



Office of Health Care Access Certificate of Need Application

Final Decision

Applicant: The William W. Backus Hospital

Docket Number: 04-30424-CON

Project Title: Facility Enhancement Project

Statutory Reference: Section 19a-639 of the Connecticut General Statutes

Filing Date: May 9, 2005

Decision Date: July 13, 2005

Staff Assigned: Jack A. Huber

Project Description: The William W. Backus Hospital (“Hospital”) is proposing to undertake a facility enhancement project, at an estimated total capital expenditure of \$42,075,688, plus \$4,076,901 in capitalized financing costs, for an estimated total project cost of \$46,152,589.

Nature of Proceedings: On May 9, 2005, the Office of Health Care Access (“OHCA”) received The William W. Backus Hospital’s Certificate of Need (“CON”) application seeking authorization to undertake a facility enhancement project, at an estimated total capital expenditure of \$42,075,688, plus \$4,076,901 in capitalized financing costs, for an estimated total project cost of \$46,152,589. The Hospital is a health care facility or institution as defined by Section 19a-630 of the Connecticut General Statutes (“C.G.S.”).

A notice to the public concerning OHCA’s receipt of the Hospital’s Letter of Intent was published in *The Norwich Bulletin* on January 24, 2005, pursuant to Section 19a-639, C.G.S. OHCA received no response from the public concerning the Hospital’s proposal.

On May 9, 2005, the Hospital requested a waiver of hearing pursuant to Section 19a-643-45 of OHCA’s Regulations. The request was made based on the grounds that the CON application is non-substantive as defined in Section 19a-643-95(3) of OHCA’s Regulations. OHCA determined that the CON application was eligible for consideration of waiver of hearing pursuant to Section 19a-643-45 of OHCA’s Regulations. A notice to

the public concerning OHCA's receipt of the Hospital's request for waiver of hearing was published in *The Norwich Bulletin* on May 22, 2005, pursuant to Section 19a-639, C.G.S. OHCA received no response from the public concerning the Hospital's request for waiver of hearing. On June 15, 2005, OHCA determined that the Hospital's request for waiver of hearing be granted based upon the reason specified by the Hospital.

OHCA's authority to review and approve, modify or deny the CON application is established by Section 19a-639, C.G.S. The provisions of this section, as well as the principles and guidelines set forth in Section 19a-637, C.G.S., were fully considered by OHCA in its review.

Findings of Fact

Clear Public Need

Impact of the Proposal on the Hospital's Current Utilization Statistics Proposal's Contribution to the Quality of Health Care Delivery in the Region Proposal's Contribution to the Accessibility of Health Care Delivery in the Region

1. The William W. Backus Hospital ("Hospital") is an acute care, general hospital located at 326 Washington Street in Norwich, Connecticut. (*May 9, 2005, CON application, Attachment 2, page 36*)
2. The Hospital proposes to undertake a facility enhancement project at an estimated total capital expenditure of \$42,075,688, plus \$4,076,901 in capitalized financing costs, for an estimated total project cost of \$46,152,589. The purpose of the proposal is to provide a more contemporary hospital facility that will offer greater availability of hospital core services and improved space functionality and workflow design for selected departments. (*May 9, 2005, CON application, pages 1 & 2*)
3. The proposal is intended to serve residents from the following communities: Bozrah, Canterbury Franklin, Griswold, Lisbon, Norwich, Preston, Sprague, Voluntown, Colchester, Lebanon, Ledyard, Montville, North Stonington, Plainfield, Salem, Scotland, and Sterling. (*December 30, 2004, CON Letter of Intent, page 2*)
4. The Hospital's proposal will enhance three high demand, core services all currently offered under the Hospital's acute care license, through facility enhancements in each of the following health service areas: (*May 9, 2005, CON application, page 2*)
 - Medical-surgical inpatient services;
 - Emergency Department services; and
 - Surgical services for inpatients and outpatients.
5. The Hospital is not requesting any additional licensed beds beyond its current licensed capacity of 213 beds, or any new health care programs or services. (*May 9, 2005, CON application, page 4*)

6. The building project includes the two following components: (*May 9, 2005, CON application, page 21*)
- **Part 1 – The C+ Addition** – new construction of a two-story addition totaling 18,000 square feet (“sq. ft.”) addition - approximately 9,000 sq. ft. per floor. This project component will allow for the expansion of the emergency services on the ground floor and surgical services on the first floor. Each department will require temporary relocation of services during portions of the phased construction and each will undergo a backfill renovation once the new addition is completed. The emergency services renovation will include 14,600 sq. ft. of reconstruction, while the surgical services will undergo 18,900 sq. ft. of renovation work.
 - **Part 2 – The E-Wing Renovations** – full renovation of the third and fourth floors of the Hospital’s E-Wing, totaling 26,000 sq. ft. - approximately 13,000 sq. ft. per floor. The third floor is currently an outdated inpatient telemetry unit. The fourth floor currently contains various programs, such as pharmacy, medical records and physical therapy that require permanent relocation. Each floor will serve as a multi-purpose inpatient medical-surgical unit at the conclusion of the proposed renovation.

Medical-Surgical Inpatient Services - E-Wing Renovations

7. The Hospital is currently experiencing the following difficulties regarding its medical-surgical inpatient service activities: (*May 9, 2005, CON application, page 4*)
- Facility infrastructure problems due to the aging of the physical plant, requiring renovated facilities and new mechanical systems; and
 - Inpatient census problems regarding the management of the Hospital’s medical-surgical inpatient beds during peak usage times requiring the need for additional staffed beds.
8. The Hospital’s E-Wing was constructed in the late 1960’s. It was later retrofitted in the 1970’s to provide climate controls for summer/winter seasonal conditions. (*May 9, 2005, CON application, page 4*)
9. The E-Wing is considered outdated by today’s hospital standards and possesses the following infrastructure problems: (*May 9, 2005, CON application, page 4*)
- The retrofit of the 1970’s was not successful in providing adequate climate control. There is currently a lack of sufficient air conditioning and heat in meeting seasonal requirements;
 - Inpatient rooms are not sized properly to meet today’s hospital standards;
 - Inpatient rooms do not provide full bathroom with shower; and
 - Access to the current ‘half-baths’ are problematic as passage into them must be made through a two foot doorway.
10. Patient satisfaction survey results received by the Hospital’s have been affected negatively due to the infrastructure problems experienced by patients receiving care within the medical-surgical inpatient services. (*May 9, 2005, CON application, page 4*)

11. The Hospital has also experienced a growing problem with accommodating its medical-surgical inpatient census. At peak utilization times a substantial number of patients may be held in the Hospital's Emergency Department ("ED") due to the lack of appropriate medical-surgical beds. Other patients may be detained in the Hospital's post-anesthesia care unit due to the same constraints. As a result, admitted patients are frequently moved to accommodate level of care needs for new patients that are acutely ill. *(May 9, 2005, CON application, page 4)*
12. The Hospital analyzed its medical-surgical census data from a twenty-month period, from first quarter 2003 to fourth quarter 2004, and found the following: *(May 9, 2005, CON application, page 5)*
 - The total medical-surgical census exceeded a desired maximum target occupancy of 85% 338 times during the study period or more than 57% of the time; and
 - The total inpatient census exceeded the actual staffed bed capacity of 143 beds twenty-three times during the study period or approximately 4% of the time.
13. The Hospital determined that when its inpatient census approaches maximum staffed bed capacity (143 beds), the daily number of admitted inpatients from the ED increases to an average of 15 patients with the upper level of the range being as high as 22 admitted inpatients. This data equates to the following: *(May 9, 2005, CON application, pages 6 & 7)*
 - The ED has 10 or more patients waiting for inpatient admission 20% of the time; and
 - The ED has 14 or more patients waiting for inpatient admission 4% of the time.
14. The Emergency Department's length of stay for admitted patients averages 6 hours. *(May 9, 2005, CON application, page 8)*
15. In addressing the problems of its aging inpatient facilities and its insufficient availability of medical-surgical inpatient beds, the Hospital is proposing to renovate the third and fourth floors of the existing E-wing to provide an additional 21 staffed multi-purpose medical-surgical beds to its existing complement of 143 staffed beds resulting in a proposed staffed bed complement of 164 beds. *(May 9, 2005, CON application, page 11)*
16. The Hospital's existing and proposed staffed bed complement by inpatient service is as follows: *(May 9, 2005, CON application, pages 5 & 6)*

Table 1: Existing & Proposed Staffed Beds by Service

Floor:	Inpatient Service:	Existing Staff Beds	Proposed Staff Beds
A2	Oncology	20	20
A3	Medical/Surgical	31	31
A4	Orthopedic/Medical/Surgical	32	32
CCU	Critical Care	12	12
E1	Medical/Surgical	16	16
E3	Medical/Surgical	32	32
E4	Medical/Surgical	0	21
Total Number of Staffed Beds		143	164

17. Applying the proposed staffed bed capacity to the Hospital's study period statistics yields the following results: *(May 9, 2005, CON application, page 12)*
- The total inpatient census would exceed a desired maximum target occupancy of 85% approximately 7% of the time; and
 - The total inpatient census would never exceed an actual staffed bed capacity of 164 beds.
18. The E-wing renovations will emphasize enhanced patient and visitor comfort, improved privacy, and clinical flexibility, and will contain the following improvements: *(May 9, 2005, CON application, pages 11 and 20)*
- Computerized telemetry system to monitor the condition of all patients, allowing these units to serve the widest range of clinical diagnoses, including cardiac care;
 - The majority of the rooms will be designed for single patient occupancy and all rooms will contain a private bathroom with shower facility;
 - A centrally located nursing station that will enable good visibility of and prompt access to each patient room, facilitating better interaction between patient and care provider;
 - Comfortable, private space for family meetings and patient/family education will be provided;
 - A second nursing station will allow for the activation of satellite special care areas, if required, due to shifting patient volume and clinical needs;
 - Staffing efficiencies will be realized as staff will be able to move from one unit to the other with little reorientation, in response to a changing census and case mix; and
 - Each floor will include six larger inpatient rooms with flexibility to be converted to semi-private rooms, reducing the need to staff an overflow unit in periods of high census.

Emergency Department Services

Construction of the New C+ Building Addition & Renovations to Existing Space

19. The Hospital indicates that due to its present configuration, the main Emergency and Convenient Care areas of the Hospital's ED are not capable of handling the number of patients evaluated and treated annually. *(May 9, 2005, CON application, page 13)*
20. Visits to the ED have increased more than 25% since the department was last expanded in 1994 to accommodate 38,000 patient visits per year. Approximately, 48,000 patients currently seek emergency care at the Hospital each year. The following table illustrates the experienced departmental growth in annual ED visits. *(May 9, 2005, CON application, pages 14 and 15)*

Table 2: Actual ED Utilization, FY 1990 to FY 2004

Description	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Main ED Visits	33,178	32,984	34,309	34,811	35,273	34,899
Convenient Care Visits	9,108	10,931	11,509	12,684	13,282	13,282
Total ED Visits	42,286	43,915	44,118	46,320	47,957	48,181

21. The Hospital estimates that the main ED service volume will grow 1.8% annually and the Convenient Care service volume will grow 3.3% annually, based on a review of the Hospital's historical ED utilization data. Together the total emergency department workload is projected to increase by 13% from 48,181 visits in FY 2004 to 54,466 visits in FY 2010. The table below illustrates the expected departmental growth in annual ED visits. *(May 9, 2005, CON application, pages 14 through 16)*

Table 3: Projected ED Utilization, FY 2005 to FY 2010

Description	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010
Main ED Visits	35,380	36,017	36,665	37,325	37,997	38,681
Convenient Care Visits	13,420	13,863	14,321	14,793	15,281	15,786
Total ED Visits	48,800	49,880	50,985	52,118	53,278	54,466

22. The Hospital is seeking to increase the number of ED treatment beds by 20 beds from 23 to 43 treatment beds, which is projected to accommodate peak demand more than 95% of the time in FY 2010. The proposed increase in ED treatment beds assumes the following: *(May 9, 2005, CON application, page 13)*

- An increase in the number of staffed inpatient medical-surgical beds as proposed;
- A one hour reduction in the ED length of stay for admitted inpatients from 6 to 5 hours; and
- A fifteen minute reduction in the ED length of stay for all other ED patients from 2.50 hours to 2.25 hours.

23. The Hospital estimated the need for additional ED beds based on an examination of the following ED data sets: *(May 9, 2005, CON application, pages 13 and 14)*

- The Hospital first reviewed its ED records that covered a 9 month period of time in calendar year 2004, to establish the probabilities of peak demand; and
- The Hospital then determined long term trends and a projection of future need based on ED utilization data from 1999 to the present, which included counts of ED registrations and average length of stays for the main ED and the Convenient Care service components.

24. The Hospital's study of the ED activity for the time period examined provided the following findings: *(May 9, 2005, CON application, page 14)*

- The ED census has exceeded departmental treatment bed capacity 50% of the time; and
- The ED census with 44 patients would exceed departmental treatment bed capacity 2% of the time.

25. Enhancements will provide increased patient convenience, comfort and privacy as follows: *(May 9, 2005, CON application, page 3)*

- Additional trauma capacity for life-threatening situations by relocating trauma rooms and a decontamination area;
- Improved traffic flow in and around the department, providing easier interaction between the ED environment and Convenient Care services;
- Increased privacy for all patient seen in the main ED and all those patients being seen for psychiatric observation; and
- More accommodating waiting area spaces for the ED and Convenient Care services.

Surgical Services for Inpatients and Outpatients
Construction of the New C+ Building Addition & Renovations to Existing Space

26. Surgical volume, inpatient and outpatient combined, has grown 16.5% over the past five fiscal years. Surgical volume is currently exceeding 11,000 surgical procedures annually. The table below illustrates this experienced growth in annual surgical procedures. (May 9, 2005, CON application, page 16)

Table 4: Surgical Service Utilization, FY 2000 to FY 2004

Description	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	% Growth
Inpatient Procedures	3,353	3,471	3,457	3,719	3,662	9.2%
Outpatient Procedures	6,352	7,735	7,935	7,492	7,647	20.4%
Total Procedures	9,705	11,206	11,392	11,211	11,309	16.5%

27. The Hospital's Same Day Surgery department processes both same day surgical admit inpatients and same day surgical procedure outpatients. (May 9, 2005, CON application, page 16)

28. The Hospital maintains that the overall space allocated to surgical services is not suitable to accommodate today's inpatient and outpatient surgical activity. The functional space as currently configured was not designed to provide effective patient processing, private family consultation or adequate waiting space. (May 9, 2005, CON application, page 16)

29. The focus of this part of the proposal is to modernize the surgical patient processing areas and family waiting space to provide improved access, convenience and privacy. (May 9, 2005, CON application, page 16)

30. No additional operating suites are proposed in this building project. (May 9, 2005, CON application, page 16)

31. The surgical suite floor plan and circulation patterns will benefit from the proposal as follows: (May 9, 2005, CON application, page 2)

- A dedicated preadmission assessment and registration area;
- Four private consultation rooms for use by family and clinical staff;
- A new central corridor to improve traffic flow between the outpatient surgery area and operating suite;
- A larger, more comfortable outpatient waiting area; and
- A new elevator to improve traffic flow and accessibility.

32. Surgical service space will increase as follows: (May 9, 2005, CON application, page 16)

- Same day surgical bays will increase 116%, from 50 sq. ft. to 108 sq. ft. for the purpose of accommodate pre- and post- operative physician consultation and family visitation; and
- Post-anesthesia care unit bays will increase 44%, from 50 sq. ft. to 72 sq. ft. for enhanced patient circulation.

Financial Feasibility and Cost Effectiveness of the Proposal and its Impact on the Hospital's Rates and Financial Condition
Impact of the Proposal on the Interests of Consumers of Health Care Services and the Payers for Such Services
Consideration of Other Section 19a-637, C.G.S. Principles and Guidelines

33. An itemization of the proposal's total project cost, which includes \$46,152,589 in total capital expenditures, plus \$4,076,901 in capitalized financing costs, is as follows: *(May 9, 2005, CON application, page 20)*

Table 6: Total Capital Expenditures Including Capitalized Financing Costs

Description	Component Cost
Medical Equipment Purchases	\$2,807,012
Non-Medical Equipment Purchases	2,846,268
Construction /Renovation Costs	36,422,408
Total Capital Expenditure	\$42,075,688
Total Capitalized Financing Costs	4,076,901
Total Project Cost	\$46,152,589

34. The proposed building costs are itemized as follows: *(May 9, 2005, CON application, p. 20)*

Table 7: Proposed Building Costs

Description	New Construction	Renovation	Total Cost
Bldg. Work	\$8,116,821	\$19,589,248	\$27,706,069
Site Work	750,000	0	750,000
Offsite Work	290,250	677,250	967,500
Arch. & Eng.	791,886	1,847,735	2,639,621
Contingency	820,652	1,914,854	2,735,506
Other-Permits/Perform. Bonds	487,114	1,136,598	1,623,712
Total Building Costs	\$11,256,723	\$1,136,598	\$36,422,408

35. The Hospital proposes to finance the project through the following funding sources: *(May 9, 2005, CON application, page 23)*

- \$6,469,500 in Hospital equity; combining operating funds & funded depreciation;
- \$5,000,000 in contributions from Hospital fundraising activities; and
- \$34,683,089 in proposed debt financing through the Connecticut Health and Educational Facilities Authority ("CHEFA").

36. The Hospital's cash equivalent balance as of February 1, 2005, is \$18,877,000. The reported balance will be a sufficient amount for the Hospital to cover the non-debt financing portion of the capital expenditures associated with the proposed project. *(May 9, 2005, CON application, page 20 and Attachment 5, page 60)*

37. The project schedule is as follows: *(May 9, 2005, CON application, page 22)*

Table 5: Project Schedule

Project Step:	Projected Date:
Commencement of Building Construction/Renovation	July, 2005
Completion of Building Construction/Renovation	September, 2007
Commencement of Modernized Facility Operations	September, 2007

38. Each component of the project has been designed in a manner which will allow for health services to be provided in a phased, uninterrupted fashion. (May 9, 2005, CON application, pages 21 & 22)
39. The Hospital expects to be able to achieve staffing efficiencies that should be realized operationally through bed management flexibility created as a result of modernizing the configuration of the medical-surgical inpatient units, emergency department and surgical services to current space functionality and workflow design standards. (May 9, 2005, CON application, page 26)
40. The projected incremental revenue from operations, total operating expense and loss from operations associated with the CON proposal is contained in the following table. The projected incremental losses from operations are due to associated depreciation, amortization and interest expenses to be incurred by the Hospital in conjunction with the building project. (May 9, 2005, CON application, pages 25 & 26, Attachment 12, page 151, and Attachment 13, page 158)

Table 8: Hospital's Financial Projections for FYs 2006 through FY 2008

Description	FY 2006	FY 2007	FY 2008
Incremental Revenue from Operations	\$0	\$0	\$0
Incremental Total Operating Expense	(\$444,600)	(\$2,223,900)	(\$5,232,600)
Incremental Loss from Operations	(\$444,600)	(\$2,223,900)	(\$5,232,600)

41. The current and projected payer mix percentages for the first three years of operating the modernized Hospital is presented in the following table. (May 9, 2005, CON application, pages 24 & 25)

Table 9: Hospital's Current and Projected Three-Year Payer Mix

Description	Current	Year 1	Year 2	Year 3
Medicare	29.7%	29.7%	29.7%	29.7%
Medicaid	6.0%	6.0%	6.0%	6.0%
CHAMPUS or Tri-Care	1.8%	1.8%	1.8%	1.8%
Total Government	37.5%	37.5%	37.5%	37.5%
Commercial Insurers	54.1%	54.1%	54.1%	54.1%
Uninsured	4.7%	4.7%	4.7%	4.7%
Workers Compensation	3.7%	3.7%	3.7%	3.7%
Total Non-Govt.	62.5%	62.5%	62.5%	62.5%
Total Payer Mix	100%	100%	100%	100%

42. There is no State Health Plan in existence at this time. (May 9, 2005, CON application, page 3)
43. The Hospital has adduced evidence that the proposal is consistent with the Hospital's Board-approved, five-year strategic plan. (May 9, 2005, CON application, page 4)
44. The Hospital has improved productivity and contained costs by undertaking energy conservation measures regarding its facilities; participating in activities involving the application of new technology; and employing group purchasing practices in its procurement of supplies and equipment. (May 9, 2005, CON application, page 19)
45. The proposal will not result in any change to the Hospital's teaching and research responsibilities. (May 9, 2005, CON application, page 19)

46. The Hospital's current patient/physician mix is similar to that of other acute care, general hospitals in the region. The proposal will not result in any change to this mix. *(May 9, 2005, CON application, page 19)*
47. The Hospital has sufficient technical, financial and managerial competence and expertise to provide efficient and adequate service to the public. *(May 9, 2005, CON application, page 17 and Attachment 1, pages 27 through 35)*
48. The proposed Hospital's rates are sufficient to cover the proposed capital expenditure and operating costs associated with the proposal. *(May 9, 2005, CON application, pages 25 & 26 and Attachment 12, page 151)*

Rationale

The Office of Health Care Access ("OHCA") approaches community and regional need for Certificate of Need ("CON") proposals on a case by case basis. CON applications do not lend themselves to general applicability due to a variety of factors, which may affect any given proposal; e.g. the characteristics of the population to be served, the nature of the existing services, the specific types of services proposed to be offered, the current utilization of services and the financial feasibility of the proposal.

The William W. Backus Hospital ("Hospital") is an acute care, general hospital located at 326 Washington Street in Norwich, Connecticut. The Hospital proposes to undertake a facility enhancement project for the purpose of providing a more contemporary hospital facility that will offer greater availability of hospital core services and improved space functionality and workflow design for selected areas of the Hospital. The project has been specifically designed to accommodate the future growth in demand for medical-surgical inpatient services, emergency department services and surgical services, as well as to enhance the quality and accessibility of the delivery of these services to the population served by the Hospital. The facility enhancement proposal does not include a request for additional licensed beds beyond the Hospital's current licensed capacity of 213 beds, or a request for any new health care programs or services.

The building project is comprised of two major components. The first component involves a full renovation of the third and fourth floors of the E-Wing of the Hospital, totaling 26,000 square feet ("sq. ft."); approximately 13,000 sq. ft. per floor. Currently the third floor is an outdated inpatient telemetry unit. The fourth floor contains various programs, such as pharmacy, medical records and physical therapy that require permanent relocation. After the proposed renovation each floor will serve as a multi-purpose medical-surgical inpatient unit. The second major component involves the construction of the C+ addition, a two-story add-on structure totaling 18,000 sq. ft.; approximately 9,000 sq. ft. per floor. This component will allow for the expansion of the emergency services on the ground floor and surgical services on the first floor. Each department will require temporary relocation of specified departmental services during portions of the phased construction. Further, each will undergo a backfill renovation once the construction of the new addition is completed. The emergency services renovation will include 14,600 sq. ft. of reconstruction, while the surgical services will undergo 18,900 sq. ft. of renovation

work. Each component of the project has been designed in a manner which will allow for health services to be provided in a phased, uninterrupted fashion.

Medical-Surgical Inpatient Services

The Hospital is currently experiencing facility infrastructure problems due to the aging of its physical plant and inpatient census problems regarding the management of its medical-surgical inpatient beds during peak usage times. The E-wing of the Hospital was constructed in the late 1960's. It was later retrofitted in the 1970's to provide climate controls for summer/winter seasonal conditions. The wing is considered outdated by today's hospital standards and possesses air handling deficiencies, substandard patient room size and accommodations, as well as other infrastructure problems. The proposed E-Wing renovations will address these infrastructure problems. The project will emphasize enhanced patient and visitor comfort, improved privacy, and greater clinical flexibility. Each of the units will include the most up-to-date technology, safety measures, and design features.

Additionally, the Hospital has also experienced a growing problem with accommodating its medical-surgical inpatient census. At peak utilization times a substantial number of patients may be held in the Hospital's Emergency Department ("ED") due to the lack of appropriate medical-surgical inpatient beds. Other patients may be detained in the Hospital's post-anesthesia care unit due to the same constraints. As a result, admitted patients are frequently moved to accommodate level of care needs for new patients that are acutely ill.

Based upon a review of its medical-surgical census data over a twenty-month period, the Hospital determined that the total medical-surgical census exceeded a desired maximum target occupancy of 85% more than 57% of the time and that the total medical-surgical census exceeded the actual staffed bed capacity approximately 4% of the time. The proposed E-Wing renovations will provide an additional 21 staffed multi-purpose medical-surgical beds to the Hospital's existing complement of 143 staffed beds, resulting in a proposed staffed bed complement of 164 beds. Increasing the number of staffed beds as proposed will allow the Hospital the opportunity to meet future inpatient demand. Had the Hospital operated at a staffed bed complement of 164 beds during the review period, its total inpatient census would have exceeded a desired maximum target occupancy of 85%, approximately 7% of the time and its total inpatient census would never have exceeded the proposed number of staffed beds.

Emergency Department Services

The Hospital indicates that its Emergency Department ("ED") frequently operates at peak capacity due to increasing service volumes. Further, the Hospital's ED services, comprised of the main Emergency Care and Convenient Care areas, is not capable of handling the number of patients evaluated and treated annually due to its present configuration. Service volumes to the ED have increased more than 25% since the department was last expanded in 1994 to then accommodate 38,000 patient visits per year. In FY 2004 approximately 48,200 patients sought emergency care at the Hospital resulting in 34,900 main ED visits and 13,280 Convenient Care visits. The Hospital estimates that

the main ED service volume will grow 1.8% annually to approximately 38,700 visits by FY 2010 and the Convenient Care service volume will grow 3.3% annually to approximately 15,800 visits by FY 2010. Each of the estimates is based on a review of the Hospital's historical ED utilization data. Together the total emergency department workload is projected to increase by 13% from approximately 48,200 actual visits in FY 2004 to approximately 54,500 projected visits in FY 2010.

The Hospital estimated the need for additional ED beds based on an examination of its ED utilization taking into account the probabilities of peak demand and long term ED trends. This data included counts of ED registrations and average length of stays for the main ED and the Convenient Care service components. The Hospital's study of its ED activity determined that the ED census has exceeded departmental treatment bed capacity 50% of the time and that the ED census with 44 patients would exceed departmental treatment bed capacity 2% of the time. In addition, the Hospital determined that as the Hospital's census approaches maximum staffed bed capacity, the daily number of admitted patients in the ED increases to an average of 15 patients with the upper level of the range being as high as 22 patients. This equates to the ED having 10 or more patients waiting for inpatient admission 20% of the time and the ED having 14 or more patients waiting for inpatient admission 4% of the time. The Emergency Department length of stay for admitted inpatients has generally been 6 hours.

Based on its ED study findings, the Hospital is seeking to increase the number of ED treatment beds by 20 beds from 23 to 43 treatment beds. A 43 treatment bed complement is projected to accommodate peak demand more than 95% of the time in FY 2010. The proposed increase in ED treatment beds assumes there will be an increase in the number of staffed inpatient medical-surgical beds as proposed in this project, a one hour reduction in the ED length of stay for admitted inpatients from 6 to 5 hours, and a 15 minute reduction in the ED length of stay for all other ED patients from 2.50 hours to 2.25 hours.

The ED enhancements to be achieved through the proposed new construction and renovation will provide increased patient convenience, comfort and privacy and will provide the number of treatment areas and beds necessary to meet the Hospital's current and projected ED demand.

Surgical Services for Inpatients and Outpatients

Surgical volume, inpatient and outpatient combined, has grown 16.5% over the past five fiscal years, from 9,705 surgical procedures in FY 2000 to 11,300 surgical procedures in FY 2004. Same-day surgical admits (i.e. inpatient surgery) and same-day surgical procedure (i.e. outpatient surgery) are processed through the Same-Day Surgery department. The Hospital maintains that the overall surgical space allocation and configuration is not suitable to accommodate today's inpatient and outpatient surgical activity. The functional space was not designed to provide effective patient processing, private family consultation or adequate visitor waiting space. While the proposal contains no provision for new surgical suites, the focus of this portion of the project is to modernize the surgical patient processing area, to allow for sufficient space to conduct private consultations and to improve access, convenience and privacy to the visitor waiting space .

The proposal will improve the surgical floor plan by providing a dedicated preadmission area, four private consultation rooms and a more amenable outpatient visitor waiting area. The proposal will also improve the surgical workflow by providing a new central corridor to improve traffic flow between the outpatient and inpatient surgery areas. In addition, the size of same-day surgical bays will increase for the purpose of accommodating physician consultation and the size of recovery unit bays will increase for the purpose of family visitation.

Based on the above, OHCA finds that the Hospital has demonstrated that its facility enhancement project is needed for the Hospital to continue to provide medical-surgical inpatient care, emergency department services and outpatient surgical services at a high level of quality and that the proposal will contribute to improving the accessibility of health services to those individuals served in the region.

Financial Feasibility and Cost Effectiveness

The total capital expenditure for the proposal is \$42,075,688. The Hospital proposes to finance the project through an equity contribution of \$6,469,500, a fundraising contribution of \$5,000,000 and tax-exempt bond financing through the Connecticut Health and Educational Facilities Authority of \$34,683,089. The Hospital possesses the necessary funds to cover its stated contribution toward project funding. The Hospital expects to be able to achieve staffing efficiencies that should be realized operationally through bed management flexibility created as a result of modernizing the Hospital's medical-surgical inpatient units.

While the Hospital's proposal is financially feasible, the Hospital projects incremental losses from operations after the implementation of the proposal. The operating losses will be attributable to the project's depreciation, amortization and interest expenses that will be incurred by the Hospital. OHCA finds that proposals of this magnitude and scope typically experience incremental operating losses as a result of implementing comprehensive building projects. OHCA further finds that the benefits to be derived by the Hospital and by those individuals the Hospital serves will in the long term be significant. The anticipated improvements in the quality and accessibility of the Hospital's medical-surgical inpatient services, emergency services and surgical services with respect to those Connecticut residents served will allow the Hospital to provide its core services in a modernized facility, compliant with current practice guidelines and standards.

Based upon the foregoing Findings and Rationale, the Certificate of Need application of The William W. Backus Hospital to undertake a facility enhancement project for the purpose of providing a more contemporary facility that will offer greater availability of hospital core services and improved space functionality and work flow design for selected departments, at a total capital expenditure of \$42,075,688, plus \$4,076,901 in capitalized financing costs, for a total project cost of \$46,152,589, is, hereby, GRANTED.

Order

The William W. Backus Hospital ("Hospital") is hereby authorized to undertake a facility enhancement project, at a total capital expenditure of \$42,075,688, plus \$4,076,901 in capitalized financing costs, for a total project cost of \$46,152,589, subject to the following conditions:

1. This authorization shall expire on September 1, 2009. Should the Hospital's facility enhancement project not be completed by that date, the Hospital must seek further approval from OHCA to complete the project beyond that date.
2. The Hospital shall not exceed the approved total capital expenditure of \$42,075,688. In the event that the Hospital learns of potential cost increases or expects that the final project costs will exceed those approved, the Hospital shall file with OHCA a request for approval of the revised CON project budget.

All of the foregoing constitutes the final order of the Office of Health Care Access in this matter.

By Order of the
Office of Health Care Access

July 13, 2005

Signed by Cristine A. Vogel
Commissioner

CAV:jah