Good morning. I'm James Hallmark, Vice Chancellor for Academic Affairs for the Texas A&M University System (the A&M System). The A&M System consists of nearly 125,000 students spread across our 11 universities and our Health Science Center. In addition, we count 7 state agencies among our number, all aligned to serve the education, research, and service needs of Texans.

I am particularly pleased to visit with you about university data projects, and more importantly using data to provide valuable information to students, parents, institutions, taxpayers, and elected officials.

I have long advocated data-centered decision making. Taxpayers, regents, lawmakers, parents, and students all need data to make good choices with their money, their policies, and their futures. And while every university leader asserts decisions are based on data, my experience has been that university decisions are most often based on anecdotes and innuendos. A good story often outweighs a hundred pages of statistics indicating otherwise. And certainly the research on human decision making indicates we typically use data to confirm decisions we have already made. For example, I am confident parents and students select Texas A&M University for the Aggie ring and traditions more so than for the 92% persistence rate.

Though we will continue to be influenced by non-data based factors in making choices, we cannot make data-centered decisions without usable data.

Universities have long been awash in data. The challenge is generally less in developing data than in transforming the existing data into forms understandable to the public and decision makers. Only then can we understand the data and use it, and also recognize any gaps in our existing data.

The A&M System has embarked on an ambitious data project across a broad range of endeavors—literally everything from PK-12 to traditional analytics to student learning outcomes—with a goal of being accountable to the public and transparent in that accountability. We employ data to help us more wisely use finite resources with which we are blessed to serve our students and our state. Significantly, this project has the full support of Chancellor John Sharp and the chair of the Committee on Academic and Student Affairs, Regent Elaine Mendoza, and the project is led by a vice chancellor, myself. This is important as it requires powerful and influential leadership to guide a major data project from infancy to maturity. We would not be successful in the A&M System without it.

I will provide what I hope are useful insights into the use of data in aiding constituent decisions, while also providing information on the A&M System's project. I will also comment briefly on the "VSA" project (Voluntary System of Accountability) a comprehensive national effort using data to aid students and parents in making choices. I will, of course, be happy to address any of these matters during your questions.

Accountability in higher education typically focuses on a handful of metrics, such as persistence rates, time to degree, graduation rates, and number of graduates. It may be useful to reference these as "student success metrics." These are reasonable measures, and are important. According to the National Center for Higher Education Management Systems, only about 30% of 8th graders will obtain a higher education credential in 11 years (the equivalent of a six-year

graduation rate). In Texas, only about 20% of 8th graders have a higher education credential in 11 years. The deficiency in Texas is even more alarming for African-Americans (11.4%) and Hispanics (11.6%). Simply, for the good of our society we must be held accountable for moving the needle on these metrics. We can only move the needle if we measure and track the information and systematically apply the findings as part of our decisions on how we structure our institutions and processes.

For the public, the greatest challenge in using these student success metrics may be in understanding the language. In higher education, we know that a retention rate refers to a specific measure, but I would assert the term is not meaningful to consumers. The retention rate references first time full time cohorts of freshmen entering the institution in a fall semester who remain enrolled at the same institution the following year. This is a useful and important measure for lawmakers, university administrators, and regents, but for first generation students and their parents the language and utility of the measure is not readily apparent and even confusing. Personally, I am a higher education professional, and yet I found—as my college freshmen daughter negotiated college admission and FAFSA—my knowledge of the game had its limits.

Beyond understanding the key terms, the data cannot—or at least should not—be interpreted without context. For example, a superficial understanding would conclude a university with a 68% six-year graduation rate is performing better than a university with a 48% six-year graduation rate. However, the reverse may be true. The 68% university may be underperforming based on the academic preparedness and socio-economic status of its incoming students, while the 48% university may be over-performing based on the input characteristics. Allow me to explain: if an institution is primarily drawing its students from white non-Hispanic households, where both parents are college graduates, and where few are Pell eligible, a 68% six-year graduation rate is poor. Meanwhile, an institution drawing primarily from underrepresented populations with a high percentage Pell eligible and mostly first generation, a 48% six-year graduation rate is remarkable. Lawmakers, regents, parents must understand the different missions of these institutions in interpreting this data.

It is also important to prevent institutions from "gaming" the metric. For example, institutions can artificially improve persistence, retention and graduation rates by truncating the freshman class, eliminating those students with the greatest needs. An access oriented institution could choose to limit admission to those with an ACT score (or equivalent) of 20 or higher and dramatically increase retention, persistence, and graduation rates, even though doing so may not be in the best interests of the community, the region, or the nation.

It should also be noted that the standard measures for student success do not adequately address the full range of goals of all students. This is most evident in community colleges where a significant number of students seek a foundation for transfer or a skill necessary for a specific job opportunity. Current data reporting metrics often underreport the community college's success, even though the institution provided what the students needed, because common data metrics only report retention and graduate rates at the students' first institution.. Similarly, one institution in the A&M System is a special purpose institution focused on maritime disciplines. A student at Texas A&M University at Galveston (TAMUG) who chooses to major in something other than maritime will transfer to Texas A&M University and is reflected in TAMUG's data

system as a "failure," even though that student may graduate and become the world's next great agricultural engineer. Again, the shortcomings of the standard measures do not account for the progress and success of many students. (The Voluntary System of Accountability addresses this challenge by tracking students across any institution.)

Moving from a discussion of metrics associates with student progression to a discussion of efficiency measures, higher education, like all facets of society, must do more with less. We must be publicly accountable to those who are providing resources, whether that source is public funding, tuition and fee dollars, or philanthropy. We must demonstrate that we are being efficient with those resources, that we are investing our resources not in frivolous activities—however that may be defined—but in activities targeting appropriate service to the education, research, and service needs of our students and our service area.

Much like student success metrics, efficiency measures must be interpreted with caution. For example, "expenditure per full time student equivalent" is a common measure of efficiency that is also viewed by some as a measure of quality. (And to revisit the concern mentioned above, it is also a measure that may not immediately be understood by consumers.) Some view this measure as a means of assessing quality. For example, the ubiquitous U.S. News and World Report ranking places a 10% weight on their version of this measure, arguing that "generous per-student spending indicates that a college can offer a wide variety of programs and services." Others may use this same metric as a measure of efficiency, arguing that we must reduce expenditures to provide access and reduce student indebtedness. Furthermore, expenditure per full time student equivalent may be more a function of an institution's size than anything else, as larger institutions benefit from economies of scale.

The issue I seek to address is not to avoid data reporting or accountability related to efficiency, but rather to use the information wisely, understanding the variances in institutional mission and size and its impact on the variable. In the A&M System's analytics project, our institutions have identified "stretch goals" for selected metrics, including expenditures per full time student equivalent. Some of our institutions seek to increase their expenditure per full time student equivalent to expand student resources in support of student success or in pursuit of a changing mission such as "downward expansion" from an upper-level only institution into a four-year institution. Other institutions who may already offer a full range of services have stretch goals to lower their expenditure levels as they are seeking efficiencies within their systems.

My final set of comments will focus on a more complete overview of the A&M System's data project. First, we firmly believe we have a responsibility to improve public education (PK-12) in the state of Texas. No other entity in Texas produces more teachers than the A&M System while supporting innovation and leadership through groundbreaking research. We at the A&M System have an obligation to continue to improve, to transform how we prepare teachers, to better prepare educational administrative leaders to support and lead these transformations, to renew our focus on STEM education particularly in the primary grades, and to expand the research we conduct across the broad spectrum of education.

But it isn't enough to say we are going to transform public education through our focus. We have specific metrics and targets that tell us how well we are performing in preparing and supporting teachers, in preparing and supporting educational administrative leaders, in improving

performance in STEM disciplines, and in education research. These data are essential in helping us transform public education.

Once the student enters an A&M System university, we begin to measure their progress via analytics. We collect and analyze data for typical metrics used by universities across the country (detailed breakdowns of enrollment trends, for example, such that I can tell you how many Hispanic females from Coleman county are majoring in a STEM discipline at the A&M System's Tarleton State University campus—the answer is 2). We track about 50 variables in this manner, with significant "drill down" capability to aid students, parents, regents, and lawmakers in decision making. With this data, students and parents can made decisions on the likelihood of quick progression to graduation, or regents can track trends in research expenditures, among other possibilities.

We have also organized our data to reflect specific interests within Texas. One set of data focuses on "Governance," data our Board of Regents has identified as central to their decision making task. Another set of data focuses on "Outcomes Based Funding," data the state of Texas has proposed for influencing institutions' state funding. Yet another set of data focuses on "Excellence," data that tracks how each institution is moving toward better fulfilling its mission. Key data in each category is accompanied by stretch goals, targets for 2015 and 2020.

Finally, within the A&M System's paradigm, we are addressing what most projects are not— student learning. Too often data projects neglect to systematically measure the knowledge and skills of the students who graduate from our institutions. It is not enough to graduate students. Instead, we must collect evidence to know we are adequately preparing our graduates for the next stage in their life, whether that is graduate school, professional school, or the workforce.

At the A&M System, we are collecting data to demonstrate a value added to the student via their encounter with our universities. Our identified outcomes are not unique, relying heavily on national models, such as the American Association of Colleges and Universities' "Essential Learning Outcomes" within the "LEAP" initiative. These models provided a foundation for us to choose to hold ourselves accountable that our graduates will communicate well, have outstanding critical thinking skills, be ethical decision makers and engage responsibly in society, have a global perspective and an appreciation for cultural diversity, problem solve well, integrate the broad knowledge obtained through their undergraduate experience, and possess the knowledge specific to their discipline of study. We are entering into a data management and reporting project assessing each of these learning outcomes.

I will close with a brief reference to the VSA—the "Voluntary System of Accountability"— mentioned earlier. The VSA was developed in 2007 to better demonstrate public university accountability and transparency, particularly in the areas of access, cost, student progress, and student outcomes. The VSA is sponsored by the Association of Public and Land-grant Universities and the American Association of State Colleges and Universities and includes 60% of all public 4-year universities.

Eight of the 11 universities in the Texas A&M University System participate in the VSA and publicly report a common set of data on the VSA College Portrait. The VSA College Portrait provides common, understandable and useful data for students, families, state officials, policy

makers, and accreditors. As an example of national collaboration to provide common, understandable and useful data, I know of no better model. And much like the A&M System's effort, the VSA is completely transparent, with links to the VSA data on the front page of every VSA's member's website.

Ultimately, it is up to the student to succeed, and many in higher education blanch at being held accountable for the behaviors of 18 year olds. Regardless, given the resources devoted to higher education and the demands and needs of society for higher education to produce contributing members of society, accountability is unavoidable. The wise approach to accountability assures we are being accountable for the right stuff and interpreting the data wisely.