University of Houston System
Board of Regents
Analysis of the Seven Breakthrough Solutions

I. INTRODUCTION

Chancellor Khator asked the Pappas Consulting Group to provide an independent analysis of the Seven Breakthrough Solutions to the University of Houston System Board of Regents. We believe we are in a unique position to do so because we have significant experience both within and outside of universities; because we advise both academic leaders and governing boards (and, in some instances Governors, legislators, and state agencies); and because we are unapologetic both in our praise and in our criticism of higher education.

The Seven Breakthrough Solutions and the Summit materials should be a good catalyst for constructive conversations about improving higher education (both its quality and productivity) and about the appropriate role of boards in that improvement. To be constructive, however, these conversations cannot be either rampantly critical or defiantly defensive. And, in our experiences, board and academic leaders have to be full partners in seeking sensible solutions.

Our report will provide some general observations and then will address in detail each of the seven breakthrough solutions, including our specific recommendations to the UH System Regents for each proposal.

II. GENERAL OBSERVATIONS ON THE RELEVANCE OF THE SEVEN BREAKTHROUGH SOLUTIONS TO THE UH SYSTEM

The **topics** introduced are important ones. The role of **teaching** and the role of **research** and either their integration or separation deserve thoughtful consideration. We were surprised, however, that the proposals were essentially silent on the role of **service** as that has been increasing in importance, with the strong encouragement of communities, regions, and states and with the active encouragement of the business civic sectors. The emergence of the Carnegie Classification of a Community Engaged University, which the UH System Board of Regents recently adopted as one of its goals, and the quality of the public and private universities with that classification, reinforces the role of the university faculty (and students) in applying their professional expertise to community or state issues.

While the topics are important, they are also **complex**. We recognize the desire to make things simple and the view of some critics that claiming something like evaluating excellent teaching or productivity is complex is no more than a diversionary tactic; however, we stand by our position that these are indeed complex matters and do not lend themselves to "simple tools" or "one-size-fits-all" solutions.

We also strongly believe that **mission** differentiation needs to be reflected in any "solutions." One of American higher education's distinctive features is the rich diversity of its institutions. Evaluating and rewarding teaching, assessing teaching productivity, and balancing the relationship among teaching, research, and service will be very different exercises for a community college than for a largely undergraduate university than for a major public research university. It will even be different for institutions **within** a system, as the UH System Board of Regent's recent conversations about **greater** mission differentiation to serve better the region confirm. Just as one example, the mix of undergraduate teaching and graduate teaching has a major impact on the number of students taught. It will be crucial that prior to taking actions that the Regents ensure there will be no unintended negative consequences to the Strategic future of the UH system and its focuses on:

- Improving student access and success at all UH System institutions.
- Strengthening the position of UH as a major research university.
- Increasing community engagement at all UH System institutions.

We also believe that any decisions made ought to **be informed by empirical evidence**. We note, for example, that a couple of the more intriguing proposals are based on actual programs: The University of Oklahoma's Teaching Excellence Award Pilot Program and the Colorado experiment of funding students rather than institutions. In those instances, we would urge the Regents to examine independent, empirically based analyses of the success and challenges, plus the consequences of unintended consequences of these programs. We are also strong believers in **pilot programs** to test new approaches prior to full scale implementation and would urge the Regents to require the administration to provide data modeling on the proposals and to recommend potential pilot programs.

As the UH System Regents know from the recent board retreat, we believe strongly in an active and engaged board (which is different both from a passive and disengaged board and from an activist and intrusive board). The Summit papers from two philosophically differing national associations for governing boards are both useful in this regard. Thus, we do believe a board should receive efficient but not excessive indicators for accountability. In our experience, there's an inverse relationship between large amounts of accountability data and real accountability. We also agree that these indicators need to

focus on both quality and productivity as they relate to the particular mission and strategic direction of each institution. We also know of no sustained success story in public higher education that was driven either by a strong chancellor/weak board or by a weak chancellor/strong board. As we indicated at the retreat, it takes a strong chancellor working in partnership with a strong board to achieve sustained success, especially if the aspirations for achievement are high. The Governor's initiative provides an opportunity for broader and deeper understanding of key higher education issues through informed conversations among the board, the academic leadership, and stakeholders and through an examination of relevant data.

III. ANALYSIS OF THE SEVEN BREAKTHROUGH SOLUTIONS

Breakthrough Solution #1

Measure Teaching Efficiency and Effectiveness and Publicly Recognize Extraordinary Teachers

The Goal Section

The Goal is an admirable one ("improve the quality of teaching" and "to publicly recognize excellent teachers"). However, the challenge is to find "a simple tool" that can measure a complex activity that is teaching. Most sound faculty evaluation systems, therefore, utilize multiple measures, such as:

- Current student evaluations
- Former student evaluations. These tend to be more valuable than current student evaluations because former students have more experience and perspective, including career preparation. It is not unusual for former students to say, for example, "While I did not realize it at the time, his demanding course and approach has served me well."
- Classroom visitation reports from at least two colleagues
- Classroom visitation report from a faculty teaching skill expert
- Self-evaluation
- Departmental chair review of curriculum, teaching methods, level of innovation, appropriateness of syllabus and individual assignments, grade distribution and commentary on assignments, etc.

Carrying Out the Reform Section

1. While some of the data and approach described would perhaps provide an interesting perspective and should be vetted for usefulness, it has a number of serious limitations that need to be resolved before this methodology ought to be implemented:

- The data compilation suggested in 1(a) is sound management practice and is done at many universities, particularly at the department chair and dean level. It would not be useful as raw data for Board members because of the sheer volume, but Regents should have access to aggregated data.

- The calculation and the implication of the calculation in (b) is flawed. Many faculty at a research university teach a mix of undergraduate and graduate courses, with the latter usually being small classes by design (and sometimes, especially in professional programs, by accreditation requirement).   This is especially true for more senior faculty as graduate faculty status is earned through establishing a distinguished record. By dint of being more senior, the faculty member will likely have a higher salary and by dint of that seniority and performance may teach fewer total students because of teaching more graduate classes. Does this <u>necessarily</u> make this faculty member not one of "the best teachers" or as having <u>necessarily</u> less "effectiveness"? On the other hand, depending on one's definition of "efficiency" in an academic setting, there are legitimate questions. Let's illustrate the complexity:

Faculty Member	Salary/Benefits	Courses	Cost Per Student
Faculty Member A (New hire: not yet earned graduate teaching status)	$65,000	3 undergraduate @ 30 students each per semester p/s. Total 180.	$361
Faculty Member B (Senior member; graduate faculty status)	$100,000	2 undergraduate @ 30 students each p/s; 1 graduate seminar @ 12 students each p/s. Total 144.	$694
Faculty Member C (Mid-level; Allied Health Faculty, class size limited by lab size/accreditation limits)	$80,000	2 undergraduate @ 18 students (accreditation max) p/s; 1 graduate @ 6 students p/s. Total 84.	$952

As these illustrations demonstrate, many factors beyond a faculty member's control came into play. Faculty Member C, for example, might be the most dynamic teacher on campus producing terrific graduates much in demand but

because she is in a high-paying discipline (due to supply and demand) that limits, by national requirements, class size, C will be low-ranked by this methodology. Faculty Member A, for example, could be a new hire in English at a relatively low salary (supply and demand again), teaching required composition classes that will be full whether A is a good teacher or not (because entering freshmen have to have the course). By this methodology, A will automatically be higher ranked than C even if A is a far inferior teacher.

Beyond the substantive issues with 1(b) cited above, there are some technical issues.

- Salary and benefits will vary significantly by discipline, making comparisons complex.

- Courses carry various credit loads that would impact the <u>number</u> of students taught. For example, a faculty member at a largely undergraduate institution may teach four, 3-credit courses with 20 students in each per semester (80 students taught, 240 credit hours generated) or three, 4-credit courses (only 60 students taught but the same 240 credit hours generated and exactly the same amount of time in the classroom). This issue could be resolved by using student credit hours generated rather than number of students, although that has a limitation in classes with low "credit hours" but high "contact hours" (e.g., art studio courses and lab science classes).

  Finally, there is a potential legal issue that Regents should examine before implementing this methodology. Modeling may indicate this approach disproportionately impacts older faculty members, which may raise issues of age discrimination.

- It is not clear what "compare" means in 1(c). Is it comparing a faculty member's student satisfaction with the same faculty member's grade distribution? Or does it mean rank faculty against each other (say in a department)? This would certainly work for student evaluations. It would not for grade distribution. Another complication arises from different grading scales for undergraduate courses (normally A-F) and graduate courses (normally A-B with the occasional C).

- Regents neither have the time nor the expertise to read and evaluate the worthiness of scholarly articles. At a major research university, for example, the number of high-cost faculty will likely be significant (UC-Berkeley, for example, has over 300 national academy members on its faculty who command high salaries and teach largely graduate students) and the number of articles they produce will be large and many will be highly technical. It is not clear what the intended purpose is of reading all the research articles and what a Regent does as a result of that reading.

2. The publicity seems one modest way of recognizing teachers. Most universities go far beyond that level of recognition already with special awards, walls of fame, bonuses, merit raises to the base salary, special designations, and so on. As illustrated above, the methodology does <u>not</u> help students identify the best teachers. It does provide them certain information that they may find valuable (faculty with high satisfaction ratings; faculty with high grade distributions), but by any sound definition of "best" this information is inadequate.

Let's look, for example, at the "Determining Teaching Efficiency Example" provided in the report. Who is "the best teacher" of the seven listed? Can you rank order them with any confidence? What as a Regent would you do with this information (multiplied many times over)? And how would you balance effectiveness against efficiency or vice a versa?

If you rank order by student satisfaction, you get:	If you rank order by cost per student, you get:
1. John Franklin 2. Sue Palmer 3. Al Walker 4. Bill Lewis 5. Nancy Jones 6. Joe Smith 7. Betty Reed	1. John Franklin 2. Bill Lewis 3. Sue Palmer 4. Betty Reed 5. Nancy Jones 6. Al Walker 7. Joe Smith

You cannot really rank order by grade distribution because, unlike student satisfaction and cost, there's no clear basis: What is a "reasonable grading curve"?

John Franklin seems to be a low cost, high satisfaction teacher; Joe Smith very high cost, relatively low satisfaction. But what about Betty Reed? She has the lowest student satisfaction but is over $3,000 per student <u>less</u> than the average cost. What do you as a Regent (or a student) do with this information?

Possible Objections Section

1. As described above, teaching quality is complex to measure and is best done, at least for personnel decisions, through a balanced and comprehensive approach, including student satisfaction ratings. More and more universities, however, are indeed making public student satisfaction ratings, with the appropriate caveats.

Regents should probably request the source and documentation for the statement "Research shows that student satisfaction ratings remain one of the best measures of

teaching effectiveness." (The various proposals do provide some sources but not for this important statement.) We do believe that well-designed student satisfaction surveys can provide valuable insights into teaching effectiveness. Simplistic ones, however, provide little value.

2. It might be better to pro-rate "credit" for the number of students taught rather than an "all or nothing" approach. (For example, if a faculty member provides three classes a week and a graduate assistant provides one discussion section, then the faculty member should receive 2.75 student credits and the graduate assistant 0.25).

3. No comments.

4. The same comment applies as in 3 above, although it would be more complex in this instance. How would you "credit" research if one person did the bulk of the original research, while the other did the bulk of the writing?

Recommendations for Breakthrough Solution #1

1. We recommend that the UH System Regents request the administration to model the proposal using actual sample faculty data. This modeling ought to include age distribution, and, for the purposes of this exercise, faculty should not be identified by name.

2. We recommend that the UH System Regents request the administration to model the proposal by making adjustments, as we have suggested, to the areas where we identified technical difficulties with the approach.

3. We recommend that the UH System Regents work with the administration to ensure the results of student evaluations are made readily available to students.

Breakthrough Solution #2

Recognize and Reward Extraordinary Teachers

The Goal Section

This goal is also a praiseworthy one, although combining "the quality of teaching" with "the number of students taught" could be problematic. (See comments on Solution #1.) It is worth noting that rankings, such as *U.S. News and World Report* actually look for low student/faculty ratios as a quality indicator. Private universities in particular, but also increasingly public universities, promote their low student/faculty ratios and number of small classes to students and parents. Clearly a public university has to be concerned about productivity but rewarding faculty for teaching more students should be done cautiously to avoid unintended consequences. For instance, some courses are inherently

small yet very important (for example, high level math courses for which few students qualify).

Carrying Out the Reform Section

A voluntary bonus system has some merit, particularly if it is <u>in addition</u> to existing merit based pay. Again, the issue has to do with "excellent teachers would be encouraged to teach as many classes and students as possible". With rare exceptions, there will be diminishing quality returns in a certain number of courses and students. For example, a writing teacher could take on more courses and more students but would have to reduce the number of papers assigned because of available grading time or reduce the number of comments on each paper. While an unintended consequence, this is an example of where "more" is not necessarily linked to "excellent".

Possible Objections Section

Again, the Regents should request the documentation on the research cited concerning student evaluations. Certainly we would agree that a bonus program for teaching should only consider teaching (not research or service). However, current students are not the only ones capable of judging effective teaching. (See comments on Solution #1.)

Recommendations for Breakthrough Solution #2

1. We would recommend that the UH System Regents request the administration to conduct a literature search on empirical research concerning the validity of student evaluations for measuring learning. The Regents should be provided the full bibliography, as well as a summary of the empirical research.

2. We would recommend that UH System Regents request that the Texas Higher Education Board engage an independent assessment of the success and consequences of the University of Oklahoma Teaching Excellence Awards Pilot Program 2006-07. Since this proposal is precisely modeled on that program, UH System Regents have a perfect opportunity to examine the outcomes prior to implementing its own program.

Breakthrough Solution #3

Split Research and Teaching Budgets to Encourage Excellence

The Goal Section

The goal seeks to reward appropriately both research and teaching, which is a sound goal given the mission of universities. However, it appears to focus only on sponsored research, which would not cover most of the scholarship in the humanities and social sciences or performances in the arts and music. While some may argue that this is not "valuable research", university faculty have a responsibility to advance knowledge in

their fields. Subjects like history are dynamic because of continuing scholarship and discovery. Ironically, research on effective teaching in universities, for example, would be unlikely to qualify for rewards.

Carrying Out the Reform Section

It is not exactly clear how the "new compensation plan" would work in practice since most merit-based plans are base salary increases. It is also not clear whether the non-compensation performance rewards (parking and offices) would change on an annual basis based on performance. While parking assignments certainly could, office reassignments on a regular basis would be disruptive and expensive. In our experience, most top public universities already have a strong "performance pay culture". The issues seem to be more what counts for performance and how is it rewarded. On the research side, not all research is sponsored. Research, for example, on behalf of a non-profit is rarely funded. Research in the humanities and social sciences are rarely funded. Research on behalf of state government or state agencies is, at best, only modestly funded. While some would argue that this research is "not valuable", advances in our understanding of everything, for example from Shakespeare to history to political science, depend on active scholarship.

Finally, this "solution" seems to ignore the national trend of universities becoming much more engaged with their communities, of assisting, for example, with major societal issues. Universities have long been accused, often fairly, of being "ivory towers". Any new reward system ought to recognize the importance of faculty engagement in community activities directly related to their scholarly expertise.

Possible Objections Section

It will be important to learn more about the "lucrative reward system" that apparently would provide tenured faculty the option to surrender tenure. What will the amounts be and how will they be funded? Also there appears to be a misunderstanding of how, under the current system, the institution retains flexibility and how a faculty member's emphasis ebbs and flows or changes at different phases of a career. For example, a faculty member who is completing a major book may need a reduced teaching load for a semester to complete it. During the next semester, that faculty member will likely want a break from research and will have exciting new material to share with students and will likely take on more students. This ebb and flow often continues throughout a productive faculty member's career.

Texas already has one of the better mechanisms in the country to influence faculty productivity as it has a high teaching load for all faculty, which is then reduced for a variety of approved reasons.

Recommendations for Breakthrough Solution #3

1. We recommend the UH System Regents examine the current "pay for performance" approach in the UH System to ensure that it is rigorous. For example, the Regents could require the administration to share annually the distribution of merit raises. In a rigorous system, there tends to be a bell-shaped curve, with some faculty getting no merit raises and some very high merit raises while the majority are distributed across the middle ranges. Regent oversight of the results of merit reviews at the macro level would increase accountability.

2. We recommend that the UH System Regents examine annually faculty productivity, ensuring that reductions in the state standard teaching load meet rigorously the Texas requirements, thereby increasing accountability. The examination of productivity should include teaching, research, and service.

Breakthrough Solution #4

Require Evidence of Teaching Skill for Tenure

The Goal Section

In our experience, most major public universities have an expectation that faculty be at least "good teachers" for tenure. It is true that research universities have expectations for research productivity in addition, but not instead of, teaching performance.

Carrying Out the Reform Section

1. Require evidence of teaching skill for tenure. Once again we find the rigid emphasis on the number of students and sources taught to be not necessarily consistent with "good teachers". For example, an outstanding tenure-track teacher might be invited to teach an Honors class, which is by design a small class or seminar. As another example, an English writing faculty member's composition courses, for quality reasons, are usually limited to 20-25 students to encourage assignment of a good number of papers. By this proposal, the faculty in these two examples might well not meet the 30 students per class average, yet may be outstanding teachers.

2. Student satisfaction ratings. Requiring a certain student satisfaction rating would probably mean Texas universities would have to adopt a uniform, highly validated instrument.

Furthermore, this proposal omits some other very valuable means to judge teaching effectiveness, including former student comments and peer classroom evaluations. As with most assessments, reliance on single measures puts too much expectation on the reliability of that instrument.

Possible Objections Section

The notion that 25% of the faculty tenured would be researchers only is a potentially very expensive proposition. The current system, that allows certain faculty to "buy out" teaching time, permits flexibility for both the institution and the individual. Under this proposal, faculty members who have tenure but who cannot sustain fully-funded research each and every year for the rest of their careers (which would be the vast majority of faculty) would have to have their salaries picked up by the state in the off years and would not have teaching assignments as an offset. Most researchers do not consider themselves "burdened" by teaching, especially if it is at the graduate level.

Recommendations for Breakthrough Solution #4

1. We would recommend that the UH System Regents ask the administration to review national best practices for measuring and considering teaching performance in tenure decisions at universities with similar missions to those of UH institutions.   The administration should report their findings and any recommendations to the Regents.

2. We would recommend that the UH System Regents ask the administration to estimate the cost to the state for UH System to have 25% of its tenured faculty on research only contracts, assuming a reasonable average annual "buy out".

Breakthrough Solution #5

Use "Results-Based" Contracts with Students to Measure Quality

The Goal Section

Documented learning outcomes and formal learning contracts are increasingly being implemented in higher education and could, if well-designed, add real value. Documented learning outcomes have become a priority of the regional accrediting agencies and, therefore, are at a more developed stage than learning contracts.

Carrying Out the Reform Section

Most of the items listed in (1). may well be valuable to students. However, it might be most efficiently delivered on-line or in a revised syllabus format.

The most fundamental flaw in the proposal is that "learning contracts" to be effective have to be two-way (as most forms of contracts are in the business and legal world). The student has certain responsibilities, also (to attend class, to complete assignments fully and on-time, to study the appropriate amount out of class, and so on). These need to be captured in any contract (as the "Sample Class Contract" attached to the proposal actually does).

Recommendations for Breakthrough Solution #5

1. We recommend that the UH System Regents request that the administration review current practices, to highlight any promising activities in this area, and to recommend pilot "learning contracts" and report the results to the Regents.

2. We recommend that the UH System Regents ask the administration to analyze the cost-benefits of each of the 1(a)-(f) data points proposed for sharing with students and recommend to the Regents which ones should be utilized and by what methodology, with explanations for those not recommended for adoption.

Breakthrough Solution #6

Put State Funding Directly in the Hands of Students

This proposal is clearly not directed at individual institutional Boards of Regents as it is a statewide public policy and finance issue. It would require action from the Governor and Legislature.

We have watched the Colorado experiment with interest, especially as we have done work recently in the state. It is an intriguing approach. We would observe that the political circumstances in Colorado, including a voter initiative that impacted state funding, are unique and contributed significantly to the approach.

We are not aware of any other states that are ready to implement the Colorado experiment yet. It makes most sense to assess the Colorado outcomes before adopting a major change in state higher education funding. It is likely that there will be a number of independent studies conducted on the Colorado approach that can inform the decision-making in Texas. In the interim, the Regents might want to ask the administration to utilize the research talent of selected faculty to provide the Regents with some initial analysis of the Colorado approach. This might be helpful to the Regents in their statewide conversations on this issue.

Breakthrough Solution #7

Create Results-Based Accrediting Alternatives

This proposal would also need to be a statewide initiative. We share some of the concerns expressed in the proposal about the current accrediting system, although some comments appear to be overstated (for example, SACS and others have increasingly become outcomes focused; however, they have largely just added that to the input measures). We also find the proposal and supporting paper confusing, as a significant portion focuses on increasing access to for-profit education in Texas. That may indeed be a public policy direction that Texas should pursue and our general belief is that the marketplace, not regulation, should govern. However, two areas that the state should retain a reasonable

degree of oversight over are the default rate of student financial aid and the quality outcomes as for-profit higher education ranges from high quality to little more than diploma mills. The data included indicates that increasing for-profit education would have minimal impact on access, and the state would be wise to consider the cost-benefits (including financial aid) of various options of increasing access (including expanding existing institutions).

We would also caution that creating and sustaining a national accreditation system will not be easy. A variation on that approach was attempted previously (SPRE's) and failed quickly. The Spellings Commission also ended up short of recommending such a group. For whatever reason, national approaches to higher education meet a lot of resistance. Many contend that the diversity of higher education institutions in the U.S. is one of higher education's strengths, especially when compared to the national (and often bureaucratic) approach taken by many other countries. If a viable national accrediting group is established and sustained, it may be worthwhile for Texas universities (or a sample of them) to pilot involvement. We are less certain, however, of the cost/benefit to Texas for "leading" such an effort.

IV. CONCLUSION

In summary, we recommend that the UH System Board of Regents ask the following questions about each of the proposals:

1. Is it consistent with, and contributes to, the Board adopted mission of the UH System and each of its constituent universities?

2. Is it consistent with, and contributes to, the Board adopted strategic themes (student access/success; UH Top Tier Research University; and Community Engagement) of the UH System and each of its constituent universities?

3. Are there adjustments that could be made, consistent with the goal of the original proposal, that would enable it to meet (1) and (2) above?

4. Is there empirical evidence currently to support adoption of each proposal? If not, when might such empirical evidence be available? Are there existing UH System data that could be used to model the impacts of each proposal?

5. Are there viable pilot programs that could be launched either based on each proposal or on a modified form of the proposal?

6. What limited number of indicators could we require to indicate progress on improving both quality and productivity within the UH System?

7. How can we best be responsive to the Governor's initiative and be working with our administration to accomplish our mission and ambitious strategic themes?