



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-03	BOARD MEETING: June 30, 2020	PROJECT NO: 20-011	PROJECT COST: Original: \$77,607,985
FACILITY NAME: Northwestern Memorial Hospital		CITY: Chicago	
TYPE OF PROJECT: Substantive			HSA: VI

PROJECT DESCRIPTION: The Applicants (Northwestern Memorial Hospital, Northwestern Memorial Healthcare) propose to add 24 beds to its Intensive Care (ICU) Service and add 28 beds to its Medical/Surgical/Observation Service. The cost of the project is \$77,607,985 and the anticipated completion date is December 31, 2022.

EXECUTIVE SUMMARY

PROJECT DESCRIPTION:

- The Applicants (Northwestern Memorial Hospital, Northwestern Memorial Healthcare) propose to modernize and expand its Intensive Care (ICU) service and its Medical/Surgical/Observation services, located in the Feinberg/Galter Pavilion on the campus of Northwestern Hospital. The expansion will entail the addition of 24 additional ICU beds to the existing 115-bed complement, resulting in 139 ICU beds. The project also proposes to add 28 Medical/Surgical beds to the existing 530-bed complement. Resulting in 555 beds. **Board Staff notes that three (3) Medical/Surgical/Observation beds will be taken out of service, due to the modernization project.**
- The proposed project involves the establishment of one 24-bed ICU unit on the 11th floor of the Galter Pavilion. This will complement the existing 115 ICU beds located in the Feinberg/Galter Pavilion, resulting in a 139-bed ICU service at NMH.
- The proposed project involves the establishment of a Medical/Surgical/Observation unit on the 12th floor of the Galter Pavilion, containing 28 med/surg and 12 observation beds. This will complement the 422 med/surg beds located in the Feinberg/Galter Pavilions and the 108 med/surg beds located in the Prentice Women's Hospital for Hematology/Oncology. This component of the project will increase the medical/surgical bed complement to 558 beds.
- The proposed project will entail the construction of connecting walkways between the Feinberg and Galter Pavilions on the 10th, 11th, and 12th floors. The placement of these walkways/connectors requires the elimination of three (3) existing med/surg beds, resulting in an overall medical/surgical bed complement of 555 beds.
- The cost of the project is **\$77,607,985** and the anticipated completion date is December 31, 2022.

WHY THE PROJECT IS BEFORE THE STATE BOARD:

- This project is before the State Board because the cost of the project exceeds the capital expenditure minimum of \$13,171,046.

PURPOSE OF THE PROJECT:

- The Applicant stated: *"The purpose of the proposed project is to improve health care for residents of the City of Chicago, Cook County, and the region by increasing access to health care services at Northwestern Memorial Hospital. The proposed project will add capacity to continue to meet the growing demand for ICU and Medical/Surgical services at NMH: 28 Med/Surg beds (net 25), 24 ICU beds, and 12 Observation beds (net 11). The additional bed capacity will allow continued growth of tertiary medical/surgical programs such as cardiac care. The market area for the project is Cook County, which accounts for 72.3% of medical/surgical admissions at NMH. Over the last two decades, medical/surgical patient days at NMH have increased by 52.6%. Since CY15 alone, medical/surgical patient days have increased by 15%, for an average annual growth of 5.1%. Without additional medical/surgical beds, capacity-constrained conditions will continue. As in other years of high demand, lack of ICU and medical/surgical bed availability causes backups in the Emergency Department which has led to over 3,000 hours of ED diversion per year, over 3,000 patients per year leaving the ED without being seen, and beds not being available to receive patients from other hospitals needing transfer to NMH for specialty services. NMH is one of the largest providers of inpatient service in Chicago. As stated above, 73.2% of NMH medical/surgical patients reside in Cook County. From 2000 to 2018, Cook County mortality rates for deaths due to "Diseases of the Heart" have dropped from 30% to 24.8% in 2018. Our efforts to accommodate demand at NMH, especially in the cardiac care area, are intended to continue improvement in this mortality trend. The goal of the proposed project is to avoid bed capacity-constrained conditions which have led to ED diversion and patients leaving the ED without being treated."*

PUBLIC HEARING/COMMENT:

- A public hearing was conducted on June 15, 2020. Written comments were received by the State Board and are included in you packet of information.

SUMMARY

- For the modernization/expansion of a category of service the Applicant must document that the additional beds are needed. When considering the modernization/expansion of a category of service the State Board reviews narratives submitted by the Applicant documenting increasing patient days, historical utilization, changes in standard of care (i.e. private rooms vs semi-private), changes in population characteristics and the ability to provide care to the residents of the service area. No consideration of other Planning Area hospitals' utilization or Planning Area bed need, or excess is considered.
- As mentioned above as part of the State Board's review, the historical growth of the category of service is considered when justifying the number of beds being modernized/expanded (77 ILAC 1110.120 (b) – Projected Utilization). The Applicants have experienced a growth in M/S patient days of 15% for the years 2015 thru 2020. If this growth continues the 555 M/S being requested are warranted. Additionally, the Applicants report an increasing need for ICU services based on backups experienced in the Emergency Department (ED) and 3,000 hours of ED diversion. The Hospital ICU Beds have averaged over 70% utilization over this five-year period which would justify the 139 ICU beds being requested at the State Board's target occupancy of 60%. The Applicants also note that from 2000 to 2018, Cook County mortality rates have decreased for deaths due to diseases of the heart, from 30% to 24.8%, and attribute this decrease in mortality to availability of ICU and Med/Surg beds.
- The Applicant is financially viable as evidenced by the "A" bond ratings from Standard & Poor's Ratings service (dated July 24, 2019), and Moody's Investors Service (dated July 24, 2019).

CONCLUSIONS:

- The Applicants addressed a total of 16 criteria and did not meet the following.

State Board Standards Not Met	
Criteria	Reasons for Non-Compliance
Criterion 1110.120 – Size of Project	The Applicants exceeded the State Board size standards for Medical/Surgical and Intensive Care beds. An explanation of these differences is provided at the end of this report.

STATE BOARD STAFF REPORT
Project #20-011
Northwestern Memorial Hospital

APPLICATION SUMMARY/CHRONOLOGY	
Applicants(s)	Northwestern Memorial Hospital Northwestern Memorial Healthcare
Facility Name	Northwestern Memorial Hospital
Location	251 East Huron Street, Chicago, Illinois
Permit Holder	Northwestern Memorial Healthcare
Operating Entity/Licensee	Northwestern Memorial Hospital
Owner of Site	Northwestern Memorial Hospital
Gross Square Feet	81,693/ GSF
Application Received	January 31, 2020
Application Deemed Complete	February 4, 2020
Financial Commitment Date	June 30, 2022
Anticipated Completion Date	December 31, 2022
Review Period Ends	June 4, 2020
Review Period Extended by the State Board Staff?	No
Can the Applicant request a deferral?	Yes

I. Project Description

The Applicants (Northwestern Memorial Hospital, Northwestern Memorial Healthcare) proposes to modernize/expand its Intensive Care (ICU) Unit, to include the addition of 24 ICU beds, and modernize/expand its Medical Surgical (Med/Surg) bed units through the addition of 28 beds. The cost of the project is \$77,607,985. The anticipated completion date is December 31, 2022.

II. Summary of Findings

- A. State Board Staff finds the proposed project is **not** in conformance with all relevant provisions of 77 ILAC 1110 (Part 1110).
- B. State Board Staff finds the proposed project is in conformance with all relevant provisions of 77 ILAC 1120 (Part 1120).

III. General Information

The Applicant facility, Northwestern Memorial Hospital, Chicago, is an 894-bed, general, not-for-profit acute care hospital. The Hospital provides inpatient, outpatient and emergency care services for residents of Chicago, Cook County and HSA-06. The hospital contains a Level I Trauma center and serves as a teaching hospital for Northwestern University School of Medicine. The project is a substantive project subject to a Part 1110 and Part 1120 review. Substantive projects are:

1. *Projects to construct a new or replacement facility located on a new site; or a replacement facility located on the same site as the original facility and the costs of the replacement facility exceed the capital expenditure minimum.*
2. *Projects proposing a new service or discontinuation of a service, which shall be reviewed by the Board within 60 days.*
3. *Projects proposing a change in the bed capacity of a health care facility by an increase in the total number of beds or by a redistribution of beds among various categories of service or by a relocation of beds from one facility to another by more than 20 beds or more than 10% of total bed capacity, as defined by the State Board in the Inventory, whichever is less, over a 2-year period. [20 ILCS 3960/12]*

IV. Health Service Area

Northwestern Memorial Hospital is in the HSA VI Health Service Area and the A-01 Hospital Planning Area. The HSA VI Health Service Area includes the City of Chicago. The A-01 Hospital Planning Area includes the following City of Chicago Communities: Uptown, Lincoln Square, North Center, Lakeview, Lincoln Park, Near North Side, Edison Park, Norwood Park, Jefferson Park, Forest Glen, North Park, Albany Park, Portage Park, Irving Park, Dunning, Montclare, Belmont Cragin, Hermosa, Avondale, Logan Square, O'Hare, and Edgewater.

There are 11 hospitals in Health Service Area VI (9 general, 2 Pediatric). Advocate Illinois Masonic Medical Center, Community First Medical Center, Louis A. Weiss Memorial Hospital, Methodist Hospital of Chicago, Northwestern Memorial Hospital, Presence Resurrection Hospital, Presence Saint Joseph Hospital-Chicago, Swedish Covenant Hospital, Thorek Memorial Hospital, Shriners Hospital for Children, and Lurie Children's Hospital of Chicago.

V. Project Details

This Application for Permit calls for the modernization/expansion of the hospital's Intensive Care (ICU), services, and modernization/expansion of its Medical/Surgical (Med/Surg), bed capacity. The proposed project will entail the following:

- 1) Increase ICU and Med/Surg bed capacity in the Galter Pavilion: The applicants propose to establish one 24-bed ICU unit on the 11th floor, and one Medical/Surgical unit on the 12th floor, containing 28 beds and 12 observation beds. This expansion will increase the ICU bed complement to 139 beds and increase the number of Medical/Surgical beds to 558 beds.
- 2) Another phase of the proposed project involves the establishment of a three-story building connector between the Feinberg and Galter Pavilions, to improve patient/clinician access between the buildings/units. The establishment of these connectors will result in the discontinuation of 3 Medical Surgical beds one on each of the floors gaining a connector, for a total reduction of three (3) Med/Surg beds. One Observation bed will also be discontinued as a result of these connectors.
- 3) The overall change in bed count will involve the addition of 24 ICU beds, for a total ICU bed complement of 139 ICU beds. The Medical/Surgical Bed complement will increase by 28 beds (25 beds net), for a total bed complement of

555 beds. The overall bed complement at NMH will increase from 894 to 943 beds

VI. Project Uses and Sources of Funds

The Applicant are funding this project in its entirety with cash/securities in the amount of \$77,607,985.

TABLE ONE				
Project Costs and Sources of Funds				
USE OF FUNDS	Reviewable	Non-Reviewable	Total	% of Total
Preplanning Costs	\$153,434	\$123,983	\$277,417	.4%
Site Preparation	\$1,188,035	\$959,992	\$2,148,027	2.7%
New Construction Contracts	\$21,671,762	\$17,512,225	\$39,183,987	50.4%
Contingencies	\$2,167,176	\$1,751,223	\$3,918,399	5%
Architectural/Engineering Fees	\$1,851,354	\$1,030,886	\$2,882,240	3.8%
Consulting and Other Fees	\$2,843,885	\$1,583,555	\$4,427,440	5.7%
Movable or Other Equipment (not in construction contracts)	\$17,279,700	\$5,059,407	\$22,339,107	28.8%
Other Costs to be Capitalized	\$1,344,746	\$1,086,622	\$2,431,368	3.2%
TOTAL USES OF FUNDS	\$48,500,091	\$29,107,893	\$77,607,985	100.00%
SOURCE OF FUNDS	Reviewable	Non-Reviewable	Total	% of Total
Cash and Securities	\$18,500,091	\$29,107,893	\$77,607,985	100.00%
TOTAL SOURCES OF FUNDS	\$48,500,091	\$29,107,893	\$77,607,985	100.00%

VII. Background of the Applicants, Purpose of the Project, Safety Net Impact, Alternatives

A) Criterion 1110.110 - Background of the Applicant

To address this criterion the Applicant must provide a list of all facilities currently owned in the State of Illinois and an attestation documenting that no adverse actions¹ have been taken against any applicant's facility by either Medicare or Medicaid, or any State or Federal regulatory authority during the 3 years prior to the filing of the Application with the Illinois Health Facilities and Services Review Board or a certified listing of adverse action taken against any applicant's facility; and authorization to the State Board and Agency access to information in order to verify any documentation or information submitted in response to the requirements of the application for permit.

¹ "Adverse action is defined as a disciplinary action taken by IDPH, CMMS, or any other State or federal agency against a person or entity that owns or operates or owns and operates a licensed or Medicare or Medicaid certified healthcare facility in the State of Illinois. These actions include, but are not limited to, all Type "A" and Type "AA" violations." (77 IAC 1130.140)

1. The Applicants provided the necessary attestation that no adverse action has been taken against any facility owned or operated by the Applicant and authorization allowing the State Board and IDPH access to all information to verify information in the application for permit, through the provision of signatures on the certification pages. [Application for Permit page 47]
2. The Applicant has provided licensure for Northwestern Memorial Hospital as required, and a list of facilities under the ownership of Northwestern Memorial Healthcare, along with IDPH license numbers and Center for Medicare & Medicaid Services (CMS) certification. [Application for Permit page 46]
3. Certificate of Good Standing for Northwestern Memorial Hospital, and Northwestern Memorial Healthcare has been provided as required (Application pgs. 27-28).
4. The site is owned by Northwestern Memorial Hospital. Attestation of ownership can be found on page 29 of the Application for Permit.
5. The Applicants provided evidence that they were in compliance with Executive Order #2006-05 that requires *all State Agencies responsible for regulating or permitting development within Special Flood Hazard Areas shall take all steps within their authority to ensure that such development meets the requirements of this Order. State Agencies engaged in planning programs or programs for the promotion of development shall inform participants in their programs of the existence and location of Special Flood Hazard Areas and of any State or local floodplain requirements in effect in such areas. Such State Agencies shall ensure that proposed development within Special Flood Hazard Areas would meet the requirements of this Order.* [Application for Permit page 35-36]
6. The proposed location of the facility is in compliance with the Illinois State Agency Historic Resources Preservation Act which requires *all State Agencies in consultation with the Director of Historic Preservation, institute procedures to ensure that State projects consider the preservation and enhancement of both State owned and non-State owned historic resources* (20 ILCS 3420/1). [Application for Permit page 38]

STATE BOARD STAFF FINDS THE PROPOSED PROJECT IN CONFORMANCE WITH CRITERION BACKGROUND OF THE APPLICANT (77 ILAC 1110.1430(b) (1) & (3))

B) Criterion 1110.110(b) – Purpose of the Project

To demonstrate compliance with this criterion the Applicant must 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 applicant shall define the planning area or market area, or other area, per the applicant's definition. The applicant shall address the purpose of the project, i.e., identify the issues or problems that the project is proposing to address or solve. Information to be provided shall include, but is not limited to, identification of existing problems or issues that need to be addressed, as applicable and appropriate for the project.

The Applicants stated: *“The purpose of the proposed project is to improve health care for residents of the City of Chicago, Cook County, and the region by increasing access to health care services at Northwestern Memorial Hospital. The proposed project will add capacity to continue to meet the growing demand for ICU and Medical/Surgical services at NMH: 28 Med/Surg beds (net 25), 24 ICU beds, and 12 Observation beds*

(net 11). The additional bed capacity will allow continued growth of tertiary medical/surgical programs such as cardiac care. The market area for the project is Cook County, which accounts for 72.3% of medical/surgical admissions at NMH. Over the last two decades, medical/surgical patient days at NMH have increased by 52.6%. Since CY15 alone, medical/surgical patient days have increased by 15%, for an average annual growth of 5.1%. Without additional medical/surgical beds, capacity-constrained conditions will continue. As in other years of high demand, lack of ICU and medical/surgical bed availability causes backups in the Emergency Department which has led to over 3,000 hours of ED diversion per year, over 3,000 patients per year leaving the ED without being seen, and beds not being available to receive patients from other hospitals needing transfer to NMH for specialty services. NMH is one of the largest providers of inpatient service in Chicago. As stated above, 73.2% of NMH medical/surgical patients reside in Cook County. From 2000 to 2018, Cook County mortality rates for deaths due to “Diseases of the Heart” have dropped from 30% to 24.8% in 2018. Our efforts to accommodate demand at NMH, especially in the cardiac care area, are intended to continue improvement in this mortality trend. The goal of the proposed project is to avoid bed capacity-constrained conditions which have led to ED diversion and patients leaving the ED without being treated.”

C) Criterion 1110.110 (c) Safety Net Impact

All health care facilities, except for skilled and intermediate long-term care facilities licensed under the Nursing Home Care Act, 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 substantive project. However, the Applicants did supply a Safety Net Impact Statement that attests to the Applicants history of serving Chicago/Cook County and their commitment to developing new partnerships to preserve this partnership moving forward. Charity Care information was also provided as required. (See Application for Permit pages 136-141)

TABLE TWO			
Northwestern Memorial Healthcare/Northwestern Memorial Hospital			
Fiscal Year	2016	2017	2018
Northwestern Memorial Hospital			
Net Patient Revenue	\$1,535,917,670	\$1,703,649,205	\$1,896,462,325
Amount of Charity Care (charges)	\$187,858,944	\$118,565,236	\$123,087,483
Cost of Charity Care	\$38,135,467	\$22,875,953	\$23,163,773
% of Charity Care to Net Revenue	2.48%	1.34%	1.22%
Northwestern Memorial Healthcare			
Net Patient Revenue	\$4,081,581,000	\$4,547,371,208	\$4,877,615,420
Amount of Charity Care (charges)	\$386,070,000	\$308,814,605	\$321,715,102
Cost of Charity Care	\$80,459,000	\$65,761,106	\$65,929,276

TABLE TWO Northwestern Memorial Healthcare/Northwestern Memorial Hospital			
Fiscal Year	2016	2017	2018
% of Charity Care to Net Revenue	2%	1.4%	1.3%

TABLE TWO Northwestern Memorial Hospital Charity (self-pay) and Medicaid Information			
	2016	2017	2018
Net Revenue	\$1,535,917,670	\$1,703,649,205	\$1,896,462,325
CHARITY			
Charity (# of self-pay patients)	12,533	15,068	15,491
Charity (self-pay) Cost	\$38,135,467	\$22,875,953	\$23,163,773
% of Charity Care to Net Rev.	2.48%	1.34%	1.22%
MEDICAID			
Medicaid (Patients)	57,154	66,757	81,438
Medicaid (Revenue)	\$167,352,862	\$304,008,585	\$200,245,748
% of Medicaid to Net Revenue	10.90%	17.84%	10.56%
1. Charity Care/Medicaid includes both inpatient and outpatient data.			

D) Criterion 1110.110 (d) - Alternatives to the Proposed Project

To demonstrate compliance with this criterion the Applicant must 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 Applicant considered four alternatives different from the proposed project. They are:

Expansion within Existing Feinberg Pavilion:

The applicants note that while this option would be more cost efficient, it would only increase the bed count incrementally, and would not meet the immediate demand for ICU/Med-Surg beds. There were no project costs identified with this alternative.

Vertical Expansion of the Feinberg Pavilion

The Applicants note their past consideration of adding floors above the 17th floor of the Feinberg Pavilion to increase bed capacity. While this seemed to be a viable alternative for adding beds, the cost of this alternative (\$145,000,000), and the disruptions to existing hospital operations would be significant. Because of these reasons, the Applicants rejected this alternative.

Accelerate Plans for a Med/Surg Pavilion on the VA Site

NMH's purchase of the Chicago VA Lakeside Hospital in 2004, provided the applicants with properties that would serve as useful space for future expansion. This option would involve the construction of a new, larger pavilion to accommodate the expansion of ICU, Med/Surg, and other clinical components at NMH. However, the cost of building a new pavilion (\$1,000,000,000), is the costly of all alternatives, and the project would not be completed in time to address the immediate need for additional beds/space. The Applicants rejected this alternative.

Utilize Floors in Prentice Women's Hospital

The Prentice Women's Hospital opened in October 2007 and provided NMH with expanded inpatient and outpatient space. In the past 13 years, births have increased over 5%, and the additional capacity that the Prentice Women's building provided is no longer available. The Applicants rejected this alternative, due to the unavailability of space, and cost estimates for this alternative were not developed.

Use Underutilized Capacity at Existing Hospitals

The Applicants acknowledge the underutilized capacity at other hospitals in the planning area (A-01) and researched this option for feasibility. However, this option was deemed infeasible, based on the inability to develop practical care models across several hospitals and coordinate physician coverage to support this care model. While this alternative would increase utilization at hospitals in the service area, the logistics of patient care and physician/staff coverage proved to be an insurmountable barrier. The Applicants rejected this alternative and did not provide a cost estimate for this alternative.

Project as Proposed/Chosen Alternative

The option of repurposing existing space and adding building connectors was deemed as most feasible, based on the existing Med/Surg and ICU services present in the Feinberg and Galter Pavilions, and the minimal disruptions the project would have on existing services. The Applicants note the project cost associated with this alternative (\$77,607,985) is commensurate with the proposed construction plan and was deemed the most economical of the alternatives.

VIII. Project Scope and Size, Utilization and Unfinished/Shell Space

A) Criterion 1110.120 (a) - Size of Project

To demonstrate compliance with this criterion the Applicant must document that the physical space proposed for the project is necessary and appropriate. The proposed square footage cannot deviate from the square footage range indicated in Appendix B or exceed the square footage standard in Appendix B if the standard is a single number, unless square footage can be justified by documenting, as described in subsection (a)(2).

The Applicants are proposing the establishment of additional patient care units in the Galter and Feinberg Pavilions, on the campus of Northwestern Memorial Hospital (NMH), Chicago. The project will involve the establishment of 24 private ICU beds on the 11th floor of the Galter Pavilion, and a Patient Care unit on the 12th floor containing 28 medical/surgical beds, and 12 observation beds. Additional

components include “connectors between floors 10, 11, and 12 of the two pavilions that require structural modifications of the existing buildings, and the elimination of three existing patient care beds on each floor of the Feinberg Pavilion. The spatial configuration for each clinical service is illustrated in Table Three. The Applicants have not met the requirements of this criterion.

TABLE THREE Size of Project Northwestern Memorial Hospital				
Dept./Service	Proposed GSF	State Standard	Actual Size Per Unit	Met Standard?
Reviewable				
ICU Beds (24 Beds) 11th floor Galter Pavilion	23,107	600-685 dgsf/bed	962.7 bgsf/bed 277.8 gsf over	No 6,666 gsf over
Med/Surg Beds (28 Beds) 12th floor Galter Pavilion	29,367	500-660 dgsf/bed	1,048 dgsf/bed 388 gsf over	No 10,864 gsf over
Total Clinical	43,299			
Non-Reviewable				
Total Non-Clinical	24,110			
TOTAL	67,409			
<ul style="list-style-type: none"> • Observation beds not regulated by the State Board 				

STATE BOARD STAFF FINDS THE PROPOSED PROJECT IS NOT IN CONFORMANCE WITH CRITERION SIZE OF PROJECT (77 ILAC 1110.120(a))

B) Criterion 1110.120 (b) - Project Services Utilization

To demonstrate compliance with this criterion the Applicant must 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 Appendix B. The number of years projected shall not exceed the number of historical years documented. If the applicant does not meet the utilization standards in Appendix B, or if service areas do not have utilization standards in 77 Ill. Adm. Code 1100, the applicant shall justify its own utilization standard by providing published data or studies, as applicable and available from a recognized source.

The Applicants provided historical and projected utilization data for its Med/ Surg and ICU bed complements, using data from years 2012, through 2024, the second year after project completion. The historical utilization data for Intensive Care services at NMH shows the Applicants have exceeded the State standard (60%) for ICU utilization, and note a 0.7% annual growth rate, based on the pattern of growth using patient occupancy days in ICU units. Medical/Surgical services were historically below the State Standard for years 2012-2020, and projected utilization was calculated using a 1.5% annual growth rate, which projects utilization to be in excess of the State Standard for years 2021-2024 for Medical/Surgical units with an excess of 200 beds (88%).

TABLE FOUR Project Utilization for Med/Surg Northwestern Memorial Hospital (NMH)					
	Dept/Service	Historical/Projected Utilization (Patient Days)/# of Beds	Utilization	State Standard	Met Standard?
FY 2014	Med/Surg	141,650/530	73.2%	88%	No
FY 2015	Med/Surg	140,405/530	72.6%	88%	No
FY 2016	Med/Surg	146,362/530	75.7%	88%	No
FY 2017	Med/Surg	149,838/530	77.5%	88%	No
FY 2018	Med/Surg	161,749/530	83.6%	88%	No
FY 2024	Med/Surg	182,370/555	90.0%	90%	Yes
*Med/Surg Utilization projected using 2.5% annual compounded growth rate					
Project Utilization for ICU					
	Dept/Service	Historical/Projected Utilization (Patient Days)/# of Beds	Utilization	State Standard	Met Standard?
FY 2015	ICU	29,923/115	71.3%	60%	Yes
FY 2016	ICU	30,786/115	73.3%	60%	Yes
FY 2017	ICU	31,430/115	74.9%	60%	Yes
FY 2018	ICU	29,429/115	70.1%	60%	Yes
FY 2019	ICU	29,642/115	70.6%	60%	Yes
FY 2024	ICU	30,733/139	60.6%	60%	Yes
*ICU Utilization projected using 3.1% annual compounded growth rate					

While the Applicants failed to provide sufficient historical utilization data for its Med/Surg service, it appears the projected increase in utilization will result in sufficient utilization data, resulting in a positive finding for this criterion.

STATE BOARD STAFF FINDS THE PROPOSED PROJECT IN CONFORMANCE WITH PROJECTED UTILIZATION (77 ILAC 1110.120 (b))

IX. Medical/Surgical, Obstetric, Pediatric and Intensive Care

A) Criterion 1110.200 (b)(2) – Planning Area Need-Service to Planning Area Residents

b) Planning Area Need – Review Criterion

The applicant shall document that the number of beds to be established or added is necessary to serve the planning area's population, based on the following:

2) Service to Planning Area Residents

- A) Applicants proposing to establish or add beds shall document that the primary purpose of the project will be to provide necessary health care to the residents of the area in which the proposed project will be physically**

located (i.e., the planning or geographical service area, as applicable), for each category of service included in the project.

- B) Applicants proposing to add beds to an existing category of service shall provide patient origin information for all admissions for the last 12-month period, verifying that at least 50% of admissions were residents of the area. For all other projects, applicants shall document that at least 50% of the projected patient volume will be from residents of the area.

The Applicants identified its service area that includes 1,643 zip codes (175 primary/1,468 secondary) from areas surrounding Northwestern Memorial Hospital, and admissions data from the immediate and expanded service areas, which show that of the 26,152 patients admitted for Med/Surg services, approximately 18,908 (72.3%), were from the immediate service area. The Applicants also supplied admissions data for its ICU service that shows within the same 1,643 zip codes, 7,307 patients were admitted for ICU services, with 4,493 (61.5%) of these admissions being from within the immediate service area (Application, pgs. 72-111).

STATE BOARD STAFF FINDS THE PROPOSED PROJECT IN CONFORMANCE WITH PLANNING AREA NEED-SERVICE TO PLANNING AREA RESIDENTS CRITERION (77 ILAC 1110.200 (b)(2))

B) Criterion 1110.200 (b)(4) – Planning Area Need-Service Demand-Expansion

b) Planning Area Need – Review Criterion

The applicant shall document that the number of beds to be established or added is necessary to serve the planning area's population, based on the following:

- 4) **Service Demand – Expansion of Existing Category of Service**
The number of beds to be added for each category of service is necessary to reduce the facility's experienced high occupancy and to meet a projected demand for service. The applicant shall document subsection (b)(4)(A) and either subsection (b)(4)(B) or (C):
- A) **Historical Service Demand**
 - B) **Projected Referrals**
 - C) **Projected Service Demand – Based on Rapid Population Growth:**

The Applicants supplied AHQ patient days for CY 2017 and CY2018, for the Med/Surg, ICU, and Observation units (See Table Five). The data contained in Table Five supports the findings in earlier criteria that shows sufficient historical utilization for the ICU services, but not for Med/Surg services.

TABLE FIVE Historical Utilization Northwestern Memorial Hospital		
Service	CY 2017	CY 2018
Med/Surg		
AHQ Patient Days	149,838	161,749

TABLE FIVE Historical Utilization Northwestern Memorial Hospital		
Utilization	77.5%	83.6%
ICU		
AHQ Patient Days	31,430	29,429
Utilization	74.9%	70.1%
Observation		
AHQ Patient Days	18,535	17,986
Utilization	99.6%	86.5%
State Standards: <ul style="list-style-type: none"> • Med/Surg: 90% • ICU: 60% • Observation: N/A 		

While these historical data do not attest to adequate historical utilization of Medical/Surgical beds/units to warrant expansion, it is evident that there is an increase in the utilization (1.5% annually for Med/Surg 0.7% annually for ICU), that suggests a growing need for these beds, which will meet the State standard by the second year after project completion. Board Staff reiterates Observation beds are not applicable State Board review.

STATE BOARD STAFF FINDS THE PROPOSED PROJECT IN CONFORMANCE WITH PLANNING AREA NEED-SERVICE DEMAND/EXPANSION CRITERION (77 ILAC 1110.200 (b) (4))

C) Criterion 1110.200 (b)(4) – Expansion of Existing Category of Service

The Applicants note that the proposed project is designed to meet the growing need for Med/Surg and ICU beds at Northwestern Memorial Hospital, HSA-06, and the A-01 health planning area. The modernization/expansion involves the new construction of building “connectors” on floors 10, 11, and 12 between the Galter and Feinberg Pavilions, the “clinical repurposing” of space on the 11th floor of the Galter Pavilion for 24 ICU beds, and the “clinical repurposing” of existing patient care space on the 12th floor of the Galter Pavilion to accommodate 28 Med/Surg beds and 12 Observation beds. Board staff notes that the construction of the building connectors will require substantial structural modifications on the mentioned floors (10, 11, and 12), resulting in the discontinuation of one Med/Surg and one Observation bed from each of the mentioned floors in the Feinberg Pavilion (total discontinuation of 3 Med/Surg and 3 Observation beds).

STATE BOARD STAFF FINDS THE PROPOSED PROJECT IN CONFORMANCE WITH CRITERION CATEGORY OF SERVICE MODERNIZATION (77 ILAC 1110.200 (d))

C) Criterion 1110.200(e) – Staffing Availability

Staffing Availability – Review Criterion

The applicant shall document that relevant clinical and professional staffing needs for the proposed project were considered and that licensure and The Joint Commission staffing requirements can be met. In addition, the applicant shall document that necessary staffing is available by providing a narrative explanation of how the proposed staffing will be achieved.

In addressing this criterion, the Applicants noted: *“The Division of Patient Care at NMH is responsible for ensuring a safe patient care environment. NMH’s framework for Nursing Practice and Guiding Principles for Care delivery are based on Northwestern Medicine Interprofessional Relationship Care Model. All inpatient nursing units maintain a staffing plan that enables the nurse in charge to identify the complement of registered nurses needed to care for the patients on the unit. NMH is successful at recruiting and retaining nurses, technicians, and other essential employees. Vacant positions are covered using an overtime/supplemental time program. NMH is confident that it can continue to fully staff its clinical inpatient and outpatient services.”* (application pgs. 117-118)

STATE BOARD STAFF FINDS THE PROPOSED PROJECT IN CONFORMANCE WITH CRITERION CATEGORY OF SERVICE STAFFING AVAILABILITY (77 ILAC 1110.200 (e))

D) Criterion 1110.200 (f) - Performance Requirements – Bed Capacity Minimum

1) Medical-Surgical

The minimum bed capacity for a new medical-surgical category of service within a Metropolitan Statistical Area (MSA), as defined by the U.S. Census Bureau, is 100 beds.

Northwestern Memorial Hospital will have a total of 139 ICU beds which meets the 4-bed requirement for ICU units in this criterion, and 555 Medical/Surgical beds, which exceeds the 100 Med/Surg bed minimum requirement

STATE BOARD STAFF FINDS THE PROPOSED PROJECT IN CONFORMANCE WITH CRITERION PERFORMANCE REQUIREMENTS (77 ILAC 1110.200 (f))

E) Criterion 1110.2000 (g) - Assurances

To demonstrate compliance with this criterion the Applicant must document that the representative who signs the CON application shall submit a signed and dated statement attesting to the applicant's understanding that, by the end of the second year of operation after project completion, the applicant will meet or exceed the utilization standards specified in Appendix B.

The Applicants supplied signed/notarized attestation that at the end of the second year of operation after project completion, the ICU and Med/Surg units at Northwestern Memorial Hospital will achieve and maintain target occupancy. (Application, p. 121).

STATE BOARD STAFF FINDS THE PROPOSED PROJECT IN CONFORMANCE ASSURANCES (77 ILAC 1110.200(g))

X. Financial Viability

A) Criterion 1120.120 – Availability of Funds

To demonstrate compliance with this criterion the Applicant must document that resources are available to fund the project.

The Applicants are funding the proposed project in its entirety with cash in the amount of \$77,607,985. Northwestern Memorial Healthcare has an “Aa2/Stable” bond rating from Moody’s Investors Service dated July 2019, and an “AA+” rating from Standard & Poor’s Ratings Services dated July 2019. The Applicants also supplied Audited Financial Statements dated December 2018 (Application, pgs. 162-218). Based upon the “A” or better bond rating and the review of the audited financial statements it appears that the Applicant has sufficient resources to fund this project.

TABLE SIX		
Northwestern Memorial Healthcare		
Audited Financial Statements		
August 31, 2018/2019		
	2018	2019
Cash	\$407,249	\$329,646
Current Assets	\$1,609,260	\$1,764,720
Total Assets	\$11,662,851	\$12,528,131
Current Liabilities	\$1,392,911	\$1,636,766
Total Liabilities	\$3,629,702	\$4,254,084
Net Assets	\$8,033,149	\$8,274,047
Net Patient Service Revenue	\$4,877,616	\$5,665,736
Total Revenue	\$5,231,566	\$6,052,028
Total Expenses	\$4,956,287	\$5,768,499
Operating Income	\$275,279	\$283,529
Investment Income	\$490,971	\$57,836
Excess of Revenues over Expenses	\$744,923	\$347,744

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

B) Criterion 1120.130 - Financial Viability

To demonstrate compliance with this criterion the Applicant must document an “A” or better bond rating or provide 3 years of historical financial ratios as required by the State Board.

The Applicant has documented an “A” or better bond rating. Based upon this bond rating the Applicant appears to be financially viable.

STATE BOARD STAFF FINDS THE PROPOSED PROJECT IS IN CONFORMANCE WITH CRITERION FINANCIAL VIABILITY (77 ILAC 1120.130)

XI. Economic Feasibility

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

To demonstrate compliance with this criterion the Applicant must document an “A” or better bond rating or attest to the following

- 1) That the total estimated project costs and related costs will be funded in total with cash and equivalents, including investment securities, unrestricted funds, received pledge receipts and funded depreciation; or
- 2) That the total estimated project costs and related costs will be funded in total or in part by borrowing because:
 - A) A portion or all of the cash and equivalents must be retained in the balance sheet asset accounts in order to maintain a current ratio of at least 2.0 times for hospitals and 1.5 times for all other facilities; or
 - B) Borrowing is less costly than the liquidation of existing investments, and the existing investments being retained may be converted to cash or used to retire debt within a 60-day period.

The Applicants are funding the proposed project in its entirety with cash in the amount of \$77,607,985. The Applicants provided evidence of an “A” or better bond rating. By providing evidence of an “A” or better bond rating the Applicants have successfully addressed this criterion.

STATE BOARD STAFF FINDS THE PROPOSED PROJECT IS IN CONFORMANCE WITH CRITERION REASONABLENESS OF FINANCING ARRANGEMENTS (77 ILAC 1120.140(a))

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

To demonstrate compliance with this criterion the Applicant must document that the conditions of debt financing are reasonable by submitting a notarized statement signed by an authorized representative that attests to the following, as applicable:

- 1) That the selected form of debt financing for the project will be at the lowest net cost available;
- 2) That the selected form of debt financing will not be at the lowest net cost available, but is more advantageous due to such terms as prepayment privileges, no required mortgage, access to additional indebtedness, term (years), financing costs and other factors;
- 3) That the project involves (in total or in part) the leasing of equipment or facilities and that the expenses incurred with leasing a facility or equipment is less costly than constructing a new facility or purchasing new equipment.

The Applicants supplied attestation that financing for the proposed project will be internal (cash & securities), and there will be no required mortgage, access to additional debt, term financing costs, or other factors. The Applicant has met the requirements of this criterion.

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

C) Criterion 1120.140 (c) – Reasonableness of Project Costs

To demonstrate compliance with this criterion the Applicant must document that the estimated project costs are reasonable and shall document compliance

The reviewable space for this project is 52,474 BGSF of clinical space designated as new construction. The Applicants appear to have met the State Board standards established for this criterion.

Preplanning Costs are \$153,434 or .37% of New construction, contingency, and equipment costs (\$41,118,638). This appears reasonable when compared to the State Board Standard of 5.0%.

Site Preparation are \$1,188,035, or 4.98% of the construction and contingency costs (\$23,838,938). This appears reasonable compared to the State Board Standard of 5.0%.

New Construction Costs are \$21,671,762 or \$413.00 per GSF. This appears reasonable when compared to the State Board Standard of \$498.54 per GSF (2021 construction mid-point).

Contingency Costs/New Construction are \$2,167,176 or 9.9% of new construction costs (\$21,671,762). This appears reasonable when compared to the State Board Standard of 10%.

Architectural and Engineering Costs/New Construction are \$1,851,354 and are 7.7% of the new construction and contingency costs (\$23,838,938). This appears reasonable when compared to the State Board Standard of the 5.52% - 8.28%.

Consulting and Other Fees are \$2,843,885. The State Board does not have a standard for these costs.

Movable and Other Equipment are \$17,279,700. The State Board does not have a standard for these costs when applied to hospitals.

Other Costs to be Capitalized are \$1,344,746. The State Board does not have a standard for these costs.

STATE BOARD STAFF FINDS THE PROPOSED PROJECT IN CONFORMANCE WITH CRITERION REASONABLENESS OF PROJECT COSTS (77 ILAC 1120.140(c))

Note: The State Board has not developed standards for the two criteria listed below. If the Applicant submits the requested information the Applicant has met the requirements of criteria. The Applicants submitted the information listed below.

D) Criterion 1120.140(d) – Projected Direct Operating Costs

The Applicants are estimating \$1,422 in direct operating costs per equivalent patient day for its ICU, and \$504 in direct operating costs for its Med/Surg unit. The State Board does not have a standard for these costs.

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

The Applicants are estimating \$11.24 in depreciation costs per equivalent patient day. The State Board does not have a standard for these costs.