ATTACHMENT - REQUIRED STATE AGENCY FINDINGS

FINDINGS
C = Conforming
CA = Conditional
NC = Nonconforming
NA = Not Applicable

DECISION DATE: June 25, 2013

PROJECT ANALYST: Kim Randolph
TEAM LEADER: Lisa Pittman

PROJECT I.D. NUMBER: G-10098-13/ North Carolina Baptist Hospital/ Replace one fixed MRI scanner and one fixed CT scanner and renovate existing space/ Forsyth County

REVIEW CRITERIA FOR NEW INSTITUTIONAL HEALTH SERVICES

G.S. 131E-183(a) The Department shall review all applications utilizing the criteria outlined in this subsection and shall determine that an application is either consistent with or not in conflict with these criteria before a certificate of need for the proposed project shall be issued.

(1) The proposed project shall be consistent with applicable policies and need determinations in the State Medical Facilities Plan, the need determination of which constitutes a determinative limitation on the provision of any health service, health service facility, health service facility beds, dialysis stations, operating rooms, or home health offices that may be approved.

CA

North Carolina Baptist Hospital (referred to as Wake Forest Baptist Medical Center (WFBMC)) proposes to replace one fixed MRI scanner and one fixed CT scanner at WFBMC. The applicant does not propose to increase the number of licensed beds in any category, add services, or acquire equipment for which there is a need determination in the 2013 State Medical Facilities Plan (2013 SMFP).

However, Policy GEN-4: Energy Efficiency and Sustainability for Health Service Facilities, on page 43 of the 2013 SMFP, is applicable to the review of this proposal. Policy GEN-4 states:

> *"Any person proposing a capital expenditure greater than $2 million to develop, replace, renovate or add to a health service facility pursuant to G.S. 131E-178 shall include in its certificate of need application a written statement describing the project's plan to assure improved energy efficiency and water conservation.*

In approving a certificate of need proposing an expenditure greater than $5 million to develop, replace, renovate or add to a health service facility pursuant to G.S. 131E-178, the Certificate of Need Section shall impose a condition requiring the applicant to develop and implement an Energy Efficiency and Sustainability Plan for the project that conforms to or exceeds energy efficiency and water conservation standards incorporated in the latest editions of the North Carolina State Building Codes. The plan must be consistent with the applicant's representation in the written statement as described in paragraph one of Policy GEN-4.

Any person awarded a certificate of need for a project or an exemption from review pursuant to G.S. 131E-184 are required to submit a plan for energy efficiency and water conservation that conforms to the rules, codes and standards implemented by the Construction Section of the Division of Health Service Regulation. The plan must be consistent with the applicant's representation in the written statement as described in paragraph one of Policy GEN-4. The plan shall not adversely affect patient or resident health, safety or infection control."

In Section III.2, page 35, the applicant states:

"The ability to significantly alter the parameters of the existing system to increase energy savings is not applicable given the limited extent of the actual refurbishment, given that the project scope is an equipment replacement rather than a renovation. However electrical energy usage will be improved through the use of modern, energy efficient fixtures with state of the art lamps and ballasts. Occupancy sensors will be used in the scan room to assure that lights are not left burning when the room is not in use."

In addition, in Section XI.7, page 92, the applicant states, *"WFBMC's engineering department uses HVAC controls to operate the buildings. WFBMC also supplies the heating and cooling operations from a central plant with duel fuel sources. Engineers are designing to the latest codes, which emphasize energy efficiency."*

The applicants adequately describe the project's plan to assure improved energy efficiency; however, the applicants do not describe the project's plan to assure improved water conservation.

Therefore, the application is conforming to this criterion subject to the following condition.

Prior to issuance of the certificate of need, North Carolina Baptist Hospital shall provide to the Certificate of Need Section a written statement describing the project's plan to assure improved water conservation.

(2) Repealed effective July 1, 1987.

(3) The applicant shall identify the population to be served by the proposed project, and shall demonstrate the need that this population has for the services proposed, and the extent to which all residents of the area, and, in particular, low income persons, racial and ethnic minorities, women, handicapped persons, the elderly, and other underserved groups are likely to have access to the services proposed.

C

WFBMC states it proposes to replace one existing and technologically outdated fixed MRI scanner, located in vault one in the MRI Center, and one existing and outdated fixed CT scanner, located in Reynolds Tower, CT Room number 21 at WFBMC. In Section II.1, page 15, the applicant states the existing MRI scanner will be replaced with a Siemens Magnetom Skrya 3T MRI scanner and the existing CT scanner will be replaced with a Siemens Flash CT scanner.

Population to be Served

In Section III.5, page 43, the applicant states, *"The geographic boundaries of the proposed project are the same as those historically served by WFBMC, which includes a 19 county North Carolina service area."*

In Section III.4, pages 40-42, the applicant provides the current FY 2012 patient origin for the residents served by the existing MRI and CT scanners, as summarized below.

County	# of MRI Patients	% of Total	# of CT Patients	% of Total
Alexander	141	0.78%	460	0.97%
Alleghany	169	0.94%	483	1.02%
Ashe	235	1.30%	672	1.42%
Burke	183	1.02%	483	1.02%
Cabarrus	75	0.42%	206	0.43%
Caldwell	366	2.03%	837	1.76%
Catawba	502	2.79%	1,609	3.39%
Cleveland	47	0.26%	218	0.46%
Davidson	1,309	7.27%	3,790	7.99%
Davie	601	3.34%	1,403	2.96%
Forsyth	5,753	31.96%	13,192	27.80%
Gaston	61	0.34%	259	0.55%
Guilford	1,009	5.60%	2,947	6.21%
Iredell	516	2.87%	1,615	3.40%
Lincoln	84	0.47%	224	0.47%
Mecklenburg	94	0.52%	253	0.53%
Randolph	544	3.02%	1,727	3.64%
Rockingham	418	2.32%	1,132	2.39%
Rowan	314	1.75%	1,079	2.27%
Stokes	690	3.83%	1,527	3.22%
Surry	939	5.21%	2,540	5.35%
Watauga	160	0.89%	572	1.21%
Wilkes	680	3.78%	1,957	4.12%
Yadkin	535	2.97%	1,285	2.71%
Other NC*	741	4.10%	1,851	3.90%
Out of State	1,835	10.20%	5,123	10.80%
Total	18,001	100.00%	47,444	100.00%

* The table above identifies the NC counties with 150 or more patients receiving MRI **or** CT services at WFBMC. The applicant identifies the number of patients receiving MRI or CT services from each NC County on pages 40-42.

In Section III.5, pages 43-46, the applicant provides the projected patient origin by county, which is based on the same percentages as the historical patient origin shown above. On pages 46-47, the applicant states

> "*The projected patient origin is expected to remain the same as the historical patient origin. Historical patient origin is often the best indicator of future patient origin, and as such the fiscal year 2012 proportions from each county, as well as input from Radiology Departmental leadership, was applied to Project Years 1 and 2 utilization projections. WFBMC anticipates that any changes to patient origin in the future will be insignificant."*

The applicant adequately identifies the population to be served.

Need for the Replacement MRI and CT Scanner

In Section III.1, pages 22-33, the applicant discusses the need to replace an MRI and CT scanner based on the need to accommodate patient demand and to support the use of updated technology in tertiary hospitals.

On page 22, the applicant states the current MRI scanner is 25 years old, is technologically outdated, and has intermittent capacity issues. The applicant states the existing CT scanner is over seven years old with maintenance issues that compromise its availability and volumes. The applicant states *"It is imperative that WFBMC be able to keep pace with patient and provider demand, provide up to date technology, and offer the best available service for both inpatient and outpatients requiring CT and MRI scans at all times."*

On page 31, the applicant provides historical and projected MRI utilization for the current and proposed MRI scanners at WFBMC, as illustrated in the following table.

MRI Scanners	FY 2011	FY 2012	Interim FY 2013	Interim FY 2014	PY 1 FY 2015	PY 2 FY 2016	PY 3 FY 2017
# of Units	6	6	6	6	6	6	6
# of Procedures	21,895	22,206	22,408	22,612	22,818	23,025	23,235
# of Weighted Procedures	29,728	30,151	29,713	29,984	30,257	30,531	30,810

As shown in the table above, the MRI scanners at WFBMC performed 30,151 weighted MRI procedures in FY 2012, or an average of 5,025 weighted MRI procedures per scanner, which exceeds the minimum performance standard found in 10A NCAC 14C .2703(b)(1) (3,328 weighted MRI procedures per scanner). The applicant projects it will perform a total of 30,810 weighted MRI procedures in Project Year 3, or an average of 5,135 weighted MRI procedures per scanner, which also exceeds the 4,805 weighted MRI procedures for an MRI service area with four or more fixed MRI scanners as required by 10A NCAC 14C .2703(b)(3)(E). It should be noted that this rule is not applicable to this review. The comparison is made to the minimum performance standard to illustrate WFBMC's six fixed MRI scanners are well utilized, which supports the applicant's assertion that a replacement is needed.

On page 32, the applicant provides historical and projected procedures and Head Equivalent Computed Tomography (HECT) utilization for the current and proposed CT scanners at WFBMC, as illustrated in the following table.

CT Scanners	FY 2011	FY 2012	Interim FY 2013	Interim FY 2014	PY 1 FY 2015	PY 2 FY 2016	PY 3 FY 2017
# of Units	11	11	11	11	11	11	11
# of Procedures	77,675	69,425	69,899	70,535	71,177	71,824	72,478
# of HECT Units	133,130	115,728	116,502	117,579	118,649	119,727	120,817

As shown in the table above, the CT scanners at WFBMC performed 115,728 HECT units in FY 2012, or an average of 10,521 HECT units per scanner, which exceeds the minimum performance standard found in 10A NCAC 14C .2303(2) (5,100 HECT units per scanner). The applicant projects it will perform a total of 120,817 HECTs in Project Year 3, or an average of 10,983 HECTs per CT scanner, which also exceeds the 5,100 HECT units required by 10A NCAC 14C .2303(3). It should be noted that this rule is not applicable to this review. The comparison is made to the minimum performance standard to illustrate WFBMC's 11 fixed CT scanners are well utilized, which supports the applicant's assertion that a replacement is needed.

In Section III.1, page 22, the applicant states

> *"…there is a specialized need within large academic and tertiary medical centers for CT and MRI to be used for additional diagnostic purposes. WFBMC is a major tertiary referral and academic medical center that provides specialty and subspecialty care such as diagnostic neurology, neonatal and perinatal medicine, and oncology services. With the scope of services offered at WFBMC, it is absolutely essential to have capacity to meet the CT and MRI needs of these and other types of patients."*

In Section I.13, page 14, the applicant states that WFBMC also provides several unique services which can only be provided with the highest technology equipment. The applicant states these unique services include:

> "*(1) functional brain activation imaging for motor, language and memory, (2) spinal cord motion studies for tethering, (3) cine CSF flow studies for hydrocephalus, (4) diffusion/perfusion imaging for stroke and tumors, (5) spectroscopy for metabolic disease, tumors and strokes, and (6) stress dobutamine heart studies."*

The applicant adequately demonstrates the need to replace one fixed MRI scanner and one fixed CT scanner.

Projected Utilization

In Section I.13, page 12, the applicant lists the current location of the MRI scanners at WFBMC. The applicant indicates WFBMC currently has a total of six fixed MRI scanners, five are operational and one is approved for the Comprehensive Cancer Center, Project I.D. #G-8372-09 and scheduled to be operational July 2013. The table below illustrates historical and projected utilization of the current and proposed MRI scanners at WFBMC.

Fiscal Year	MRI Patients	Patient Growth Rate	Total Unweighted Procedures	Scan Ratio (procedures / patient)	Total Weighted Procedures	# of MRIs	Procedures per Machine
Historical							
2008	17,532	–	22,038	1.26	30,455	6	5,076
2009	17,382	-0.86%	21,639	1.24	29,609	5	5,922

2010	16,327	-6.07%	20,619	1.26	28,420	5	5,684
2011	17,309	6.01%	21,895	1.26	29,728	6	4,955
2012	18,001	4.00%	22,206	1.23	30,151	6	5,025
Projected							
2013	18,165	0.91%	22,408	1.23	29,713	6	4,952
2014	18,330	0.91%	22,612	1.23	29,984	6	4,997
PY1 2015	18,497	0.91%	22,818	1.23	30,257	6	5,043
PY2 2016	18,665	0.91%	23,025	1.23	30,531	6	5,089
PY3 2017	18,835	0.91%	23,235	1.23	30,810	6	5,135

Source: Section III.1, pages 30-31.

In Section III.1, page 31, the applicant indicates the annual maximum capacity of a single fixed MRI scanner as defined in the 2013 SMFP, page 166, is 6,864 procedures annually based on operation of a scanner for 66 hours per week, 52 weeks per year with 2 procedures per hour [6,864=(66 x 52) x 2]. The applicant applied the tiered planning threshold capacity from the 2013 SMFP for a facility with more than four fixed MRI scanners and determined its capacity threshold is 4,805 weighted procedures per scanner. The applicant indicates, based on the 4,805 threshold capacity, WFBMC has been operating at over 100 percent capacity since FY 2008 as shown in the table above.

In Section I.13, pages 12-13, the applicant lists the current location of the CT scanners at WFBMC. The applicant indicates WFBMC currently has a total of 11 fixed CT scanners, 10 are operational and one is approved for the adult emergency department, Project I.D. #G-8327-09 [G-8627-11] and scheduled to be operational November 2014. The table below illustrates historical and projected utilization of the current and proposed CT scanners at WFBMC.

Fiscal Year	CT Patients	Patient Growth Rate	Total # of Procedures	Scan Ratio (procedures / patient)	Total HECT Units	# of CTs	HECT Units per Machine
Historical							
2008	46,675	–	83,437	1.79	145,091	11	13,190
2009	47,674	2.14%	83,487	1.75	145,209	11	13,201
2010	45,875	-3.77%	83,587	1.82	145,584	11	13,235

2011	47,417	3.36%	77,675	1.64	133,130	11	12,103
2012	47,444	0.06%	69,425	1.46	115,728	11	10,521
Projected							
2013	47,876	0.91%	69,899	1.46	116,502	11	10,591
2014	48,311	0.91%	70,535	1.46	117,579	11	10,689
PY1 2015	48,751	0.91%	71,177	1.46	118,649	11	10,786
PY2 2016	49,195	0.91%	71,824	1.46	119,727	11	10,884
PY3 2017	49,642	0.91%	72,478	1.46	120,817	11	10,983

Source: Section III.1, pages 26, 29, & 32.

In Section III.1, page 31, the applicant indicates the annual maximum capacity threshold per fixed CT scanner as defined in 10A NCAC 14C .2300 is 5,100 HECT units. The applicant indicates that based on the 5,100 HECT units per scanner capacity, WFBMC has been operating at over 200 percent capacity since FY 2008 as shown above.

In Section III.1, pages 24-33, the applicant provides the assumptions and methodology used to project utilization, which is described below.

MRI and CT Utilization Assumptions and Methodology	
Step	**Description**
1	Determine the historical patterns of MRI and CT scanner utilization.
2	Calculate the MRI and CT population increase and apply the scan ratio (procedures/patient).
3	Determine the MRI and CT scanner capacity.

Step 1: Determine the historical patterns of MRI and CT scanner utilization.
The applicant reviewed historical data from FY 2008 through FY 2012 to determine patient and volume growth rates.

MRI
On page 26, the applicant states WFBMC experienced a compound annual growth rate (CAGR) of 0.66 percent over the last five years for patients receiving an MRI procedure as shown below.

Fiscal Year	**Total # of Patients Receiving an MRI Procedure**	**Annual Growth Rate**
2008	17,532	—
2009	17,382	-0.86%
2010	16,327	-6.07%
2011	17,309	6.01%
2012	18,001	4.00%
CAGR		0.66%

On page 26, the applicant states the number of unweighted MRI procedures has increased slightly with a CAGR of 0.19 percent, while the number of weighted MRI procedures has declined with a CAGR of negative 0.25 percent. The applicant states the decline in the number of weighted MRI procedures is due the following factors:

- WFBMC's stricter quality improvement process to ensure patients receive the appropriate procedure at the appropriate time; and
- Stricter preauthorization requirements by payers.

On page 27, the applicant states "*…there remains a clear need to replace the MRI scanner as it is 25 years old and not able to be as productive as new equipment with new technology.*"

CT

On page 24, the applicant states WFBMC experienced a CAGR of 0.41 percent over the last five years for patients receiving a CT procedure as shown below.

Fiscal Year	Total # of Patients Receiving a CT Procedure	Annual Growth Rate
2008	46,675	–
2009	47,674	2.14%
2010	45,875	-3.77%
2011	47,417	3.36%
2012	47,444	0.06%
CAGR		0.41%

On page 25, the applicant notes that despite the small increase in CT patients, the number of CT procedures has decreased significantly over the last two fiscal years by a CAGR of negative 4.49 percent for unweighted CT procedures and a CAGR of negative 5.50 percent for CT HECT units. The applicant states

"*The decline in the number of CT scans is due the following factors:*

- *There is a more concerted effort on the part of the WFBMC physicians and imaging staff to reduce the number of unnecessary scans as radiation safety has become a more predominant patient safety concern.*
- *A significant CPT coding change occurred in January 2011. Prior to January 2011, WFBMC billed separately for CTs of the Abdomen and CTs of the Pelvis. These sets of scans, which account for 18-21% of the total scan volume have been combined into one, where they were previously counted as two, and as a result the coding change resulted in a decline in the reported volume numbers.*
- *Redirection by managed care payers to freestanding imaging centers, when appropriate, for their patient panels.*

- *Stricter preauthorization requirements by payers.*

Despite this decline in the number of CT scans, there is a clear need for a replacement CT scanner to accommodate and support projected patient growth requiring a CT given the volume of scans performed on an annual basis."

Step 2: Calculate the MRI and CT population increase and apply the scan ratio (procedures/patient).
The applicant states the methodology it used to project increases in MRI and CT patient volumes was to determine and apply a conservative population growth rate to the FY 2012 patient volume and then apply the scan ratio of procedures per patient to determine the number of projected procedures.

The applicant chose to develop its projects using the combined 19 county service area annual population growth rate of 0.91 percent per year. The applicant states this is conservative based on the chart on page 28 of the application, which indicates that over half of the patients receiving MRI or CT services are over age 45, with the 45-65 age group expected to increase at 1 percent per year and the 65+ age group expected to increase at 3.56 percent per year. The applicant also believes the population growth rate is supported due to the expected coverage expansion passed as part of the Affordable Health Care Act.

The applicant then applied the scan ratio of 1.23 for MRI procedures and 1.46 for CT procedures to the projected patient volumes to determine the total number of projected procedures through Project Year 3 (FY 2017).

Step 3: Determine the MRI and CT scanner capacity.
The applicant states the methodology it used to determine MRI and CT scanner capacity was to calculate capacity based on the definitions and standards found in the 2013 SMFP and 10A NCAC 14C .2300 respectively.

MRI volume assumptions
The applicant chose to project MRI unweighted procedures based on the historical FY 2008-2012 inpatient and outpatient mix of 27 percent inpatient and 74 percent outpatient. The applicant chose to project MRI weighted procedures based on averaging the historical FY 2008-2012 distribution by the 2013 SMFP Procedure Types for WFBMC's mix which is 28 percent outpatient w/no contrast/sedation, 45 percent outpatient w/ contract/sedation, 7 percent inpatient w/no contrast/sedation and 20 percent inpatient w/ contrast/sedation.

CT volume assumptions
The applicant chose to project CT HECT categories based on FY 2012 percentages, per the request of the Director of Radiology, in order to account for a full years' experience of CPT code changes.

Access to Services

In Section VI.2, page 57, the applicant states

> "*WFBMC does not discriminate based on age, race, national or ethnic origin, disability, sex, income, or ability to pay.*
>
> …
>
> *The proposed project will not change patient access to services at WFBMC."*

In Section VI, page 59, the applicant states

> *"WFBMC provides outpatient and inpatient services that regularly and routinely serve indigent and medically underserved patients. The ED is a major source of primary care and urgent care for those who do not have access to physician services. WFBMC subsidizes services to indigent and medically underserved patients by providing in excess of $4 million a year in subsidies to support the Downtown Health Plaza operating in eastern Winston Salem."*

The applicant states WFBMC provided 15 percent of its net revenue or $173.86 million in charity care for FY 2012.

In Section VI, page 63, the applicant projects that 86 percent of its patients will be covered by Medicare, Medicaid or Managed Care.

The applicant adequately demonstrates the need that this population has for the services proposed, and the extent to which all residents of the service area, and in particular, low income person, racial and ethnic minorities, women, handicapped person, the elderly, and other underserved groups are likely to have access to the services proposed.

In summary, the applicant adequately identifies the population to be served, demonstrates the need the population has for the replacement fixed MRI and CT scanners and the extent to which all residents of the service area are likely to have access to the services proposed. Therefore, the application is conforming to this criterion.

(3a) In the case of a reduction or elimination of a service, including the relocation of a facility or a service, the applicant shall demonstrate that the needs of the population presently served will be met adequately by the proposed relocation or by alternative arrangements, and the effect of the reduction, elimination or relocation of the service on the ability of low income persons, racial and ethnic minorities, women, handicapped persons, and other underserved groups and the elderly to obtain needed health care.

NA

(4) Where alternative methods of meeting the needs for the proposed project exist, the applicant shall demonstrate that the least costly or most effective alternative has been proposed.

CA

In Section III.3, pages 35-37, the applicant describes the alternatives considered prior to submitting the application, which include the following:

1) Maintain the Status Quo – the applicant states this alternative is not the most effective because it would not be in the best interest of the radiation therapy center's patients. The applicant states the current MRI scanner and CT scanner are already performing in excess of the state defined performance requirements, and are old, technologically outdated, and in need of frequent maintenance, causing a backlog of patients waiting for appointments.

2) Replace the Existing Fixed MRI and CT Scanners in their current locations – the applicant determined that this was the most effective alternative because the new scanners will be state–of-the-art and will enable the academic medical center to treat patients more effectively and efficiently.

The applicant adequately demonstrates that the proposal is its least costly or most effective alternative to meet the need to replace a current MRI and CT scanner. The application is conforming to all other applicable statutory and regulatory review criteria, and thus, is approvable. A project that cannot be approved cannot be an effective alternative. Therefore, the application is conforming to this criterion and approved subject to the following conditions and the condition in Criterion (1).

1. **North Carolina Baptist Hospital shall materially comply with all representations made in the certificate of need application.**

2. **North Carolina Baptist Hospital shall acquire no more than one fixed MRI scanner and one fixed CT scanner to replace an existing fixed MRI and CT scanner for a total of no more than 6 fixed MRI scanners and 11 CT scanners upon project completion.**
3. **North Carolina Baptist Hospital shall not acquire, as part of this project, any equipment that is not included in the project's proposed capital expenditure in Section VIII of the application and which would otherwise require a certificate of need.**

4. **North Carolina Baptist Hospital shall develop and implement an Energy Efficiency and Sustainability Plan for the project that conforms to or exceeds energy efficiency and water conservation standards incorporated in the latest editions of the North Carolina State Building Codes. The plan must be**

consistent with the applicant's representations in the written statement as described in paragraph one of Policy GEN-4.

5. North Carolina Baptist Hospital shall acknowledge acceptance of and agree to comply with all conditions stated herein to the Certificate of Need Section in writing prior to issuance of the certificate of need.

(5) Financial and operational projections for the project shall demonstrate the availability of funds for capital and operating needs as well as the immediate and long-term financial feasibility of the proposal, based upon reasonable projections of the costs of and charges for providing health services by the person proposing the service.

C

In Section VIII, pages 74-78, the applicant projects the total capital cost for the project will be $5,907,527. The capital costs are shown in the table below.

MRI Replacement	
Construction Contract	$493,500
Miscellaneous Project Costs	
Fixed Equipment	$2,800,000
Furniture	$3,000
Architect and Engineering	$35,000
Other	$8,500
Total MRI Replacement Cost	$3,340,000
CT Replacement	
Construction Contract	$465,000
Miscellaneous Project Costs	
Fixed Equipment	$2,062,527
Furniture	$2,500
Architect and Engineering	$30,000
Other	$7,500
Total CT Replacement Cost	$2,567,527
Total Capital Cost of Project	**$5,907,527**

In Section VIII.3, page 78, the applicant states that the capital costs will be funded with WFBMC internal accumulated reserves. In Section IX, page 82, the applicant states there will be no start up or initial operating expenses.

Exhibit 14 of the application contains a March 15, 2013 letter from Wake Forest Baptist Health's Associate Vice President for Financial Planning indicating North Carolina Baptist Hospital agrees to make available from its accumulated reserves a total of $5,907,527 for the capital costs incurred in the development of the MRI and CT

replacement project. The letter further states the Associate Vice President for Financial Planning attests to the availability of the funds.

Exhibit 15 of the application contains the audited financial statements for North Carolina Baptist Hospital and Affiliates for the years ending June 30, 2011 and June 30, 2010. As of June 30, 2011, North Carolina Baptist Hospital had $20,648,000 in cash and cash equivalents, $1,489,079,000 in total assets and $987,132,000 in total net assets (total assets less total liabilities). The applicant adequately demonstrates the availability of sufficient funds for the capital needs of the project.

In Section XIII, the applicant provides pro forma financial statements and assumptions for the first three operating years of the project for WFBMC. The applicant projects revenues will exceed operating expenses in each of the first three full fiscal years, as illustrated in the tables below.

WFBMC MRI Services*	**Project Year 1** 07/01/14 - 06/30/15	**Project Year 2** 07/01/15 - 06/30/16	**Project Year 3** 07/01/16 - 06/30/17
Projected # of Procedures	22,751	22,958	23,167
Projected Average Charge (Gross Patient Revenue / Projected # of Patients)	$3,817	$3,970	$4,129
Gross Patient Revenue	$86,844,000	$91,141,000	$95,649,000
Deductions from Gross Patient Revenue	$60,879,000	$65,005,000	$69,385,000
Net Patient Revenue	$25,965,000	$26,136,000	$26,264,000
Total Expenses	$18,885,000	$19,451,000	$20,043,000
Net Income	$7,080,000	$6,685,000	$6,221,000

* Source: Forms C & D.

WFBMC CT Services*	**Project Year 1** 07/01/14 - 06/30/15	**Project Year 2** 07/01/15 - 06/30/16	**Project Year 3** 07/01/16 - 06/30/17
Projected # of Procedures	71,177	71,824	72,478
Projected Average Charge (Gross Patient Revenue / Projected # of Procedures)	$2,550	$2,650	$2,753
Gross Patient Revenue	$181,503,000	$190,303,000	$199,527,000
Deductions from Gross Patient Revenue	$132,820,000	$141,562,000	$150,827,000

Net Patient Revenue	$48,684,000	$48,741,000	$48,699,000
Total Expenses	$35,250,000	$36,350,000	$37,491,000
Net Income	$13,433,000	$12,392,000	$11,208,000

* Source: Forms C & D.

The applicant also projects a positive net income for the entire facility in each of the first three operating years of the project.

WFBMC Entire Facility*	**Project Year 1** 07/01/14 - 06/30/15	**Project Year 2** 07/01/15 - 06/30/16	**Project Year 3** 07/01/16 - 06/30/17
Gross Patient Revenue	$3,703,926,000	$3,964,297,000	$4,192,877,000
Deductions from Gross Patient Revenue	$2,372,519,000	$2,570,190,000	$2,754,371,000
Net Patient Revenue	$1,331,406,000	$1,394,108,000	$1,438,506,000
Total Expenses	$1,326,671,000	$1,385,582,000	$1,430,279,000
Net Income	$43,753,000	$51,055,000	$55,010,000

* Source: Form B.

The projected costs and revenues are based on reasonable assumptions, including projected utilization. The applicant adequately demonstrates that the financial feasibility of the proposal is based upon reasonable projections of costs and charges. Therefore, the application is conforming to this criterion.

(6) The applicant shall demonstrate that the proposed project will not result in unnecessary duplication of existing or approved health service capabilities or facilities.

C

WFBMC states it proposes to replace one existing and technologically outdated fixed MRI scanner, located in vault one in the MRI Center, and one existing and technologically outdated fixed CT scanner, located in Reynolds Tower, CT Room number 21 and will renovate current space to accommodate the replacement equipment. The project will not result in the addition of an MRI scanner or a CT scanner to the inventory of fixed MRI or CT scanners in Forsyth County. The applicant adequately demonstrates the need to replace both pieces of equipment. See Criterion (3) for discussion regarding the need to replace the current equipment and the historical and projected utilization which is incorporated hereby as if set forth fully herein.

The applicant adequately demonstrates the proposal will not result in the unnecessary duplication of existing or approved MRI or CT scanners. Therefore, the application is conforming to this criterion.

(7) The applicant shall show evidence of the availability of resources, including health manpower and management personnel, for the provision of the services proposed to be provided.

C

In Section VII.1, pages 65-69, the applicant provides the current and projected staffing for the proposed MRI and CT services. The applicant states no new positions will result from this project and the current staff and personnel are appropriately trained.

	Current CT and MRI Staff FY 2012	**Projected CT and MRI Staff FY 2016**
Functional Area and Position	**Total # of Full Time Equivalent (FTE) Positions**	**Total # of Full Time Equivalent (FTE) Positions**
RNs	6.2	6.2
Radiology		
Technologists	36.4	36.4
Clerical	4.0	3.8
Other – Tech Extender	4.0	3.0
Total Staff	52.4 [50.6]	49.4

In Section VII.8, page 72, the applicant states that Dr. Thomas Sibert MD, MBA is the Chief Medical Officer for WFBMC. See Exhibit 13 for a copy of Dr. Sibert's Curriculum Vitae.

The applicant projects adequate health manpower to provide the proposed MRI and CT services and budgets sufficient funds for the number of positions it projects to provide. Therefore the application is conforming to this criterion.

(8) The applicant shall demonstrate that the provider of the proposed services will make available, or otherwise make arrangements for, the provision of the necessary ancillary and support services. The applicant shall also demonstrate that the proposed service will be coordinated with the existing health care system.

C

WFBCM is an existing acute care hospital which currently provides ancillary and support services for its inpatient and outpatient services, including MRI and CT services. In Section II.2, page 16, the applicant provides a list of ancillary and support services available to the Radiology Department.

In Section V, pages 52-56, and Exhibits 8 and 9, the applicant documents that MRI and CT services are coordinated with the existing health care system. Exhibit 10 contains letters of support for the proposed project.

The applicant adequately demonstrates the availability of the necessary ancillary and support services and that the proposed services would be coordinated with the existing health care system. Therefore, the application is conforming to this criterion.

(9) An applicant proposing to provide a substantial portion of the project's services to individuals not residing in the health service area in which the project is located, or in adjacent health service areas, shall document the special needs and circumstances that warrant service to these individuals.

NA

(10) When applicable, the applicant shall show that the special needs of health maintenance organizations will be fulfilled by the project. Specifically, the applicant shall show that the project accommodates: (a) The needs of enrolled members and reasonably anticipated new members of the HMO for the health service to be provided by the organization; and (b) The availability of new health services from non-HMO providers or other HMOs in a reasonable and cost-effective manner which is consistent with the basic method of operation of the HMO. In assessing the availability of these health services from these providers, the applicant shall consider only whether the services from these providers:

(i) would be available under a contract of at least 5 years duration;
(ii) would be available and conveniently accessible through physicians and other health professionals associated with the HMO;
(iii) would cost no more than if the services were provided by the HMO; and
(iv) would be available in a manner which is administratively feasible to the HMO.

NA

(11) Repealed effective July 1, 1987.

(12) Applications involving construction shall demonstrate that the cost, design, and means of construction proposed represent the most reasonable alternative, and that the construction project will not unduly increase the costs of providing health services by the person proposing the construction project or the costs and charges to the public of providing health services by other persons, and that applicable energy saving features have been incorporated into the construction plans.

NA

(13) The applicant shall demonstrate the contribution of the proposed service in meeting the health-related needs of the elderly and of members of medically underserved groups,

such as medically indigent or low income persons, Medicaid and Medicare recipients, racial and ethnic minorities, women, and handicapped persons, which have traditionally experienced difficulties in obtaining equal access to the proposed services, particularly those needs identified in the State Health Plan as deserving of priority. For the purpose of determining the extent to which the proposed service will be accessible, the applicant shall show:

(a) The extent to which medically underserved populations currently use the applicant's existing services in comparison to the percentage of the population in the applicant's service area which is medically underserved;

C

The following table illustrates the current payor mix for WFBMC for FY 2012, as reported by the applicant in Sections VI.12 - VI.13, pages 62-63.

Payor Category	Entire Facility Patient Days/ Procedures as Percent of Total Utilization	MRI Services Patient Days/ Procedures as Percent of Total Utilization	CT Services Patient Days/ Procedures as Percent of Total Utilization
Self Pay/ Indigent/ Charity	7%	6%	12%
Medicare / Medicare Managed Care	40%	34%	40%
Medicaid	18%	18%	14%
Managed Care / Commercial Insurance	30%	37%	28%
Other	5%	4%	7%
Total	100%	100%	100%

In Section VI.2, page 57, the applicant states "*WFBMC does not discriminate based on age, race, national or ethnic origin, disability, sex, income, or ability to pay.*"

The Division of Medical Assistance (DMA) maintains a website which offers information regarding the number of persons eligible for Medicaid assistance and estimates of the percentage of uninsured for each county in North Carolina. The following table illustrates those percentages for Forsyth County and statewide.

	Total # of Medicaid Eligibles as % of Total Population	Total # of Medicaid Eligibles Age 21 and older as % of Total Population	% Uninsured CY 2009 (Estimate by Cecil G. Sheps Center)*

Forsyth	16.0%	5.7%	19.5%
Statewide	17.0%	6.7%	19.7%

* More current data, particularly with regard to the estimated uninsured percentages, was not available.

The majority of Medicaid eligibles are children under the age of 21. Moreover, the number of persons eligible for Medicaid assistance may be greater than the number of Medicaid eligibles who actually utilize health services. The DMA website includes information regarding dental services which illustrates this point. For dental services only, DMA provides a comparison of the number of persons eligible for dental services with the number actually receiving services. The statewide percentage of persons eligible to receive dental services who actually received dental services was 48.6% for those age 20 and younger and 31.6% for those age 21 and older. Forsyth County was 50.4% and 30.8% respectively. Similar information is not provided on the website for other types of services covered by Medicaid. However, it is reasonable to assume that the percentage of those actually receiving other types of health services covered by Medicaid is less than the percentage that is eligible for those services.

The Office of State Budget & Management (OSBM) maintains a website which provides historical and projected population data for each county in North Carolina. In addition, data is available by age, race or gender. However, a direct comparison to the applicant's current payor mix would be of little value. The population data by age, race or gender does not include information on the number of elderly, minorities or women utilizing health services. Furthermore, OSBM's website does not include information on the number of handicapped persons.

The applicant demonstrates that medically underserved populations have adequate access to WFBMC's existing services and the application is conforming to this criterion.

(b) Its past performance in meeting its obligation, if any, under any applicable regulations requiring provision of uncompensated care, community service, or access by minorities and handicapped persons to programs receiving federal assistance, including the existence of any civil rights access complaints against the applicant;

C

Recipients of Hill-Burton funds were required to provide uncompensated care, community service and access by minorities and handicapped persons. In Section VI.11, page 62, the applicant states WFBMC has not had any formal obligation to provide uncompensated care during the last three years. In Section VI.6, page 59, the applicant states WFBMC provides services that routinely serve indigent and medically underserved patients. The applicant further states

that WFBMC subsidizes services to indigent and medically underserved patients in excess of four million dollars a year by supporting Downtown Health Plaza in Winston-Salem. The applicant states *"Downtown Health Plaza provides more than 70,000 visits per year, of which 30% are uninsured."*

In Section VI.10, page 61, the applicant states that no complaints have been filed against WFBMC regarding civil rights equal access in the last five years. The application is conforming to this criterion.

(c) That the elderly and the medically underserved groups identified in this subdivision will be served by the applicant's proposed services and the extent to which each of these groups is expected to utilize the proposed services; and

C

The following table illustrates the projected payor mix during the second operating year (FY 2016) as reported by the applicant in Sections VI.14 - VI.15, pages 63-64.

Payor Category	Entire Facility Patient Days/ Procedures as Percent of Total Utilization	MRI Services Patient Days/ Procedures as Percent of Total Utilization	CT Services Patient Days/ Procedures as Percent of Total Utilization
Self Pay/ Indigent/ Charity	7%	7%	12%
Medicare / Medicare Managed Care	42%	36%	43%
Medicaid	17%	21%	16%
Managed Care / Commercial Insurance	28%	31%	22%
Other **	5%	4%	7%
Total	100%	100%	100%

On page 63, the applicant states WFBMC's payor mix is based on projected adjusted patient days from 07/01/2012 – 06/30/2013. *"Adjusted patient days represent inpatient days plus an outpatient adjustment based on outpatient revenues."*

On page 64, the applicant states the payor mix for MRI and CT services is *"…assumed to remain unchanged following the completion of the project relative to recent experience."*

In the assumptions supporting the ProFormas in Section XIII, in the "*Payor and Procedure Mix"* section, the applicant states:

"MRI Patients commonly utilize both inpatient and outpatient services. Because of the mix in reimbursement trends for these services, the total reimbursement rates are a hybrid of declining im[n]patient percentages and mostly neutral outpatient growth. The influence of healthcare reform also causes an expected shift from some previously self-pay and managed care payors to healthcare exchanges that are expected to pay at or above Medicaid rates.

CT volumes are expected to continue to increase at the entity level, as CT imaging continues to be a valuable diagnostic tool that is widely accepted. Because of the patient volume mix is heavy in outpatients, CT will continue to support heavy throughput. In reimbursement trends for these services, the total reimbursement rates are a hybrid of steady inpatient percentages and mostly neutral outpatient growth. The influence of healthcare reform also causes an expected shift from some previously self-pay and managed care payors to healthcare exchanges that are expected to pay at or above Medicaid rates."

Exhibit 11 contains WFBMC's Financial, Collection and Admission Policies. The applicant demonstrates that medically underserved populations will continue to have adequate access to the facility's services. Therefore, the application is conforming to this criterion.

(d) That the applicant offers a range of means by which a person will have access to its services. Examples of a range of means are outpatient services, admission by house staff, and admission by personal physicians.

C

In Section VI.9, pages 60-61, the applicant describes the range of means by which a person will access MRI and CT services. The application is conforming to this criterion.

(14) The applicant shall demonstrate that the proposed health services accommodate the clinical needs of health professional training programs in the area, as applicable.

C

In Section V.1, page 52, the applicant states that WFBMC has been providing acute care services for more than 90 years and has established relationships with many clinical training programs in the Southeast. The applicant states WFBMC will continue to provide teaching opportunities for the clinical training programs. See Exhibit 8 for a list of educational programs that use WFBMC facilities for clinical training. The information provided is reasonable and credible and supports a finding of conformity with this criterion.

(15) Repealed effective July 1, 1987.
(16) Repealed effective July 1, 1987.
(17) Repealed effective July 1, 1987.
(18) Repealed effective July 1, 1987.

(18a) The applicant shall demonstrate the expected effects of the proposed services on competition in the proposed service area, including how any enhanced competition will have a positive impact upon the cost effectiveness, quality, and access to the services proposed; and in the case of applications for services where competition between providers will not have a favorable impact on cost-effectiveness, quality, and access to the services proposed, the applicant shall demonstrate that its application is for a service on which competition will not have a favorable impact.

C

The applicant proposes to replace one existing fixed MRI scanner and one existing fixed CT scanner at WFBMC and will renovate the current space. The existing MRI scanner, located in vault one of the MRI Center, is 25 years old and will be replaced with a Siemens Magnetom Skrya 3T MRI scanner. The existing CT scanner, located in Reynolds Tower, in CT Room number 21, is seven years old and will be replaced with a Siemens Flash CT scanner. The applicant is not proposing to add any additional beds, equipment, or new services in Forsyth County.

In Section V.7, page 55, the applicant discusses the impact of the proposed project on competition in the service area as it relates to promoting cost-effectiveness, quality, and access. The applicant states *"The proposed project will foster competition by promoting cost effectiveness, quality, and access to standard of care health services in Forsyth County."* See Sections II, III, V, VI, and VII where the applicant discusses the impact of the project on cost-effectiveness, quality, and access.
The information provided by the applicant is reasonable and credible and adequately demonstrates that the expected effects of the proposal on competition in the service area include a positive impact on cost effectiveness, quality, and access to MRI and CT services in Forsyth County. This determination is based on information in the application and the following analysis:

- The applicant adequately demonstrates the need to replace the existing MRI scanner in vault 1 of the MRI Center and the existing CT scanner, located in Reynolds Tower, in CT Room number 21;
- The applicant adequately demonstrates that the proposal is a cost-effective alternative to meet the need (see Section III of the application);

- The applicant will continue to provide quality services (see Section II and VII of the application);
- The applicant will continue to provide adequate access to medically underserved populations (see Section III and VI of the application); and
- The proposal will have a positive impact on competition by providing residents with increased access to quality services (see Section II and VI of the application).

Therefore, the application is conforming to this criterion.

(19) Repealed effective July 1, 1987.

(20) An applicant already involved in the provision of health services shall provide evidence that quality care has been provided in the past.

C

North Carolina Baptist Hospital is accredited by the Joint Commission and certified for Medicare and Medicaid participation. According to the files in the Acute and Home Care Licensure and Certification Section, Division of Health Service Regulation, no incidents occurred, within the eighteen months immediately preceding the date of this decision, for which any sanctions or penalties related to quality of care were imposed by the State on the hospital. Therefore, the application is conforming to this criterion.

(21) Repealed effective July 1, 1987.

(b) The Department is authorized to adopt rules for the review of particular types of applications that will be used in addition to those criteria outlined in subsection (a) of this section and may vary according to the purpose for which a particular review is being conducted or the type of health service reviewed. No such rule adopted by the Department shall require an academic medical center teaching hospital, as defined by the State Medical Facilities Plan, to demonstrate that any facility or service at another hospital is being appropriately utilized in order for that academic medical center teaching hospital to be approved for the issuance of a certificate of need to develop any similar facility or service.

NA