The Responsible individual has been involved in the management of the following health care facilities:

President, UCH Hospitals and COO, Upper Chesapeake Health System ("UCH")	January 2011 – October 2011
Executive Vice President, Chief Operating Officer (UCH)	June 2009 – December 2010
Sr. Vice President and Chief Operating Officer (UCH)	May 2005 – June 2009
Vice President, Operations (UCH)	January 2004 – May 2005
Assistant Vice President, Ambulatory Services and Business Development (UCH)	July 2003 – January 2004
Director, Ambulatory Services (UCH) & Director, Laboratory Services, Harford Memorial Hospital ("HMH")	March 2002 – July 2003
Director, Laboratory Services (HMH)	February 1997 – March 2002

3. In the last 5 years, has the Maryland license or certification of the applicant facility, or the license or certification from any state or the District of Columbia of any of the facilities listed in response to Question 2, above, ever been suspended or revoked, or been subject to any disciplinary action (such as a ban on admissions)? If yes, provide a written explanation of the circumstances, including the date(s) of the actions and the disposition. If the applicant(s), owners, or individuals responsible for implementation of the Project were not involved with the facility at the time a suspension, revocation, or disciplinary action took place, indicate in the explanation.

   No

4. Other than the licensure or certification actions described in the response to Question 3, above, has any facility with which any applicant is involved, or has any facility with which any applicant has in the past been involved (listed in response to Question 2, above) ever received inquiries from a federal or any state authority, the Joint Commission, or other regulatory body regarding possible non-compliance with Maryland, another state, federal, or

Joint Commission requirements for the provision of, the quality of, or the payment for health care services that have resulted in actions leading to the possibility of penalties, admission bans, probationary status, or other sanctions at the applicant facility or at any facility listed in response to Question 2? If yes, provide, for each such instance, copies of any settlement reached, proposed findings or final findings of non-compliance and related documentation including reports of non-compliance, responses of the facility, and any final disposition or conclusions reached by the applicable authority.

No

5. Has any applicant, owner, or responsible individual listed in response to Question 1, above, ever pled guilty to, received any type of diversionary disposition, or been convicted of a criminal offense in any way connected with the ownership, development, or management of the applicant facility or any of the health care facilities listed in response to Question 2, above? If yes, provide a written explanation of the circumstances, including as applicable the court, the date(s) of conviction(s), diversionary disposition(s) of any type, or guilty plea(s).

No

One or more persons shall be officially authorized in writing by the applicant to sign for and act for the applicant for the project which is the subject of this application. Copies of this authorization shall be attached to the application. The undersigned is the owner(s), or Board-designated official of the applicant regarding the project proposed in the application.

I hereby declare and affirm under the penalties of perjury that the facts stated in this application and its attachments are true and correct to the best of my knowledge, information, and belief.

October 11, 2017
Date

Signature of Owner or Board-designated Official

President and CEO
Position/Title

Kenneth D. Kozel, MBA, FACHE
Printed Name

PART IV - CONSISTENCY WITH PROJECT REVIEW STANDARDS AND GENERAL REVIEW CRITERIA

INSTRUCTION: Each applicant must respond to all criteria included in COMAR 0.24.01.08G(3), listed below.

An application for a Certificate of Need shall be evaluated according to all relevant State Health Plan standards and other review criteria.

If a particular standard or criteria is covered in the response to a previous standard or criteria, the applicant may cite the specific location of those discussions in order to avoid duplication. When doing so, the applicant should ensure that the previous material directly pertains to the requirement and the directions included in this application form. Incomplete responses to any requirement will result in an information request from Commission Staff to ensure adequacy of the response, which will prolong the application's review period.

10.24.01.08G(3)(a). <u>The State Health Plan</u>.

To respond adequately to this criterion, the applicant must address each applicable standard from each chapter of the State Health Plan that governs the services being proposed or affected, and provide a direct, concise response explaining the project's consistency with each standard. <u>In cases where demonstrating compliance with a standard requires the provision of specific documentation, documentation must be included as a part of the application.</u>

Every acute care hospital applicant must address the standards in **COMAR 10.24.10: Acute Care Hospital Services**. A Microsoft Word version is available for the applicant's convenience on the Commission's website. Use of the *CON Project Review Checklist for Acute Care Hospitals General Standards* is encouraged. This document can be provided by staff.

Other State Health Plan chapters that may apply to a project proposed by an acute care hospital are listed in the table below. A pre-application conference will be scheduled by Commission Staff to cover this and other topics. It is highly advisable to discuss with Staff which State Health Plan chapters and standards will apply to a proposed project before application submission. Applicants are encouraged to contact Staff with any questions regarding an application.

COMAR 10.24.10. Acute Care Chapter

.04A. GENERAL STANDARDS

The following general standards encompass Commission expectations for the delivery of acute care services by all hospitals in Maryland. Each hospital that seeks a Certificate of Need for a project covered by this Chapter of the State Health Plan must address and document its compliance with each of the following general standards as part of its Certificate of Need application. Each hospital that seeks a Certificate of Need exemption for a project covered by this Chapter of the State Health Plan must address and demonstrate consistency with each of the following general standards as part of its exemption request.

Standard .04A (1) – Information Regarding Charges.

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

(a) Maintenance of a Representative List of Services and Charges that is readily available to the public in written form at the hospital and on the hospital's internet web site;

(b) Procedures for promptly responding to individual requests for current charges for specific services/procedures; and

(c) Requirements for staff training to ensure that inquiries regarding charges for its services are appropriately handled.

Applicant Response:

UMSMC-E has a written policy in place that meets the requirements of this standard. See **Exhibit 5.** This policy addresses all parts of this standard: procedures on maintenance of the Representative List of Services and Charges; procedures for responding to requests for information regarding current charges for specific services and procedures**;** and requirements for staff training on inquiries regarding charges for services.

The current list of representative services and charges is readily available to the public, both in written form at UMSMC-E and on the Hospital's website (http://umshoreregional.org/patients/insurance), it is also attached as **Exhibit 6.** The current list of charges was updated on June 30, 2016 and will be updated quarterly, as required.

Standard .04A(2) – Charity Care Policy.

Each hospital shall have a written policy for the provision of charity care for indigent patients to ensure access to services regardless of an individual's ability to pay.

(a) The policy shall provide:

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

(ii) Minimum Required Notice of Charity Care Policy.

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

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

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

Applicant Response:

UMSMC-E provides inpatient and other care to all patients regardless of the ability to pay. A copy of the hospital's Financial Assistance Policy is attached as **Exhibit 7**. Notices regarding the availability of charity care at the hospital are posted in the Emergency Department and in the Admission and Business Offices. A copy of that notice is attached as **Exhibit 8**. An annual notice is published in the following newspapers: *The Star Democrat, The Bay Times Record, Kent County News, Dorchester Star, and Record Observer*. See **Exhibit 9**. Each patient or patient representative is advised of UMSMC-E's charity care policy at the time of admission or outpatient registration. The hospital's Financial Assistance Policy specifically states that it will make a determination of probable eligibility within two (2) business days following a patient's request for charity care services, application for medical assistance, or both. Financial counselors assist individuals to prepare and file all documents required to seek charity care at the Hospital.

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

Applicant Response:

As shown in Table 1 below, UMSMC-E is not in the bottom quartile in terms of percentage of Charity Care to Total Operating Expenses in the State of Maryland.

Table 1
HSCRC Community Benefit Report, Data Excerpts
FY2014

	Total Charity Care	Total Operating Expenses	Percent
Bon Secours	$12,073,632	$119,439,002	10.11%
Garrett County Hospital	$3,225,760	$38,194,377	8.45%
Doctors Community	$14,726,686	$176,796,204	8.33%
UMMC Midtown Campus	$14,755,634	$178,869,000	8.25%
Holy Cross Hospital	$30,739,060	$390,575,586	7.87%
Dimensions Prince Georges Hospital Center	$15,861,400	$217,477,100	7.29%
Adventist Washington Adventist	$14,404,325	$217,791,712	6.61%
Calvert Hospital	$7,010,751	$119,481,772	5.87%
Mercy Medical Center	$24,885,600	$426,907,600	5.83%
UM Shore Medical Center at Dorchester	$2,305,000	$39,674,000	5.81%
Western Maryland Health System	$14,413,981	$282,308,921	5.11%
Frederick Memorial	$14,227,000	$319,313,000	4.46%
UM Shore Medical Center at Chestertown	$2,067,000	$47,354,000	4.36%
Dimensions Laurel Regional Hospital	$4,507,400	$104,245,600	4.32%
UM Harford Memorial	$3,428,179	$80,416,000	4.26%
UMMC	$55,444,257	$1,305,636,000	4.25%
Johns Hopkins Bayview Medical Center	$22,183,000	$530,603,000	4.18%
Ft. Washington	$1,614,129	$38,620,727	4.18%
UM Baltimore Washington	$13,307,038	$319,031,000	4.17%
McCready	$572,384	$14,682,491	3.90%
MedStar Harbor Hospital	$6,997,842	$189,700,114	3.69%
UM Shore Medical Center at Easton	$5,828,000	$160,829,000	3.62%
Peninsula Regional	$13,261,500	$368,170,415	3.60%
Atlantic General	$3,594,293	$101,574,098	3.54%
Shady Grove	$10,015,261	$295,844,877	3.39%
MedStar Union Memorial	$13,169,128	$394,669,299	3.34%
MedStar Montgomery General	$4,722,141	$141,655,632	3.33%
St. Agnes	$11,750,468	$392,471,132	2.99%
Lifebridge Northwest Hospital	$6,203,971	$212,164,000	2.92%
MedStar Franklin Square	$13,581,700	$469,241,214	2.89%
Meritus Medical Center	$7,993,597	$292,347,127	2.73%
MedStar St. Mary's Hospital	$3,430,456	$131,503,457	2.61%

	Total Charity Care	Total Operating Expenses	Percent
Howard County Hospital	$6,010,720	$231,080,000	2.60%
MedStar Good Samaritan	$7,581,945	$303,307,419	2.50%
UM St. Joseph	$7,375,769	$310,933,000	2.37%
UM Upper Chesapeake	$4,956,053	$236,718,000	2.09%
Union Hospital of Cecil County	$3,064,396	$146,635,757	2.09%
Suburban Hospital	$4,501,300	$225,204,531	2.00%
LifeBridge Sinai	$12,880,700	$669,579,000	1.92%
UM Charles Regional Medical Center	$1,864,000	$108,755,000	1.71%
Johns Hopkins Hospital	$32,721,000	$1,928,280,000	1.70%
MedStar Southern Maryland	$3,582,453	$219,466,790	1.63%
Carroll Hospital Center	$3,355,681	$209,384,000	1.60%
GBMC	$4,337,420	$381,697,000	1.14%
Anne Arundel Medical Center	$5,688,100	$514,545,000	1.11%

Source: HSCRC http://www.hscrc.state.md.us/init_cb.cfm

Standard .04A(3) – Quality of Care.

An acute care hospital shall provide high quality care.

(a) Each hospital shall document that it is:

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

(ii) Accredited by the Joint Commission; and

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

Applicant Response:

UMSMC-E is licensed by the State of Maryland. Its license is attached as **Exhibit 10**.

UMSMC-E is accredited by the Joint Commission. Its accreditation certificates are attached as **Exhibit 11.**

UMSMC-E is in compliance with the Conditions of Participation of the Medicare and Medicaid programs.

(b) A hospital with a measure value for a Quality Measure included in the most recent update of the Maryland Hospital Performance Evaluation Guide that falls within the bottom quartile of all hospitals' reported performance measured for that Quality Measure and also falls

below a 90% level of compliance with the Quality Measure, shall document each action it is taking to improve performance for that Quality Measure.

Applicant Response:

As noted in the Commission's recent decision in the CON review for the replacement and relocation of Washington Adventist Hospital, "subpart (b) of this standard is essentially obsolete in that it requires an improvement plan for any measure that falls within the bottom quartile of all hospitals' reported performance on that measure as reported in the most recent Maryland [Hospital Evaluation Performance Guide]." *In re Washington Adventist Hospital*, Docket No. 13-15-2349, Decision at 19-20. The Commission's new format for the Hospital Guide for Maryland Health Care Quality Reports does not report quality measures in a manner that shows hospitals' relative scores in quartiles, nor is it easy to determine the 90% level of compliance. Instead, the new Hospital Guide shows the hospital's rating as "below average," "average," or "better than average," and shows the hospital's risk-adjusted rate.

Attached as **Exhibit 12** is a chart showing the quality measures for UMSMC-E in the Commission's most recent Hospital Guide (accessed on 5/24/2016), which is found on the Maryland Health Care Quality Reports' website. UMSMC-E is ranked as "At average" in 60 categories, as "Better than average" in 19 categories, and as "Below average" in 12 categories. There are also 17 categories for which there is "Not enough data to report" a ranking. The exhibit also describes the actions UMSMC-E is taking to improve performance for indicators for which it falls in the "Below average" category.

COMAR 10.24.10 ACUTE CARE CHAPTER

.04B. PROJECT REVIEW STANDARDS

Standard .04B(1) – Geographic Accessibility

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

Applicant Response:

In the original CON application, the applicant initially considered four alternative sites. As part of its analysis of the sites, the applicant compared the driving time from each of the ZIP Codes in all five counties to each site. In that analysis, the average drive time to the proposed site was estimated to be shorter than the average drive time to UMSMC-E's existing location. In July 2016, the applicant updated its drive time analysis based on more recent data and the updated analysis shows that the average drive time to the proposed site is still estimated to be shorter than the average drive time to UMSMC-E's existing location.

To address the requirement that travel time be addressed based on the hospital's "likely service area population," UMSMC-E performed a study using Google Maps to determine the travel time from each ZIP Code in its service area to each of the four alternative sites. For the proposed site, the Talbot County Community Center (located on the adjacent property) was used as a proxy, as an address does not yet exist for the proposed hospital.

UMSMC-E's PSA includes seven ZIP Codes, and its SSA includes twelve ZIP Codes. See Table 2 below.

Table 2
UMSMC-E Primary and Secondary Service Areas
FY 2016

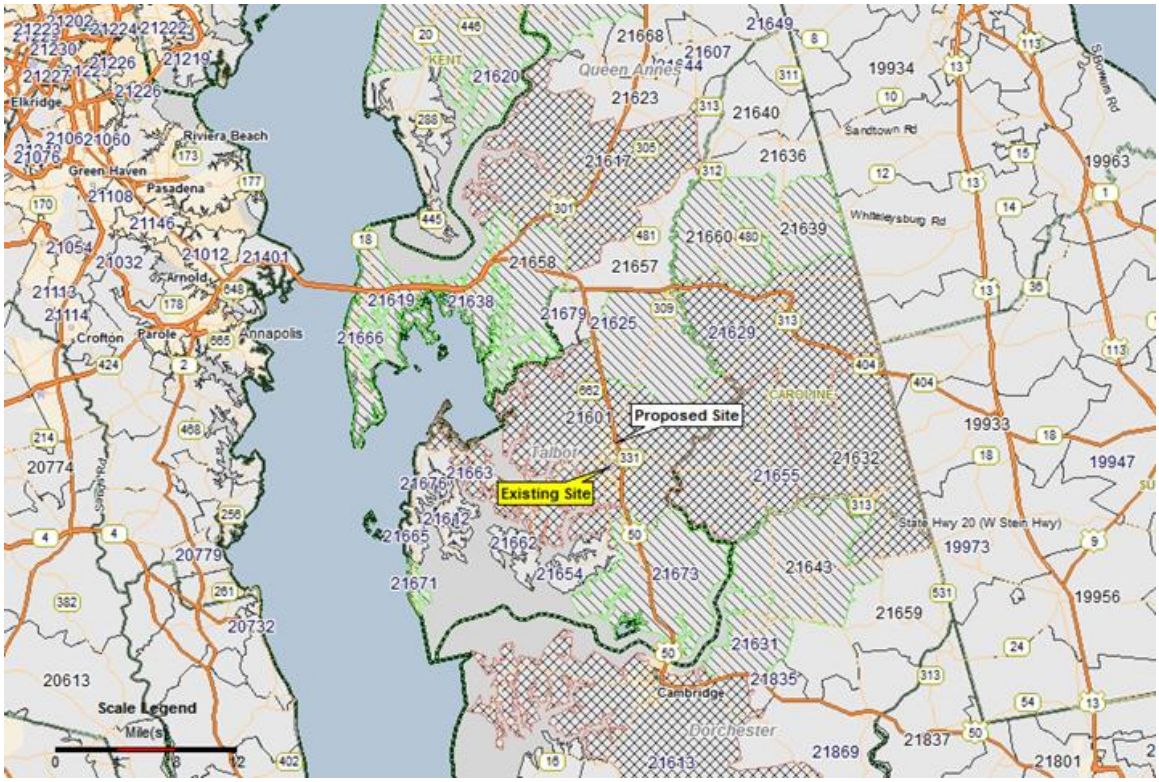
Primary Service Area			
21601	1,862	25.7%	25.7%
21629	683	9.4%	35.1%
21613	629	8.7%	43.7%
21632	334	4.6%	48.3%
21655	330	4.5%	52.9%
21663	287	3.9%	56.8%
21617	279	3.8%	60.7%

Secondary Service Area			
21643	263	3.6%	64.3%
21639	263	3.6%	67.9%
21660	218	3.0%	70.9%
21673	198	2.7%	73.6%
21625	171	2.4%	76.0%
21620	129	1.8%	77.8%
21638	124	1.7%	79.5%
21666	110	1.5%	81.0%
21658	86	1.2%	82.1%
21619	84	1.2%	83.3%
21631	74	1.0%	84.3%
21671	68	0.9%	85.2%
All Other ZIP Codes	1,071	14.8%	100.0%
TOTAL	7,257		

Source: UMSMC-E

The Service Areas are shown in Figure 3.

Figure 3
Primary and Secondary Service Areas—UMSMC-E
FY 2016



To obtain the average drive time to each site in minutes, the applicant first determined the drive time that Google Maps estimated from the Post Office in each ZIP Code listed above to each site. UMSMC-E then multiplied the drive times by the 2016 and 2021 population in each ZIP Code, according to Claritas data, to obtain the weighted average drive time. The products of the drive times for the population for each ZIP Code were summed and divided by the total service area population to obtain the total weighted average drive time to each site. This analysis is shown in **Exhibit 13**.

The total weighted average drive time for the 2021 service area population to each site is summarized below. As this summary shows, the proposed site has a lower average drive time than two of the other sites, and a slightly higher drive time (by 0.1 minutes) than one of the other sites.

Table 3
Weighted Drive Times for 2021
Service Area Population

	219 South Washington St., Easton (Existing Site)	Easton Bypass & Oxford Rd., Easton 21601	10028 Ocean Gateway (Community Center) Easton 21601 (Proposed Site)	Route 50 and 404, Wye Mill 21679
Average Drive Time in Minutes	27.4	29.00	26.2	26.1

When the travel times were multiplied by the 2021 service area population, the travel time savings associated with the proposed site were significant. For example, in total, the proposed site would save 205,941 minutes (or 3,432 hours) of drive time compared to the existing site. (In Table 3, 4,702,333 minutes for the service area population to the existing site minus 4,496,392 minutes to the proposed site = 205,941 person minutes; 205,941/60 minutes per hour = 3,432 hours.)

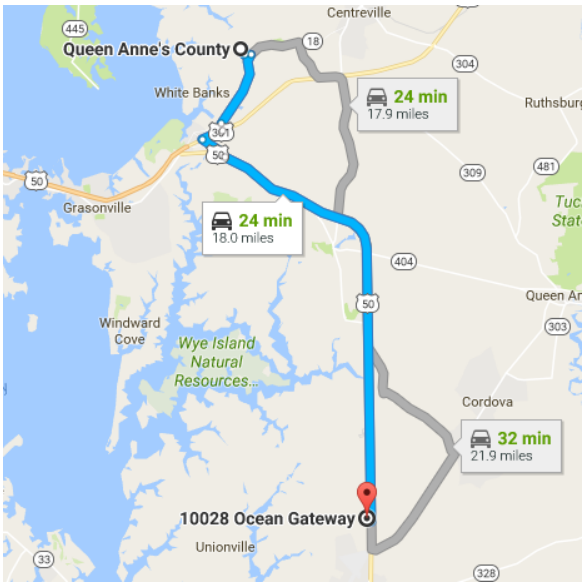
When the applicant performed this same analysis for the original CON application based on 2012 and 2017 population data, the total weighted average drive time to the proposed site was slightly lower than to the other three sites based on the 2017 service population. Below are the results of the original drive time analysis based on the 2017 service area data.

Table 4
Weighted Drive Times for 2017
Service Area Population

	219 South Washington St., Easton (Existing Site)	Easton Bypass & Oxford Rd., Easton 21601	10028 Ocean Gateway (Community Center) Easton 21601 (Proposed Site)	Route 50 and 404, Wye Mill 21679
Average Drive Time in Minutes	24.00	25.60	23.29	24.39

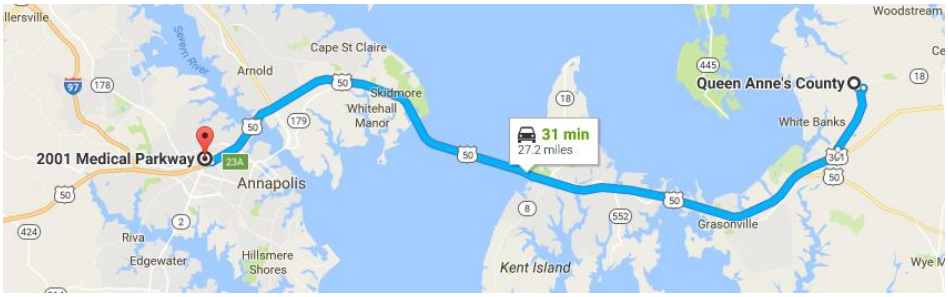
In addition, the proposed site makes acute inpatient services available at UMSMC-E within 30 minutes for more people than is the case at the existing location. According to Nielsen data, the estimated population living within a 30 minute driving time of UMSMC-E's current site is 105,398 in 2016 and 106,788 in 2021. Claritas estimates that the population living with a 30 minute driving time of UMSMC-E's proposed site is 111,621 in 2012 and 113,346 in 2021. Of course, the applicant recognizes that some portions of this population have access to other area hospitals, as well. However, UMSMC-E is the only hospital in Talbot County, and there are no hospitals located in Caroline and Queen Anne's Counties. UMSMC-E is the closest hospital for residents of both Caroline and Queen Anne's Counties.

For example, according to Google Maps, the proposed site is 18 miles and 24 minutes from "Queen Anne's County" (the precise location in Queen Anne's County was designated by Google Maps).



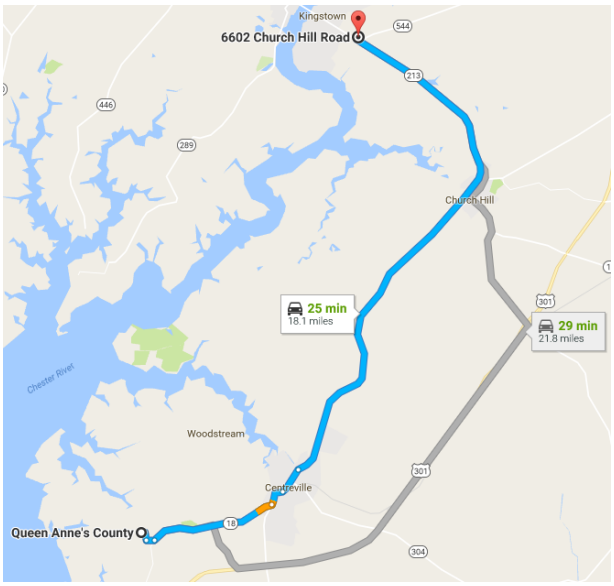
Source: Google Maps

Anne Arundel Medical Center is 27.2 miles and 31 minutes from the same site, and requires traversing the Chesapeake Bay Bridge (with tolls on the return trip).



Source: Google Maps

UMSMC-C is 18.1 miles and 25 minutes from the same site.



Source: Google Maps

These travel times demonstrate that the proposed site will be the closest hospital for Queen Anne's County. The same type of analysis similarly shows that the proposed site will be the closest Maryland hospital for Talbot County and for Caroline County residents as well.

Standard .04B(2) – Identification of Bed Need and Addition of Beds

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

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

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

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

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

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

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

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

Applicant Response:

UMSMC-E is currently licensed to operate 112 acute care beds in FY2017, including 87 MSGA beds, 17 obstetrical beds, 8 pediatric beds. UMSMC-E proposes to reduce the number of acute care beds at the replacement hospital and operate a total of 95 acute care beds: 77 MSGA beds, 16 obstetrical beds, and two pediatric beds. Since UMSMC-E's "total bed capacity" will not exceed "the most recent annual calculation of bed capacity," the proposed project is consistent with Subsection (c)(i) of this standard. Decreasing MSGA bed capacity at the replacement hospital by 17 MSGA beds (to 95 MSGA beds) is also consistent with Subsection (c)(ii) of this standard because the minimum jurisdictional MSGA bed need for Talbot County in 2022 is 91 MSGA beds. See 41 *Maryland Register* 356-57 (March 7, 2014). Finally, in terms of pediatric beds, Subsection (c) of this standard is inapplicable as UMSMC-E is not proposing to add pediatric beds.

MSGA Bed Need Calculations

The applicant utilized 2015 Health Services Cost Review Commission ("HSCRC") inpatient data to project the need for MSGA beds. The Primary (ZIP Codes contributing the top 60% of discharges) and the Secondary (ZIP Codes contributing the next 25% of discharges) MSGA Service Areas are shown in Table 5.

Table 5
UMSMC-E's MSGA
Primary and Secondary Service Areas
2015

ZIP Code	Age 15+ Discharges	Cumulative %
21601	1,512	28.5%
21629	478	37.5%
21613	341	43.9%
21655	258	48.7%
21632	237	53.2%
21663	236	57.6%
21660	191	61.2%
21643	176	64.5%
21639	175	67.8%
21617	166	70.9%
21673	119	73.2%
21638	104	75.1%
21625	104	77.1%
21666	85	78.7%
21620	72	80.0%
21658	71	81.4%
21662	64	82.6%
21654	63	83.8%
21619	60	84.9%
21671	55	85.9%
Subtotal	4,566	
198 Other Zip Codes	748	
Total	**5,314**	

Source: HSCRC Discharge Database

The aggregate of both the Primary and Secondary MSGA Service Areas will be referred to as UMSMC-E's MSGA Service Area.

The applicant then counted the number of discharges by age cohort (15-64, 65-74, and 75+) by ZIP Code in UMSMC-E's MSGA Service Area at any Maryland hospital and, also, the number of discharges at UMSMC-E. These are shown in Table 6.

Table 6
MSGA Discharges
UMSMC-E's MSGA Service Area
By ZIP Code and Age Cohort
2015

All Discharges 2015 from Service Area					UMSMC-E Discharges 2015 from Service Area						
Zip Code	15-64	65-74	75+	Grand Total	Zip Code	15-64	65-74	75+	Grand Total	Cum. %	Market Share
21601	844	469	901	2,214	21601	458	307	747	1,512	28.5%	68.3%
21629	382	164	223	769	21629	182	110	186	478	37.5%	62.2%
21613	1,141	480	620	2,242	21613	172	76	92	341	43.9%	15.2%
21655	212	82	106	401	21655	106	64	87	258	48.7%	64.3%
21632	268	82	97	446	21632	131	45	62	237	53.2%	53.2%
21663	104	89	159	352	21663	46	58	132	236	57.6%	67.0%
21660	159	68	89	316	21660	75	37	79	191	61.2%	60.4%
21643	292	112	143	547	21643	83	40	53	176	64.5%	32.1%
21639	177	54	67	299	21639	86	36	52	175	67.8%	58.5%
21617	313	159	179	651	21617	70	34	62	166	70.9%	25.5%
21673	109	47	52	208	21673	51	30	38	119	73.2%	57.2%
21638	168	87	106	360	21638	44	20	41	104	75.1%	28.9%
21625	92	64	29	184	21625	40	41	24	104	77.1%	56.6%
21666	459	214	201	874	21666	39	16	30	85	78.7%	9.7%
21620	543	272	503	1,318	21620	31	20	21	72	80.0%	5.5%
21658	106	74	64	243	21658	29	18	25	71	81.4%	29.3%
21662	24	35	31	91	21662	16	20	27	64	82.6%	70.2%
21654	27	36	44	107	21654	14	14	35	63	83.8%	58.8%
21619	223	104	177	504	21619	12	10	28	60	84.9%	11.9%
21671	32	23	33	88	21671	17	13	25	55	85.9%	62.5%
Total	**5,674**	**2,716**	**3,823**	**12,213**		**1,701**	**1,010**	**1,845**	**4,566**		

Source: HSCRC Discharge Database

From these data, the applicant calculated bed need using the following methodology:

1. For each ZIP Code, the applicant ordered population data from Nielsen for 2010, 2016 and 2021. The applicant then calculated the Compound Average Growth Rate ("CAGR") for the difference between 2010 and 2016 for each age cohort to calculate the 2015 population. The applicant also calculated the CAGR for the difference between 2016 and 2021. The applicant used this CAGR to calculate the projected population in 2024.

2. The applicant calculated the 2015 use rates that the ZIP Code populations experienced to all hospitals by age cohort (15-64, 65-74, and 75+) by dividing the number of discharges in 2015 by the 2015 population.

3. The applicant applied these use rates to the 2024 population by ZIP Code and age cohort to project the number of discharges from each ZIP Code in 2024.

4. The applicant summed the total number of projected 2024 discharges of all of the age cohorts by ZIP Code.

5. The applicant applied a reduction in discharges for population health efforts and Potentially Avoidable Discharges. The applicant projects that there will be a 5.79% reduction in discharges from all ZIP Codes by 2024. The reduction is based on UMSMC-E's current level of PAUs and efforts to support reductions in Medicare Total Cost of Care. The reduction based on this resulted in an "Adjusted 2024 Discharges" to all hospitals from each ZIP Code.

6. The applicant applied UMSMC-E's 2015 market share that it had in each ZIP Code to the Adjusted 2024 Discharges to project the number of 2024 discharges that will occur at UMSMC-E.

7. Since these ZIP Codes comprise UMSMC-E's Primary and Secondary Service Areas (85.9% of UMSMC-E's 2015 total MSGA discharges), the applicant adjusted the projected discharges to account for out of Service Area discharges by dividing the Service Area discharges by .859. This resulted in a subtotal of all UMSMC-E projected MSGA discharges.

8. UMSMC-E reflected the recapture of some market shift that it has lost over the past five years in service lines that were affected by the loss of physicians. UMSMC-E projects to recapture a small number of discharges (a total of 143) in its service area in six specialties as outlined below.

Orthopedic Surgery	80
Gastroenterology	22
Myocardial Infarction	16
Invasive Cardiology	13
Endocrinology	8
Orthopedics	4
Total	143

These 143 cases were added to the 2024 subtotal of all UMSMC-E projected MSGA discharges, resulting in the "Adjusted Subtotal 2024 Discharges."

9. UMSMC-E continues to focus on reducing the ALOS at the current and new facility. The projections reflect a reduced 2015 MSGA Average Length of Stay ("ALOS") of 4.17 days to bring the UMSMC-E ALOS in line with the projected statewide case mix adjusted ALOS. This reduction was 12.65%, resulting in a projected 3.64 day ALOS.

10. The applicant applied the Projected ALOS to the Adjusted Subtotal 2024 Discharges to project the Subtotal 2024 Patient Days.

11. The applicant added the number of PCI related patient days that would not have been reflected in the 2015 data. Specifically, the applicant added 223 PCI discharges and assumed a two day ALOS, resulting in 446 additional patient days.

12. The applicant summed the total number of 2024 projected patient days.

13. The applicant divided the total number of 2024 projected patient days by 365 to obtain the Average Daily Census ("ADC"). This resulted in an ADC of 57.3.

14. The applicant divided the ADC by the State Health Plan Jurisdictional Minimum Occupancy Rate (75%) for hospitals with an ADC of 50-99, as shown on page 29 of the State Health Plan For Facilities And Services: Acute Care Hospital Services (COMAR 10.24.10)

These projections are shown in **Exhibit 14**. They result in a projected need for 76.4 MSGA beds. UMSMC-E is proposing 77 MSGA beds.

Pediatric Bed Need Calculations

The applicant utilized 2015 HSCRC inpatient data to project the need for Pediatric beds. The Primary (ZIP Codes contributing the top 60% of discharges) and the Secondary (ZIP Codes contributing the next 25% of discharges) Pediatric Service Areas are shown in Table 7.

Table 7
UMSMC-E's Pediatric
Primary and Secondary Service Areas
2015

ZIP Codes	Age 0-14 Discharges	Cumulative %
21601	28	21.4%
21613	27	42.1%
21625	3	47.9%
21629	8	53.6%
21632	6	57.9%
21639	6	62.1%
21640	3	66.4%
21643	6	70.0%
21649	5	73.6%
21651	3	76.4%
21652	3	78.6%
21655	4	80.7%
21660	5	82.9%
21673	8	85.0%
18 Other ZIP Codes	20	
Total	**133**	

The aggregate of both the Primary and Secondary Pediatric Service Areas will be referred to as UMSMC-E's Pediatric Service Area.

The applicant then counted the number of discharges by ZIP Code in UMSMC-E's Pediatric Service Area at any Maryland hospital and, also, the number of discharges at UMSMC-E. These are shown in Table 8.

Table 8
Pediatric Discharges
By ZIP Code
2015

All Discharges 2015 from Service Area		UMSMC-E Discharges 2015 from Service Area			
ZIP Codes	Age 0-14 Discharges	ZIP Codes	Age 0-14	Cumulative %	Market Share
21601	59	21601	28	21.4%	47.8%
21613	76	21613	27	42.1%	35.9%
21625	9	21625	3	47.9%	32.1%
21629	33	21629	8	53.6%	23.3%
21632	21	21632	6	57.9%	27.5%
21639	18	21639	6	62.1%	32.1%
21640	5	21640	3	66.4%	58.7%
21643	18	21643	6	70.0%	32.1%
21649	7	21649	5	73.6%	70.3%
21651	12	21651	3	76.4%	24.0%
21652	3	21652	3	78.6%	100.0%
21655	14	21655	4	80.7%	27.5%
21660	9	21660	5	82.9%	54.2%
21673	18	21673	8	85.0%	43.1%
TOTAL	**300**		**113**		

Source: HSCRC Discharge Database

From these data, the applicant calculated bed need using the following methodology:

1. For each ZIP Code, the applicant ordered population data from Nielsen for 2010, 2016 and 2021. The applicant then calculated the Compound Average Growth Rate ("CAGR") for the difference between 2010 and 2016 to calculate the 2015 population. The applicant also calculated the CAGR for the difference between 2016 and 2021. The applicant used this CAGR to calculate the projected population in 2024.

2. The applicant calculated the 2015 use rates that the ZIP Code populations experienced to all hospitals by age cohort (0-14).

3. The applicant applied these use rates to the 2024 population by ZIP Code and age cohort to project the number of discharges from each ZIP Code in 2024.

4. The applicant summed the total number of projected 2024 discharges by ZIP Code.

5. The applicant applied UMSMC-E's 2015 market share that it had in each ZIP Code to the Adjusted 2024 Discharges to project the number of 2024 discharges that will occur at UMSMC-E.

6. Since these Zip Codes comprise UMSMC-E's Primary and Secondary Service Areas (85.0% of UMSMC-E's 2015 total Pediatric discharges), the applicant adjusted the projected discharges to account for out of Service Area discharges by dividing the Service Area discharges by 0.85. This resulted in a subtotal of all UMSMC-E projected Pediatric discharges.

7. The applicant applied the 2015 ALOS to the Subtotal 2024 Discharges to project the 2024 Patient Days.

8. The applicant divided the total number of 2024 projected patient days by 365 to obtain the Average Daily Census ("ADC"). This resulted in an ADC of 0.9.

9. The applicant divided the ADC by the State Health Plan Jurisdictional Minimum Occupancy Rate (50%) for hospitals with an ADC of 0-6, as shown on page 29 of the State Health Plan For Facilities And Services: Acute Care Hospital Services (COMAR 10.24.10)

These projections are shown in **Exhibit 15**. They result in a projected need for 1.7 Pediatric beds. The applicant is proposing 2 Pediatric beds at UMSMC-E.

Standard .04B(3) – Minimum Average Daily Census for Establishment of a Pediatric Unit

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

(a) The hospital is located more than 30 minutes travel time under normal driving conditions from a hospital with a pediatric unit; or

(b) The hospital is the sole provider of acute care general hospital services in its jurisdiction.

Applicant Response:

Not applicable.

Standard .04B(4) – Adverse Impact

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

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

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Applicant Response:

As part of a partial rate application to be filed with the HSCRC, the applicant is requesting an increase in rates equal to approximately 100% of the increase in capital costs (depreciation and interest) plus markup associated with the proposed project.

The total cost of the project is $349.9 million of which $285.8 million are depreciable assets and $59.2 million represents capitalized interest and a debt service reserve fund investments. $311.0 million of the depreciable assets will be funded with proceeds from the issuance of tax exempt bonds. A full year of depreciation and interest expense (i.e. capital costs) related to the project are projected to equal $31.3 million in FY 2023 with the opening of the new hospital facility. The project is scheduled to open in early summer of calendar year 2022. Shore Health will experience a half year of depreciation in FY 2022.

Depreciation expense was calculated in accordance with GAAP using the straight line half year convention depreciation methodology by major asset category.

Table 9
UMSMC-E Projected Capital Costs

	FY 2019-FY2022 Total Project Cost $ in 000's
Uses of Capital	
UMSMC-E Build & Fit-Out:	
Planning and Design	$9,000.0
Land Acquisition & Site Development	43,055.8
Construction	170,951.7
Medical Equipment	43,884.7
Information Technology	15,930.1
Other	3,650.0
Subtotal:	286,472.3
Capitalized Interest	39,658.0
Debt Service Reserve Fund	19,586.0
Other Costs (Financing, consultants)	4,188.2
Total Project Cost	**$349,904.5**

Effective July 1, 2021, UMSMC-E's revenue reflects inclusion of $11.2 million or 3.8% related to the capital project. This adjustment reflects the half year of depreciation associated with the project which is scheduled to open on June 1, 2022. An additional $27.6 million or 8.8% is added to the rates effective July 1, 2022 in conjunction with incremental interest expense and a full year of depreciation expense. These amounts reflect actual project capital costs plus a 1.2365 markup to reflect UMSMC-E's actual payer mix and corresponding deductions from revenue.

In the HSCRC's most recent, published Reasonableness of Charges Report ("ROC") from spring 2011, UMSMC-E was identified as being 3.0% below the average of its Peer Group.

Because HSCRC has not published an updated ROC in more than five years, UMSMC-E has estimated the ROC results for FY 2015 following the same assumptions of the spring 2011 ROC but adjusting volumes to ECMADs. These results are shown below in Table 10.

Table 10
UMSMC-E's Most Recent ROC Performance

Date of ROC	% Below Peer Group
Spring 2011	3.00% Below
FY 2015 Projected ROC	9.87% Above

Because UMSMC-E was above its Peer Group average in the ROC, the calculation of UMSMC-E's FY2015 Debt to Capitalization and comparison to the average of its Peer Group is presented below in Table 11. The amounts for Memorial of Easton and Dorchester General Hospital are considered a single entity in the audited Financial Statements therefore the combined amount is reflected for each of these facilities.

Table 11
UM Shore Medical Center at Easton
Comparison to Peer Group Debt to Capitalization
FY 2015
($ in thousands)

Hospital	Long Term Debt	Fund Balance	Debt to Capitalization
Anne Arundel Medical Center	$338,285	$388,554	0.87
Atlantic General Hospital	22,491	51,465	0.44
Calvert Memorial Hospital	45,714	33,982	1.35
Carroll Hospital Center	94,916	167,287	0.57
Chester River Hospital Center	4,659	44,895	0.10
Civista Medical Center	5,391	16,157	0.33
Doctors Community Hospital	139,451	71,716	1.94
Dorchester General Hospital	86,872	243,512	0.36
Fort Washington Medical Center	6,649	4,992	1.33
Frederick Memorial Hospital	161,012	218,346	0.74
Garrett County Memorial Hospital	8,169	48,029	0.17
Harford Memorial Hospital	25,953	64,113	0.40
Howard County General Hospital	-	93,051	-
Laurel Regional Hospital	1,287	(51,386)	(0.03)
McCready Memorial Hospital	476	13,326	0.04
Montgomery General Hospital	7,900	95,000	0.08
Northwest Hospital Center	76,152	208,227	0.37
Peninsula Regional Medical Center	144,721	429,098	0.34
Shady Grove Adventist Hospital	121,851	191,722	0.64
Southern Maryland Hospital Center	-	135,900	-
St. Joseph Medical Center	238,885	(52,258)	(4.57)
St. Mary's Hospital	100	126,900	0.00
Union of Cecil	65,955	100,398	0.66
Upper Chesapeake Medical Center	179,799	339,751	0.53
Washington Adventist Hospital	66,437	(7,851)	(8.46)
Washington County Hospital	252,124	260,759	0.97
Western Maryland Regional Medical Center	266,058	150,085	1.77
Peer Group Weighted Average	$2,361,307	$3,385,770	0.70
Memorial Hospital at Easton	86,872	243,512	0.36

Source: FY 2015 Audited Financial Statements

In 2015, UMSMC-E's Debt to Capitalization ratio of 0.36 was below the average of 0.70 for its peer group.

UMSMC-E's Average Age of Plant and comparison to the average of its Peer Group is presented below in Table 12. In 2015, UMSMC-E's Average Age of Capital of 14.43 years is older than the Average Age of Capital for its peer group of 9.96 years.

Table 12
UM Shore Medical Center at Easton
Comparison to Peer Group Average Age of Capital
FY 2015
($ in thousands)

Hospital	Accumulated Depreciation	Current Depreciation	Average Age of Plant
Anne Arundel Medical Center	$105,511	$13,741	7.68
Atlantic General Hospital	12,644	1,006	12.57
Calvert Memorial Hospital	93,195	8,630	10.80
Carroll Hospital Center	178,505	14,631	12.20
Chester River Hospital Center	39,843	3,457	11.53
Civista Medical Center	50,035	6,111	8.19
Doctors Community Hospital	108,343	7,252	14.94
Dorchester General Hospital	37,270	2,354	15.83
Fort Washington Medical Center	7,753	256	30.29
Frederick Memorial Hospital	266,610	23,279	11.45
Garrett County Memorial Hospital	30,465	2,635	11.56
Harford Memorial Hospital	84,940	5,417	15.68
Howard County General Hospital	98,790	15,555	6.35
Laurel Regional Hospital	63,516	3,961	16.04
McCready Memorial Hospital	10,978	941	11.66
Montgomery General Hospital	109,517	10,644	10.29
Northwest Hospital Center	94,286	7,797	12.09
Peninsula Regional Medical Center	252,139	21,363	11.80
Shady Grove Adventist Hospital	190,202	13,850	13.73
Southern Maryland Hospital Center	24,393	9,164	2.66
St. Joseph Medical Center	35,648	13,717	2.60
St. Mary's Hospital	78,420	6,960	11.27
Union of Cecil	111,641	10,861	10.28
Upper Chesapeake Medical Center	24,364	15,114	1.61
Washington Adventist Hospital	151,979	4,702	32.32
Washington County Hospital	169,163	20,388	8.30
Western Maryland Regional Medical Center	239,367	24,365	9.82
Peer Group Weighted Average	$2,669,517	$268,150	9.96
Memorial Hospital at Easton	$143,944	$9,974	14.43

Source: HSCRC data for FY 2015

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

Applicant Response:

UMSMC-E proposes to reduce the number of MSGA and Pediatric beds consistent with the need analyses set forth in response to Standard .04B(2) above.

All of the ambulatory clinics that are currently offered at UMSMC-E will continue to be offered at the replacement facility.

None of the proposed changes in this project will impact access for indigent and/or uninsured patients. UMSMC-E will continue to care for patients regardless of their ability to pay.

Standard .04B(5) – Cost-Effectiveness

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

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

(i) To the extent possible, quantify the level of effectiveness of each alternative in achieving each primary objective;

(ii) Detail the capital and operational cost estimates and projections developed by the hospital for each alternative; and

(iii) Explain the basis for choosing the proposed project and rejecting alternative approaches to achieving the project's objectives.

Applicant Response:

Planning for this project occurred in several phases over a number of years. For a full account of the planning process and the alternatives SHS considered that led to the selection of the proposed project as the most cost effective alternative, please see the original CON application and the completeness question responses SHS submitted related to this section.

Identification of Primary Objectives

In 2005, the applicant began evaluating alternatives for the proposed project as it explored its affiliation with UMMS. In doing so, it identified its primary objectives for the proposed project.

At the time of the early planning of the project, the population of the Eastern Shore of Maryland was growing rapidly. The applicant wanted to make sure that the physical solutions to its facility constraints continued to adequately provide for the needs of these growing communities.

The population of the five-county service area was also expected to continue to age over the planning horizon. This growing senior population was expected to have a significant impact on health service needs because seniors use health services at a much greater rate than the

younger population. SHS wanted to make sure that its facilities solution continued to adequately provide services for the senior citizens in the service area.

SHS also determined that there was a need for more physicians in the five-county service area. There was a shortage of both primary care physicians and specialists serving the region. The shortage was expected to grow as the population grew and some of the existing physicians retired. The existing members of the medical staff at UMSMC-E indicated that it was difficult to recruit new physicians into their practice. The recruitment difficulties were partially due to physician compensation levels in the region, but also due to the physical environment of the hospitals. Although physician recruitment for SHS would require various initiatives, SHS wanted to make sure that the physical solution for its facilities would enhance physician recruitment.

Based on surveys conducted at the time, it was clear that choosing a location that was accessible to residents was very important to the community. However, there was no general agreement on the most accessible location. After considering a number of options, as described in the original application and in completeness question responses, SHS determined that the location near the Talbot County Community Center was the best option.

SHS concluded that the optimal facility solution for a replacement hospital would need to address several primary objectives:

1. Accommodate the growth of the population in the five-county service area.

The facility solutions were evaluated based on the volume projections generated by the growing population. SHS projected the volume of both inpatient admissions and clinical service workloads based on the population size and current use rates. Market shares for each facility were calculated for each community and applied to the volumes.

2. Provide for the special needs of the growing senior citizens population.

Senior citizens use healthcare resources at a much greater rate than their younger counterparts. The use rates of the senior citizens were built into the volume projections for each site. Seniors also have a special need for simple wayfinding. The facility solutions and site configurations for each site were evaluated on their ability to support simple wayfinding.

3. Improve access to hospital services for all of the residents of the five-county region.

The access to hospital services was measured by a drive time analysis. The drive time from each community in the hospital's service area to each of the alternative sites was measured using online mapping software. The drive time was weighted for the population of each community, and then aggregated. The site with the lowest aggregate drive time was considered to have the best access for all residents of the service area.

4. Enhance physician recruitment to the Eastern Shore.

Recruiting new physicians to the Eastern Shore is challenging, due to both its rural nature and reimbursement issues. In interviews with existing physicians and community leaders, the majority of participants believed that physician recruitment would be enhanced only with new hospital facilities. Renovation of existing facilities was not believed to provide any

enhancement. Therefore, each site alternative was evaluated for this objective based on whether it provided a new or renovated hospital.

Evaluation of the Final Project Alternatives

After SHS filed the original CON application in 2012, it withdrew one of the original project alternatives it had considered, which was redevelopment of the existing hospital site. SHS's concerns about the limitations of this alternative are detailed in SHS's responses to Completeness Questions Set 1, Questions 10(c), 10(e), and 10(f) submitted on October 24, 2012 and in section 1 of SHS's supplemental response submitted January 18, 2013. SHS decided to withdraw this alternative because, upon further consideration, it determined that this alternative would not meet its primary objectives.

After withdrawing the existing campus alternative, the proposed project and two alternative projects remained, which are summarized below:

1. Relocate to a New Site in Easton – "Bypass at Oxford Road Site"

As stated in the original CON application, UMSMC-E owns a 60-acre parcel of land in southwestern Easton, on the Easton Bypass (Route 322) at Oxford Road. The new hospital facility in this alternative would be sized exactly the same as the proposed project. There would be no land acquisition costs associated with this alternative. Because there are utility services available on Route 322, UMSMC-E would not be partially responsible for extending water and electrical services to the site, as is the case in the proposed project. All other project costs of this alternative would be the same as described in the proposed project.

2. Relocate to a Site in Northern Talbot County – "Routes 50 & 404 Site"

In this alternative, UMSMC-E planned to acquire a 90-acre parcel of land on the southeast corner of the intersection of Maryland Routes 50 and 404. The cost of land acquisition is included in the cost of the alternative. The hospital facility in this alternative would be substantially the same as the proposed project. There are no utilities available currently to serve this site. UMSMC-E assumes that electric service would have to be extended from Wye Mills and that wells would have to be dug on the property to provide water. A sewage treatment plant to serve the new facility would also have to be developed on the property. All other project costs of this alternative would be the same as has been described in the proposed project.

3. Relocate to Talbot County Community Center Site – "Proposed Project Site"

The proposed project site is a 235-acre parcel at the intersection of Longwoods Road and Route 50, just north of the Easton Municipal Airport (the "Proposed Project Site"). Talbot County offered to convey the Proposed Project Site to SHS at a cost of approximately $2 million. The site is predominantly a "green-fields" site, not all of which will be used for the Hospital. The remainder of the parcel will be used for future development. As a green-fields site, utilities will have to be brought to the site lines, but the land has been annexed by the Town of Easton to provide utilities and services to the site.

During the completeness process on the original CON application, SHS re-evaluated each of these alternatives to provide a more apples-to-apples comparison by using the same assumptions it had used for the proposed project. The assumptions UMSMC-E used to update its models were as follows:

a. Patient volumes are equivalent across all relocation alternatives.

b. Square footage of the facilities in each of the relocation alternatives will be equivalent to the square footage of the proposed project.

c. New construction costs, per square foot, are the same across all relocation alternatives to be equal to the new construction costs of the proposed project.

d. The implementation timetables of each alternative are the same as the timetable in the CON application for the proposed project, so the project costs for each alternative are inflated for 27 months using the same MHCC inflation index.

e. Because the costs for the renovation of UMSMC-D are not included in the proposed project, these costs are excluded from all of the alternatives.

f. The ambulatory care facilities that were included in several of the original alternative models have all been constructed or developed in the intervening years. The project costs of these ambulatory care facilities are omitted from each of the alternatives, as is the case for the proposed project.

g. The proposed project would have a three year construction time frame, to begin within three months of project approval. The other two alternatives were also assumed to have the same three year construction time frame.

Using these assumptions, UMSMC-E updated the estimated project costs for each alternative, which are shown below:

Table 13
Project Cost Comparisons for Final Alternatives

	Site in Easton (Bypass at Oxford Road)	Site in Northern Talbot County (Routes 50 and 404)	Proposed Project Site
New Construction	$ 125,193,045	$ 125,193,045	$ 125,193,045
Fixed Equipment (not in building)	$ -	$ -	$ -
Renovation	$ -	$ -	$ -
Land	$ -	$ 7,150,000	$ 2,000,000
Site Development	$ 31,929,484	$ 40,915,484	$ 36,015,484
A/E Fees	$ 17,400,000	$ 17,400,000	$ 17,400,000
Permits	$ 4,107,718	$ 4,107,718	$ 4,107,718
Major Moveable Equipment	$ 22,000,000	$ 22,000,000	$ 22,000,000
Minor Moveable Equipment	$ 4,100,000	$ 4,100,000	$ 4,100,000
Contingencies	$ 7,000,000	$ 7,000,000	$ 7,000,000
IT etc.	$ 18,200,000	$ 18,200,000	$ 18,200,000
Inflation cost	$ 4,561,181	$ 4,822,039	$ 4,679,795
Capitalized Construction Interest	$ 24,259,218	$ 25,961,677	$ 24,901,333
Total Project Capital Costs	**$ 258,750,646**	**$ 276,849,963**	**$ 265,597,375**

During the completeness question process, UMSMC-E also updated the Key Financial Indicators for these alternatives, which are shown below. **Exhibit 16** includes the revenue and

expense projections along with the assumptions that were used to develop these projections. Please see **Exhibit 17** for the revenue and expense projections and assumptions that were presented in the original CON application (Table 3) for the proposed project.

Table 14
Key Financial Indicators – Relocation to New Site in Easton
(Dollars in Thousands)

	Historical				Projected			
	2010	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Operating Revenue	$157,772	$155,330	$161,534	$163,622	$165,564	$167,531	$178,202	$189,018
Operating Expenses	$152,400	$144,273	$149,837	$161,848	$208,508	$155,889	$168,690	$179,939
Operating Income	$5,372	$11,057	$11,696	$1,773	-$42,945	$11,642	$9,512	$9,079
Excess of Revenue Over Expense	$9,912	$19,017	$10,860	$8,989	-$36,516	$18,599	$16,540	$16,161
Cash (1)	$9,970,106	$9,967,626	$9,979,350	$9,973,457	$9,949,482	$9,960,492	$9,975,173	$9,993,062
Long Term Debt (1)	$89,966	$87,728	$85,712	$84,135	$309,075	$296,039	$280,637	$273,709
Net Assets (1)	$155,118	$179,887	$186,207	$159,325	$159,325	$187,152	$213,716	$229,206
Total Capitalization (1)	$134,814	$155,506	$160,571	$165,296	$123,767	$149,939	$174,815	$188,583
Operating Margin	3.40%	7.12%	7.24%	1.08%	-25.94%	6.95%	5.34%	4.80%
Excess Margin	6.28%	12.24%	6.72%	5.49%	-22.06%	11.10%	9.28%	8.55%
Debt Service Coverage (1)	5.81	7.93	4.00	3.72	3.93	4.31	2.73	2.29
Days Cash on Hand (1)	17869.9	17015.8	16097.7	14888.1	14666.8	14574.1	14200.8	13927.8
Debt to Capitalization (1)	36.71%	32.78%	31.52%	29.70%	65.99%	61.27%	56.77%	54.42%

Note (1): Based on Consolidated financial statements.

Table 15
Key Financial Indicators – Relocation to Site in Northern Talbot County
(Dollars in Thousands)

	Historical				Projected			
	2010	2011	2012	2013	2014	2015	2016	2017
Operating Revenue	$157,772	$155,330	$161,534	$163,622	$165,564	$167,531	$178,727	$190,075
Operating Expenses	$152,400	$144,273	$149,837	$161,848	$208,144	$155,525	$169,289	$180,891
Operating Income	$5,372	$11,057	$11,696	$1,773	-$42,581	$12,005	$9,438	$9,184
Excess of Revenue Over Expense	$9,912	$19,017	$10,860	$8,989	-$36,546	$18,487	$16,225	$16,330
Cash (1)	$16,945	$14,465	$26,190	$20,297	$3,061	$13,581	$27,960	$45,684
Long Term Debt (1)	$89,966	$87,728	$85,712	$84,135	$328,557	$315,521	$299,931	$292,615
Net Assets (1)	$155,118	$179,887	$186,207	$159,412	$159,412	$187,244	$213,611	$229,387
Total Capitalization (1)	$134,814	$155,506	$160,571	$165,296	$123,854	$150,031	$174,710	$188,765
Operating Margin	3.40%	7.12%	7.24%	1.08%	-25.72%	7.17%	5.28%	4.83%
Excess Margin	6.28%	12.24%	6.72%	5.49%	-22.07%	11.04%	9.08%	8.59%
Debt Service Coverage (1)	5.81	7.93	4.00	3.72	3.87	4.23	2.57	2.22
Days Cash on Hand (1)	151.7	177.2	181.0	172.0	132.8	149.6	167.9	191.2
Debt to Capitalization (1)	36.71%	32.78%	31.52%	29.70%	67.33%	62.76%	58.40%	56.06%

Note (1): Based on Consolidated financial statements.

After updating the project costs and financial projections for each alternative, SHS revised its ranking of the final two alternatives and the proposed project, which are presented in the following table.

Objectives	Relocation to New Site in Easton (Bypass at Oxford Road)	Relocation to New Site in Northern Talbot County (Route 50 and 404)	Proposed Project
Needs of Growing Population			
BGSF as % of Required	1	1	1
% Private Beds	1	1	1
Inter-Department Layout	1	1	1
Intra-Department Layout	1	1	1
Needs of Senior Citizens			
Campus/Building Wayfinding	1	1	1
Improve Access for All Citizens			
Aggregate Drive Times	3	2	1
Ease of Access by Employees	1	3	1
Ease of EMS Access	3	2	1
Enhance Physician Recruitment			
New v. Renovation Facility	1	1	1
Capital Cost			
Lowest Capital Cost	1	3	2
Philanthropic Support	2	3	1
Aggregate Score	16	19	12
Overall Ranking	**2**	**3**	**1**

Rankings: 1 = Best; 2 = 2nd Best; 3 = Worst

Ranking of the Final Alternatives

All of the alternatives ranked as equivalent on several of the objectives: meeting the needs of a growing population, meeting the needs of senior citizens in providing improved wayfinding, and enhancing physician recruitment. Meeting the needs of a growing population and improving wayfinding were identified as objectives, in part, because they are serious deficiencies with the existing facility. All of the alternatives would provide a new site with fewer space limitations and new facility with a more modern design that would easily meet these objectives. Similarly, a modern, state-of-the-art facility was estimated to enhance physician recruitment, and all of these alternatives would provide such a facility.

The final alternatives could be distinguished primarily by how they ranked on two objectives: improving access to citizens and the capital costs of the project. For improving access, the proposed project ranked first because based on drive time analysis it was estimated to have the lowest aggregate drive time and was thought to provide the most ease of access for employees and EMS services. The site in Northern Talbot County ranked second, and the new site in Easton ranked third (worst) for improving access for all citizens.

As for capital costs, the facility in Northern Talbot County was estimated to have higher capital costs than the Proposed Project Site for several reasons. First, SHS would have to purchase the land for the Northern Talbot County site and would have to pay the market value. For the Proposed Project Site, Talbot County offered to convey the land for approximately $2 million. The Town of Easton and the County also promised to bring the major utilities to the site. By comparison, the site in Northern Talbot County would be expensive to develop since utilities would have to be brought from long distances and SHS would have to develop its own sewage treatment facility. The capital costs of the Northern Talbot County Site would be approximately $11 million more than the capital costs at the Proposed Project Site.

Although the capital costs at the new site in Easton were estimated to be lower than the Northern Talbot County Site and Proposed Site, this site was not expected to have the same volume growth or market share advantages as the northern sites. Volume growth projections were a function of population growth and market share changes. The volume projections assumed that improving the access of the project would make it more appealing to the residents of Queen Anne's County. Queen Anne's County has the largest population in the service area and is the fastest growing county in the service area. Moving the hospital to the northern part of Talbot County would have resulted in a greater market share in Queen Anne's County and would have the greatest impact on the volume projections. The northern Talbot County site was not only adjacent to major roads (Routes 50 and 404), but was also closer to Queen Anne's County residents. The market share increase in Queen Anne's County for this alternative was highest because the proximity and easy access. Please see SHS's response to Completeness Question Set 1, Question 10(g) for more information on the different market share and volume growth assumptions.

Based on all factors, the Proposed Project Site was found to be the most cost effective alternative that would best meet SHS's objectives.

Since filing of the original CON application, SHS's primary objectives have not changed, and the Proposed Project Site continues to be the most cost-effective approach to meeting all of SHS's objectives. Using the same assumptions and applying an inflation factor to account for the passage of time, the proposed alternative would still result in the same overall ranking of alternatives.

Based on the updated drive time analysis, the northern Talbot County Site is now estimated to have a slightly lower drive time than the Proposed Project Site by one-tenth of a minute. The total weighted average drive time to the Proposed Project Site is now estimated to be 26.2 minutes while the Northern Talbot County site is estimated to be 26.1 minutes. Another change to note about the Proposed Project Site is that, since the filing of the original CON application, Talbot County conveyed the land at that site to SHS in October 2015 for $2.46 million.

Size Analysis of Proposed Project

1. Adjusting Easton Replacement Hospital Size for Benchmark comparison

The applicant is mindful of the importance of not "overbuilding" the replacement facility, and it does not wish to spend more resources than are necessary to meet the health care needs of the service area population. There is no single hospital sizing benchmark applicable to all hospital projects. Each project is distinctive. Some differences in hospital sizing can be explained by grouping hospitals into like categories, such as academic hospitals or rural hospitals. Other differences can only be understood by examining the particular needs of each hospital and the community it serves. The proposed replacement hospital has been designed to meet the needs of the community in a cost effective manner.

The area of the proposed replacement hospital, before any adjustments, is 354,643 BGSF, including the Central Utility Plant, as shown in Table C. This equates to 2,980 sf/bed prior to any adjustments. For purposes of comparing to other facilities, the applicant adjusted the planned space to adhere to industry standard methodology for calculating the hospital area by removing the outpatient clinic space from the total area. Outpatient service line space varies greatly between facilities and is not a reflection of the inpatient volume drivers. For example, the new Holy Cross Germantown Hospital, the most recent approved project that has been constructed and opened, does not include any of the outpatient services to be included in the proposed replacement hospital for UMSMC-E. Accordingly, outpatient service space should be excluded when comparing the two facilities. Moreover, the total building square footage excludes UMSMC-E's freestanding mechanical enclosure in order to provide an apples-to-apples comparison to the Holy Cross Germantown Hospital, which also excluded its freestanding mechanical enclosure from the total square footage.

Table 16
Adjusted Square Footage Excluding Outpatient Clinics & Central Energy Plant

Replacement Hospital at Easton	**Total BGSF**	**SF / Bed**
Total Building Area (incl. Clinics & C.U.P.)	354,643	2,980
Building area associated with Clinics	29,222	246
Adjusted Building Area excl. Clinics	**325,421**	**2,734**
Central Utility Plant	22,530	189
Adjusted Building Area excl. Clinics and Central Energy Plant	**302,891**	**2,545**

2. Unique Features for a rural facility

Facilities providing care to rural populations often have key differences when compared with facilities in urban areas. Rural facilities have a larger catchment area than urban and suburban facilities, and there are fewer care alternatives for patients to choose from within these

catchment areas. This leads to rural facilities having greater emergency department volume compared to the number of inpatient beds as there are fewer alternatives for outpatient care. This can also be reflected in the levels of outpatient surgery and imaging that are performed in a rural facility. As will be shown in the tables in this section comparing the proposed replacement hospital with Holy Cross Germantown Hospital, UMSMC-E needs larger diagnostic and treatment areas than Holy Cross Germantown Hospital in order to support its greater emergency and imaging demands.

In a rural facility, the delivery and supply stocking systems can also vary compared to urban settings. In a rural setting it is more difficult to practice a 'just-in-time' delivery and stocking system because there are few facilities nearby to provide the infrastructure support that are typically available to facilities in an urban setting. The materials management strategy for the UMSMC-E replacement facility will be to treat this facility as "the hub" that will support other outlying facilities. To maximize efficiency in support staff utilization, bulk deliveries are planned to arrive and be received at the hospital and then dispatched to other facilities, reducing the staffing required elsewhere. Thus, there is need for more space to support this function.

Administrative space often is different at rural facilities as well. As the main hospital in the region, UMSMC-E accommodates all administrative and executive staff to support the care provided in the region. Many urban hospitals have some of these program spaces located in nearby leased space outside of the main campus. Many hospitals similar in size (~100 beds) to UMSMC-E are usually linked to larger urban hospitals, which house some shared administrative staff.

3. Comparison to Holy Cross Germantown

The Commission staff has indicated that the applicant should consider Holy Cross Germantown Hospital as a comparable facility for sizing purposes. The following charts provide the sizing of the proposed UMSMC-E facility and Holy Cross Germantown Hospital and highlight some of the key differences in the scope of the facilities.

Table 17
Square foot Comparison to Holy Cross Germantown Hospital

Functional Area	Facility **Easton Replacement Hospital**		Facility **Holy Cross Germantown ***	
Number of Beds	109 + 10 Obs		93 + 8 Obs	
Nursing Units	**89,374**		**74,370**	
Percentage of DGSF	37%		44%	
SF / Bed	751		736	
Diagnostics & Tretment	**86,755**		**60,030**	
Percentage of DGSF	35%		35%	
SF / Bed	729		594	
Administrative & Public Services	**31,553**		**13,800**	
Percentage of Overall BGSF	13%		8%	
SF / Bed	265		137	
Support Services	**37,164**		**22,060**	
Percentage of DGSF	15%		13%	
SF / Bed	312		218	
Total DGSF	**244,846**		**170,260**	
Shell	0		18,300	
Grossing Factor 23.7%	58,045		48,400	
Overall Hospital BGSF	**302,891**		**236,960**	
SF / Bed	2,545		2,346	
Clinics	**23,622**			
Grossing Factor 23.7%	5,600			
Overall Clinic BGSF	**29,222**		0	
Central Utility Plant	**22,530**		0	
Total Facility BGSF	**354,643**			
SF / Bed	2,980			

* Areas for Holy Cross, Germantown are take-offs done form available CON plans provided and not from detailed program information

Table 17 excludes the outpatient clinic space along with the Central Utility Plant at the proposed UMSMC-E facility from the comparison, as outpatient clinics are not provided at the Holy Cross Germantown Hospital and the freestanding Central Utility Plant was also excluded from the overall square footage of the facility. With these space removed, Table 17 shows that the proposed UMSMC-E facility is approximately 200 square feet per bed larger than Holy Cross Germantown Hospital. This difference can be attributed to the unique features of a rural facility as described above.

Table 18 below identifies some of the key differences in the diagnostic and treatment spaces. These departments have been selected for comparison as they have their own need based analysis independent of the inpatient bed need. The departments include emergency

services, imaging, and surgical services. All have outpatient volumes that drive need independent of inpatient bed counts.

Table 18
Comparison to Holy Cross Germantown Diagnostic & Treatment services

Diagnostic & Treatment Comparison Chart Summary

Department		Facility			Facility	
	# Key Rooms	Easton Replacement Department SF	SF / Room	# Key Rooms	Holy Cross Germantown Department SF *	SF / Room
Emergency Department	28	22,945	819	12	10,775	898
Interventional Suite (OR & Cath)	9	23,001	2,556	7	20,100	2,871
Prep / Recovery & PACU **	41	14,983	365	34	9,230	271
Imaging	12	15,004	1,250	9	13,800	1,533
Total D&T space		75,933			53,905	
	Delta	22,028				

* Areas for Holy Cross, Germantown are take-offs done form available CON plans provided and not from detailed program information

** All Prep/Recovery spaces at Holy Cross Germantown are open bays. Prep rooms at Easton are private rooms for Patient Privacy per best practice.

Emergency Department:

Table 18 shows that the proposed replacement hospital has a significantly larger emergency department with 28 exam rooms compared to the 12 exam rooms at Holy Cross Germantown Hospital. Table 18 also identifies the square footage per room. The emergency department planned for the proposed replacement hospital has approximately 819 square feet per exam room compared to 898 square feet per exam room at Holy Cross Germantown Hospital, and fits well within the square footage benchmarks provided in the *American College of Emergency Physicians* ("ACEP") *Guide on Emergency Department Design* (Second Edition) based on the volume of emergency department visits anticipated at the replacement facility, as discussed in the response to COMAR 10.24.10.04B(14).

Interventional Suite:

For the Interventional Suite, which includes operating rooms, catheterization labs, and an E.P. lab, the proposed replacement hospital again has a greater number of major procedure rooms than Holy Cross Germantown Hospital. The proposed facility has an extra catheterization lab and an E.P. lab that are not provided at Holy Cross Germantown Hospital. When looking at these spaces on a square footage per room comparison, the proposed replacement for UMSMC-E has a more efficient square footage per room metric.

Prep/Recovery & PACU:

With the additional procedure rooms come additional prep and recovery stations and related support. The square footage per room number is higher in the proposed replacement facility as the patient prep rooms have been designed as private rooms. This model is considered best practice in this environment and provides patient privacy for activities performed prior to surgery, such as visual privacy for changing and acoustical privacy for consultations. The Holy Cross Germantown Hospital has an open bay concept for both prep and recovery with only curtains providing privacy. This model does require less space but does compromise patient privacy and patient satisfaction.

Imaging:

The Imaging Department at the proposed replacement for UMSMC-E also has additional modalities to meet the projected need. This includes an additional C.T., fluoroscopy, and an I.R. suite. When comparing the square footage per room for this department, again the proposed replacement hospital is more efficient than Holy Cross Germantown.

Table 19 shows how the additional overall program and square footage impacts the overall square footage per bed metric. It provides a comparison of the diagnostic and treatment space at the proposed replacement hospital and at Holy Cross Germantown Hospital. Table 19 reduces the proposed replacement hospital's total diagnostic and treatment square footage by the differential shown in Table 18, to provide a more apples-to-apples comparison of the efficiency of these two facilities' space based on the volumes of services they support. This adjustment alone, without the added consideration of additional administration and support services required to support this rural facility, shows that the facilities are comparably sized when the services and volumes they support are taken into account.

Table 19
Adjusted Comparison to Holy Cross Germantown after Alignment of D&T

Functional Area	Facility Easton Replacement Hospital		Facility Holy Cross Germantown *	
Number of Beds	109 +10 Obs		93 +8 Obs	
Nursing Units	**89,374**		**74,370**	
Percentage of DGSF	40%		44%	
Diagnostics & Treatment (adjusted) **	**64,727**		**60,030**	
Percentage of DGSF	29%		35%	
Administrative & Public Services	**31,553**		**13,800**	
Percentage of Overall BGSF	14%		8%	
Support Services	**37,164**		**22,060**	
Percentage of DGSF	17%		13%	
Total DGSF	**222,818**		**170,260**	
Shell	0		18,300	
Grossing Factor 23.7%	58,045		48,400	
Overall Hospital BGSF	**280,863**		**236,960**	
SF / Bed	2,360		2,346	

* Areas for Holy Cross, Germantown are take-offs done form available CON plans provided and not from detailed program information

** Area adjusted as a comparison if Easton had similar D&T volumes / space as Holy Cross

4. Comparison to other National facilities

To provide a broader range of comparative facilities, Table 20 below lists a number of new build hospital projects that HKS designed with fewer than 125 beds. The projects listed in Table 20 exclude any medical office building or outpatient clinic square footage in order to provide a more apples-to-apples comparison.

Table 20
National Facility Gross Area Comparison

Hospital Name	Project Name	Health System / Owner	City	ST	# Beds	Comp. Date	Square Footage	SF/Bed
Paris Lakes Medical Center	Paris Lakes Medical Center	Paris Lakes Medical Center	Paris	TX	94	2015	175,000	1,862
Baylor Medical Center at Waxahachie	Baylor Medical Center at Waxahachie Replacement Hospital	Baylor Health Care System	Waxahachie	TX	124	2014	285,000	2,298
Palmetto Health Baptist Parkridge Hospital	Palmetto Health Baptist Parkridge Hospital	Palmetto Health	Columbia	SC	76	2013	224,000	2,947
Tradition Center for Innovation	Martin Health System Tradition Medical Center	Martin Health System	Port St. Lucie	FL	90	2013	200,000	2,222
Ty Cobb Regional Medical Center	Ty Cobb Regional Medical Center	Ty Cobb Healthcare System	Livonia	GA	56	2012	200,000	3,571
Madison Hospital	Madison Hospital	Huntsville Hospital	Madison	AL	60	2012	227,800	3,797
Texas Health Presbyterian Hospital Flower Mound	Texas Health Presbyterian Hospital Flower Mound	Texas Health Resources	Flower Mound	TX	96	2010	180,000	1,875
Grove General Hospital	INTEGRIS Grove General Hospital	INTEGRIS Health	Grove	OK	58	2009	140,000	2,414
Hualapai Mountain Medical Center	Hualapai Mountain Medical Center	MedCath, Inc.	Kingman	AZ	72	2009	180,000	2,500
Seton Medical Center Hays	Seton Medical Center Hays	Ascension Health	Kyle	TX	112	2009	332,000	2,964
CHRISTUS Santa Rosa	CHRISTUS Santa Rosa at Westover Hills	CHRISTUS Health	San Antonio	TX	120	2008	308,000	2,567
Gateway Medical Campus	Gateway Medical Campus	Gateway	Gilbert	AZ	120	2008	259,900	2,166
CHRISTUS Muguerza del Sur Hospital	CHRISTUS Muguerza del Sur Hospital	CHRISTUS Health	Monterrey		100	2007	230,000	2,300
St. Rose Dominican	St. Rose Dominican San Martin Campus	Dignity Health	Las Vegas	NV	110	2006	343,000	3,118
Homestead Hospital	Homestead Hospital	Baptist Health South Florida	Homestead	FL	120	2006	339,000	2,825
Parker Adventist Hospital	Parker Adventist Hospital	Adventist Health System - Centura Health	Parker	CO	101	2003	271,000	2,683
INTEGRIS Canadian Valley Regional Hospital	INTEGRIS Canadian Valley Regional Hospital	INTEGRIS Health	Yukon	OK	52	2002	141,000	2,712
Average					**92**			**2,637**
Easton Replacement Hospital					**119**		302,891	**2,545**
Note: *Square Footages excluded any M.O.B. / Outpatient Services per Industry Standard for direct comparison*								

Table 20 shows a wide range of square footage per bed (1,862 – 3,797 sf/bed) and that each facility's size is impacted by many factors beyond the number of inpatient beds provided. Moreover, the average square footage per bed of 2,637 indicates that the proposed replacement for UMSMC-E is sized favorably compared to other facilities with comparable bed counts.

Table 21
National Facility Gross Area Comparison – Facilities with More Than 24 ED rooms

Hospital Name	Project Name	Health System / Owner	City	ST	# Beds	Comp. Date	Square Footage	SF/Bed	ED Rooms
Palmetto Health Baptist Parkridge Hospital	Palmetto Health Baptist Parkridge Hospital	Palmetto Health	Columbia	SC	76	2013	224,000	2,947	26
Seton Medical Center Hays	Seton Medical Center Hays	Ascension Health	Kyle	TX	112	2009	332,000	2,964	28
CHRISTUS Santa Rosa	CHRISTUS Santa Rosa at Westover Hills	CHRISTUS Health	San Antonio	TX	120	2008	308,000	2,567	26
St. Rose Dominican	St. Rose Dominican San Martin Campus	Dignity Health	Las Vegas	NV	110	2006	343,000	3,118	27
Homestead Hospital	Homestead Hospital	Baptist Health South Florida	Homestead	FL	120	2006	339,000	2,825	36
Average					**108**			**2,884**	28.6
Easton Replacement Hospital					**119**		302,891	**2,545**	28
Note: *Square Footages excluded any M.O.B. / Outpatient Services per Industry Standard for direct comparison*									

Table 21 provides a comparison of the proposed replacement hospital to facilities with similar sized emergency departments. This metric is useful because it shows square footage in relation to potential volumes of other outpatient services in imaging and surgery. This further refinement narrows the appropriate pool of comparator facilities in Table 20 to facilities with comparable sized emergency department treatment capacity. After making this adjustment, it shows that the proposed replacement hospital is well below the average square footage per bed for facilities with similar Inpatient beds and emergency department exam rooms.

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

Applicant's Response

Not applicable.

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

(i) That it has considered, at a minimum, an alternative project site located within a Priority Funding Area that provides the most optimal geographic accessibility to the population in its likely service area, as defined in Project Review Standard (1);

(ii) That it has quantified, to the extent possible, the level of effectiveness, in terms of achieving primary project objectives, of implementing the proposed project at each alternative project site and at the proposed project site;

(iii) That it has detailed the capital and operational costs associated with implementing the project at each alternative project site and at the proposed project site, with a full accounting of the cost associated with transportation system and other public utility infrastructure costs; and

(iv) That the proposed project site is superior, in terms of cost-effectiveness, to the alternative project site or sites located within a Priority Funding Area.

Applicant Response:

The proposed site is within a Priority Funding Area. (See **Exhibit 18**.)

Standard .04B (6) – Burden of Proof Regarding Need

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

Applicant Response:

UMSMC-E acknowledges that it has the burden of proof regarding need.

Standard .04B(7) – Construction Cost of Hospital Space

(a) The cost per square foot of hospital construction projects shall be no greater than the cost of good quality Class A hospital construction given in the Marshall and Swift Valuation Quarterly, updated to the nearest quarter using the Marshall and Swift update multipliers, and adjusted as shown in the Marshall and Swift guide as necessary for terrain of the site, number of levels, geographic locality, and other listed factors.

(b) Each Certificate of Need applicant proposing costs per square foot above the limitations set forth in the Marshall and Swift Guide must demonstrate that the higher costs are reasonable.

Applicant Response:

As shown below, the cost per square foot of the new construction is lower than the Marshall Valuation Service ("MVS") benchmark. A complete MVS analysis is included as **Exhibit 19**.

I. Marshall Valuation Service
Valuation Benchmark – New Construction – Tower 1

Type		Hospital
Construction Quality/Class		Good/A
Stories		6
Perimeter		1,202
Average Floor to Floor Height		15.2
Square Feet		329,579
f.1	Average floor Area	54,930
A. Base Costs		
	Basic Structure	$365.78
	Elimination of HVAC cost for	0

	adjustment	
	HVAC Add-on for Mild Climate	0
	HVAC Add-on for Extreme Climate	0
Total Base Cost		$365.78
Adjustment for Departmental Differential Cost Factors		1.11
Adjusted Total Base Cost		$404.23
B. Additions		
	Elevator (If not in base)	$0.00
	Other	$0.00
Subtotal		$0.00
Total		$404.23
C. Multipliers		
Perimeter Multiplier		0.903535116
	Product	$365.24
Height Multiplier		1.073617949
	Product	$392.13
Multi-story Multiplier		1.015
	Product	$398.01
D. Sprinklers		
	Sprinkler Amount	$2.40
Subtotal		$400.41
E. Update/Location Multipliers		
Update Multiplier		1.02
	Product	$408.41
Location Multipier		0.99
	Product	$404.33
Calculated Square Foot Cost Standard		**$404.33**

The MVS estimate for this project is impacted by the Adjustment for Departmental Differential Cost Factor. In Section 87 on page 8 of the Valuation Service, MVS provides the cost differential by department compared to the average cost for an entire hospital. The calculation of the average factor is shown below.

Department	Proposed Dept. Area SF	MVS Department Name	MVC Differential Cost Factor	Cost Factor x SF
Inpatient Nursing Units				
Intensive Care	11,808	Inpatient Units	1.06	12,516
Med / Surg - Telemetry	13,487	Inpatient Units	1.06	14,296
Rehab (Requard Center)	13,792	Inpatient Units	1.06	14,620
Med / Surg - General	13,502	Inpatient Units	1.06	14,312
Pediatric Unit	-	Inpatient Units	1.06	0
Med / Surg - Joint & Neuro	13,492	Inpatient Units	1.06	14,302
Obstetrics incl. nursery	23,293	Inpatient Units	1.06	24,691
Subtotal	89,374			
Diagnostic & Treatment				
Clinical Lab / Pathology	3,923	Laboratories	1.15	4,511
Emergency Department	22,945	Emergency Suite	1.18	27,075
Inpatient Dialysis	1,771	Inpatient Units	1.06	1,877
Imaging Department	15,004	Radiology	1.22	18,305
Interventional Suite (incl O.R.'s, Cath, EP)	23,001	Operating Suite, Total	1.59	36,572
Prep / Stage 2 Recovery	14,983	Operating Suite, Total	1.59	23,823
Pre-Anesthesia Testing	1,300	Laboratories	1.15	1,495
Observation Unit	2,957	Inpatient Units	1.06	3,134
Respiratory Therapy	871	Adjunct Facilities	1.18	1,028
Subtotal	86,755			
Administrative / Public Services				
Auxilary	354	Offices	0.96	340
Admitting / Registration	2,213	Offices	0.96	2,124
Chapel	487	Public Space	0.8	390
Education Center / Med Library	3,027	Offices	0.96	2,906
Gift Shop	1,248	Offices	0.96	1,198
Hospitalist Suite	600	Offices	0.96	576
On-Call	1,464	Offices	0.96	1,405
Executive Admin	5,496	Offices	0.96	5,276
CIM / Physician Lounge	2,977	Employee Facilities	0.8	2,382
Quality Team	5,111	Offices	0.96	4,907

Human Resources / Employee Health	1,831	Offices	0.96	1,758
Nursing Administration / Staff offices	2,870	Offices	0.96	2,755
Information Technology	2,575	Offices	0.96	2,472
Lobby Services	1,300	Public Space	0.8	1,040
Subtotal	31,553			
Support Services				
EVS/Linen/Facilities/Mat. Mgmt	13,028	Laundry	1.68	21,887
Maryland Express Care	733	Offices	0.96	704
Sterile Processing	6,336	Central Sterile Supply	1.54	9,757
Pharmacy	4,032	Pharmacy	1.33	5,363
Security	930	Offices	0.96	893
Food & Nutrition	12,105	Dietary	1.52	18,400
Subtotal	37,164			
Clinics				
Cardiopulminary / Vascular	5,763	Outpatient Department	0.99	5,705
Allied Health / School of Nursing	-			0
Behavioral Health Addiction Clinic	1,391	Outpatient Department	0.99	1,377
Breast Center	-			0
Cardio Rehab	3,483	Outpatient Department	0.99	3,448
Child Advocacy Center	-			0
Joslin Diabetes Clinic	3,670	Outpatient Department	0.99	3,633
Infusion Center	2,137	Outpatient Department	0.99	2,116
Coumadin (antii-Thromb) Clinic	-			0
Pain Management Clinic	2,635	Outpatient Department	0.99	2,609
Sleep Lab	-	Outpatient Department	0.99	0
Multi Specialty Clinic	3,813	Outpatient Department	0.99	3,775
Wound Healing Center	-	Outpatient Department	0.99	0
Outpatient Lab Draw	730	Outpatient Department	0.99	723
Subtotal	23,622			
Total Department Gross SF	**268,468**			**322,474**

Building Grossing Factor	**63,645**	**Mechanical Equipment and Shops**	**0.7**	**44,552**
Central Plant	**-**			
Total Building Gross SF	**332,113**		**1.11**	**367,026**

II. Marshall Valuation Service
Valuation Benchmark – New Construction – Central Utility Plant ("CUP")

The MVS does not have a separate benchmark for the CUP. UMSMC-E utilized the hospital benchmark but applied the Departmental Cost Differential Factor of 0.7 for Mechanical Equipment and Shops.

Type		Hospital
Construction Quality/Class		Good/A
Stories		7
Perimeter		610
Average Floor to Floor Height		18.0
Square Feet		22,530
f.1	Average floor Area	22,530
A. Base Costs		
	Basic Structure	$ 365.78
	Elimination of HVAC cost for adjustment	0
	HVAC Add-on for Mild Climate	0
	HVAC Add-on for Extreme Climate	0
Total Base Cost		$365.78
Adjustment for Departmental Differential Cost Factors		0.70
Adjusted Total Base Cost		$256.05
B. Additions		
	Elevator (If not in base)	$0.00
	Other	$0.00
Subtotal		$0.00
Total		$256.05
C. Multipliers		

Perimeter Multiplier		0.916558
	Product	$234.68
Height Multiplier		1.184
	Product	$277.86
Multi-story Multiplier		1.000
	Product	$277.86
D. Sprinklers		
	Sprinkler Amount	$3.77
Subtotal		$281.64
E. Update/Location Multipliers		
Update Multiplier		1.02
	Product	$287.27
Location Multiplier		0.99
	Product	$284.40
Calculated Square Foot Cost Standard		**$284.40**

III. Marshall Valuation Service
Valuation Benchmark– Mechanical Penthouse

Type		Mechanical Penthouse
Construction Quality/Class		Good/A
Stories		7
Perimeter		205
Average Floor to Floor Height		18.0
Square Feet		2,534
f.1	Average floor Area	2,534
A. Base Costs		
	Basic Structure	$ 80.77
	Elimination of HVAC cost for adjustment	0
	HVAC Add-on for Mild Climate	0
	HVAC Add-on for Extreme Climate	0
Total Base Cost		$80.77

Adjustment for Departmental Differential Cost Factors		N/A
Adjusted Total Base Cost		$80.77
B. Additions		
	Elevator (If not in base)	$0.00
	Other	$0.00
Subtotal		$0.00
Total		$80.77
C. Multipliers		
Perimeter Multiplier		1.05492
	Product	$85.21
Height Multiplier		1.22609
	Product	$104.47
Multi-story Multiplier		1.020
	Product	$106.56
D. Sprinklers		
	Sprinkler Amount	$5.48
Subtotal		$112.04
E. Update/Location Multipliers		
Update Multiplier		1.02
	Product	$114.28
Location Multiplier		0.99
	Product	$113.14
Calculated Square Foot Cost Standard		**$113.14**

IV. Consolidated MVS Benchmark

			Total Cost
	MVS		Based on
	Benchmark	Sq. Ft.	MVS
Benchmark			
Hospital	$404.33	329,579	$133,258,451.23
CUP	$284.40	22,530	$6,407,456.18
Mechanical Penthouse	$113.14	2,534	$286,694.82
Consolidated	**$394.63**	354,643	$139,952,602.23

V. Cost of New Construction

A. Base Calculations	**Actual**	**Per Sq. Foot**
Building	$132,074,850	$372.42
Fixed Equipment	$0	$0.00
Site Preparation	$33,000,000	$93.05
Architectual Fees	$9,000,000	$25.38
Permits	$8,055,849	$22.72
Capitalized Construction Interest	Calculated Below	Calculated Below
Subtotal	$182,130,699	$513.56

However, as related below, this project includes expenditures for items not included in the MVS average. As shown below, there are costs both in areas called “Inside the Loop” and “Outside the Loop.” The entire real estate parcel is not allocated to the Hospital. Only the portion of the site called “Inside the Loop” is hospital related, and the remainder of the site will be used for future, non-hospital related development. However, the project costs include all of the costs related to the entire site. Consequently, the costs related to the portion of the parcel that is not related to the hospital (“Outside the Loop”) are being subtracted from the comparison, as off-site costs.

	Project Costs	
Inside the Loop		
Canopy	$1,032,052	Building
Premium for Labor Shortages on Eastern Shore Projects	$9,905,614	Building
LEED Silver Premium	$5,282,994	Building
Siesmic Costs	$2,641,497	Building
Pneumatic Tube System	$750,000	Building
Transvac System	$2,700,000	Building
Signs	$1,040,000	Building

	Project Costs	
Jurisdictional Hook-up Fees	$1,852,215	Permits
Impact Fees	$1,539,819	Permits
Paving and Roads	$6,240,000	Site
Demolition	$26,000	Site
Storm Drains	$2,472,660	Site
Rough Grading	$1,476,214	Site
Landscaping	$2,222,382	Site
Sediment Control & Stabilization	$209,130	Site
Helipad	$622,594	Site
Water	$60,900	Site
Sewer	$97,440	Site
Premium for Minority Business Enterprise Requirement	$4,486,908	Building
Premium for Minority Business Enterprise Requirement	$782,907	Site
Outside the Loop		
Roads	$6,240,000	Site
Pump Station	$745,680	Site
8" to 12" Force Main	$1,040,000	Site
Misc.	$520,000	Site
EASTON ELECTRICAL SERVICE	$704,369	Site
EASTON GAS SERVICE TO PROPERTY	$254,196	Site
Verzion	$1,170,497	Site
MD Broad Band (Fiber)	$1,592,448	Site
Chop Tank (Electric)	$2,826,004	Site
Cable TV	$3,532,880	Site
Amount Spent on the 2012 Project that is not now Usable		
Architect/Engineering Fees	$2,022,908	Architect/Engineering Fees
Permits	$52,849	Permits

Explanation of Extraordinary Costs

- Demolition - The project requires a small amount of demolition. These costs are specifically excluded from the Marshall & Swift Valuation base square foot cost for a Class A - Good General Hospital per Section 1, page 3 of the Marshall Valuation Service.

- Premium for Labor Shortages/Remote Location on Eastern Shore Projects – Whiting Turner, the cost estimator on this project, has included a 7.5% premium (based on Building Costs) due to labor shortages and costs of transporting equipment and construction materials that they have experienced on the Eastern Shore. In Section 99, Page 1, MVS recognizes the potential for a 2%-10% premium for Abnormal Shortages and for a 5%-15% for Remote Areas.

- LEED Silver Premium - Whiting Turner has included a 4% premium (based on Building Costs only) due to constructing this building to LEED Silver standards. The potential for a 0%-7% premium is recognized by MVS in Section 99, Page 1.

- Seismic Costs - Whiting Turner has included a 2% premium (based on Building Costs only) due to constructing this building to the necessity of building in seismic protection factors. The potential for a 2%-5% premium is recognized by MVS in Section 99, Page 1.

- Signs, Canopy, Jurisdictional Hook-up Fees, Impact Fees, Paving and Roads, Storm Drains, Rough Grading, Landscaping, and Sediment Control & Stabilization – These costs are specifically excluded from the Marshall & Swift Valuation base square foot cost for a Class A – Good General Hospital per Section 1, page 3 of the Marshall Valuation Service.

- Helipad - Land improvement costs, such as helipads, are specifically excluded from the Marshall & Swift Valuation base square foot cost for a Class A -Good General Hospital per Section 1, page 3 of the Marshall Valuation Service. (While helipads are not specifically mentioned, UMSMC-E considers it a land improvement cost.)

- Water and Sewer– This project requires the extension of utilities to the perimeter of the hospital related portion of the site (i.e., to the outer boundary of the "Inner Loop"). These costs are specifically excluded from the Marshall & Swift Valuation base square foot cost for a Class A – Good General Hospital per Section 1, page 3 of the Marshall Valuation Service.

- Premium for Minority Business Enterprise Requirement – This construction will be subject to the Minority Business Enterprise Requirement ("MBE"). UMSMC-E estimates that the premium will be 4%, based on input from contractors.

- All Outer Loop Costs – These are considered off-site costs, as they relate to a portion of the parcel that is not hospital related. Off-site costs are specifically excluded from the Marshall & Swift Valuation base square foot cost for a Class A – Good General Hospital per Section 1, page 3 of the Marshall Valuation Service.

- Capitalized Construction Interest on Extraordinary Costs - Capital interest shown on the project budget sheet is for the entire costs of the hospital building. The costs associated with this line item also apply to the extraordinary costs. Because the Capitalized Construction Interest only associate with the costs in the "Building" budget line are considered in the MVS analysis, it is appropriate to adjust the cost of each of the above items that are in the Building costs to include the associated capitalized construction interest.

- Architectural and Engineering Fees Related to Extraordinary Costs – A&E Fees are typically a percentage of the total cost of Building and Site Preparation, including extraordinary costs. Consequently, like Capitalized Interest, if the extraordinary costs are removed from the comparison, their related A&E Fees should also be removed. This was accomplished by calculating the percent that the original A&E Fees comprised of the Building and Site Prep costs, multiplying that percentage times the sum of the extraordinary costs, and subtracting that number from the original A&E fees.

- Amount Spent on the 2012 Project that is not now Usable – Within the costs are the costs spent on the 2012 project. Prior to this modification, UMSMC-E had spent nearly $9M on the original project. Only A&E Fees and Permits are relevant to the MVS Analysis. Some of what was spent on A&E fees is still usable, but almost half of it was not. UMSMC-E has only counted what is not usable as Extraordinary Costs. These costs would not be in the average benchmark for current projects.

Row Labels	Usable	Not Usable	Grand Total
A&E	$2,224,553	$2,022,908	$4,247,461
Consultant	$273,997	$1,051,679	$1,325,677
Legal		$2,000	$2,000
Other		$3,282,548	$3,282,548
Permits		$52,849	$52,849
Grand Total	$2,498,551	$6,411,984	$8,910,534

Eliminating all of the extraordinary costs reduces the project costs that should be compared to the MVS estimate to $392.72. As noted below, the project's cost per square foot is below the MVS benchmark.

Adjusted Project Cost		**Per Square Foot**
Building	$104,235,785	$293.92
Fixed Equipment	$0	$0.00
Site Preparation	$163,698	$0.46
Architectural Fees	$6,977,092	$19.67
Permits	$4,610,966	$13.00
Subtotal	$115,987,541	$327.05
Capitalized Construction Interest	$23,286,584	$65.66
Total	$139,274,125	$392.72

VI. Comparison to the MVS Benchmark

MVS Benchmark	$394.63
The Project	$392.72
Difference	-$1.91

Standard .04B(8) – Construction Cost of Non-Hospital Space

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

Applicant Response:

Not applicable.

Standard .04B(9) – Inpatient Nursing Unit Space

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

Applicant Response:

The average square feet/bed of the inpatient nursing units in the proposed facility is 488 sf/bed, using the definition in the Acute Care Chapter of the State Health Plan. The average sf/bed varies by the type of nursing unit. The twelve-bed ICU unit exceeds the standard because it has very few beds. The perinatal (OB) unit also exceeds the standard because the

beds in that unit will be LDRP (labor, delivery, recovery, postpartum) beds, which require more space than a typical patient bed. However, the overall average is reduced to below the benchmark because the Medical/Surgical units have fewer square feet per bed than the standard. A summary of the calculations is shown below. The detailed analysis is included in **Exhibit 20.**

Table 22
Average Square Feet Per Bed of Inpatient Nursing Units

INPATIENT UNIT	LEVEL	NSF	# BEDS	SF/BED
GENERAL MED/SURG UNITS				
MED/SURG (JOINT & NEURO)	3	9,324	22	**424**
MED/SURG (ADULT, PEDS & PALLIATIVE)	4	9,263	23	**403**
MED/SURG (TELEMETRY BEDS)	5	9,324	22	**424**
SPECIALTY UNITS				
PERINATAL / LDRP	3	10,605	16	**663**
ICU	5	7,854	12	**654**
TOTAL AREA & BEDS		**46,368**	**95**	
AVERAGE SF/BED				**488**

Standard .04B(10) – Rate Reduction Agreement

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

Applicant Response:

Inapplicable. The Commission recently determined in the CON review for the replacement and relocation of Washington Adventist Hospital that this standard is inapplicable because the rate reduction agreements referenced in the standard have been replaced by the Global Budget revenue model (in this case, Total Patient Revenue model). *In re Washington Adventist Hospital*, Docket 13-15-2349, Decision at 51.

Standard .04B(11) – Efficiency

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

(a) Provide an analysis of each change in operational efficiency projected for each diagnostic or treatment facility and service being replaced or expanded, and document the manner in which the planning and design of the project took efficiency improvements into account; and

(b) Demonstrate that the proposed project will improve operational efficiency when the proposed replacement or expanded diagnostic or treatment facilities and services are projected to experience increases in the volume of services delivered; or

(c) Demonstrate why improvements in operational efficiency cannot be achieved.

Applicant Response:

UMSMC-E is already an efficient hospital. It is important to note that UMSMC-E is a "Total Patient Revenue System" ("TPR") hospital. Under this rate system, the HSCRC provides assurance of a certain amount of revenue each year, independent of the number of patients treated and the amount of services, either inpatient or outpatient, provided to these patients. If volumes go down, UMSMC-E has to increase prices, and if volumes go up, UMSMC-E has to decrease prices. Volume will not drive net revenue, only expenses will do so. Consequently, UMSMC-E has every incentive to become more efficient and where UMSMC-E has been able to become more efficient, it has attempted to do so.

In the spring of 2015 UM SRH engaged IMA consulting, a national healthcare advisory firm, to evaluate staffing throughout the UM SRH System. IMA Consulting utilizes interviews with key stakeholders and direct observations of operations, supplemented by comparative data analyses and cost per unit of service, to identify viable opportunities for improvement. By establishing worked hours per unit of service targets, it guides the organization's leaders to assure that productivity remains on track. IMA compared UMSMC-E's worked hours per unit of service to national standards and proposed adjustments in processes and procedures in order to staff its departments at the 25-50th percentile benchmark for the "most efficient departments" throughout the nation.

Since the IMA engagement, UMSMC-E has maintained its benchmarking construct and continues to efficiently staff its departments according to the established productivity standards. As a result, a new facility will not make the departments more efficient, as they are already high performers, but instead efficiencies will be generated through: (i) plant design in reduction of utilities estimated to be 15% annually; (ii) the TransVac System which will reduce inter-facility transporters by an estimated 5 FTE's; and (iii) reduction in repairs and maintenance expenses being incurred at the existing hospital site due to the age of the facility.

A number of design elements of the replacement hospital have been targeted to improve efficiency. They include:

Bed Units. The bed units, all private patient rooms are designed to improve staff efficiency. The rooms have been mocked up to simulate room work flow for staff, patients and family. The location of the charting alcove with the nurse server provides critical supplies close by. All of these are improvements over the aged nursing units, and non-standardized care areas of the existing hospital. Additionally, the sweeping triangular form minimizes unit-wide

circulation to key rooms and reduced footsteps for the caregiver by as much as 30% over their current race-track configuration in most units. The location of the ADA designed rooms near the patient elevators, as well as the location of the elevators between the units, further improves work flow and efficiency processes. Other things that foster improved efficiency are the location of the gym/rehab space on the unit for Ortho/Rehab and the location of ICU with Step Down Unit and Respiratory Therapy.

Imaging. Imaging efficiency is achieved by both locating it convenient to the primary public spine, as well as its direct adjacency to emergency services and close relationship to the patient/service elevators for inpatient imaging. Internally, the department is designed to operate at optimum efficiency by separating inpatient and outpatient flows, and building in synergies between imaging service modalities, such as a dedicated cardiac imaging center.

Surgery. Surgery offers the biggest improvement over the existing facility where departments are fragmented by other departments, prep/recovery is fragmented and central sterile is more remote than desired. In the new facility, the prep and recovery area is designed to flex between prep and stage II recovery in standardized rooms that can flex with patient flow. The outpatient access is less than 90 feet from the front door to check-in. Prep and Recovery is closely located to both the minor procedure suite as well as the major OR's, Cath Rooms, and E.P. lab. The PACU is located to minimize transport from the OR suite, as well as to the patient elevators for inpatients. Central Sterile is located directly adjacent to the OR suite for more timely and efficiently processing of sterile supplies. Furthermore, all invasive procedure suites were co-located in one new department to take advantage of a shared prep/recovery/PACU platform that improves nurse efficiency. Within the OR suite, the standardized OR's allow for maximum utilization and the central core allows for staging of case carts for optimum throughput.

This same mind toward efficiency holds true for materials management, lab and pharmacy. All located to shorten the distance for delivery of supplies or specimens and medications.

Standard .04B(12) – Patient Safety

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

Applicant Response:

The new facility is designed with patient and staff safety as a core design element. This begins with the organization of the facility with clear separation of public and staff/service corridors to improve patient privacy, patient experience, and staff efficiency. The facility will include 100% private rooms, which will help reduce medication errors and infections. The facility will also feature standardized patient care areas in both the patient units as well as in the surgical suite. The units themselves are designed to be as efficient as possible, locating key supplies near patient units to minimize staff travel distances by as much as 30% at the new

facility. This includes placing nurse servers outside of each two patient rooms. Placing computers in rooms and charting between the rooms will facilitate safe delivery of medications allowing for bedside barcode checking of medications, as well as greater visibility of the staff to the patients. The investment in patient care units with fewer beds/unit than in the existing hospital further helps with both localizing resources, minimizing staff travel distances, and opening up visibility of patients, while controlling noise in the units.

Patient handling and movement is also a key aspect of patient and staff safety. The elevators at the replacement facility will be centralized to minimize patient transport distances. On the patient units, ADA designed rooms are located close to the patient elevators to minimize staff handling, and all the rooms are planned to accommodate patient lifts.

In the diagnostic areas, the invasive procedure rooms are all located together and in close proximity to patient prep and recovery. The ORs, Cath Room, Prep and PACU are all standardized, with daylight in both patient care and staff areas to help with recovery and fatigue. To help with stress, the facility will feature embedded way finding for patients and family. This means that all public areas, both circulation and waiting, are oriented to the exterior with views of where they parked. This minimizes the distances patients have to travel, and helps alleviate congestion and confusion within staff/service only areas. Another example of efficient design in diagnostic areas is the proximity of departments to streamline services. Central Sterile Processing is located adjacent to Surgery. Lab and Pharmacy are located adjacent to surgery and immediately next to the service elevators. The gym for Rehab is located on the patient unit, with corridors designed to promote ambulating in the units.

In all areas, patient privacy is a key factor in safety. As part of the planning process, acoustical design is an increased consideration and now required by the 2014 guidelines. As such, materials and finishes are being selected that not only soften footfalls for wear and tear of staff, but also help absorb noise. This is in addition to three-walled rooms in prep for privacy and the private rooms in the patient care units.

As a Greenfield replacement facility, UMSMC-E is afforded the opportunity to design both to the current guidelines for acoustics, patient safety and patient handling, as well as to design a facility that is readily adaptable to new services and ever changing technologies. The infrastructure is being planned accordingly. The floor to floor height accommodates larger technologies, the first two floor plates feature a regular grid that allows for adaptability over time to new modalities and services. For future flexibility, the hospital departments are carefully planned to allow for horizontal expansion without disruption to existing services. As an added measure, a mobile technology dock is being planned to further allow for any unanticipated technology needs until more permanent solutions can be incorporated.

One of the other features of the proposed facility is that given its location along Route 50, the building is sited and the emergency department is planned to allow for scalability in the event of contingency events. This includes both provisions for mass decontamination, flow of the department and flexible use of spaces in such demanding situations.

Some of the other features that improve patient safety over the existing facility include:

- Co-location of related support functions to maximize efficiency
- Universal patient room design

- Dedicated trauma/patient elevator
- Continuing Care Nursery with accommodations for opioid addicted neonates or other special care needs.
- Directed traffic flow into building (main entrance) past security
- Automation of technology and patient records
- Upgrade to ADA/ANSI standards
- Reduced patient transfer distances (surgery to short stay recovery, ED to ICU, ED to helipad, nursery/LDRP to helipad, etc.)
- Appropriate number of prep/recovery bays
- Increased telemetry capability
- Direct access from C-section to nursery
- Rehab stairs at each floor in lieu of using enclosed stairwells
- Charting/observation at each patient room
- Airborne infection isolation rooms on every patient unit

Standard .04B(13) – Financial Feasibility

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

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

(b) Each applicant must document that:

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

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

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

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

Applicant Response:

A comprehensive statement of assumptions is included in **Exhibit 21.** As shown in Tables G and H, UMSMC-E projects excess of revenues over expenses.

Standard .04B(14) – Emergency Department Treatment Capacity and Space

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

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

(i) The existing and projected primary service areas of the hospital, historic trends in emergency department utilization at the hospital, and the number of hospital emergency department service providers in the applicant hospital's primary service areas;

(ii) The number of uninsured, underinsured, indigent, and otherwise underserved patients in the applicant's primary service area and the impact of these patient groups on emergency department use;

(iii) Any demographic or health service utilization data and/or analyses that support the need for the proposed project;

(iv) The impact of efforts the applicant has made or will make to divert non-emergency cases from its emergency department to more appropriate primary care or urgent care settings; and

(v) Any other relevant information on the unmet need for emergency department or urgent care services in the service area.

Applicant Response:

As stated previously, UMSMC-E is not seeking an expansion in the number of treatment bays. The existing hospital has 32 treatment spaces and the proposed replacement hospital will include 28 treatment spaces.

The historical volumes are shown in Table 23.

Table 23
Historical ED Volume
UMSMC-E
FY 2012 – 2016

Year	ED Visits
2012	36,737
2013	36,756
2014	33,974
2015	34,304
2016	33,869

Source: UMSMC-E

The applicant has projected future ED visits based on the 2016 use rate of ED visits at UMSMC-E by ZIP Code in the hospital's acute care Primary and Secondary Service Areas. The projected number of visits in 2024 are shown in Table 24.

Table 24
Projected ED Volume
UMSMC-E
2024

ZIP Code	FY2016 Cases	2016 Population	2016 UR	2024 Projected Population	2024 Projected Cases
21601	10,559	23,962	0.441	24,615	10,847
21629	3,128	9,561	0.327	9,731	3,184
21613	1,755	17,740	0.099	18,210	1,801
21632	2,371	6,236	0.380	6,094	2,317
21655	2,053	4,944	0.415	4,894	2,032
21663	1,229	3,088	0.398	2,909	1,158
21617	594	10,647	0.056	11,574	646
21643	1,466	5,943	0.247	6,123	1,510

ZIP Code	FY2016 Cases	2016 Population	2016 UR	2024 Projected Population	2024 Projected Cases
21639	1,331	4,433	0.300	4,512	1,355
21660	1,193	3,841	0.311	3,873	1,203
21673	1,238	3,054	0.405	2,910	1,180
21625	903	2,492	0.362	2,476	897
21620	172	12,553	0.014	12,444	171
21638	210	5,178	0.041	5,518	224
21666	209	12,224	0.017	12,644	216
21658	179	3,750	0.048	3,737	178
21619	152	6,295	0.024	6,616	160
21631	220	3,126	0.070	3,185	224
21671	316	699	0.452	653	295
Service Area Subtotal	29,278				29,598
Out of SA Visits	4,591				4,641
Total Visits	33,869				34,239
SA%	86.4%				86.4%
Additional PCI Related Visits					59
Total Visits					**34,298**

The applicant anticipates that the addition of PCI will add additional ED visits, which could not have been reflected in the 2016 ED visit use rate. To be conservative, the applicant used only the number of projected Primary PCI cases in 2024 as a proxy for the additional PCI related ED visits.

The proposed ED is appropriately sized as compared to the departmental gross square feet ("DGSF") size benchmark in the American College of Emergency Physicians ("ACEP") Guide entitled *Emergency Department Design* (Second Edition). On pages 109-112, the *Guide* presents, in chart form, the factors that should be considered in planning the size of the ED. The information on the proposed new hospital is presented below. The ACEP Guidelines use "Low Range," "Mid Range," and "High Range" thresholds for certain measures to determine the appropriate size for an ED. Criteria 1-16 in Table 25 show the factors for determining if an ED should be planned larger or smaller. If the facts for any given hospital under the criteria fall in the "Low Range" category, the ED could be smaller than if the majority of factors fall in the "High Range" Category. The table shows the number of DGSF and the number of treatment bays that would be required in both the high and low range categories at various projected ED volumes.

Table 25 shows that, based on the ACEP Guide, an ED at UMSMC-E's projected volumes would require between 18,175 and 24,131 DGSF. UMSMC-E's ED will be 22,945 DGSF in size. This is appropriate given that UMSMC-E anticipates that it will exceed the high end threshold in four of the eleven ACEP factors and will be between the low and the high end thresholds in four of the factors. Therefore, UMSMC-E believes that it is using the proposed space efficiently.

Table 25
American College of Emergency Physicians ("ACEP") Guide
***Emergency Department Design* (Second Edition)**
"Low Range, "Mid Range," and "High Range" Thresholds
and UMSMC-E Comparison
Emergency Department

	Low	***Mid***	**High**	**Existing Hospital**	**Proposed Hospital**
% Admitted Patients	< 8%	12%-20%	> 25%	18.1%	18%
ALOS	<2.25 Hours	2.5-3.75 Hours	>4 Hours	6.5	4
Patient Care Spaces	Rapid Care	Mostly Private	All Private	Rapid Care	All Private
Inner Waiting and Result Waiting Areas	Pts. Will Move	Limited	Will Not Move	Will Not Move	Will Not Move
CDU or Observation Space	Outside	Limited	Will Stay in ED	Outside	Will Stay in ED
Time to Admit	<=60 Minutes	90-120 Minutes	>120 Minutes	2 Hours	1 Hour
Turnaround Time Dx Tests	<=45 Minutes	60 Minutes	>90 Minutes	52 Min.	50 Min.
Percent Behavioral Health Patients	<3%	4%-6%	>=7%	3.4%	3.4%
% Nonurgent/%Urgent	>45% ESI 4+5	25%-45% ESI 4+5	< 25% ESI 4+5	32.0%	*32%*
Age of Patient	<10% Age 65+	10%-20% Age 65+	>20% Age 65+	22.3%	26-27%
Imaging w/n ED	No	Limited	Yes	No	*No*
Family Amenities (consult rooms, nourishment, etc.)	None	Limited	Extensive	None	Limited
Geriatrics Specialty Area in ED	No Specialty Area	Might Have	Yes	No Specialty Area	No Specialty Area
Pediatrics Specialty Area in ED	None	Might Have	Yes	None	None
Detention Specialty Area in ED	No Special Provision	Might Have	Yes	Behavioral Health Rooms can be used for this.	Behavioral Health Rooms can be used for this.
Administrative and Teaching Space	Minimal	Moderate	Extensive	Moderate	Moderate
Projected DGSF				**21,220**	**22,945**
Projected Annual Visits				33,845	34,298
DGSF 30,000 Visits	16,800		21,875		
DGSF 35,000 Visits	18,400		24,500		
DGSF Calculated at Projected Volumes	**18,175**		**24,131**		
Treatment Bays 30,000 Visits	21		25		
Treatment Bays 35,000 Visits	23		28		
Treatment Bays Calculated at Projected Volumes	**23**		**28**		
Proposed Number of Treatment Bays					**28**

Standard .04B(15) – Emergency Department Expansion

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

(a) The applicant hospital must demonstrate that, in cooperation with its medical staff, it has attempted to reduce use of its emergency department for non-emergency medical care. This demonstration shall, at a minimum, address the feasibility of reducing or redirecting patients with non-emergent illnesses, injuries, and conditions, to lower cost alternative facilities or programs;

(b) The applicant hospital must demonstrate that it has effectively managed its existing emergency department treatment capacity to maximize use; and

(c) The applicant hospital must demonstrate that it has considered the need for bed and other facility and system capacity that will be affected by greater volumes of emergency department patients.

Applicant Response:

Inapplicable. The applicant is not proposing to expand its emergency department treatment capacity.

Standard .04B(16) – Shell Space

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

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

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

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

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

(c) Shell space being constructed on lower floors of a building addition that supports finished building space on upper floors does not require a net present value analysis. Applicants shall provide information

on the cost, the most likely uses, and the likely time frame for using such shell space.

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

Applicant Response:

Inapplicable. The applicant does not propose to add any shell space in the relocated hospital.

COMAR 10.24.11. General Surgical Services

.05A. GENERAL STANDARDS

Standard .05(A)(1) – Information Regarding Charges

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

Applicant Response:

Please see the response to COMAR 10.24.10.04A-Standard .04A (1) – Information Regarding Charges.

Standard .05(A)(2) – Charity Care Policy.

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

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

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

(iii) Criteria for Eligibility. Hospitals shall comply with applicable State statutes and HSCRC regulations regarding financial assistance policies and charity care eligibility. ASFs, at a minimum, must include the following eligibility criteria in charity care policies. Persons with family income below 100 percent of the current federal poverty guideline who have no health insurance coverage and are not eligible for any public program providing coverage for medical expenses shall be eligible for services free of charge. At a minimum, persons with family income above 100 percent of the federal poverty guideline but below 200

percent of the federal poverty guideline shall be eligible for services at a discounted charge, based on a sliding scale of discounts for family income bands. A health maintenance organization, acting as both the insurer and provider of health care services for members, shall have a financial assistance policy for its members that is consistent with the minimum eligibility criteria for charity care required of ASFs described in these regulations.

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

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

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

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

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

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

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

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

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

Applicant Response:

Please see the response to COMAR 10.24.10.04A – Standard .04A(2) – Charity Care Policy.

Standard .05(A)(3) – Quality of Care

A facility providing surgical services shall provide high quality care.

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

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

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

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

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

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

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

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

Applicant Response:

Please see the response to COMAR 10.24.10.04A – Standard .04A (3) – Quality of Care.

Standard .05A(4) – Transfer Agreements

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

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

(c) Each ASF shall have procedures for emergency transfer to a hospital that meet or exceed the minimum requirements in COMAR 10.05.05.09.

Applicant Response:

Please see **Exhibit 22**, which includes copies of UMSMC-E's transfer agreements with other hospitals.

.05B. Project Review Standards

Standard .05B(1) – Service Area

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

Applicant Response:

The applicant expects the service area for surgery will be the same as the UMSMC-E hospital service area.

Standard .05B(2) – Need- Minimum Utilization for Establishment of a New or Replacement Facility

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

capacity or higher levels within three years of the initiation of surgical services at the proposed facility.

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

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

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

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

(b) An applicant proposing the establishment of a new ambulatory surgical facility shall submit a needs assessment that includes the following:

(i) Historic trends in the use of surgical facilities for outpatient surgical procedures by the proposed facility's likely service area population;

(ii) The operating room time required for surgical cases projected at the proposed facility by surgical specialty or, if approved by Commission staff, another set of categories; and

(iii) Documentation of the current surgical caseload of each physician likely to perform surgery at the proposed facility.

Applicant Response:

Even if the hospital were not being replaced, UMSMC-E would need to replace its surgical suite. Most of the operating rooms are not sufficient in size to house the equipment necessary for contemporary complex surgery. Even some of the ENT cases now use Brain Lab equipment which take up a significant footprint. Another larger piece of equipment is the robot which consists of three very large pieces of equipment. As a result, the OR setting at UMSMC-E has no space flexibility. Although UMSMC-E staff have tried to utilize the rooms as "universal," it really is logistically impossible due to the size. Two of the operating rooms are larger (OR 1 and 6) and therefore many of the cases require UMSMC-E to use them in order to allow appropriate clearances (examples are neuro, laparoscopic chole, larger vascular cases, major ENT, all ORTHO). When the robot was acquired, in order to keep from damaging the equipment, an alcove was constructed in two of the ORs (OR 1 and 5) so it is within these two rooms that UMSMC-E focuses its current robotic surgery volume.

UMSMC-E currently has six ORs and is proposing to maintain six ORs at the new facility.

Table 26
Historical OR Volumes
UMSMC-E
2008-2015

Year	Cases			Minutes		
	Inpt.	Outpt.	Total	Inpt.	Outpt.	Total
2008	1,304	2,677	3,981	159,280	182,440	341,720
2009	1,667	3,331	4,998	204,612	234,088	438,700
2010	1,623	3,280	4,903	196,131	221,792	417,923
2011	1,561	3,479	5,040	193,297	244,400	437,697
2012	1,381	3,191	4,572	175,985	252,869	428,854
2013	1,307	2,878	4,185	166,420	236,153	402,573
2014	1,470	3,001	4,471	184,782	248,834	433,616
2015	1,722	3,161	4,883	201,635	251,765	453,400

Source: UMSMC-E, Volumes include only OR Cases,
excluding endoscopies, cystoscopies, C-sections, and other procedure room cases.

In calculating the need for ORs, the applicant used 36 minutes of turnaround time ("TAT") per case. The Director of Surgical and Ambulatory Services for UMSMC-E has tracked the TAT on 90 percent of UMSMC-E's inpatient and outpatient OR cases in FY 2015. Cleanup time varies by specialty. Unlike urban hospitals, which may have many nurses, residents, and other staff who help "turn over" an OR, UMSMC-E has a limited number of staff members who are available to do this. On average, the turnover time at UMSMC-E was 36 minutes in FY 2015.

UMSMC-E has been very conservative in its projections of need. It has projected future need based on the 2015 surgical use rate by ZIP Code in the hospital's acute care Primary and Secondary Service Areas. As shown in Table 27, projections show that UMSMC-E will need 5.6 ORs in 2024.

As at other hospitals, surgeons desire to have "blocked" time so that they can better plan and make better use of their time. Due to the wide geographic area that UMSMC-E's physicians cover, they have offices in most of the five counties in the Mid-Shore Region. Using block scheduling is essential to maintaining a reliable schedule for the physicians without having to reschedule an entire office of patients. For some UMSMC-E surgeons, patients have to wait 4 - 6 weeks to obtain their surgery. Thus, the maintenance of six ORs is crucial to the ability of UMSMC-E to adequately serve the community.

Table 27
OR Need
UMSMC-E
Through 2024

	Inpatient					Outpatient			
ZIP Code	2015 Cases	2015 Population	2015 Use Rate	2024 Projected Population	2024 Projected Cases	2015 Cases	2015 UR	2024 Projected Cases	2024 Total Cases
21601	470	23,901	0.020	24,615	484	696	0.029	717	1,201
21629	137	9,567	0.014	9,731	139	228	0.024	232	371
21613	206	17,733	0.012	18,210	212	348	0.020	357	569
21632	69	6,283	0.011	6,094	67	146	0.023	142	209
21655	63	4,966	0.013	4,894	62	139	0.028	137	199
21663	75	3,128	0.024	2,909	70	101	0.032	94	164
21617	50	10,532	0.005	11,574	55	109	0.010	120	175
21643	66	5,927	0.011	6,123	68	130	0.022	134	202
21639	59	4,435	0.013	4,512	60	107	0.024	109	169
21660	36	3,845	0.009	3,873	36	81	0.021	82	118
21673	34	3,084	0.011	2,910	32	90	0.029	85	117
21625	26	2,493	0.010	2,476	26	65	0.026	65	90
21620	29	12,608	0.002	12,444	29	96	0.008	95	123
21638	26	5,139	0.005	5,518	28	37	0.007	40	68
21666	29	12,199	0.002	12,644	30	45	0.004	47	77
21658	18	3,760	0.005	3,737	18	36	0.010	36	54
21619	9	6,259	0.001	6,616	10	33	0.005	35	44
21631	19	3,122	0.006	3,185	19	47	0.015	48	67
21671	12	709	0.017	653	11	28	0.039	26	37
Service Area Subtotal	1,433				1,455	2,562		2,598	4,054
Out of AS Cases	289				294	599		607	901
Total Cases	1,722				1,749	3,161		3,206	4,955
SA %	83.2%					81.1%			
Min/Case					117.1			79.6	
OR Minutes					204,794			255,314	460,109
TAT Min/Case									36
TAT Min									178,364
Total Min									638,472
Capacity Minutes/OR									114,000
Needed ORs									5.6

Standard .05B(3) – Need - Minimum Utilization for Expansion of An Existing Facility

An applicant proposing to expand the number of operating rooms at an existing hospital or ambulatory surgical facility shall:

(a) Demonstrate the need for each proposed additional operating room, utilizing the operating room capacity assumptions and other guidance included at Regulation .06 of this Chapter;

(b) Demonstrate that its existing operating rooms were utilized at optimal capacity in the most recent 12-month period for which data has been reported to the Health Services Cost Review Commission or to the Maryland Health Care Commission; and

(c) Provide a needs assessment demonstrating that each proposed operating room is likely to be utilized at optimal capacity or higher levels within three years of the completion of the additional operating room capacity. The needs assessment shall include the following:

(i) Historic trends in the use of surgical facilities at the existing facility;

(ii) Operating room time required for surgical cases historically provided at the facility by surgical specialty or operating room category; and

(iii) Projected cases to be performed in each proposed additional operating room.

Applicant Response:

Inapplicable. The applicant does not propose to expand surgical capacity in the replacement hospital.

Standard .05B(4) – Design Requirements

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

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

(b) An ASF shall meet the requirements in Section 3.7 of the FGI Guidelines.

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

Applicant Response:

Please see **Exhibit 23**, which is a letter from the architectural firm HKS attesting that the surgical suite meets FGI Guidelines.

Standard .05B(5) – Support Services

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

Applicant Response:

UMSMC-E provides laboratory, radiology, and pathology services on-site and will continue to do so in the replacement facility.

Standard .05B(6) – Patient Safety

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

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

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

Applicant Response:

Please see the response to COMAR 10.24.10, Standard .04B(12) – Patient Safety.

Standard .05B(7) – Construction Costs

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

(a) Hospital projects.

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

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

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

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

(b) Ambulatory Surgical Facilities.

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

(ii) If the projected cost per square foot exceeds the Marshall Valuation Service® benchmark cost by 15% or more, then the applicant's project shall not be approved unless the applicant demonstrates the reasonableness of the construction costs. Additional independent construction cost estimates or information on the actual cost of recently constructed surgical facilities similar to the proposed facility may be provided to support an applicant's analysis of the reasonableness of the construction costs.

Applicant Response:

Please see the response to COMAR 10.24.10.04B-Standard .04B(7) – Construction Cost of Hospital Space.

Standard .05B(8) – Financial Feasibility

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

(a) An applicant shall document that:

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

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

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

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

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

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

Applicant Response:

Please see the response to COMAR 10.24.10.04B(13) - Financial Feasibility.

Standard .05B(9) – Preference in Comparative Reviews

In the case of a comparative review of CON applications to establish an ambulatory surgical facility or provide surgical services, preference will be given to a project that commits to serve a larger proportion of charity care and Medicaid patients. Applicants' commitment to provide charity care will be evaluated based on their past record of providing such care and their proposed outreach strategies for meeting their projected levels of charity care.

Applicant Response:

Not applicable.

COMAR 10.24.12. OB Services Chapter

.04 REVIEW STANDARDS

Standard .04(1) – Need.

All applicants must quantify the need for the number of beds to be assigned to the obstetric service, consistent with the approach outlined in Policy 4.1. Applicants for a new perinatal service must address Policy 4.1.

Applicant Response:

UMSMC-E is currently licensed to operate 17 Acute Obstetrical beds in FY2017. UMSMC-E proposes to reduce the number of Obstetrical beds at the replacement hospital and operate 16 beds.

The applicant utilized 2015 HSCRC inpatient data to project the need for Obstetrical beds. The Primary (ZIP Codes contributing the top 60% of discharges) and the Secondary (ZIP Codes contributing the next 25% of discharges) Obstetrical Service Areas are shown in Table 28.

Table 28
UMSMC-E's Obstetrical
Primary and Secondary Service Areas
2015

ZIP Codes	Grand Total	Cumulative %
21613	342	19.9%
21601	307	37.7%
21629	131	45.3%
21632	101	51.1%
21643	101	57.0%
21639	72	61.1%
21655	59	64.6%
21673	48	67.3%
21660	45	69.9%
21649	43	72.4%
21617	32	74.3%
21631	30	76.1%
21640	29	77.7%
21620	27	79.3%
21804	24	80.7%
21625	19	81.8%
21636	19	82.9%

ZIP Codes	Grand Total	Cumulative %
21663	19	84.0%
21619	18	85.1%
21801	18	86.1%
50 Other ZIP Codes	240	
Total	**1,723**	

Source: HSCRC Discharge Database

The aggregate of both the Primary and Secondary Obstetrical Service Areas will be referred to as UMSMC-E's Obstetrical Service Area.

UMSMC-E then counted the number of discharges by age cohort (Females age 15-44) by ZIP Code in UMSMC-E's Obstetrical Service Area at any Maryland hospital and, also, the number of discharges at UMSMC-E. These are shown in Table 29.

Table 29
Obstetrical Discharges
UMSMC-E's Obstetrical Service Area
By ZIP Code and Age Cohort
2015

All Discharges All Hosps from UMSMC-E's Obstetrical Service Area		UMSMC-E Discharges from UMSMC-E's Obstetrical Service Area			
ZIP Code	Grand Total	ZIP Code	Grand Total	Cumulative %	Market Share
21601	337	21601	307	19.9%	91.1%
21613	378	21613	342	37.7%	90.5%
21617	100	21617	32	45.3%	32.0%
21619	68	21619	18	51.1%	26.0%
21620	115	21620	27	57.0%	23.6%
21625	27	21625	19	61.1%	70.6%
21629	165	21629	131	64.6%	79.4%
21631	34	21631	30	67.3%	88.4%
21632	120	21632	101	69.9%	84.1%
21636	26	21636	19	72.4%	73.3%
21639	86	21639	72	74.3%	83.7%
21640	35	21640	29	76.1%	82.7%
21643	109	21643	101	77.7%	92.6%
21649	53	21649	43	79.3%	81.2%
21655	69	21655	59	80.7%	85.5%
21660	65	21660	45	81.8%	69.1%
21663	23	21663	19	82.9%	82.7%

All Discharges All Hosps from UMSMC-E's Obstetrical Service Area		UMSMC-E Discharges from UMSMC-E's Obstetrical Service Area			
ZIP Code	Grand Total	ZIP Code	Grand Total	Cumulative %	Market Share
21673	52	21673	48	84.0%	92.3%
21801	395	21801	18	85.1%	4.5%
21804	461	21804	24	86.1%	5.2%
TOTAL	**2,717**		**1,483**		**54.6%**

Source: HSCRC Discharge Database

From these data, UMSMC-E calculated bed need using the following methodology.

1. For each ZIP Code, UMSMC-E ordered population data from Nielsen for 2010, 2016 and 2021. UMSMC-E then calculated the Compound Average Growth Rate ("CAGR") for Females age 15-44 for the difference between 2010 and 2016 to calculate the 2015 population. UMSMC-E also calculated the CAGR for the difference between 2016 and 2021. UMSMC-E used this CAGR to calculate the projected population in 2024.

2. The applicant calculated the 2015 Obstetrical use rates that the ZIP Code populations experienced to all hospitals.

3. The applicant applied these use rates to the 2024 Female age 15-44 population by ZIP Code to project the number of discharges from each ZIP Code in 2024.

4. The applicant summed the total number of projected 2024 discharges by ZIP Code.

5. The applicant applied UMSMC-E's 2015 market share that it had in each ZIP Code to the 2024 discharges to project the number of 2024 discharges that will occur at UMSMC-E.

6. Since these ZIP Codes comprise UMSMC-E's Primary and Secondary Service Areas (86.3% of UMSMC-E's 2015 total Obstetrical discharges), the applicant adjusted the projected discharges to account for out of Service Area discharges by dividing the Service Area discharges by 0.863. This resulted in a subtotal of all UMSMC-E projected Obstetrical discharges.

7. The applicant projects that It will recapture a small number of discharges (Total: 86) that would not have been reflected in the 2015 market shares due to actions UMSMC-E is taking in Obstetrics.

8. The applicant applied the 2015 ALOS to the Subtotal 2024 discharges to project the 2024 Patient Days.

9. The applicant divided the total number of 2024 projected patient days by 365 to obtain the Average Daily Census ("ADC"). This resulted in an ADC of 10.56.

10. The applicant divided the ADC by a 75% occupancy rate.

These projections are shown in **Exhibit 24.** They result in a projected need for 15.6 Obstetrical beds. UMSMC-E is proposing 16 Obstetrical beds.

Standard .04(2) – The Maryland Perinatal System Standards

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

Applicant Response:

UMSMC-E currently has a Level I nursery, as will the proposed replacement facility. **Exhibit 25** includes a self-assessment conducted in June 2014 in preparation for the CON utilizing the 2014 Standards from the Maryland Department of Health and Mental Hygiene. The self-assessment shows that UMSMC-E meets all of the essential perinatal standards for Level I.

Standard .04(3) – Charity Care Policy

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

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

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

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

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

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

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

Applicant Response:

Please see response to COMAR 10.24.10.04A(2). UMSMC-E's Charity Care policy applies to acute care and obstetric services.

Standard .04(4) – Medicaid Access

Each applicant shall provide a plan describing how the applicant will assure access to hospital obstetric services for Medical Assistance enrollees, including:

(a) an estimate of the number of Medical Assistance enrollees in its primary service area, and the number of physicians that have or will have admitting privileges to provide obstetric or pediatric services for women and infants who participate in the Medical Assistance program.

Applicant Response:

UMSMC-E provides care to all individuals, regardless of ability to pay or source of payment. According to the Maryland Department of Health and Mental Hygiene's Maryland Medicaid eHealth Statistics there were 6,482 Medicaid enrollees in Talbot County in May 2016 (http://chpdm-ehealth.org/mco/mco-enrollment_action.cfm).

Each of the obstetricians and pediatricians with privileges at UMSMC-E participates in the Medical Assistance Program. There are eight obstetricians, five pediatricians, and eight nurse-midwives participating in Medicaid. UMSMC-E expects another obstetrician to obtain privileges in January 2017.

Standard .04(5) – Staffing

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

Applicant Response:

Staffing at third-year projected volumes is estimated to be:

Employee Category	FTE	FTE Replacement Factor	Total Expense	Comments
Staff Nurse (RN)	22.45	9.11%	$2,446,726	All RNs are cross-trained to L&D, Nursery, Post-partum, and outpatient testing/triage. This is an LDRP unit.
Per diem RN	2.25			These are the replacement factor FTEs.
Clinical Coordinators	2.4			
Nurse Practitioner	0			
Surgical Technician (ST)	4.4	4.35%	$245,203	
Per Diem ST	0.2			These are the replacement factor FTEs.
Nurse Manager	1.0		$92,502	Includes benefits. Responsible for OB and Pediatrics.
Unit Secretary (US)	2.2		$67,928	
Per diem US	0.0			
Lactation Consultant	1.0		$81,837	
Midwife	8			Not a part of the nursing staff. Credentialed through the Medical staff office. Five employed by Chesapeake Women's Health and three with Community Medical Group Women's Health.
Overtime			$70,544	All employee categories.
On-Call			$19,656	All employee categories.
TOTAL	35.9		$3,024,396	Midwives not included in total.

Standard .04(6) – Physical Plant Design and New Technology

All applicants must describe the features of new construction or renovation that are expected to contribute to improvements in patient safety and/or quality of care, and describe expected benefits.

Applicant Response:

As is the case with the entire proposed facility, the Birthing Center at the proposed new hospital is designed with patient and staff safety as a core design element. This commitment to safety begins with the organization of the facility with clear separation of public and staff/service corridors to improve patient privacy and staff efficiency. Also, the proposed facility will feature standardized patient care areas in both the patient units as well as in the surgical suite. The units themselves are designed to be as efficient as possible, with key supplies located to minimize staff travel distances by as much as 30% over their existing facilities. This includes placing nurse servers outside of each two patient rooms. Locating computers in patient rooms, as well as charting between the rooms, will facilitate safe delivery of medications allowing for bedside barcode checking of medications, as well as great visibility of the patients by staff. The proposed facility will have three more obstetrics beds than in the existing hospital, and be configured to consolidate and centralize resources, minimize staff travel distances, and open up visibility of patients, while controlling noise in the units.

Patient handling and movement is also a key aspect of patient and staff safety, as the elevators are centralized to minimize patient transport distances. The elevators for the Birthing Center allow direct access from the OR and ED.

In the diagnostic areas, the invasive procedure rooms are all located together and convenient to patient prep and recovery. The Birthing Center's Cesarean Section Rooms are all standardized, designed with input from the Director of Surgical Services and Anesthesia. To help relieve patient and family stress, the facility will feature embedded way finding for patients and family. Public areas, both circulation and waiting, will be oriented to the exterior with views of parking areas. This minimizes the distances patients have to travel, and helps alleviate congestion and confusion within staff/service only areas.

In the Birthing Center (as in the rest of the proposed hospital), patient privacy is a key factor in safety. As part of the planning process, acoustical design is an increased consideration and is now required by the 2014 guidelines. As such, materials and finishes are being selected that not only soften footfalls to reduce strain on staff, but also to help absorb noise. Also, all rooms in the Birthing Center, and throughout the facility, will be private.

The greater floor to floor height in the proposed facility will accommodate larger technologies. The first two floor plates feature a regular grid that allows for adaptability over time to new modalities and services.

Some of the other features that improve patient safety in the Birthing Center include:

- Co-location of related support functions to maximize efficiency
- Universal patient room design
- Charting/observation at each patient room
- Automation of technology and patient records
- Separate lactation room
- Appropriate number of triage bays

- Dedicated bathrooms in triage
- Dedicated trauma and Birthing Center Elevator for patient transfers in emergencies
- Reduced patient transfer distances (surgery to short stay recovery, ED to ICU, ED to helipad, nursery/LDRP to helipad, etc.)
- Appropriate number of prep/recovery bays
- Special OR lights in all triage rooms
- Direct access from C-section to nursery
- Continuing Care Nursery with accommodations for opioid addicted neonates or other special care needs
- Newborn / Baby Holding Nursery separated from Continuing Care Nursery to minimize noise and disruption
- Increased telemetry capability
- Storage alcoves on the Birthing Center for wheel chairs and stretcher
- Upgrade to ADA/ANSI standards
- Directed traffic flow into building (main entrance) past security
- Locked unit with an infant security system
- Dedicated medication/clean supply room

Standard .04(7) Nursery

An applicant for a new perinatal service shall demonstrate that the level of perinatal care, including newborn nursery services, will be consistent with the needs of the applicant's proposed service area.

Applicant Response:

Inapplicable.

Standard .04(8) – Community Benefit Plan

Each applicant proposing to establish a new perinatal service will develop and submit a Community Benefit Plan addressing and quantifying the unmet community needs in obstetric and perinatal care within the applicant's anticipated service area population, This Plan should include an

outreach program component, and should provide a detailed description of the manner in which the proposed perinatal service will meet these needs, and the resources required, At a minimum, the Community Benefit Plan must include:

(a) a needs assessment related to obstetric and nursery services for the proposed program's service area population, including a description of the manner in which the proposed perinatal service will satisfy unmet needs identified in the needs assessment,

(b) measurable and time-limited goals and objectives for health status improvements pursuant to which the Plan can be evaluated; and

(c) information on the structure, staffing and funding of the Plan;

(d) documentation of community support and involvement in program planning for the Plan by other agencies, organizations or institutions which win be involved, directly or indirectly, with the Plan;

(e) an implementation scheme for the Community Benefit Plan.

(f) Applicants must commit to implementation of the Community Benefit Plan and continuing commitment to the Plan as a condition of Commission approval, and as an ongoing condition of providing obstetric services.

(g) Applicants must agree to submit an Annual Report to the Commission which will include:

(i) an evaluation of the achievement of the goals and objectives of the Community Benefit Plan; and

(ii) information on staffing levels and the total costs of any programs implemented as part of the Community Benefit Plan.

Applicant Response:

Inapplicable.

Standard .04(9) – Source of Patients

An applicant for a new obstetric service shall demonstrate that the majority of its patients will come from its primary service area.

Applicant Response:

Inapplicable.

Standard .04(10) – Non-metropolitan Jurisdictions

A proposed obstetrics program in non-metropolitan jurisdictions, as defined in the chapter, shall demonstrate that physicians with admitting privileges to provide obstetric services have offices for patient visits within the primary service area of the hospital.

Applicant Response:

The applicant is not proposing to create a new obstetrics program, it is simply relocating the existing program. In any event, all of the obstetricians practicing at UMSMC-E have offices in Easton, which is within the primary service area.

Standard .04(11) – Designated Bed Capacity

An applicant for a new obstetric service shall designate a number of the beds from within the hospital's licensed acute care beds that will comprise the proposed obstetric program.

Applicant Response:

Inapplicable.

Standard .04(12) – Minimum Volume

(a) An applicant for a new obstetrics program must be able to demonstrate to the Commission's satisfaction that the proposed program can achieve a minimum volume of 1,000 admissions annually in metropolitan jurisdictions, or 500 cases annually in non-metropolitan jurisdictions, within 36 months of initiation of the program.

(b) As a condition of approval; the applicant shall accept a requirement that it will dose the obstetric program, and its authority to operate will be revoked, if:

(i) it fails to meet the minimum annual volume for any 24 consecutive month period, and

(ii) it fails to provide good cause for its failure to attain the minimum volume, and a feasible corrective action plan for how it will achieve the minimum volume within a two year period.

Applicant Response:

Inapplicable.

Standard .04(13) – Impact on the Health Care System

(a) An application for a new perinatal program will he approved only if its likely impact on the volumes of obstetric discharges at any existing obstetric program, after the three year start-up period, will not exceed 20 percent of an existing program's current or projected volume.

(b) When determining whether to approve an application for an obstetrics program, the Commission will consider whether an existing program's payer mix of obstetrics patients will significantly change as a. result of the proposed program, and the existing program will have to care for a disproportionate share of the indigent obstetrics patients in its service area; and

(c) When determining whether to approve an application for an obstetrics program the Commission will also consider the impact on a hospital with an existing program that has undertaken a capital expenditure project for which it has pledged pursuant to H-G Article § 19·120(k) not to increase rates for that project, so long as the pledge was based, at least in part, on assumptions about obstetric volumes.

(d) The Commission may consider evidence:

(i) from an applicant as to why rules (a) through (e) should not apply to the applicant, or;

(ii) from a very low volume program (fewer than 500 annual obstetric discharges) as to why a lower volume impact should apply.

Applicant Response:

Inapplicable.

Standard .04(14) – Financial Feasibility

Hospitals applying for a Level I or II perinatal program must clearly demonstrate that the hospital has the financial and non-financial resources necessary to implement the project, and that the average charge per admission for new perinatal programs will be less than the current statewide average charge for Level I and Level II perinatal programs. When determining whether to approve an application for an obstetric program, the Commission will consider the following:

(a) the applicant's projected sources of funds to meet the program s total expenses for the first three years of operation,

(b) the proposed unit rates and/or average charge per case for the perinatal services;

(c) evidence that the perinatal service will be financially feasible at the projected volumes and at the minimum volume standards in this Plan, and

(d) the written opinions or recommendations of the HSCRC.

Applicant Response:

Inapplicable.

Standard .04(15) – Outreach Program

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

Applicant Response:

UMSMC-E works closely with many partners. Entry into the healthcare system occurs through many referral sources. UMSMC-E along with UMSMC-D, UMSMC-C, county health departments, community centers, local physicians, schools, social services agencies, and other organizations in the five counties identify women who need prenatal care, especially those who may be uninsured, under-insured, or indigent. Of course, families may also refer women who think that they may be pregnant and some women refer themselves for services.

UMSMC-E's program accommodates referrals for obstetric and gynecologic care for underserved women in all five counties from any of these sources.

In addition, UMSMC-E offers dozens of classes in the community, including:

- Planning for baby's arrival - Take A Childbirth Education Class
- Successful Breastfeeding
- Health & Wellness Classes
- Labor & Delivery Class
- Childbirth Class
- Stroke Awareness
- Alzheimer's Support
- Psychosocial Support
- Palliative Care Education
- Prostate Cancer and Urological Conditions
- Classes and Support Groups Focus on Managing Diabetes
- Pneumonia - Antibiotic and Antiviral Drug Classes
- Mindfulness-Based Stress Reduction
- Blood Pressure Screenings
- Breast Cancer Screenings
- Cancer Support Groups
- Pregnancy and Infant Loss
- New Mom, New Baby & Infant Safety
- Big Brother & Big Sister
- Infant CPR

- Labor & Delivery I, II, III
- Stroke Survivor Support Group
- Us Too Prostate Support Group
- Look Good…Feel Better
- Shore Kids Camp
- Safe Sitter Class
- Breast cancer – Chemotherapy

There is no financial barrier to attend these classes, as there is no charge for any participant.

Many of these entities identify people who need medical care (not only women who need prenatal care) by an offhand comment made by a family member. In terms of prenatal care, whenever a woman in need of medical care is identified, either by a Health Department, social service agency, school, at an UMSMC-E class, or other source, the woman is referred to the Local Health Department, which evaluates the situation to assure that the family has all the resources it needs (not only regarding the pregnancy). Working with the Health Department, UMSMC-E assigns the woman to a UMSMC-E Obstetrician. No women are turned away. Every woman who needs an obstetrician becomes a private patient of an UMSMC-E Obstetrician.

As Table 30 shows, UMSMC-E's OB service area has a lower percentage of births that had "Late or No Prenatal Care" compared to the State of Maryland as a whole. Also, the UMSMC-E OB service area had a significantly higher percent of births that had "First Trimester Prenatal Care" than did the State as a whole.

Table 30
Births with "Late or No Prenatal Care" and "1st Trimester Prenatal Care"
Queen Anne's, Kent, Caroline, Talbot, and Dorchester Counties
CY 2014

	Total Births	Late or No Prenatal Care		1st Trimester Prenatal Care	
		#	%	#	%
Kent	157	13		125	
Queen Anne's	434	28		341	
Caroline	373	22		272	
Talbot	333	25		243	
Dorchester	387	23		281	
Total	1,684	111	6.0%	1,262	74.9%
Maryland	73,588	6,225	8.4%	45,278	61.5%

Source: Maryland Vital Statistics Annual Report 2014
http://dhmh.maryland.gov/vsa/Documents/14annual_revised.pdf

COMAR 10.24.09. Specialized Health Care Services— Acute Inpatient Rehabilitation Services

Standard .04A. – General Review Standards.

(1) Charity Care Policy.

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

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

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

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

Applicant Response:

See response to COMAR 10.24.10.04A(2). UMSMC-E's Charity Care policy applies to both acute care and rehabilitation services.

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

Applicant Response:

See response to COMAR 10.24.10.04A(2).

(c) A proposal to establish or expand an acute inpatient rehabilitation hospital or subunit, for which third party reimbursement is available, and which is not subject to HSCRC regulations regarding financial assistance policies, shall commit to provide charitable rehabilitation services to eligible patients, based on its charity care policy, which shall meet the minimum requirements in .04A(1)(a) of this Chapter. The applicant shall demonstrate that:

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

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

Applicant Response:

Inapplicable. UMSMC-E is subject to HSCRC regulations.

(d) A health maintenance organization, acting as both the insurer and provider of health care services for members, if applying for a CON for a project that involves acute inpatient rehabilitation services, shall commit to provide charitable services to indigent patients. Charitable services may be rehabilitative or non-rehabilitative and may include a charitable program that subsidizes health plan coverage. At a minimum, the amount of charitable services provided as a percentage of total operating expenses for the health maintenance organization will be equivalent to the average amount of charity care provided statewide by acute general hospitals, measured as a percentage of total expenses, in the most recent year reported. The applicant shall demonstrate that:

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

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

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

Applicant Response:

Inapplicable.

(2) Quality of Care.

A provider of acute inpatient rehabilitation services shall provide high quality care.

(a) Each hospital shall document that it is:

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

(ii) Accredited by the Commission for Accreditation of Rehabilitation Facilities.

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

(b) An applicant that currently provides acute inpatient rehabilitation services that is seeking to establish a new location or expand services shall report on all quality measures required by federal regulations or State agencies, including information on how the applicant compares to other Maryland acute inpatient rehabilitation providers. An applicant shall be required to meet quality of care standards or demonstrate progress towards reaching these standards that is acceptable to the Commission, before receiving a CON.

Applicant Response:

UMSMC-E is in compliance with all applicable regulations, accreditation standards, and certification standards. A copy of the most recent Joint Commission accreditation certificate is attached as **Exhibit 11**, a copy of its CARF accreditation certificate is attached as **Exhibit 26,** and a copy of UMSMC-E's license is attached as **Exhibit 10**.

For UMSMC-E's performance under the quality measures, see response to COMAR 10.24.10.04A(3).

(c) An applicant that does not currently provide inpatient rehabilitation services that is seeking to establish an inpatient rehabilitation unit within an acute care hospital or an inpatient rehabilitation specialty hospital shall demonstrate through reporting on quality measures that it provides high quality health care compared to other Maryland providers that provide similar services or, if applicable, nationally.

Applicant Response:

Inapplicable. UMSMC-E is an existing provider.

Standard .04B. – Project Review Standards.

In addition to these standards, an acute general hospital applicant shall address all applicable standards in COMAR 10.24.10 that are not duplicated in this Chapter. These standards apply to applicants seeking to provide comprehensive acute rehabilitation services or both comprehensive acute rehabilitation services and specialized acute rehabilitation services to adult or pediatric patients.

(1) Access.

A new or relocated acute rehabilitation hospital or subunit shall be located to optimize accessibility for its likely service area population. An applicant that seeks to justify the need for a project on the basis of barriers to access shall present evidence to demonstrate that barriers to access exist for the population in the service area of the proposed project, based on studies or other validated sources of information. In addition, an applicant must demonstrate that it has developed a credible plan to address those barriers. The credibility of the applicant's plan will be evaluated based on whether research studies or empirical evidence from comparable projects support the proposed plan as a mechanism for addressing the barrier(s) identified, whether the plan is financially feasible and whether members of the communities affected by the project support the plan.

Applicant Response:

See response to Acute Hospital Services Standard .04B(1).

(2) Need.

A project shall be approved only if a net need for adult acute rehabilitation beds is identified by the need methodology in Section .05 in the applicable health planning region (HPR) or if the applicant meets the applicable standards below. The burden of demonstrating need rests with the applicant.

(a) An application proposing to establish or expand adult acute inpatient rehabilitation services in a jurisdiction that is directly contiguous to another health planning region may be evaluated based on the need in contiguous regions or states based on patterns of cross-regional or cross-state migration.

(b) For all proposed projects, an applicant shall explicitly address how its assumptions regarding future in-migration and out-migration patterns among Maryland health planning regions and bordering states affect its need projection.

(c) If the maximum projected bed need range for an HPR includes an adjustment to account for out-migration of patients that exceeds 50 percent of acute rehabilitation discharges for residents of the HPR, an applicant proposing to meet the need for additional bed capacity above the minimum projected need, shall identify reasons why the existing out-migration pattern is attributable to access barriers and demonstrate a credible plan for addressing the access barriers identified.

Applicant Response:

UMSMC-E is currently licensed to operate 20 special hospital/rehabilitation beds in FY2017. UMSMC-E proposes to reduce the number of rehabilitation beds at the replacement hospital and operate 14 beds. Since UMSMC-E's "total bed capacity" will not cause the number of beds on the Eastern Shore to exceed "the most recent annual calculation of bed capacity," the proposed project is within the most current need projections in the State Health Plan. The gross acute rehabilitation bed need for the Eastern Shore in 2017 is 87 beds, and the net need is 13. See 41 *Maryland Register* 1297 (October 17, 2014).

The applicant utilized 2015 Health Services Cost Review Commission ("HSCRC") inpatient data to project the need for Rehabilitation beds. The Primary (ZIP Codes contributing the top 60% of discharges) and the Secondary (ZIP Codes contributing the next 25% of discharges) Rehabilitation Service Areas are shown in Table 31.

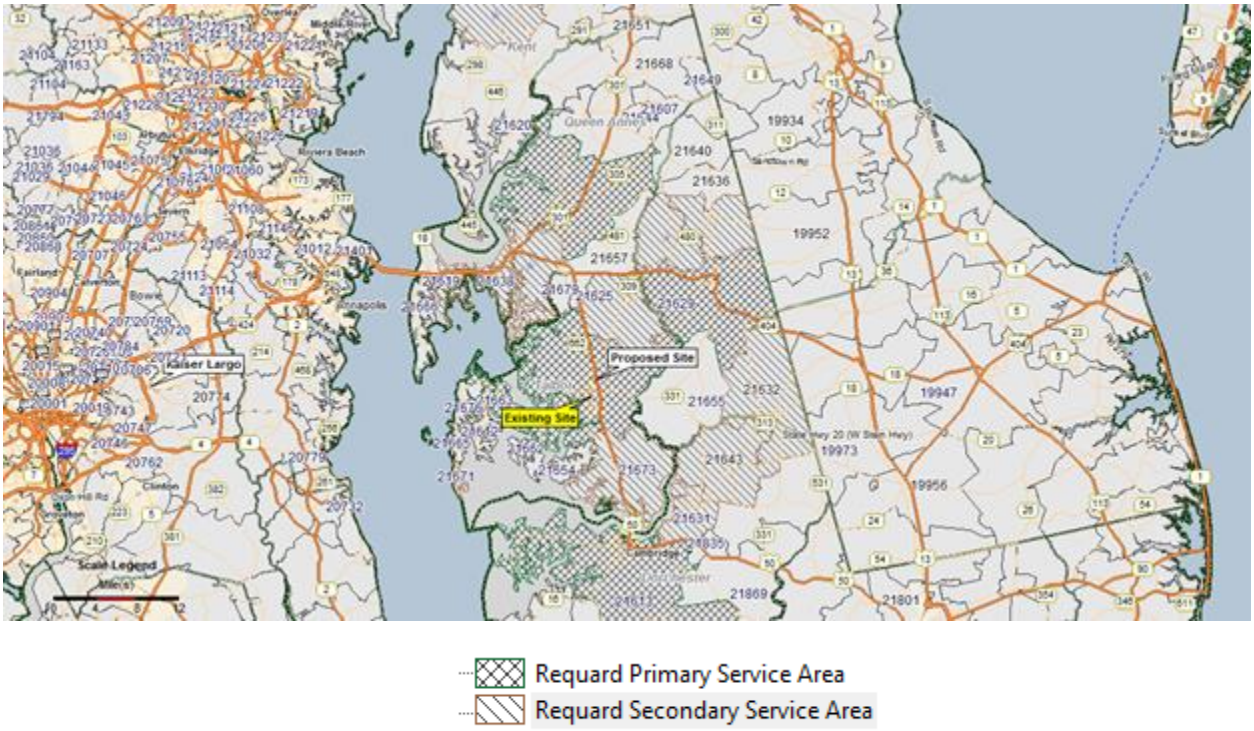
Table 31
UMSMC-E's Rehabilitation
Primary and Secondary Service Areas
2015

ZIP Codes	Discharges	Cumulative %
21601	116	31.5%
21613	41	42.7%
21663	23	48.8%
21629	16	53.3%
21632	11	56.3%
21643	11	59.4%
21655	10	62.2%
21658	10	65.0%
21625	9	67.5%
21666	8	69.7%
21617	7	71.7%
21660	6	73.4%
21673	6	75.0%
21619	5	76.4%
21620	5	77.8%
21671	5	79.2%
21677	5	80.6%
21631	4	81.7%
21638	4	82.8%
21659	4	84.0%
21662	4	85.1%
21869	4	86.3%
30 Other ZIP Codes	51	100.0%
TOTAL	**369**	

Source: HSCRC Discharge Database

The aggregate of both the Primary and Secondary Rehabilitation Service Areas will be referred to as UMSMC-E's Rehabilitation Service Area.

Figure 4
Primary and Secondary Rehabilitation Service Areas—UMSMC-E
FY 2016



UMSMC-E then counted the number of discharges by age cohort (15-44, 54-64, 65-74, and 75+) by ZIP Code in UMSMC-E's Rehabilitation Service Area at any Maryland hospital and, also, the number of discharges at UMSMC-E. These are shown in **Exhibit 27**.

From the data in Exhibit 27, UMSMC-E calculated bed need using the following methodology.

1. For each ZIP Code, UMSMC-E ordered population data from Nielsen for 2010, 2016 and 2021. UMSMC-E then calculated the Compound Average Growth Rate ("CAGR") by age cohort for the difference between 2010 and 2016 to calculate the 2015 population. UMSMC-E also calculated the CAGR for the difference between 2016 and 2021. UMSMC-E used this CAGR to calculate the projected population in 2024.

2. The applicant calculated the 2015 use rates that the ZIP Code populations experienced to all hospitals by age cohort (15-44, 54-64, 65-74, and 75+).

3. The applicant applied these use rates to the 2024 population by ZIP Code and age cohort to project the number of discharges from each ZIP Code in 2024.

4. The applicant summed the total number of projected 2024 discharges by ZIP Code.

5. The applicant applied UMSMC-E's 2015 market share that it had in each ZIP Code to the 2024 discharges to project the number of 2024 discharges that will occur at UMSMC-E.

6. Since these ZIP Codes comprise UMSMC-E's Primary and Secondary Service Areas (86.3% of UMSMC-E's 2015 total Rehabilitation discharges), the applicant adjusted the projected discharges to account for out of Service Area discharges by dividing the Service Area discharges by 0.863. This resulted in a subtotal of all UMSMC-E projected Rehabilitation discharges.

7. The applicant applied the 2015 ALOS to the Subtotal 2024 discharges to project the 2024 Patient Days.

8. The applicant divided the total number of 2024 projected patient days by 365 to obtain the Average Daily Census ("ADC"). This resulted in an ADC of 10.56.

9. The applicant divided the ADC by the State Health Plan Minimum Occupancy Rate (75%) for hospitals with an ADC of 0-49, as shown on page 15 of the *State Health Plan For Facilities And Services: Specialized Health Care Services-Acute Inpatient Rehabilitation Services* (COMAR 10.24.09)

These projections are shown in **Exhibit 28**. They result in a projected need for 14.1 Rehabilitation beds. UMSMC-E is proposing 14 Rehabilitation beds.

(d) An applicant proposing to establish or expand adult acute rehabilitation beds that is not consistent with the projected net need in .05 in the applicable health planning region shall demonstrate the following:

(i) The project credibly addresses identified barriers to access; and

(ii) The applicant's projection of need for adult acute rehabilitation beds explicitly accounts for patients who are likely to seek specialized acute rehabilitation services at other facilities due to their age or their special rehabilitative and medical needs. At a minimum, an applicant shall specifically account for patients with a spine or brain injury and pediatric patients; and

(iii) The applicant's projection of need for adult acute rehabilitation beds accounts for in-migration and out-migration patterns among Maryland health planning regions and bordering states.

Applicant Response:

Inapplicable. The applicant does not propose to expand the number of beds, and the Commission's projection of need for rehabilitation beds on the Eastern Shore in 2017 (published in the *Maryland Register* on October 17, 2014) shows a net need for an additional 13 beds.

Gross and Net Bed Need Projections for Acute Rehabilitation Beds: Maryland, 2017							
Health Planning Region	Minimum Occupancy Standard	Range	Total Days Projected	Current Licensed Bed Capacity	Available Bed Days	Gross Bed Need Range	Net Bed Need Range
Central	0.78	minimum	70,110	277	101,105	246	-31
		maximum	85,006			298	21
Eastern Shore	0.75	minimum	14,224	74	27,010	52	-22
		maximum	23,857			87	13
Montgomery	0.80	minimum	20,283	87	31,755	69	-18
		maximum	32,915			113	26
Southern	0.75	minimum	5,112	28	10,220	19	-9
		maximum	25,618			94	66
Western	0.75	minimum	10,488	33	12,045	38	5
		maximum	12,673			46	13

(e) An applicant that proposes a specialized program for pediatric patients, patients with brain injuries, or patients with spinal cord injuries shall submit explanations of all assumptions used to justify its projection of need.

Applicant Response:

Inapplicable. UMSMC-E is not proposing a specialized program for pediatric patients.

(f) An applicant that proposes to add additional acute rehabilitation beds or establish a new health care facility that provides acute inpatient rehabilitation services cannot propose that the beds will be dually licensed for another service, such as chronic care.

Applicant Response:

Inapplicable. UMSMC-E is not proposing to add additional rehabilitation beds.

(3) Impact.

A project shall not have an unwarranted adverse impact on the cost of hospital services or the financial viability of an existing provider of acute inpatient rehabilitation services. A project also shall not have an unwarranted adverse impact on the availability of services, access to services, or the quality of services. Each applicant must provide documentation and analysis that supports:

(a) Its estimate of the impact of the proposed project on patient volume, average length of stay, and case mix, at other acute inpatient rehabilitation providers;

(b) Its estimate of any reduction in the availability or accessibility of a facility or service that will likely result from the project, including access for patients who are indigent or uninsured or who are eligible for charity care, based on the affected acute rehabilitation provider's charity care policies that meet the minimum requirements in .04A(1)(a) of this Chapter;

(c) Its estimate of any reduction in the quality of care at other providers that will likely be affected by the project; and

(d) Its estimate of any reduction in the ability of affected providers to maintain the specialized staff necessary to provide acute inpatient rehabilitation services.

Applicant Response:

UMSMC-E is not proposing to add additional rehabilitation beds. In addition, patient volume is assumed to increase consistent with population growth and UMSMC-E will maintain its current market share.

(4) Construction Costs.

(a) The proposed construction costs for the project shall be reasonable and consistent with current industry and cost experience in Maryland.

(b) For a hospital that is rate-regulated by the Health Services Cost Review Commission, the projected cost per square foot of a hospital construction project or renovation project shall be compared to the benchmark cost of good quality Class A hospital construction given in the Marshall Valuation Service® guide, updated using Marshall Valuation Service® update multipliers, and adjusted as shown in the Marshall Valuation Service® guide as necessary for site terrain, number of building levels, geographic locality, and other listed factors. If the projected cost per square foot exceeds the Marshall Valuation Service® benchmark cost, any rate increase proposed by the hospital related to the capital cost of the project shall not include the amount of the projected construction cost that exceeds the Marshall Valuation Service® benchmark and those portions of the contingency allowance, inflation allowance, and capitalized construction interest expenditure that are based on the excess construction cost.

Applicant Response:

Please see the response to COMAR 10.24.10.04B-Standard .04B(7) – Construction Cost of Hospital Space.

(5) Safety.

The design of a hospital project shall take patient safety into consideration and shall include design features that enhance and improve patient safety.

Applicant Response:

The Acute Rehab unit design meets all safety related standards of The Joint Commission and CARF. It is also consistent with requirements of ADA design. Environment of Care/Safety self-inspection rounds are currently performed semi-annually, and will continue per CARF requirements. Annual inspections by external authorities are also completed and will be continued.

The new facility will also implement the design and safety features discussed in response to Acute Care Services Standard 10.24.10.04B(12) (Patient Safety), which is incorporated herein by reference.

(6) Financial Feasibility.

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

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

(b) Each applicant must document that:

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

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

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

(iv) The hospital will generate excess revenues over total expense (including debt service expenses and plant and equipment depreciation), if the applicant's utilization forecast is achieved for the specific services affected by the project within five years or less of initiating operations with the exception that a hospital proposing an acute inpatient rehabilitation unit that does not generate excess revenues over total expenses, even if utilization forecasts are achieved for the services affected by the project, may demonstrate that the hospital's overall financial performance will be positive.

Applicant Response:

Please see the response to COMAR 10.24.10.04B-Standard .04B(13) – Financial Feasibility.

(7) Minimum Size Requirements.

(a) A proposed acute inpatient rehabilitation unit in a hospital shall contain a minimum of 10 beds and shall be projected to maintain an average daily census consistent with the minimal occupancy standard in this Chapter within three years.

(b) A proposed acute inpatient rehabilitation specialty hospital shall contain a minimum of 30 beds and shall be projected to maintain within three

years an average daily census consistent with the minimum occupancy standard in this Chapter.

Applicant Response:

Inapplicable. The Requard Center is and will be part of an acute inpatient rehabilitation unit in an acute general hospital, not a specialty hospital.

(8) Transfer and Referral Agreements.

Each applicant shall provide documentation prior to licensure that the facility will have written transfer and referral agreements with facilities, agencies, and organizations that:

(a) Are capable of managing cases that exceed its own capabilities; and

(b) Provide alternative treatment programs appropriate to the needs of the persons it serves.

Applicant Response:

UMSMC-E has established written transfer agreements with other healthcare facilities to ensure the continuum of care for patients requiring transfer to another facility or entity. Examples of patient transfer agreements with other facilities can be found in **Exhibit 29.**

Transfers that exceed the Requard unit's capabilities fall into two categories: (1) patients whose acute care needs exceed the rehabilitation unit's capabilities and so must be transferred to an acute care service; and (2) patients whose rehabilitation needs exceed the Requard unit's capabilities and so must be transferred to another rehabilitation facility (such as new acute traumatic brain injury, new quadriplegics, new paraplegics, and multiple traumas with multiple weight bearing limitations). The Acute Care Hospitals to which such cases are transferred include: UMSMC-E, UMSMC-D, University of Maryland Medical Center, and Johns Hopkins Hospital. The Acute Rehabilitation Hospital to which patients are transferred for rehabilitation is Kernan Orthopedics and Rehabilitation Hospital (Baltimore, MD). The number of transfers for Fiscal Years 2014 – 2016 are shown in Table 32.

Table 32
Patients Transferred Due to Exceeding the Requard Unit's Capabilities
2014 – 2016

Types of Cases	FY2014	FY2015	FY2016
Acute Care Transfers (discharged from Rehab)	31	21	38
Specialized Rehab/Care (admitted to Rehab then transferred)	0	0	0

Source of Data: UDS Pro I IRF PAI Data base

Some cases could have been provided at UMSMC-E Acute Rehab (*i.e.,* evidenced medical necessity for acute rehab) but were referred elsewhere because of bed availability issues, patient/caregiver choice, and/or health plan/payer barriers. These patients were transferred to the following Acute Rehab Hospitals: Healthsouth Chesapeake Rehabilitation Hospital (Salisbury, MD) and Kernan Orthopedics and Rehabilitation Hospital (Baltimore, MD). Other patients were transferred to skilled nursing facilities, including: Genesis (Easton, Cambridge, Centreville, MD), Bayleigh Chase (Easton, MD), Mallard Bay (Cambridge, MD), Envoy Nursing and Rehab (Denton, MD), Caroline Nursing and Rehab (Denton, MD), and Shore Nursing and Rehabilitation Center at Chester River (Chestertown, MD).

(9) Preference in Comparative Reviews.

In the case of a comparative review of applications in which all standards have been met by all applicants, the Commission will give preference to the applicant that offers the best balance between program effectiveness and costs to the health care system as a whole.

Applicant Response:

Inapplicable.

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

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

INSTRUCTIONS: Please identify the need that will be addressed by the proposed project, quantifying the need, to the extent possible, for each facility and service capacity proposed for development, relocation, or renovation in the project. The analysis of need for the project should be population-based, applying utilization rates based on historic trends and expected future changes to those trends. This need analysis should be aimed at demonstrating needs of the population served or to be served by the hospital. The existing and/or intended service area population of the applicant should be clearly defined.

Fully address the way in which the proposed project is consistent with each applicable need standard or need projection methodology in the State Health Plan.

If the project involves modernization of an existing facility through renovation and/or expansion, provide a detailed explanation of why such modernization is needed by the service area population of the hospital. Identify and discuss relevant building or life safety code issues, age of physical plant issues, or standard of care issues that support the need for the proposed modernization.

Please assure that all sources of information used in the need analysis are identified. Fully explain all assumptions made in the need analysis with respect to demand for services, the projected utilization rate(s), the relevant population considered in the analysis, and the service capacity of buildings and equipment included in the project, with information that supports the validity of these assumptions.

Explain how the applicant considered the unmet needs of the population to be served in arriving at a determination that the proposed project is needed. Detail the applicant's consideration of the provision of services in non-hospital settings and/or through population-based health activities in determining the need for the project.

Complete the Statistical Projections (Tables F and I, as applicable) worksheets in the CON Table Package, as required. Instructions are provided in the cover sheet of the CON package.

Applicant Response:

Please see discussion of bed and capacity need in response to COMAR 10.24.10.04B(2) (acute care bed need); COMAR 10.24.10.04B(14) (emergency department space); COMAR 10.24.12.04(1) (obstetric bed need); COMAR 10.24.11.05B(2) (operating rooms); and COMAR 10.24.09.04B(2) (acute rehabilitation bed need). The discussion below addresses: (1) the need to replace the aging and obsolete existing building; (2) the need for observation beds, which is not subject to any need standard under the State Health Plan.

1. The Need to Replace the Existing Hospital Building.

The existing building is deficient in many ways. It is not designed for modern, family oriented medicine. It is undersized in various critical areas (such as the size of the operating rooms). It does not have adequate parking (sharing its parking lot with a synagogue). The footprint of the Hospital building cannot be expanded (being surrounded by residential areas) and is inconvenient for the many patients from outside Easton who have to drive into downtown Easton to access the Hospital. Although the outpatient component is newer, it was designed to be an addition to the older building components and, therefore, suffers from considerable limitations.

Prior to submitting the original CON application, the applicant engaged The Schachinger Group ("TSG") to conduct departmental interviews, meeting with representatives from many clinical and service-oriented departments. The numerous findings as to existing physical space deficiencies and limitations affected nearly every department in the hospital. A summary is presented below, followed by issues specific to departments identified in the TSG's interviews.

Not surprising, given the age and limited space of the existing hospital facility, there are many concerns about the existing physical plant, which are summarized below.

- Location and accessibility of supplies are not optimal. Hoarding of supplies is common. Night and weekend supply searches occur often by nursing staff.

- An inordinate amount of staff time is taken with supply and inventory ordering, tracking, and maintenance. Much of the work is manual. Par levels may be higher than necessary to mitigate supply chain problems.

- General lack of storage throughout the hospital has resulted in inefficient use of staff time and cluttered hallways. Patient rooms have been closed and used for storage as no central storage area for beds and other necessary equipment exists. A semi-private bed area on almost every floor has been closed for storing beds, computer carts, blood pressure cuffs, and other equipment.

- The elevators are too small for larger patient transports and are inconveniently located, both in terms of physical location and difficulty getting there through the corridors. Elevator protocol leaves some departments with very long wait times. Patients in transport are frequently exposed to public spaces.

- Concerns were voiced regarding cleaning certain equipment or transporting equipment to be cleaned. Locations for equipment storage rooms have been debated; centralized versus a more common call for decentralized storage on patient floors. The request to have Environmental Services ("EVS") clean equipment was heard and responded to positively.

- Clean and especially soiled utility rooms must be sized appropriately for the units. The existing soiled utility rooms are considerably under sized.

- Par levels need better management. There is no way to electronically reconcile supplies to inventory, so a lot of time is spent doing it manually. A better system is needed for tracking, billing, and reordering supplies. Some form of automation, bar-codes or similar, was mentioned as desirable.

- Signage is not adequate as people get lost, especially in major intersections like one near the main lobby and the elevators.

The Emergency Department

- There is no elevator near the ED. It is a long trip to the main hospital elevators, especially to the helipad elevator. The trip to an elevator includes maneuvering many corners. In addition, there are no oversized elevators for patient transport. It is difficult for a critical care team to squeeze into the elevator. The helipad elevator, which typically handles larger teams, is smaller than the other elevators in the hospital. This elevator is also used extensively by materials management for supply transport.

- While the ED does not have many extra beds and stretchers, there is no storage space for storing the extras.

- The Pneumatic Tube System station is located in the middle of the nurses' station, which is not ideal because a column blocks lines of sight within the area.

- Location and accessibility of supplies is an issue; the supply room is down a hallway (about 200 feet away) and is not convenient or near the nurses' station. Centralized supplies in ED (Pyxis stations preferred) would reduce staff steps required. Because there is no central supply, the nurses tend to hoard high-demand items as they do not know when they will get more. Reducing the amount of steps to get supplies to make things more accessible in general would be welcomed.

- Patient care equipment is stored at various locations. A yellow sticker (tag) method (clean, in-use, soiled) is used to track the status of individual equipment items. The results are not consistent due to human input and error. There is no organization for charging, and no method for locating items. Tracking systems are desired.

- There are two soiled utility rooms, one for ED and one for Express Care (a "fast track" ER program). Neither are large enough for trash and dirty supplies (particularly bedside commodes). Ideally, they would like three rooms: soiled, clean room, storage room.

- Environmental Services has a small storage space in the ED, however additional room is needed to store cubicle curtains.

- There is no practical storage space for dietary carts. Special delivery trays are often left on top of the nurse station counters. There is no collection area for dirty trays; a pick up / drop off location is needed.

Dietary

- There are long waits for elevators, especially when one is down.

Imaging

- Elevator sizes are an issue. One can barely access the control panel when transporting a patient by bed, as the bed barely fits in the elevator. When the patient

is transported with additional equipment and a multiple person team, the elevator is cramped.

Infection Control

- Clean and soiled utility rooms are inadequately sized for current usage.
- Need for private rooms in order to accommodate the number of isolation patients.
- Isolation supplies are kept on a cart outside the patient's room. This creates hallway clutter. Nurse servers are hard to keep clean and provide chance for infection.
- Separate rooms for clean and soiled are preferred by the Joint Commission. Custom ultrasonic equipment travels in and out of soiled rooms, even after cleaning.
- Placement of sinks is not ideal. Sinks should be placed closer to room exit, with a trash can on the way to the sink. There should be more sinks outside patient rooms.
- All units have negative pressure isolation room(s); there is a need for more.
- Bed storage is an issue, as extra beds are typically left out in the hallway or even on the loading dock.
- Deliveries from vendors / suppliers to Materials Management must be unpacked for storage and not stored on the units in shipping containers.
- Sinks aren't deep enough. Design & depth of sinks needs to be considered.

Inpatient Care Services/Nursing

- The warehouse where most supplies are stored is too far away from the clinical areas, which is critical during the hours when Materials Management is not staffed and nursing supervisors are required to find necessary items.
- An area is needed for storing supplies and equipment that has been cleaned and is ready for use. Storage for soiled equipment is lacking. When needed, equipment has to be located and the status (clean/soiled) is often unknown. Much time is wasted looking for items needed for patient care.
- Storage is a major concern. Having no central storage area for beds and other necessary equipment, a semi-private bed area on inpatient units have been closed for storing beds, computer carts, blood pressure cuffs, and other equipment. Many items are stored in the hallways. The existing utility rooms have electric panels on the inside walls, reducing the ability for optimum storage.
- Because of the transition to electronic records, there should be a computer located at every bed side.
- Nurses must often locate, clean, and store the equipment necessary for their functions. This takes valuable time away from patient care. With no central supply, items cannot be requisitioned delivered on an on-call basis. There should be

adequate space and EVS staff to pick up soiled items, clean, return, andplace in storage.

- The elevators are too small to transport a patient with patient care equipment and the necessary transport team. There are a large number of bariatric patients at SHS and transportation of those patients requires additional equipment and staff, as well as wider doorways. The elevators, which have metal floors, are very noisy and bumpy which is disruptive to the patient during transport.

Laboratory

- The lab is currently in a space that was not originally designed to be a lab. Layout for the new hospital needs to be reconfigured with blood bank in front, supervisor offices segregated, more open layout not compartmentalized, better access to phone, printers, and computers. There should be total automation.

Linen Services

- On the floors, linens are stored in a variety of areas, depending on space and department. Storage areas include linen closets, clean utility rooms, and hallways.

Materials Management

- Multi-levels of receiving and supply storage are not efficient. Traffic patterns and busy intersections within the hospital are not optimal. The ideal dock area at the new facility would be well lit with a receded overhang that is high enough to not be damaged by large trucks. The docks should be 48” high with a generous ramp and a large staging area.

- Pallet racking is currently located in undesirable locations but there is no place to move it. Paper/Forms and other bulky stuff are stored at the dock because of bulk and weight. Most unit supplies arrive on pallets.

- Emergency supplies are located in trailers on the campus and in off-site, rented, climate controlled storage. These should all be stored on site.

- IT storage room is needed as well. Placement will depend on where the IT department is eventually located.

- The cylinder farm is located in the dock bay area. Replenishments are ordered once per week and delivered on Tuesdays. H and K gases are stored by the docks and E gases are stored near the cylinder farm in cages. For the new facility, a tank/cylinder farm that is inside or at least covered is preferred.

- Bulk gas is automatically refilled by the vendor when the meter reaches a certain level, so deliveries are unscheduled. While the delivery truck is refilling the tanks, the truck must park across the loading dock bay, blocking the loading dock.

Outpatient Services and Surgery

- There is no Central Supply to store and supply what is used by multiple departments, so multiples of the same supplies are spread throughout the building. Multiples are common and unnecessary, and there are a lot of special orders. Materials Management does not have the necessary space for this storage.

- The elevators are not large enough to support the equipment and large teams. The gap between the door and the floor is large and catches the wheels of beds, carts, and gurneys. The location of the service elevators is inconvenient to the OR and travel involves multiple turns, corners, and intersections. Easy access between the OR and ICU is requested for the new facility, whether by adjacency or by elevator.

Pharmacy

- The hospital has a 6" Translogic (Swisslog) Pneumatic Tube System. Most stations are not located within the secure nursing area, making it inconvenient. It is also loud; having been installed after the hospital was built. It has been changed at least once.

Plant Operations (Engineering/Maintenance)

- The maintenance area is located in a bay beside the receiving dock. They are short on equipment storage space for items such as televisions, wheelchairs, and beds. They need expanded organized storage with standard wire shelving and sufficient space to navigate around them. Drawers, pipe racks, and lumber racks are necessary. The existing facility uses large amounts of lumber at off-site facilities, though they hope to reduce use of lumber in future.

- Storage is the major issue with Bio-Med, which has 2,500 pieces of equipment. There is no central storage; their equipment is located throughout the hospital.

Respiratory Services

- The outpatient services performed by the department are on the 3rd & 4th floors, which is not convenient. Patients often have problems with wayfinding. They have left a departmental flyer with the registration desk staff, who have been encouraged to give to patients so they can find their way to the department. This flyer is not always distributed and patients are often lost when attempting to locate the department.

- There is no Pneumatic Tube Station in Respiratory Care or the Cath Lab. Drugs are received through the Pyxis system, which is working adequately for their needs.

- Elevators are an issue at the existing facility when moving equipment. When there is no equipment involved, the respiratory staff typically uses the stairs. The size of the elevators and usage by other departments makes it difficult to transport equipment, and the wait times for available space to transport via elevators are long.

- The department has limited contact with EVS and do not often use the soiled utility room because there is not enough room to store its equipment.

Sterile Processing and Surgery

- The cart washer can only handle one cart at a time, with a cycle of 20-30 minutes. A backup of 2 to 4 carts is common and very limited storage for the cleaned carts waiting to be filled; the staff must work around these extra carts. There is also no storage for prepared case carts, which line up in the OR area.

- There are storage issues with portable equipment. This equipment should be stored at point of use, but there is not enough space or enough staff; it is stored where ever space can be found.

- Two double-well sinks are in Sterile Processing, but only one is utilized due to storage issues.

Thus, the proposed project is needed to replace an aged facility that has deficiencies in nearly every department.

2. <u>The Need for Observation Beds</u>.

The required number of observation beds was calculated as follows:

- Projected FY 2017 Observation patients were adjusted to reflect population growth consistent with Med/Surg need analysis. Population is assumed to increase at a rate of 1.1% annually.

- As patients continue to shift from inpatient to outpatient settings, the use of observation beds is expected to increase. The projections reflect a 0.5% use rate growth. Since 2013, observation cases Statewide have increased 24% (FY 2016 161,105 / FY 2013 129,518) or 8% annually. This growth is in excess of population and supports the trend of shifting volumes from the inpatient setting to a lower cost outpatient setting.

- The projected observation cases in 2024 is 1,674.

- UMSMC-E patients average 39 hours in observation which equates to 1.6 patient days. The ALOS of 1.6 was multiplied by the projected patients to derive observation patient days. This resulted in 2,738 patient days.

- The applicant divided the total number of 2024 projected patient days by 365 to obtain the Average Daily Census ("ADC"). This resulted in an ADC of 8.

- The applicant divided the ADC by the Med/Surg Minimum Occupancy Rate (75%) to arrive at the bed need of 10 observation beds.

These projections are shown in Table 33.

Table 33
Projection of Observation Bed Need

	Two Most Recent Years (Actual)		Current Year Projected	Projected						
	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
OBSERVATION										
a. Number of Patients	1,394	1,480	1,503	1,526	1,550	1,574	1,598	1,623	1,648	1,674
b. Hours	48,665	58,086	58,987	59,903	60,832	61,776	62,734	63,708	64,696	65,700
c. MGSA population			1.1%	1.1%	1.1%	1.1%	1.1%	1.1%	1.1%	1.1%
d. Use Rate Growth			0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
e. Observation Growth Assumption			1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%
f. Resulting OBV Days	2,028	2,420	2,458	2,496	2,535	2,574	2,614	2,654	2,696	2,738
g. OBV Avg LOS	1.5	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
h. OBV ADC	6	7	7	7	7	7	7	7	7	8
i. Bed need (75% Occupancy)	7	9	9	9	9	9	10	10	10	10

COMAR 10.24.01.08G(3)(c). Availability of More Cost-Effective Alternatives.

The Commission shall compare the cost effectiveness of the proposed project with the cost effectiveness of providing the service through alternative existing facilities, or through an alternative facility that has submitted a competitive application as part of a comparative review.

INSTRUCTIONS: Please describe the planning process that was used to develop the proposed project. This should include a full explanation of the primary goals or objectives of the project or the problem(s) being addressed by the proposed project. The applicant should identify the alternative approaches to achieving those goals or objectives or solving those problem(s) that were considered during the project planning process, including:

a) the alternative of the services being provided through existing facilities;

b) or through population-health initiatives that would avoid or lessen hospital admissions.

Describe the hospital's population health initiatives and explain how the projections and proposed capacities take these initiatives into account.

For all alternative approaches, provide information on the level of effectiveness in goal or objective achievement or problem resolution that each alternative would be likely to achieve and the costs of each alternative. The cost analysis should go beyond development costs to consider life cycle costs of project alternatives. This narrative should clearly convey the analytical findings and reasoning that supported the project choices made. It should demonstrate why the proposed project provides the most effective method to reach stated goal(s) and objective(s) or the most effective solution to the identified problem(s) for the level of costs required to implement the project, when compared to the effectiveness and costs of alternatives, including the alternative of providing the service through existing facilities, including outpatient facilities or population-based planning activities or resources that may lessen hospital admissions, or through an alternative facility that has submitted a competitive application as part of a comparative review.

Applicant Response:

See response to COMAR 10.24.10.04B(3) above.

COMAR 10.24.01.08G(3)(d). Viability of the Proposal

The Commission shall consider the availability of financial and nonfinancial resources, including community support, necessary to implement the project within the time frames set forth in the Commission's performance requirements, as well as the availability of resources necessary to sustain the project.

INSTRUCTIONS: Please provide a complete description of the funding plan for the project, documenting the availability of equity, grant(s), or philanthropic sources of funds and demonstrating, to the extent possible, the ability of the applicant to obtain the debt financing proposed. Describe the alternative financing mechanisms considered in project planning and provide an explanation of why the proposed mix of funding sources was chosen.

- Complete applicable Revenues & Expenses (Tables G, H, J and K as applicable), and the Work Force information (Table L) worksheets in the CON Table Package, as required. Instructions are provided in the cover sheet of the CON package. Explain how these tables demonstrate that the proposed project is sustainable and provide a description of the sources and methods for recruitment of needed staff resources for the proposed project, if applicable.

- Describe and document relevant community support for the proposed project.

- Identify the performance requirements applicable to the proposed project and explain how the applicant will be able to implement the project in compliance with those performance requirements. Explain the process for completing the project design, contracting and obtaining and obligating the funds within the prescribed time frame. Describe the construction process or refer to a description elsewhere in the application that demonstrates that the project can be completed within the applicable time frame.

- Audited financial statements for the past two years should be provided by all applicant entities and parent companies.

Applicant Response:

Audited Financial Statements are included in **Exhibit 30.**

Under the TPR model of reimbursement, UMSMC-E has the incentive to reduce length of stay, ancillary testing, unnecessary admissions and readmissions, as well as improve efficiency in the provision of services while treating patients in a manner consistent with appropriate, high quality medical care. A TPR hospital essentially is penalized for higher volumes. Consequently, UMSMC-E will seek a rate increase from the HSCRC, to raise its revenue, to enable it to have adequate revenue to cover the additional debt service.

As part of a partial rate application to be filed with the HSCRC in September 2016, UMSMC-E is requesting an increase in rates from the HSCRC to account for the increase in capital costs associated with the proposed project.

As shown in Table E, the total cost of the project is $349.9 million. The sources of funding for the project are cash ($13.9 million), philanthropic gifts ($25 million), and debt ($311 million). A full year of depreciation and interest expense (*i.e.*, capital costs) related to the project are projected to equal $31.3 million in FY 2023 with the opening of the new hospital

facility. This cost will be phased in over two years as components of the project become operational in FY 2022.

UMSMC-E has already begun discussions with the HSCRC about the requested rate increase.

The proposed project enjoys strong community support, as shown by the numerous letters of support included in **Exhibit 31.**

COMAR 10.24.01.08G(3)(e). Compliance with Conditions of Previous Certificates of Need.

An applicant shall demonstrate compliance with all terms and conditions of each previous Certificate of Need granted to the applicant, and with all commitments made that earned preferences in obtaining each previous Certificate of Need, or provide the Commission with a written notice and explanation as to why the conditions or commitments were not met.

INSTRUCTIONS: List all of the Certificates of Need that have been issued to the applicant or related entities, affiliates, or subsidiaries since 2000, including their terms and conditions, and any changes to approved CONs that were approved. Document that these projects were or are being implemented in compliance with all of their terms and conditions or explain why this was not the case.

Applicant Response:

UMSMC-E has obtained two CONs and one Certificate of Conformance since 2000. Copies are attached at **Exhibit 32.**

- In July 2003, UMSMC-E received a CON for the "Capital Renovation and Expansion to Memorial Hospital at Easton." 03-20-2112
- In September 2004, UMSMC-E received a CON for the "Establishment of a Twenty-Bed Acute Inpatient Rehabilitation Unit at The Memorial Hospital at Easton." 03-20-2128
- In April 2016, UMSMC-E received a Certificate of Conformance to provide primary and secondary percutaneous coronary intervention (PCI) services. CC-15-20-0001.

There were no specific conditions placed on the CON projects. Both CON projects were completed as approved. UMSMC-E has not yet implemented the Certificate of Conformance for PCI services.

COMAR 10.24.01.08G(3)(f). Impact on Existing Providers and the Health Care Delivery System.

An applicant shall provide information and analysis with respect to the impact of the proposed project on existing health care providers in the health planning region, including the impact on geographic and demographic access to services, on occupancy, on costs and charges of other providers, and on costs to the health care delivery system.

INSTRUCTIONS: Please provide an analysis of the impact of the proposed project:

a) On the volume of service provided by all other existing health care providers that are likely to experience some impact as a result of this project[1];

b) On access to health care services for the service area population that will be served by the project. (state and support the assumptions used in this analysis of the impact on access);

c) On costs to the health care delivery system.

If the applicant is an existing hospital, provide a summary description of the impact of the proposed project on costs and charges of the applicant hospital, consistent with the information provided in the Project Budget, the projections of revenues and expenses, and the work force information.

Applicant Response:

The project will improve geographic access, as discussed previously. (See Standard .04B(1) – Geographic Accessibility). The project will address and resolve considerable deficiencies in the current site, which are discussed in the Project Description section IV.B. (See pages 12-17). UMSMC-E is actively recruiting physicians and believes this project will assist in its recruitment efforts which are a challenge in a rural area.

UMSMC-E has reflected the recapture of some market shift that is has lost over the past 5 years in service lines that were impacted by the loss of physicians. UMSMC-E's market recapture assumptions are also discussed in Standard .04b(2) – Identification of Bed Need and Addition of Beds. Table 34 below outlines the projected volume recapture by services and hospital.

[1] **Please assure that all sources of information used in the impact analysis are identified and identify all the assumptions made in the impact analysis with respect to demand for services, the relevant populations considered in the analysis, and changes in market share, with information that supports the validity of these assumptions.**

Table 34
Projected Volume Recapture by Service Line and Hospital

	Anne Arundel Medical Center			Peninsula Regional Medical Center			Total		
Product Line	Total FY 2015 Cases	UMSMC Easton Market Recapture	% Recapture	Total FY 2015 Cases	UMSMC Easton Market Recapture	% Recapture	Total FY 2015 Cases	UMSMC Easton Market Recapture	% Recapture
Orthopedic Surgery	3,062	68	2.2%	1,389	12	0.9%	4,451	80	1.8%
Gastroenterology	2,132	18	0.8%	1,385	4	0.3%	3,517	22	0.6%
Myocardial Infarction	238	6	2.5%	217	10	4.6%	455	16	3.5%
Invasive Cardiology	400	13	3.3%	562	-	0.0%	962	13	1.4%
Endocrinology	327	6	1.8%	271	2	0.7%	598	8	1.3%
Orthopedics	301	3	1.0%	155	1	0.6%	456	4	0.9%
All Other IP Med/Surg Product Lines	12,787	-	0.0%	10,719	-	0.0%	23,506	-	0.0%
Total Inpatient Med/Surg Cases	**19,247**	**114**	**0.6%**	**14,698**	**29**	**0.2%**	**33,945**	**143**	**0.4%**

Notes:
[1] Source: IP HSCRC abstract data FY 2015 final
[2] Med/Surg cases only; excludes the following product lines - Obstetrics/Delivery, Other Obstetrics, Neonatology, Normal Newborn, Psychiatry, Substance Abuse, Rehabilitation

	Anne Arundel Medical Center			Peninsula Regional Medical Center			Total		
Product Line	Total FY 2015 Cases	UMSMC Easton Market Recapture	% Recapture	Total FY 2015 Cases	UMSMC Easton Market Recapture	% Recapture	Total FY 2015 Cases	UMSMC Easton Market Recapture	% Recapture
Obstetrics/Delivery	5,457	86	1.6%	1,881	-	0.0%	7,338	86	1.2%
Other Obstetrics	332	-	0.0%	64	-	0.0%	396	-	0.0%
Total OB Cases	**5,789**	**86**	**1.5%**	**1,945**	**-**	**0.0%**	**7,734**	**86**	**1.1%**

Notes:
[1] Source: IP HSCRC abstract data FY 2015 final

The proposed project will not result in any significant reduction of volumes from facilities offering similar services in the area. The applicant expects there will not be an impact on costs or charges at the other facilities in the area.

This project will not have an impact on the margin of other hospitals. As the inpatient utilization of Maryland hospitals declines, the inpatient revenue at these hospitals will be proportionately reduced. This reduction in revenue is limited to a 50% reduction in each hospital's GBR revenue in relation to the specific service line affected. This reduction occurs in the year following the change in volume through the HSCRC market shift adjustment methodology.

Any reduction in volumes and related revenue is expected to be partially offset by a reduction in variable expenses. Applying an assumption of 50% variability of expenses with changes in volumes suggests that for every 1% reduction in volumes, the 0.5% reduction in revenue will be offset by a 0.5% reduction in variable expenses.

The proposed project will have no negative effects on other providers and will have positive effects on the health care system as a whole.

AFFIRMATIONS

I hereby declare and affirm under the penalties of perjury that the facts stated in this application and its attachments are true and correct to the best of my knowledge, information, and belief.

10/6/16
Date

JoAnne Hahey, CPA
Senior Vice President, Finance and
Chief Financial Officer
UM Shore Regional Health

#569251
012516-0003

I hereby declare and affirm under the penalties of perjury that the facts stated in this application and its attachments are true and correct to the best of my knowledge, information, and belief.

Kathleen McGrath

Signature

Oct. 7, 2016

Date

Kathleen McGrath

Printed Name

I hereby declare and affirm under the penalties of perjury that the facts stated in this application and its attachments are true and correct to the best of my knowledge, information, and belief.

10-5-2016
Date

Robert Frank, MBA
Senior Regional Vice President,
Operations
UM Shore Regional Health

#569255
012516-0003

I hereby declare and affirm under the penalties of perjury that the facts stated in this application and its attachments are true and correct to the best of my knowledge, information, and belief.

Oct. 7, 2016
Date

Patti Willis
Senior Vice President
UM Shore Regional Health

#569256
012516-0003

I hereby declare and affirm under the penalties of perjury that the facts stated in this application and its attachments are true and correct to the best of my knowledge, information, and belief.

October 5 2016
Date

William Huffner, M.D.
MBA, FACEP, FACHE
Senior Vice President, Medical Affairs
and Chief Medical Officer
UM Shore Regional Health

#569248
012516-0003

I hereby declare and affirm under the penalties of perjury that the facts stated in this application and its attachments are true and correct to the best of my knowledge, information, and belief.

10/6/16
Date

Ruth Ann Jones
Ruth Ann Jones, Ed.D.
MSN, RN, NEA-BC
Senior Vice President, Patient Care Services and Chief Nursing Officer
UM Shore Regional Health

I hereby declare and affirm under the penalties of perjury that the facts stated in this application and its attachments are true and correct to the best of my knowledge, information, and belief.

10-7-2014
Date

Gary Jones
Regional Director, Cardiovascular & Pulmonary Services
UM Shore Regional Health

#569245
012516-0003

I hereby declare and affirm under the penalties of perjury that the facts stated in this application and its attachments are true and correct to the best of my knowledge, information, and belief.

10/7/16
Date

Darryl Mealy
Vice President of Construction and Facilities Planning
University of Maryland Medical System

#569246
012516-0003

I hereby declare and affirm under the penalties of perjury that the facts stated in this application and its attachments are true and correct to the best of my knowledge, information, and belief.

Oct. 7, 2016
Date

Jeanette Cross
Managing Director
Berkeley Research Group, LLC

#569253
012516-0003

I hereby declare and affirm under the penalties of perjury that the facts stated in this application and its attachments are true and correct to the best of my knowledge, information, and belief.

Oct. 7, 2016
Date

Shannon Kraus
FAIA, FACHA, LEED AP
Principal
HKS

#569254
012516-0003

I hereby declare and affirm under the penalties of perjury that the facts stated in this application and its attachments are true and correct to the best of my knowledge, information, and belief.

10/5/16

Date

Andrew S. Solberg
A.L.S. Healthcare Consultant Services

#569247
012516-0003