



STATE OF ILLINOIS
HEALTH FACILITIES AND SERVICES REVIEW BOARD

525 WEST JEFFERSON ST. • SPRINGFIELD, ILLINOIS 62761 • (217) 782-3516 FAX: (217) 785-4111

DOCKET NO: H-12	BOARD MEETING: January 27, 2015	PROJECT NO: 14-057	PROJECT COST: Original: \$85,519,082
FACILITY NAME: Advocate Christ Medical Center		CITY: Oak Lawn	
TYPE OF PROJECT: Non Substantive			HSA: VII

PROJECT DESCRIPTION: The applicants (Advocate Health Care Network and Advocate Health and Hospitals Corporation d/b/a Advocate Christ Medical Center and including Advocate Christ Children's Hospital-Oak Lawn) are proposing to expand and modernize various existing clinical areas at its acute care hospital, in Oak Lawn. The proposed project is a combination of new construction and modernization, with a cost of \$85,519,082. The proposed project is the third phase of the Medical Center's campus master plan to renovate and expand its hospital campus in Oak Lawn. **The anticipated project completion date is December 31, 2020.**

EXECUTIVE SUMMARY

PROJECT DESCRIPTION:

- The applicants (Advocate Health Care Network and Advocate Health and Hospitals Corporation d/b/a Advocate Christ Medical Center and including Advocate Christ Children's Hospital-Oak Lawn) are proposing to expand and modernize the following clinical areas:
 - Adult/Pediatric Level I Trauma Center
 - Comprehensive Emergency Department (ED)
 - General Radiology
 - Inpatient Endoscopy
 - Phase I/Phase II Recovery
 - Triage, Cast Room, and Transesophageal Echo (TEE)
- . The anticipated project completion date is December 31, 2020.

WHY THE PROJECT IS BEFORE THE STATE BOARD:

- The project is before the State Board because the cost of the project exceeds the capital expenditure minimum of \$12,670,607

PURPOSE OF THE PROJECT:

- The purpose of this project is to expand the above mentioned services with facilities that are appropriately sized to meet the growing service demand and functionally designed to ensure delivery of high quality care. The applicants report having served Chicago's southwest suburbs for more than one-half a century, evolving from a community cornerstone for health care, to a major teaching hospital providing a comprehensive range of tertiary and quaternary services. The applicants propose to continue in their mission with this third installment in a series of projects designed to modernize and expand the campus of Advocate Christ Medical Center, Oak Lawn.

PUBLIC COMMENT:

- An opportunity for a public hearing was offered, but no hearing was requested. No opposition letters were received. Support letters were received from:
 - State Senator Bill Cunningham (18th District)
 - State Senator Jacqueline Y. Collins (16th District)
 - State Senator Christine Radogno (41st District - State Republican Leader)
 - State Senator Steve Landek (12th District)
 - State Representative Kelly Burke (36th District)
 - State Representative Monique D. Davis (27th District)
 - State Representative Frances Ann Hurley (35th District)
 - State Representative Renee Kosel (37th District)
 - State Representative Al Riley (38th District)
 - Mayor Edward J. Zabrocki (Tinley Park)
 - Mayor Harry J. Klein (Burbank)
 - Mayor James J. Sexton (Evergreen Park)
 - Mayor Patrick E. Kitching (Alsip)
 - Mayor Kevin M. Casey (Hometown)

- Village Clerk Jane M. Quinlan (Oak Lawn)
- Chief of Police Robert D. Pyznarski (Chicago Ridge)
- Chief of Police Steven Neubauer (Tinley Park)
- Chief of Police Alan T. Vodicka (Hickory Hills)
- Fire Chief Thomas Styczynski (Alsip)
- James C. Doherty, MD MPH F ACS, Director of Trauma Surgery
- Sean E. Motzny, MD, Medical Director - Emergency Medical Services
- Sue Hecht, BSN RN TNS IPEM CHEC-III, EMS Manager/EMS Administrative Director

NEED FOR THE PROJECT:

- The applicants note Advocate Christ Medical Center, Oak Lawn, in its 50th year of service, has grown from a community hospital, to a major teaching hospital, offering a comprehensive range of tertiary and quaternary services. The applicants claim to have among the busiest Emergency Departments in the State and the only Level I Trauma Center in its planning area and in EMS Region VII as well as a nationally recognized cardiovascular service. The proposed project includes 3 services that have established utilization standards or occupancy targets - emergency department, inpatient endoscopy lab, and general radiology. Historical utilization will justify the number of rooms being requested for inpatient endoscopy labs and general radiology. The applicants currently have 50 emergency stations (8 stations dedicated to trauma and 42 stations dedicated to emergency services). The applicants are proposing 70 stations (12 stations dedicated to trauma and 58 stations to emergency services). The State Board Standard is 2,000 visits per station. Historical utilization will justify 47 stations.

Executive Summary				
TABLE ONE				
# of Stations	2012 Visits	2013 Visits	Average	Number of Rooms justified
50	93,119	91,901	92,510 visits/2,000 visits	47

The applicants provided four different alternative methodologies to justify the number of stations being requested.

1. **The first methodology** had 3 components - a CAGR (compound annual growth rate) trend line, and factors to account for hours on bypass and the high percentage of patients who left without treatment. This methodology was calculated for 2 time periods - CY 2012 and RY 2014. CY 2013 was not used because utilization was negatively affected by major construction on the Medical Center site. Calculated visits divided by the State Guideline of 2,000 visits per treatment station ranged from 63 to 66 stations. As noted in the application, the Medical Center has been able to achieve 2,000 visits per station; however this visits per treatment station guideline, based on actual experience, is unrealistic because it results in very long wait times – as long as 10 hours. However, if the more conservative guidelines of visits per station proposed by the American College of Emergency Physicians or the Emergency Department Benchmarking Alliance are applied to the projected balance from 89 to 97 treatment areas could be justified

2. **The second methodology** was published by the American College of Emergency Physicians and is based on average census in the Medical Center on any hour of the day. Based on the 11 busiest hours, the Medical Center justified the need for from 65 to 78 stations, or an average of 72 stations. This methodology was also based on CY 2012 and RY 2014 data.
3. **The third methodology** was also published by the American College of Emergency Physicians and is based on the impact of key operational indicators. This methodology establishes the need for as many as from 89 to 96 emergency stations.
4. **The fourth methodology** is taken from information developed by the Emergency Department Benchmarking Alliance (EDBA). For hospitals with more than 80,000 visits (and ACMC projected from 125,000 to 130,000 visits), the EDBA's benchmark is 1,408 visits per treatment space. Based on this visits per space guideline, the Medical Center would also need from 89 to 96 stations. The Medical Center is conservatively requesting 70 emergency treatment stations. At 70 stations, 125,075 projected visits equal 1,787 visits per room or 89.4 percent of the State Guideline. At 70 stations, 130,779 projected visits equal 1,857 visits per room or 92.9 percent of the State Guideline. Projected visits per room exceed the 2013 average utilization of emergency rooms in Illinois or in Health Planning Area A-04.

The State of Illinois average number of visits per emergency station is 1,611 visits per station. HSA VII the average number of visits per emergency station is 1,657 visits per station. Advocate Christ Medical Center's average number of visits per emergency station is 1,851 visits per station. The State Board Standard is 2,000 visits per station.

The applicants stated the following: *“This letter provides the Health Facilities Services and Review Board with assurances regarding our application to modernize the level I Trauma Center and the Emergency Department and other clinical and non-clinical services at Advocate Christ Medical Center in Oak Lawn. We hereby state that it is our understanding, based upon information available to us at this time, that by the second year of operation after project completion, Advocate Christ Medical Center reasonably expects to operate all clinical services areas included in the application for which there are utilization standards, except the Emergency Department, at the State Agency target utilization specified in 77 III. Adm. Code 1110. Appendix B. Because of the unique characteristics of the Medical Center's Emergency Department, the Medical Center used alternative need determination methodologies published by the American College of Emergency Physicians that take into account operational indicators that are not addressed in the State Agency utilization target. These include emergency patient census by hour; percentage of patients admitted; disproportionate share of urgent vs. non urgent patients (higher acuity patient mix); presence of a graduate medical education, an EMS training program, and other teaching programs; special emergency psychiatric services; and special pediatric services. These operational indicators reflect longer average patient times in the Emergency Department because of high acuity and other special patient needs longer patient times in the Emergency Department translate into fewer possible visits per room. Based on the American College of Emergency Physicians methodologies, the proposed number of emergency stations is consistent with the volume, acuity and patient mix seen at the Medical Center.”*

WHAT WE FOUND:

- The applicants addressed a total of 12 criteria and were deemed non-compliant with the following items.

State Board Standards Not Met	
Criteria	Reasons for Non-Compliance
1110.234(b) – Project Services Utilization	The applicants did not supply sufficient projected operational capacity for its Emergency Department.
1110.3030(d) – Clinical Service Areas Other Than Categories of Service	The number of emergency stations being proposed is not justified by historical utilization at the State Board’s Standard of 2,000 visits per station.
1120.140(c) – Reasonableness of Project Costs	The applicants exceeded calculated State Board Standards for Modernization and Proportionate Contingencies.

STATE BOARD STAFF REPORT
Advocate Christ Medical Center
Project #14-057

APPLICATION CHRONOLOGY	
Applicants(s)	Advocate Health Care Network and Advocate Health and Hospitals Corporation d/b/a Advocate Christ Medical Center and including Advocate Christ Children’s Hospital-Oak Lawn
Facility Name	Advocate Christ Medical Center
Location	4440 West 95 th Street, Oak Lawn
Permit Holder	Advocate Health and Hospitals Corporation d/b/a Advocate Christ Medical Center
Operating Entity/Licensee	Advocate Health and Hospitals Corporation d/b/a Advocate Christ Medical Center
Owner of the Site	Advocate Health and Hospitals Corporation
Application Received	November 5, 2014
Application Deemed Complete	November 6, 2014
Review Period Extended by the State Board Staff?	No
Can the applicants request a deferral?	Yes

I. The Proposed Project

The applicants (Advocate Health Care Network and Advocate Health and Hospitals Corporation d/b/a Advocate Christ Medical Center and including Advocate Christ Children’s Hospital-Oak Lawn) are proposing to implement Phase Three of its Master Design project that was initiated in 2011, involving the modernization/expansion project on the campus of its hospital in Oak Lawn. The project proposes to expand/modernize various clinical components related to its Trauma, ED, Triage, Endoscopy, and Recovery sections. **The anticipated project completion date is December 31, 2020.**

II. Summary of Findings

- A. The State Board Staff finds the proposed project does **not** appear to be in conformance with the provisions of Part 1110.
- B. The State Board Staff finds the proposed project does **not** appear to be in conformance with the provisions of Part 1120.

III. General Information

The applicants are Advocate Health and Hospitals Corporation d/b/a Advocate Christ Medical Center and Advocate Health Care Network. The operating entity licensee is Advocate Christ Medical Center and the owner of the site is Advocate Health and Hospitals Corporation. Advocate Health Care Network controls the following hospitals:

TABLE ONE			
Hospitals controlled by Advocate Health Care Network			
Facilities	City	County	Authorized Beds
Advocate - Good Shepherd Hospital	Barrington	Lake	176
Advocate BroMenn Medical Center	Normal	McLean	221
Advocate Christ Medical Center	Oak lawn	Cook	788
Advocate Condell Medical Center	Libertyville	Lake	273
Advocate Eureka Hospital	Eureka	Woodford	25
Advocate Illinois Masonic Medical Ctr.	Chicago	Cook	408
Advocate Lutheran General Hospital	Park Ridge	Cook	638
Advocate Sherman Hospital	Elgin	Kane	255
Advocate South Suburban Hospital	Hazel Crest	Cook	284
Advocate Trinity Hospital	Chicago	Cook	205
Total			3,273

Advocate Christ Medical Center is located at 4440 West 95th Street, Oak Lawn, Illinois in Health Service Area VII and Health Planning Area A-04. HSA VII includes Suburban Cook and DuPage County. The target utilization for Emergency Department is 2,000 visits/station/year (77 IAC 1110 Appendix B)

This is a **non substantive project** subject to an 1110 and 1120 review. Project obligation will occur after permit issuance. The anticipated completion date is December 31, 2020.

IV. Health Planning Area A-04

HPA A-05 includes suburban Cook County, and the townships of Lemont, Stickney, Worth, Lyons, Palos, Calumet, Thornton, Bremen, Orland, Rich and Bloom. The December 2014 Bed Need Determination has projected an excess of 379 medical surgical pediatric beds, a need for 42 intensive care beds, and an excess of 53 obstetric beds in by CY 2015. There are eight additional acute care hospitals in HPA A-04: Adventist LaGrange Memorial Hospital, LaGrange, Advocate South Suburban Hospital, Hazel Crest, Franciscan St. James Health-Chicago Heights, Franciscan St. James Health-Olympia Fields, Ingalls Memorial Hospital, Little Company of Mary Hospital, Evergreen Park, MetroSouth Medical Center, Blue Island, and Palos Community Hospital, Palos Heights. The applicants are the only Level 1 Trauma Center In Planning A-04 and EMS System Region VI.

V. The Proposed Project

The applicants are proposing to expand and modernize its current Level I Trauma Center and its Adult and Pediatric Emergency Departments to meet the growing demand for these services. The applicants also propose to relocate 3 inpatient endoscopy rooms, and expand its Phase I and Phase II recovery units to support the replacement endoscopy rooms and growing catheterization services. Lastly, the proposed project will also

involve the relocation of the triage area, cast room, and transesophageal echo service. The specific spatial allotments are outlined in Table Three.

VI. Project Costs and Sources of Funds

The applicants are funding the project with cash of \$29,467,082 and a bond issue of \$56,052,000. The applicants supplied audited financial statements referenced in project #14-027, Advocate BroMenn Medical Center, and A-Bond Rating Letters from FitchRatings Service, Standard & Poor’s, and Moody’s (application, pgs. 168-179). Table Two lists the project costs and sources of funds. The project contains both clinical and non-clinical components.

TABLE TWO			
Project Costs and Sources of Funds			
	Clinical	Non Clinical	Total
Preplanning Costs	\$581,561	\$349,474	\$931,035
Site Survey and Soil Investigation	\$75,000	\$15,000	\$90,000
Site Preparation	\$1,495,447	\$356,461	\$1,851,908
New Construction Contracts	\$570,820	\$2,643,324	\$3,214,145
Modernization Contracts	\$27,560,966	\$3,673,693	\$31,234,659
Contingencies	\$4,177,161	\$812,228	\$4,989,389
Architectural & Engineering Fees	\$2,529,790	\$558,720	\$3,088,010
Consulting and Other Fees	\$4,348,355	\$678,645	\$5,027,000
Movable Equipment	\$11,627,390	\$658,610	\$12,286,000
Bond Issuance Expense	\$574,533	\$126,117	\$700,650
Net Interest During Construction	\$8,057,555	\$1,768,731	\$9,826,286
Other Costs to Be Capitalized	\$10,638,400	\$1,641,600	\$12,280,000
Total Uses	\$72,236,979	\$13,282,103	\$85,519,082
Cash	\$24,751,999	\$4,715,083	\$29,467,082
Bond Issue	\$47,484,980	\$8,567,020	\$56,052,000
Total Sources	\$72,236,979	\$13,282,103	\$85,519,082

VII. Cost Space Chart

Only the clinical space will be reviewed as part of this project. Non clinical space is also being modernized as part of this project. Vacated space will be used for administrative purposes. Clinical services comprise approximately 84% of the project cost and 26% of the gross square footage.

TABLE THREE							
Cost Space Chart ⁽²⁾							
Department	Total Costs	Existing	Proposed	New Construction	Modernized	As Is	Vacated Space ⁽¹⁾
Clinical							
Trauma	\$8,791,241	1,432	7,342	0	7,342	0	1,432
Triage	\$1,762,582	726	1,447	1,447	0	0	726

TABLE THREE Cost Space Chart ⁽²⁾							
Department	Total Costs	Existing	Proposed	New Construction	Modernized	As Is	Vacated Space ⁽¹⁾
Adult E.D.	\$27,233,341	14,984	22,737	0	22,737	0	14,984
Pediatric E.D.	\$15,964,372	6,097	13,324	0	13,324	0	6,097
E.D. Total	\$43,197,713	21,081	36,061	0	36,061	0	21,081
Phase I Recovery	\$2,094,872	10,252	10,252	0	1,751	8,501	1,750
Phase 2 Recovery	\$9,795,334	5,495	37,098	0	8,184	28,914	3,745
GI/Endoscopy	\$3,200,098	11,798	12,425	0	2,672	9,753	2,045
Cast Room	\$151,698	966	130	0	130	966	0
General Radiology	\$2,289,912	20,621	22,531	0	1,910	20,621	0
Ultrasound Mobile	\$657,357	14,060	14,614	0	554	14,060	0
TEE	\$296,172	191	248	0	248	0	191
Total Clinical	\$72,236,979	76,370	142,148	1,447	58,852	82,815	30,970
Non-Clinical							
Administration	6,104,455	20,152	26,160	625	7,670	17,865	2,287
Public Space	\$4,473,412	22,826	28,906	4,518	1,562	22,826	0
Building Components	\$2,704,236	343,846	345,698	445	1,429	342,024	1,822
Total Non Clinical	\$13,282,103	386,824	400,764	7,388	10,661	382,715	4,109
Total	\$85,519,082	463,194	542,912	8,835	69,513	465,530	35,079

1. Information furnished by the applicants

VIII. Criterion 1110.230 - Purpose of the Project, Safety Net Impact, and Alternatives

A) Criterion 1110.230 - Purpose of the Project

To be in compliance with this criterion the applicant shall document that the project will provide health services that improve the health care or well-being of the market area population to be served.

The purpose of this project is to meet the growing demand for health care in the service area with functionally designed facilities capable of delivering high quality care. The applicants propose to expand/modernize its Trauma, Triage, Adult/Pediatric E.Ds, Recovery (Phase I and II), GI/Endoscopy, General Radiology, Cast Room, Ultrasound, and Transesophageal Echo (TEE). The applicants identified these as clinical areas that have experienced significant growth in utilization, and in need of the proposed modernization/expansion.

B) Safety Net Impact Statement

All health care facilities, with the exception of skilled and intermediate long-term care facilities licensed under the Nursing Home Act [210 ILCS 45], shall provide a safety net impact statement, which shall be filed with an application for a substantive project (see Section 1110.40). Safety net services are the services provided by health care providers or organizations that deliver health care services to persons with barriers to mainstream health care due to lack of

insurance, inability to pay, special needs, ethnic or cultural characteristics, or geographic isolation. [20 ILCS 3960/5.4]

This is a non substantive project and a Safety Net Statement is not required by the applicants. Charity care information was provided as required. The applicants did provide a safety net impact statement at pages 194-195 of the application for permit.

TABLE FOUR			
Charity Care Expense			
	2011	2012	2013
Net Patient Revenue	\$880,368,000	\$862,955,639	\$900,774,000
Charity Care as Charges	\$54,888,000	\$73,282,846	\$97,601,284
Cost of Charity Care	\$19,519,005	\$20,805,000	\$27,468,000
Charity Care as a Percentage of Net Revenue	2.2%	2.4%	3.0%

C) Alternatives to the Proposed Project

The applicant shall document that the proposed project is the most effective or least costly alternative for meeting the health care needs of the population to be served by the project.

The applicants considered the following alternatives:

1. ***Expand Trauma/Emergency Services as First Phase of Master Plan.*** *The applicants rejected this alternative because it would have exacerbated the existing bed shortage at the facility. Instead, in order to better serve the community, the applicants initiated improved patient flow processes and created 18 temporary curtained cubicles in hallways for patients when emergency stations were fully occupied. Cost: \$24,000*
2. ***Relocate Trauma/ED service across the street from the main campus.*** *The applicants own property across South Kilbourn Avenue that is currently used as surface parking. To implement this alternative, the applicants would have had to build a bridge across South Kilbourn, duplicate many costly services adjacent to the new Trauma Center/ED, and replace the surface parking with a parking structure. Because this was not a feasible option, no cost was developed.*
3. ***Develop a Pediatric Emergency Department, and connect it to Advocate Children’s Hospital:*** *The hospital considered this alternative for its capacity to provide a distinct pediatric E.D. contiguous and connected to the Pediatric Hospital. However, this option would result in the hospital having two separate trauma units, resulting in potential confusion for patients and patient families during stressful times, and rejected this option. The applicants identified no costs with this alternative.*

- 4. Develop a Free-Standing Emergency Center in Orland Park/Tinley Park:** While this alternative would result in decreased volume on the medical center campus, the applicants rejected this option. After thorough analysis, the applicants determined a free-standing ED would not have the same care capabilities and access to trauma and ED services on the current Advocate campuses, and a free-standing facility would be restricted to caring for low acuity patients. The applicants also determined the establishment of a free-standing ED facility would not resolve the need for more capacity on campus. The applicants identified a cost of \$30,258,271 with this alternative.
- 5. Expand Existing ED in Existing Vacated Space.** The applicants assessed the use of space to be vacated with the completion of the Ambulatory Pavilion and Patient Tower projects. The architects determined that there would be insufficient space to accommodate the planned expansion. The architects then developed a more aggressive project that included relocating and expanding the number of cardiac catheterization labs, the related recovery spaces and imaging services to the ground level. This expanded project was rejected because it substantially exceeded the budget that had been set for the Trauma/ED project. Cost: \$149,989,683.

6. Expand the Trauma And Emergency Service in New and Existing Space (Option Chosen)

The applicants deemed this option as most feasible, and note having chosen to reutilize space in the physician parking garage to accommodate a new ED/Triage area. The applicants cited many advantages to this option, to include Increased patient safety/satisfaction/privacy, enhanced infection control, and improved operational efficiency. Identified cost: \$85,519,082.

The applicants also considered the options of joint ventures and utilizing other healthcare resources, but rejected these, based on their inability to serve the growing needs related to modernized health care in the service area.

IX. Section 1110.234 - Project Scope and Size, Utilization and Shell Space

A) Criterion 1110.234 (a) - Size of Project

To document compliance with this criterion the applicants shall document that the physical space proposed for the project is necessary and appropriate and meets State Board Standard per Section 1110 Appendix B.

The applicants are proposing to increase the size of it facility.

TABLE FIVE Spatial Allotments					
Department/Area	Project				
	Rooms	DGSF	DGSF/Room	State Standard	Standard Met?
Triage	5	1,447	290	N/A	N/A
Trauma	12	7,342	612	N/A	N/A

E.D. Adult	52	22,737	438	900	Yes
E.D. Pediatrics	18	13,324	740	900	Yes
Subtotal E.D.	70	36,601	515	900	Yes
GI/Endoscopy Lab Class B Procedure Room	3	2,672	891	1,100	Yes
Phase I Recovery	10	1,751	175	180	Yes
Phase II Recovery	21	8,184	390	400	Yes
Gen. Radiology	2	1,910	955	1,300	Yes
Ultrasound Mobile	1	554	554	N/A	N/A
Cast Room	1	130	130	N/A	N/A
TEE	1	248	248	N/A	N/A

THE STATE BOARD STAFF FINDS THE PROPOSED PROJECT TO BE IN CONFORMANCE WITH CRITERION SIZE OF PROJECT (77 IAC 1110.234 (a))

B) Criterion 1110.234 (b) - Project Services Utilization

To document compliance with this criterion the applicant shall document that, by the end of the second year of operation, the annual utilization of the clinical service areas or equipment shall meet or exceed the utilization standards specified in Section 1110 Appendix B.

The applicants identified three services in the proposed project that have established utilization targets. The need methodologies are provided in Attachment 34 and are summarized on pages 116 – 118 of the application. The results are identified in TABLE SIX. It appears that there is insufficient project utilization for the ED services. Despite recognized and accepted methodologies justifying the number of proposed rooms, a negative finding results for this criterion because none appear to satisfy the State Guideline of 2,000 visits per exam room..

TABLE SIX						
Projected Service Utilization						
Department/Service	Historical Utilization		Projected Utilization 2022 Visits/Room	State Standard	Number Requested	Standard Met?
	2012	2013				
E.D	93,119	91,901	1,924-2,012	2,000	70	No
Inpatient Endoscopy	12,285	12,807	12,807/1,280	1,100 hrs/Room	10	Yes
General Imaging	154,989	153,919	153,919/8,511	8,000 procedures	18	Yes

THE STATE BOARD STAFF FINDS THE PROPOSED PROJECT DOES NOT CONFORM WITH CRITERION PROJECT SERVICE UTILIZATION (77 IAC 1110.234 (b))

X. Section 1110.3030 – Clinical Service Areas Other Than Categories of Service

A) Criterion 1110.3030(d) Service Modernization

1) Deteriorated Equipment or Facilities

2) Necessary Expansion

The proposed project is necessary to provide expansion for diagnostic treatment, ancillary training or other support services to meet the requirements of patient service demand. Documentation shall consist of, but is not limited to: historical utilization data, evidence of changes in industry standards, changes in the scope of services offered, and licensure or fire code deficiency citations involving the proposed project.

3) Utilization

A) Major Medical Equipment

B) Service or Facility

C) If no utilization standards exist, the applicant shall document in detail its anticipated utilization in terms of incidence of disease or conditions, or population use rates.

The applicants propose to modernize and expand three clinical areas that fall into this criterion.

1) Emergency Department (E.D) The applicants propose to modernize and expand its adult and pediatric emergency services. Currently the applicants have 26 adult and 16 pediatric emergency stations for a total of 42 emergency stations. Historical utilization supports a total of 47 emergency stations. The applicants are requesting 52 adult stations and 18 pediatric stations for a total of 70 stations. The current ED reports no violation in health and safety codes, it is noted that the facility in its current condition is deficient in comparison to modern health care standards. The applicants project approximately a 5% increase in utilization annually, with an 8 year increase (2 years after project completion) of 42.3 percent. This increase was calculated using a CAGR trend line and accounting for patients left without being seen and bypass. However, historical utilization does not support the number of stations being requested. The proposed rooms would be operating at 1,886 visits per room compared to the State Guideline of 2,000 visits per room or within 95% of the State Board Standard.

2) Inpatient Endoscopy

The applicants propose to relocate and modernize its inpatient Endoscopy service, while maintaining its current complement of 10 Endoscopy rooms (7 outpatient/3 inpatient). The applicants propose to modernize its 3

inpatient rooms, and remain compliant with the approved 10 room complement approved through the permit process for the Ambulatory Pavilion. The applicants note there are currently no life safety code issues identified for this service at the hospital, and that there is a calculated projected demand for 17 rooms, based on historical utilization and a compound average growth rate (CAGR). Based on the utilization data supplied, the applicants have provided sufficient data to justify the number of rooms, and the proposed modernization.

3) General Radiology

The applicants note having received approval to operate 16 General Radiology/Fluoroscopy rooms, via project #11-019, and the establishment of the APMC Ambulatory Pavilion. Of these 16 units, 9 are located in the hospital's Main Imaging Department (inpatient), 1 is in the Children's Hospital, 5 are in the Ambulatory Pavilion (outpatient), and one in a satellite location in Lockport. The applicants are proposing to establish two additional units in the proposed modernized/expanded ED, and base this decision on the fact that almost half of the ED/Trauma patient base require at least one general radiology exam. The applicants note there are currently no life safety code issues identified for this service, but identify the need for the two additional stations in the ED in an effort to comply with the necessities to operate a modern Trauma care center. Based on the utilization data (historical and projected), it appears that the 2 station expansion is justified.

4) Clinical Service Areas with No Utilization Guidelines

The applicants propose to modernize and expand the Level I Trauma Service from 8 to 12 beds. The Level I Trauma Center is approved for both children and adults and serves as the EMS System resource hospital for 5 other facilities. While the Trauma Center reports no violations in health and safety codes, in its current condition it is deficit compared to modern health care standards. Level I Trauma designation requires various services (lab, imaging, surgery) be available at a moment's notice to respond to imminent patient needs. The current 8 trauma stations are located in 1,432 GSF of space, allowing approximately 179 GSF per station. While there are no State Standards that dictate sufficient spatial accommodations for trauma services, it falls well below the State Guidelines for ED stations (900 GSF per station). The applicants note that trauma services differ greatly from general emergency services in that trauma often requires many clinicians and equipment operating in one room

Board Staff finds the applicants non-compliant with the requirements of this criterion, based on the projected utilization data for its Emergency Department (ED).

**THE STATE BOARD STAFF FINDS THE PROPOSED PROJECT IS NOT
IN CONFORMANCE WITH THE CLINICAL SERVICE AREAS OTHER
THAN CATEGORIES OF SERVICE-SERVICE MODERNIZATION
CRITERION (77 IAC 1110.3030(d))**

FINANCIAL

X. Section 1120.120 - Availability of Funds

To determine compliance with this criterion the applicant must document that financial resources are available by documenting an “A” of better bond rating and the applicants have sufficient cash to fund the cash portion of the project.

The applicants report having an **AA/Stable** bond rating from FitchRatings service (application p. 168), an **Aa2** rating from Moody’s Investor Service (application, p. 171), and an **AA/Stable** Bond Rating from Standard & Poor’s (application, p. 176). Table Seven contains financial viability data submitted to Board Staff in 2013, attesting to its financial viability. It appears the applicants possess the sufficient funding to undertake the proposed project, and have met the requirements of this criterion.

TABLE SEVEN		
Advocate Health Care Network ⁽¹⁾		
Balance Sheet		
	2013	2012
Cash	\$563,229	\$397,945
Current Assets	\$1,524,917	\$1,292,774
Assets Limited to Use	\$4,734,532	\$4,245,397
Non Current Assets	\$508,034	\$475,334
Property Plant Equipment	\$2,282,463	\$1,763,694
Total Assets	\$9,049,946	\$7,777,199
Current Liabilities	\$1,395,301	\$1,256,713
Non Current Liabilities	\$2,526,210	\$2,255,573
Total Liabilities	\$3,921,511	\$3,512,286
Net Assets	\$5,128,435	\$4,264,913
Income Statement		
Net Patient Revenue	\$4,214,479	\$3,893,366
Total Revenue	\$4,938,002	\$4,595,689
Expenses	\$4,637,807	\$4,297,423
Operating Income	\$300,195	\$298,275
% of Operating Income to Net Patient Revenue	7.12%	7.66%
Non Operating Income	\$465,125	\$373,381
Revenues in Excess of Expenses	\$765,320	\$671,656
% of Revenue in Excess of Expenses to Net Patient Revenue	18.15%	17.25%
1. Information taken from 2013 audited financial statements		

THE STATE BOARD STAFF FINDS THE PROPOSED PROJECT IN CONFORMANCE WITH CRITERION AVAILABILITY OF FUNDS (77 IAC 1120.120)

XI. Section 1120.130 - Financial Viability

To document compliance with this criterion that the applicants must document that they are financially viable by providing evidence of an “A” or better bond rating from Fitch, Moody’s, and Standard and Poor’s.

The applicants report having an **AA/Stable** bond rating from FitchRatings service (application p. 168), an **Aa2** rating from Moody’s Investor Service (application, p. 171), and an **AA/Stable** Bond Rating from Standard & Poor’s (application, p. 176). Table Seven contains financial viability data submitted to Board Staff in 2013, attesting to its financial viability. It appears the applicants possess the financial viability to undertake the proposed project, and have met the requirements of this criterion.

THE STATE BOARD STAFF FINDS THE PROPOSED PROJECT TO BE IN CONFORMANCE WITH CRITERION FINANCIAL VIABILITY (77 IAC 1120.130)

XII. Section 1120.140 – Economic Feasibility

A) Criterion 1120.140 (a) – Reasonableness of Financing Arrangements

To document compliance with this criterion the applicant must document that the financing of the project is reasonable by providing evidence of an “A” or better bond rating from Fitch, Moody’s, and Standard and Poor’s.

The applicants are in compliance with this criterion because they have an **AA/Stable** bond rating from FitchRatings service (application p. 168), an **Aa2** rating from Moody’s Investor Service (application, p. 171), and an **AA/Stable** Bond Rating from Standard & Poor’s (application, p. 176). The applicants propose to fund the project with a combination of cash and securities totaling \$29,467,082, and project-related bond issues totaling \$56,052,000. It appears the applicants have met the requirements of this criterion.

THE STATE BOARD STAFF FINDS THE PROPOSED PROJECT TO BE IN CONFORMANCE WITH CRITERION REASONABLENESS OF FINANCING ARRANGEMENT (77 IAC 1120.140 (a))

B) Criterion 1120.140(b) – Terms of Debt Financing

To document compliance with this criterion the applicants must attest that the debt financing will be at the lowest net cost available to the applicant.

The applicants attested to the following on page 186 of the application: *“This letter is to attest to the fact that the selected form of debt financing for the proposed Advocate Christ Medical Center project will be at the lowest net cost available, or if a more costly form of financing is selected, that form is more advantageous due to such terms*

as prepayment privileges, no required mortgage, access to additional debt, term financing costs, and other factors.” The applicants have met this criterion.

THE STATE BOARD STAFF FINDS THE PROPOSED PROJECT TO BE IN CONFORMANCE WITH CRITERION TERMS OF DEBT FINANCING (77 IAC 1120.140 (b))

C) Reasonableness of Project and Related Costs

The applicant shall document that the estimated project costs are reasonable.

Only the clinical costs are being reviewed per 20 ILCS 3960/5. Tables Eight, Nine, and Ten include both clinical and non clinical costs.

Preplanning Costs – These costs are \$581,561 and are 1.3% of new construction, modernization, contingencies and movable equipment costs. This appears reasonable when compared to the State Board Standard of 1.8%.

Site Survey and Soil Investigation and Site Preparation Costs – These costs are \$1,570,447 and are 4.8% of new construction, modernization, and contingency costs. This appears reasonable when compared to the State Board Standard of 5%.

New Construction and Proportionate Contingency Costs – These costs are \$627,617 and are \$433.74 per GSF. This appears reasonable when compared to the Adjusted State Standard of \$503.31.

Modernization and Proportionate Contingencies Costs – These costs are \$31,681,330.29 and are \$538.72 per GSF. This appears **HIGH** when compared to the adjusted State standard of \$352.31

Contingencies Costs/New Construction – These costs are \$56,797 (contingencies cost) and 9.95% of new construction costs. This appears reasonable when compared to the State Board Standard of 10%.

Contingencies Costs/Modernization – These costs are \$4,120,364 and 14.95% of modernization costs. This appears reasonable when compared to the State Board Standard of 10% - 15%.

Architectural and Engineering Fees/New Construction – These costs are \$50,596 and are 7.7% of new construction and proportionate contingency costs. This appears reasonable when compared to the State Board Standard of 10.59% - 15.89%.

Architectural and Engineering Fees/Modernization – These costs are \$2,479,194 and are 7.8% of modernization and proportionate contingency costs. This appears reasonable when compared to the State Board Standard of 7.19% - 10.79%.

Consulting and Other Fees – These costs are \$4,348,355. The State Board does not have a standard for these costs.

TABLE EIGHT Consulting Fees	
HDR additional services	\$1,260,000
CON Fee	\$100,000
CON Legal Fees	\$45,000
CON Consultant	\$90,000
Building Permit	\$512,000
Other Consultant Fees	\$2,030,000
IDPH Fees	\$85,000
Testing Material Fees	\$85,000
Abatement Management	\$90,000
Project Management	\$690,000
MWRD	\$40,000
Total	\$5,027,000

Moveable Equipment Not in Construction Contracts – These costs total \$11,627,390. The State Board does not have a standard for these costs.

TABLE NINE Movable Equipment	
Medical Miscellaneous Equipment	\$11,394,357
Furniture FF & B	\$688,745
Signage	\$79,530
Graphic Work	\$91,370
Cubicle Curtains	\$31,998
Total	\$12,286,000

Bond Issuance Expense – These costs total \$574,533. The State Board does not have a standard for these costs.

Net Interest Expense During Construction – These costs total \$8,057,555. The State Board does not have a standard for these costs.

Other Costs to be Capitalized – These costs total \$10,638,400. The State Board does not have a standard for these costs.

TABLE TEN Other Costs to be Capitalized	
Pepper GC/Fees/Misc	\$5,220,000
Owner Contingency	\$1,714,500
Voice Data	\$2,678,000
Cerner/RTLS	\$2,649,500
Final Audit	\$18,000

TABLE TEN	
Other Costs to be Capitalized	
Total	\$12,280,000

THE STATE BOARD STAFF FINDS THE PROPOSED PROJECT NOT IN CONFORMANCE WITH CRITERION REASONABLENESS OF COSTS (77 IAC 1120.140 (c))

D) Criterion 1120.140 (d) - Projected Operating Costs

The applicant shall provide the projected direct annual operating costs (in current dollars per equivalent patient day or unit of service) for the first full fiscal year at target utilization but no more than two years following project completion. Direct cost means the fully allocated costs of salaries, benefits and supplies for the service.

Direct operating costs per equivalent by CY 2021 is \$1,109,218,259 or 3,059.23 per equivalent patient day. The State Board does not have a standard for this criterion.

THE STATE BOARD STAFF FINDS THE PROPOSED PROJECT TO BE IN CONFORMANCE WITH THE CRITERION PROJECTED OPERATING COSTS ((77 IAC 1120.140 (d))

E) Criterion 1120.140 (e) – Total Effect of the Project on Capital Costs

The applicant shall provide the projected capital costs (in current dollars per equivalent patient day or unit of service) for the first full fiscal year at target utilization but no more than two years following project completion.

Projected Capital Costs per equivalent patient day is \$213.76 per equivalent patient day. The State Board does not have a standard for this criterion.

THE STATE BOARD STAFF FINDS THE PROPOSED PROJECT TO BE IN CONFORMANCE WITH THE CRITERION TOTAL EFFECT OF THE PROJECT ON CAPITAL COSTS ((77 IAC 1120.140 (e))

<u>Ownership, Management and General Information</u>		<u>Patients by Race</u>		<u>Patients by Ethnicity</u>	
ADMINISTRATOR NAME:	Kenneth Lukhard	White	52.0%	Hispanic or Latino:	10.3%
ADMINSTRATOR PHONE	708-684-5010	Black	35.0%	Not Hispanic or Latino:	86.5%
OWNERSHIP:	Advocate Health and Hospital Corporation	American Indian	0.2%	Unknown:	3.2%
OPERATOR:	Advocate Health and Hospital Corporation	Asian	0.7%		
MANAGEMENT:	Church-Related	Hawaiian/ Pacific	0.0%	IDPH Number:	0315
CERTIFICATION:		Unknown	12.1%	HPA	A-04
FACILITY DESIGNATION:	General Hospital			HSA	7
ADDRESS	4440 West 95th Street	CITY:	Oak lawn	COUNTY:	Suburban Cook County

<u>Facility Utilization Data by Category of Service</u>										
<u>Clinical Service</u>	<u>Authorized CON Beds 12/31/2013</u>	<u>Peak Beds Setup and Staffed</u>	<u>Peak Census</u>	<u>Admissions</u>	<u>Inpatient Days</u>	<u>Observation Days</u>	<u>Average Length of Stay</u>	<u>Average Daily Census</u>	<u>CON Occupancy Rate %</u>	<u>Staffed Bed Occupancy Rate %</u>
Medical/Surgical	394	388	388	23,111	112,905	2,473	5.0	316.1	80.2	81.5
0-14 Years				0	0					
15-44 Years				3,682	15,678					
45-64 Years				7,634	35,511					
65-74 Years				4,733	23,956					
75 Years +				7,062	37,760					
Pediatric	45	45	45	3,488	12,150	1,192	3.8	36.6	81.2	81.2
Intensive Care	153	103	103	6,843	32,869	4	4.8	90.1	58.9	87.4
Direct Admission				5,507	26,452					
Transfers				1,336	6,417					
Obstetric/Gynecology	56	39	39	4,467	12,205	55	2.7	33.6	60.0	86.1
Maternity				4,036	11,184					
Clean Gynecology				431	1,021					
Neonatal	64	37	37	1,003	9,589	0	9.6	26.3	41.0	71.0
Long Term Care	0	0	0	0	0	0	0.0	0.0	0.0	0.0
Swing Beds			0	0	0		0.0	0.0		
Acute Mental Illness	39	35	35	1,208	8,454	0	7.0	23.2	59.4	66.2
Rehabilitation	37	37	37	857	12,181	0	14.2	33.4	90.2	90.2
Long-Term Acute Care	0	0	0	0	0	0	0.0	0.0	0.0	0.0
Dedicated Observation	34					3695				
Facility Utilization	788			39,641	200,353	7,419	5.2	569.2	72.2	

(Includes ICU Direct Admissions Only)

<u>Inpatients and Outpatients Served by Payor Source</u>							
	<u>Medicare</u>	<u>Medicaid</u>	<u>Other Public</u>	<u>Private Insurance</u>	<u>Private Pay</u>	<u>Charity Care</u>	<u>Totals</u>
Inpatients	33.7%	17.5%	0.0%	42.5%	2.7%	3.7%	
	13348	6922	0	16832	1056	1483	39,641
Outpatients	21.4%	22.6%	0.0%	50.4%	2.2%	3.5%	
	70616	74378	0	166029	7097	11413	329,533

<u>Financial Year Reported:</u>	1/1/2013 to	12/31/2013	<u>Inpatient and Outpatient Net Revenue by Payor Source</u>					<u>Charity Care Expense</u>	<u>Total Charity Care Expense</u>
	<u>Medicare</u>	<u>Medicaid</u>	<u>Other Public</u>	<u>Private Insurance</u>	<u>Private Pay</u>	<u>Totals</u>	<u>Charity Care Expense</u>		
Inpatient Revenue (\$)	34.2%	13.3%	0.0%	50.8%	1.7%	100.0%		27,468,000	
	227,821,835	88,477,783	0	338,907,298	11,464,810	666,671,726	23,079,000		
Outpatient Revenue (\$)	17.4%	1.0%	0.0%	79.1%	2.5%	100.0%		Total Charity Care as % of Net Revenue	
	40,716,883	2,327,324	0	185,151,953	5,906,114	234,102,274	4,389,000	3.0%	

<u>Birthing Data</u>			<u>Newborn Nursery Utilization</u>			<u>Organ Transplantation</u>	
Number of Total Births:	3,713		Level I	Level II	Level II+	Kidney:	11
Number of Live Births:	3,686		Beds	44	0	Heart:	19
Birthing Rooms:	0		Patient Days	8,367	0	Lung:	0
Labor Rooms:	0		Total Newborn Patient Days		12,870	Heart/Lung:	0
Delivery Rooms:	0					Pancreas:	0
Labor-Delivery-Recovery Rooms:	15					Liver:	0
Labor-Delivery-Recovery-Postpartum Rooms:	0		<u>Laboratory Studies</u>			Total:	30
C-Section Rooms:	3		Inpatient Studies		1,156,449		
CSections Performed:	1,352		Outpatient Studies		468,777		
			Studies Performed Under Contract		0		

Surgery and Operating Room Utilization

Surgical Specialty	Operating Rooms				Surgical Cases		Surgical Hours			Hours per Case	
	Inpatient	Outpatient	Combined	Total	Inpatient	Outpatient	Inpatient	Outpatient	Total Hours	Inpatient	Outpatient
Cardiovascular	0	0	4	4	3045	478	11884	1070	12954	3.9	2.2
Dermatology	0	0	0	0	0	0	0	0	0	0.0	0.0
General	0	0	3	3	2098	2231	4714	3544	8258	2.2	1.6
Gastroenterology	0	0	2	2	5	2	5	2	7	1.0	1.0
Neurology	0	0	1	1	889	132	3254	328	3582	3.7	2.5
OB/Gynecology	0	0	2	2	588	1150	1853	2137	3990	3.2	1.9
Oral/Maxillofacial	0	0	1	1	42	27	126	81	207	3.0	3.0
Ophthalmology	0	0	1	1	39	1210	83	1667	1750	2.1	1.4
Orthopedic	0	0	5	5	2825	1776	7807	3519	11326	2.8	2.0
Otolaryngology	0	0	1	1	131	601	216	832	1048	1.6	1.4
Plastic Surgery	0	0	2	2	548	1102	1506	2086	3592	2.7	1.9
Podiatry	0	0	0	0	142	104	280	236	516	2.0	2.3
Thoracic	0	0	2	2	617	323	1544	534	2078	2.5	1.7
Urology	0	0	2	2	531	849	1253	1527	2780	2.4	1.8
Totals	0	0	26	26	11500	9985	34525	17563	52088	3.0	1.8
SURGICAL RECOVERY STATIONS			Stage 1 Recovery Stations		24		Stage 2 Recovery Stations			16	

Dedicated and Non-Dedicated Procedure Room Utilization

Procedure Type	Procedure Rooms				Surgical Cases		Surgical Hours			Hours per Case	
	Inpatient	Outpatient	Combined	Total	Inpatient	Outpatient	Inpatient	Outpatient	Total Hours	Inpatient	Outpatient
Gastrointestinal	0	0	5	5	3430	7065	4431	8376	12807	1.3	1.2
Laser Eye Procedures	0	0	0	0	0	0	0	0	0	0.0	0.0
Pain Management	0	0	0	0	0	0	0	0	0	0.0	0.0
Cystoscopy	0	0	0	0	0	0	0	0	0	0.0	0.0
Multipurpose Non-Dedicated Rooms											
	0	0	0	0	0	0	0	0	0	0.0	0.0
	0	0	0	0	0	0	0	0	0	0.0	0.0
	0	0	0	0	0	0	0	0	0	0.0	0.0

Emergency/Trauma Care

Certified Trauma Center	Yes
Level of Trauma Service	Level 1
Operating Rooms Dedicated for Trauma Care	1
Number of Trauma Visits:	2,450
Patients Admitted from Trauma	1,131
Emergency Service Type:	Comprehensive
Number of Emergency Room Stations	50
Persons Treated by Emergency Services:	91,901
Patients Admitted from Emergency:	21,613
Total ED Visits (Emergency+Trauma):	94,351

Free-Standing Emergency Center

Beds in Free-Standing Centers	0
Patient Visits in Free-Standing Centers	0
Hospital Admissions from Free-Standing Center	0

Outpatient Service Data

Total Outpatient Visits	329,533
Outpatient Visits at the Hospital/ Campus:	290,208
Outpatient Visits Offsite/off campus	39,325

Cardiac Catheterization Labs

Total Cath Labs (Dedicated+Nondedicated labs):	6
Cath Labs used for Angiography procedures	0
Dedicated Diagnostic Catheterization Lab	0
Dedicated Interventional Catheterization Labs	0
Dedicated EP Catheterization Labs	2

Cardiac Catheterization Utilization

Total Cardiac Cath Procedures:	5,397
Diagnostic Catheterizations (0-14)	151
Diagnostic Catheterizations (15+)	2,965
Interventional Catheterizations (0-14):	232
Interventional Catheterization (15+)	940
EP Catheterizations (15+)	1,109

Cardiac Surgery Data

Total Cardiac Surgery Cases:	1,490
Pediatric (0 - 14 Years):	359
Adult (15 Years and Older):	1,131
Coronary Artery Bypass Grafts (CABGs) performed of total Cardiac Cases :	460

Diagnostic/Interventional Equipment

	Examinations			Therapeutic Equipment		Therapies/Treatments			
	Owned	Contract	Inpatient	Outpt	Contract				
General Radiography/Fluoroscopy	10	1	92,510	60,681	0	Lithotripsy	0	0	0
Nuclear Medicine	5	0	3,079	3,030	0	Linear Accelerator	0	2	18,487
Mammography	0	5	15	19,413	0	Image Guided Rad Therapy			0
Ultrasound	8	3	16,116	19,169	0	Intensity Modulated Rad Thrp			3,517
Angiography	2	0				High Dose Brachytherapy	1	0	287
Diagnostic Angiography			8,211	5,673	0	Proton Beam Therapy	0	0	0
Interventional Angiography			1,758	600	0	Gamma Knife	0	0	0
Positron Emission Tomography (PET)	0	0	0	0	0	Cyber knife	1	0	297
Computerized Axial Tomography (CAT)	5	1	25,270	21,825	0				
Magnetic Resonance Imaging	3	2	5,793	7,317	0				