

**DIVISION OF HEALTH PLANNING
AND RESOURCE DEVELOPMENT
FEBRUARY 2007**

**CON REVIEW HG-R-1206-037
FORREST GENERAL HOSPITAL
RENOVATION & UPGRADING OF EQUIPMENT IN OPERATING SUITE
CAPITAL EXPENDITURE: \$5,389,079
LOCATION: HATTIESBURG, FORREST COUNTY, MISSISSIPPI**

STAFF ANALYSIS

I. PROJECT SUMMARY

A. Applicant Information

Forrest General Hospital (FGH) is a 512-bed, short-term, general acute care, public community hospital located in Hattiesburg, Forrest County, Mississippi. The hospital is owned by Forrest County, Mississippi, and was established by the County Board of Supervisors in July 1952. The hospital is presently governed and managed by a seven-member Board of Trustees. The facility is certified to participate in the Medicare and Medicaid programs and is accredited by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO).

The licensed bed complement of FGH consists of 400 short-term, general acute care beds, 24 rehabilitation beds, 56 adult psychiatric beds, and 32 adult chemical dependency beds (CDU). The occupancy rates, average length of stay (ALOS), and Medicaid Utilization for the three most recent years are as follows:

Fiscal Year	Occupancy Rate (%)	ALOS (DAYS)	Medicaid Utilization Rate
2003	61.24	4.59	29.16
2004	61.97	4.61	25.17
2005	62.74	4.83	22.23

Source: Division of Health Facilities, Licensure and Certification, MDH

B. Project Description

Forrest General Hospital requests Certificate of Need (CON) authority to expand its surgical room area by renovating 5,500 square feet of hospital space. This will entail demolishing an existing cysto room, doctor's lounge, change space, sleep rooms, and one office. The space will be reconfigured into the following areas: one endovascular room, two general operating rooms, one doctor's lounge, change area, and sleep room. The new endovascular operating room will consist of 836 square feet of space. The ceiling height of the operating room will be higher than normal in order to house new, fixed radiology equipment. The proposed project will not involve changes to the site, grounds, drainage, parking or fencing; however, the electrical and mechanical system will be upgraded to provide more power and chilled water to the air conditioning system.

The applicant provided a letter from the architect to verify the estimated cost to complete the project. The applicant asserts it will cost \$323.29 per square foot to renovate 5,500 square feet of space within the existing hospital. Also, FGH submitted an equipment list to describe items which will be purchased. The list indicates that the total fixed and non-fixed equipment costs will be \$3,095,437 and \$515,552, respectively. The application also includes acquisition of a Single Plane Digital Subtraction Angiography (DSA) to replace existing DSA equipment.

The applicant includes a capital expenditure summary, a three-year projected operating statement, and an Audited Financial Statement. The project will involve hiring 11.2 full-time equivalent personnel (FTEs), three Registered Nurses and 8.1 Technical/Paramedical staff at a cost of \$383,000. Forrest General Hospital will continue to have transfer/referral/ affiliation agreements with 17 entities and 6 colleges and universities. The facility received site approval from the Mississippi Department of Health, Division of Licensure and Certification. FGH will use cash reserves to fund the project. Upon the approval of the project, the project will be completed by November 1, 2007.

II. TYPE OF REVIEW REQUIRED

The Mississippi Department of Health reviews applications for construction and renovation in accordance with Section 41-7-191, subparagraph (1) (j) Mississippi Code 1972 Annotated, as amended, and duly adopted rules, procedures, plans, criteria, and standards of the Mississippi Department of Health.

In accordance with Section 41-7-197(2) of the Mississippi Code of 1972 Annotated, as amended, any affected person may request a public hearing on this project within 20 days of publication of the staff analysis. The opportunity to request a hearing expires March 7, 2007.

III. CONFORMANCE WITH THE STATE PLAN AND OTHER ADOPTED CRITERIA AND STANDARDS

A. State Health Plan (SHP)

The *FY 2007 Mississippi State Health Plan (FY 2007 MSHP)* contains criteria and standards which the applicant is required to meet before receiving CON authority for construction, renovation, and the acquisition of major medical equipment. This application is in compliance with applicable criteria and standards.

SHP Criterion 1- Need

Forrest General Hospital states the hospital has served residents of Forrest County for 53 years. Through the Board of Trustees, FGH has evaluated the needs of its patients and has made appropriate changes to the facility and services.

FGH stated that throughout the years, several renovation and/or improvement projects were approved by the Board of Trustees to be completed in phases. The current layout of the operating room was part of the "Phase VI Construction Plan." In this plan, thirteen operating rooms and two cystoscopy rooms were remodeled; electrical and mechanical system was upgraded; two rooms in the surgical area were remodeled; and a heart and surgical room were added.

The current design of the surgical area shows there are 15 operating rooms, including one cystoscopy room. Also, the area houses a portable C-arm. Surgeons use the mobile imaging equipment on patients to reveal what will be surgically repaired. Even though the equipment is highly technical, it is not the most advanced equipment available on the market to perform vascular surgery.

The applicant asserts that FGH is a Level II Trauma hospital and it needs a state of the art operating room, advanced surgical equipment, and adequate space to provide emergency medical care to Forrest County residents. Due to Hurricane Katrina in 2005, FGH has noticed an influx of Gulf Coast area residents seeking medical care at the facility. Based on the increased number of patients, the applicant asserts that the hospital staff is working overtime hours to meet the scheduling demands of the physicians. Thus, the applicant believes that modernizations to the surgery area are needed to increase efficiency, accommodate the flow of patients, and to schedule surgeries shortly after regular appointments.

The applicant states that a designated planning group, the administration, and the hospital's planning committee have produced a development plan to embrace FGH's long-term goals and visions. A resolution was adopted by the Board to apply for a CON in order to renovate the operating suite and upgrade surgical equipment.

The applicant states the FGH is not adding additional beds or services; however, the facility will continue to participate in the state's trauma system as a Level II center. Thus, this project will not have an adverse impact on existing facilities in GHSA 6.

SHP Criterion 2 - Bed Service Transfer/Reallocation/Relocation

The applicant asserts that this project does not involve transfer/reallocation/relocation of beds to another facility within GHSA 6; thus, this criterion is not applicable to the proposed project.

SHP Criterion 3 - Charity/Indigent Care

Forrest General Hospital affirms that it will provide a "reasonable amount" of indigent/charity care as described in Chapter I of the *FY 2007 MSHP*.

SHP Criterion 4 - Cost of Proposed Project

The applicant states that the *2006 Means Construction Cost Data* publication lists the following hospital construction cost ranges per square foot: low-\$155.00; median-\$190; and high-\$288.00. Using the *Means Construction Cost Data* book as a cost guide, the applicant states it will cost \$265.00 per square foot to renovate 5,500 square feet of space.

Applying the renovation criterion and formula listed in Chapter 8, the *Mississippi Certificate of Need Review Manual, 2006 revision*, the applicant asserts that the cost to renovate 5,500 square feet of space in the existing building will be \$323.29 per square foot.

Based on the *2006 Means Construction Cost Data* publication, the applicant states that the proposed project is between the median to high construction cost range for renovation projects in the state of Mississippi.

According to the *Means Construction Cost Data for 2007 (updated version)* and *2006*, the median cost for hospitals this size is \$217,000 per bed, \$203 per square foot; and \$203,500 per bed, \$190 per square foot; respectively. Both books compare construction costs; however, they do not compare costs for renovation projects. Staff contends the cost to renovate 5,550 square feet of surgical space will be \$323.29 per square feet (see Attachment II).

The applicant asserts that the total fixed equipment cost is \$3,095,437 and the non-fixed cost is \$515,552. Forrest General Hospital affirms that equipment costs do not exceed the median costs for equipment of similar quality by more than 15%. Also, FGH states that equipment cost estimates have been acquired from vendors through FGH's purchasing department.

SHP Criterion 5 - Floor Area and Space Requirements

Forrest General Hospital proposes to renovate 5,500 square feet of space and lists minimum space requirements reported in three state and national publications. Based on these requirements, the applicant complies with state and national norms for similar projects. Regarding the proposed project, the applicant does not list any architectural design restraints of the existing building, nor does FGH list any "special considerations due to local conditions."

SHP Criterion 6 – Cost of Proposed Renovation or Expansion Project

The applicant asserts the proposed renovation project will not exceed 85% of the cost of a replacement facility. Based on the median cost per bed of facilities listed in the *2007 Means Construction Cost Data* book, it will cost approximately \$111,192,000 to construct a 512-bed facility.

B. General Review (GR) Criteria

Chapter 8 of the *Mississippi Certificate of Need Review Manual, 2006 revision*, addresses general criteria by which all CON applications are reviewed. This application is in substantial compliance with general review criteria.

GR Criterion 2 - Long Range Plan

The applicant states that the Eckroth Planning Group has worked with the administration of FGH and the hospital's Planning Committee (HPC) to develop all long range development plans for the hospital. All plans are presented by the HPC to the Board of Trustees and in turn, the Board of Trustees approves or disapproves all plans. On November 28, 2006, the Board adopted a resolution to apply for a CON in order to renovate the operating suite and upgrade equipment in the suite. The applicant asserts that the proposed project will complement current healthcare services offered at FGH in GHSA 6. Thus, this project is in compliance with this criterion.

GR Criterion 3- Availability of Alternatives

Since FGH is a Level II Trauma Center, FGH considered the following alternatives before deciding on the proposed project: (1) keep the operating suite in its existing state and not upgrade the surgical suite equipment; (2) renovate space outside the existing operating room; (3) convert the existing operating rooms to the areas listed in the "Project Description;" and (4) renovate the existing operating room suite and upgrade the equipment in the hospital's operating suite.

The first alternative cannot continue to adequately accommodate the increased number of patient referrals and transfers to the hospital due to Hurricane Katrina. Secondly, the space outside the existing operating room is cramped and would be inefficient due to electrical, mechanical, and

structural limitations. When renovating and constructing new space, the hospital must adhere to space requirements set forth by state and national agencies. The third alternative would not allow minimum clear and walking area requirements of 600 and 20 square feet, respectively.

In this case, the applicant believes the fourth alternative will be the most cost effective method to provide state of the art vascular procedures to the residents of Forrest County. Thus, the applicant submits that renovating and upgrading operating equipment are the only cost effective options available to offer quality patient care.

GR Criterion 4 - Economic Viability

The applicant provided a three-year projected operating statement and indicated that net revenue over a projected three year period will increase from \$316,594,812 to \$335,510,237. The statement shows that the net income will increase from \$9,836,791 to \$13,716,112 over same three year period. The applicant affirms the proposed costs and charges associated with the project are comparable to similar renovation projects in the state (see Attachment I, Page 13). The applicant asserts that proposed charges are based on historical trends and will be determined by third party payor market rates.

Since the proposed project is for renovating space and upgrading operating room equipment at FGH, the applicant affirms that hospital utilization statistics in GHSA 6 and surrounding hospitals are comparable to FGH's projected utilization level.

The applicant's Chief Financial Officer (CFO) submitted a letter stating the project will be funded using FGH operating funds and capital reserves. The CFO indicates the proposed project will not create any interest costs. Based on the projections listed in the three-year operating statement, all financial requirements will be met during the projected three years and thereafter. Thus, this proposed project will be financially feasible.

GR Criterion 5 - Need for the Project

The FGH states the facility will serve all patients in GHSA 6 without respect to race, color, age, sex, ethnicity, or ability to pay. Forrest General Hospital will operate 7 days per week, 24 hours per day.

The applicant asserts this project does not involve relocating the facility or service; thus, current and projected utilization of like facilities or services within GHSA 6 is not applicable to this criterion.

The applicant asserts that Hurricane Katrina 2005 caused patients on the Gulf Coast to migrate to Forrest County to receive trauma, vascular, surgical, and medical care. Forrest General Hospital reports that operating room, vascular, and trauma cases for 2004, 2005, and 2006 have increased by 16%, 47%, and 13%, respectively. The hospital indicates that occupancy rates and average length of stay (days) for 2003 through 2005 have increased by 1.5% and .24%, respectively.

Since FGH is only renovating the operating room and upgrading surgical equipment, the applicant affirms this project will not have an adverse impact on existing facilities in GHSA 6.

Several endorsement letters from various community officials were included in the CON application dated December 1, 2006. According to the applicant, the community officials recognize that the FGH complies with all federal regulations regarding community service and supports FGH's efforts to serve all patients in GHSA 6 regardless of race, creed, sex, or ability to pay.

GR Criterion 6 -Accessibility

As previously stated above, FGH will serve all patients in GHSA 6 without respect to race, color, age, sex, ethnicity, or ability to pay. The hospital will operate 7 days per week, 24 hours per day.

GR Criterion 7- Information Requirement

The applicant affirms that FGH will record and maintain the information required by this criterion and shall make the data available to the Mississippi Department of Health within fifteen (15) business days of request.

GR Criterion 8 - Relationship to Existing Health Care System

The applicant states that FGH is only enhancing their facility and will continue to provide services to the community. Forrest General Hospital has transfer agreements with 17 health care providers and entities. Thus, the applicant asserts this project will not have an adverse impact on existing facilities in GHSA 6.

GR Criterion 9 - Availability of Resources

The applicant contends that FGH maintains a full complement of professional and support staff to operate the facility and surgical suite. The hospital states FGH recruiters are on hand to recruit new hires from universities and colleges within GHSA 6, the state of Mississippi, and other states. As a result of this project, 11.2 additional full-time equivalents (FTEs) will be hired at a cost of \$383,000.

The applicant affirms that FGH employs 71 surgeons and seven surgeons will be selected to work for FGH at a later date. Forrest General Hospital states that the hospital has demonstrated a successful staffing history and asserts that sufficient physicians are available to ensure proper implementation of this project.

GR Criterion 10 - Relationship to Ancillary or Support Services

The applicant asserts that the project is not expected to have an adverse effect upon the delivery of ancillary health services.

GR Criterion 11- Health Professional Training Programs

The applicant affirms that FGH will continue to provide staff and health professional training programs at the hospital except for nursing. Clinical training of nurses will be completed at surrounding universities and colleges. The applicant asserts that the proposed renovation and equipment upgrade will not have an adverse effect upon the health professional training programs in GHSA 6.

GR Criterion 12- Access by Health Professional Schools

The applicant affirms that students enrolled in health professional schools will continue to have access to nursing care services at FGH for training purposes.

GR Criterion 14 - Construction Projects

The architect hired by the hospital submitted a cost estimate to show a proposed capital expenditure of \$5,389,079. The application includes a site approval letter from the Division of Health Facilities Licensure and Certification and includes a schematic drawing to show how the area will look after the renovation process has been completed.

In addition, the applicant states that the project complies with state and local building codes, zoning ordinances, and all appropriate regulatory authorities. The applicant has provided written assurance that FGH will comply with state statutes and regulations for the protection of the environment.

Since hospital officials and consultants opted to modernize the surgery suite, the renovation formula was used by the hospital to show how much the proposed project will cost per square foot. The applicant states that the cost to renovate 5,500 square feet of space in the existing building will be \$323.29 per square foot.

The *Means Construction Cost Data for 2007 (updated version)* and *2006* does not compare costs for renovation projects (see Attachment II).

GR Criterion 16 - Quality of Care

The applicant asserts that FGH is certified to participate in the Medicare and Medicaid programs, is accredited by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO), and the College of American Pathology (CAP). Also, FGH holds a Certification as a Level II Trauma hospital.

The applicant asserts that FGH has won several high ranking honors based on the hospital's delivery of healthcare services. Forrest General Hospital affirms it has a history of providing quality care to residents of Forrest County and will continue its efforts to deliver superior medical care.

IV. FINANCIAL FEASIBILITY

A. Capital Expenditure Summary

Cost Item	Projected Cost	% of Total
Construction Cost - New		
Construction Cost - Renovation	\$1,457,500	27.05%
Capital Improvements		
Total Fixed Equip Cost	3,095,437	57.44%
Total Non-Fixed Equip Cost	515,552	9.57%
Land Cost		
Site Prep Cost		
Fees	145,750	2.70%
Contingency Reserve	174,840	3.24%
Capitalized Interest		
Other Cost		
Total Proposed Expenditures	\$ 5,389,079	100.00%

Forrest General Hospital will renovate 5,550 square feet of space in the operating room suite and upgrade surgical equipment. The cost to renovate 5,550 square feet of space will be \$323.29 per square foot. The *Means Construction Cost Data* does not compare costs for renovation projects.

B. Method of Financing

Forrest General Hospital will use cash reserves to fund the project. Audited financial statements demonstrate that FGH has sufficient cash reserves to fund the project.

C. Effects on Operating Costs

The applicant projects gross patient revenue of \$861,395,303, \$880,207,040, and \$906,613,252 the first, second, and third year of operation, respectively, and expenses of \$318,081,534, \$320,627,862, and \$333,807,240 for the first three years of operation. Utilization, cost, and charges are included in the applicant's Three-Year Projected Operating Statement (See Attachment I).

D. Cost to Medicaid/Medicare

Patient Mix	Utilization Percentage	First Year Cost
Medicare	45.0%	\$ 143,136,690.30
Medicaid	23.0%	73,158,752.82
Other Payors	<u>32.0%</u>	<u>101,786,090.88</u>
Total	100.0%	\$ 318,081,534.00
FGH projects 8.3% percent bad debt. Medically indigent and charity care are approximately 26.7% and 3.9% of gross patient revenues, respectively.		

V. RECOMMENDATION OF OTHER AFFECTED AGENCIES

The Division of Medicaid was provided a copy of this application for comment; however, no written comments were received from the Division.

VI. CONCLUSION AND RECOMMENDATION

This project is in substantial compliance with the criteria and standards for construction, renovation, and expansion projects as contained in the *2007 Mississippi State Health Plan*; Chapter 8 of the *Mississippi Certificate of Need Review Manual, Revised 2006*; and all adopted rules, procedures, and plans of the Mississippi Department of Health.

The Division of Health Planning and Resource Development recommends approval of this application submitted by Forrest General Hospital (FGH).

**ATTACHMENT I
 FORREST GENERAL HOSPITAL
 THREE YEAR OPERATING STATEMENT**

	First Year	Second Year	Third Year
Revenue			
Inpatient Care Revenue	\$ 549,609,219	\$ 559,909,196	\$ 576,706,472
Outpatient Care Revenue	311,786,084	320,297,844	329,906,780
Gross Patient Care Revenue	\$ 861,395,303	\$ 880,207,040	\$ 906,613,252
Deductions:			
Charity Care	\$ (36,981,568)	\$ (37,351,384)	\$ (36,230,842)
Deductions from Revenue	(507,818,923)	(519,293,371)	(534,872,172)
Net Patient Care Revenue *	\$ 316,594,812	\$ 323,562,286	\$ 335,510,237
Other Operating Revenue	\$ 11,323,513	\$ 11,663,218	\$ 12,013,115
Total Operating Revenue *	\$ 327,918,325	\$ 335,225,504	\$ 347,523,352
Operating Expense			
Salaries	\$ 134,987,501	\$ 140,686,001	\$ 146,307,461
Benefits	28,260,110	28,626,711	29,770,100
Supplies	65,721,116	67,692,749	71,077,387
Services	37,357,475	33,621,728	34,630,379
Lease	7,759,399	6,983,459	7,053,294
Depreciation	19,624,610	20,557,974	20,962,241
Interest	4,038,834	4,159,999	4,243,199
Other	20,332,489	18,299,240	19,763,179
Total Operating Expense *	\$ 318,081,534	\$ 320,627,862	\$ 333,807,240
Net Operating Income (Loss) *	\$ 9,836,791	\$ 14,597,642	\$ 13,716,112
Inpatient Days	122,603	123,829	128,782
Outpatient Visits	174,197	191,616	210,778
Charge per Outpatient Visit	\$ 1,790	\$ 1,672	\$ 1,565
Charge per Inpatient Day	\$ 4,483	\$ 4,522	\$ 4,478
Cost per Inpatient Day	\$ 2,594	\$ 2,589	\$ 2,592
Cost per Outpatient Visit	\$ 1,826	\$ 1,673	\$ 1,584

Note: * Applicant's totals are off by \$1 due to rounding.

**ATTACHMENT II
 FORREST GENERAL HOSPITAL
 COMPUTATION OF CONSTRUCTION AND RENOVATION COST**

<u>Cost Component</u>		<u>Total</u>	<u>New Construction</u>	<u>Renovation</u>
A	New Construction Cost		\$0	
B	Renovation Cost	\$1,457,500		\$1,457,500
C	Total Fixed Equipment Cost	\$3,095,437		
	Total Non-Fixed Equipment Cost	\$515,552	\$0	
	Land Cost	\$0	\$0	
D	Site Preparation Cost	\$0	\$0	
E	Fees (Architectural, Consultant, etc.)	\$145,750		\$145,750
F	Contingency Reserve	\$174,840		\$174,840
G	Capitalized Interest		\$0	\$0
	Total Proposed Capital Expenditure	\$5,389,079	\$0	\$1,778,090
	Square Footage	5,500		5,500
	Allocation Percent		0.00%	100.00%
	Costs Less Land, Non-Fixed Eqt.	\$4,873,527	\$0	\$1,778,090
	Cost Per Square Foot	\$886.10		\$323.29