

**Department of Health and Human Services
Division of Licensing and Regulatory Services
State House, Augusta, Maine
Preliminary Analysis**

Date: 6/20/2007

Project: Proposal by Mid-Coast Hospital

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Directly Affected Party: Parkview Adventist Medical Center
Bath Iron Works

Recommendation: APPROVE WITH CONDITIONS

Estimated Capital Expenditure per Applicant	\$21,324,000
Approved Capital Expenditure per CON	\$19,803,133
Maximum Contingency per CON	\$1,521,113
Total Approved Capital Expenditure with Contingency	\$21,324,246
Capital Investment Fund Impact: (2 years)	\$1,560,407

INTRODUCTION:

The Certificate of Need (CON) application proposed by Mid Coast Hospital (MCH) includes a 31,650 square foot expansion to the existing facility. This will allow the construction and activation of 18 currently licensed medical surgical beds. It will also add three treatment rooms in a newly constructed emergency department to meet increasing service need. The existing emergency department will be converted into a six bed holding area for diagnostic imaging to improve the throughput of the hospital's diagnostic equipment.

MCH presently has a licensed capacity for 104 beds but has a current bed complement of 74 (staffed beds).¹ The CON definition of Bed Capacity is: "the licensed capacity of a health care facility". The CON definition of Bed Complement is: "the total number of beds that are normally available for inpatient use".²

Parkview Adventist Medical Center (PAMC), the other hospital in the service area, has a licensed capacity for 55 beds that is equivalent to its 55 bed complement.

According to information contained in the record, "in 1987 the former Bath memorial and Regional Memorial hospitals came together under Mid Coast Health Services and ultimately merged as Mid Coast Hospital in 1991. In 2001, the two campuses were combined into a single, efficient, state of the art facility located halfway between Bath and Brunswick. With this combination came a reduction in licensed beds in the community from 200 to 159."

Today, the area served by these hospitals presently has a total of 159 licensed beds (bed capacity) with a total bed complement of 129 beds. Construction of an addition to the existing MCH building is proposed to meet the need for services and move its bed complement to 92 beds, closer to its licensed capacity of 104 beds and the total 159 bed licensed capacity in the service area. With the proposed activation of 18 beds, MCH would still be 12 beds below its presently licensed capacity.

The activation of eighteen medical surgical beds and the expansion of the emergency department are proposed to reduce and potentially eliminate the practice of ambulance diversion and patient boarding that are documented threats to public safety. Improved throughput of the diagnostic imaging service is predicted to extend the life of the existing imaging equipment. This project also includes the re-design of the nursing delivery model. This redesign is intended to improve the way patient care is managed in the acute care setting, especially as it relates to patients with chronic diseases.

The expansion of the emergency department will provide additional capacity to meet the service needs of the Behavioral Health population served by MCH, which is the only hospital in the region with an in-patient behavioral health unit. This unit serves as a community, regional and statewide referral site and will increase from two to three secure rooms and also increase support space for staff.

The proposed capital expenditure is \$21,324,000 and the third year incremental operating costs are \$3,120,813 (per CONU adjustments). The capital expenditure estimate of \$21,324,000 was developed

¹ Division of Licensing and Regulatory Services, Hospital Bed Count, 1/23/07

² 10-144 Chapter 503, Maine Certificate of Need Procedure Manual, pg 5

based upon detailed cost estimates. The project will be financed with an equity contribution of \$10,000,000 and \$11,324,000 in bonds issued through the MHHEFA.

MCH will set aside an additional \$3,000,000 as an endowment, the income from which will be designated entirely for wellness, prevention and chronic disease management programs. Based on an analysis of unmet needs, these funds will initially be targeted toward the prevention of obesity.

The applicant projects lowering the future cost of healthcare for mid coast communities. MCH's Cost per Adjusted Discharge (CPAD) in 2013 is projected to be \$422 less than the Dirigo voluntary limit. According to information provided by the applicant, this equates to annual savings of \$ 6.9 million.

The applicant included detailed demand projections through the year 2020 as support for this projection. These demand projections account for the significant increase in hospital admissions as a result of an aging population and the closure of the Brunswick Naval Air Station. Mid Coast's service area has a higher proportion of elderly than Maine as a whole and is projected to experience a 62% growth in the 65+ population over the next 14 years. The population projections included in the application have been modified by the applicant to incorporate the closure of the Brunswick Naval Air Station.

The applicant explained its previous effort to alleviate diversions and boarding and enhance throughput. Consolidation discussions between Parkview Adventist Medical Center and Mid Coast Hospital were also discussed in this application.

Considerable public input was received in writing and at a Public Hearing held March 13, 2007. Input (verbal and written) included personal testimonies and professional letters, reports, and commentaries. All input received, as well as other documents reviewed by the CONU, have been made a part of the record as required by statute.

The focus of this CONU review is limited by statute to the scope of Certificate of Need covered activities and the criteria governing reviews and determinations.

I. Project Description:

A. From Applicant

“In order to alleviate constrained capacity and respond to community need, Mid Coast Hospital is proposing a 31,650 square foot expansion of its existing hospital. The expansion consists of activating 18 of its previously licensed medical surgical beds, the addition of 3 emergency department treatment rooms and the addition of a 6 bed holding area to extend the life and improve the throughput of the hospital’s most expensive diagnostic imaging equipment. As part of this project, Mid Coast Hospital is also proposing a redesign of its nursing delivery model to better address and manage patients with chronic disease. A complete description of this new delivery model is included as APPENDIX II Schedule 5 (*on file with CONU*). Finally, as part of this project, Mid Coast Hospital will set aside \$3,000,000 of internal funds to create an endowment, the income of which will be used solely for the purposes of wellness, prevention and chronic disease programs.”

“The proposed capital expenditure for this project is \$ 21,324,000 and the proposed third year operating costs (un-inflated) are \$2,510,000.”

“This proposed project ensures public safety which is a top priority of the State Health Plan. Mid Coast Hospital’s inpatient Medical Surgical and Emergency Room bed capacity is currently insufficient to meet the needs of the community. In a paper titled “Emergency department overcrowding in the United States: an emerging threat to patient safety and public health” (APPENDIX II, Schedule 1(*on file with CONU*)) the authors describe the role of emergency rooms in protecting public safety and their key role in providing this country’s health care safety net. In this article the authors state “therefore the role of the ED is crucial for public health. Any threat to the ED’s ability to provide quality emergency care constitutes a public health crisis. Currently the greatest threat to the viability of the US emergency care system is ED overcrowding.” Two key indicators of Emergency Department overcrowding are “diversions” and “boarding”. Hospitals go on “diversion” when the Emergency Department becomes too crowded to adequately and safely take another ambulance. Hospitals “board” patients in the Emergency Department when there are no available inpatient beds. APPENDIX II, Schedule 2 (*on file with CONU*) summarizes the number of times that Mid Coast Hospital has gone on diversion over the last five years. These numbers have grown significantly in the last two years. The Institute of Medicine’s June 2006 report titled “the Future of Emergency Care in the United States” (see APPENDIX II, Schedule 3) (*on file with CONU*) states “each diversion adds precious minutes to the time before a patient can be wheeled into an ED and be seen by a doctor, and these delays may in fact mean the difference between life and death.” APPENDIX II, Schedule 2 (*on file with CONU*) summarizes the number of hours that patients were “boarded” in the emergency room when no inpatient bed was available. Again, these numbers have increased dramatically in the past two years. The patient safety issues associated with boarding are significant. The Joint Commission on the Accreditation of Hospital Organizations (JCAHO) found that one half of all sentinel event cases of poor outcomes were attributable to delays in therapy originated in the ED, with ED overcrowding playing a role in one-third of these cases (see APPENDIX II, Schedule 4)(*on file with CONU*). By increasing the number of inpatient beds and the number of emergency department treatment rooms, ambulance diversions and boarding should be significantly reduced if not eliminated.”

“Second, as part of this project, Mid Coast Hospital is redesigning the nursing delivery model to better address and manage the acute episode of care and chronic illness care for all patients. APPENDIX II, Schedule 5 includes a complete description of this new delivery model. To summarize, all of the discharge planning, quality review and complex case management functions that previously took place on the back end of a patient’s acute hospital stay will now be integrated into the nursing delivery model. In addition to the bedside clinical nurse and attending physician, Patient Care Coordinators will be assigned to every patient to make sure that evidenced-based practices are followed throughout the patient’s stay. This clinically expert and experienced nurse will provide a critical safety net to ensure that quality and safe practices are followed concurrently, in addition to coordinating efficient and timely care throughout the patient’s hospitalization. This model will also ensure consistent and appropriate hand-off at the time of discharge from both the Medical Surgical Unit and Emergency Department to community primary care based chronic illness managers through Mid Coast’s affiliation with the Maine Medical Center PHO.

“Third, as part of this project and to show the commitment to the priorities in the State Health Plan, Mid Coast will set aside \$3,000,000 of internal funds to create an endowment, the income of which will be used solely for the purposes of wellness, prevention and chronic disease programs. Historically, Mid Coast Hospital has been a leader in the areas of wellness, prevention and chronic disease management. Mid Coast has developed highly regarded programs ranging from “Running Start”, which is an adult fitness program and was created in the 1980’s to “Living with Diabetes” which is a chronic disease management program and has been in place for close to twenty years. A complete list of wellness, prevention and chronic disease management programs is included as APPENDIX II, Schedule 6 (*on file with CONU*). The addition of this \$3,000,000 endowment will generate substantial ongoing income and provide a significant boost for these important programs.”

“Fourth, the State Health Plan gives priority to projects that lower healthcare costs. Mid Coast Hospital is already recognized as one of the lowest cost hospitals in the State, especially when compared against hospitals of similar size and providing similar services. The most common efficiency measure used in the industry, and the measurement used as part of the Dirigo legislation, is cost per adjusted discharge (CPAD). Hospitals have been asked, as part of the Dirigo legislation, to voluntarily limit the increase in CPAD to no more than 3.5% per year. Mid Coast’s CPAD in the third year of operation is projected to be \$6,405, which is \$422 less than the current CPAD trended forward. This equates to \$6.9 million in savings on an annual basis.”

“Fifth, Mid Coast Hospital is committed to improving the quality and safety of patient care by deploying Information Technology throughout its system and by eventually sharing this information via the MHINT. As more fully described in Question 9 of this section, and in Section VIII, Mid Coast Hospital has committed over \$5 million so far to these initiatives.”

“For all of these reasons, Mid Coast Hospital’s proposed project is consistent with the priorities of the State Health Plan. Yet, as more fully described in Section VI, Mid Coast also believes that the best alternative, for the mid coast communities, is to have a single integrated delivery system. This vision is entirely consistent with the priorities of the State Health Plan. Over the past twenty years Mid Coast Health Services has taken substantial steps to implement this vision. In 1987, the former Bath Memorial and Regional Memorial hospitals came together under Mid Coast Health Services and ultimately merged as Mid Coast Hospital in 1991. In 2001, the two campuses were combined into a

single, efficient, state of the art facility located halfway between Bath and Brunswick. With this combination came the reduction in licensed beds in the communities from 200 to 159.”

“Soon after opening the new hospital, it became evident that Mid Coast Hospital would be constrained from a capacity standpoint. The hospital immediately created two teams to deal with constrained capacity; one to look at short-term issues and the second to look at long-term issues. The short-term team developed a number of recommendations to eliminate bottlenecks in the system and, in effect, create more capacity. These recommendations have been implemented and are more fully described in Section VI. The long-term team focused on bigger picture issues and in 2004 Mid Coast Health Services attempted to “do the right thing” for the mid coast communities by initiating discussions with Parkview Adventist Medical Center (PAMC).”

“It is significant to note that PAMC is a religious hospital owned by the Northern New England Conference of Seventh Day Adventist Churches. APPENDIX VI, Schedules 3a through 3i (*on file with CONU*) consist of the complete trail of documentation of these discussions. Unfortunately for the communities, the Northern New England Conference of Churches (Parkview’s owners) has rejected the notion of a single integrated healthcare system based on “faith-based issues”. The Church has repeatedly stated that Parkview’s reason for existence is its faith-based mission. While Mid Coast respects this mission, the hospital also believes that the State Health Plan is correct in advocating for the consolidation of hospitals. And, Mid Coast Hospital would argue adamantly, that given PAMC’s refusal to consider consolidation, their unused capacity should not be considered in determining the need for this project.”

“Without Parkview’s cooperation, this leaves Mid Coast Hospital no choice but to seek permission from the State for the expansion outlined in this application.”

“As part of this project Mid Coast Hospital is setting aside \$3,000,000 to create an endowment, the income of which will be devoted solely for the purposes of wellness, prevention and chronic disease management. APPENDIX II, Schedule 6 is a matrix that inventories Mid Coast Health Services current efforts in the entire continuum of chronic disease management including population based prevention and screening programs, the management of acute episodes, outpatient care management, and secondary prevention and education. This matrix shows that Mid Coast Health Services is clearly committed to building healthier communities by preventing disease. Yet, this matrix also shows that there are unmet needs and gaps in Mid Coast’s current array of services especially as it relates the prevention of obesity. Therefore, as part of this project, Mid Coast is proposing to include a complementary program targeted at preventing obesity.”

“Over the past year, Mid Coast Hospital’s Obesity Task force has been exploring and researching the most effective model for accomplishing these objectives. While the work of this task force is not complete, the group is favoring a model that includes three components: 1) a preventative component for children and adults consisting of community education, health promotion, and influencing community policy; 2) a chronic disease management component for children and adults designed to arm primary care physicians with evidenced based, best practice tools to address obesity and weight management issues in the office setting; and 3) a medical clinic component that would be a multidisciplinary referral center, including medical management, nutritional counseling, exercise counseling, and psychosocial counseling.”

“The project will be an expansion of the existing Mid Coast Hospital located in Brunswick, Maine. After exploring a number of alternatives, the proposed option includes building new space for the emergency department, building 18 medical surgical beds over this space, and renovating the vacated emergency department space to create a holding area to support the diagnostic imaging department. This approach is the most economical alternative for meeting the needs of the community.”

“The relationship of the proposed project to the applicant's current services.”

“Medical Surgical Beds - The additional Medical Surgical beds represent an expansion of the hospital’s medical surgical capacity from one to two units. All systems of care (medication administration, etc.) on the new unit will mirror the systems of care established on the existing medical surgical unit to ensure patient safety and consistency. One nurse manager will oversee both units which will help to ensure a single standard of care across both units.”

“Emergency Department – The new emergency department will be built adjacent to the current emergency department. Mid Coast Hospital could not be happier with the flow and function of its “new” hospital. The one exception to this statement is relative to the current emergency department. The current emergency department is undersized, and has not worked well from a patient flow and function standpoint. The proposed new emergency department gives the hospital and its staff the opportunity to “start over” and correct all of the deficiencies of the current space.”

“Holding Area for Diagnostic Imaging - The addition of a holding area to support the diagnostic imaging department is a cost effective way to improve CT and MRI throughput thereby increasing capacity and avoiding the need to purchase second CT and MRI units. This holding area will occupy the space vacated by the current emergency department and is adjacent to the diagnostic imaging department allowing for an efficient flow of patients both pre and post procedure.”

“The public will benefit from the proposed project in a number of ways:

First, Mid Coast Hospital does not currently have enough capacity in the medical surgical, emergency and diagnostic imaging departments to handle the community’s demand. The proposed project responds to this demand and will reduce the threats to public safety associated with not having enough beds or capacity to treat some of the community’s sickest patients.”

“Second, the public will benefit from Mid Coast Hospital’s introduction of a new nursing delivery model associated with this project. This model will assure the absolute best care for patients with chronic disease that are admitted to the hospital during their acute care episode and a seamless integration with the care management they receive outside of the hospital via the care managers assigned by the Maine Medical Center PHO.”

“Third, the public will benefit from the \$3,000,000 endowment that Mid Coast is creating as part of this project to further the efforts of prevention, wellness and chronic disease management. The estimated income from this endowment of \$120,000 to \$150,000 per year will be designated solely for chronic disease management, prevention and wellness services for the communities.”

“Fourth, as documented above, the public will benefit from the increased efficiency of Mid Coast Hospital as a result of this project. The prices that Mid Coast Hospital charges for its services will not increase as a result of this project.”

“The anticipated gains in effectiveness and/or efficiency associated with the proposed project and how those will be measured/reported.”

“First, this project will reduce the number of times that Mid Coast Hospital goes on diversion which, as documented throughout this application, puts the communities at risk. The three additional treatment rooms proposed as part of this project are designed to significantly reduce and hopefully eliminate the need to divert patients. Diversions are tracked currently (see APPENDIX II, Schedule 2) and will continue to be tracked once the project goes live.”

“Second, the addition of the Medical Surgical beds will eliminate the need for patients to board in the emergency department awaiting a bed. This information is tracked currently (see APPENDIX II, Schedule 2) and will continue to be tracked once the project goes live.”

“Third, the additional Emergency Department treatment rooms will improve the flow and function of the space and ultimately improve patient satisfaction. While Mid Coast Hospital’s Avatar patient satisfaction scores in the Emergency Department compare favorably to national data, the scores are lagging slightly behind other Maine hospitals. This information is tracked currently (see APPENDIX II, Schedule 7) and will continue to be tracked once this project goes live.”

“Fourth, the addition of the Holding Area to support the diagnostic imaging department will improve the throughput for patients receiving CT Scan, MRI and other special procedures. As more fully described later in this application, the holding area will improve the efficiency of this entire service and avoid the costly alternative of purchasing additional expensive equipment.”

“Fifth, as described previously, this project allows Mid Coast Hospital to continue its status as one of the most efficient hospitals in Maine. From an economic standpoint, hospitals are no different from any other entity in that they must grow and constantly improve productivity in order to maintain price stability.”

“Mid Coast Hospital has complied each year with the voluntary price and cost targets established by the Dirigo Act. APPENDIX II, Schedule 8 is Maine Hospital Association’s calculation of the voluntary price and cost targets established by the Dirigo Reform Act, PL 469 for Mid Coast Hospital’s FY 2003 and FY 2004. It is also important to point out that Mid Coast continues to operate below the statewide average on these measures.”

“Mid Coast Hospital has made and is continuing to make major investments in Information Technology (IT) in order to improve patient safety, quality and ultimately lower the cost of healthcare. In 2001, Mid Coast Hospital made an important decision to take a major leap forward in its IT area by outsourcing its IT department to Computer Sciences Corporation (CSC), one of the leading IT outsourcing vendors in the world. This increased Mid Coast’s annual investment in IT by 400% and has given the health system the ability to rapidly advance the deployment of clinical information technology.”

“In 2002, Mid Coast Hospital replaced its entire hospital information system with a new system (CPSI) that provides clinicians with the tools that they need to provide safe, quality care. Phase I of the CPSI implementation automated a number of areas that previously had been manual including clinical order entry, clinical documentation, radiology, and surgical services. This Phase has automated approximately 70% of the hospital’s medical record. Phase II of the CPSI implementation is the introduction of Computerized Physician Order Entry (CPOE). After intensive testing and trialing of the system, CPOE is set to go live in late 2007. CPOE is recognized by the Leapfrog organization as a benchmark for patient safety.”

“During the same period of time, Mid Coast Hospital selected the Phillips-Stentor Picture Archival and Communications System (PACS) system to digitize the Diagnostic Imaging department. This project went live in May 2006 and has been very successful allowing the hospital to eliminate 90% of film and to improve results turnaround time from 36 hours to less than 8 hours.”

“In 2005, Mid Coast Medical Group selected the GE Centricity system for its physician electronic medical record (EMR). An interface from the CPSI system moves hospital test results continuously into the GE Centricity EMR. This system has significant built-in functionality to manage patients with chronic disease and also has the capability of interfacing with Maine Health’s chronic disease registry database. In addition to implementing the GE Centricity EMR for its own practices, Mid Coast Hospital, through its contract with Computer Sciences Corporation, is working with a number of other practices in the community to implement GE Centricity. The ultimate vision is to have as many practices on one system as possible thereby allowing an efficient link to the MHINT.”

“All of these systems are HL7 compliant.”

The region’s existing capacity for such services, including how the proposed project impacts volume of services and quality of care of other providers in the local area, as well as the primary or secondary service area.

“**Bed Capacity** - In addition to the 104 licensed beds (74 beds have been activated) at Mid Coast Hospital, there are 55 licensed beds at Parkview Adventist Medical Center (PAMC). On average, the beds at PAMC are utilized at an occupancy rate of 40%. As stated earlier, there appears to be sufficient capacity in the mid coast region when you consider the unused capacity at PAMC. However, Mid Coast does not believe that it is appropriate to consider Parkview’s unused capacity for the following reasons:”

“First, as described above, the owners of PAMC, the Northern New England Conference of Seventh Day Adventist Churches, have rejected the notion of consolidation with Mid Coast Hospital. The consolidation of hospitals is listed as a specific priority of the State Health Plan. Denying this application because of PAMC’s unused capacity would reward Parkview for ignoring the priorities of the State Health Plan and penalize Mid Coast Hospital for its efforts to comply with the State Health Plan.”

“Second, there is a growing preference among the medical community for Mid Coast Hospital. Denying this application would force the Mid Coast medical staff to admit and care for their patients at PAMC. Unlike other two hospital communities, very few of the physicians cross between Mid

Coast Hospital and PAMC In fact, of the 122 members on Mid Coast's active medical staff only 28 have active staff privileges at PAMC. Of the 28 that have privileges at PAMC, there are just two physicians that practice adult family and/or internal medicine. In the past year, three significant physician groups have stopped using PAMC including Chest Medicine Associates, Bowdoin Medical Group, and three of the OB/GYN providers that were previously employed by PAMC. Chest Medicine Associates is a group of four pulmonologists that provide intensivist coverage in the Intensive Care Unit. The Bowdoin Medical Group is the largest primary care group in the region. APPENDIX II, Schedule 9 includes letters from each of these groups explaining why they no longer practice at PAMC."

"Third, there is a growing preference among the patient community for Mid Coast Hospital. As described above and documented in APPENDIX II, Schedule 10, there has been a significant market shift toward Mid Coast Hospital in the past five years. Denying this application would force patients, currently affiliated with Mid Coast Hospital physicians, to use PAMC. Mid Coast does not believe that limiting access and reducing choices for patients is good public policy."

"Fourth, although it is unlikely that the Mid Coast Hospital medical staff would willingly admit their patients to PAMC, assuming that they did, there would be a substantial increase in the cost of healthcare to the communities. Based on the CPAD reports included as APPENDIX II, Schedule 8, through 2004 Mid Coast Hospital was tracking 4% below PAMC. Although this data has not yet been published for 2005 and 2006, data tracked each quarter by the Maine Hospital Association shows Mid Coast Hospital for the most recent 12 month period to be tracking 19% below PAMC in terms of CPAD and 27% below PAMC in terms of Charges per adjusted discharge."

"Fifth, while PAMC may have the physical capacity to handle Mid Coast Hospital's growing demand, Parkview has not demonstrated the organizational, management or financial capacity to take on this demand. As described above, three significant physician groups in the area have stopped admitting their patients to PAMC. The common theme among these groups is quality of care and a lack of confidence in PAMC's administrative team (see APPENDIX II, Schedule 9). Parkview has incurred significant turnover among its key positions including the Vice President of Nursing (nine times in the last ten years) and Chief Financial Officer. During the last year, PAMC made a decision to drop their JCAHO accreditation. As described below, PAMC's financial condition is precarious. With no available cash and no available debt capacity, PAMC will be challenged to make the investments necessary to maintain its own infrastructure, not to mention the substantial investments that all hospitals must make in the future to improve quality and patient safety."

Emergency Room Capacity – In addition to the 12 treatment rooms at Mid Coast Hospital there are 7 treatment rooms at Parkview Adventist Medical Center (PAMC). Without detailed information from PAMC it is difficult to analyze the Emergency Department capacity from the community perspective. Based on anecdotal information and rough calculations, it does not appear that there is significant excess capacity in PAMC's emergency department."

How will costs of other providers likely be impacted (for example, will the planned service have an impact on rural providers by altering referral patterns that may impact the viability of such providers, and what can mitigate those impacts).

“The only other provider that may be impacted by this project is Parkview Adventist Medical Center (PAMC). As more fully described in Section IV, the demand for this project is driven primarily by population growth and the rapid aging of the population. The demand projections in Section IV include only minor increases in market share, significantly less than the rapid historical shift shown in APPENDIX II, Schedule 10. In other words, the projected demand for Mid Coast’s proposed project is not dependent on taking significant market from PAMC.”

“APPENDIX II, Schedule 11 is an analysis of PAMC’s financial condition. This analysis reveals an extremely precarious financial position whereby all of PAMC’s key financial ratios are below acceptable levels. PAMC’s poor financial performance is a result of the decisions that their management and Board have made over decades. The fact that PAMC has not established any reserve funds for the replacement of their aging plant is just one example of a decision that now places PAMC’s financial future in jeopardy. Whether or not PAMC is able to reverse these trends will ultimately be determined by their actions and not Mid Coast’s proposed project.”

“Whether “green” building standards strategies will be used and the potential impact of the project both on internal as well as external environments.”

“Mid Coast Hospital is committed to a sustainable approach to the design and operation of the proposed project. The architectural firm of Shepley, Bullfinch, Richardson, and Abbott is LEED certified and will plan according to LEED guidelines using an integrated approach. The following goals have been established relative to the project:”

- Improve the environment of care for patients and staff
- Contribute to the well-being of the greater community
- Provide optimal energy performance of heating and cooling equipment

“The following strategies will be utilized in order to achieve these goals:

- Reduce the incidence of heat island effect through use of light colored roofs
- Reduce light pollution through specification of cut-off fixtures
- Reuse of excavated soil where possible to manage construction waste
- Reuse building materials in the renovation of the Emergency Department when possible (may include plumbing fixture, casework, millwork handrails, lighting, and doors)
- Reuse furniture and medical furnishings where possible
- Specification of regionally produced and or manufactured materials
- Meeting and monitoring air quality performance
- Specification of low-emitting interior finishes including adhesives and sealants
- Specification of efficient air handling equipment
- Maximizing daylight and views
- Specification of highly absorptive ceiling tiles to ensure comfortable acoustic environment.”

“The proposed schedule for this project is included in APPENDIX II, Schedule 12. This schedule begins with the planning and design efforts that started in 2006 and ends with occupancy in the 4th calendar quarter of 2010 (Mid Coast Hospital’s FY 2011).”

“The proposed project is a combination of renovation and new construction. The medical surgical and emergency department portions of the project will be new construction. The holding area and diagnostic imaging space will involve the renovation of existing space. APPENDIX II, Schedule 13 includes the schematic drawings for the proposed project.”

“The new construction will be steel framed, stud construction, with a brick facade. The intent is to match the quality and appearance of the existing building. The new two story addition will have a flat membrane roof and will be built slab on grade.”

“The proposed project includes 31,650 gross square feet of new construction and 6,600 square feet of renovated space. The space breaks down as follows: “

Floor	Gross Square Feet
Ground Floor	600
First Floor	14,850
Second Floor	16,200
Total Gross (New)	31,650
Renovation	6,600

Department	Net Square Feet
Emergency Department (new)	12,300
Holding Area / Diagnostic Imaging (renovation)	4,800
Public Space (renovation)	1,600
Medical Surgical (new)	14,000
Total Net	32,700

“The schematic drawings, as well as a narrative describing the drawings, are part of the submission as APPENDIX II, Schedule 13 on file with CONU. The construction will take place on the existing site. The applicant declared that the project will be designed with the most current science on building enclosure including using air barrier wall construction with thermal insulation and a TPO membrane roof to ensure that the building can be efficiently cooled and heated and to prevent water leakage and condensation on the interiors. The construction will be planned to minimize disruption to the patients and staff. The project will include an ICRA (Infection Control Risk Mitigation) and work will be monitored by the hospital to ensure patient safety.”

“The total capital expenditures and the historic rate of growth in capital expenditures for the three most recent fiscal years are as follows:”

Fiscal Year	Total Capital Expenditures	Rate of Increase Over Previous Year
FY 2004	\$ 3,207,000	+52.5%
FY 2005	\$ 2,258,000	-29.6%
FY 2006	\$ 2,333,000	+3.3%

“Each year, Mid Coast Hospital puts together a capital budget to replace equipment as it reaches the end of its useful life, to meet the ever changing regulatory and patient safety standards, to keep up with changes in technology, to maintain its investment in buildings and fixed equipment and to advance the deployment of Information Technology throughout the hospital. The entire list of equipment for these three years represents approximately 450 line items. The largest single expenditure in FY 2004 was \$709,000 for the renovation of space required for digestive health. In FY 2005 the largest expenditures were \$356,000 to replace the chemistry analyzer and \$86,000 to replace a camera used for laparoscopic surgery. The largest expenditures in FY 2006 were \$153,000 to replace an ultrasound unit and \$142,000 to upgrade the telemetry system to comply with new FCC regulations.”

“A master plan for the Mid Coast Health Services campus was developed in 2000 and envisioned the potential expansion of the hospital on the existing hospital site. The proposed project is consistent with the master plan.”

“When the current hospital was built in 1999, enough steel was included in the infrastructure to allow the hospital to expand upward and add a third floor. This option has been dismissed as it would add approximately \$4,000,000 to the project cost and over six months to the schedule. The proposed plans call for the outward expansion of the building. Using this approach shortens the schedule, reduces the cost of the project, and minimizes patient disruption during construction.”

B. CONU Discussion

Mid Coast Hospital (MCH) is proposing to construct a 31,650 square foot expansion of its existing hospital in order to address documented issues of patient safety due to constrained capacity and to respond to an increasing need for services. Due to current size constraints, the expansion is necessary to activate 18 currently licensed medical surgical beds. Additionally, they propose adding 3 treatment rooms in a newly constructed emergency department. The existing emergency department will then be converted to a 6 bed holding area designed to facilitate efficient throughput for diagnostic imaging services.

The proposed construction will expand the medical surgical bed capacity of MCH from one unit to two. The new unit will “mirror” the existing unit and will be overseen by one nurse manager. This is designed to ensure patient safety and consistency as well as operational efficiency.

The emergency department will be constructed adjacent to the current emergency department. “The current emergency department is undersized, and has not worked well from a patient flow and function standpoint”. The vacated emergency room will be renovated to become a 6 bed holding area for

diagnostic imaging. This space is adjacent to the diagnostic imaging department and will facilitate efficient throughput for patients.

According to information contained in the application, “in 1987 the former Bath Memorial and Regional Memorial hospitals came together under Mid Coast Health Services and ultimately merged as Mid Coast Hospital in 1991. In 2001, the two campuses were combined into a single, efficient, state of the art facility located halfway between Bath and Brunswick. With this combination came a reduction in licensed beds in the community from 200 to 159.” Mid Coast is presently licensed for 104 beds (capacity) but is unable to activate to licensed capacity due to structural constraints. If approved, this application will move the MCH bed complement to 92 beds, 12 short of their licensed capacity. Parkview Adventist Medical Center (PAMC) is the other provider within this service area. It has 55 licensed beds with a 55 bed complement. The total bed complement within the service area will increase from 129 to 147 under this CON application. The 147 bed complement is 12 beds below the presently licensed capacity for this service area and 53 beds less than the previously licensed 200 beds.

The applicant presented a comprehensive description of this project in the project summary. The project summary also includes and defines several proposed project benefits and details that are reviewable by CON statute. These will be discussed in Sections II through XI, as applicable.

II. Profile of the Applicant

A. From Applicant

“The name and principal address of the applicant is Mid Coast Hospital, 123 Medical Center Drive, Brunswick, Maine 04011. Mid Coast Hospital is a non-profit, 501(c)(3) corporation.”

“Mid Coast Hospital’s primary service area includes Arrowsic, Bath, Brunswick, Bowdoin, Bowdoinham, Dresden, Durham, Edgecomb, Freeport, Georgetown, Harpswell, Phippsburg, Richmond, Topsham, West Bath, Westport, Wiscasset, Woolwich. The primary service area includes towns where Mid Coast Hospital represents 25% or more of the discharges or Mid Coast’s discharges are less than ten percentage points from the hospital with the greatest share of discharges.”

“Mid Coast Hospital’s secondary service area includes Alna, Boothbay, Boothbay Harbor, Lisbon, Nobleboro, Pownal and Southport. The secondary service area represents towns where Mid Coast Hospital represents 10% or more of the discharges. The source of this information is the most recent hospital inpatient origin report prepared by the Maine Health Information Center.”

“The names, locations, and relationships of all affiliated entities/related parties.”

“Mid Coast Health Services, 123 Medical Center Drive, Brunswick, Maine 04011
Relationship: Parent Organization of Mid Coast Health Management Corporation (MCHMC), Mid Coast Hospital (MCH), Community Health and Nursing Services (CHANS), Mid Coast Senior Health Center (MCSHC), and Mid Coast Medical Group.”

“Mid Coast Health Management Corporation, 123 Medical Center Drive, Brunswick, Maine 04011. Relationship: subsidiary of Mid Coast Health Services. Provides management services to each of the Mid Coast Health Services affiliates.”

“Community Health and Nursing Services (CHANS), 60 Baribeau Drive, Brunswick, Maine 04011. Relationship: subsidiary of Mid Coast Health Services. Provides home health and hospice services to the community.”

“Mid Coast Senior Health Center, 58 Baribeau Drive, Brunswick, Maine 04011 Relationship: subsidiary of Mid Coast Health Services. Provides long term care via 42 nursing facility beds, 39 assisted living apartments, and 17 Alzheimer’s apartments.”

“Mid Coast Medical Group, 123 Medical Center Drive, Brunswick, Maine 04011 Relationship: subsidiary of Mid Coast Health Services. Provides surgical services to residents of the mid coast communities.”

“Thornton Oaks Development Corporation, 123 Medical Center Drive, Brunswick, Maine 04011. This organization is Mid Coast Health Service’s real estate development entity and was one of the partners in the development of Thornton Oaks. Thornton Oaks is a retirement community consisting of 46 private homes and 98 apartments. Mid Coast Health Management Corporation has an ongoing management agreement with Thornton Oaks.”

“Mid Coast Heart Center LLC, 123 Medical Center Drive, Brunswick, Maine 04011. Mid Coast Heart Center LLC owns a minority interest in Mid Coast Cardiology, a four physician cardiology practice doing business in Brunswick, Maine.”

“Mid Coast Health Services, Mid Coast Health Management Corporation, Mid Coast Hospital, Community Health and Nursing Services, Mid Coast Senior Health Center, Mid Coast Medical Group, Thornton Oaks Development Corporation and Mid Coast Heart Center, LLC. These organizations provide the following services: acute inpatient and outpatient; home health and hospice; nursing facility, assisted living, and alzheimer’s; and surgical services and cardiology services. APPENDIX I, Schedule 2 include the biographies of the Senior Management Team at Mid Coast Hospital as well as the managers most closely associated with this project. APPENDIX I, Schedule 3 is an organizational chart for Mid Coast Hospital and APPENDIX I, Schedule 4 is a corporate chart for Mid Coast Health Services and its affiliates.”

“Mid Coast Hospital is currently licensed by the State of Maine, accredited by the Joint Commission on Accreditation of Hospital Organizations (JCAHO), and certified by Medicare and Medicaid as well as all major health plans. Other accreditations include the American College of Radiology (ACR) for the MRI, ultrasound, and mammography programs, College of American Pathologists (CAP) for the laboratory and pathology programs, and the American Association of Blood Banks for the blood bank program.”

B. CONU Discussion

i. Criteria

Relevant criteria for inclusion in this section is specific to the determination that the applicant is fit, willing and able to provide the proposed services at the proper standard of care as demonstrated by, among other factors, whether the quality of any health care provided in the past by the applicant or a related party under the applicant's control meets industry standards;

ii. Analysis

The Division of Licensing and Regulatory Services, Medical Facilities Unit, confirmed that Mid Coast Hospital is a fully licensed acute care hospital in the State of Maine and is MaineCare and Medicare certified. The Division's most recent survey was conducted on December 15, 2005. A revised Statement of Deficiencies was issued January 26, 2006. A Plan of Correction was received on February 10, 2006 and accepted by the Division, per email, dated March 01, 2006. Mid Coast Hospital is on the State of Maine (State Employee Health Commission) Preferred Hospital List (January 1, 2007) and is accredited by other professional accrediting organizations. The applicant has a history of providing hospital services that comply with licensing standards.

iii. Conclusion

Based upon the information provided by the applicant, and verified by the Medical Facilities Licensing Unit, CONU recommends that the Commissioner determine that the applicant is fit, willing and able to provide the proposed services at the proper standard of care.

III. Capital Expenditure & Financing

A. From Applicant

The applicant provided the following information regarding the capital expenditure and financing of the project. The total capital expenditures and the historic rate of growth in capital expenditures for the three most recent fiscal years are as follows:

Fiscal Year	Total Capital Expenditures	Rate of Increase Over Previous Year
FY 2004	\$ 3,207,000	+52.5%
FY 2005	\$ 2,258,000	-29.6%
FY 2006	\$ 2,333,000	+3.3%

"Each year, Mid Coast Hospital puts together a capital budget to replace equipment as it reaches the end of its useful life, to meet the ever changing regulatory and patient safety standards, to keep up with changes in technology, to maintain its investment in buildings and fixed equipment and to advance the deployment of Information Technology throughout the hospital. The entire list of equipment for these

three years represents approximately 450 line items. The largest single expenditure in FY 2004 was \$709,000 for the renovation of space required for digestive health. In FY 2005 the largest expenditures were \$356,000 to replace the chemistry analyzer and \$86,000 to replace a camera used for laparoscopic surgery. The largest expenditures in FY 2006 were \$153,000 to replace an ultrasound unit and \$142,000 to upgrade the telemetry system to comply with new FCC regulations.”

“A Financial Feasibility Study is included as APPENDIX V, Schedule 4. This feasibility study shows that the Debt Service Coverage (DSC) Ratio in the third year of operation is projected to be 4.3, well above the 1.4 minimum required by MHHEFA to finance a project. In addition, the feasibility study shows that the number of Days Cash on Hand is projected to be 198 even after infusing \$10 million of equity into this project. This ratio is well above the U.S. average of 112 Days Cash on Hand.”

“Projections of the project’s potential impact on the applicant’s consolidated operating margin the applicant’s operating margin, and, in the instance of a hospital, the projected impact of the project on the hospital’s cost per adjusted discharge, in the context of historical cost per adjusted discharge and projected cost per adjusted discharge in the absence of the project (using a formula supplied by the Department).”

“Projections of the project’s potential impact on the consolidated operating margin and the applicant’s operating margin are included as APPENDIX III, Schedule 3 *on file with CONU*. The consolidated operating margin for all of the Mid Coast Health Services affiliates is projected to be 3.0% in the third year of operation. The Mid Coast Hospital operating margin is projected to be 2.7% in the third year of operation. The cost per adjusted discharge (CPAD) is projected to be \$6,405 in the third year of operations, \$422 below the current CPAD trended forward by 3.5% per year.”

“APPENDIX III, Schedule 4 shows that both the Days Cash on Hand and Working Capital ratios exceed industry standards and therefore document evidence of the availability of sufficient working capital.”

“The debt portion of this project will be financed by the issuance of tax-exempt bonds through the Maine Health and Higher Educational Facilities Authority (MHHEFA). MHHEFA staff has estimated that if the bonds were issued today the “all in blended rate” for the various bond maturities would be 4.5%. Since these bonds will not be issued for over two years, MHHEFA staff advised using 5.25% for the interest rate. The bonds will be amortized over 30 years.”

“This project is expected to begin within a year of the approved CON and be in construction and renovations for the following two years. Full utilization of the new and renovated spaces will not begin until that time. 3rd year expenditures will not occur in this timeline until 2012. The applicant proposes to fund this project through two sources, equity and new debt. This is summarized in the following table.”

Equity	\$ 10,000,000	46.9%
New Debt	11,324,000	53.1%
Totals	\$21,324,000	100%

“The planned additional debt is from a proposed 30 year tax exempt bond issue. The interest rate is expected to be 5.25%. Expenditures are expected to be \$2,509,671. Annual Depreciation on a straight-line basis using component depreciation rates is expected to be \$678,108 annually. Interest during construction is expected to be \$607,239. This construction interest is capitalized in conformity with generally accepted accounting principals in place in the United States. The applicant proposes to include a \$1,521,113 (8%) contingency and includes \$1,347,645 for movable equipment.” Refer to page 18 for revision CONU estimates relative to this paragraph.

“APPENDIX V, Schedule 1 includes the incremental staffing estimates, payroll costs, and fringe benefits applicable to this project. These numbers represent the incremental staffing (FTEs) for each cost center associated with this project and were calculated by comparing the staffing projections in the Financial Feasibility Study – With CON (APPENDIX V, Schedule 4, Page 91) to the staffing projections in the Financial Feasibility Study – Status Quo (APPENDIX V, Schedule 5, Page 91).”

“The projections described above are incremental in nature as required for the certificate of need. In reality, the staffing for the three components of this project (medical surgical, emergency department, and holding area) will combine with the existing staff of these areas. Therefore, it is important to make sure that staffing for the combination of the existing and newly proposed staff can be made operational via a combined staffing pattern. The combined staffing patterns for each of the areas are attached as APPENDIX V, Schedule 7.”

“These costs are included in APPENDIX V, Schedule 1 and do agree with the three-year expense projection included as APPENDIX V, Schedule 2.”

“Mid Coast has had an excellent track record in both the recruitment and retention of staff. APPENDIX V, Schedule 6 includes the most recent turnover report for Mid Coast Hospital. This report shows that Mid Coast’s overall turnover rate of 10% compares favorably to the national rate of 16%. Of significant note is the 5% turnover rate for RNs compared to the national rate of 11%. Mid Coast Hospital has consistently demonstrated excellence in nursing practice and is currently in the process of applying for the Magnet Hospital Recognition Program through the American Nurses Credentialing Center.”

“APPENDIX V, Schedule 2 represents a three-year projection of the incremental revenues and expenses associated with this project and are calculated by taking the difference between Financial Feasibility Study – With CON and the Financial Feasibility Study – Status Quo. This analysis also extends the timeframe through 2020.”

“The audited financial statements and cost reports for FY 2004 and FY 2005 are included in APPENDIX I, Schedule 5.”

“The incremental operating expenses associated with this project are included as APPENDIX V, Schedule 2. The third year incremental operating costs in 2013 dollars are \$ 3,234,000 and the third year incremental operating costs “un-inflated” are \$ 2,510,000.”

“The Maine Health and Higher Educational Facilities Authority (MHHEFA) do not require an independent financial feasibility study for this project since it does not involve any new services.

However, in order to determine whether this project is economically feasible, and to calculate many of the schedules required for this application, the Mid Coast Health Services Board required and staff has prepared a financial feasibility study. The first scenario labeled “Financial Feasibility Study – With CON” is included as Appendix V, Schedule 4.”

“This scenario includes all of the assumptions relative to this proposed CON project. The second scenario labeled “Financial Feasibility Study – Status Quo” is included as Appendix V, Schedule 5. This scenario excludes all assumptions relative to this proposed CON.”

“All references and assumptions for both scenarios are footnoted at the end of each study. In addition, since the model is extremely complex, a narrative has been included at the beginning of APPENDIX V, Schedule 4 summarizing the feasibility study and describing how the model works.”

“The three-year projection of incremental changes in operating and non-operating revenues and expenses is included as APPENDIX V, Schedule 2.”

FINANCIAL FEASIBILITY STUDY

“Mid Coast Hospital is proposing an expansion to its facilities that includes the addition of inpatient of medical surgical beds, the addition of treatment rooms in the emergency department and the addition of a holding area that will support the diagnostic imaging department. The proposed capital expenditure is \$21,324,000.”

“This study was performed in order to determine the feasibility of this project from a financial perspective and to provide the necessary supporting documentation to support the Certificate of Need (CON) application. Key determinants of financial feasibility include:

- Adequate demand to support the project
- Sufficient revenues to cover operating expenses and provide a margin that is in line with national benchmarks
- Sufficient cash flow to service the new debt associated with this project as well as the existing debt
- Key financial ratios that are in line with industry benchmarks
- Cost Per Adjusted Discharge no higher than current (as adjusted for inflation)
- Charge Per Adjusted Discharge no higher than current (as adjusted for inflation)”

“A computer model was developed to analyze the impact of the various assumptions and ultimately produce a set of pro forma financial statements. This model was developed in the mid 1990’s and is used by the hospital to develop its annual budget as well as its long range financial plan. Slight adjustments were made to the model to accommodate the long time frame being analyzed (2007 – 2020) and to produce the necessary documents required for CON.”

“Two basic scenarios were run through the model. The first scenario (referred to as “Status Quo”) represents projections without the CON expansion while the second scenario (referred to as “With CON”) represents projections with the CON expansion. Having both of these scenarios was necessary

to measure the impact of the proposed project and in providing the CON agency with many of the “incremental” analysis that they require.”

“Based on this study we were able to determine that the proposed CON project is financially feasible based on each of the key determinants discussed above.”

1. Adequate Demand to Support the Proposed Project

“Medical Surgical Beds – Based simply on existing occupancy rates and generally accepted planning standards, there is already a need for approximately 6 additional beds. This number grows rapidly so that by 2013, the third year of the project, the demand will support 15 additional beds. This growth is based on slight increases in the under age 65 population, a substantial growth in the over age 65 population, and small increases in market share. By 2020, due to the aging of the population, the demand will support 25 additional beds. To be conservative, the market share increases are substantially less than actual experience over the past five years. The planned expansion is for 18 beds.”

“Emergency Department – The key statistic driving Emergency department bed need is the number of ED visits. Total ED Visits are projected to grow to 22,752 by 2013, the third year of the project. The projected ED Visits reflect a slight reduction in use rates related to the opening of a new primary care clinic in 2008. ED Bed needs were developed by the management engineering firm, Applied Management Systems, based on a generally accepted approach that accounts for the daily and seasonal variability of visits.”

“Holding Area – The Holding area is a new approach for “staging” patients that require CT Scan, MRI and other special procedures. The holding area is being proposed to increase throughput and thereby avoid the cost of purchasing second scanners. A separate feasibility study was performed on this portion of the project. Based on this separate study it has been determined that the “holding area” approach saves between \$632,000 and \$1,509,000 annually compared to the option of purchasing second units.”

2. Sufficient Revenues to Cover Operating Expenses and Provide a Margin in Line with National Benchmarks

“This study has determined that this project, in combination with our existing operation, will provide sufficient revenues to cover operating expenses and provide an operating margin of 2.7% by the third year of operation. This operating margin is consistent with national benchmarks and consistent with the voluntary targets associated with the Dirigo legislation. There are literally thousands of assumptions that have been made in the computer model. The key assumptions are outlined in Table 5.1 below.”

TABLE 5.1 – KEY ASSUMPTIONS	
Assumption	Assumption Details
Population	Total population is assumed to grow by 7.1 % between 2006 and 2020. The 65+ population is projected to grow by 62.4% over this same time period. These projections were provided by the Maine State Planning Office and have been adjusted downward in 2009 to reflect the closure of the BNAS.
Admissions per 1000	Admission rates for the under 65 and 65+ age groups are projected to remain flat over the forecast period. This is consistent with national trends that have remained flat for the past five years.
Market Share	The historic overall market share has increased 4 percentage points since 2000. The projections include ¼ point per year increases in market share over the forecast period. We believe that this assumption strikes a balance between being conservative and making sure that we build enough capacity.
Average Length of Stay	The ALOS for the under 65 and 65+ age groups is projected to remain flat over the forecast period. Although the historical ALOS has declined at Mid Coast Hospital, the current overall ALOS of 4.1 is very close to best practice and compares to a national average of 5.7.
Inpatient Admissions	Inpatient Admissions are projected to increase from 5,063 in 2006 to 5,466 in 2013 and to 6,396 by 2020. The major driver of this increase is the rapid aging of the population. The admission rate per 1000 for the 65+ age group is about 5 times that of the under 65 population.
Inpatient Ancillary Statistics	Inpatient ancillary statistics are projected based on the historical ratio of inpatient statistic to inpatient days.
Outpatient Statistics	Outpatient statistics are projected to grow consistent with the overall growth in population plus the ¼ growth in market share. Adjustments have been made in a number of areas where historic growth has far exceeded population growth.
Inpatient and Outpatient Pricing	Prices are assumed to increase 3.5% per year through 2013 and 3.0% thereafter. This is consistent with the overall inflation assumption and would be significantly lower if we increased the Medicare and MaineCare assumptions outlined below.
Medicare Reimbursement	Medicare inpatient and outpatient reimbursement rates are projected to increase 2% per year throughout the forecast period.
MaineCare Reimbursement	MaineCare inpatient and outpatient rates are projected to increase at 2% per year throughout the forecast period.
Other Reimbursement	All other payers' reimbursement rates are projected to increase consistent with the price increases noted above.
Wages	FTE's have been modeled using our existing labor benchmarks for each department. Overall FTEs are projected to increase from 597 in 2006 to 674 in 2013. FTE's per adjusted occupied bed are projected to decrease as a result of increasing volumes from 4.1 in

TABLE 5.1 – KEY ASSUMPTIONS	
	2006 to 4.0 by 2013 to 3.8 by 2020. Wage rates are assumed to increase 3.5% per year throughout the forecast period.
Fringe Benefits	Fringe Benefits are projected to increase from 26% of wages in 2006 to 29% of wages in 2013 and to 35% of wages by 2020. Increases in health insurance and worker’s compensation are the drivers of this growth in fringe benefit %.
Operating Expenses	Operating expenses have been modeled based on a fixed/variable analysis whereby the variable portion increases/decreases consistent with the change in the applicable statistical indicator for each department.
Plant Operations	Utility costs have been adjusted in 2011, the first year of operation to account for the increase in the building square feet.
Interest Expense	Interest expense has been projected based on the detailed amortization schedules currently in place for our existing debt and the projected amortization schedule for the MHHEFA bonds to be issued in connection with this project.
Depreciation Expense	Depreciation has been projected based on the detailed depreciation ledgers for all existing assets as well as the proposed annual capital budget. Depreciation expense on the new project begins in 2011, the first year of operation.

3. Sufficient Cash Flow To Service The New Debt Associated With This Project As Well As Existing Debt

“The DSC Ratio tests whether there is sufficient cash flow to service the debt associated with this project as well as the hospital’s existing debt. This ratio compares operating cash flow (the numerator) to annual debt service payments (the denominator). The median for all hospitals in the United States is 3.7 and the minimum allowable ratio in the Maine Health and Higher Educational Facilities Authority loan agreement is 1.4. In 2013, the third year of this project, the projected DSC Ratio is 4.3.”

“Therefore, this study has concluded that there is sufficient cash flow to service the existing and new debt associated with this project.”

4. Key Financial Ratios That Are In Line With Industry Benchmarks

“Two of the key financial ratios, “Operating Margin” and “DSC Ratio” are discussed above. These two ratios as well as other key ratios are summarized in the Table 5.2 below.”

Table 5.2 – KEY FINANCIAL RATIOS				
	FY 2006	CON FY 2013	CON FY 2020	U.S. Median
Operating Margin – this ratio tests whether there are sufficient revenues to cover operating expenses and provide enough margin to service debt, make future capital improvements and provide reserves.	7.5%	2.7%	2.4%	3.0%
Debt Service Coverage Ratio – this ratio tests whether the operation provides sufficient cash flow to service existing and new debt.	4.5	4.3	4.9	3.7 U.S. 1.4 MHHEFA
Days Cash on Hand All Sources – this ratio tests whether there is sufficient cash to respond to short term fluctuations, replace buildings and equipment as they reach the end of their useful lives, and respond to opportunities in the marketplace.	180	198	240	112
Debt to Capitalization – this ratio determines whether the level of debt is appropriate compared to the organization’s total capitalization.	30%	24%	12%	26%

In FY 2013, the third year of operation, and in 2020, the tenth year of operation, each of the key ratios meets or exceeds national benchmarks.

5. Cost Per Adjusted Discharge (CPAD) No Higher Than Current (As Adjusted For Inflation)

“This calculation is an important measure of overall efficiency. The numerator is the hospital’s annual operating expense and the denominator is the hospital’s total inpatient and outpatient volume. This measure is also significant in that it represents the CPAD calculation which is the voluntary efficiency measure contained in the Dirigo legislation.”

“The CPAD in FY 2013 is projected to be \$6,405. The current CPAD adjusted for inflation (3.5% per year per the Dirigo voluntary cost cap) is \$6,827. Therefore, not only is Mid Coast projected to be in compliance with Dirigo’s voluntary cap on CPAD growth, the savings of \$422 per CPAD equates to an annual savings of \$6.9 million.”

6. Charge per Adjusted Discharge No Higher than Status Quo

“Although we are not aware of any national benchmarks for this indicator, this is a key internal determinant of financial feasibility. Certainly all of the other indicators would be tainted if they were achieved as a result of increasing prices. The charge per adjusted discharge in FY 2013 is projected to be \$12,747. The current charge per adjusted discharge (adjusted for inflation) is projected to be \$13,328.”

“In summary, the proposed project meets all six of the key determinants described above and is therefore financially feasible.”

Compliance with Rules and Regulations of Local, State and Federal Agencies

“Mid Coast Hospital has and will continue to meet all of the certification requirements of the Medicare and Medicaid programs. All plans, relative to this project, will be reviewed with the Department of Health and Human Services at the appropriate point in the implementation process. Occupancy will be based on an acceptable review by the Department of Licensure.”

“All plans will be reviewed by local planning boards, the Department of Environmental Protection, the fire marshal and the State at the appropriate point in the process. Mid Coast Hospital is not expecting any significant issues during the permitting phase of the project.”

“The proposed project allows Mid Coast to use its existing site rather than go to green field development. In so doing it prevents rather than contributes to sprawl.”

B. CONU DISCUSSION:

i. Criteria

The relevant criteria under consideration in this section are specific to the determination that the economic feasibility of the proposed services is demonstrated in terms of:

- Capacity of the applicant to support the project financially over its useful life, in light of the rates the applicant expects to be able to charge for the services to be provided by the project; and
- Applicant’s ability to establish and operate the project in accordance with existing and reasonably anticipated future changes in federal, State and local licensure and other applicable or potentially applicable rules.

ii. Analysis

The CONU financial analysis considers information contained in the 2006 Almanac of Hospital Financial and Operating Indicators and generally accepted accounting standards in determining the financial capability of a hospital to support a proposed project. It also uses information provided in the application and sometimes includes projections by CONU staff.

The review of financial indicators is important because it presents a fair and equitable representation of the financial health of an organization and can present appropriate comparisons. This provides a sound basis for a determination of whether the hospital has the ability to commit the financial resources to develop and sustain the project. While there are a number of indicators that are used in the industry, the ones applied to this review have been selected due to their direct relevance to the financial health of the applicant. The following analysis is based upon information contained in the record. One item of terminology needs to be defined. Throughout the analysis, a comparison of high-performance and low-performance hospitals is referenced. These groups are based on the uppermost and lowermost quartiles of hospitals based on their return on investments.

Profitability:

Non-profit hospitals need to perform at financially sustainable levels in order to carry out their public missions. An adequate operating margin is a key indicator of the financial health of a hospital.

	2004 Northeast Median	2004 Maine State Median	2002-2005 MCH's Average	2013 MCH Proforma
Operating Margin	2.08%	2.6%	5.04%	2.71%
Net Margin		3.1	6.11%	4.82%
Return on Total Assets		4.2%	4.52%	3.56%

Operating margins in the high performing hospital group have seen greater improvements in margins while hospitals in the low performing group are sliding. High performing hospitals are doing better now than five years ago. Over the same time, lower performing hospitals are generally doing worse than five years ago. There is a widening gap between high and low performing hospitals. Improvement in operating profits for high-performing hospitals drives this widening performance gap. As a comparison, operating margins in the Northeast Region are considerably lower than in other regions.

The Maine State average for 2004 was 3.1%. MCH was 3.28, slightly above the average which puts them in the 50th percentile. The trend for the State of Maine has been inconsistent with a low of -1.2 and a high of 3.1 over the 2000 to the 2004 period. MCH, in three of the last five years has had greater than 5.5% operating margin. Over the course of the projection through 2013 it is projected that the hospital will have less than a 3% operating margin. This is reflective of the conservative assumptions by the applicant.

The effect of this project on operating margins, as projected by the applicant, is a decrease from 2.78 to 2.71. This is not a significant impact on the operating margin for the hospital.

Liquidity:

Liquidity measures a hospital's ability to manage change and provide for short-term needs for cash. This liquidity alleviates the need for decision making to be focused on short term goals and allows for more efficient planning and operations of a hospital.

	2004 Northeast Median	2004 Maine State Median	2002-2005 MCH Average	2013 MCH's Proforma
Current Ratio	1.68	1.72	1.72	2.09
Days in Patient Accounts Receivable	49.17 Days	44.3 Days	38.80 Days	34.83 Days
Days Cash on Hand	80.11 Days	73.4 Days	110.95 Days	197.87 Days
Average Payment Period	63.40 Days	53.6 Days	51.81 Days	44.57 Days

Days Cash On Hand is a ratio that is industry accepted, easily calculated, method to determine a hospital's ability to meet cash demands.

High performing hospitals have approximately 80 days cash on hand while low performing hospitals have 45 days. Hospitals with revenue between \$60-100 million have approximately 73 days cash on hand. Hospitals with revenue of \$100-150 have 81 days cash on hand.

In 2004, the average days cash on hand for all sources for hospitals in the State of Maine was 73.4 days. The CONU calculated day's cash on hand for MCH in 2004 was approximately 111 days indicating that MCH was in the 75th to 90th percentile.

According to same source, between 2000 and 2004 the average days cash on hand remained about 68 days. Between 2002 and 2012 average days cash on hand for MCH is projected to increase by 200%. Maine had 15% less day's cash on hand than the Northeast Region at 80 days, 12 days less than the Maine average.

The impact of the proposed project is calculated at approximately 30 day's reduction in days cash on hand in the third operating year as compared to the non CON operating projection (with and without this project). This approximates a 15% decrease in days cash on hand. Based upon source information this hospital is projected to be in greater than the 90th percentile for days cash on hand with or without the project. Therefore, this project will not have a substantial impact on MCH operating ability to meet its cash demands. Even if actual cash on hand is lower based on additional investments in programs and technology, MCH should be able to adequately support this project.

Capital Structure Ratios:

Many long term creditors and bond rating agencies evaluate capital structure ratios to determine the Hospital's ability to increase its amount of financing. During the past 20 years, the hospital industry has radically increased its percentage of debt financing. This trend makes capital structure ratios

important to hospital management because these ratios are widely used by outside creditors. Values for these ratios ultimately determine the amount of financing available for a hospital.

	2004 Northeast Median	2004 Maine State Median	2002-2005 MCH's Average	2013 MCH's Proforma
Equity Financing	47.45%	56.9%	56%	71%
Debt Service Coverage	3.11	3.45	2.52	4.25
Cash Flow to Total Debt	16.38%	19.7%	20%	24%
Fixed Asset Financing	62.88	54.3	68%	58%

DSC is the most widely used capital structure ratio. DSC minimums are often seen as loan requirements when obtaining financing. DSC is the ratio of earnings plus depreciation and interest expense to debt service requirements. In 2004, the median Maine hospital's DSC (DSC) was 3.45x.

Mid Coast Hospital had a DSC of 2.32x which indicates that the hospital is in the 50th percentile. The trend for the State of Maine for DSC was a low of 2.39 in 2002 and a high of 3.71 in 2000. The trend for 2000-2004 is inconsistent with a low of 2.39 in 2002 and a high of 2.71 in 2000. The trend for MCH has been steady for at a rate of 2.3 over the last 3 years. The trend, as projected by MCH, of this project 2007-2013 is that DSC is expected to improve to greater than 5.5x. Compared to the non-CON projection DSC is expected to decrease by .84x.

MCH has the capacity and the ability to have adequate DSC. If MCH were to maintain its DSC at a ratio consistent with its recent history, a change of .84x would significantly impact its debt service ratio. As a consequence, CONU would not recommend an increase in debt financing (not asked for at this time) for this project without significant input from the applicant regarding its financial feasibility.

Fixed Asset Financing: "Low performance hospitals have historically used more debt to finance net fixed assets than high performance hospitals. With the removal of capital cost pass through, long term debt will become most costly relative to equity. High performance hospitals are restructuring their capital positions to reflect this shift in the relative costs of debt and equity capital. However, we expect fixed asset financing ratios to continue to remain stable during the next 5 (five) years as hospitals curtail their growth in new capital expenditures and reduce their reliance on long term debt."

The Northeast has considerably higher rates in financing fixed assets than other regions.

The 2004 average for hospitals in the State of Maine was 54.3 percent in regards to fixed asset financing. In 2004, MCH was at 67 percent which is the 75 percentile for the State of Maine. For the years 2000-2004, for hospitals with revenues similar to MCH, 60 percent is about the average.

The fixed asset financing ratio over the past 5 years has remained relatively consistent in the State of Maine.

The proposed financing is consistent with the way MCH is spending the funds on fixed assets. This is because there is an insignificant change in the fixed financing (2 percent) during the projected time frame (through 2013).

Efficiency Ratios:

Efficiency ratios measure various assets and how many times annual revenues exceed these assets.

	2004 Northeast Median	2004 Maine State Median	2002-2005 MCH's Average	2013 MCH's Proforma
Total Asset Turnover	1.06	1.18	0.74	0.74
Fixed Asset Turnover	2.72	2.67	1.46	1.96
Current Asset Turnover	3.91	4.00	4.67	4.73

Total asset turnover (TAT) provides an index of the number of operating revenue dollars generated per dollar of asset investment. A higher value for this ratio implies greater generation of revenue from the existing investments of assets. Larger hospitals usually have lower values for TAT than smaller hospitals. This can be attributed to two factors. First, larger hospitals are more likely to have newer physical plants. Second, capital intensity is often greater in larger hospitals due to more specialized services and higher levels of technology.

In 2004, according to the source cited above Maine hospitals had a total asset turnover ratio of 1.18.

For 2004, MCH had a total asset turnover of .79, and this is indicative of the newness of the hospital, which was built in 2001.

During the period of 2000 – 2004, there has been a steady increase in the TAT for Maine hospitals. The expected trend for MCH is for TAT to remain constant through 2007-2013. This is reflective of a hospital planning to spend significant funds for capital improvements or investments in technology. This is a capital intensive project. The capital nature of this project is indicated by the fact that expected revenues are expected to increase by only 50 percent of the increased investment in assets. However, as a percent of the overall hospital assets, it represents only a 2 percent decrease in TAT.

Financial Feasibility and Marginal Costs for 2013:

The applicant used proprietary financial software to present spreadsheets detailing the assumptions for its facility's projected operations for the period through 2013 with and without the proposed project. Following instructions from the CONU, a comparison of 2013 (the third full year of operations) with and without the CON were presented. The applicant included in its baseline for the "without CON" scenario, additional major medical equipment that, if not for the Certificate of Need application, the hospital indicates it would need to purchase. The financial model for 2013 with the CON is presently fairly in financial accounting terms; however the differences between the two projected years presents

the impact of the project by comparing higher costs not currently part of the hospital. This is due to the inclusion of costs that the applicant asserts will be avoided if this application is approved.

To calculate the impact on the Capital Investment Fund (CIF) requires the CONU to determine the costs to the institution as if this project was completed. Clearly, these costs include the operating expenses: paid physicians, nursing, staff, and maintenance costs of the improved facility. This cost also includes the depreciation costs of the capital expenditures as well as interest expense.

PAMC suggested that Mid Cost Hospital under-represents the increased costs to the health care system by not including depreciation as discussed in the prior paragraph. CONU staff has adjusted the depreciation included by the applicant in its projected costs. It is the opinion of the CONU staff that, as presented in this preliminary analysis, the project will result in 3rd year annual costs of \$3,120,813 as follows:

CONU Third Year Incremental Costs

Wages	\$1,267,473
Employee Taxes & Benefits	405,655
Plant Operations	336,769
Interest	680,000
Other Expenses	437,968
Depreciation	678,108
Bad Debt Expense	60,813
Third Year Incremental Costs	\$3,866,786

Third Year Incremental Costs

“Uninflated” **\$3,120,813**

The CIF changes affect the impact on commercial insurance rates³ that is discussed later in sections regarding the State Health Plan and the impact on the CIF.

Further discussion of the impact of this amount can be found in sections regarding the State Health Plan and the impact on the CIF.

An additional challenge to the analysis of costs by PAMC regards opportunity costs. PAMC commented regarding the lost interest income to the facility from spending \$10 million in cash and not investing the money. Opportunity costs are not part of the CIF analysis and the model proposed by the Bureau of Insurance considers expenses borne by the hospital. Changes in revenues are considered as part of the overall feasibility of the project.

Changing Laws and Regulations

CONU staff is not aware of any imminent or proposed changes in laws or regulations that would impact this project. MCH has the organizational strength to adjust to reasonable changes in laws and regulations.

³ Calculated by the State of Maine, Bureau of Insurance

iii. Conclusion

Mid Coast Hospital has presented detailed proformas that demonstrate the financial capacity to support the project and that the project is economically feasible. Demands on liquidity and capital structure are expected to be adequate to support projected operations. Financing and turnover ratios show little impact on the organization as a whole from engaging in this project. The hospital has shown earnings that are not expected to be significantly impacted by this project. In completing this section of the analysis, the CONU staff concludes that, as proposed, the applicant can financially support the project.

CONU recommends that the Commissioner determine that the economic feasibility of the project is demonstrated.

IV. Needs to be Met

A. From Applicant

“Mid Coast Hospital’s primary service area includes Arrowsic, Bath, Brunswick, Bowdoin, Bowdoinham, Dresden, Durham, Edgecomb, Freeport, Georgetown, Harpswell, Phippsburg, Richmond, Topsham, West Bath, Westport, Wiscasset, Woolwich. The primary service area represents towns where Mid Coast Hospital represents 25% or more of the discharges or Mid Coast’s discharges are within ten percentage points of the hospital with the greatest share of discharges.”

“Mid Coast Hospital’s secondary service area includes Alna, Boothbay, Boothbay Harbor, Lisbon, Nobleboro, Pownal and Southport. The secondary service area represents towns where Mid Coast Hospital represents 10% or more of the discharges.”

“The population for the primary service area is projected to be 91,483 in 2013, the third year of the project. The population for the secondary service area for 2013 is projected to be 20,897. Detailed population projections developed by the Maine State Planning Office are included as **APPENDIX IV, Schedule 1.**” *(on file with CONU)*

“These projections have been reduced by the estimated reduction in population associated with the closure of the Brunswick Naval Air Station (BNAS). Although BNAS is not scheduled to close until 2011, many of the 3,000 military personnel will be relocated beginning in 2009. In addition to the 3,000 military personnel, there are 1,400 reservists and 700 civilian employees at the BNAS. To date, the Maine State Planning Office has not revised its population projections to account for any population loss associated with the base closure. To be conservative, Mid Coast Hospital has reduced the State’s population projections by 5,000 beginning in 2009. Currently there are a number of groups reviewing re-development options for BNAS which may mitigate all or some portion of the population loss. Again, to be conservative, the demand forecast does not assume any re-development of BNAS. The executive summary of a report titled ‘The Impact of BRAC Ordered Closure of the Brunswick Naval Air Station’ is included as **APPENDIX IV, Schedule 2.**” *(on file with CONU)*

“Table 4.1 shows the number of medical surgical admissions, medical surgical patient days, medical surgical occupancy rate, emergency department visits and diagnostic imaging procedures for Mid Coast Hospital for 2000 through 2006. It should be noted that the medical surgical occupancy rates in this table have reached their peak due to the fact that the current medical surgical unit includes a high number of semi-private rooms. Patient compatibility and female-male issues prevent the unit from running at a higher occupancy rate.”

“Medical Beds – below that the capacity beds is

TABLE 4.1 – HISTORICAL USE PATTERNS					
Year	Med / Surg Admissions	Med / Surg Patient Days	Med / Surg Occupancy Rate	ED Visits	CT Scan and MRI Procedures
FY 2000	3118	9695	73.8%	18238	3678
FY 2001	3294	10052	76.3%	18216	6508
FY 2002	3405	10563	80.3%	18126	8024
FY 2003	3469	11776	89.4%	19682	10002
FY 2004	3456	11343	86.3%	20388	11481
FY 2005	3159	11079	84.1%	20830	12683
FY 2006	3379	11267	85.7%	21813	13863

Surgical Table 4.2 shows current of 36

insufficient to meet the projected average daily census of 40. This planning conclusion is corroborated by the “real life” metrics presented in Section II relative to the boarding of patients in the Emergency Department. Based on generally accepted planning guidelines for medical surgical beds, the projected demand will require 51 beds in 2013. In Table 4.3 below, the demand analysis has been expanded to incorporate the dramatic aging of the population that takes place through 2020, just seven years past the typical three year certificate of need planning timeline. Since the 65+ population utilizes inpatient services at almost five times the rate of the population under age 65, there is a significant need for additional beds by 2020. Based on this expanded timeframe, the projected demand will require 61 beds by 2020. Mid Coast is proposing an additional 18 beds taking the Medical Surgical capacity from 36 to 54 beds.”

“**Emergency Department Treatment Rooms** - Table 4.4 below shows that the current capacity of 12 treatment rooms is insufficient to meet the projected 22,752 emergency department visits in 2013. Again, this planning conclusion is corroborated by the “real life” metrics presented in Section II relative to ambulance diversion. A detailed analysis of the data, based on generally accepted planning guidelines, shows that the projected demand will require 15 treatment rooms by 2013. This analysis is discussed in more detail below.”

“**Diagnostic Imaging Space** - In order to maximize the potential throughput of the existing CT Scanner (CT) and Magnetic Resonance Imaging (MRI) equipment and avoid the need to purchase second units, Mid Coast Hospital is proposing to add a 6 bed holding area for the preparation and recovery of patients requiring certain CT and MRI procedures. Table 4.5 below is an analysis showing the projected demand for CT and MRI procedures, and the capacity of the existing equipment before and after adding a holding area. This table shows that without the holding area the CT and MRI equipment are quickly approaching capacity. The addition of the holding area doubles the capacity of this equipment from 16,474 procedures to 32,947 procedures annually thereby eliminating the need to purchase second units.”

“Table 4.2 summarizes the projected Medical Surgical demand for the first three years of the proposed project. Table 4.3 expands the analysis of medical surgical demand to the year 2020. Table 4.4 summarizes the projected Emergency Department demand for the first three years of the project. Table 4.5 summarizes the projected Diagnostic imaging demand for the first three years of the project. The information in these tables has been summarized from the detailed demand models included as **APPENDIX IV**, Schedules 3, 4, and 5.” *(on file with CONU)*

TABLE 4.2 – MEDICAL SURGICAL BEDS – Years One through Three			
	FY 2011	FY 2012	FY 2013
Current Capacity (Beds)	36	36	36
Projected Demand – Average Daily Census	38	39	40
Required Capacity based on Projected Demand	48	49	51
Proposed Capacity (Beds)	54	54	54

TABLE 4.3 – MEDICAL SURGICAL BEDS – Years Eight through Ten			
	FY 2018	FY 2019	FY 2020
Current Capacity (Beds)	36	36	36
Projected Demand – Average Daily Census	47	48	49
Required Capacity based on Projected Demand	58	59	61
Proposed Capacity (Beds)	54	54	54

TABLE 4.4 - EMERGENCY DEPARTMENT TREATMENT ROOMS			
	FY 2011	FY 2012	FY 2013
Current Capacity (Treatment Rooms)	12	12	12
Projected Demand – ED Visits	22,062	22,407	22,752
Required Capacity based on Projected Demand	14/16	14/16	14/16
Proposed Capacity (Treatment Rooms)	15	15	15

TABLE 4.5 – DIAGNOSTIC IMAGING			
	FY 2011	FY 2012	FY 2013
Current Capacity without Holding Area (CT and MRI Procedures)	16,474	16,474	16,474
Required Capacity Based on Projected Demand	16,996	17,846	18,739
Proposed Capacity with Holding Area	32,947	32,947	32,947

“Tables 4.2 and 4.3 show that with the addition of 18 medical surgical beds, the proposed project will have the capacity to meet the projected need and demand for medical surgical beds through 2013. By 2018, due to the significant aging of the population, the proposed 18 beds fall short of meeting the need and demand. However, with more private rooms, the potential for using the holding area for observation patients, and the potential for wellness and prevention programs to reduce future use rates, Mid Coast Hospital is confident that this proposal will adequately respond to need and demand.”

“Table 4.4 shows that with the addition of 3 treatment rooms in the emergency department, the proposed project will have the capacity to meet the need and demand.”

“Table 4.5 shows that by adding a holding area for the preparation and recovery of CT and MRI patients, the current capacity is increased from 16,996 procedures to 32,947 procedures thereby avoiding the need to buy second CT and MRI units.”

“The detailed projections analyzing the demand for this project are included as APPENDIX IV, Schedules 3, 4, and 5. (*on file with CONU*)

“**Medical Surgical Beds** - APPENDIX IV, Schedule 3 (*on file with CONU*) is a detailed model that projects the inpatient demand for the proposed Medical Surgical expansion. The variables in the model include population (broken down between under age 65 and 65+), admission rates per 1000 population, market share, admissions from outside of the primary service area, and average length of stay. The basis for the assumptions relative to each of these variables is documented at the end of the model. Taken overall, Mid Coast Hospital believes that the assumptions are reasonable and strike a balance between being conservative and sizing the facility appropriately. In terms of reconciling demand and need, Table 4.6 shows that the projected use rates per 1000 population for the Mid Coast Hospital primary service area are extremely conservative when compared to Maine and national data.”

TABLE 4.6 – ADMISSIONS PER 1000 POPULATION			
	MCH 2013	Maine 2004	U.S. 2004
Admissions per 1000 Population	103	115	119
Source: Maine and U.S. from Kaiser Family Foundation, State Health Facts, www.statehealthfacts.kff.org , MCH from APPENDIX IV, Schedule 3.			

“**Emergency Department Treatment Rooms** - APPENDIX IV, Schedule 4 (*on file with CONU*) is a detailed projection of the demand for the proposed Emergency Department expansion. The variables in the model include population, visit rates per 1000 population, and market share. The basis for the assumptions relative to each of these variables is documented at the end of the model. It is important to note that the use rates per 1000 population have been adjusted downward to take into account the introduction of a primary care clinic in 2008 that will expand primary care access for MaineCare patients. APPENDIX IV, Schedule 6 (*on file with CONU*) is a series of charts that support the calculation for the proposed 15 treatment rooms. These charts were prepared by Applied Management Systems (AMS), Mid Coast’s management engineering consultants. AMS is a Massachusetts based healthcare consulting firm that has consultants who specialize in Emergency Departments. These charts project the cumulative arrival pattern of ED patients over the twenty-four hour period for the forecasted number of visits. Since the mid coast region has a substantial influx of summer residents and tourists, the data has been analyzed separately for the “summer” and “winter” seasons. In order to account for the variability of visits, one standard deviation has been added to the projections to determine the number of required treatment rooms. For 2013, the required number of treatment rooms using this methodology is 14 during the “winter” months and 16 during the “summer” months. Mid Coast Hospital is proposing 15 treatment rooms.”

“In terms of reconciling demand and need, Table 4.7 shows that the projected use rates per 1000 population for the Mid Coast Hospital service area are conservative when compared to Maine and national data.”

TABLE 4.7 – ED VISITS PER 1000 POPULATION			
	MCH 2013	Maine 2004	U.S. 2004
ED Visits per 1000 Population	360	541	383

Source: Maine and U.S. from Kaiser Family Foundation, State Health Facts, www.statehealthfacts.kff.org, MCH from APPENDIX IV, Schedule 4.

“**Holding Area** - APPENDIX IV, Schedule 5 (*on file with CONU*) is a detailed projection of the demand for the Holding Area. Included in this schedule are demand projections for CT Scan and MRI procedures, the two services that will primarily be supported by the holding area. Projecting demand for these services is extremely challenging given the ever increasing capabilities and potential in the diagnostic imaging field. Over the past five years, CT Scan procedures have been growing at an average annual rate of 18 % per year. Over this same period of time, MRI procedures have been growing at an average annual rate of 8 % per year. To be conservative, Mid Coast Hospital is projecting growth rates of 5% for CT and 4% for MRI services. APPENDIX IV, Schedule 7 (*on file with CONU*) is a financial feasibility study performed specifically for the proposed Holding Area. This analysis compares the cost of adding a Holding Area with the cost of purchasing second scanners. The analysis shows that the Holding Area significantly improves throughput and generates substantial annual savings ranging from \$632,000 to \$1,509,000 depending on the assumed volume.”

“The services proposed in the project will significantly improve access for residents of the primary and secondary service area. As previously discussed, current capacity for the services proposed in this project is constrained.”

“From a financial standpoint, each of the services proposed in this project are available to all residents regardless of their ability to pay. As discussed previously, the prices that Mid Coast Hospital charges for its services will not increase as a result of this project.”

B. CONU Discussion

i. Criteria

Relevant criteria for inclusion in this section are specific to the determination that there is a public need for the proposed services as demonstrated by certain factors, including, but not limited to:

- Whether, and the extent to which, the project will substantially address specific health problems, as measured by health needs in the area to be served by the project;
- Whether the project will have a positive impact on the health status indicators of the population to be served;
- Whether the services affected by the project will be accessible to all residents of the area proposed to be served; and
- Whether the project will provide demonstrable improvements in quality and outcome measures applicable to the services proposed in the project.

ii. Analysis

MCH points to several key factors (evidence based) to support the public need (public safety and patient safety) for the activation of 18 licensed medical surgical beds and the addition of 3 emergency treatment rooms:

- 1) Diversions: The first quantifiable factor is the number of times MCH has gone on “diversion” status over the last five years. Diversions occur when emergency departments become over crowded and patients are “diverted” to other hospitals.

Data presented by MCH in Appendix II (*on file with CONU*) reflects an increase in these occurrences. Ambulance diversions increased from 2 to 16 in 2005 and 2006 respectively. Diversions generally span a two hour period and have an impact that extends beyond the patient being diverted. Not only is the patient being diverted placed in jeopardy due to delays in accessing emergency care, but The Institute of Medicine of the National Academies (6/06) states: “Each diversion adds precious minutes to the time before a patient can be wheeled into an ED and be seen by a doctor, and these delays may in fact mean the difference between life and death for some patients. Moreover, the delays increase the time that ambulances are unavailable for other patients” (Appendix 2 Item 3) (*on file with CONU*)

Information presented in this application and supported at the public hearing cites the increase in times that Mid Coast Hospital has had to go on diversion status. In a diversion situation, Mid Coast seeks agreement from Parkview Hospital to accept ambulance patients and rescue services are notified to take all ambulance patients to Parkview. Mid Coast Hospital submitted a copy of its diversion protocol with this application. Even with a diversion protocol and collaboration with Parkview relative to

diversions, the threat to patient and public safety cannot be underestimated. Substantial evidence is included in this application that establishes that a threat to public and patient safety exists when hospitals are on diversion status.

The threat to public safety occurs when a diversion status exists because the general public is not aware that a hospital is on diversion until they arrive at the ED. An estimated 82% of Mid Coast Hospital's ED patients do not arrive at the ED by ambulance but arrive via self transport or by transport other than an ambulance. This delays access to treatment that can be life threatening or cause a condition to worsen. It can also extend pain and discomfort while the patient awaits treatment.

- 2) Boarding: The second key factor presented to support this application is patient "boarding". Patient "boarding" occurs when inpatient beds are not available. Patients wait for an inpatient bed/room in hallways, the ED, or other areas. "Boarding" relates directly to bed capacity and complement.

Emergency Department boarding hours at Mid Coast Hospital increased from 73 in 2003 to 2,416 in 2006. This represents a substantial increase in "boarding" incidents at Mid Coast Hospital.

Testimony provided by Lois Skillings, Vice President for Nursing and Patient Care Services at MCH, at the Public Hearing, March 13, 2007, states as follows (pg 29): *(on file with CONU)*

"The number of times that we have had to board or hold in patients over night due to lack of inpatient beds has increased significantly and, in 2006 alone, 122 patients spent the night in the emergency department awaiting a bed the next morning, or next afternoon in some cases. Over fifty-two days of the year sometimes as many as six patients a night. In 2007 so far this year, since January, we're on a path to triple that number of boarding patients. In each of these situations, every single one, the reason for boarding in the emergency department was because we did not physically have an inpatient bed for the patient."

"ED overcrowding is an emerging threat to public safety. ED overcrowding could potentially affect anyone who suffers unexpected severe illness or injury requiring time sensitive emergency treatment. Manifestations of ED overcrowding include (1) "boarding of patients" in the ED, (2) increased risk of medical errors, (3) ambulance diversions, (4) threat to disaster preparedness, and (5) eroding reliability of the emergency care system."⁴

Overcrowding at Mid Coast Hospital is further complicated due to their status as the primary treatment source for Behavioral Health Clients. Both Sweetser and Spring Harbor Hospital have voiced strong support for this expansion in order to assure access to safe, quality of care, for patients with behavioral health issues.

- 3) Overcrowding: Mid Coast medical/surgical bed complement needs to be increased by 18, closer to its presently licensed bed capacity, in order to relieve overcrowding in the ED and reduce/eliminate patient boarding and diversions.

⁴ www.emjonline.com: Trzeciak, Sand E P Rivers Emerg. Med. J 2003;20:402-405

Presently Mid Coast Hospital faces increasing need for diversions and patient boarding based upon overcrowding: both constitute a documented threat to public and patient safety. They provided utilization data and longitudinal projections to support future need.

CONU reviewed the methodology employed by the applicant by comparing historical admissions/discharges to hospital bed needs as developed by the Rural Hospital Health Research Institute and verified discharge data according to MHDO. MCH's population growth projections are based upon information developed by the Maine Office of State Planning. These estimates include adjustments for potential population loss due to BNAS closure and include a projected increase in the elderly population. MCH's analysis appears to reasonably present both the current and future bed need within the service area. Due to the increased need for services and the room mix (16 private and 20 semiprivate), Mid Coast is functioning at or close to maximum capacity. The present capacity configuration does not allow MCH to relieve the backlog in the ED. This application addresses the needs faced today by MCH that will also facilitate future needs estimated using modest growth projections.

- 4) Mid Coast will use the vacated ED space as a patient holding area for imaging services and convert some space to storage.

In order to improve efficiency the applicant proposes to use the vacated ED space as a patient holding area for diagnostic imaging services, staff work space and storage. This space is adjacent to the diagnostic imaging department and is designed to facilitate efficient patient throughput. A separate feasibility study was performed by the applicant for this portion of the project. According to information contained in the record, this study determined that this approach saves between \$632,000 and \$1,509,000 annually compared to the option of purchasing a second diagnostic unit. The applicant presented utilization data that demonstrates that the present CT and MRI are "quickly approaching capacity". The addition of the patient staging/holding area is predicted to double the capacity of the existing equipment thereby eliminating the need to purchase second units. Additionally, a portion of the vacated ED space will be used to meet the need for storage and staff work areas. Both program areas are reported to be deficient in the existing department. Renovating the present ED to serve as a patient holding area appears to be an efficient use of this space due to its adjacency to the diagnostic imaging department and the increased throughput that will be realized.

- 5) Mid Coast also indicates that it will introduce a new nursing delivery model associated with this project. This model provides seamless care management for patients with chronic diseases. It is designed in conjunction with care managers assigned by the Maine Medical Center PHO.

Nursing care models that do not result in a new service are not subject to CON review and therefore are not reviewed as a part of this application. It is, however, considered a complement to this application and the efforts of MCH to expand its chronic care case management capability.

iii. Conclusion

The current situation is one of emergency room overcrowding, ambulance diversions, patient "boarding", and facility inefficiencies that are documented threats to patient safety. Additionally,

MCH is the only hospital in the region with a Behavioral Health Unit. Considerable evidence was presented, cited in the application, and included in the record, which supports the proposed project that intends to reduce threats to public and patient safety. This project will provide demonstrable improvements in service quality and outcomes by eliminating or greatly reducing the incidence of patient diversions and boarding and through the reduction of overcrowding. Additionally, as a not-for-profit hospital, MCH is accessible to all residents of its service area.

CONU recommends that the Commissioner determine that there is a public need for the proposed services.

V. Alternatives Considered

A. From Applicant

1. **“Reduce the need for this project by increasing throughput and reducing demand”**

In addition to the other alternatives outlined below, Mid Coast Hospital has taken a number of steps and initiated a number of programs in an attempt to mitigate its capacity issues. Shortly after moving into the new hospital, a Capacity Management Team was formed to address capacity concerns. Initiatives that have been implemented as a result of this team are as follows:

- A new position in the case management department focused solely on managing complex cases to reduce length of stay and increase capacity.
- Meetings with each of the physician groups to educate them on their individual lengths of stay relative to national benchmarks.
- A reshuffling of the operating room schedules after identifying inpatient backlogs on certain days of the week.
- The development of a hospitalist program to better move patients through the system and thereby increase inpatient capacity.
- The development of a best practice transfer protocol with Maine Medical Center that avoids unnecessary admissions to Mid Coast Hospital for certain high risk heart attack and trauma cases.
- A study of Emergency Department throughput was conducted by Applied Management Systems, management engineering consultants. Their recommendations have been implemented in order to maximize throughput in the current space.
- The development of a Primary Care Clinic that will open in FY 2008. This clinic will expand access to primary care services especially for patients insured through the MaineCare program.

The cumulative impact of these programs is the elimination of approximately 1,800 patient days on an annual basis. Stated another way, Mid Coast has reduced the bed need by about five beds. Unfortunately, all of this good work has not obviated the need for the proposed project.”

2. **“Collaborate with Parkview Adventist Medical Center (PAMC) to develop a single healthcare system for the mid coast communities.**

“Mid Coast Hospital believes that the best alternative for the mid coast communities is to have a single integrated healthcare system. APPENDIX VI, Schedule 1 is an analysis of the costs that could be eliminated if there was a single system serving the mid coast communities. The mid coast service area is currently the smallest area, from a population standpoint, to be served by two hospitals. In addition, it is becoming harder for small hospitals to deal with the ever increasing investments required to improve patient safety and improve outcomes. APPENDIX VI, Schedule 2 is an analysis ranking each of Maine’s hospitals in order of average daily census. This analysis shows that PAMC is one of the smallest hospitals in Maine that has not become a Critical Access Hospital. Stated another way, small hospitals have needed to take extraordinary efforts simply to survive. Obviously, with Mid Coast Hospital located within five miles, PAMC does not qualify for Critical Access status.”

“Soon after opening the new hospital, it became evident that Mid Coast Hospital would be constrained from a capacity standpoint. In 2004 Mid Coast Health Services attempted to complete the vision of a single integrated healthcare system for the mid coast communities by initiating discussions with Parkview Adventist Medical Center (PAMC). APPENDIX VI, Schedule 3 includes all of the documentation of these attempts. A timeline and summary of these discussions follows:

- Schedule 3a is a letter to Mr. Lewis, PAMC President, dated April 6, 2004 requesting a meeting to discuss the idea of bringing the two facilities together.
- Schedule 3b is a response from Mr. Lewis to the letter of April 6, 2004.
- Schedule 3c and Schedule 3d are a series of PowerPoint presentations that summarize various models for bringing the two organizations together. These models were developed after a series of meetings during the summer of 2004.
- Schedule 3e is a letter dated October 13, 2004 from Mr. Lewis to Mr. Paris summarizing the Parkview Board’s rejection of Mid Coast Hospital’s various affiliation options.
- Schedule 3f is a PowerPoint Presentation of a proposal to the “Membership Committee” of the Seventh Day Adventist Church dated December 2, 2004. The Membership Committee, in effect, owns PAMC.
- Schedule 3g is a letter dated December 6, 2004 from Mr. Paris, MCH President, to Mr. Ortel, the Chair of the Membership Committee, summarizing the meeting in which Mr. Ortel rejected Mid Coast Hospital’s proposal.
- Schedule 3h is a letter dated September 27, 2005 from Mr. Paris to Mr. Lewis and Mr. Ortel, pointing out Mid Coast’s increasing concern about Parkview’s viability and again offering to bring Parkview into the Mid Coast Health Services system.
- Schedule 3i dated November 7, 2005 is the most recent rejection from Mr. Lewis, on behalf of Parkview.

It is significant to note that PAMC is a religious hospital owned by the Northern New England Conference of Seventh Day Adventist Churches. Unfortunately for the communities, the Northern New England Conference of Churches (Parkview’s owners) has rejected the notion of a single integrated healthcare system based on “faith-based issues”. The Church has repeatedly stated that Parkview’s reason for existence is its faith-based mission.”

3. Status Quo (Do nothing)

“This alternative is obviously not possible since doing nothing puts the mid coast communities at tremendous risk. From a day-to-day standpoint, doing nothing increases the number of patients spending the night in the Mid Coast Hospital emergency department and the number of times that Mid Coast Hospital must go on diversion. The public safety issues associated with ambulance diversions and boarding of patients in the Emergency department have already been discussed.

“Mid Coast Hospital is also very concerned about the viability of Parkview. A review of PAMC’s financial situation reveals an extremely precarious situation. APPENDIX II, Schedule 4, taken from Parkview’s audited financial statements, shows a declining trend over the past four years. Parkview has managed to meet its obligations by 1) incurring substantial debts, and 2) doubling their prices. Given Parkview’s affiliation with the Seventh Day Adventist Church, all indications are that they intend to “go it alone” as a small faith-based hospital. As outlined above, very few small hospitals have been able to survive without the protection of critical access status. APPENDIX VI, Schedule 4, includes an article about The Boston Regional Medical Center (BRMC), a Seventh Day Adventist hospital in Stoneham, Massachusetts. Prior to closure, BRMC was the only other Seventh Day Adventist Hospital in New England. Mid Coast’s concern, in reading this article, was the sudden nature of the hospital closure and the risk to the communities if something similar happened in Brunswick.”

“In summary, Mid Coast Hospital has taken a number of steps and implemented a number of new programs to reduce the need for this project. While extremely successful, these measures have only “scratched the surface” in terms of reducing demand. The best alternative and one that is supported by the State Health Plan, is the consolidation of Mid Coast and Parkview hospitals. Every attempt to make this happen has been rejected by the Church on the basis of faith based issues. The alternative of doing nothing puts the communities at great risk. Therefore, the only viable alternative is to seek Certificate of Need approval to expand services at Mid Coast Hospital.”

B. CONU Discussion

i. Criteria

Relevant criteria for inclusion in this section are specific to determination that the proposed services are consistent with the orderly and economic development of health facilities and health resources for the State as demonstrated by:

- The impact of the project on total health care expenditures after taking into account, to the extent practical, both costs and benefits of the project and the competing demands in the local service area and statewide for available resources for health care;
- The availability of State funds to cover any increase in State costs associated with utilization of the project’s services; and
- The likelihood that more effective and accessible, or less costly alternative technologies or methods of service delivery may become available.

ii. Analysis

Total projected 3rd year incremental operating costs are projected to be \$3,120,812 with an estimated MaineCare cost of \$315,202. By applying the payor mix for MCH, it is estimated that the cost to the State of Maine would be approximately \$110,321.⁵ This cost to the State is not considered substantial, particularly considering the public and patient safety benefits that are included in this application. Additionally, there are no competing applications within this service area. The total of all CON applications in this round do not exceed the total amount available in the hospital portion of the Capital Investment Fund.

MCH discussed several alternatives to the proposed project:

- 1) The first alternative presented by the applicant discusses initiatives they enacted that were designed to “reduce the need for this project by increasing throughput and reducing demand.” These activities are presented in detail above. Although the initiatives resulted in a reduction of 1,800 patient days, present demand for services exceeds capacity and creates a threat to public and patient safety as discussed in section C of this analysis;
- 2) The second effort presented by the applicant discusses efforts to develop a single healthcare system for mid coast communities. This would require an acquisition/merger of PAMC and MCH. These efforts were not successful. This does not appear to be an option; and
- 3) The final option discussed was to remain status quo. This is not a viable option due to the increasing incidence in hospital diversions and patient boarding due to overcrowding.

iii. Conclusion

The project proposed by the applicant appears to be the most viable option to address the issues of public and patient safety as documented in the application.

CONU recommends that the Commissioner determine that the proposed services are consistent with the orderly and economic development of health resources for the State. There are adequate credits in the CIF to approve this project.

VI. State Health Plan

A. From Applicant

“The following summarizes how Mid Coast Hospital’s proposed project relates to the priorities set out in the State Health Plan and other planning documents.”

“First, Mid Coast believes that this statement was meant to apply to the State as a whole and not to any particular community. Surely, if there are bed shortages in a particular community then exceptions would need to be made to this general rule. APPENDIX VIII, Schedule 1 is an analysis comparing the beds per 1000 population for the Bath-Brunswick Hospital Service Area (HSA) to Maine as a whole. The beds per 1000 for Maine are adjusted downward to take into account tertiary care that is only provided in certain hospitals. Using licensed capacity (remember that Mid Coast Hospital has never activated 30 of its licensed beds), the Bath-Brunswick HSA has only 2.1 beds per 1000 whereas Maine has 2.7 community beds per 1000. Stated another way, even after activating the 18 beds requested in

⁵ MCH MaineCare payor mix, March 2007 ($\$3,120,812 \times 10.4 = \$315,202 \times 35\% = \$110,321$).

this application, the Bath-Brunswick Hospital Service Area would still have 19% less beds per 1000 population than the State as a whole.”

“Second, Mid Coast believes that this application deserves special attention since it is not seeking to expand its licensed capacity. Mid Coast is simply asking to activate 18 of its already licensed beds. Mid Coast Hospital is currently licensed for 104 beds and has built only 74 beds. In fact, in the CON for the new hospital, Mid Coast Hospital was approved to build 85 beds. Due to significant legal delays between the date of approval and the time of construction, there were a number of years of inflation not recognized in the CON. This forced a reduction in the number of “built beds” from 85 to 74.”

“Third, as described in detail in Section II – Question 10, Mid Coast does not believe that the unused capacity at Parkview Adventist Medical Center should be considered in this application. Rather than repeat this argument in this section, see Section II – Question 10.”

“State Health Plan Specific Priorities: “Projects that protect public health and safety are of the utmost importance. Projects that directly and unambiguously protect the public’s health and safety are assigned the highest priority in the current environment. Examples of such projects include: elimination of specific threats to patient safety; projects that center on a redirection of resources and focus toward population-based health and prevention; such efforts address our state’s greatest area of need. This includes addressing – at a population level as opposed to an individual patient level – the most significant health challenges facing Maine – cardiovascular disease, cancer, chronic lung disease, diabetes, depression and drug addiction; Projects that specifically incorporate as a primary component of the initiative for which approval is being sought, a comprehensive scope of concern including prevention, early detection, treatment and rehabilitation of chronic conditions, especially cardiovascular disease, cancer, lung disease, diabetes, and depression. Such efforts will contribute to efforts to implement the care model across our communities and will encourage appropriate utilization of resources and maximize patient outcomes. At a minimum, priority projects will devote a portion of the total “value” or cost of the project to new investment in a related public health effort that is aimed at reducing the demand for the service proposed under the application at the population level. Projects demonstrating additional new investment in such public health initiatives should receive a higher priority ranking”.

“First, the proposed project is consistent with the State Health Plan’s priority of protecting public health and safety. This is described in detail in Section II – Question 2 and supported by numerous articles and citations included in APPENDIX II.

“Second, as part of this project Mid Coast is redesigning the nursing delivery model to ensure that all patients receive evidence based care and that patients with chronic disease are managed appropriately. This project is described in more detail in Section II – Question 2 and APPENDIX II, Schedule 5.”

“Third, as part of this project and to show the hospital’s commitment to the State’s priorities, Mid Coast Hospital will set aside \$3,000,000 of internal funds to create an endowment, the income of which will be used solely for the purposes of wellness, prevention and chronic disease programs. Based on an analysis of unmet need, the income on the endowment will be initially directed toward the prevention of obesity. See Section II – Question 3. Based on prudent investment and spending

policies, this endowment will generate \$120,000 to \$150,000 every year to invest in these important programs.”

1. “Projects that contribute to lower cost of care and increased efficiencies are also priorities. The rate at which spending on health care is increasing in this state is unsustainable, given current economic constraints. Projects that clearly demonstrate that they will generate cost savings either through verifiable increased operational efficiencies or through strategies that will lead to lower demand for high cost services in the near and long term should be given very high priority during the competitive review process. These types of projects may include: Projects that physically consolidate hospitals or services that serve all or part of the same area and that demonstrate an appropriate, cost effective use for the “abandoned” infrastructure, that do not result in increased costs to the health care system and that, in accordance with state policy as expressed in Maine’s Growth Management Act, do not contribute to sprawl”

“First, Mid Coast has documented throughout this application that this project will allow Mid Coast Hospital to become even more efficient. APPENDIX III, Schedule 3 shows the projected cost per adjusted discharge (CPAD) with this project will be \$ 422 less than the current CPAD trended forward. This equates to an annualized savings of \$ 6,900,000.”

“Second, Mid Coast believes that special consideration should be given to this proposal since it has made every attempt to facilitate a consolidation of the Mid Coast and Parkview hospitals. As documented elsewhere in this application, such a consolidation would reduce operating costs in the communities by \$5.1 million per year, and would avoid millions of dollars of duplication in terms of capital investments.”

“Mid Coast Hospital has been a model hospital in terms of efficiency and lowering cost. Mid Coast is one of a few hospitals in the State that can speak from experience in terms of actually reducing the number of hospitals through consolidation. As previously described in Section I, in 1987, the former Bath Memorial and Regional Memorial hospitals came together under Mid Coast Health Services and ultimately merged as Mid Coast Hospital in 1991. In 2001, the two campuses were combined into a single, efficient, state of the art facility located halfway between Bath and Brunswick. With this combination came the reduction in licensed beds in the communities from 200 to 158. The former Bath Memorial Hospital was donated to the City of Bath and has been re-developed into a state-of-the-art Mid Coast Center for Higher Education. The former Regional Memorial Hospital has been re-developed into the Mid Coast Senior Health Center which includes 42 nursing facility beds, 39 assisted living units and 17 Alzheimer’s units.”

2. “Projects that advance access to services and reflect a collaborative, evidenced based strategy for introducing new services and technologies are also priority projects.”

“This project is not proposing the introduction of any new services or technologies.”

3. “Projects and/or applicants demonstrating certain attributes should be deemed higher priority than those without the attributes”

- a. **“Projects that include a complementary preventive component that will lead to a reduced need for services at the population level will receive the highest priority among all applications reviewed in a given review cycle.”**

“As described above, Mid Coast Hospital is proposing to set aside \$3,000,000 as an endowment, the income of which will be used for prevention, wellness and chronic disease management. As described in Section II – Question 3, Mid Coast Hospital has determined that the most important priority for these funds is in the prevention of obesity. Mid Coast Hospital’s Obesity Task force has been meeting for the past year to develop recommendations relative to Mid Coast Health Service’s role in dealing with the obesity epidemic. The proposed endowment will provide much needed funding to implement the recommendations.”

- b. **“Projects and/or applicants that demonstrate a tangible, real (as opposed to in kind) investment in the MHINT (Maine Health Information Network Technology) project should be assigned a higher priority ranking than applicants failing to make such an investment. These investments must be for hardware, software or direct financial contribution to the MHINT project.”**

“As documented in Section II – Question 9, Mid Coast Hospital is currently in the process of building the infrastructure that will be necessary to support the link to the MHINT project. Mid Coast Hospital has committed \$977,000 to install the GE Centricity system in the offices of the 25 providers employed by Mid Coast Hospital. Once complete, this project will be expanded, via the hospital’s contract with Computer Sciences Corporation, to include other practices in the community. Once installed, this system will allow for transfer of data and information to the MHINT.”

- c. **“Similarly, applicants and/or projects representing real investments in electronic medical records systems both in hospital and in community medical practices will receive a higher priority ranking than those applicants failing to make such an investment. Qualifying investments will support clinical data exchange between separate data systems or applications using accredited standards for the exchange of data such as HL7.**

“As more fully described in Section II – Question 9, Mid Coast Hospital has made major investments in the implementation of electronic medical records in both the hospital and for the 25 providers employed by Mid Coast Hospital. The total commitment for both of these efforts is \$5,329,000 to date.”

“All of these systems are HL7 compliant.”

4. **Projects that exercise less than a .5% increase on regional health insurance premiums shall be given priority consideration under the CON review process.”**

“As of the date of this submission, the Bureau of Insurance has not distributed the formula to make this determination. APPENDIX VIII, Schedule 2 is Mid Coast Hospital’s calculation

showing that this project will have no impact on health insurance premiums in this region.” See CONU analysis under “Impact on Commercial Insurance Rates Bureau of Insurance Assessment, page 48, of this preliminary review.

B. CONU Discussion

i. Criteria

Relevant criteria for inclusion in this section are specific to the determination that the project is consistent with the State Health Plan. For this determination, the Commissioner will be guided by the priority criteria set forth in the State Health Plan.

State Health Plan priorities targeted
By Applicant:

State Health Plan Priority Ranking:

Projects with primary object of eliminating threats to public safety	Highest Priority
Projects that contribute to lower costs of care & greater efficiency	High Priority
Projects that advance access to services and new services	
Projects and/or applicant attributes	Higher with than without
a. Include comprehensive component	
b. Tangible investment in MHINT	
c. Investment in HL7	
Less than a .5% impact on commercial insurance rates	Priority consideration

ii. Analysis

Projects that protect public health and safety:

- **Projects with the primary objective of eliminating threats to patient safety:**

According to the State Health Plan, projects that protect public health and safety (eliminate threats) have the highest priority. Two portions of this application satisfy the criterion of having a primary objective of eliminating threats to patient safety. These include the activating of 18 licensed medical surgical beds and expanding the Emergency Department capacity by 3 beds to relieve overcrowding resulting in patient “boarding” and “diversions”. (A full discussion of this threat to public and patient safety is included in Section IV “Needs” of this analysis.)

Additionally, MCH serves as the referral destination for persons with acute mental health needs and closely collaborates with Sweetser Peer Center and Spring Harbor Hospital. Sweetser and MCH collaborate to provide Intentional Peer Services to behavioral health clients who are receiving crisis assessment in the emergency room. Sweetser Peer Support Specialists provide support to individuals in crisis while they wait for a mental health assessment and disposition. Sweetser quantifies its support for the expansion and reconfiguration of the ED to more effectively deal with behavioral health crisis interventions and protect client confidentiality (on file with CONU).The ED expansion also protects the safety of non-behavioral health patients by not co-mingling them in a common emergency department area.

Additionally, a letter of “strong endorsement” was written by the CEO of Spring Harbor Hospital. In addition to supporting the need for the ED expansion they state: “Further, these plans are consistent with recent plans adopted by DHHS and the courts regarding care for persons with mental health and chemical dependency issues” (*on file with CONU*).

Consultation with the State of Maine Office of Adult Mental Health Services confirms the positive impact on patient care that will result from the proposed reconfiguration of treatment and staff space.

According to the CDC Assessment: “Overcrowding the emergency department results in potential threats to the patients in that the lack of beds will require a diversion of the ER patients to another facility resulting in delayed emergency services.” (The Health Assessment received from the Maine CDC/DHHS dated January 2007, is on file with CONU)

Based upon supporting documentation contained in this application, and corroborated by credible sources, the project meets this priority criterion.

- **Projects that reflect a redirection of resources and focus on population-based health and prevention.**

Obesity is specifically identified in the State Health Plan (pg 12) “as a priority of the Maine Center for Disease Control and Prevention as well as the many voluntary public health efforts around the state.” The State Health Plan (page 56) identifies “cardiovascular disease, cancer, chronic lung disease, diabetes, depression, and drug addiction” as the most significant health challenges facing Maine. Obesity causes heart attacks, strokes, and diabetes, among other illnesses. It is increasingly prevalent in children, who are likely to grow up to be obese adults. Because obesity has been determined to have a causal relationship with several major health challenges identified in the State Health Plan and the diseases associated with diabetes often result in ED and inpatient treatment, the project is deemed to meet this priority criterion.

- **Projects that demonstrate best practices in building construction, renovation and operation to minimize environmental impact both internally and externally (e.g. “green” energy)**

The analysis provided by the CDC/DHHS acknowledges that “the applicant states that they have employed an architectural firm that is LEED certified and will plan the construction according to LEED guidelines utilizing an integrated approach”. CONU concurs with this analysis: the project is deemed to meet this priority criterion.

Projects that contribute to lower cost of care and greater efficiencies

The operative word in this determination is “and”. Although the applicant demonstrated reduced marginal operating costs and it will not contribute to sprawl, it does not physically consolidate hospitals or services and therefore, the project does not meet this priority criterion.

Projects that advance access to services and reflect collaborative evidence based strategy for introducing new service

The operative word in this determination is “and”. Although this project will advance access to emergency department services and create efficiency as determined in Section IV “Need”, it does not also introduce new services and technologies. This criterion does not apply to this project.

- **Investment in HL7**

Based upon the information contained in this section, the applicant has demonstrated investment in and/or use of an electronic medical records system with an HL7 interface. Accordingly, this applicant meets this criterion.

Impact on Commercial Insurance Rates Bureau of Insurance Assessment

The Bureau of Insurance has provided the following information to CONU regarding the impact of this project on “regional insurance premiums” as required in the Maine State Health Plan. “I estimate that the maximum impact of this project’s third year of operation will be approximately \$1.063 per \$100 (1.063%) of premium. I further estimate that this project, in its third year of operation, will have an impact on statewide private health insurance premiums of approximately \$0.049 per \$100 (0.049%) of premium (William A. Bremer, FCA, MAAA, Assistant Actuary, Bureau of Insurance).

CONU is governed by 22 M.R.S.A. Sec. 335 (5) and guided by the Maine State Health Plan (page 59). “Projects that exercise less than a 0.5% increase on regional insurance premiums shall be given priority consideration under the CON process.” Therefore, this project is not given priority consideration under this criterion. It is important to note that the applicant provided a model that reflects an impact below the 0.5% priority. CONU believes, in totality, the benefits of this project outweigh the costs.

Projects that involve any of the following characteristics cannot be considered priority projects:

- Projects that duplicate existing services or facilities in a region or community that has existing capacity for such services. This limitation assists in the orderly development of the health care system and in our efforts to control costs.
- Projects that result in an increase in the number of inpatient beds in the State. Putting additional beds on-line, without a complimentary reduction in beds elsewhere will infuse additional costs into the system.
- Projects that involve the construction of a new hospital (other than replacement facilities).
- Projects that involve major expansions of existing services and/or facilities.

This particular priority is discussed, in detail, in other sections of this review and will not be repeated here. For the specific purpose of this priority status, CONU offers the observation that existing capacity is not meeting the area need and that patient and public safety are threatened by diversions and boarding.

MCH is presently licensed for 104 beds, but is operating with 74 beds. In order to meet the community need and move closer to its licensed capacity, MCH is proposing a major facility expansion. This

expansion project will bring MCH to 92 licensed beds which is still below its presently licensed capacity of 104.

According to the language contained in this section, CONU believes this project cannot be considered a priority project. PAMC contends that since this project cannot be deemed a priority project it must be denied (*on file CONU*). CONU does not agree with PAMC that not meeting this priority is a mandate to disapprove the application. This project meets several other important priorities in the State Health Plan, including “highest priority” criteria and it also meets CONU review criteria beyond the State Health Plan.

iii. Conclusion

As a result of a detailed analysis of information contained in the record, CONU recommends that the Commissioner determine that the proposed services are consistent with the State Health Plan

VII. Outcomes and Community Impact

A. From Applicant

“The activation of eighteen medical surgical beds and the expansion of the emergency department are proposed to reduce and potentially eliminate the practice of ambulance diversion and patient boarding that are documented threats to public safety. Improved throughput of the diagnostic imaging service is predicted to extend the life of the existing imaging equipment. This project also includes the re-design of the nursing delivery model. This redesign is intended to improve the way patient care is managed in the acute care setting, especially as it relates to patients with chronic diseases.”

“The expansion of the emergency department will provide additional capacity to meet the service needs of the Behavioral Health population served by MCH, which is the only hospital in the region with an in-patient behavioral health unit. This unit serves as a community, regional and statewide referral site and will increase from two to three secure rooms and also increase support space for staff.”

B. CONU Discussion

i. Criterion

Relevant criterion for inclusion in this section is specific to the determination that the project ensures high-quality outcomes and does not negatively affect the quality of care delivered by existing service providers.

ii. Analysis

Ensures high-quality outcomes and does not negatively affect the quality of the care delivered by existing service providers.

The following excerpts are taken from the Maine Quality Forum Analysis:

- “SUMMARY: Mid Coast Hospital performs at a level of quality comparable to its peers. The failure to address security in the ED within this project is of concern. The impact of increased capacity at Parkview Hospital is a concern, however mitigating that impact on issues of quality is the obligation of Parkview.”
- “Mid Coast performs well on clinical indicators. Also the applicant measures well on service quality surveys”.

MQF did identify concerns as follows relative to:

- level of staff in nursing units;
- higher than expected cesarean, procedures, falls and pressure ulcer rates;
- security in the Emergency Department;
- the number of procedures performed below accepted thresholds for carotid endarterectomy procedures in 2004; and
- the applicant did not discuss overall effort in infection control.

CONU staff concur with the conclusions presented by MQF:

- “The impact of increased capacity on Parkview Hospital is a concern, however mitigating that impact on the issue of quality is the obligation of Parkview.”
- “One could assume that if Parkview limited its services to those it could adequately support, then quality could be provided. If Parkview chose to maintain a broader level of services than it could financially and structurally support, then quality would likely suffer”
- “It is then Parkview’s obligation to structure itself so that its quality of care is maintained over the spectrum of services it provides.”

MCH responded, in writing, to the MQF Analysis and provided updated information relative to the concerns expressed in the MQF review. This information is also contained in the record and summarized as follows:

- MCH no longer performs carotid endarterectomy procedures;
- MCH presented a description of its ED security plan;
- MCH explained that its nursing unit staffing that includes a higher level of R.N.s. This results in a richer skill mix and better patient outcomes (per MQF data 2006, Quarter 1);
- MCH provided updated numbers relative to cesarean rates that compare favorably to Maine and U.S. rates;
- MCH provided data relative to patient falls which indicates that their fall rate is below the mean and falls at MCH resulted in no major injuries;
- MCH provided its policy entitled: Surveillance, Prevention & Control of Infection Program to address HAI;
- MCH provided updated data that shows they have reduced the incidence of hospital-acquired pressure sores since the 2/06 reporting period

Additionally, there is no information that points to a potential decrease in quality of care at Parkview due to this application. Indeed, hospital diversions and overcrowding are recognized by credible sources as threats to public and patient safety (cited in other sections of this review).

The State of Maine presently has faith-based hospitals successfully coexisting in communities with non-faith-based hospitals. Examples of this include Mercy Hospital in Portland and Saint Mary's Regional Medical center in Lewiston. Both of these faith-based hospitals have expanded and/or are in the process of expansion. This coexistence has not negatively impacted the quality of care at either facility.

Indeed, testimony provided at the Public Hearing by Mid Coast Hospital (pg 7, *on file at CONU*) states: "There is no intention by this application to harm Parkview in any way. In fact, the region needs both facilities. If Parkview were to close today, Mid Coast even with the, with the increased size, is not large enough to serve the hospital needs of the region. So both hospital facilities are in fact needed."

PAMC and MCH concur that several physicians and physician groups have left PAMC i.e. withdrawn their affiliation with PAMC. These physicians are now affiliated with MCH. Physician practices are not regulated by CON review and, accordingly, where a physician chooses to practice is not within the scope of this review.

Information provided by Parkview Adventists Medical Center (PAMC), both at the Public Hearing on March 13, 2007 and in writing March 23, 2007 (*on file at CONU*), does not state (quantify) how the quality of care at PAMC will be negatively impacted by this project.

Testimony provided at the Public Hearing by Mr. Ted Lewis, CEO of Parkview (pgs 65-70) indicates that PAMC is comfortable with its financial position. On page 66 of the Public Hearing Testimony, Mr. Lewis comments on the "profitability of the organization [Parkview]" including:

- "We had about a \$1 million turn around for the good in 2003";
- "We were right about break even in 2003"
- "In 2004 our hospital operations actually improved close to 1% margin"
- "We had some unusual one-time expenses in that year [2004] of \$1.7 million"
- "In 2005 our operations actually continued to improve. We had a margin of about {\$650,000} which was about 1 ½%. . "our goal is to hit two to three percent total"
- "Our book of business is now running about \$40 million. We're very comfortable with our performance that we feel good about in 2006"

iii. Conclusion

The project encompasses improvements to a facility that, in its current condition, does not meet the communities need for services. These services are being delivered in a less than optimal setting and continued stress to the system occurs from overcrowding. In the future, this will exacerbate the problem and reduce quality to unacceptable. Services are not being made available in an orderly and efficient manner.

Based upon input from the Maine Quality Forum, The Maine CDC and information received from the public and private sector, and information contained in the record, CONU recommends that the Commissioner determine that this project ensures high-quality outcomes and does not negatively affect the quality of care delivered by existing service providers.

VIII. Service Utilization

A. From Applicant

“According to AHA Hospital Statistics 2006 (page 87), the ED use rate in Maine was 540.2/1000 population in 2004. This is higher than the 2000 rate, but below the 2001, 2002, and 2003 rates. Maine utilization is much higher than the US overall. MCH and PAMC share ED service for the Bath-Brunswick area. As incorporate in previous sections, overall hospital visits for the service area is lower than the state averages.”

B. CONU Discussion

i. Criterion

Relevant criterion for inclusion in this section is specific to the determination that the project does not result in inappropriate increases in service utilization, according to the principles of evidence-based medicine adopted by the Maine Quality Forum.

ii. Analysis

The analysis provided by the MQF does not include a statement relative to inappropriate increases in service utilization specific to this project. Evidence presented by the applicant, to support this project, is based upon authoritative sources recognized by the industry. The sources agree that patient diversion and boarding are threats to patient and public safety. These safety issues are discussed in Section IV Need.

The existence of vacant beds at PAMC is not alleviating the conditions of overcrowding at MCH. Although PAMC receives “diverted” patients from MCH, it appears from the record, that local physicians and members of the community are using MCH more than PAMC.

Additionally, financial information contained in the record relating to Parkview Adventist Medical Center, leads CONU to question whether Parkview has the financial means to meet the current and projected needs in the community documented by MCH in this application.

Currently, PAMC does not demonstrate the ability to take on significant debt or to finance significant additional operating capital to support expanding operations at this current facility. Evidence of this in the record is its debt coverage ratio of 1.34, which is quite low considering the overall low debt that Parkview carries (Calculated by CONU staff based upon Parkview Adventist Medical Center And Subsidiaries Consolidated Financial Statements, December 31, 2006 and 2005; *on file CONU*).

PAMC appears to be in an improving financial condition but, based on the low days cash on hand, and its low operating margin, Parkview does not demonstrate the financial capacity to undertake a significant increase in patients (1.47 days cash on hand compared to a State average of 73.4 days and 110.95 days for Mid-Coast Hospital).

According to information contained in the record, PAMC total patient discharges for 2005 are reported at 1,981. Total patient discharges for MCH in 2005 are reported at 4,919.

There was no evidence presented in the voluminous materials in the record that indicated that any of Parkview's patients would have chosen Mid-Coast Hospital but for the availability of a bed at Mid-Coast. This also applies to Mid-Coast patients. It appears patient utilization patterns reflect a preference for treatment at Mid-Coast and the physicians who practice there. Each facility has its proponents.

The mere existence of unused capacity at Parkview does not necessarily establish that the bed need can be met by Parkview. Since many of the major physician groups have migrated to MCH, it is logical that patients will want to be treated at the hospital at which their physicians have privileges. Even in the face of unused capacity at PAMC, patient diversions and boarding continue to increase in the area, thereby creating a threat to public safety. Since 82% of patients arriving at the emergency department arrive via non-ambulance transport, they would not know that MCH, or any other hospital, was on diversion status. This is discussed further in other sections of the record.

It is not unusual for a community to have a faith-based mission hospital coexist with a non faith-based hospital. Indeed, it is not unusual for a community to have more than one hospital. The success of one does not necessarily cause the demise of the other. Rather, both bear the responsibility for providing quality of care for those services they offer patients and to reach a complementary array of services. This is demonstrated in utilization data contained in the record and physician migration to MCH.

iii. Conclusion

CONU recommends that the Commissioner determine that the project does not result in inappropriate increases in service utilization, according to the principles of evidence-based medicine adopted by the MQF.

This application meets these criterion.

IX. Other

1. Funding Available in the Capital Investment Fund. 22 M.R.S.A. Sec. 335 (7)

i. Criterion

Relevant criterion for inclusion in this section is related to the needed determination that the project can be funded within the CIF.

ii. Analysis

The Certificate of Need Unit has determined that, if approved, this project can be funded within the Capital Investment Fund (CIF).

The CON portion of the State of Maine Health Plan “ assess the proposals against a variety of quality, cost and access considerations (pg 50)” and that the analysis occur with input from the Maine Quality Forum, the Bureau of Insurance, the State of Maine CDC and other appropriate sources.

iii. Conclusion

The project encompasses improvements to a facility that clearly in its current condition cannot continue to meet demands for services. CONU recommends that this project be approved under the CIF.

2. Public Comments

This project benefited from both a Public Information Meeting, held on January 11, 2007 and a Public Hearing that was held on March 13, 2007.

Throughout the review period, CONU received considerable public feedback relative to this application. The full content of all feedback received is on file with CONU. Additionally, all information that was received by CONU that is relevant to CON review criteria was considered in reaching a determination. Information received during the course of the CON review is summarized below and can be categorized as follows:

Strongly opposed: Parkview Adventist Medical Center (PAMC)

- 1) On January 11, 2007, PAMC submitted a document entitled: Parkview Adventist Medical Center Statement In Opposition To Mid Coast Hospital Major Expansion Project (*on file with CONU*). This document was submitted as “. . .its preliminary position in opposition to approval of a Certificate of Need for this project”. The statements contained in this document relevant to CON review criteria are stated as follows:
 - “Any objective analysis of community bed need that includes both hospitals leads to the inescapable conclusion that no additional beds are needed in this community”; and “Importantly, the State Health Plan requires that “the project”, not the applicant, but the project submitted for review” is consistent with certain priorities in the Plan.”
- 2) On March 23, 2007 PAMC submitted a binder containing extensive text and numerous attachments. This submission is entitled: Written Comments of Parkview Adventist Medical center in Opposition to Mid Coast Hospital CON Application (*on file with CONU*). The statements contained in this document relevant to CON review criteria are contained on page iii as follows: “To wit this project:
 - 1) Duplicates existing services or facilities in a community that has existing capacity;

- 2) Increases the number of inpatient beds without a complementary reduction in beds elsewhere; and
- 3) Involves a major expansion of existing services and facilities.”
- 4) “As such, this proposed project is not a priority under the State Health Plan, and should be disapproved.”

B. Mid Coast Hospital (MCH) Additional Information Submitted:

- 1) On March 23, 2007, MCH submitted supplemental information in response to the Public Hearing held on March 13, 2007. This document is entitled: Mid Coast Hospital’s Supplemental Submission In Support Of Its Application For Certificate Of Need (on file with CONU). The summary of information contained in this submission that is relevant to CON review criteria are as follows:
 - 1) “Printed copies of the text of the presentations made by Robert McCue and Lois Skillings at the March 13 public hearing:
 - 2) An additional copy of Mid Coast’s written response to Parkview’s statement of opposition made at the Public Informational Meeting in January”; and
 - 3) A bulleted list of “undisputed facts “contained in the application or provided at the public hearing.”
- 2) On May 8, 2007 Mid Coast Hospital submitted a document entitled: Mid Coast Hospital’s Response To Parkview Adventist Medical Center’s Written Comments Dated March 23, 2007 (on file with CONU). This document focuses both on items that they believe were adequately addressed in their application and provided additional information relevant to the review criteria as follows:
 - 1) BNAS closing data based upon a study conducted by the State Planning Office that Mid Coast cites as “ confirming that the estimates used by Mid Coast were right on the money”
 - 2) “The very modest market increases in market share estimates over an eight year period are significantly less than the market share shifts that have occurred over the past five years”
 - 3) “The Joint Commission and the Institute of Medicine are quite clear in stating that boarding should never happen because it is unsafe”
 - 4) “In addition, a separate financial feasibility study for this component [diagnostic services holding area]of the certificate of need is included as Appendix IV, Schedule 7 of the application. This study shows that the alternative of adding a holding area is clearly preferable to the status quo.”

C. Information and Testimony from the Public Information Meeting held January 11, 2007 and the Public Hearing held March 13, 2007 (on file with CONU).

The additional documents were considered relevant to CON review criteria. Minutes from the Public Information Meeting and Minutes from the Public Hearing totaled 168 pages.

D. Opposed: Predominately Parkview patients wanting faith-based care (public testimony and letters).

Ten letters opposing the Mid Coast Hospital CON application were received. A majority of the letters written in opposition to this CON application express their desire to have a two-hospital community. Two Physicians wrote letters opposing this application.

- Melinda Schaeffer Skau, MD states: “I feel both hospitals give good care and are equally needed in the community”
- Carl W. Grove, RPh (no address) states: “What is clearly different at Parkview is the priority focus on total well being with a strong inclusion of spiritual health”
- Gaylen Johnson, MD states: 1)Believes quality of care equivalent though services are somewhat different, 2) believes Mid Coast is requesting a potentially precedent setting exemption from CON law (does not provide details), 3) request regulations be applied fair and impartial, and 4) believes CON approval would negate need for collaboration
- Letters from the public, many who prefer the “faith-based mission” of PAMC and/or want a two hospital community.

E. Supported: Professionals, volunteers, patients, community organizations and Businesses

A preponderance of letters, that speak specifically to the CON review criteria, supported the Mid Coast Hospital’s CON application. Notably they include 51 letters of support:

- Spring Harbor Hospital
- Sweetser (Your Partner In Behavioral Health)
- Ev Simon, MD
- Bath Iron Works
- N. Nalchajian, MD
- Mid Coast Medical Group
- Coastal orthopedics & Sports Medicine
- Bowdoin Medical group
- Brunswick Gastroenterology
- Elaine M. Secskas, MD, P.A.
- Philip E. Sumner, MD
- Approximately 40 letters from individuals written to support this CON application

X. Timely Notice

Letter of Intent filed:	September 21, 2006
Subject to CON review letter issued:	September 26, 2006
Technical assistance meeting held:	October 17, 2006
CON application filed:	December 15, 2006
CON certified as complete:	December 15, 2006

Public Information Meeting

January 11, 2007

Public Hearing

March 13, 2007

XI. Findings and Recommendations

Based on the preceding analysis, the CONU recommends that the Commissioner make the following finds and recommendations:

- A. The applicant is fit, willing and able to provide the proposed services at the proper standard of care as demonstrated by, among other factors, whether the quality of any health care provided in the past by the applicant or a related party under the applicant's control meets industry standards;
- B. The economic feasibility of the proposed services is demonstrated in terms of the:
 - 1. Capacity of the applicant to support the project financially over its useful life, in light of the rates the applicant expects to be able to charge for the services to be provided by the project; and
 - 2. The applicant's ability to establish and operate the project in accordance with existing and reasonably anticipated future changes in federal, state and local licensure and other applicable or potentially applicable rules;
- C. That there is a public need for the proposed services as demonstrated by certain factors, including, but not limited to:
 - 1. Whether the project will substantially address specific health problems as measured by health needs in the area to be served by the project;
 - 2. Whether the project will have a positive impact on the health status indicators of the population to be served;
 - 3. Whether the services affected by the project will be accessible to all residents of the area proposed to be served; and
 - 4. Whether the project will provide demonstrable improvements in quality and outcome measures applicable to the services proposed in the project
- D. That the proposed services are consistent with the orderly and economic development of health facilities and health resources for the State as demonstrated by:
 - 1. The impact of the project on total health care expenditures after taking into account, to the extent practical, both costs and benefits of the project and the competing demands in the local service area and statewide for available resources for health care;
 - 2. The availability of State funds to cover any increase in State costs associated with the Utilization of the project's services; and
 - 3. The likelihood that more effective, more accessible or less costly alternative technologies or methods of service delivery may become available;

In making a determination under this subsection, the commissioner shall use data available in the state health plan under Title 2, section 103, data from the Maine Health Data Organization established in chapter 1683 and other information available to the commissioner. Particular weight must be given to information that indicates that the proposed health services are innovations in high quality health care delivery, that the proposed health services are not reasonably available in the proposed area and that the facility proposing the new health services is designed to provide excellent quality health care.

- E. That the project is consistent with the State Health Plan;
- F. That the project ensures high-quality outcomes and does not negatively affect the quality of care delivered by existing service providers;
- G. That the project does not result in inappropriate increases in service utilization, according to the principles of evidence-based medicine adopted by the Maine Quality Forum; and
- H. That the project can be funded within the Capital Investment Fund.

The CONU recommends that this project be **APPROVED with the following conditions:**

1. The total licensed bed capacity of Mid Coast Hospital (MCH) will be 92 beds;
2. MCH will report the number of diversions and boarding events annually to the CONU for the period beginning in 2007 through three years following project implementation;
3. MCH will report data on increased efficiencies in throughput for diagnostic services annually beginning for a period of three years following project implementation;
4. MCH will report results from the Obesity prevention annually for a period of three years following implementation.