

**AN ASSESSMENT OF THE UNIVERSITY OF TEXAS MEDICAL BRANCH AT  
GALVESTON (“UTMB”) & RECOMMENDATIONS  
FOR CLINICAL REDEVELOPMENT**

**Submitted to the Regents of the University of Texas System**

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**INTRODUCTION**

In November of 2008 the University of Texas System engaged Kurt Salmon Associates (“KSA”) to review the state of affairs at UTMB in the aftermath of Hurricane Ike (“Ike”). The objective of the review was to take stock of the impact of the storm on the clinical operations and advance recommendations as to how best to redevelop this aspect of UTMB. Our charge has been to review UTMB in light of how best to establish a successful future for a leading academic medical center applying contemporary standards of excellence.

In light of the need for an expedited process to define and evaluate options, KSA identified and framed the issues and options. Our process was fact-based and did not attempt to estimate the levels of public or private financial support each of the various redevelopment options might attract. In our experience, estimating how much any party is willing to pay for a solution is only possible after the options are first understood and vetted by the potential sponsors.

KSA is the longest established health care consulting group in the country, and has served as the chief planning advisor on many of the largest campus redevelopment projects in the academic medical center (“AMC”) field. This has included successful work with such institutions as UCLA Medical Center, University of Colorado Medical Center, University of Michigan Medical Center, Kings County Medical Center, University of California San Francisco, University of Washington Medical Center, Johns Hopkins Hospital and the University of Texas Southwestern Medical Center at Dallas. The KSA team has extensive personal credentials on the topics confronting UTMB, and represents individuals experienced in strategy, facilities, finance, and organization.

Following is the Executive Summary of our detailed report to the Regents of the University of Texas System.

## THE SITUATION AT UTMB

UTMB is a well recognized AMC with a distinguished record of accomplishment in medical education, research, and patient care. The institution was established on Galveston Island in 1891 when Galveston was a leading economic and population center in the State of Texas. The institution experienced steady growth over the subsequent decades, enabled by hundreds of millions of dollars of public and private financial support, chiefly through the State of Texas and the Sealy & Smith Foundation, respectively. By the summer of 2008, UTMB comprised almost seven million square feet of facilities, more than 12,000 employees, and a \$1.5 billion budget. This includes a UTMB “clinical enterprise” consisting of the John Sealy Hospital, the 600-physician UTMB faculty practice plan, and the Texas Department of Criminal Justice (TDCJ) Hospital, among other components. The teaching hospital and attending physician staff provide the major training forum for educating UTMB clinicians of all types, and serve a large sector of the regional population in so doing.

As a business prior to Ike, the UTMB clinical enterprise was not financially viable without high levels of extramural support. This ongoing external support is required to finance both the large annual operating losses and provide capital for development and renewal of infrastructure. The conditions driving the financial shortfalls are evident:

- ¶ The location accessibility on an island is not competitive for the growing Houston metro market to the north, particularly for the commercially insured and Medicare sectors vital to viable clinical economics. While the absolute driving time to UTMB from the southeastern suburbs of Houston is not unreasonable, several alternative providers are located much closer to this area resulting in a less competitive position for UTMB. This situation will only get worse as more Houston-based healthcare systems place new facilities into the south metro area, north of Galveston, and further reduce the relative accessibility of UTMB.
- ¶ The clinical practice model is generally not competitive for the more elective, procedure-based cases in the commercial and Medicare sectors, and this situation is independent of location. Key sub-specialists can be difficult to access from a scheduling perspective and the quality of the patient experience is often not on par with what is available on, e.g., the Texas Medical Center (“TMC”) campus located to the north. And, while UTMB has a good reputation, the institution does not enjoy a superior standing vis-à-vis the best of the TMC institutions in such important programs as heart, cancer, pediatrics, and neuroscience.
- ¶ The existing physical facilities on the UTMB campus prior to Ike were not state-of-the-art and did not meet contemporary standards for patient care delivery. For example, existing inpatient rooms were half the size of current planning standards and operating rooms and diagnostic/procedural capabilities were significantly undersized and outdated. Such circumstances made it difficult to attract certain patients to the UTMB campus.

The net result is a UTMB inpatient payor sponsorship of over 60 percent Medicaid and uninsured, and the financial margins provided by commercial and Medicare patients are insufficient to offset the losses. Without major changes in the UTMB capability to be

competitive for a broader payor market, we expect the annual operating losses to increase further. Additionally, capital costs are escalating at similarly high rates, and the total extramural funding needs of UTMB will likely increase without a change in the business model.

The impact of Ike greatly exacerbated this already difficult financial situation. UTMB has lost much of the capacity of the John Sealy Hospital, requiring replacement at high costs. Additionally, a large sector of the commercial and Medicare patient population has been diverted to other providers in the wake of the loss of capacity at UTMB. This is a situation that will continue for several more years until new or repaired facilities can be activated. This combination of circumstances will make any *status quo* redevelopment of UTMB financially challenging in the extreme. While the research and education components of the UTMB campus remain strong and physically intact, continuing the clinical enterprise in the current model of location and operation will result in an increase in the relative proportions of Medicaid and uninsured, resulting in higher operating losses in more expensive facilities. Without major change, we expect annual operating costs to further increase over the coming years even if near-term capital is provided to renew the existing physical plant.

As to a national health care reform, we don't recommend you plan for such a scenario to materially change this outlook. Most any reform providing new insurance revenue from currently uninsured citizens will likely reduce or eliminate the current system of disproportionate share payments realized by the State of Texas and generated by UTMB. There is no evidence that possible new revenues will provide an offset to a reduction in disproportionate share revenues. As a result, for purposes of making this decision, we don't recommend any new UTMB redevelopment assume that increases in Federal reform support will suffice to make the institution financially viable.

## **OPTIONS FOR UTMB REDEVELOPMENT**

Our assessment of UTMB assumes the institution continues to serve major roles in medical education and research at current levels of activity and eminence going forward. UTMB has a major AMC campus in place on Galveston Island, with a number of research and education facilities essentially undamaged by Ike. UTMB should continue operating on the Island in these facilities. The question is not one of UTMB being "on or off" the Island. Rather, the question is how to define the future clinical scope of the second mainland campus already under development for ambulatory care in League City to the north and its impact on the redevelopment of the clinical enterprise on Galveston Island.

While many variations on a theme are possible, we suggest UTMB has three basic options or scenarios to choose from:

1. Redevelop all of the UTMB inpatient hospital capacity on Galveston Island (Option 1). In this option the League City campus would serve a purely ambulatory care purpose.

2. Redevelop all of the UTMB inpatient hospital capacity inland on the League City campus (Option 2A). In this option, the only inpatients that would remain on Galveston Island are in the TDCJ facility (which would remain on the Island at the discretion of the State). An ambulatory diagnostic and procedural facility would remain on the UTMB campus in this option. A variation of this option (Option 2B) would again redevelop UTMB inpatient capacity inland, and would also develop a small community hospital to serve local Island residents.
3. Split the inpatient programs into two major UTMB hospitals, one on each campus. While there are many hypothetical splits, only a few are more logistically possible and these are defined along programmatic lines. We suggest the most feasible programmatic split is along the lines of an “adult” medical surgical hospital on one site, and a “mother-baby” hospital on the other site. In this option, two variations are evaluated: Option 3A places the adult medical surgical hospital inland and the “mother-baby” hospital on Galveston Island; Option 3B reverses the locations, placing the “mother-baby” hospital inland and the medical surgical hospital on Galveston Island.

In any of these scenarios there are several additional considerations for determining the final size of the clinical facilities.

- ¶ Prior to Ike, UTMB served more patients in several medical services than is necessary to support the education of medical students. A smaller version of UTMB’s clinical operations would suffice to meet the educational mission and this reduction would spare capital costs and operating losses. While medical student training would not be impacted, reductions may impact residency training if also accompanied by a downsizing or closure of the TDCJ hospital. The TDCJ facility has not been considered as an element of the UTMB redevelopment going forward nor do the capital estimates herein include any allocation for TDCJ.
- ¶ The pediatric program at UTMB is very small and not an ideal candidate to redevelop as a result. While the program is essential to the educational mission, the possibility of providing these services at an alternative site or through a new affiliate should be vigorously explored. Scenarios included herein provide facility capacity until an alternative strategy can be developed. Any scenario in which pediatrics does not require direct UTMB redevelopment spares capital costs and reduces operating losses.
- ¶ The psychiatric program is similarly small, and again while important to the educational mission, should be reviewed for placement at an alternative site or through a new affiliate. As with pediatrics, options included herein provide facility capacity until an alternative strategy can be developed. Avoiding a direct redevelopment of psychiatry similarly spares capital and reduces operating losses.

For purposes of our analysis, we have sized the future UTMB clinical enterprise to meet the requirements of the academic program and particularly medical student education. Should pediatrics and psychiatry not be successfully sited elsewhere, they will need to be included in the UTMB redevelopment program. For purposes of this analysis, physical capacity and capital for these programs is included. Additionally, trauma services are

anticipated to follow the adult medical surgical hospital regardless of location in the options presented. Any hospital development contemplated by these options will require some level of emergency room capabilities.

Given our charge has been to recommend how best to redevelop UTMB for the future as a vibrant, growing AMC, we have defined these three basic options to be long-term as well as comparative in nature. There are clearly options costing less in the short term than those we have defined, but require more frequent recapitalization and/or a facility replacement over a nearer timeframe, and we did not attempt to evaluate all the possibilities.

For comparative purposes, we have defined an Option “Zero” which requires the least capital investment to get the current Galveston Island hospital reopened in facilities materially consistent with pre-Ike capabilities. This option does not include the construction of any new buildings; rather, this option provides only for the repair of existing facilities, returning them to pre-Ike operating status, plus the mitigation of these facilities to protect against future storm damage. The resulting UTMB clinical facilities in this option will continue to be significantly undersized and outdated and will not meet contemporary standards for care delivery. More importantly, the inpatient clinical enterprise at UTMB has been significantly crippled and many patients and clinicians have been and will be lost over the coming years until it is fully re-opened.

Any scenario contemplating the “minimum” capital required to simply re-open historical capacity will not in our opinion restore the level and quality of AMC program UTMB enjoyed prior to Ike. So, while such an option remains a choice for UTMB, we have not recommended nor applied further comparative review to this option given it does not advance the objectives we have defined at the onset of our review.

An overview of each of the three redevelopment options follows.

## **OPTION 1: Redevelop all of the UTMB inpatient hospital capacity on the Galveston Island campus**

### ***Programmatic Overview and Financial Impact***

This option is the simplest concept being essentially a replacement of pre-Ike hospital capabilities on the current location. This option differs substantively from Option “Zero” in that it brings the UTMB clinical care facilities up to contemporary standards, including some renovation of existing facilities and construction of new buildings.

The adult medical/surgical inpatient bed complement has been oriented to meet minimal education (vs. purely clinical service, which is a more expansive demand) size requirements. The pediatric and psychiatric programs have been noted as separate line items as discussed earlier. We note again these services must also be directly redeveloped if not provided through new affiliation arrangements.

The inpatient facility redevelopment in this option has been normalized to provide “apples to apples” comparability across scenarios. That is, our planning definition for the redevelopment of UTMB calls for bringing the campus up to contemporary standards for a useful building life of 30-40 years, making it comparable to other options. Our redevelopment plan also incorporates storm-proofing costs to mitigate against future damage. This redevelopment must necessarily occur in stages given ongoing patient care operations, resulting in completion of all projects by 2017.

The annual operating financial result of the clinical enterprise in this option is negative, an outcome that is the case in all options. The drivers of this outcome are a payor mix with reduced commercial volumes and the reflection of depreciation. Capital costs are necessarily higher than a comparably new redevelopment on the mainland due to the necessity to phase around existing patient care operations and provision for storm-proofing the infrastructure.

KSA’s financial analysis reflects the current funds flow between the state and UTMB, specifically that disproportionate share funds are collected by the state of Texas and the state allocates funds to UTMB that are captured as non-operating revenue. Estimated operating losses in all scenarios do not include general revenue or other non-operating revenues. If general revenue were reflected in the financial analyses included herein, operating losses would be substantially reduced. Inflation is factored into this analysis; operating results are shown in 2017 dollars, project capital numbers are escalated to the anticipated midpoint of the construction period.

A summary of key program and financial indicators for Option 1 is included in Table 1.

**Table 1**  
**Option 1: Operating and Financial Summary**

Operations			Financials	
Bed Type	Number	Location	Measure	\$ million
Med/Surg/ICU	250	Island	Project Capital	\$1,050 *
OB/NICU	150	Island	Mitigation	\$120
Peds	40	Island	Total Capital	\$1,170
Psych	25	Island		
Sub-total	465		2017 Operating Revenue	\$630-650
			2017 Operating Income/(Loss)	(260-245)
TDCJ	100	Island		
Grand total	565			

Source: KSA analysis; mitigation estimate from UTMB Department of Facilities and Construction

\* Estimates do not include capital attributable to TDCJ

Note: Ranges for revenue and operating losses assume a 5 point decrease in commercially insured patients with a commensurate and proportional increase in Medicaid, self-pay, and “other” patients

### ***Option Evaluation***

The strength of this option is the continued co-location of the major AMC activities of clinical care, research, and education on one primary campus. Such proximity simplifies logistics for staff and students alike, maintaining a level of efficiency and enhancing

opportunities for collaboration across clinical and scientific personnel. The benefits of proximity at an AMC are many and not to be underestimated.

The problem with this option is the location which presents challenges on several levels.

- ¶ The first of these relates to access, and the replacement of a major AMC on an island with half of the potential service area in the ocean limits service competitiveness. This is particularly true as the large populations of the Houston metro area continue to increase to the north of Galveston, while the local population on Galveston Island is flat.
- ¶ The second relates to capital costs which are higher due to both the phasing of construction around ongoing patient care operations and the need for storm-proofing.
- ¶ The third relates to the potential for UTMB to be competitive for a broader and more financially viable mix of sponsored patients. The island site is harder to access than the existing hospital alternatives and those being contemplated in the mainland geography to the north. UTMB will have lost large sectors of sponsored patient volumes for several years by the time new or repaired facilities open on the Island, and regaining even past levels of payor mix is so unlikely we cannot assume it in the projections. The implication is for even larger operating losses than currently exist.

In summary, Option 1 provides the great benefit of maintaining single campus proximity of the major missions of patient care, education, and research. Such a benefit comes at a cost, with this scenario requiring a high level of ongoing operating support. Further, the prospect of UTMB ever achieving a greater level of fiscal operating self-sufficiency is furthest removed in any scenario totally redeveloped on the Island.

## **OPTION 2: Redevelop all of the UTMB inpatient hospital capacity inland on the League City campus**

### ***Programmatic Overview and Financial Impact***

The basic objectives of this option are twofold. The first is to recognize a mainland campus location is a more accessible and competitive situation for a future UTMB teaching hospital. The second is to minimize the splitting of acute care programs and maintain as cohesive a clinical operation as possible. While the splitting of an AMC campus is difficult for reasons cited earlier, the segmentation of teaching hospital programs can be even more challenging. This is particularly true of mid-sized teaching hospitals such as UTMB, where splitting of programs risks creating inadequate critical mass in key services.

Two variations of this option are evaluated here. The first, Option 2A, is a redevelopment of all UTMB inpatient hospital capacity inland on the League City

campus. In this option, the only inpatients that would remain on Galveston Island are in the TDCJ facility (which would remain on the Island at the discretion of the State). An ambulatory diagnostic and procedural facility would remain on the UTMB campus in this option to provide care for Island residents and TDCJ patients. The second, Option 2B, would again redevelop all UTMB inpatient capacity inland, and would also develop a small community hospital to serve local Island residents. In this option, the ambulatory facility planned in Option 2A is accommodated in the community hospital plan.

The inpatient redevelopment in Option 2A occurs on the League City campus. The facilities would all be new and are assumed to be contemporary buildings with 30-40 year useful lives.

The annual operating financial result of this scenario is negative. The inland location is more conducive to UTMB attracting a larger number of sponsored payor patients and this has the potential to reduce the deficit in this scenario versus an Island location. Given the construction would occur in a “green field” and not require working around ongoing patient care operations, time to activation is faster and is assumed to occur in 2013. The inland location requiring limited storm protection coupled with faster construction time reduces overall capital compared to a comparable facility on the Island.

Option 2B calls for the concurrent development of a community hospital program on the Island sized to the needs of the local population. While it’s clear Island residents require access to inpatient beds, the demand case for providing these services directly on the Island versus the mainland, is questionable. Total demand on the Island, based on either the pre-Ike population (est. 60,000) or at a lower post-Ike level, will only support a small hospital of limited technical capability, and there is an argument that residents would be better served in a larger more capable facility even with a longer access time. Conversely, Island population numbers are not insignificant, increase substantially during peak fair weather periods, and a case can be made for a facility locally. We have defined such a facility and assumed to be located on the current UTMB campus. The program complement of such a facility would focus on less intensive primary and secondary inpatient services.

The operating and capital impact of both variations to Option 2 is noted below in tables 2A and 2B (variation providing for a community hospital on the Island).



**Table 2A**  
**Option 2A: Operating and Financial Summary**

Operations			Financials	
Bed Type	Number	Location	Measure	\$ million
Med/Surg/ICU	250	Inland	Project Capital	\$820 *
OB/NICU	150	Inland	Mitigation	\$0
Peds	40	Inland	Total Capital	\$820
Psych	25	Inland		
Sub-total	465		2017 Operating Revenue	\$650-670
			2017 Operating Income/(Loss)	(230-210)
TDCJ	100	Island		
Total	565			

Source: KSA analysis

\* Estimates do not include capital attributable to TDCJ

**Table 2B**  
**Option 2B: Operating and Financial Summary**

Operations			Financials	
Bed Type	Number	Location	Measure	\$ million
Med/Surg/ICU	306	250 Inland, 56 Island	Project Capital	\$880 *
OB/NICU	158	150 Inland, 8 Island	Mitigation	\$120
Peds	40	Inland	Total Capital	\$1,000
Psych	25	Inland		
Sub-total	529		2017 Operating Revenue	\$745-765
			2017 Operating Income/(Loss)	(265-245)
TDCJ	100	Island		
Total	629			

Source: KSA analysis; mitigation estimate from UTMB Department of Facilities and Construction

\* Estimates do not include capital attributable to TDCJ

Note: Ranges for revenue and operating losses assume a 5 point increase in commercially insured patients with a commensurate and proportional decrease in Medicaid, self-pay, and “other” patients

### ***Option Evaluation***

The major benefits of either variation of this option include a better location to site a major teaching hospital for the future and a minimization of programmatic splitting by maintaining a single inpatient program. The result is a more favorable capital cost and potential for improved financial results on an ongoing operating basis, reducing UTMB dependency on extramural support. While the variation providing for a small community hospital on the Island (Option 2B) represents an inpatient bed split, we conclude this can be workable as long as the highly technical programs remain together in the new mainland facility.

The problem with both variations of this option is a splitting of the overall UTMB academic campus across two sites. In particular, having the educational and research enterprises in Galveston and the main clinical enterprise in League City has the potential to reduce scholarly interactions between the clinical and academic sides of the AMC. This option requires an extensive “shuttling” of staff and students between the two campuses, and this is assumed as a long term logistics reality. While technology, training program formats, and clinical schedules can all be deployed to relieve some of the travel

inefficiency, it's our experience there will be an ongoing impact on UTMB and some tension across the two campuses as a result.

Option 2A or 2B provides the benefit of a better site for a future UTMB teaching hospital, and does so without further decentralizing the clinical programs. The cost of this scenario is the introduction of travel inefficiencies and the increased potential to separate clinical and scientific interchange on a long-term basis.

### **OPTION 3: Split the inpatient programs into two major UTMB hospitals, one on each campus**

#### ***Programmatic Overview and Financial Impact***

The concept behind Option 3 is the development of two UTMB hospitals of advanced technical capabilities. One of these is on the new mainland site to capture the benefits of a better location, and one on the current Island campus to capture the benefits of AMC proximity, at least for those programs continuing to be Island-based. Beyond the logistics of travel between two campuses as previously outlined, the primary challenge of this option is how best to effectively “split” the UTMB teaching hospital into two operations without undermining operating feasibility to the point of failure.

The splitting of academic inpatient programs requires the clinical departments to cover two sites and this is an expensive proposition. Departments with high scholarship such as Medicine are already challenged to provide sub-specialty consult coverage on one campus, and the introduction of a second is very costly. Hospital-oriented services such as anesthesia, radiology, and pathology all similarly incur inefficiencies covering two sets of programs. Beyond the clinical departments, hospital operations such as pharmacy, critical care and operating rooms must be established across two sites with similar efficiency challenges.

To the degree such splits are necessary we suggest the most efficient of the variations keep the “adult” medical/surgical services core together. This implies programmatic candidates to split out as “freestanding” include pediatrics, maternity and psychiatry, as these have better potential to operate freestanding assuming large volumes and scale. It is possible to further consider “ortho,” “heart” and “cancer” inpatient hospitals on a similar freestanding basis where size and scale can support the same. The pediatric, psychiatric, orthopedic, cardiovascular, and cancer services at UTMB are all far too small to consider for such purposes. Further, the prospects of developing scale in the wake of Ike and the lost volumes in the interim rebuilding years make such options very risky.

UTMB has a very large maternity service and this is of a size capable of supporting a freestanding women's hospital. To the degree pediatrics cannot be re-sited with a new affiliate, a co-location of this service with maternity would be recommended to preserve the economies of the critical care areas. For these reasons, should UTMB consider a split campus option solution, KSA recommends the “adult” medical/surgical and women's/children's programs as the programmatic basis for evaluating the two hospital scenario.

Two variations are evaluated: Option 3A places the adult medical surgical hospital inland and the “mother-baby” hospital on Galveston Island; Option 3B reverses the locations, placing the “mother-baby” hospital inland and the medical surgical hospital on Galveston Island.

The inpatient redevelopments on each campus are modeled to be equivalent in functionality to allow for valid comparison between options. The variations of this option relate to where each program is sited, i.e., adult medical/surgical on the Island or mainland and women’s/children’s vice versa. To the degree achieving a more balanced sponsored mix of patients is a goal, placing the adult medical/surgical program on the League City site is the best alternative (Option 3A). The adult programs have a level of access to Medicare populations not possible in a women’s/children’s program, and have higher prospects for elective cases in the commercial sector as well.

The annual operating financial results of both Option 3A and 3B are negative. In particular, the clinical inefficiencies cited require higher levels of operating support and result in larger losses. The inland location has an improved opportunity to attract a broader payor mix and this reduces losses, particularly where the adult program is the inland option (Option 3A).

Capital costs for these options reflect facility redevelopment on both campuses. Variations of Option 3 are typically deployed when a move to a new campus is desired but the necessary capital is insufficient to fund a full move, requiring a move in phases. In virtually all cases, the former “main” campus is a viable operating enterprise allowing most or all of the capital to be spent on the “new” campus. At UTMB the Galveston campus teaching hospital is significantly damaged and so any two-campus redevelopment of the hospital requires capital spending on both.

The operating and capital impact of Options 3A and 3B are summarized below.

**Table 3A**  
**Option 3A: Operating and Financial Summary**

Operations			Financials	
Bed Type	Number	Location	Measure	\$ million
Med/Surg/ICU	250	Inland	Project Capital (Inland)	\$470 *
OB/NICU	150	Island	Project Capital (Island)	\$260
Peds	40	Island	Mitigation (Island)	\$120
Psych	25	Inland	Total Capital	\$850
Sub-total	465			
TDCJ	100	Island	2017 Operating Revenue	\$650-670
Total	565		2017 Operating Income/(Loss)	(255-235)

Source: KSA analysis; mitigation estimate from UTMB Department of Facilities and Construction

\* Estimates do not include capital attributable to TDCJ

Note: Ranges for revenue and operating losses assume a 5 point increase in commercially insured patients with a commensurate and proportional decrease in Medicaid, self-pay, and “other” patients

**Table 3B**  
**Option 3B: Operating and Financial Summary**

Operations			Financials	
Bed Type	Number	Location	Measure	\$ million
Med/Surg/ICU	250	Island	Project Capital (Inland)	\$410 *
OB/NICU	150	Inland	Project Capital (Island)	\$900
Peds	40	Inland	Mitigation (Island)	\$120
Psych	25	Island	Total Capital	\$1,430
Sub-total	465			
TDCJ	100	Island	2017 Operating Revenue	\$630-650
Total	565		2017 Operating Income/(Loss)	(290-270)

Source: KSA analysis; mitigation estimate from UTMB Department of Facilities and Construction

\* Estimates do not include capital attributable to TDCJ

Note: Ranges for revenue and operating losses assume a 5 point decrease in commercially insured patients with a commensurate and proportional increase in Medicaid, self-pay, and “other” patients

### ***Option Evaluation***

The major benefit of Option 3 is the placement of a major UTMB hospital “anchor program” on both campuses. Such a deployment maintains a significant clinical presence on Galveston Island while providing for a more competitive and accessible future for UTMB on the mainland.

The problems are chiefly those related to two-campus logistics as discussed previously, namely the costs and clinical feasibility. Even with the best possible economic split between adult medical/surgical and women’s/children’s programs, the losses increase due to inefficiencies. Should UTMB proceed even further and split the adult medical/surgical programs such as inpatient cardiovascular, critical care, and cancer care, our experience suggests even greater losses will be sustained, and leads to the question of what the clinical departments can implement at acceptable levels of quality and safety.

In summary, Option 3 presents the most significant operating challenges. To the degree this option is the desired approach, the data suggests placement of the adult medical/surgical hospital on the mainland (Option 3A) has the most favorable financial prospects going forward. Clearly, such a split also introduces the two-campus AMC issue – distance inefficiencies among the research, education and clinical, and distance inefficiencies within the clinical – into the relationship between the research and education enterprise remaining on the Island and the components of the clinical enterprise located inland.

## **CONSIDERATIONS AND RECOMMENDATIONS**

Given enough money and tolerance for travel/logistics, any of the options can work for UTMB. The differences are in the required levels of these two variables and in the resulting reliance of UTMB on extramural financial support from the public and private sectors.

As to the operating money, the major Island-based hospital redevelopments outlined in Options 1 and 3 place UTMB in a greater reliance on operating support from the State going forward due to reduced ability to build a different payor mix. Option 2 presents the best possibilities in this regard.

As to capital, the development of two major hospitals as presented in Option 3B is the most costly followed by Option 1 for the same reason, i.e., rebuilding on the Island for a contemporary and long-term replacement presents construction premiums versus the inland locations. Option 2A is the least expensive in this regard.

A summary of the financial indicators across all scenarios is included in Table 4.

**Table 4**  
**Summary of Options: Financials**

	<b>Option 1</b> Rebuild on Island	<b>Option 2A</b> Rebuild Inland	<b>Option 2B</b> Rebuild Inland w/ Comm. Hospital on Island	<b>Option 3A</b> Split Campus Adult Inland	<b>Option 3B</b> Split Campus Women & Children Inland
<b>Measure (\$ million)</b>					
Beds	565	565	629	565	565
Project Capital *	\$1,050	\$820	\$880	\$730	\$1,310
Mitigation	\$120	\$0	\$120	\$120	\$120
Total Capital	\$1,170	\$820	\$1,000	\$850	\$1,430
2017 Operating Revenue	\$630-650	\$650-670	\$745-765	\$650-670	\$630-650
2017 Operating Income/(Loss)	(260-245)	(230-210)	(265-245)	(255-235)	(290-270)

Source: KSA analysis; mitigation estimate from UTMB Department of Facilities and Construction

\* Estimates do not include capital attributable to TDCJ

Note: Ranges for revenue and operating losses assume a 5 point increase or decrease in commercially insured patients with a commensurate and proportional change in Medicaid, self-pay, and “other” patients

The question of proximity and the impact of travel and logistics for UTMB staff is the second major variable. Option 1 is clearly superior in this regard, with all the remaining variations requiring long term two-campus logistics. This stated, an increasing number of leading AMCs such as University of California San Francisco and University of California San Diego are arrayed on two or more campuses with more AMCs joining their ranks as capital and real estate limitations force phased redevelopments.

Given the damage to the UTMB facilities on Galveston Island, the need to redevelop these facilities at high costs, and the changing demographics of the region, we recommend the options be prioritized as follows:

- ¶ Option 2A, redeveloping the teaching hospital inland without further dividing the inpatient programs, as the first priority. This option provides the best opportunity for UTMB to achieve greater financial self-sufficiency and is the most capital efficient. While this option creates two-campus travel logistics, we suggest the prospects for UTMB are more in line with the demographics of the future, thus meriting the costs of the split. As to the variation providing for a small community hospital on the Island (Option 2B), we recommend this be pursued if desired by the Galveston community along the service acuity definition outlined.

- ¶ Option 3A, with the adult medical/surgical hospital inland and a women's/children's hospital on the Island, as the second priority choice. This option has expensive operating costs to begin with, and if the medical surgical programs are further sub-divided, this presents increased risk to the success of the endeavor. To the degree either variation of Option 3 is pursued, we recommend adhering to the concept of keeping the adult medical/surgical programs together. This option also introduces the two-campus travel logistics, but we suggest the benefits of new geographic access merit the costs.
- ¶ Option 1, redeveloping the entire inpatient operation on the Island with a replacement hospital, as the third of the three choices. While this option provides for proximity and is conceptually the easiest to implement, the location is not aligned with the future and risks relegating UTMB to even greater reliance on large public and private subsidies for the foreseeable future. So, while Option 1 is perfectly workable, it should be recognized UTMB will have more limited prospects for a better financial result on the clinical side going forward.

Greater detail behind this assessment is more completely outlined in the full report which follows.