

Managing for Results: Higher Education Institutions

Imagine running a billion-dollar company with data that is two years old. The outcomes would likely not be positive, given the rapid pace of business innovation and disruption. Analogous to this is performance management for higher education, which is hindered by the lack of data availability in real time. Each year, the Legislature invests¹ in programs aimed at improving student outcomes, then must wait a year or more for the data to catch up to inform those decisions, if meaningful data exists. In contrast, the private sector has disrupted latent industries by turning data management on its head; it has effectively turned the arcane business of capturing and organizing data into real-time business intelligence.

Data Rich, Information Poor

In higher education, the data exists; it is being collected on a real-time basis at institutions. Every semester, colleges and universities gather tremendous amounts of data on students: the number of students enrolled, the number of classes a student completes, a student's academic performance in those classes, a student's success in progressing through their degree plan, a student's financial history, etc.

Data reporting is robust by colleges and universities; they report reams of data throughout the year to state and federal governments, to stakeholders (non-profits, the press, alumni, etc.), and to investors (the Legislature, the parents and students). The deluge of reporting – and the labyrinth of databases and processes created for compliance – has obscured its informational value. The impact has been information diffusion, widening the gap for data accessibility by students, parents, policy makers, and the general public.

Limited Data Reporting to Legislature. The Legislature receives only a fraction of the higher education data that is submitted to state and federal regulators, despite being a data rich sector. Colleges and universities provide the Legislature with two measures consistently: (1) student retention rates, semiannually, and (2) student graduation rates, annually, from which assessments are made to describe performance and rationalize appropriation levels.

Two measures are insufficient to describe performance, or to tell the story of student success on college campuses. Providing a more comprehensive picture of student success throughout the year, which is the outcome of higher education, requires a deeper dive into the data captured by colleges and universities. Colleges may push back on an effort to dig deeper into the data – given the limitations of the process – because institution staff are inundated with data requests to maintain compliance. The legislative remedy, for seeking data, is to define Accountability in Government Act (AGA) performance measures as a requirement for reporting.

AGENCY: Higher Education Department, Colleges and Universities

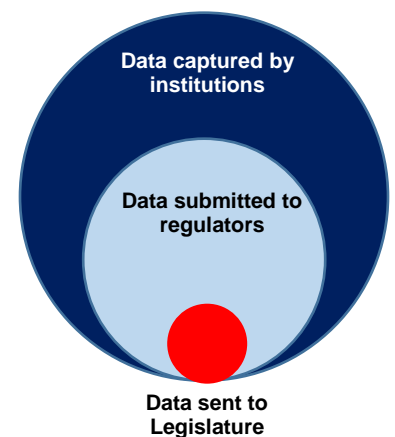
DATE: June 19, 2019

PURPOSE OF HEARING: Discuss the use of data to manage colleges and universities.

WITNESS: Kate O'Neill, HED Secretary; Dan Arvizu, Chancellor, New Mexico State University System; Jeff Elwell, Chancellor, Eastern NM University System; Becky Rowley, President, Clovis Community College

PREPARED BY: Mark F. Valenzuela, Principal Analyst and Micaela Fischer, Manager, LFC Program Evaluation Unit

EXPECTED OUTCOME: Recommendations to improve data use at institutions.



¹ The *Wall Street Journal* reported recently on the benefits of investing in education to improving the socioeconomic conditions in southern US states (Appendix A).

ANNUAL REPORTS FROM ASSOCIATIONS

Since 1998, the Council of University Presidents (CUP) has compiled a public, "Performance Effectiveness Plan" report. The PEP report contains AGA data submissions for each institution with additional key indicators reported to IPEDS. The New Mexico Independent Community Colleges (NMICC) and New Mexico Association of Community Colleges (NMACC) also provide annual reports, but their reports tend to be less comprehensive in than CUP and not readily available on a public website.

Right now though, AGA metrics are difficult to comprehend without additional supporting data, nor is it delivered at times conducive to informing on the performance-based budgeting process. The higher education formula funding does provide performance data, but alignment with AGA is not easily apparent.

Timeliness of Information. To comply with federal law, considerable time is expended to clean, verify and validate student course and financial data. When cleansed, the data is submitted to state and federal regulators electronically for further refinement. As a result, it can take two years before data is available for Legislators or the general public, which confounds the problem of using data to manage for performance at New Mexico’s institutions of higher education.

As an attempt to enlighten this dated or incomplete information, the professional higher education associations – which represent all the colleges and universities – provide annual reports to the Legislature. The reports are delivered near the start of the legislative session, when legislators and staff are flooded with information. That release time does not allow adequate time to analyze information and assess the performance, prior to releasing a budget recommendation.

Consistency of Data Reporting. Compounding the problem of stale data is reporting consistency by the colleges and universities. The four-year sector and the two-year sector report the same performance measures, but submit to the Legislature at different times. As an example, when the two-year colleges report 2nd semester retention, four-year universities report 3rd semester retention for students who all started at the same time. It is a problem; it creates confusion for the public and the Legislature. Moreover, the content of the annual reports from the three professional associations are different with varying data formats. An example is shown below:

2-year Independent College	2-year Branch College	4-year University
<ul style="list-style-type: none"> • Fall Enrollment (headcount) • Fall Enrollment (FTE) • New workforce clients served • Noncredit workforce training enrollment (Headcount) - academic year • Years to earn an associate degree • Fall-to-fall retention rate • Degrees awarded per 100 FTE students • External dollars supporting all program from federal or non-governmental sources • Nursing degrees awarded • SBDC ROI, jobs created or saved 	<ul style="list-style-type: none"> • Percent of Students taking 9 or more credits that are successful after 3 years • Percent of graduates placed in jobs in New Mexico • Percent of graduates placed in job & continuing education in NM • Percent of programs having stable or increasing enrollments • Percent of full-time, first-time, degree-seeking students enrolled in a fall term who persist to the following spring term • Percent of full-time, first-time, degree-seeking students who complete a degree/certificate in 150 percent of time. 	<ul style="list-style-type: none"> • Fall 2018, Overall Enrollment by Level • Number of Programs by Degree Level • Fiscal Resources • Affordability of tuition & fees relative to peers • Financial support to degree-seeking UG or GR students • Enrollment diversity • Student transfer rate • Profile of baccalaureate degree recipients at University • Fall-to-fall retention rate • Six-year grad rate • 4, 5, 6 year grad rate for traditional students. • Degrees awarded in prior years • Student-faculty ratio • Full-time instructional faculty information: degree held, avg salary, % of peers

HED Data Collection Serves Its Regulatory Need. The variability in the data reporting, its lack of consistency, and its persistent time delay limit its usefulness for making informed decisions. The LFC has long called for more frequent reporting and better use of data to inform decisions. More frequent, quarterly reporting could address and alleviate these data concerns. Matched with

a deeper dive into the labyrinth of existing data, the Legislature could begin to rely upon more comprehensive performance information about higher education.

In statute, the Higher Education Department (HED) is responsible for providing information on the performance of the system. In meeting its mission, HED collects data from the 24 public colleges and universities and from this information, provides annual reports for public view on its website. Most reports simply provide data; some provide a policy discussion. With limited resources, HED relies on the colleges and universities to submit data routinely into its computer system, called eDEAR. LFC staff do not have access to this system, and thus, must request data through HED.

Also, HED maintains financial oversight of colleges by, in part, requiring annual, unaudited reports of actual (ROA) expenditures, which are shared with LFC staff. As HED shares the ROAs after they receive them in September, any analysis of ROA data could be reported by November 1st at the earliest for use in a second-quarter report card. Just as with the annual college association reports, data provided in the late fall does not leave enough time for staff analysis or reporting to the Legislature before budget drafting and it is, therefore, not useful for performance-based budgeting.

Data in eDEAR is used primarily for regulatory purposes, to assist HED in its regulatory duties of colleges and universities within the state. As mentioned, only a small portion of the data is used to inform decision making on campus or in the Legislature.

Establishing a New Framework: Moving to Business Intelligence

The Legislature needs clear, comprehensive information that easily communicate college performance, with current, consistent, and meaningful information. Perhaps more importantly, college administrators – who have access to troves of data – have the opportunity to mine their databases to identify and produce meaningful information about student success.

Leaders in higher education, who shift from a mindset of data-management-for-compliance to data-mining-for-business-intelligence, will disrupt and innovate on college campuses. Several higher education institutions in other states have made this transition with improved outcomes of student success. Universities in surrounding states are experiencing higher enrollments and producing more degrees. Arizona universities, as an example, are all experiencing growth in students and degrees awarded, which may serve as a model for New Mexico.

Maybe the best example of a disrupter is Georgia State University, a research university located in Atlanta, who works with its data to inform its leadership, in real time, of any potential problems its students may be experiencing. Partnering with a private company, Georgia State – using existing student financial and performance data – began tracking 801 student factors, daily. Using predictive analytics, the University is able to discern if students are attending classes or struggling, withdrawing from courses, or facing challenges. The predictive analytics program will point to a potential struggling student.

ANNUAL REPORTS TO THE LEGISLATURE

AGA Performance: The 24 public, nonspecial, and nontribal colleges in New Mexico report two staple AGA performance measures – annual retention and completion rates – that LFC staff often recommend be included in the text of New Mexico's General Appropriations Act. Importantly, retention and completion rates are also prominently featured in the U.S. Department of Education's College Scorecard, and often collected by accreditors. As of FY18, all 24 colleges are also tracking and reporting on the number of degrees awarded per 100 full-time equivalent students. Other AGA measures which are specific to the two-year and four-year sectors of colleges are listed in the following table. Of note, while AGA measures are generally common within the two-year and four-year groups, they sometimes vary ever so slightly in language from one college to the next. In the future, AGA measure language should be made consistent across all colleges that share measures.

Federal Reporting: All New Mexico colleges provide extensive data reporting to the federal Integrated Postsecondary Education Data System (IPEDS) throughout the year. IPEDS data is a subset of the information collected by the National Center for Education Statistics, a part of the Institute for Education Sciences within the U.S. Department of Education. Completion of all IPEDS questionnaires is mandatory for institutions that want students to be able to participate in federal financial assistance programs such as Pell grants and Stafford loans.

Within 48 hours, for a struggling student, Georgia State makes contacts to triage the problem, then determines a plan to support the student. The impact, Georgia State University has doubled its graduation rate since implementing the program.

Current Measures Inadequate for Measuring and Monitoring Performance. New AGA measures and a revised reporting schedule (Appendix B) could improve information delivered to the Legislature and could be useful in performance-based budgeting, as defined in the LFC's *Legislating for Results* manual, which outlines that quality metrics should be

Useful: valuable and meaningful information to the agency and policymakers.

Results-Oriented: Focus on outcomes.

Clear: Communicate in a plain and simple manner to all stakeholders.

Responsive: Reflect changes in performance levels.

Valid: Capture the intended data and information.

Reliable: Provide reasonably accurate and consistent information over time.

Economical: Collect and maintain data in a cost-effective manner.

Accessible: Easy to obtain, decipher, comprehend and use.

Comparable: Easily compared against similar institutions through time.

Benchmarked: Use best practice standards.

Relevant: Assess the core function of the program.

Existing AGA measures for higher education embody a number of these qualities; for example, graduation and retention rates are valid, reliable, and economical. But, the data is not timely, nor inclusive of an entire student population. Transcribing a story of performance – based on data from a smaller subset of students – could lead to management decisions poorly suited for all students. The LFC staff proposal seeks to capture data on the entire student population to ensure it is useful, results oriented, and clear. Appendix B provides a list of proposed data reporting and schedules proposed by LFC staff.

Higher Education Statewide Performance Goals. College administrators are frustrated how data is or will be used to assess performance, in part because the data is effusive and not immediately identifiable to statewide goals. The statewide Route-to-66 higher education attainment goal, where 66 percent of the adult population holds a postsecondary credential by 2030, is clear, easily measured, and results oriented. Yet, for college administrators, aside from increasing degrees awarded, the statewide goal is not useful in defining targets for individual institutions, particularly in an environment of declining enrollment, nor is performance clear for individual contributions toward the goal. Information on the state's progress toward meeting the Route-to-66 goal is not published in aggregate or by institutional contributions. The concern speaks to the larger issue of statewide goals for higher education.

In fact, locating statewide performance data for higher education is difficult in New Mexico; the LFC provides individual institutional data in its quarterly reports and thorough data reports with policy analysis in its annual appropriation recommendation. The HED funding formula provides a glimpse of statewide performance. However, outside of this information, very little information exists.

On a statewide level, visualizing the collective efforts of institutions, who are educating New Mexico students, is the goal of performance management. Appendix C provides a possible mockup of data visualization, which resembles the Arizona system. The point, with the data being captured at HED and at

institutions, it is possible for New Mexico to develop this type of reporting and visualization.

For comparison, the Arizona Board of Regents set 12 goals for the state's public four-year universities. Several of Arizona's metrics are common to New Mexico's AGA measures: freshmen retention, six-year graduation rate, and a measure for degrees in high-demand fields. Other measures, Arizona monitors enrollment levels to understand recruitment and graduation flows and reports the number of degrees awarded to transfer students from in-state community colleges, data which is currently captured by New Mexico institutions. Arizona measures education and related (E&R) spending per degree as an efficiency measure.

Overall, restructuring how New Mexico higher education uses its data could prove beneficial to decision makers on campus and appropriators in the Legislature. The ultimate benefit is to students, who may find their path through higher education more seamless and worthwhile.

THE WALL STREET JOURNAL.

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<https://www.wsj.com/articles/the-souths-economy-is-falling-behind-all-of-a-sudden-the-money-stops-flowing-11560101610>

The South's Economy Is Falling Behind: 'All of a Sudden the Money Stops Flowing'

Policies that once drove the region's growth have proven inadequate in an economy shaped by the forces of globalization

By Sharon Nunn / Photographs by Seth Herald for The Wall Street Journal

Updated June 9, 2019 5:58 p.m. ET

NATCHEZ, Miss.—The American South spent much of the past century trying to overcome its position as the country's poorest and least-developed region, with considerable success: By the 2009 recession it had nearly caught up economically with its northern and western neighbors.

That trend has now reversed. Since 2009, the South's convergence has turned to divergence, as the region recorded the country's slowest growth in output and wages, the lowest labor-force participation rate and the highest unemployment rate.

Behind the reversal: The policies that drove the region's catch-up—relatively low taxes and low wages that attracted factories and blue-collar jobs—have proven inadequate in an expanding economy where the forces of globalization favor cities with concentrations of capital and educated workers.

“Those policies worked before, then they became fundamental constraints on the [South's] long-term growth,” said Richard Florida, an urbanization expert at the University of Toronto.

Higher taxes and education spending aren't a cure-all, as many northern states now suffering population loss have found. Nor is the South alone in its economic troubles: Automation and globalization have wiped out millions of good-paying factory jobs around the country, especially in the Rust Belt.

But these trends have fallen especially hard on the South, which is more rural than the rest of the country and has fewer big cities. In part because of its legacy of racial segregation the region has, relative to others, underinvested in human capital. Thus the South, the only region to have enjoyed such a dramatic rise in the postwar period, is the only one to experience such a retreat in the past decade.

In the 1940s, per capita income in the states historians and economists generally refer to as the South—Louisiana, Mississippi, Alabama, Georgia, the Carolinas, Virginia, West Virginia, Oklahoma, Arkansas, Tennessee and Kentucky—equaled 66.3% of the national average, according to historical data reconstructed by University of Kent economist Alex Klein and The Wall Street Journal. By 2009, that had climbed to 88.9%. That was the high-water mark. By 2017 it fell back to 85.9%.

Against the Northeast, the country's wealthiest region, the South's decline began sooner and has been steeper. The South's per capita income peaked at 79.1% of the Northeast's level, and has since fallen to 71.6%.

(Those numbers would look slightly better under the U.S. Census Bureau's broader definition of the South, which adds in Texas, Florida, Maryland and Delaware, though the general trend remains the same.)

Rural Adams County in the southwest corner of Mississippi exemplifies the typical story of the South's rise and fall. It once attracted thousands of higher-paid factory jobs, particularly in the 1930s, when a big tire and rubber plant arrived. But the major factories began closing in the 2000s; the tire plant shut down in 2001. "Friends and family that have been here for 20 years... were packing up and leaving," says Chandler Russ, who grew up in Adams.

The income gains the county notched against the rest of the country from the 1950s to the 2000s have completely reversed.

The county population peaked in 1982 at 39,172, and has declined about 20% since. Factory jobs, 18.5% of the county's total in 1992, were just 5% in 2017. Per capita income is now 56.8% of the national average.



Chandler Russ, who heads the Natchez economic development office, faces an uphill struggle.

Today Mr. Russ runs its economic development office, working to attract better paying jobs. It's an uphill battle. A slim supply of college graduates makes it difficult to attract high-paying employers, which in turn gives the county's smartest students little reason to stay. "Our brightest and best that go to college

and get a good education don't come back," said Glenn Green, a prominent local Realtor. He has sold fewer pricier homes in recent years as the engineers, plant managers, and other higher-paid workers who used to staff the big plants have left.

Within the South, individual cities and states have had widely diverging experiences. So-called Sunbelt cities like Charlotte and Atlanta have attracted both wealthier white-collar workers and retirees from richer regions, and less-educated workers from poorer, rural areas. Thanks to these cities, the entire region rebranded itself as the New South.

And neighboring states such as Texas, with its own unique economy, often got lumped in. But unlike the rest of the South, Texas is relatively urban, with five major metro centers. It has a thriving tech sector and ample reserves of oil and gas which have boomed in recent years thanks to the fracking revolution.

"The 'New South' is a narrative that is more applicable to the urban centers," says James Ziliak, an economist at the University of Kentucky specializing in poverty. Much of the region consists of smaller towns and rural communities whose fortunes rose, then often fell with that of a single local industry.

As the divide between rural and urban incomes widens nationwide, the South has been particularly affected, since a third of its population lives in rural areas, compared with under 20% for the overall U.S.



Main Street in Natchez, which is trying to up its tourism game.

The South's economy was historically poorer because it was heavily dependent on agriculture, one legacy of the dominance of cotton and slavery. In 1880, about 90% of southern workers were employed in farming, compared with about 66% nationally, according to Sukkoo Kim of Washington University.

To diversify and lure manufacturing, southern states, starting with Arkansas in 1947, began passing right-to-work laws that weakened unions and kept taxes lower than in the wealthier North. And they spent less, especially on education: an average of \$1,869 per student in 2009 dollars, in 1960, compared with \$2,741 nationwide, according to the Education Department. In part, this reflected the long shadow of slavery. In the Jim Crow era white taxpayers and politicians resisted spending that benefited blacks,

SHARE YOUR THOUGHTS

What do you think it will take for the South to catch up to the rest of the country economically? Join the conversation below.

according to historians.

Mississippi was an early adopter of this industrial push. In the 1930s, it passed the nation's first state-sponsored economic development plan to encourage northern industries to move south, using low taxes, low wages and other incentives. Manufacturers flooded in. By 2009, per capita income had climbed to 76.3% of the national average, from just 30.3% in 1932.

The plan was particularly successful in Adams County, where, by 1960, farm labor declined to one of the lowest percentages in the state. Armstrong Tire and Rubber, later known as Titan Tire, was one of the first manufacturers to respond to Mississippi's plan, opening a plant in Natchez in 1939. It became a linchpin in the community, the behemoth building's outline visible above the tops of homes and businesses in its neighborhood. It eventually employed more than 1,000 white workers, and by the 1960s began hiring blacks, including Jessie Winston, now 108 years old, who checked the quality of tires coming off conveyor belts, and his daughter Helen.



108 year old Jessie Winston, one of the first black workers hired at Natchez's tire plant, remembers the prosperity it brought to the town.

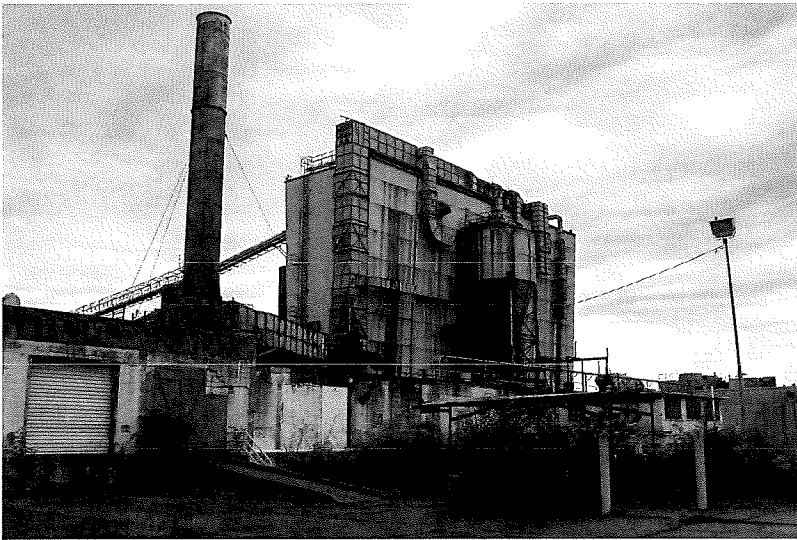
The streets surrounding the tire plant were busy with passing cars and families and lined with fully occupied, brightly painted homes, the Winstons recall.

But in the 1980s, globalization and automation began eliminating the sorts of lower-skilled manufacturing jobs that the South had been so successful at attracting. The tire plant closed permanently in 2001 largely due to regulatory lawsuits and union negotiations that turned

sour. This threw Mr. Winston and his daughter out of work. Other factory closures happened around the same time, devastating the county's tax base.

"All of a sudden that [industry] money stops flowing through the economy," Mr. Russ said. "It was alarming."

The neighborhood near Titan's gray and rusting plant is quieter now, there is less traffic, and empty homes with broken windows contrast with the well-kept lawns of the remaining residents and churches. The restaurants the Winstons used to frequent have closed. Mr. Winston continued a hair-cutting side gig and later worked at a bakery, making doughnuts and pastries. His daughter became a housekeeper for a local community college.



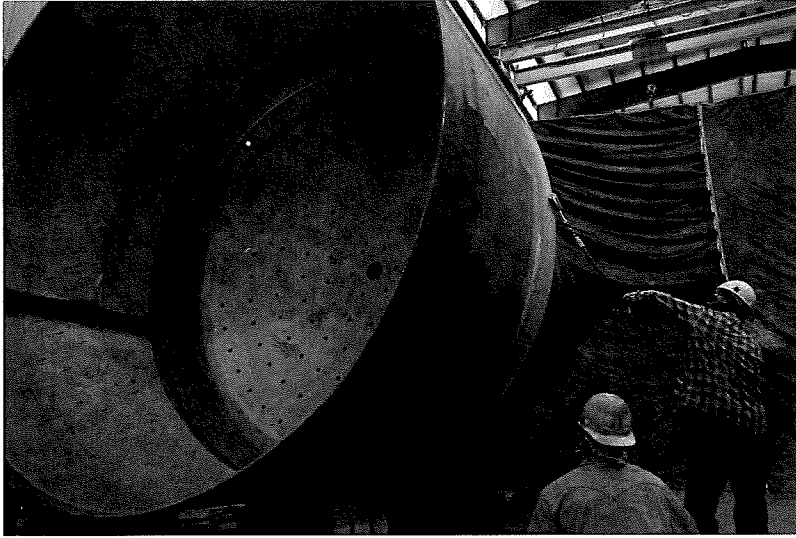
The Titan Tire plant closed in 2001 after a labor strike and multiple lawsuits.

The federal government has tried ways to redress regional disparities. Huntsville, Ala., was a major recipient of federal missile and space research jobs and funding. President Trump's tariffs are meant to bring factory jobs back to the U.S., including the South. After the Trump administration threatened 25% tariffs on auto imports, Toyota announced it was building a \$1.6 billion assembly plant with Mazda Motor Corp. in Huntsville.

But such moves have yet to eliminate the South's income gap.

Many economists say the most effective way for the South to regain its momentum would be to invest more in education, which would over time create a more skilled workforce to attract employers. But Mississippi State University economist Alan Barefield notes that is difficult to reconcile with southern states' historic desire to keep spending and taxes low.

As Adams County's industrial jobs fled over the past decade, they have been replaced by jobs in the lower-paid leisure, hospitality and food sectors, which are now about a fifth of the workforce. Natchez leaders have also tried to draw tourism dollars, emphasizing its deeply Southern roots and proximity to the Natchez Trace Parkway, a series of trails formerly used by Native Americans. Foreign tourists now meander down the city's waterfront path with an unobstructed view of the Louisiana coastline, and make their way through antebellum-style plantation homes with tall, imposing white columns.



Employees of Great River Industries roll a vat in a paint-like substance to protect the steel from oxidation.

But the dearth of college-educated workers has hampered its ability to attract high-paying white-collar information and professional and business services jobs,

which made up less than 8% of the workforce.

So city leaders are doing their best with what they have. They encouraged its local community college, Copiah-Lincoln, to adapt its offerings to what potential employers may need. This is showing signs of working. Great River Industries, which makes fabricated metal products like industrial-sized vessels that hold chemicals, moved to Natchez in 2013 after the city pushed the community college to redesign its welding curriculum. The firm currently employs almost 300 and plans to hire more. A couple of other smaller manufacturers have also set up shop.

But Mr. Russ acknowledged that the city can't depend on just a few manufacturers in a handful of product areas or it could go the way of the past again.

"There's no visions of grandeur," Mr. Russ said, and little hope of going back to the days of Titan Tire. "But what if we get 10 100-[person] plants that grow to 250 jobs over time?" he added. "You don't take the beating when you lose one."

— *Anthony DeBarros in Washington contributed to this article.*

Write to Sharon Nunn at sharon.nunn@wsj.com

Appeared in the June 10, 2019, print edition as 'The South's Economy Is Falling Behind.'

Appendix B. Proposed Reporting Timeline for New AGA Measures

Appendix B

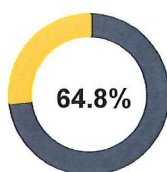
Measure (short title)	Q1 (November 1)	Q2 (February 1)	Q3 (May 1)	Q4 (August 1)
1 Headcount and Full-time Status of Students				
1a Undergraduate Students	Fall Headcount		Spring Headcount	
1b Graduate Students	Fall Headcount		Spring Headcount	
1c At-Risk Students	Fall Headcount		Spring Headcount	
1d Percent Full-time Undergraduates*	Summer Percentage	Fall Percentage		Spring Percentage and Annual Percentage
2 Credit Hours Delivered				
2a Undergraduate EOC/SCH*	Summer Numbers	Fall Numbers		Spring Numbers and Annual Numbers
2b Graduate EOC/SCH*	Summer Numbers	Fall Numbers		Spring Numbers and Annual Numbers
2c Dual Credit EOC/SCH*		Fall Numbers		Spring Numbers and Annual Numbers
3 Total Awards				
3a Certificates >1yr	Summer Numbers	Fall Numbers		Spring Numbers and Annual Numbers
3b Certificates <1yr	Summer Numbers	Fall Numbers		Spring Numbers and Annual Numbers
3c Associate's Degrees	Summer Numbers	Fall Numbers		Spring Numbers and Annual Numbers
3d Bachelor's Degrees	Summer Numbers	Fall Numbers		Spring Numbers and Annual Numbers
3e Master's Degrees	Summer Numbers	Fall Numbers		Spring Numbers and Annual Numbers
3f Doctoral and Professional Degrees	Summer Numbers	Fall Numbers		Spring Numbers and Annual Numbers
3g Post Baccalaureate Certificates	Summer Numbers	Fall Numbers		Spring Numbers and Annual Numbers
4 Awards in High Demand Fields				
4a K-12 Teachers - Alt. Licensure (Certificates)	Summer Numbers	Fall Numbers		Spring Numbers and Annual Numbers
4b Preschool Teachers (Associate's)	Summer Numbers	Fall Numbers		Spring Numbers and Annual Numbers
4c Registered Nurses (Associate's conferred to BSN Grads)	Summer Numbers	Fall Numbers		Spring Numbers and Annual Numbers
4d Social Workers (Bachelor's)	Summer Numbers	Fall Numbers		Spring Numbers and Annual Numbers
4e K-12 Teachers (Bachelor's and Certificate for Alt. Licensure)	Summer Numbers	Fall Numbers		Spring Numbers and Annual Numbers
4f Registered Nurses, excluding CC-based BSNs (Bachelor's)	Summer Numbers	Fall Numbers		Spring Numbers and Annual Numbers
4g Nurse Practitioners (Masters)	Summer Numbers	Fall Numbers		Spring Numbers and Annual Numbers
4h Social Workers (Masters)	Summer Numbers	Fall Numbers		Spring Numbers and Annual Numbers
4i Education Administrators (Masters)	Summer Numbers	Fall Numbers		Spring Numbers and Annual Numbers
5 At-Risk Awards				
5a Certificates >1yr	Summer Numbers	Fall Numbers		Spring Numbers and Annual Numbers
5b Certificates <1yr	Summer Numbers	Fall Numbers		Spring Numbers and Annual Numbers
5c Associate's Degrees	Summer Numbers	Fall Numbers		Spring Numbers and Annual Numbers
5d Bachelor's Degrees	Summer Numbers	Fall Numbers		Spring Numbers and Annual Numbers
5e Master's Degrees	Summer Numbers	Fall Numbers		Spring Numbers and Annual Numbers
5f Doctoral and Professional Degrees	Summer Numbers	Fall Numbers		Spring Numbers and Annual Numbers
5g Post Baccalaureate Certificates	Summer Numbers	Fall Numbers		Spring Numbers and Annual Numbers

Measure (short title)	Q1 (November 1)	Q2 (February 1)	Q3 (May 1)	Q4 (August 1)
6 Time and Credits to Graduation				
6a Average Years to Associate's	Summer Average	Fall Average		Spring Average and Annual Average
6b Average Credits to Associate's	Summer Average	Fall Average		Spring Average and Annual Average
6c Average Years to Bachelor's	Summer Average	Fall Average		Spring Average and Annual Average
6d Average Credits to Bachelor's	Summer Average	Fall Average		Spring Average and Annual Average
7 Transfer Student Success				
7a Bachelor's Degrees to Transfer Students	Summer Numbers	Fall Numbers		Spring Numbers and Annual Numbers
7b Average Credits Transferred in per Bachelor's Recipient*	Summer Average	Fall Average		Spring Average and Annual Average
8 Graduation and Retention Rates				
8a 150% Graduation Rate for Associate's FTFT students	Summer Rate	Fall Rate		Spring Rate and Annual Rate
8b 150% Graduation Rate for Bachelor's FTFT students	Summer Rate	Fall Rate		Spring Rate and Annual Rate
8c 100% Graduation Rate for Associate's FTFT students	Summer Rate	Fall Rate		Spring Rate and Annual Rate
8d 100% Graduation Rate for Bachelor's FTFT students	Summer Rate	Fall Rate		Spring Rate and Annual Rate
8d FTFT Freshmen Retention Rate		Fall to Fall Rate	Fall to Spring Rate	
9 Tuition and Fees				
9a Average Net Price				Annual Averages from Previous Year
9b Tuition and Fees Compared to Regional Peers				Annual Percentages
10 Education and Related Expenditures				
10a E&R Spending per Student FTE		Annual E&R/FTE		
10b E&R Spending per Bachelor's Degree		Annual E&R/Bachelor's		

* Measure is classified as explanatory, provided for informational purposes. The measure does not have a target.

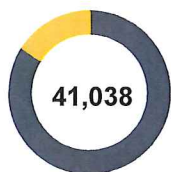
Appendix C. Proposed Dashboard for New Mexico 4-Year Colleges

EDUCATE



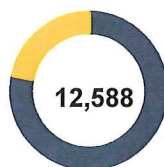
Freshmen Retention

Goal: 88.3%



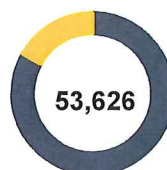
Undergraduate Enrollment

Goal: 48,615



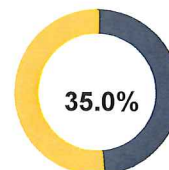
Graduate Enrollment

Goal: 16,107



Total Enrollment

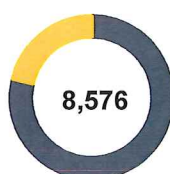
Goal: 64,491



Six-year Graduation Rate

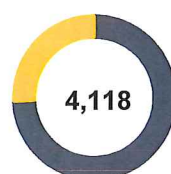
Goal: 71.5%

ACHIEVE



Bachelor's Degrees

Goal: 10,904



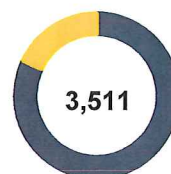
Graduate Degrees

Goal: 5,542



Education and Related Expenses Per Degree

Explanatory



CC Transfer Student Bachelor Degrees Awarded

Goal: 4,280

DISCOVER and IMPACT



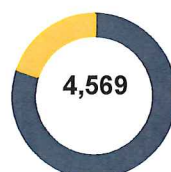
Research and Development Activity

Goal: \$674,104



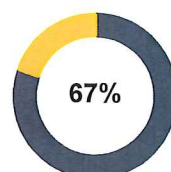
Public Service Activity

Goal: \$64,342



STEM Awards

Goal: 5,687



Job Placement: Bachelors

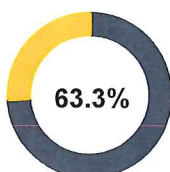
Goal: 85 percent



Average Salary: Bachelors

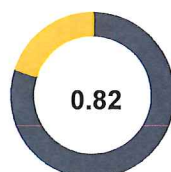
Goal: \$55,000

REACH



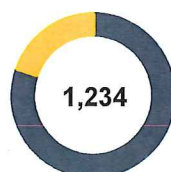
College going rate

Goal 70 percent



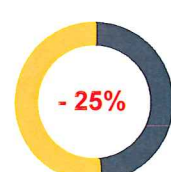
Import/export ratio, college going rate

Goal: 1.00



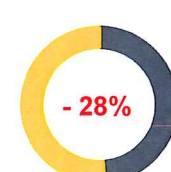
Number of top ten percent enrolled

Goal: 2,113



Achievement Gap: Hispanic Students

Goal: -15 percent



Achievement Gap: American Indian Students

Goal: -18 percent