

### MARYLAND HEALTH CARE COMMISSION

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### MEMORANDUM

To: Commissioners

From: Eileen Fleck, Project Manager E.F.

**Date:** December 20, 2012

Re: Staff Report and Recommendation: Mercy Medical Center Docket No. 12-24-2332

Attached is the Staff Report and Recommendation in the review of the application of Mercy Medical Center ("Mercy") for a Certificate of Need ("CON") for the relocation of four mixed use general purpose operating rooms and the construction of four additional mixed use general purpose operating rooms, for a total of 26 operating rooms, and for the construction of surgical preparation, recovery, and storage areas on the First Floor of the Bunting Center. The total cost of the project is \$23,529,859.

The space for the proposed project, the First Floor of the Bunting Center, was previously approved as part of another CON (Docket No. 05-24-2174) for the relocation of the Emergency Department ("ED"). However, Mercy determined that consolidating all surgical services in the Bunting Center would be the most effective use of that space. Commission staff reviewed the historical volume of ED visits at Mercy as part of this CON review and concluded that the trend in the volume of ED visits supports Mercy's decision not to relocate its Emergency Department.

Staff concludes that Mercy Medical Center has demonstrated compliance with the applicable CON review standards and criteria. Therefore, Commission staff recommends approval of the proposed project. However, Staff also found that the proposed construction costs exceed the applicable Marshall Valuation Service benchmark used as a State Health Plan standard and recommends that the following condition be included:

Any future change to the financing of this project involving adjustments in rates set by the Health Services Cost Review Commission must exclude the \$918,929 cost associated with the excess construction costs, interest, and inflation. This figure includes the estimated projected construction expenditure that exceeds the Marshall Valuation Service guideline cost and portions of the estimated contingency allowance and inflation allowance for the project that are based on the excess construction cost.

In addition to the condition noted above, Commission staff recommends that the capital cost approved by the Commission in 2007 for the CON under Docket No. 05-24-2174 should be reduced by \$18,501,728 because approval of the proposed 8-OR project eliminates the relocation and expansion of the Hospital's ED, which was part of that prior CON project. This recommendation would result in a modification of the approved cost of the CON approved under Docket Number 05-24-2174 from \$489,239,521 to \$470,737,793.

IN THE MATTER OF	*	BEFORE THE
MERCY MEDICAL	*	MARYLAND
CENTER, INC.	*	HEALTH CARE
Docket No. 12-24-2332	*	COMMISSION
*****	*****	*****

### **Staff Report and Recommendation**

December 20, 2012

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### I. INTRODUCTION

Mercy Medical Center, Inc. ("Mercy" or "the Hospital") is a 233-bed general acute care hospital located in Baltimore City. The Hospital provides three inpatient services (medicalsurgical-gynecology-addictions [MSGA], obstetric, and pediatric services) and outpatient diagnostic and treatment services.<sup>1</sup> Additionally, the Hospital operates 29 licensed comprehensive care facility beds through a sister agency, Stella Maris, Inc., which are both owned by Mercy Health Services, Inc.

The Hospital is located on approximately 3.58 acres at 301 St. Paul Place near the Inner Harbor. Mercy's campus includes:

- The Mary Catherine Bunting Center ("Bunting Center"), a 686,000 square foot, 18-level patient care tower with 227 private rooms and 15 operating rooms, opened on December 10, 2010;
- The Tower Building, constructed in 1963, which housed all the Hospital's patient units and support services prior to construction of the Bunting Center. A four-floor addition to this building was constructed in 1991.
- The Harry and Jeanette Weinberg Center ("Weinberg Center"), a 118,000 square foot facility on a block to the south and immediately adjacent to the Hospital connected to the Hospital by a two-story bridge, completed in 2003;
- The five-story Burk Building, attached to the Tower Building, which contains the Emergency Department and ancillary services, completed in 1981 and renovated since construction; and
- A 126,000 square foot medical office building and conference center.

### A. Project Description

This project involves the consolidation and addition of surgical services in the Bunting Center, by using space that Mercy previously planned to use for the relocation of its Emergency Department. Mercy proposes to relocate four operating rooms that now exist in the Weinberg Center and add four new operating rooms based on projected need. Mercy asserts that shutting down the operating room suite in the Weinberg Center and re-locating those four rooms to the Bunting Center, will increase efficiency and patient safety. The proposed project includes no net change in overall bed capacity at Mercy.

The proposed eight operating rooms will be on the First Floor of the Bunting Center, while the main 15-room operating room suite is on the Sixth Floor of the building. A copy of the floor plan for the proposed project is attached as Appendix A. Upon completion of the project, Mercy will have 23 operating rooms located in the Bunting Center. Three operating rooms dedicated to podiatric surgery will remain in the Foot and Ankle Center, located in the Burk Building. Table 1 shows Mercy's current and proposed operating room inventory.

<sup>&</sup>lt;sup>1</sup> Maryland Health Care Commission, *Report on Selected Maryland Acute Care and Special Hospital Services: Fiscal Year 2013 update* 

Existing Capacity			After Project Completion				
Location (Building/Floor)		Total Rooms	Square Feet	Location (Building/Floor)		Total Rooms	Square Feet
Weinberg Center	3 <sup>rd</sup> Floor	4	15,637	Weinberg Center	3 <sup>rd</sup> Floor	0	0
Bunting Center	6 <sup>th</sup> Floor	15	36,941	Bunting Center	6 <sup>th</sup> Floor	15	36,941
Foot and Ankle	2 <sup>nd</sup> Floor	3	6,923	Foot and Ankle	2 <sup>nd</sup> Floor	3	6,923
Center, Burk				Center, Burk			
Building				Building			
				Bunting Center	1 <sup>st</sup> Floor	8	32,000
Total Operating Rooms		22				26	

Table 1: Existing and Proposed Operating Rooms for Mercy

Source: DI#7, page 10; and Docket No. 05-24-2174, DI#53, page 28.

The project is estimated to have a total cost of \$23,599,859 including \$385,000 for site preparation costs; \$10,539,910 for building, fixed equipment, and fees and permits; \$10,151,979 in other capital costs; \$2,094,350 in contingencies; \$358,620 in inflation; and \$70,000 for CON-related expenses. Cost estimates were developed in collaboration with Mercy's Construction Manager, Whiting-Turner. Mercy plans to fund the project with cash.

### B. Background and Project History

The Commission approved a Certificate of Need ("CON") on June 21, 2007, Docket No. 05-24-2174, authorizing Mercy to build a new patient care tower with 18 stories to replace the building space housing most of Mercy's clinical facilities and services, the majority of which were located in the Tower Building. The project plan approved included phases to relocate and increase Mercy's Emergency Department, surgical and obstetric capacity, and also included shell space to be used for additional medical/surgical beds. The original approved cost was \$406,584,514. Mercy later proposed a modification to the CON to increase the number of penthouse floors from one to two, add two elevator penthouses, and make other minor design changes. The modification request was approved on September 20, 2007, increasing the project cost to \$489,239,518.

Included in CON Docket No. 05-24-2174, the Emergency Department ("ED") was to be relocated to the First Floor of the new tower, proposed as part of Phase 7, at a cost of \$18,501,728. Commission staff determined that subsequent changes did not require Commission approval, such as reducing the number of phases from seven to five with relocation of the Emergency Department scheduled to occur as Phase 5. Mercy now believes that consolidating all surgical services in the Bunting Center is the most effective use of that space. Because of this change, Commission staff has included capacity and need discussions regarding the ED at Mercy in this report.

As shown in Table 2, the existing ED has 40 treatment spaces and includes 25,955 square feet. Mercy plans to expand the ED into the Second Floor of the Tower Building, which would allow up to 15,686 additional square feet after the Department of Radiology relocates to the Bunting Center. The Department of Radiology relocation is scheduled in Mercy's capital budget

in FY 2016. The original plan for the existing ED space was to use the lower floors in the Tower Building for materials management and other support services.

	Existing Capacity			Original Relocation & Expansion Plan			Plan	
Locatio (Building/F		Total Treatment Spaces	Square feet	Location (Building/Floor)		Total Rooms	Square feet	
Tower Building	1 <sup>st</sup> Floor	40	25,955	Bunting Center	1 <sup>st</sup> Floor	47	32,820	
Poten	tial to Expa	and Existing ED	)					
	Location (Building/Floor)		Square feet			oor currently house		
Tower Building	2 <sup>nd</sup> Floor		Up to 15,686; for a total of 41,641	the Dept. of Radiology and is scheduled for				

 Table 2: Existing and Potential Emergency Department Expansion, and

 Originally Proposed Emergency Department Relocation in CON 05-24-2174

Source: DI#9, page 2

### C. Summary and Staff Recommendation

MHCC Staff recommends approval of the proposed project at a cost of \$23,599,859 with one condition and a modification of the approved cost of Docket No. 05-24-2174 from \$489,239,521 to \$470,737,793 to account for the elimination of the relocation of the Emergency Department from that project. A summary of the Commission Staff's analysis of the proposed project is provided below.

### Need

• Mercy has demonstrated a need to expand its current surgical capacity of 19 operating rooms to a total of 23 operating rooms.

### **Cost-Effectiveness**

• Mercy has demonstrated that the proposed project is cost effective, primarily due to the large salary savings anticipated. Mercy expects to achieve over \$900,000 in annual salary savings.

### **Construction Cost**

• Construction costs exceed the cost index applied by MHCC through the State Health Plan ("SHP"). The SHP does not require project construction cost to be within the index cost, but costs in excess of the index must be excluded from consideration in any rate adjustment sought by Mercy from the Health Services Cost Review Commission for costs related to this project.

### **Financial Feasibility**

• Mercy has documented the availability of resources to implement this project, and based on the financial data reviewed, the proposed project is financially feasible.

### Impact

• Full utilization of the proposed operating room complement does not rely on pulling case volume away from other providers or increasing Mercy's market share. Therefore, the project is unlikely to have a negative impact on other providers in the region.

### II. PROCEDURAL HISTORY

### A. Review Record

On December 2, 2011, Mercy Medical Center, Inc. ("Mercy") submitted a Letter of Intent to apply for a Certificate of Need for construction of six new operating rooms in space in the new patient care tower that Mercy originally planned to use for a new Emergency Department. This letter was acknowledged by Commission staff on December 12, 2011 [Docket Item ("DI") #1].

On February 3, 2012, Mercy submitted a letter to amend the Letter of Intent to include construction of four new operating rooms and relocation of four existing operating rooms in order to consolidate all surgical services to the First and Sixth Floors of the Bunting Center, except for the three-operating rooms at the Foot and Ankle Center (DI#2).

Mercy filed its application for Certificate of Need on February 3, 2012 (DI#3).

Commission staff acknowledged receipt of the application (DI#4) and, on February 6, 2009, requested publication of receipt of the application in the next issue of *The Baltimore Sun* (DI#5).

Commission staff requested publication of receipt of the application in the *Maryland Register* on February 6, 2012. (DI#6).

On February 17, 2012, Commission staff sent Completeness Questions to Samuel Moskowitz, Executive Vice President and COO of Mercy requesting additional information (DI#7).

On February 21, 2012, Mercy wrote to Commission staff to confirm that Commission staff granted Mercy the request for an extension to the Completeness Questions, to be extended to March 5, 2012 (DI#8).

On March 6, 2012, Mercy provided a Response to Completeness Questions. (DI#9).

On March 19, 2012, Commission staff acknowledged receipt of the Hospital's response to Completeness Questions and asked for additional information regarding the Hospital's response to Completeness Questions (DI#10).

On March 26, 2012, Mercy provided a Response to Completeness Questions (DI#11). On March 28, 2012, Mercy provided the affirmations to be attached to the March 26, 2012 filing (DI#12).

On April 6, 2012, Commission staff acknowledged receipt of the Hospital's response to Completeness Questions and asked for additional information regarding the Hospital's response to Completeness Questions (DI#13).

On April 18, 2012, Samuel Moskowitz wrote to inform Commission staff that he would be leaving the employ of Mercy Medical Center. All future correspondence should be addressed to Judy Weiland, Senior Vice President for Strategic/Capital Planning & Facilities.

On April 23, 2012, Commission staff granted a request from Mercy to extend the deadline for responses to the Completeness Questions to April 27, 2012 (DI#15).

On April 27, 2012, Mercy provided a Response to Completeness Questions (DI#16).

On May 4, 2012, Commission staff notified the Hospital that its application would be docketed for review as of May 18, 2012 and that notice of the application's docketing would be published in the *Maryland Register* on that date. Commission staff also requested additional information from the Hospital regarding the proposed project (DI#17).

On May 4, 2012, Commission staff requested publication of a Notice of the application's docketing in the next edition of *The Baltimore Sun* (DI#18)

On May 4, 2012, Commission staff requested that a notice of the docketing of Mercy's CON request also be published in the *Maryland Register* on May 18, 2012 (DI#19).

On May 4, 2012, a copy of the application was sent to the Baltimore City Health Department for review and comment (DI #20).

On May 12, 2012, Commission staff received a copy of the docketing notice that was published in *The Baltimore Sun* on June 23, 2009 (DI #21).

On June 18, 2012, Commission staff received a response to Additional Information Questions (DI #22).

On August 29, 2012, Thomas Dame sent a letter to Commission staff regarding the standards that would apply to Mercy's application (DI#23).

On August 29, 2012, Commission staff sent a request for Additional Information to Judy Weiland (DI#24).

On September 4, 2012, Commission staff received a response to the Additional Information Questions sent August 29, 2012 (DI#25).

On September 7, 2012, Commission staff sent a request to the Health Services Cost Review Commission requesting comments on Mercy's application (DI#26).

On September 19, 2012, Commission staff sent a request for Additional Information to Judy Weiland (DI#27).

On September 27, 2012, Commission staff received a response to the Additional Information Questions sent September 19, 2012 (DI#28).

On October 5, 2012, Commission staff sent a request for Additional Information to Judy Weiland (DI#29).

On October 5, 2012, Commission staff received a response to the Additional Information Questions sent October 5, 2012 (DI#30).

On October 25, 2012, Commission staff received a response from the Health Services Cost Review Commission with comments on Mercy's application (DI#31).

On October 25, 2012, Commission staff corresponded by email with Kathy Pilkenton, which included attached financial documents (DI#32).

On October 26, 2012, Commission staff corresponded by email with Kathy Pilkenton, which included attached financial documents (DI#33).

On November 1, 2012, Commission staff corresponded by email with Kathy Pilkenton, which included clarification information on operating rooms (DI#34).

On November 9, 2012, Commission staff corresponded by email with Kathy Pilkenton, which included additional questions on operating rooms (DI#35).

On November 13, 2012, Commission staff corresponded by email with Kathy Pilkenton, which included additional information on operating room staffing (DI#36).

On November 15, 2012, Commission staff corresponded by email with Kathy Pilkenton, which included information on anesthesiologist and CRNAs at Mercy (DI#37).

### B. Interested Parties

There are no interested parties in this review.

### C. Local Government Review

No comments were received from local government entities.

### D. Community Support

No letters of support for the proposed project were received.

### III. STAFF REVIEW AND ANALYSIS

The Commission is required to make its decision in accordance with the general Certificate of Need review criteria at COMAR 10.24.01.08G(3)(a) through (f).

### A. The State Health Plan

## COMAR 10.24.01.08G(3)(a)states, "An application for a CON shall be evaluated according to all relevant State Health Plan standards, policies, and criteria."

The relevant State Health Plan chapter is COMAR 10.24.10, *State Health Plan for Facilities and Services: Acute Inpatient Services*. Assumptions concerning full and optimal use of operating room capacity found in COMAR 10.24.11, *State Health Plan for Ambulatory Surgical Services*, at the time the application was docketed, were also used in this review.

## COMAR 10.24.10 State Health Plan for Facilities and Services: Acute Inpatient Services

### COMAR 10.24.10.04A — General Standards.

### (1) Information Regarding Charges.

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

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

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

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

Mercy has a written policy in place that meets the requirements of this standard. Mercy maintains 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 web site. Mercy provided a policy that includes procedures for promptly responding to individual requests for current charges for specific services and procedures and for staff training on how to address inquiries regarding charges. Mercy complies with this standard.

### (2) Charity Care Policy.

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

(a) The policy shall provide:

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

(ii) Minimum Required Notice of Charity Care Policy.

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

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

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

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

Mercy provides inpatient and outpatient care to all patients regardless of the ability to pay. The Financial Assistance Policy (DI#10, Exhibit 1) states that the Hospital will make a determination of probable eligibility within two business days following a patient's submission of an application. Notices regarding the availability of financial assistance are posted in the ED and in the Admissions and Business Offices. Mercy also publishes an annual notice that charity care is available at the Hospital in the *Baltimore Sun*. Each patient or patient representative is advised of Mercy's Financial Assistance Policy, which states that the patient is given a determination regarding eligibility within two business days and that financial counselors assist individuals to prepare and file all documents required to receive financial assistance.

Upon request, the policy can be provided in several languages and interpreter services are also available. According to the most recent data available from the Health Services Cost Review Commission ("HSCRC"), Mercy provided charity care equal to 3.1 percent of its operating expenses in FY 2011, which was in the second quartile of all hospitals. Mercy is consistent with this standard.

### (3) Quality of Care.

An acute care hospital shall provide high quality care.

(a) Each hospital shall document that it is:

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

(ii) Accredited by the Joint Commission; and

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

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

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

Mercy is licensed in good standing by the Maryland Department of Health and Mental Hygiene, and Mercy is accredited by the Joint Commission. The Hospital submitted documentation of its most recent accreditation from the Joint Commission for the 36 month period commencing October 9, 2010 (DI #3, Exhibit 7). The Hospital is also in compliance with the conditions of participation of the Medicare and Medicaid programs.

Mercy Medical Center: April 2011-March 20		
Quality Measure	Hospital Performance	State Average
Heart Attack – Giving you aspirin when you arrive	100%	99%
Heart Attack – Giving you aspirin at discharge	N/A	99%
Heart Attack – ACE Inhibitor or ARBs for LVSD	N/A	98%
Heart Attack – Providing advice or counseling on how to stop smoking	N/A	99%
Heart Attack – Giving you beta blockers when you leave	N/A	99%
Heart Attack –AMI patients whose time frame hospital arrival to primary PCI is 90 minutes or less	N/A	91%
	<b>N1/A</b>	400%
Children's Asthma Care – Relievers for inpatients	N/A	100%
Children's Asthma Care – Systemic corticosteroids for inpatients	N/A	100%
Children's Asthma Care – Home management plan given	N/A	84%
Heart Failure – Giving full instructions when you leave the hospital	95%	92%
Heart Failure – Performing LVS assessment	100%	99%
Heart Failure – ACEI for LVSD	93%	97%
Heart Failure – Providing advice or counseling on how to stop smoking	98%	99%
Pneumonia – Vaccination against pneumonia	97%	96%
Pneumonia – Performing Emergency Room blood cultures	98%	96%
Pneumonia – Providing advice or counseling on how to stop smoking	98%	99%
Pneumonia – Given antibiotics within 6 hours	96%	96%
Pneumonia – Given most appropriate initial antibiotic	100%	96%
Pneumonia – Given Flu Vaccine	92%	93%
Surgical Care- Beta-blocker prior to admission, if received during		
Perioperative period	94%	96%
Surgical Care- Received antibiotics 1 hour before incision	96%	97%
Surgical Care- Prophylactic Antibiotic Selection	99%	98%
Surgical Care- Antibiotic discontinued within 24 hours of surgery	97%	97%
Surgical Care- Cardiac surgery patients with controlled 6 a.m.		
postoperative blood glucose	N/A	94%
Surgical Care- Appropriate hair removal	100%	100%
Surgical Care- Doctor-ordered treatments to prevent blood clots	98%	98%
Surgical Care- Urinary catheter removed on postoperative day 1 or 2	99%	95%
Surgical Care- Perioperative temperature management	99%	100%
Surgical Care- Blood clot prevention within 24 hours	98%	97%

### Table 3: Maryland Hospital Performance Evaluation Guide Mercy Medical Center: April 2011-March 2012

Source: MHCC Hospital Performance Evaluation Guide, April 2011-March 2012.

Mercy reported that it scored above the 90 percent level in the applicable quality measures included in the Maryland Hospital Performance Evaluation Guide (DI#3, page 19). Commission staff reviewed updated data for the 29 quality measures included in the Maryland Hospital Performance Evaluation Guide. These quality measures refer to the proportion of patients that received the recommended process of care in five clinical areas: heart attack care, children's asthma care, pneumonia care, heart failure care, and select surgical care. Mercy does

not fall within the bottom quartile of all hospitals' reported performance for any of the quality measures. As shown in Table 3, Mercy's score is above a 90 percent level of compliance for all 20 of the applicable quality measures. Mercy complies with this standard.

### COMAR 10.24.10.04B — Project Review Standards

The standards in this section are intended to guide reviews of Certificate of Need applications and exemption requests involving acute hospital facilities and services.

### (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.

This standard is not applicable. Mercy is not proposing a new acute care general hospital or the replacement of an acute care general hospital at a new site.

(2) Identification of Bed Need and Addition of Beds.

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

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

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

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

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

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

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

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

This standard is not applicable. Mercy is not proposing any change in its MSGA beds or pediatric beds as part of this project.

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

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

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

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

This standard is not applicable. Mercy is not proposing a new pediatric service.

### (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

(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.

Mercy is not seeking a rate increase for this project at this time. In addition, this project is not reducing the potential availability or accessibility of a facility or service. Therefore, this standard is not applicable.

### (5) Cost-Effectiveness.

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

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

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

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

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

(b) An applicant proposing a project involving limited objectives, including, but not limited to, the introduction of a new single service, the expansion of

capacity for a single service, or a project limited to renovation of an existing facility for purposes of modernization, may address the cost-effectiveness of the project without undertaking the analysis outlined in (a) above, by demonstrating that there is only one practical approach to achieving the project's objectives.

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

(i) That it has considered, at a minimum, 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 offactiveness, to the alternative project sites located within a Priority.

## effectiveness, to the alternative project sites located within a Priority Funding Area.

The primary objective of the proposed project is to address projected growth in surgical volume and provide care in a more efficient manner. Mercy believes that consolidating surgical services in the Bunting Center, with the exception of the Foot and Ankle Center, will be more efficient because it projects that this facility change will allow it to reduce surgical staffing levels by 9.6 FTEs when compared to the staffing requirements under its current surgical facility configuration. Mercy also believes that having fewer surgical suites creates a safer environment in terms of anesthesia coverage and reliance on other clinical staff. (DI#9, pages 3 and 7; DI#36 Attachment 1).

Mercy considered two alternatives to address the projected growth in surgical volume. The first was to renovate an old surgical suite in the Tower Building. Mercy rejected this alternative because after consulting with its architects (AECOM), it determined that the project would not be cost-effective. The main portion of the surgical suite was designed in the 1950s, so the operating room size and flow are not consistent with modern standards. Using and integrating modern surgical equipment is not possible. The operating room layouts do not support video integration. The layout of the support areas, such as the patient prep and recovery area and the location of sterilization facilities are not consistent with efficient care. In order to use the space, it would need to be gutted. (DI#9, pages 7-8).

However, even if the space is gutted, Mercy notes that there are structural limitations. For example, the low floor-to-floor height ratios would make it expensive to meet current codes and standards. There is also irregular column grid spacing that blocks the size of operating rooms. Another problem is that the space is above the Radiology Department which would require off-hours work and periodic closing of the Radiology Department. Lastly, infection control issues are more problematic than building an 8-OR suite in the Bunting Center. Mercy did not provide specific cost estimates for this alternative. Commission staff accepts that given the number and types of problems cited, renovating space in the Tower Building is unlikely to be a cost-effective alternative and did not request that Mercy provide cost estimates. (DI#9 p. 8-9).

At the request of Staff, the second alternative Mercy considered to address the projected growth in surgical volume was building a four operating room (4-OR) suite at the Bunting Center and continuing to use the 4-OR suite at the Weinberg Center. This appeared to be a more obvious alternative in that the Weinberg Center is not an old facility. Mercy provided a project budget estimate for this alternative and comparative staffing information. This information is shown in Table 4. As shown in Table 4, the construction of an eight operating room (8-OR) suite at the Bunting Center is expected to cost \$23.6 million dollars, and a 4-OR suite would cost approximately \$15.6 million dollars; the 4-OR suite is approximately \$8 million dollars less expensive. The lower cost stems primarily from the lower cost of renovations and equipment for a 4-OR project compared to an 8-OR project. However, if the 4-OR suite is built, there would be additional costs of approximately \$2.9 million dollars associated with maintaining the Weinberg 4-OR surgical suite because Mercy would seek to update the surgical suite to include the technology proposed for the 8-OR project, and it would need to replace equipment (DI#37, Exhibit A-2).

	If Weinberg Did not Relocate			Bronocod 9		Average	Cost
Position	Bunting 4-ORs	Weinberg 4-ORs	Total	Proposed 8- ORs in Bunting	Savings	Average Salary	Cost Savings
Patient Care							
Anesthesia Technician	2.0	2.0	4.0	3.0	1.0	\$27,872	\$27,872
RN	22.7	22.7	45.4	45.4		\$79,040	
OR Tech	2.5	2.5	5.0	5.0		\$30,722	
Surgical Tech	5.3	5.3	10.6	10.6		\$58,573	
Nurse Support Tech	3.0	3.0	6.0	6.0		\$30,763	
Patient Service Reps	4.0	2.4	6.4	4.8	1.6	\$25,709	\$41,134
Nurse Management	1.0	1.0	2.0	1.0	1.0	\$114,400	\$114,400
Support Services							
Housekeeping	2.5	2.0	4.5	4.5		\$25,147	
Security Staff	3.0		3.0	3.0		\$31,200	
Maintenance	1.0		1.0	1.0		\$30,160	
Patient Transport/Courier	1.0	1.0	2.0	1.0	1.0	\$24,960	\$24,960
Central Sterile Tech	2.0	3.5	5.5	4.0	1.5	\$38,854	\$58,282
Receptionist	1.5	1.5	3.0	1.5	1.5	\$31,200	\$46,800
Surgical Systems Analyst		1.0	1.0	1.0		\$101,920	
Material Management	1.5	1.5	3.0	2.0	1.0	\$37,440	\$37,440
Anesthesiologist/ CRNA	4.5	4.5		8.0		\$450,000	\$450,000
Subtotal	53.0	49.4	102.4	93.8	9.6		\$885,101
Other Savings							16,948
Benefits	N/A	N/A	N/A	N/A	N/A	N/A	\$84,213
Total	53.0	49.4	102.4	93.8	9.6		\$902,049

Table 4: Staff Estimates for 4-OR and 8-OR Surgical Suites at the Bunting Center and the 4-OR Surgical Suite at the Weinberg Center at Mercy Medical Center

Sources: DI#11, Exhibit 2; DI#36; DI#37, Exhibit A-3;

Note: The salary for the anesthesiologist/CRNA position reflects the salary of an anesthesiologist only. The "Other Savings" is from a very small percentage of staff time saved through reduced patient transportation time to ICU.

As shown in Table 4, Mercy expects that it will be able to hire 9.6 fewer FTEs with the 8-OR project at Bunting as compared to a 4-OR project at Bunting. Mercy states that these staff reductions and reducing the time spent by staff transporting patients from the 4-OR suite in Weinberg to the intensive care unit ("ICU"), it achieves approximately \$902,000 in annual expense savings in FY 2012 dollars for the first full year of the project (DI#37, Exhibit A-1). With regard to the savings attributed to fewer anesthesiologists and fewer certified registered nurse anesthetists (CRNAs), Mercy explained that 0.25 FTE would be saved for coverage of patient recovery, 0.25 FTE would be saved through assigned staffing hours, and 0.5 FTE would be saved through reduced hours for general coverage (DI#36, pages 2-3).

In addition to relying on staff savings to justify its proposed 8-OR project, Mercy states that building a 4-OR suite now and continuing to operate the 4-OR suite at the Weinberg Center will result in high costs due to disruption of the surgical suite, when an additional four operating rooms are needed and added later. Mercy notes that the construction work will all need to be off-hours, and it will be difficult to work efficiently because work will only start once surgical cases are finished for the day, which may result in only a few hours of construction work each day. Mercy states that the additional cost would amount to about \$6.3 million dollars (DI#32, Exhibit C-1 and C-2).

Based on the anticipated high costs associated with later expanding a 4-OR suite to an 8-OR suite, as well as the expected salary savings associated with the proposed 8-OR project, Mercy concludes that its proposed 8-OR project is more cost-effective than the alternative of building a 4-OR suite and continuing to operate the 4-OR suite at the Weinberg Center. Mercy also notes that an additional benefit of consolidating surgical services would be improved anesthesia coverage and response time (DI#9, page 9).

### Staff Analysis

Commission staff regards net present value analysis as the best approach for evaluating Mercy's proposed project. Net present value (NPV) analysis is an approach to evaluating investments that is widely accepted by financial analysts and economists. It involves creating a cash flow statement, with the revenues and expenses associated with a project over a period of time, adjusting the net revenue in each year by a discount rate, and then adding up the net revenue in each year. The discount rate is way of adjusting for the time value of money. It is necessary to use a discount rate because a given sum of money available now is worth more than the same amount of money received in a future year; money available now is available for profitable investment or consumption.

Commission staff's NPV analysis is described in greater detail below, following a discussion of the staff efficiency gains identified by Mercy. Staff concludes that it is unlikely that all of the staff savings identified by Mercy are achievable. Nevertheless, Staff concludes that Mercy's proposed 8-OR project would be more cost-effective than the alternative project of building only 4-ORs and continuing to operate the 4-OR suite at the Weinberg Center.

In most cases, when Staff questioned the reductions in FTEs attainable by building the proposed 8-OR suite, we accepted the explanations provided by Mercy. However, with regard to

the patient service representatives, Staff remains skeptical of the proposed savings identified by Mercy for its proposed 8-OR project in the Bunting Center, as compared to the alternative of maintaining a 4-OR suite in Weinberg and building only a new 4-OR surgical suite in the Bunting Center. Initially, when asked about why a 4-OR surgical suite in the Bunting Center would require four patient service representatives, when only 2.4 are required for the existing 4-OR surgical suite in Weinberg, Mercy stated that, "with the expected volume and larger footprint of the proposed Bunting Center unit, Mercy determined that two overlapping shifts of two persons would be needed." (DI#16, page 2). When later asked again about the differences in the number of patient service representatives for the proposed project and the alternative of building only a 4-OR surgical suite in Bunting, Mercy stated that the need for patient representatives "is not affected by the number of ORs (four or eight) to be added in the Bunting Center. Mercy determined that minimal additional FTEs would be required to staff the additional four ORs" (DI#28, pages 1-2).

Commission staff requested historic information on the surgical case volume and patient representative FTEs to evaluate whether the savings on patient service representatives was consistent with historical staffing patterns at the Weinberg Center, which has four ORs; the larger surgical suite ("McAuley OR") which was later replaced by a 15-OR surgical suite in Bunting; and the new 15-OR surgical suite in the Bunting Center ("Bunting OR"). The information submitted by Mercy for fiscal year (FY) 2010-2012 is shown below in Table 5. From the information provided in Table 5, Staff calculated the volume of surgical cases per FTE at each location for a one year period, as shown in Table 6. This information suggests that the number of cases handled by each patient service representative FTE is similar whether a surgical suite has only four operating rooms or many more operating rooms, about 1,100 cases per patient service representative FTE. Therefore, Commission staff finds Mercy has not demonstrated that a savings of 1.6 patient representative FTEs is feasible.

	FY 2	010	FY 201	FY 2012		
Location	Cases	FTEs	Cases	FTEs	Cases	FTEs
Bunting OR	N/A	N/A	5,185 (6 months)	9.2 (6 months)	10,839	9.9
Weinberg OR	3,460	2.8	3,043	2.8	2,933	2.4
McAuley OR	9,856	8.6	4,502 (6 months)	8.5 (6 months)	N/A	N/A

 Table 5: Historical Surgical Case Volume

 and Patient Service Representative FTEs by Location, FY 2010-12

Source: DI#28, page 2.

Note: Number of Cases and FTEs are for one year, unless otherwise indicated.

Per Patient Service Representative FTE by Location, FY 2010-12						
Location	FY 2010	FY 2011	FY 2012			
Bunting OR	N/A	1,127	1,095			
Weinberg OR	1,236	1,087	1,222			
McAuley OR	1,146	1,059	N/A			

Table 6: Estimated Annual Number of Surgical Cases	
Per Patient Service Representative FTE by Location, FY 2010-12	

Source: MHCC staff analysis of DI#28, page 2.

With regard to the savings attributed to reduced patient transportation costs, Staff is also skeptical that the saved time will allow for a reduction in the number of FTE employees hired. The amount of staff time saving is only 10 percent of time for a transport registered nurse, respiratory therapy, and an anesthesiologist, based on the number of cases expected to require transport in 2017 (DI#37, Exhibit A-2). Staff is skeptical that hiring practices can be adjusted to reflect such a small time savings. Therefore, Staff disagrees that \$16,948 in salary savings may be attributed to the reduced patient transportation costs.

With regard to the savings attributed to a reduction of one FTE for anesthesiology services, Commission staff believes the projected annual savings should be reduced slightly to reflect the use of both CRNAs and physician anesthesiologists. Although some functions may only be performed by an anesthesiologist, Mercy indicated that both CRNAs and physician anesthesiologists are used to induce patients (DI#36). Based on the ratio of CRNAs to physician anesthesiologist FTEs reported by Mercy (2.5 to 1), Staff reduced the savings attributed to anesthesiology from \$450,000 to 434,500 (DI#36).

For the net present value analysis, Staff determined that the appropriate time frame would be from 2015 through 2024. Staff chose 2024 as the end point because that is when, based on an optimal capacity standard of 97,920 minutes per operating room, and the historic trend in surgical services, Mercy is projected to need eight new operating rooms, which is the number of new operating rooms that it is proposing to build. Staff wanted to answer the question: do the cost savings associated with building an 8-OR suite before it is needed offset the higher cost of the bigger project? Answering this question through NPV analysis, as noted previously, entails creating a cash flow statement, with the revenue and expense associated with the project between the time of the initial capital investment and the end of the project, adjusting the net revenue in each year by a discount rate, and then adding up the net revenue for each year.

Commission staff requested revenue and expense projections from Mercy for this extended period for both its proposed 8-OR project and the alternative of building a 4-OR suite and continuing to operate the 4-OR suite in Weinberg. Several iterations were developed as Staff reviewed and discussed these projections with the applicant. Commission staff used this information for its NPV analysis. Because Mercy projected that patient revenue from each project would be the same and expenses would be the same, except for salary costs and the initial capital investment costs, the outcome of the NPV analysis is determined by only a few line-item differences. On the revenue side, the only difference is the investment income available through the lower capital cost of the 4-OR project.

Although the length of the project time, over ten years, means there is less certainty about the validity of the assumptions used, the limited number of differences between the two projects, with the large capital investment for each project being in the near-term, increases Staff's confidence that valid conclusions may be drawn from its NPV analysis. The year 2024 may be optimistic with regard to the need for surgical capacity, and with the optimal capacity assumption for a general purpose operating room used by MHCC increasing from 97,920 minutes to 114,000 minutes, it is likely that Mercy's next surgical capacity expansion may not be needed until almost 2030. However, Staff notes that this longer time frame serves to support the proposed project because it means more years of accrued salary savings.

Staff's perspective on the consideration of alternatives was based on a concern about the value of Weinberg lost by shutting it down before the end of its useful life. Mercy identifies the useful life of the operating room equipment for a surgical suite as seven years on average, while the useful life of the building space is considered 40 years. Mercy was unable to provide a cost estimate for building the Weinberg 4-OR surgical suite, which opened in 2004, that would be comparable to the cost estimates for the proposed 8-OR project or a smaller 4-OR project. Therefore, Staff sought to estimate the value of Weinberg unit in 2016 in two different ways. First, Staff used the Marshall Valuation Service benchmark for the year it was constructed and multiplied it by the number of square feet for the project, and then calculated the annual depreciation and subtracted 11 years of depreciation. This results in an estimate for the second approach, Staff used the cost based on the ratio of square feet for the 4-OR suite in Weinberg and the new 4-OR suite; Weinberg is about 30 percent smaller. Staff again then calculated the annual depreciation and subtracted the annual depreciation and subtracted the annual depreciation and subtracted the new 4-OR suite; Weinberg is about 30 percent smaller. Staff again then calculated the annual depreciation and subtracted the annual depreciation. This results in an estimated value of \$5 million dollars.

Staff was initially uncertain as to how the estimated value of Weinberg should be accounted for in its NPV analysis. Staff's understanding is that the cash flow accounts for the value of keeping Weinberg in operation versus shutting it down. When only the cash flow of the two projects is considered, then the 8-OR project has a net present value of approximately \$17.9 million dollars compared to approximately \$17.0 million dollars for the alternative of maintaining Weinberg and building only a new 4-OR project; the 8-OR project is favored by about \$959,000 (Appendix B). Given the timeframe over which this advantage is spread, the savings from the 8-OR project is modest. The investment return on the money saved through building a smaller project was assumed to be very conservative, only 1.5 percent. A higher return could significantly reduce the financial advantage of the 8-OR project. However, as Staff noted previously, Mercy's next opportunity to expand its surgical capacity may over 15 years away, given the new optimal capacity standard for operating rooms, which will provide more years of salary savings. Therefore, Commission staff concludes that Mercy's proposed 8-OR project is cost effective.

### (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.

Commission staff concludes that Mercy has met the burden of proof with regard to the proposing an additional four ORs at the Hospital. This need analysis is discussed under COMAR 10.24.01.08G(3)(b).

### (7) Construction Cost of Hospital Space.

The proposed cost of a hospital construction project shall be reasonable and consistent with current industry cost experience in Maryland. The projected cost per square foot of a hospital construction project or renovation project shall be compared to the benchmark cost of good quality Class A hospital construction given in the Marshall Valuation Service® guide, updated using Marshall Valuation Service® update multipliers,

and adjusted as shown in the Marshall Valuation Service® guide as necessary for site terrain, number of building levels, geographic locality, and other listed factors. If the projected cost per square foot exceeds the Marshall Valuation Service® benchmark cost, any rate increase proposed by the hospital related to the capital cost of the project shall not include the amount of the projected construction cost that exceeds the Marshall Valuation Service® benchmark and those portions of the contingency allowance, inflation allowance, and capitalized construction interest expenditure that are based on the excess construction cost.

This standard requires a comparison of the project's estimated construction cost with an index cost derived from the Marshall Valuation Service ("MVS"). For comparison, an MVS benchmark cost is developed for new construction based on the relevant construction characteristics of the proposed project. The MVS cost data includes the base cost per square foot for new construction by type and quality of construction for a wide variety of building uses including hospitals. Separate base costs are specified for basements and mechanical penthouses. The MVS guide also includes a variety of adjustment factors, including adjustments of the base costs to the costs for the latest month, the locality of construction, as well as factors for the number of stories, height per story, shape of the building (such as the relationship of floor area to perimeter), and department use of space.

Mercy developed an MVS benchmark cost for this project of \$512.17 per square foot ("SF") for new construction based on the proposed space to be "fitted out." This benchmark included adjustments for departmental cost differential, perimeter multiplier (relationship of floor space to perimeter), the average floor height, the addition of sprinklers, and the current cost and local costs multipliers. The departmental cost differential is significant because most of the project space is for the operating suite, which is expensive relative to the average square foot cost for a complete hospital. Mercy compared this benchmark to its estimated project costs as adjusted for project costs that are not included in MVS (demolition and road work), and determined that its estimated cost (\$334 per SF) is \$178 less than the MVS benchmark. This large difference is not surprising considering that the MVS costs are for a complete new building and Mercy's project costs are only for the finishing of interior space.<sup>2</sup>

In order to provide a more reasonable MVS comparison for the proposed project, Commission Staff developed a MVS benchmark for finishing comparable vacant space for surgical services as detailed in Table 7 below. The benchmark was developed by calculating a benchmark for constructing comparable shell space (\$196.58 per SF) and subtracting this from the MVS benchmark for new construction. Staff calculated the benchmark for shell space by taking the latest available MVS base cost for a Class A, Good Quality hospital building (November 2011) and applying the differential cost factor for unassigned space (0.5), and then adjusting this result for the shape and height of the proposed space. This cost was then inflated to the current time period (November 2012) and adjusted for the local conditions of Baltimore. For these calculations, Staff used some assumptions that differ from the ones Mercy used.

Commission Staff agrees with Mercy on the base cost, the departmental cost differential and the height multiplier. However, Staff used a lower adjustment for the shape of the floor, a

<sup>&</sup>lt;sup>2</sup> Mercy's project costs do not include the construction of the base floor, the exterior walls, and a roof

perimeter multiplier of 1.008 instead of 1.013, as Mercy used. Staff added \$3.28 per SF for sprinklers, which is slightly more than the \$3.25 used by Mercy. Staff also used the latest current cost multiplier (1.04 for November 2012) to inflate the costs from the November 2011 base, which is slightly higher than the 1.03 current cost multiplier used by Mercy, and the latest local multiplier (1.02 as of October 2012) to adjust national costs for the cost of construction in Baltimore. This is less than the 1.04 local cost multiplier used by Mercy. The result is a slightly lower MVS benchmark of \$504.89 per SF for the total construction of comparable new space than the value calculated by Mercy, \$512.17 per SF.

The MVS benchmark cost applied by Commission staff to the proposed the finishing of the proposed space<sup>3</sup> is \$308.31 per SF as detailed in the following table. This new benchmark is the difference between the MVS benchmark cost for the complete construction of a one story hospital building of comparable size and shape for the proposed use (\$504.89 per SF) and the MVS benchmark for construction of vacant hospital space of comparable size and shape (\$196.58 per SQ).

	Total New Hospital	Hospital	Fit Out of Space As
	Construction	Shell Space	Proposed
Construction Class/Quality	Class A/Good	Class A/Good	Class A/ Good
Number of Stories	1	1	1
Square Feet	32,000	32,000	32,000
Average Floor Areas (SF)	32,000	32,000	32,000
Average Perimeter (F)	2,000	2,000	2,000
Average Floor to Floor Height (F)	16	16	16
Base Cost per SE (New 2011)	\$336.71	\$336.71	\$336.71
Base Cost per SF (Nov. 2011)			\$330.7 I
Adjustment for Dept. Cost Differences	Surgical Suite,	Unassigned	N/A
Dillerences	Circulation, Storage, etc.	Space 0.5	N/A N/A
Adjusted Base Cost per SF	1.275 <b>\$429.31</b>	\$168.36	\$260.95
Adjusted Base Cost per SF	\$429.31	\$100.30	\$200.95
Multipliers			
Perimeter Multiplier	1.008	1.008	1.008
Story Height Multiplier	1.092	1.092	1.092
Multi-story Multiplier*	1.0	1.0	1.0
Refined Cost per SF	\$472.67	\$185.36	\$287.31
Add-Ons			
Sprinklers – wet system (Nov 2012)	3.28		3.28
Refine Cost per SF	\$475.95	\$185.31	\$290.59
	<b>,</b>	<b>*</b> • • • • •	
Update/Location Multipliers			
Update Multiplier (November 2012)	1.04	1.04	1.04
Location Multiplier (Baltimore, Oct.	1.02	1.02	1.02
2012)			
Final Benchmark MVS Cost per SF	\$504.89	\$196.58	\$308.31

 Table 7: Calculation of Marshall Valuation Service Benchmark Cost

 Per Square Foot for Mercy's Fit Out of Shell Space for Surgical Services

<sup>&</sup>lt;sup>3</sup> The finishing of 32,000 sq. ft. of shell space on the first floor of the Bunting Building for the provision of surgical services.

Data Sources: DI#3, page 7 (Chart 1) and pages. 28-29 and Marshall Valuation Service®, Published by Marshall & Swift/Boeckh, LLC.

Staff reviewed the Applicant's costs for comparison to the MVS benchmark and calculated the project's comparable cost per square foot to be the same as that calculated by Mercy (\$334.08), as detailed in the following table.

Construction Budget to Marshall Valuation Servic	e Benchmark
Project Construction Costs	Construction
Building	\$8,446,000
Fixed Equipment	\$1,003,030
Site Work	\$385,000
Professional Fees	\$981,000
Permits	\$109,880
Capital Construction Interest	\$0
Total Construction Costs	\$10,924,910
Adjustments to Project Construction Costs	
Demolition	\$107,776
Roads	\$126,472
Total Adjustments	\$234,248
Adjusted Project Cost	\$10,690,662
Square Feet ("SF")	32,000
Cost Per SF	\$334.08
Adj. MVS Cost/SF for finishing the space	\$308.31
Over(Under)	\$25.77

 Table 8: Comparison of Mercy Medical Center's

 Instruction Budget to Marshall Valuation Service Benchmark

Source: DI#3, page 7 (Chart 1), pages 13-14 (Project Budget), and pages 30-31 (MVS analysis).

Based on the comparison detailed in Table 8, Mercy's proposed cost per square foot for finishing the shell space is higher than the MVS benchmark by \$25.77 per SF. The standard requires that any rate increase proposed by the Hospital related to the capital cost of the project shall not include the amount of project construction costs that exceeds the MVS benchmark and those portions of the contingency allowance, inflation allowance, and capitalized construction interest that are based on the excess construction cost. The construction cost exceeds the MVS benchmark by \$824,640 (\$25.77 per SF multiplied by 32,000 SF, the total area of the proposed project).

With regard to exclusion of costs above the MVS benchmark, in addition to the excess construction costs of \$824,640, the cost only needs to be adjusted for the contingency and inflation allowances because the project costs do not include any capitalized construction interest, and the MVS benchmarks already account for capitalized construction interest. Staff calculated that the amount of contingency allowance to exclude is \$82,464 by applying the percentage of the project attributed to the total contingency amount, 10 percent. This percentage was calculated by dividing the budgeted contingency of \$2,094,350 by \$21,076,889, the total proposed current capital costs less the contingency cost. Staff calculated the inflation allowance should be reduced by \$11,825 by applying the percentage of budget cost attributable to inflation,

3.3 percent, to the excess construction cost. Therefore, any future change to the financing of this project involving adjustments in rates set by the Health Services Cost Review Commission must exclude \$918,929, which is the sum of the excess construction cost (\$824,640) and portions of the contingency (\$82,464) and inflation allowances (\$11,825) for the project.

The following condition addressing this construction cost issue is recommended for inclusion, if the project is awarded a CON.

Any future change to the financing of this project involving adjustments in rates set by the Health Services Cost Review Commission must exclude \$918,929 for the costs associated with the excess construction costs, interest, and inflation. This figure includes the estimated project construction expenditure that exceeds the Marshall Valuation Service guideline cost and portions of the contingency allowance, inflation allowance, and capitalized construction interest estimate for the project that are based on the excess construction cost.

### (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 nonhospital 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.

This standard is not applicable. The project does not involve construction of non-hospital space.

### (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.

This standard is not applicable. The proposed project does not involve the construction of an inpatient nursing unit.

### (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.

Mercy is not a high charge hospital, based on HSCRC's most recently analysis of hospitals known as the "Reasonableness of Charges" (ROC) analysis. This analysis entails analyzing charges of similar hospitals and identifying whether such charges are unacceptably high. If a hospital is three percent or more above the average charge of its peer group of similar hospitals, then HSCRC identifies the Hospital as being high-charge. The HSCRC's most recent ROC analysis, released for 2011 rates, identified Mercy as 0.36 percent above its Peer Group (Peer Group 4) average charge per case. This standard does not apply because Mercy is not a high charge hospital.

### (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.

Mercy states that consolidating surgical services at the Hospital will result in efficiencies (DI#3, pages 35-36). For example, both the existing 15-OR surgical suite and the proposed 8-OR surgical suite in the Bunting Center will share main registration and pre-admission testing areas. Both surgical suites will also share a Central Sterile Department. The proposed consolidation will also allow for a reduction in 1.0 FTEs for anesthesia coverage (DI#36, Attachment 1). Mercy also notes that the proposed surgical suite will be designed with a layout similar to the existing 15-OR surgical suite to minimize the need to train staff, and greater space for equipment storage will allow ORs to be used efficiently for different procedures. Lastly, Mercy notes that the new suite will incorporate state-of-the-art sustainable features including energy efficient systems, lighting, heating, air condition, air filtration and medical equipment. Mercy did not provide a cost savings estimate for most of these improved design efficiencies.

Mercy provided a comparison of staffing costs associated with the consolidation. Mercy expects to be able to hire about 9.6 fewer FTEs at a savings of \$902,049 dollars per year if surgical services are consolidated to the Bunting Center. Although Commission staff does not agree that all of the FTE savings cited by Mercy are likely to be achievable, as discussed under the cost-effectiveness criterion, Commission staff agrees that Mercy will likely obtain significant salary savings as a result of the proposed project.

This project complies with this standard. Mercy has cited numerous efficiency improvements related to consolidating surgical capacity in the new Bunting Center.

### (12) 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.

Mercy states that patient safety was a key driver in the design of the First Floor surgical suite (DI#3, page 37). For example, it will be located in close proximity to the Emergency Department and the main patient elevator core that connects to the Intensive Care Units and other major services. It is also designed to have a layout similar to the existing 15-OR surgical suite, which minimizes the need to train staff and allows staff to move between the two surgical suites easily.

Mercy also states that architectural features to promote patient safety are based on the *Guidelines for Design and Construction of Healthcare Facilities* (2010 edition; adopted by the State of Maryland) and the Maryland Building Code. Examples of design elements include finishes of the floors, walls, and other areas that are specified to maintain a sterile environment and minimize operative and post-operative infection risk; mechanical filtration is designed to maintain optimum levels of air quality; and Mercy's infection control and risk assessment program will be incorporated through the design and construction process. In addition, Mercy chose lighting for the ORs based on its goal of minimizing staff and surgeon fatigue, while still maintaining adequate illumination for surgical procedures.

Mercy also included a list of additional design features that address patient safety:

- PACU/Recovery bays will be arranged in close proximity around the nurse station to provide direct visibility to each recovery bay.
- Pre-Op and Recovery Bays will have a standardized layout.
- Each pre-op and recovery bay has computer access to physician order entry and electronic charting.
- Acoustical ceiling tile, sound absorbing cubicle curtains, and voice recognition pagers will be used to reduce noise.
- Use of mobile and wireless charting systems will be used to enhance interaction between staff and patient and family members.
- Circulation will be arranged to minimize interaction between inpatients and outpatients, visitor, staff and materials. The OR waiting space will have direct connection to public elevators and entry/exit points for Prep/Recovery spaces.

This project is consistent with this standard.

### (13) Financial Feasibility

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

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

used to develop the projections.

(b) Each applicant must document that:

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

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

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

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

With respect to subsection (i), there is not a need projection for operating rooms in the State Health Plan. Therefore, historic trends are relied on to evaluate utilization projections. Mercy projects its OR utilization will increase at an annual rate of 3.55 percent for inpatient surgical cases and by approximately two percent for outpatient surgical cases, between FY 2011 and FY 2020 (DI#3, page 53). Mercy chose the projected rates of growth based on ten years of historic surgical case volume data that show the same respective average annual rates of change for inpatient and outpatient surgical cases. Therefore, Mercy's utilization projections are consistent with historic trends. This conclusion is also discussed in further detail under COMAR 10.24.01.08G(3)(b).

Mercy's revenue estimates for the proposed project are consistent with Mercy's approved rates and current charge levels. Mercy states that uncompensated care is projected based on Mercy's current experience. For Mercy, revenue projections include an assumption of 2.9 percent charity care, relative to gross patient services revenue. Mercy assumes the payor mix will remain the same (DI#3, Table 3, pages 66-68). Mercy's projections also indicate that the amount of projected bad debt, as a percentage of gross patient revenue, will be consistent with the 5.4 percent current level. Contractual allowances, as a percentage of gross patient revenue, remain consistent at 4.1 percent. Commission staff concludes that the project is consistent with subsection (ii).

With respect to subsection (iii) and staff projections, Mercy projects that a total of 93.8 additional full time equivalent employees ("FTEs") will be needed (DI#9, Exhibit 4) to staff the proposed new eight operating suite. Mercy plans to add a net new 44.4 FTEs. For these

employees, Mercy projected their salaries based on those of existing employees in the same type job category and assumed benefits would amount to 24 percent of their total salaries. Although Staff disagrees with the projected number of patient service representative FTEs, as discussed earlier under the Cost Effectiveness criterion, overall Staff finds Mercy's expense projections are reasonable, and the proposed project will not jeopardize the long-term viability of the Hospital. Commission staff concludes the project is consistent with subsection (iii).

Mercy reports a projected income loss in FY 2012 which reflects a non-cash change in the market value of Mercy's interest rate SWAP portfolio since June 30, 2011. Mercy entered into several interest rate SWAPs to manage the exposure of debt instruments and convert its variable rate debt to a fixed rate. Mercy pays the counter-party a fixed rate and receives a rate equal to the variable rate on the bonds. This value fluctuates with interest rate changes. The negative value reflects the decline in interest rates.

In FY 2013 to FY 2017, Mercy projects revenues to exceed expenses (DI#3, page 67). However, the level of income projected for three years is significantly lower than FY 2010 and FY 2011. This lower level of income is a result of interest and depreciation related to construction of the Bunting Center, which opened in December of 2010. According to analysis by HSCRC, Mercy's financial status is sound because it has 193 days of cash on hand, and the Maryland Health and Higher Educational Facilities Authority's rate covenant calls for no less than 70 days of cash on hand.

The project has complied with this standard. Financial viability of the project is addressed under the Financial Viability review criterion, COMAR 10.24.01.08G(3).

### (14) Emergency Department Treatment Capacity and Space

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

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

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

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

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

(iv) The impact of efforts the applicant has made or will make to

# divert non-emergency cases from its emergency department to more appropriate primary care or urgent care settings; and (v) Any other relevant information on the unmet need for emergency department or urgent care services in the service area.

This standard is not applicable. Mercy is not proposing a new or expanded emergency department.

### (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 nonemergency 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.

This standard is not applicable. Mercy is not proposing an expansion of its emergency department.

### (16) Shell Space

(a) Unfinished hospital space for which there is no immediate need or use, known as "shell space," 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 Service Cost Review Commission. This standard is not applicable. Mercy is not proposing to build shell space for future use.

### B. Need

COMAR 10.24.01.08G(3)(b) states "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 had demonstrated unmet needs of the population to be served, and established that the proposed project meets those needs."

For this CON review, the need for four additional operating rooms must be evaluated. Mercy proposes to increase its total surgical capacity from 22 operating rooms to 26 operating rooms, which includes three operating rooms in the Foot and Ankle Center. The other key component of the project is the relocation of four existing operating rooms from the Weinberg Center to the Bunting Center, consolidating 23 general operating rooms in one building. The utilization of the three operating rooms at the Foot and Ankle Center is not included in the discussion of need.

For the purpose of analyzing the need for operating room capacity, both Mercy and Staff relied on the Ambulatory Surgical Services chapter of the SHP. When this application was submitted, this Chapter defined full operating room capacity for general purpose, mixed use operating rooms as 2,040 hours per room per year and optimal operating room capacity as 1,632 hours per room per year (97,920 minutes per room per year). Staff has since updated the capacity standard to 114,000 minutes per room per year. However, this application will be evaluated using the standard at the time of submission, in accordance with the current applicable SHP chapter.

Mercy has concluded that more operating space is needed at the Hospital because existing operating rooms are already functioning at optimal utilization (80 percent of full capacity), and Mercy projects continued growth in surgical volume. For its projections of surgical case volume, Mercy assumed that the future average annual percent change in surgical case volume will be the same as the historic trend between FY 2000 and FY 2011. For this time period, Mercy calculated that the average of the annual percentage change in surgical case volume was 3.55 percent for inpatient cases and two percent for outpatient cases, as shown in Table 9. Table 9 also shows that the total surgical volume at Mercy increased 31 percent between FY 2000 and FY 2011; inpatient cases grew 45 percent and outpatient cases grew 22 percent.

N N	Inpatient	Percent	Outpatient	Percent	Total	Percent
Year	Cases	Change	Cases	Change	Cases	Change
FY 2000	3,875	-	5,858	-	9,733	-
FY 2001	3,745	-3.35%	6,687	14.15%	10,432	7.18%
FY 2002	4,240	13.22%	7,178	7.34%	11,418	9.45%
FY 2003	4,314	1.75%	6,496	-9.50%	10,810	-5.32%
FY 2004	4,742	9.92%	6,683	2.88%	11,425	5.69%
FY 2005	4,631	-2.34%	7,122	6.57%	11,753	2.87%
FY 2006	4,495	-2.94%	6,992	-1.83%	11,487	-2.26%
FY 2007	4,650	3.45%	7,078	1.23%	11,728	2.10%
FY 2008	4,836	4.00%	7,607	7.47%	12,443	6.10%
FY 2009	5,126	6.00%	7,598	-0.12%	12,724	2.26%
FY 2010	5,604	9.33%	7,712	1.50%	13,316	4.65%
FY 2011	5,608	0.07%	7,122	-7.65%	12,730	-4.40%
Avg. Annual						
% Change		3.55%		2.00%		2.57%
Total Change 2000-2011	44.72%		21.58%		30.79%	47.50

**Table 9: Percent Growth in Surgical Cases at Mercy** 

Source: Based on information from Mercy Medical Center CON application, DI #3, pages 47, 53.

Using the average of the annual growth rates of 3.55 percent for inpatient cases and two percent for outpatient cases, the respective average case times in 2011, and the current optimal capacity standard of 97,920 minutes per operating room, Mercy projected a need for four additional operating rooms by 2018, as shown in Table 10. In 2011, the average number of minutes per case for inpatient cases was 160.3 minutes and for outpatient cases it was 69.1 minutes per case. These average case times are much longer than the average case time ten years prior. On average, inpatient cases take 20 percent longer. Mercy attributes the longer average case time for inpatient surgeries to an increase in complex cases and procedures.

Minutes, and ORS: Mercy Medical Center, F1 2000-2019								
			Total			Optimal	Number	
	Inpatient	Outpatient	Surgical	Cleanup	Total	Minutes	of ORs	
Year	Minutes	Minutes	Minutes	Minutes	Minutes	per OR	Needed	
FY00	511,476	378,620	890,096	291,990	1,182,086	97,920	12.1	
FY01	472,163	405,067	877,230	312,960	1,190,190	97,920	12.2	
FY02	562,249	442,243	1,004,492	342,540	1,347,032	97,920	13.8	
FY03	612,856	404,304	1,017,160	324,300	1,341,460	97,920	13.7	
FY04	632,299	418,002	1,050,301	342,750	1,393,051	97,920	14.2	
FY05	623,171	423,775	1,046,946	352,590	1,399,536	97,920	14.3	
FY06	603,385	416,832	1,020,217	344,610	1,364,827	97,920	13.9	
FY07	655,813	430,550	1,086,363	351,840	1,438,203	97,920	14.7	
FY08	708,047	500,399	1,208,446	373,290	1,581,736	97,920	16.2	
FY09	752,892	535,868	1,288,760	381,720	1,670,480	97,920	17.1	
								Optimal
FY10	863,488	524,833	1,388,321	399,480	1,787,801	97,920	18.3	Capacity 19 ORS
FY11	898,710	492,303	1,391,013	381,900	1,772,913	97,920	18.1	
FY12	930,649	502,172	1,432,821	392,160	1,824,981	97,920	18.6	
FY13	963,724	512,238	1,475,962	402,720	1,878,682	97,920	19.2	
FY14	997,974	522,507	1,520,481	413,580	1,934,061	97,920	19.8	
FY15	1,033,441	532,981	1,566,422	424,770	1,991,192	97,920	20.3	
FY16	1,070,169	543,665	1,613,834	436,290	2,050,124	97,920	20.9	
FY17	1,108,202	554,564	1,662,766	448,140	2,110,906	97,920	21.6	
FY18	1,147,586	565,680	1,713,266	460,350	2,173,616	97,920	22.2	Optimal Capacity 23 ORS
FY19	1,188,370	577,020	1,765,390	472,890	2,238,280	97,920	22.9	
FY20	1,230,604	588,587	1,819,191	485,820	2,305,011	97,920	23.5	

Table 10: Actual and Projected Surgical Cases, Minutes, and ORs: Mercy Medical Center, FY 2000-2019

Source: Mercy Medical Center CON application, DI #3, page 54.

Note: Actual cases and inpatient and outpatient minutes are shown for FY 2000-11. FY 2012-20 are projected.

With regard to population changes during the same period, 2000 to 2011, Mercy submitted population estimates for what the Hospital refers to as its primary service area (PSA) and secondary service areas (SSA), which comprise 75 percent of the Hospital's patient discharges. According to Mercy, the Hospital's downtown Baltimore location attracts residents from a broad geographical area, including Baltimore City and many parts of Baltimore, Carroll, Harford, Howard, and Anne Arundel Counties. Mercy's PSA includes 32 zip codes in and around Baltimore City, and its SSA includes 24 zip codes in bordering counties up to Harford County to the northeast and Carroll County to the northwest.

 Table 11: Mercy Medical Center Service Area Population Estimates and Projections

· · · · · · · · · · · · · · · · · · ·						
	2000	2011	% Chg	2016	% Chg	
	Census	Census	2000-11	Projection	2011-16	
Primary Service Area	1,259,267	1,281,436	1.8%	1,279,374	(0.2)%	
65+ population	168,580	170,486	1.1%	189,257	11.0%	
Secondary Service Area	586,943	653,794	11.4%	674,237	3.1%	
65+ population	71,005	88,685	24.9%	103,962	17.2%	
Total	1,846,210	1,935,230	4.8%	1,953,611	0.9%	
65+ population	239,585	259,171	8.2%	293,219	13.1%	

Source: Mercy Medical Center CON application, DI#3, Table 2, page 50-51. Original source referenced: Claritas

As shown in Table 11, the population residing in Mercy's primary and secondary service area increased by 4.8 percent between 2000 and 2011; the primary service area population increased 1.8 percent, while the secondary service area increased 11 percent. During this same period, Mercy's total surgical volume increased by 31 percent. Based on this incongruence, Mercy concluded that service area population changes are not reflective of Mercy's volume increases and are not the best determinant to use for need projections for operating rooms.

Commission staff disagrees with Mercy's conclusion that historical changes in surgical volume are unrelated to population changes in its primary and secondary service area. Based on the statistical analysis of the 12 years of surgical case volume information reported by Mercy and the estimated population for residents in the primary and secondary service area, there is a strong correlation between population growth and surgical case volume. Staff calculated the correlation coefficient at .94 (1.0 is the maximum possible value). The correlation is even higher when, comparing the change in population to the change in surgical cases per 1,000 population (.99).

As shown in Table 12, total surgical case volume is growing at a faster rate than the population in Mercy's primary and secondary service area (2.47 percent versus .043 percent), but the difference is not as vast as suggested by Mercy. Commission staff also notes that another way to calculate the average annual change in case volume is to use the endpoints to calculate the average annual change, rather than averaging the change from year-to-year as Mercy did. This change results in a slightly lower average annual growth rate for inpatient cases (3.41 percent versus 3.55 percent) and for outpatient cases (1.79 percent versus 2.00 percent), as shown in Table 12.

Because Commission staff found that population growth is strongly correlated with historic changes in surgical volume at Mercy, Staff projected future case volume by removing the historic level of surgical volume growth attributed to population growth (.43 percent) and then factoring back in the lower population growth expected in the primary and secondary service area through 2016. As shown in Table 12, Commission staff projects that future growth in inpatient case volume will be the average annual percent increase in case volume per 1,000 population between 2000 and 2011 (2.98 percent), plus the average annual percent increase in population projected for 2011 to 2019 (.19 percent). For projecting outpatient case volume, Commission staff takes a similar approach, resulting in an assumed average annual increase of 1.55 percent.

SL				es per 1,000 Populati		al Center	1
	Case Co	ount Repo	orted by		Cases per 1,000		
<b>-</b> '	A 11	Mercy	0.0	0	Population	10	0.0
Fiscal	All	IP Coore	OP Coore	Service Area		IP Coore	OP Coore
Year	Cases	Cases	Cases	Population	All Cases	Cases	Cases
2000	9,733	3,875	5,858	1,846,210	5.27	2.10	3.17
2001	10,432	3,745	6,687	1,854,131	5.63	2.02	3.61
2002	11,418	4,240	7,178	1,862,085	6.13	2.28	3.85
2003	10,810	4,314	6,496	1,870,074	5.78	2.31	3.47
2004	11,425	4,742	6,683	1,878,097	6.08	2.52	3.56
2005	11,753	4,631	7,122	1,886,154	6.23	2.46	3.78
2006	11,487	4,495	6,992	1,894,246	6.06	2.37	3.69
2007	11,728	4,650	7,078	1,902,373	6.16	2.44	3.72
2008	12,443	4,836	7,607	1,910,535	6.51	2.53	3.98
2009	12,724	5,126	7,598	1,918,731	6.63	2.67	3.96
2010	13,316	5,604	7,712	1,926,963	6.91	2.91	4.00
2011	12,730	5,608	7,122	1,935,230	6.58	2.90	3.68
Average Annual Rate of Change 2000-11	2.47%	3.41%	1.79%	0.04%	2.03%	2.98%	1.36%
				Estimated Values			
Estimated Annual Rate of Change 2011-16	2.22%	3.16%	1.55%	0.19%	2.03%	2.98%	1.36%
2011-10	13,018	5,785	7,232	1,938,892	6.71	2.9078	3.73
2012	13,313	5,969	7,344	1,938,892	6.85	3.07	3.78
2013	12,443	5,969 6,157	7,344	1,946,238	6.99	3.16	3.83
2014	13,925	6,352	7,573	1,949,921	7.13	3.26	3.88
2015	14,243	6,553	7,690	1,953,611	7.13	3.36	3.94
2010	14,570	6,761	7,809	1,957,323	7.44	3.45	3.99
2017	14,904	6,975	7,930	1,961,042	7.60	3.56	4.04
2010	15,248	7,195	8,052	1,964,768	7.76	3.66	4.10
2013	10,240	1,195	0,002	1,304,700	1.10	5.00	4.10

Table 12: Projected and Historical Surgical Case Volume and Rates per 1.000 Population for Mercy Medical Center

Source: Commission staff analysis of Mercy CON application, DI#3, pages 52-53.

Notes: The estimated volumes of inpatient (IP) and outpatient (OP) cases for 2012-2019 are calculated by multiplying the respective prior year's actual or estimated case volume by the respective estimated percentage growth in case volume. The estimated growth in case volume is assumed to be the average annual percentage increase in case volume between 2000 and 2011 per 1,000 population plus the annual percentage of population growth projected. The totals for all cases, in years 2012-2019, are the sum of projected IP and OP cases. Population estimates for 2000, 2010, 2011, and 2016 are from DI#3. For intervening years, a straight line projection is assumed.

Commission staff finds that if its own more conservative estimates for case volume growth are used, the current average case times for inpatient and outpatient surgical cases, and an assumption that population growth after 2016 will be similar to growth for 2011 to 2016, then Mercy will not need 23 operating rooms until 2019. This is one year later than Mercy projects

and would not meet the required timeframe for being at or above optimal capacity within two years of completing the project. However, Staff notes that if the average time per case continues to increase for inpatient and outpatient cases, at even just half the historic rates of increase between 2000 and 2011 (0.9 percent and 0.5 percent), then Mercy will need four additional operating rooms in 2018, as shown in Table 13. Commission staff regards it as reasonable to assume average case times will continue to increase at least slightly given the historic trend at Mercy, and its explanation for the increased case times. In addition, Staff compared Mercy's average minutes per case to the minutes per case reported in the HSCRC database and found that Statewide and Peer Group average case times also increased during this time period, which suggests that Mercy is not being less efficient that its peers. As shown in Table 13, Commission staff finds that Mercy will need four additional operating rooms in 2018.

Year	Inpatient Cases	Outpatien t Cases	Total Cases	Inpatient Case Minutes	Outpatient Case Minutes	Turnaround Time	Total Time	OR Need
FY 2012	5,786	7,232	13,018	932,097	502,257	390,545	1,824,899	18.6
FY 2013	5,969	7,344	13,314	970,299	512,592	399,410	1,882,302	19.2
FY 2014	6,158	7,458	13,617	1,010,067	523,140	408,502	1,941,709	19.8
FY 2015	6,354	7,574	13,928	1,051,465	533,905	417,827	2,003,197	20.5
FY 2016	6,555	7,691	14,246	1,094,560	544,891	427,391	2,066,842	21.1
FY 2017	6,763	7,811	14,573	1,139,420	556,104	437,201	2,132,726	21.8
FY 2018	6,977	7,932	14,909	1,186,120	567,547	447,265	2,200,932	22.5
FY 2019	7,198	8,055	15,253	1,234,733	579,226	457,588	2,271,548	23.2

Table 13: Staff Projection of Surgical Case Volume, Time, and OR Need for Mercy Medical Center

Source: MHCC staff analysis, based on DI#3, pages 52-54.

Although Mercy has demonstrated a need for four additional operating rooms, it is necessary to also consider Mercy's need for additional space for its ED. In 2005, Mercy obtained a CON (Docket No. 05-24-2174) for a project that included moving the Hospital's ED from its current space on the first floor of the Tower Building to the first floor of the Bunting Center, which the Hospital now states is better suited as a surgical suite. Previously, Mercy justified moving and expanding its ED by stating, "The ED should be close to MSGA beds, especially the ICU beds, and the operating suites and imaging" (Docket No. 05-24-2174). Mercy also projected growth of only two percent in ED visits between 2007 and 2018.

Staff asked Mercy why relocating the ED was no longer desirable or necessary. Mercy responded that its concerns about the distance of the ED to other services did not materialize. Mercy also explained that it has invested approximately \$7.6 million dollars in 2003 renovating the ED and an additional \$4.0 million dollars in 2007, and if the ED were moved Mercy would lose the benefit of those investments. Furthermore, Mercy noted that the ED has greater space to

expand in its current location than it would if relocated to the first floor of the Bunting Center. Mercy estimates there will be as much as 19,000 square feet available for the ED to expand in its current location, after the Department of Radiology relocates to the Bunting Center. (DI#30, page 6). As a result, over 40,000 square feet of total space would be available for the ED in its current location compared to 32,820 square feet in the Bunting Center.

In order to evaluate Mercy's decision regarding the location of its ED, Staff reviewed the change in ED cases in the past ten years, as shown in Table 14.

De		cy hospital, c12002-11
Year	Number of Visits	Annual Percent Change
2002	47,035	
2003	49,633	5.5%
2004	49,408	-0.5%
2005	51,061	3.3%
2006	51,161	0.2%
2007	55,741	9.0%
2008	60,282	8.1%
2009	65,161	8.1%
2010	62,851	-3.5%
2011	67,975	8.2%

Table 14: Number of Emergency Department Visits at Mercy Hospital, CY2002-11

Source: MHCC analysis of HSCRC discharge abstract data and Outpatient data, CY 2002-11.

As shown in Table 14, between 2007 and 2011, the annual percent change in the number of ED visits was about eight percent, with the exception of the change between 2009 and 2010, a decrease of 3.5 percent. In addition, the total number of visits in 2009 already has exceeded Mercy's prior estimate, included in the 2005 CON, of the number of ED visits in FY 2018, which was slightly less than 65,000 visits. This level of growth supports Mercy's conclusion that keeping the ED in its current location, where there will be greater space to expand, will allow Mercy to better accommodate growth in ED visits. Therefore, it is reasonable to use the first floor of the Bunting Center for another project, such as the proposed 8-OR project instead.

As previously noted, Commission staff concludes that Mercy has demonstrated a need for four additional operating rooms. Therefore, the proposed project is consistent with the need criterion.

## C. Availability of More Cost-Effective Alternatives

COMAR 10.24.01.08G(3)(c): "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 which has submitted a competitive application as part of a comparative review."

This criterion was addressed earlier in the report, under the section for project review standards. Commission staff concluded that the proposed project is cost-effective.

### D. Viability of the Proposal

COMAR 10.24.01.08G(3)(d): "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."

Mercy proposes to finance the project with cash. Staff reviewed the audited financial statements of Mercy, which included the consolidated financial statements for its various entities. These statements showed that Mercy had cash and cash equivalents in the amount of \$86,759,000 as of June 30, 2011 (DI#3, Exhibit 9). These financial statements indicate the availability of sufficient cash resources for the proposed equity contribution.

Mercy's most recent operational results for FY 2010, as reported to the Health Services Cost Review Commission, are presented below in Table 15. The operating margin for services regulated by the Health Services Cost Review Commission has been between nine and 10 percent of net operating revenue for FY 2008 to FY 2010. This was in excess of the average performance of its peer group which ranged from approximately five to seven percent for FY 2008 to FY 2010.

Fiscal Category	<u> </u>	FY 2008		FY 2009		FY 2010
Mercy Medical Ce	enter	: Regulated O	perat	tions Only		
Net Operating Revenue	\$	315,462,821	\$	337,994,222	\$	339,231,791
Net Operating Income	\$	28,738,877		\$33,930,600	\$	31,580,844
Net Operating Margin		9.11%		10.04%		9.31%
Mercy Medical Center:	Regi	ulated and Unr	egul	ated Operation	IS	
Net Operating Revenue	\$	333,459,788	\$	355,588,388	\$	355,316,258
Net Operating Income	\$	26,974,054	\$	31,326,480	\$	25,231,960
Net Operating Margin		8.09%		8.81%		7.10%
Peer Grou	р4:	Regulated Ope	eratio	ons		
Average Operating Margin		5.13%		6.42%		7.30%
Median Operating Margin		5.97%		7.71%		8.54%
Peer Group 4	: Re	gulated and Ur	nreg	ulated		
Average Operating Margin		-1.01%		0.21%		1.00%
Median Operating Margin		1.39%		1.27%		1.64%
Statewide:	Regi	ulated and Unr	egul	ated		
Operating Margin (Regulated and						
Unregulated)		2.30%		2.60%		2.60%
Operating Margin (Regulated)		5.20%		5.90%		6.20%

Table 15: Recent Financial Performance of Select Maryland Hospitals

Source: HSCRC Final Staff Report on the Financial Condition of Maryland Hospitals, Sept. 2011.

Table 15 shows the financial performance of the Maryland hospitals as reported on their audited financial statements. As shown in Table 15, Mercy generated an operating margin that ranged from about seven percent to nearly nine percent for FY 2008 to FY 2010, well above the

Statewide average and the target set by HSCRC for FY 2008 to FY 2010. However, Mercy's excess margin is below both the Statewide average and the HSCRC target. As shown in Table 16, Mercy's excess margin was less than a half percent for FY 2008 to FY 2010, when the HSRC target value was four percent and the Statewide average values ranged from almost none to about four percent for the same period.

	Mercy Medical Cen	iter
Year	Operating Margin	Excess Margin
2010	7.10%	0.48%
2009	8.81%	-1.10%
2008	8.09%	0.30%
	Maryland Hospitals-Sta	atewide
Year	Operating Margin	Excess Margin
2010	2.60%	3.80%
2009	2.60%	0.01%
2008	0.000/	4 400/
2000	2.30%	1.40%
2000	2.30% HSCRC Target Valu	

 Table 16:
 Select Financial and Operating Indicators for Maryland Hospitals

Source: Staff analysis of HSCRC Final Staff Report on the Financial Condition of Maryland Hospitals, Sept. 2011.

Note: Calculations are based on both regulated and unregulated revenue.

The days of cash available measures the number of days a hospital could meet its average daily expenditures with existing liquid assets, or cash. As shown in Table 17, Mercy's 2012 financial statements indicate that the Hospital has sufficient cash from operations that exceeds the target days thresholds set by both the Maryland Health and Higher Education Facilities Authority(60 days) and the PNC Bank standard for cash on hand (70 days).

Cash Available	\$183,196
Less Project Cost Funded	(23,600)
Adjusted Cash Available after Proposed Project	\$159,596
Net Cash Operating Expenses	\$370,546
Days in Year	366
Daily Operating Expense	\$1,012
Days Cash on Hand	158

Table 17: Calculation of Days Cash Available for Mercy (in thousands)

Source: MHCC staff analysis of Audited Consolidated Financial Statements, June 30, 2012

Commission Staff requested HSCRC staff's opinion on the financial feasibility and viability of this project, which is appended to this report as Appendix C. Based on its review of the project's financial and funding assumptions, financial projections, and the hospital's financial condition, HSCRC staff finds that the project is financially feasible and viable.

The applicant projects that the first year of full utilization will be 2018. Mercy projects that it will have a positive net income in all years until 2018 (DI#3, page 67). The Hospital

estimates that it will generate \$22,775,000 in net income by the first year of full utilization (DI#3, page 67). Based on statistical and financial projections, Commission staff concludes that this project is financially viable.

## E. Compliance with Conditions of Previous Certificates of Need

COMAR 10.24.01.08G(3)(e): "An applicant shall demonstrate compliance with all terms and conditions of each previous Certificates 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."

On June 21, 2007 Mercy received CON approval to construct the Bunting Center, referred to in the CON as "New Patient Care Tower" (Docket No. 05-24-2174). Mercy has completed six of seven phases of that plan, all in compliance with conditions applicable to this project. This CON was modified on September 20, 2007 and included the following conditions.

Upon completion of this project, Mercy Medical Center will not place any of the existing physical bed capacity being replaced by bed capacity being constructed in the New Tower into operation for routine inpatient care without Commission approval;

Mercy will not finish the shell space without giving notice to the Commission and obtaining all required Commission approvals;

Mercy will not request an adjustment in rates by HSCRC that includes depreciation or interest costs associated with construction of the proposed shell space until and unless Mercy has obtained CON approval for finishing the shell space.

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

Any future change to the financing of this project involving adjustments in rates set by the HSCRC must exclude the construction cost found to be in excess of the applicable Marshall Valuation Service ("MVS") benchmark cost, which is calculated to be \$57,061,879 for the new construction based on the difference between Mercy's estimated cost per square after adjustments and the fully adjusted MVS cost per square foot; and Any future change to the financing of the project involving adjustment in rates set by the HSCRC must exclude the cost associated with the excess square footage of the new nursing units, which is calculated to be \$12,861,979, using the adjusted MVS estimated cost per square foot for the new construction.

At this point in time, Mercy has given notice and obtained required Commission approvals regarding this CON. Mercy has proposed finishing some shell space in this proposal and has not sought an adjustment in rates by HSCRC related to depreciation or interest costs associated with construction of the shell space.

There are no compliance issues at this time with respect to the terms and conditions of the modified CON approval.

### F. Impact on Existing Providers

COMAR 10.24.01.08G(3)(f): "An applicant shall provide information and analysis with respect to the impact of the proposed project on existing health care providers in the service area, including the impact on geographic and demographic access to services, on occupancy, on costs and charges of other providers, and on costs to the health care delivery system."

The four additional operating rooms and expanded surgical prep, recovery, and storage areas are intended to meet the current and future demand for surgical services at Mercy, as previously discussed under COMAR 10.24.01.08G(3)(b). Mercy states that the relocation of four operating rooms and addition of four operating rooms should not affect other providers. Mercy's projected need for additional surgical capacity is based on historic growth in case volume. Mercy is not proposing that it will need additional surgical capacity through expanding its market share. In addition, no interested parties expressed objections to this proposed application.

Regarding recruitment and retention, Mercy will use its existing resources to fill the positions associated with this project. Mercy does not anticipate finding it difficult to fill the positions necessary to implement this project. For registered nurses, the current vacancy rate is 6.9 percent and the current turnover rate is 4.7 percent. (DI#3, page 76).

Mercy also states that the addition of four new operating rooms and relocation of four operating rooms from the Weinberg Center to the First Floor of the Bunting Center will have a positive effect on the health care delivery system within Mercy because the design will more effectively and efficiently provide inpatient and outpatient surgical services as discussed under the Cost Effectiveness and Efficiency criteria. The project will also benefit payers because it will be accomplished without an increase in Mercy's charges for surgical and related care. (DI#3, pages 75-76).

Staff recommends a finding that this project will have minimal impact on existing health care providers in the service area, access to services, or cost and charges of other providers.

### IV. SUMMARY AND STAFF RECOMMENDATION

Staff concludes that Mercy Medical Center has demonstrated compliance with the applicable CON review standards and criteria. Therefore, Commission staff recommends approval of the proposed project.

Staff found that the proposed project costs exceed a reasonable MVS benchmark for the finishing of the shell space as proposed by Mercy. Therefore, any future rate increase proposed by Mercy related to this project must exclude the excess costs including excess costs associated with contingency allowance and inflation allowance. In addition, Commission staff finds that the capital cost approved by the Commission in 2007 for the CON under Docket No. 05-24-2174 should be reduced by \$18,501,728 because approval of the proposed 8-OR project eliminates the relocation and expansion of the Hospital's emergency department, which was part of that prior CON project. Therefore, staff recommends modification of the approved cost of the CON approved under Docket Number 05-24-2174 from \$489,239,521 to \$470,737,793.

IN THE MATTER OF	*	BEFORE THE
MERCY MEDICAL	*	MARYLAND HEALTH
CENTER	*	CARE COMMISSION
Docket No. 12-24-2332	*	
****	******	****

### FINAL ORDER

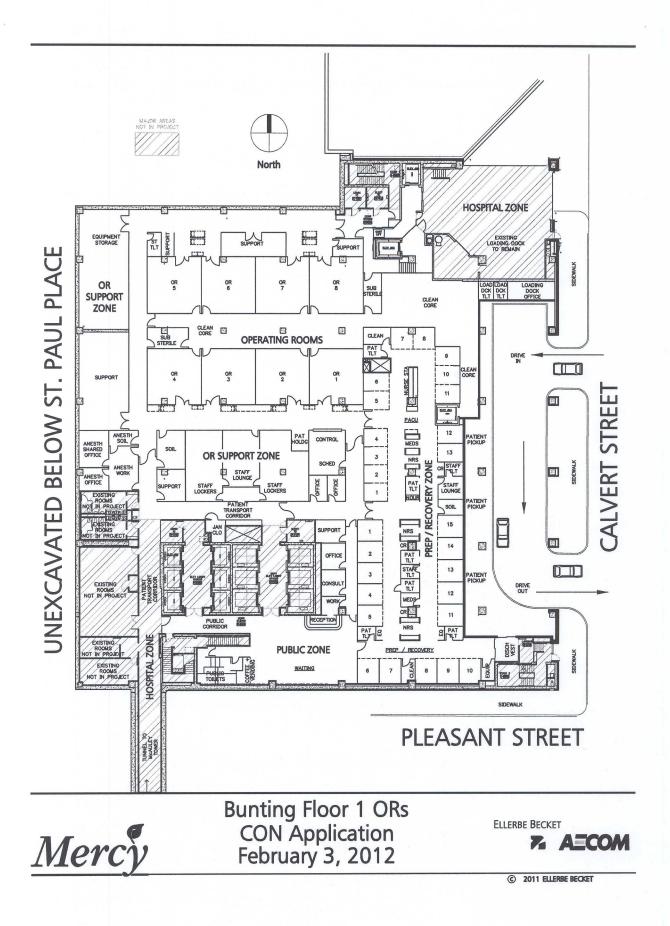
Based on the analysis and findings in the Staff Report and Recommendation, it is this 20<sup>th</sup> day of December 2012, by the majority of the Maryland Health Care Commission, **ORDERED** that the application of Mercy Medical Center for a Certificate of Need to relocate four mixed use general purpose operating rooms and construct four additional mixed use general purpose operating rooms for a total of 26 operating rooms, to consolidate, construct, and improve surgical operating, prep, recovery, and storage areas at Mercy Medical Center on the First Floor of the Bunting Center, at a total project cost of \$23,529,859, is **APPROVED**, subject to the following condition:

Any future change to the financing of this project involving adjustments in rates set by the Health Services Cost Review Commission must exclude the \$918,929 cost associated with the excess construction costs, interest, and inflation. This figure includes the estimated projected construction expenditure that exceeds the Marshall Valuation Service guideline cost and portions of the estimated contingency allowance and inflation allowance for the project that are based on the excess construction cost.

It is further **ORDERED** that the CON approved under Docket Number 05-24-2174 is modified to reduce the total approved project costs from \$489,239,521 to \$470,737,793.

## MARYLAND HEALTH CARE COMMISSION

# **APPENDIX** A



# **APPENDIX B**

### **Net Present Value Analysis**

#### Proposed Project: Build New 8-OR Surgical Suite in the Bunting Center

Revenue ( thousands of dollars)	2016	2017	2018	2019	2020	2021	2022	2023	2024
Net Operating Revenue	47,798	59,459	61,654	63,934	66,304	68,765	71,323	73,981	76,742
Expenses (thousands of dollars)									
Project Expense	23,600	0	0	0	0	0	0	0	0
Salaries, Wages, and Benefits	18,874	23,270	23,885	24,517	25,165	25,831	26,514	27,214	27,934
Contractual Services	4,043	4,992	5,137	5,286	5,440	5,598	5,760	6,378	6,100
Interest on Current Debt	969	1,128	1,093	1,059	1,026	994	964	934	905
Interest on Project Debt	-	-	-	-	-	-	-	-	
Supplies	19,541	24,455	25,505	26,600	27,742	28,933	30,176	31,471	32,822
Other Expenses (Insurance, Utilities, Repairs)	1,242	1,519	1,549	1,580	1,611	1,643	1,675	1,708	1,742
Total Operating Expenses	68,269	55,364	57,169	59,042	60,984	62,999	65,089	67,705	69,503
Income (thousands of dollars)									
Income from Operations	-20,471	4,095	4,485	4,892	5,320	5,766	6,234	6,276	7,239
Non-Operating Income									
Net Income	(20,471)	4,095	4,485	4,892	5,320	5,766	6,234	6,276	7,239
NPV ( 3% discount factor applied)	(20,471)	3,976	4,228	4,477	4,727	4,974	5,221	5,103	5,714
NPV SUM	17,949								

### Alternative Project: Build New 4-OR Surgical Suite and Maintain Existing 4-OR Surgical Suite at the Weinberg Center

2016	2017	2018	2019	2020	2021	2022	2023	2024
47,798	59,459	61,654	63,934	66,304	68,765	71,323	73,981	76,742
18,553	0	0	0	0	0	0	0	0
19,557	24,089	24,726	25,380	26,051	26,740	27,447	28,172	28,917
4,043	4,992	5,137	5,286	5,440	5,598	5,760	5,928	6,100
969	1,128	1,093	1,059	1,026	994	964	934	905
0	0	0	-	0	0	0	0	
19,541	24,455	25,505	26,600	27,742	28,933	30,176	31,471	32,822
1,242	1,519	1,549	1,580	1,611	1,643	1,675	1,708	1,742
63,905	56,183	58,010	59,905	61,870	63,908	66,022	68,213	70,486
-16,107	3,276	3,644	4,029	4,434	4,857	5,301	5,768	6,256
63	76	76	76	76	76	76	76	76
(16,044)	3,352	3,720	4,105	4,510	4,933	5,377	5,844	6,332
(16,044)	3,254	3,506	3,757	4,007	4,256	4,504	4,751	4,998
16,990								
	47,798 18,553 19,557 4,043 969 0 19,541 1,242 63,905 -16,107 63 (16,044) (16,044)	47,798         59,459           18,553         0           19,557         24,089           4,043         4,992           969         1,128           0         0           19,541         24,455           1,242         1,519           63,905         56,183           -16,107         3,276           63         76           (16,044)         3,352           (16,044)         3,254	47,798         59,459         61,654           18,553         0         0           19,557         24,089         24,726           4,043         4,992         5,137           969         1,128         1,093           0         0         0           19,541         24,455         25,505           1,242         1,519         1,549           63,905         56,183         58,010           -16,107         3,276         3,644           63         76         76           (16,044)         3,352         3,720           (16,044)         3,254         3,506	47,798         59,459         61,654         63,934           18,553         0         0         0           19,557         24,089         24,726         25,380           4,043         4,992         5,137         5,286           969         1,128         1,093         1,059           0         0         0         -           19,541         24,455         25,505         26,600           1,242         1,519         1,549         1,580           63,905         56,183         58,010         59,905           -16,107         3,276         3,644         4,029           63         76         76         76           (16,044)         3,352         3,720         4,105           (16,044)         3,254         3,506         3,757	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $

#### NPV Difference

\$ 958,864

Sources: DI#32, Exhibits A and B, except as noted. The salaries/benefit expense for the 4-OR project is from DI#36, Exhibit A for years 2016-2018; for 2019-2024, Staff projected values would increase 2.0644% each year, which is the percentage change between 2017 and 2018. The salaries/benefit expense for the 8-OR project is the same as for the 4-OR project, adjusted by Staff's estimate of the salary savings achievable in 2016 and 2017; for years 2018-2024, Staff's estimated annual salary savings is increased each year by 2.0644% consistent with other salary projections. Staff calculated the Total Operating Expenses, Net Income, NPV, and NPV sums and difference.

# **APPENDIX C**

#### STATE OF MARYLAND DEPARTMENT OF HEALTH AND MENTAL HYGIENE

John M. Colmers Chairman

Herbert S. Wong, Ph.D. Vice-Chairman

George H. Bone, M.D.

Stephen F. Jencks, M.D., M.P.H.

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Bernadette C. Loftus, M.D.

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HEALTH SERVICES COST REVIEW COMMISSION 4160 Patterson Avenue, Baltimore, Maryland 21215 Phone: 410-764-2605 · Fax: 410-358-6217 Toll Free: 1-888-287-3229 hscrc.maryland.gov

CHS-5308

Patrick Redmon, Ph.D. **Executive Director** 

Stephen Ports Principal Deputy Director Policy and Operations

Gerard J. Schmith Deputy Director Hospital Rate Setting

Mary Beth Pohl Deputy Director Research and Methodology

RECEIVE

OCT 3 1 2012

MARYLAND HEAITH

Memo

To:

From:

Joel Riklin, MHCC

Gerard J. Schmith

Date:

October 25, 2012

Subject:

CARE COMMISSION Mercy Medical Center ("Hospital," or "Mercy") Consolidation of Surgical Services Docket No. 12-24-2332

On September 7, 2012, you requested that we review and comment on the financial feasibility of Mercy's proposed capital project. Under this docket number, the Hospital is seeking approval to finish 32,000 square feet of shell space on the first floor of The Mary Catherine Bunting Center ("Bunting Center"). The Bunting Center first opened on December 19, 2010. The Hospital originally planned to relocate its Emergency Department in this space. Now, the Hospital intends to finish the space for surgical services including the relocation of four operating rooms from the Weinberg Center and the addition of four new operating rooms. The capital cost of this project is estimated at \$23.6 million. The Hospital intends to finance the cost of this project with cash currently on hand.

### Data

On October 9, 2012, the Hospital provided a copy of the Audited Financial Statements for Mercy Health Services, Inc. ("System"), the parent company of Mercy Medical Center. Additionally, the Hospital provided an analysis of Days of Cash on Hand (DCH) for the System's Obligated Group, before and after the cash outlay for the Project (Attachment 1.) The Obligated Group is made up of the entities within the System, which are responsible for servicing the debt associated with the Hospital's outstanding bonds. The Obligated Group had 193 DCH as of June 30, 2012 and would have 170 DCH after the financing of this Project. The Maryland Health and Higher Educational Facilities Authority's rate covenant calls for no less than 60 DCH, and PNC Bank's rate covenant calls for no less than 70 DCH.

Since the Days of Cash on Hand of the Obligated Group are more than adequate relative to the bond covenants included in the Hospital's borrowing documents, HSCRC Staff believes that the project is financially feasible.

0.013 Auditod Concolidated Einancial Statements lune 30	C10C	÷3								
רפן אממורכת לטווזטווממרכת ו וומוממו סנמנכווניונזי אמוכן של							Total	less		Adjusted
		Mercy	2	Mercy	Mercy		Mercy	Project	ct	Mercy
		Medical	Ξ	Health	Health	0	Obligated	Cost	-	Obligated
		Center	Se	Services	Foundation		Group	Funded	pa	Group
Cash Available:										
Cash and short term investments	ŝ	76,381	Ş	243 \$	1,768	ŝ	78,392			
Long term investments		20,667		6,647	L		27,314			
Board designated and donor restricted funds		86,148		8,760	9,580		104,488	(2)	(23,600)	
less donor restricted funds			-	(13,303)			(13,303)			
	s	183,196	Ş	2,347 \$	11,348	ŝ	196,891	\$ (2	(23,600) \$	173,291
Operating expenses	Ş	402,878 \$	\$	1,282 \$	1,693 \$	ŝ	405,853			
less depreciation		(32,332)		ı	(2)	(	(32,334)			
Net Cash operating expenses		370,546		1,282	1,691		373,519			
days		366					366			
Daily operating expense	ŝ	1,012				ŝ	1,021		ŝ	1,021
Davie Cach on Hand		181					193			170
Debt Covenants:										
MHHEFA Target Days' Cash on Hand							60			60
PNC Target Day's Cash on Hand							70			70

Mercy Medical Center CON- Surgical Services Cash Availability for Project Cost (in \$000) Attachment 1