

# Office of Health Care Access Certificate of Need Application

### **Final Decision**

Applicant: Middlesex Hospital

Docket Number: 05-30509-CON

**Project Title:** South Building Renovation Project

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

Filing Date: August 15, 2005

Decision Date: October 20, 2005

Default Date: November 13, 2005

Staff Assigned: Jack A. Huber

**Project Description:** Middlesex Hospital is proposing an on-campus, facility renovation project involving two floors of its South Building, which will allow the Hospital to increase its complement of staffed inpatient beds by 30, from 169 to 199 staffed inpatient beds, at an estimated total capital expenditure of \$6,913,935.

**Nature of Proceedings:** On August 15, 2005, the Office of Health Care Access ("OHCA") received Middlesex Hospital's ("Hospital") Certificate of Need ("CON") application seeking authorization to undertake an on-campus, facility renovation project involving two floors of its South Building, which will allow the Hospital to increase its complement of staffed inpatient beds, at an estimated total capital expenditure of \$6,913,935. The Hospital is a health care facility or institution as defined by Section 19a-630 of the Connecticut General Statutes ("C.G.S.").

Pursuant to Section 19a-639, C.G.S., a notice to the public concerning OHCA's receipt of the Hospital's Letter of Intent was published in *Middletown Press* on May 30, 2005. OHCA received no responses from the public concerning the Applicant's proposal. Pursuant to Public Act 05-75, three individuals or an individual representing an entity with five or more people had until September 5, 2005, the twenty-first calendar day following the filing of the Hospital's CON application, to request that OHCA hold a public hearing

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on the Hospital's proposal. OHCA received no hearing requests from the public by September 5, 2005.

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. Middlesex Hospital ("Hospital") is an acute care hospital located at 28 Crescent Street in Middletown, Connecticut. (July 13, 2005, CON application, Exhibit C, page 46)
- 2. The Hospital proposes to undertake an on-campus facility renovation project involving two floors of the Hospital's South Building. (July 13, 2005, CON application, page 11)
- 3. The renovation project involves the following components: (*July 13, 2005, CON application, page 11*)
  - Reclaiming existing space currently utilized by several business offices of the Hospital and the subsequent relocation of these offices to an existing on-campus facility;
  - Renovating the fourth and sixth floors of the Hospital's South Building for the reestablishment of inpatient services;
  - Increasing the number of staffed inpatient beds by 30 from the Hospital's current complement of 169 to a proposed complement of 199 staffed inpatient beds; and
  - Allocating the 30 additional staffed inpatient beds in the following manner: 14 inpatient medical-surgical beds for fourth-floor South and 16 inpatient medical-surgical beds for sixth-floor South.
- 4. The Hospital is not requesting additional beds beyond its current licensed capacity of 275 general hospital beds and 22 bassinets, or any new health care programs or services. (*July 13, 2005, CON application, page 5*)
- 5. The proposal will increase the number of staffed inpatient medical-surgical beds by 30, from the current complement of 117 to a proposed complement of 147 staffed inpatient medical-surgical beds. A comparison between the Hospital's current and proposed complement of staffed and licensed beds by inpatient service is provided in the Table 1, found on the following page. (August 15, 2005, CON Completeness Response, page 5)

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Table 1: Current & Proposed Bed Configuration by Inpatient Service

Inpatient Service	Current # Hospital Beds		Proposed # Hospital Beds	
	Staffed	Licensed	Staffed	Licensed
Medical-Surgical	117	210	147	210
ICU-CCU	12	16	12	16
Psychiatric	20	28	20	28
Maternity	20	21	20	21
Total General Hospital Beds	169	275	199	275
Newborn Bassinets	20	22	20	22
Total Beds & Bassinets	189	297	219	297

- 6. The proposal is intended to serve residents from the communities that comprise the Hospital's primary service area ("PSA"). The Hospital states its PSA encompasses the following: Middletown, Middlefield, Cromwell, Durham, Haddam, Killingworth, Portland, East Hampton, East Haddam, Marlborough, Colchester, Chester, Deep River, Essex, Old Saybrook, Clinton, Westbrook, and Madison. (May 13, 2005, Letter of Intent, page 2)
- 7. The renovation project is intended to provide the following benefits: (*July 13, 2005, CON application, pages 5 and 6*)
  - Accommodate current daily peak and future demand for Hospital inpatient medicalsurgical services over the course of the next ten years (i.e. to fiscal year 2015);
  - Ameliorate Emergency Department ("ED") overcrowding associated with delays in admitting those individuals requiring inpatient services due to the lack of available inpatient beds, especially during peak demand times;
  - Improve a portion of the Hospital's infrastructure to a more modern facility and enhance its operational design, workflow patterns and patient placement flexibility;
  - Facilitate the periodic maintenance and refurbishment of other existing Hospital inpatient medical-surgical care units once the renovation project is completed; and
  - Improve the Hospital's ability to provide "surge capacity" to address potential emergency management needs of the State.

#### **Bed Capacity**

8. The Hospital's actual total inpatient service volumes have been approaching 53,000 patient days and 12,500 discharges annually. The actual number of total inpatient and medical-surgical inpatient patient days and discharges reported annually by the Hospital for the most current fiscal years ("FY") are as follows: (August 15, 2005, CON Completeness Response, page 9 and OHCA's Acute Care Hospital Inpatient Discharge Database)

Table 2: Actual Total Inpatient\* & Medical-Surgical Inpatient Service Volume Data by FY

FY	Total Patient Days	Total Discharges	MedSurg. Patient Days	MedSurg. Discharges
2001	43,926	11,249	31,818	7,978
2002	49,004	11,900	36,152	8,539
2003	49,751	12,599	36,823	9,107
2004	50,113	12,089	38,132	8,812
2005**	52,900	12,425	37,272	9,200

Notes: \* The annual actual total inpatient service volume data includes newborn utilization statistics.

\*\*The annualized volume projections for FY 2005 were computed on the basis of eight months of actual year-to-date data.

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9. The Hospital conducted a need assessment to project its current daily peak demand and future demand requirements for its medical-surgical inpatient capacity. The assessment includes the following: (*July 13, 2005, CON application, Attachment 1, pages 19 - 25*)

- An analysis of acute care, inpatient service trends within the Hospital's PSA;
- An analysis of the Hospital's current utilization statistics; and
- The Hospital's projected need for medical-surgical inpatient beds.
- 10. The Hospital offered the following inpatient medical-surgical care trends, obtained from a review of CHIME Special Studies data encompassing FY 2000 to FY 2004 and YTD 2005, for all acute care, hospital activity involving individuals who reside within Middlesex Hospital's eighteen-town service area: (July 13, 2005, CON application, Attachment 1, Need Assessment, pages 19 through 25)
  - The number of patient days and discharges has increased 17% and 14%, respectively;
  - The actual annual average daily census ("ADC") demand has increased by 17% from a low of 158 inpatients to a high of 185 inpatients; and
  - The annual utilization rates per 1,000 population have increased by 15% from a low of 299 to a high of 344.
- 11. The Hospital offered the following utilization information, obtained from its review of the CHIME Special Studies data, for its inpatient medical-surgical service involving individuals residing within its eighteen-town service area: (July 13, 2005, CON application, Attachment 1, Need Assessment, pages 19 through 25 and the Hospital's Annual Reporting and Twelve-Months Filing, Schedule 500, page 1 of 3, for the FY 2001 through FY 2004 filings)
  - Examining the variability and peak daily demand characteristics of the Hospital's inpatient medical-surgical service reveal, that at current demand levels, the Hospital has been operating at over a 90% annual occupancy level for medical-surgical staffed beds during the last four fiscal years. The Hospital's annual average medical surgical occupancy level for each previous FY is as follows:
    - o 94.1% staffed bed occupancy in FY 2001 operating with 93 staffed beds;
    - o 99.2% staffed bed occupancy in FY 2002 operating with 95 staffed beds;
    - o 99.5% staffed bed occupancy in FY 2003 operating with 100 staffed beds; and
    - o 90.4% staffed bed occupancy in FY 2004 operating with 108 staffed beds.
  - The actual annual ADC demand has increased by over 20% for the Hospital, exclusive of the volume of patients who are admitted to the Hospital from outside its eighteen-town service area;
- 12. The Hospital offered the following regarding its need for medical-surgical inpatient beds to FY 2015 involving individuals residing within the Hospital's eighteen-town service area: (July 13, 2005, CON application, Attachment 1, Need Assessment, pages 19 through 25)
  - The projected annual ADC demand for Middlesex Hospital medical-surgical inpatient beds range from 103 in 2005 to 130 in 2015 representing an increase of approximately 26.2% over a ten year period or on average 2.62% per year increase.
  - The projected annual utilization rates for medical-surgical inpatient care based on current use rates by age cohort and projected demographic changes will yield an anticipated increase of approximately 7% from a low of 335 to a high of 360; and
  - The projected medical-surgical inpatient bed need calculation, based on the anticipated ADC projections and a maximum practical annual occupancy

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percentage of 85%, yields a need for 148 Hospital medical-surgical inpatient beds in 2015.

13. The Hospital projects that its total and medical-surgical inpatient service volumes for FY 2006 through FY 2008 will remain constant. Total inpatient services volumes are expected to be approximately 52,900 patient days and 12,425 discharges per fiscal year, while the medical-surgical inpatient services volumes are anticipated to be approximately 37,300 patient days and 9,200 discharges per fiscal year. (August 15, 2005, Hospital Completeness Response, pages 4 and 9)

#### Renovation

- 14. The South Building was constructed in two phases with the basement level through third floor completed in 1948 and with levels four through seven added in 1961. (August 15, 2005, Hospital Completeness Response, page 1)
- 15. The building's fourth and sixth floors last operated as acute care inpatient units in 1994 and 1992, respectfully. Inpatient services were discontinued on the fourth floor when the maternity services unit was relocated to a newly constructed Hospital wing. The decision to discontinue services on the sixth floor was made when declining demand for inpatient services was experienced by the Hospital in the early 1990's. (August 15, 2005, Hospital Completeness Response, page 1)
- 16. The project totals 18,000 square feet ("sq. ft.") of renovation or 9,000 sq. ft. of work per floor. Significant building work will be required to prepare the existing facility space for the planned medical-surgical inpatient services. (*July 13, 2005, CON application, page 11*)
- 17. The project will be implemented in two successive phases with the fourth floor renovations taking place first, followed by the sixth floor renovations. The project's anticipated schedule is as follows: (*July 13, 2005, CON application, page 13*)

**Table 3: Proposed Project Schedule** 

Project Component	4 <sup>th</sup> Floor – 14 Bed Addition	6 <sup>th</sup> Floor – 16 Bed Addition
Work Commencement	October, 2005	October, 2006
Work Completion	December, 2005	December, 2006
Operations Commencement	December, 2005	December, 2006

- 18. The Hospital's proposal to expand the number of staffed inpatient medical-surgical beds could only be accommodated in the South Building, as it is the Hospital's only existing on-campus structure currently suitable for the development of inpatient services. (August 15, 2005, Hospital Completeness Response, page 3)
- 19. Each component of the project has been designed in a manner which will allow for Hospital services to be provided in an uninterrupted fashion. (July 13, 2005, CON application, page 11)

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# 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

20. An itemization of the project's total capital expenditure is as follows: (July 13, 2005, CON application, pages 10 & 11)

**Table 4: Total Capital Expenditure Itemization** 

Description	Component Cost
Medical Equipment Purchases	\$192,129
Non-Medical Equipment Purchases	546,903
Renovation Work	4,226,000
Total Arch. & Engineering	1,054,000
Total Contingency	630,903
Inflation Factor	264,000
Total Project Capital Expenditure	\$6,913,935

- 21. The Hospital proposes to finance the project entirely through funded depreciation. (*July 13, 2005, CON application, page 13*)
- 22. The projected incremental revenue from operations, total operating expense and loss from operations associated with the CON proposal is identified in the following table. The projected incremental losses from operations are due to increasing depreciation expenses that will be incurred by the Hospital in conjunction with the project. (August 15, 2005, Hospital Completeness Response, page 9)

Table 5: 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	\$180,600	(\$439,317)	(\$505,490)
Incremental Loss from Operations	(\$180,000)	(\$439,317)	(\$505,490)

23. The current and three year projected payer mix percentages with the proposal are presented in the following table. (July 13, 2005, CON application, page 15)

Table 6: Current and Projected Three-Year Paver Mix Percentages

Description	Current	Year 1	Year 2	Year 3
Medicare	39.2%	39.2%	39.2%	39.2%
Medicaid	6.7%	6.7%	6.7%	6.7%
CHAMPUS	0.2%	0.2%	0.2%	0.2%
<b>Total Government</b>	46.1%	46.1%	46.1%	46.1%
Commercial Insurers	49.0%	49.0%	49.0%	49.0%
Self-Pay	0.6%	0.6%	0.6%	0.6%
Workers Comp.	4.3%	4.3%	4.3%	4.3%
Total Non-Govt.	53.9%	53.9%	53.9%	53.9%
Total Payer Mix	100.0%	100.0%	100.0%	100.0%

24. There is no State Health Plan in existence at this time. (*July 13, 2005, CON application, page 5*)

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25. The Hospital has adduced evidence that the proposal is consistent with the Hospital's long range plan. (*July 13, 2005, CON application, page 5*)

- 26. The Hospital has improved productivity and contained costs by undertaking energy conservation measures regarding its facilities; participating in activities involving the application of new technologies; and employing group purchasing practices in its procurement of supplies and equipment. (July 13, 2005, CON application, page 8)
- 27. The proposal will not result in any change to the Hospital's teaching and research responsibilities. (*July 13, 2005, CON application, page 9*)
- 28. 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. (*July 13, 2005, CON application, page 9*)
- 29. The Hospital has sufficient technical, financial and managerial competence and expertise to provide efficient and adequate service to the public. (July 13, 2005, CON application, page 7 and Attachment B, pages 26 through 32)
- 30. The Hospital's rates are sufficient to cover the proposed capital expenditure and operating costs associated with the proposal. (*July 13, 2005, CON application, pages 15 & 16*)

## 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.

Middlesex Hospital ("Hospital") is an acute care hospital located at 28 Crescent Street in Middletown, Connecticut. The Hospital's total licensed capacity is 297 beds and bassinets consisting of 275 general hospital beds and 22 bassinets. The Hospital has identified as its service area the following communities: Middletown, Middlefield, Cromwell, Durham, Haddam, Killingworth, Portland, East Hampton, East Haddam, Marlborough, Colchester, Chester, Deep River, Essex, Old Saybrook, Clinton, Westbrook, and Madison. The Hospital is proposing to undertake an on-campus facility renovation project involving two floors of its South Building. The renovation project will permit the Hospital to increase the number of staffed inpatient medical-surgical beds, while modernizing portions of its physical plant. The Hospital is not requesting additional beds beyond its current licensed capacity, nor is it proposing any new health care programs or services.

The project involves renovating 18,000 square feet ("sq. ft.") of existing space, 9,000 sq. ft. per floor, for the purpose of reestablishing inpatient medical-surgical services to the fourth floor (14 additional staffed beds) and the sixth floor (16 additional staffed beds) of the South Building. The South Building was constructed in two phases with the basement level through third floor completed in 1948 and with levels four through seven added in

1961. The reclamation of existing space, currently utilized by a number of Hospital business offices, will allow the Hospital to increase its number of staffed beds by 30, from a current total staffed bed complement of 169 to a proposed total staffed bed complement of 199 beds. Each of the 30 additional staffed beds will be designated for inpatient medical-surgical services, permitting the Hospital to increase its number of inpatient medical-surgical staffed beds from a current complement of 117 beds to a proposed inpatient medical-surgical staffed bed complement of 147 beds. In the process of creating additional inpatient services space, the affected Hospital business offices will be relocated to an existing on-campus facility.

The Hospital identified several benefits that would be derived from the facility renovation project. The proposal will accommodate current daily peak demand and future demand for Hospital inpatient services over the course of the next ten years. The proposal will also ameliorate Emergency Department overcrowding associated with delays in admitting those individuals requiring inpatient services to medical-surgical beds due to the lack of available beds, especially during peak demand times. By modernizing and enhancing the operational design and workflow patterns within the specified portion of the Hospital's existing infrastructure, the creation of two new inpatient medical-surgical units will assist in facilitating the periodic maintenance and refurbishment of the other existing Hospital inpatient medical-surgical units. The proposal will likely improve the Hospital's ability to provide "surge capacity" thereby improving the Hospital's ability to address potential emergency management needs of the State.

The Hospital's actual total inpatient service volumes have been approaching 53,000 patient days and 12,500 discharges annually with inpatient medical-surgical activity component representing on average approximately 70% of the total patient days and 74% of the total discharges (i.e. 37,100 patient days and 9,100 discharges in FY 2003). During the last four fiscal years the Hospital has been operating its inpatient medical-surgical services at over a 90% staffed bed occupancy rate, while incrementally increasing its medical-surgical staffed bed complement from 93 beds in FY 2001 to 108 beds in FY 2004. In FYs 2002 and 2003 the Hospital's staffed occupancy rates were 99.2% with 95 staffed beds and 99.5% with 100 staffed beds, respectively. The Hospital projects that its total and inpatient medical-surgical service volumes for FY 2006 through FY 2008 will remain fairly constant. Total inpatient services volumes are expected to be approximately 52,900 patient days and 12,425 discharges per fiscal year, while the medical-surgical inpatient services activity component is anticipated to be approximately 37,300 patient days and 9,200 discharges per fiscal year.

The Hospital conducted a need assessment to project its current daily peak and future requirements for medical-surgical inpatient capacity. The assessment included an investigation regarding general acute care, inpatient service trends, and a review of the Hospital's current utilization statistics as well as a Hospital calculated projection identifying the number inpatient medical-surgical beds the Hospital will need by FY 2015. Analyzing historical utilization data, the Hospital indicates that the data shows general acute care inpatient utilization trends as well as hospital-specific utilization trends have been increasing as they relate to those individuals who reside within the Hospital's eighteen-town service area. Lastly, the Hospital utilizing a use rate methodology calculated the number of inpatient medical-surgical beds it will need to maintain by FY

2015, based on its current volumes, anticipated average daily census and use rates, and a maximum practical annual medical-surgical staffed occupancy rate of 85%. Utilizing this approach, the Hospital calculation yields a need for 148 inpatient medical-surgical beds for FY 2015. This projection represents an increase of 31 staffed inpatient medical-surgical beds over the Hospital's current complement of 117 staffed inpatient medical-surgical beds. The staffed inpatient medical-surgical beds proposed in this facility renovation project will meet the Hospital's future need for such over the next ten years.

The South Building's fourth and sixth floors were last used as acute care inpatient units in 1994 and 1992, respectfully. The Hospital's proposal to expand the number of staffed inpatient medical-surgical beds could only be accommodate in the proposed building, as it is the only existing structure suitable for inpatient service development. Significant building work will be required to prepare the existing facility space for the planned medical-surgical inpatient units. The project is scheduled to commence in October 2005 and conclude in December 2006. The renovation work has been designed in a manner which will allow for Hospital services to be provided in an uninterrupted fashion.

Based on the above, OHCA finds that the Hospital has demonstrated that its South Building renovation project is needed for the Hospital to continue to provide inpatient services at a high level of quality and that the proposal will contribute to the accessibility of health services to the region.

The project's total capital expenditure is \$6,913,935. The Hospital will finance its proposal through funded depreciation. The Hospital projects incremental losses from operations in the early years of the proposal's implementation. While the projected incremental losses are attributable to increasing depreciation expense associated with the proposal, the projected losses are not considered significant based on the overall scope and duration of the building project. Therefore, OHCA finds that the Hospital's projections are reasonable and achievable, and that the proposal is financially feasible and cost-effective.

Based upon the foregoing Findings and Rationale, the Certificate of Need application of Middlesex Hospital to undertake an on-campus, facility renovation project involving two floors of its South Building that will allow the Hospital to increase its complement of staffed inpatient beds by 30, from 169 to 199 staffed beds, at a total capital expenditure of \$6,913,935 is, hereby, GRANTED.

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### Order

Middlesex Hospital ("Hospital") is hereby authorized to undertake on-campus, facility renovation project involving two floors of its South Building that will allow the Hospital to increase its complement of staffed inpatient beds by 30, from 169 to 199 total staffed beds, at a total capital expenditure of \$6,913,935, subject to the following conditions:

- 1. This authorization shall expire on December 31, 2008. Should the Hospital's facility renovation 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 project cost of \$6,913,935. 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

October 20, 2005

Signed by Cristine A. Vogel Commissioner

CAV:jah