

WORKFORCE INNOVATION THROUGH TECHNICAL EDUCATION

SD Technical Institutes

Presentation to Joint Appropriations | February 4, 2016



STRENGTHENING & INCREASING SOUTH DAKOTA'S WORKFORCE

- Educate **6,300 students** each year
- Provide technically skilled degrees (AAS, diploma, certificates)
- Offer a cost effective & timely route to successful, fulfilling employment

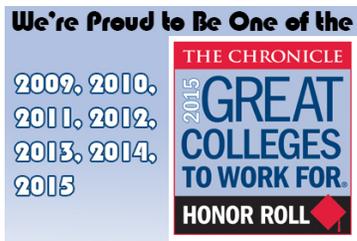


STRENGTHENING & INCREASING SOUTH DAKOTA'S WORKFORCE



- SD employers count on a fresh infusion of talent each year – **2,500 graduates**
- More than **1,200 industry experts** help guide curriculum & programs
- **85%** of responding graduates remain in South Dakota to fill high-tech, high-need careers or continue their education

NATIONALLY RECOGNIZED



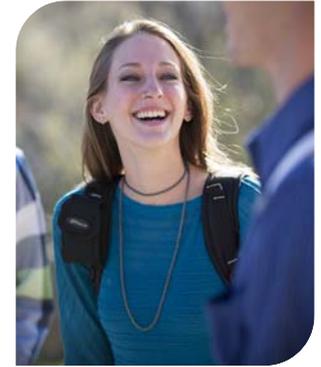
SDTECHS Work 2021

TECHNICAL INSTITUTE'S STRATEGIC PLAN

- **Overarching Goal:** Provide quality postsecondary education and training to enable South Dakota's workforce and economy to grow.
- **Product:** Grow a technically skilled workforce prepared to meet the challenges of industry and continuing education.
- **People:** Lead a system with the appropriate quality and quantity of instructors, staff and administrators.
- **Plant:** Ensure facilities are adequate, safe and capable of meeting evolving industry demands and are conducive to learning.



SDTECHS Work 2021

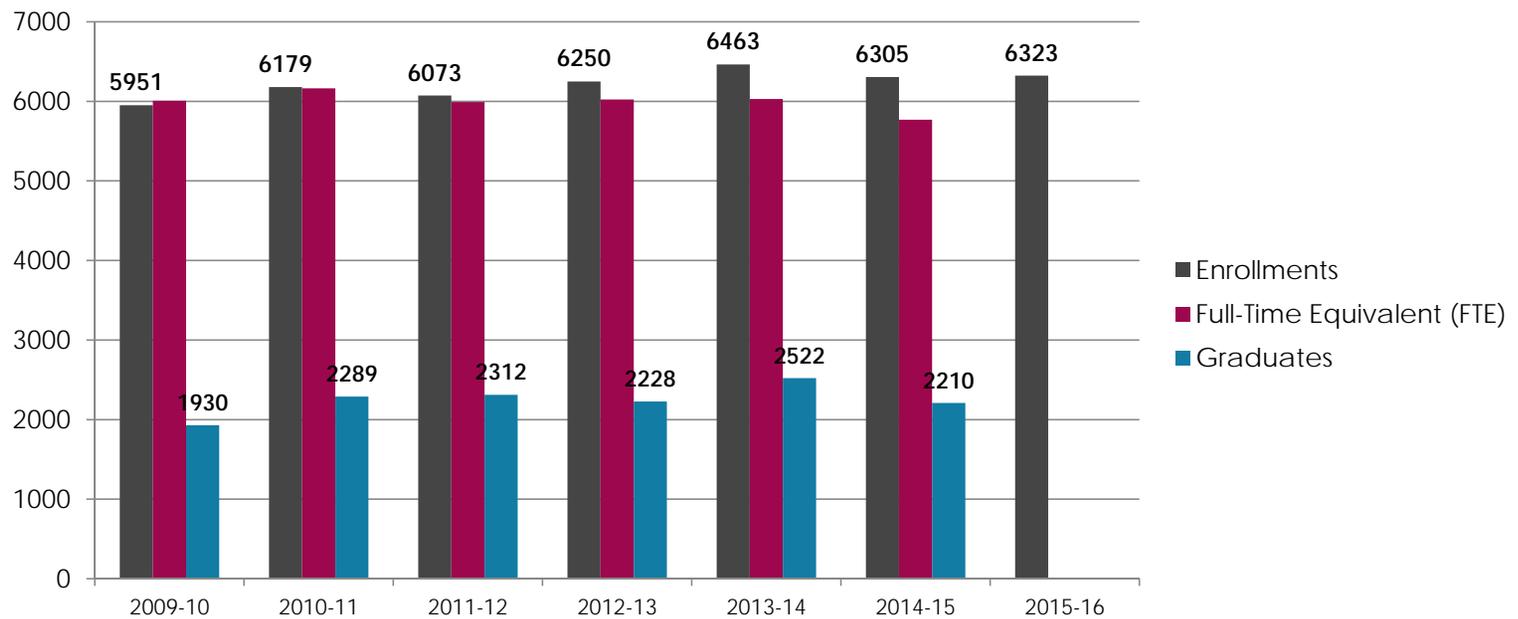


PRODUCT

Grow a technically skilled workforce prepared to meet the challenges of industry and continuing education.

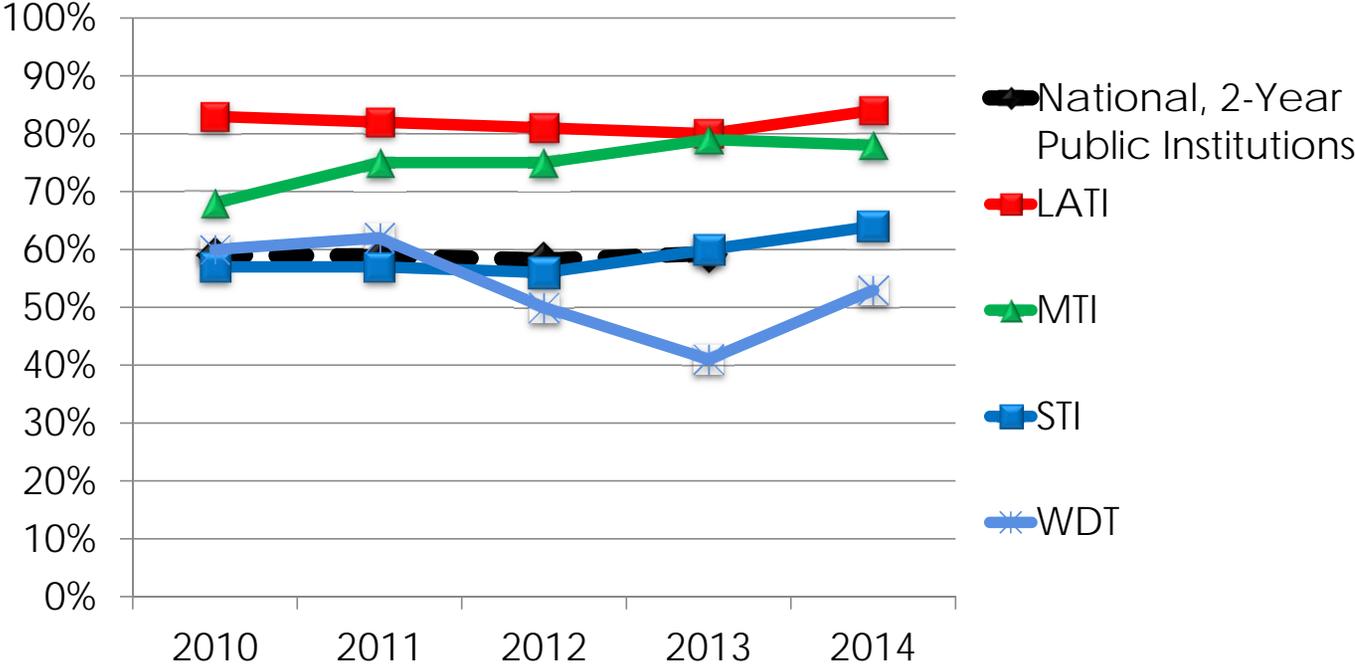


ENROLLMENTS, FTE & GRADUATES



RETENTION

Technical Institute Retention of First-time, Full-time Students

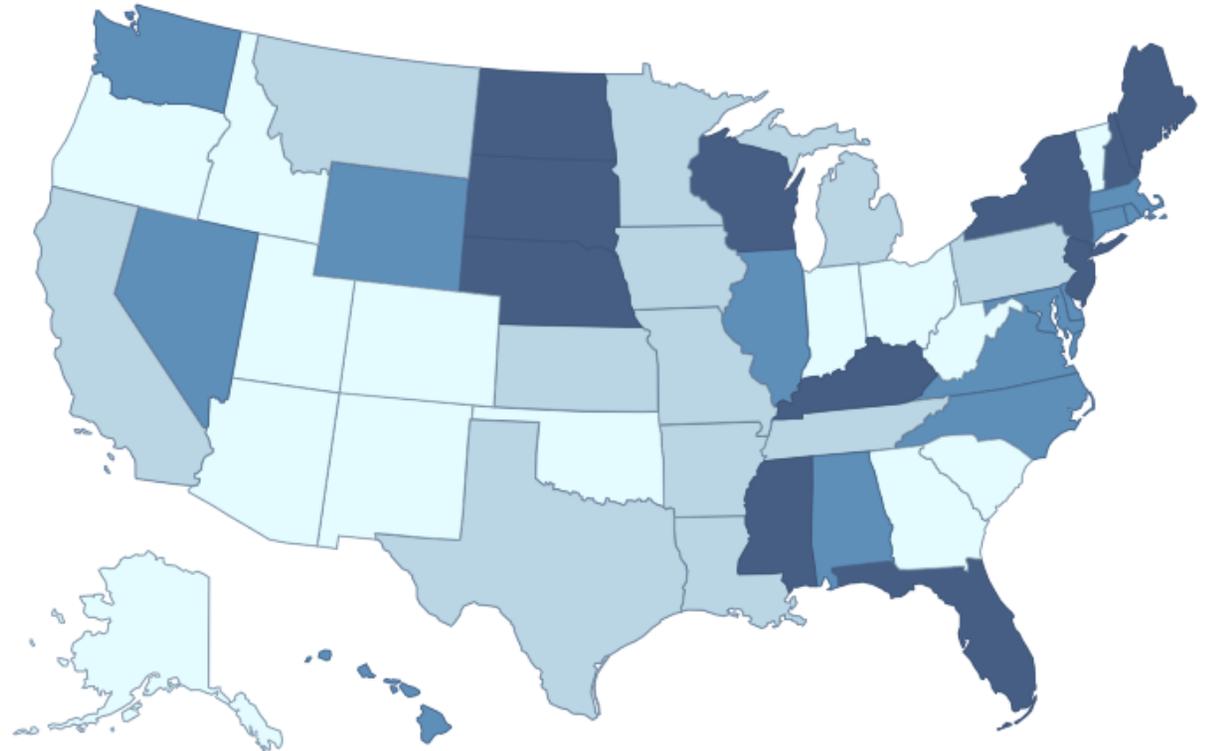


National 2-year institution retention is 59%. SD technical institutes averaged 73% in 2014.

Source: IPEDS Data Center

RETENTION

Retention Rates - First-Time College Freshmen Returning Their Second Year: Two-Year Public - 2010

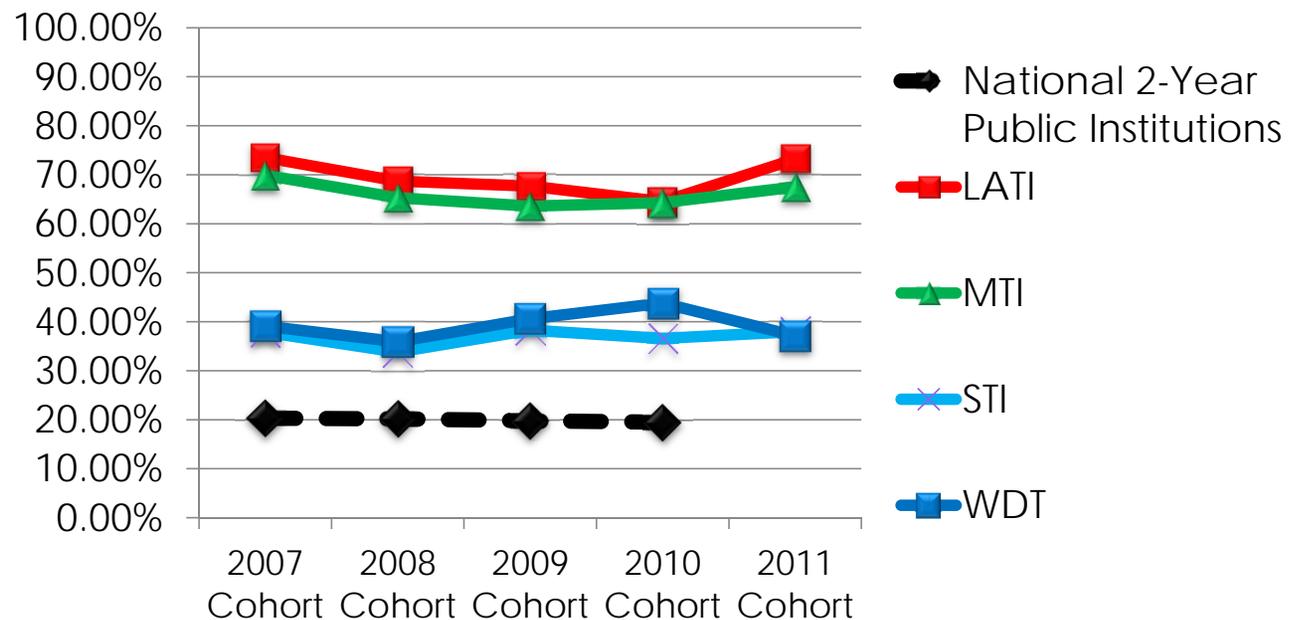


In 2010, SD technical institutes led the nation in retention at 65.5% as a system. NY came in 2nd at 60.7%.

Source: National Information Center for Higher Education Policymaking and Analysis

GRADUATION

Technical Institute Graduation, 150% Expected Time



National 2-year public graduation rate is 19%. SD technical institutes ranged from 37-73% in 2014 (2011 cohort).

Source: IPEDS Data Center

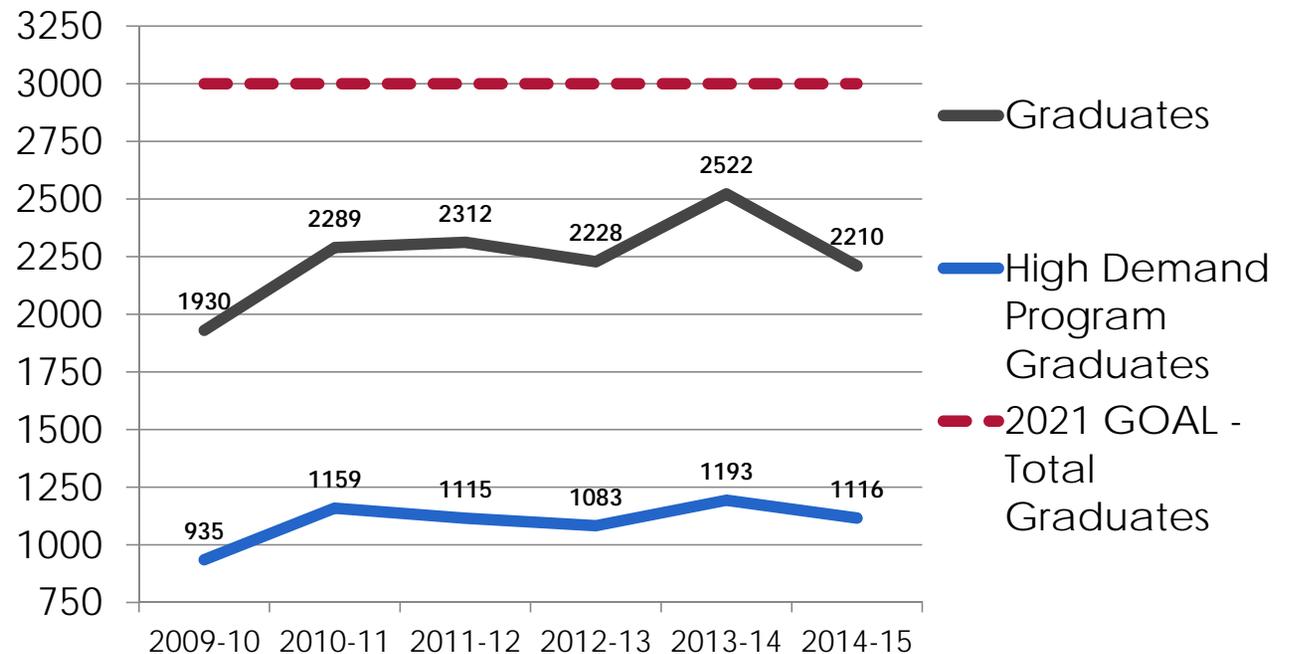
GRADUATION

Technical Institute Graduates

As a system, the technical institutes are working to educate 3,000 graduates per year by 2021.

High demand programs are those eligible for the Build Dakota Scholarship.

Source: TI Placement Reports

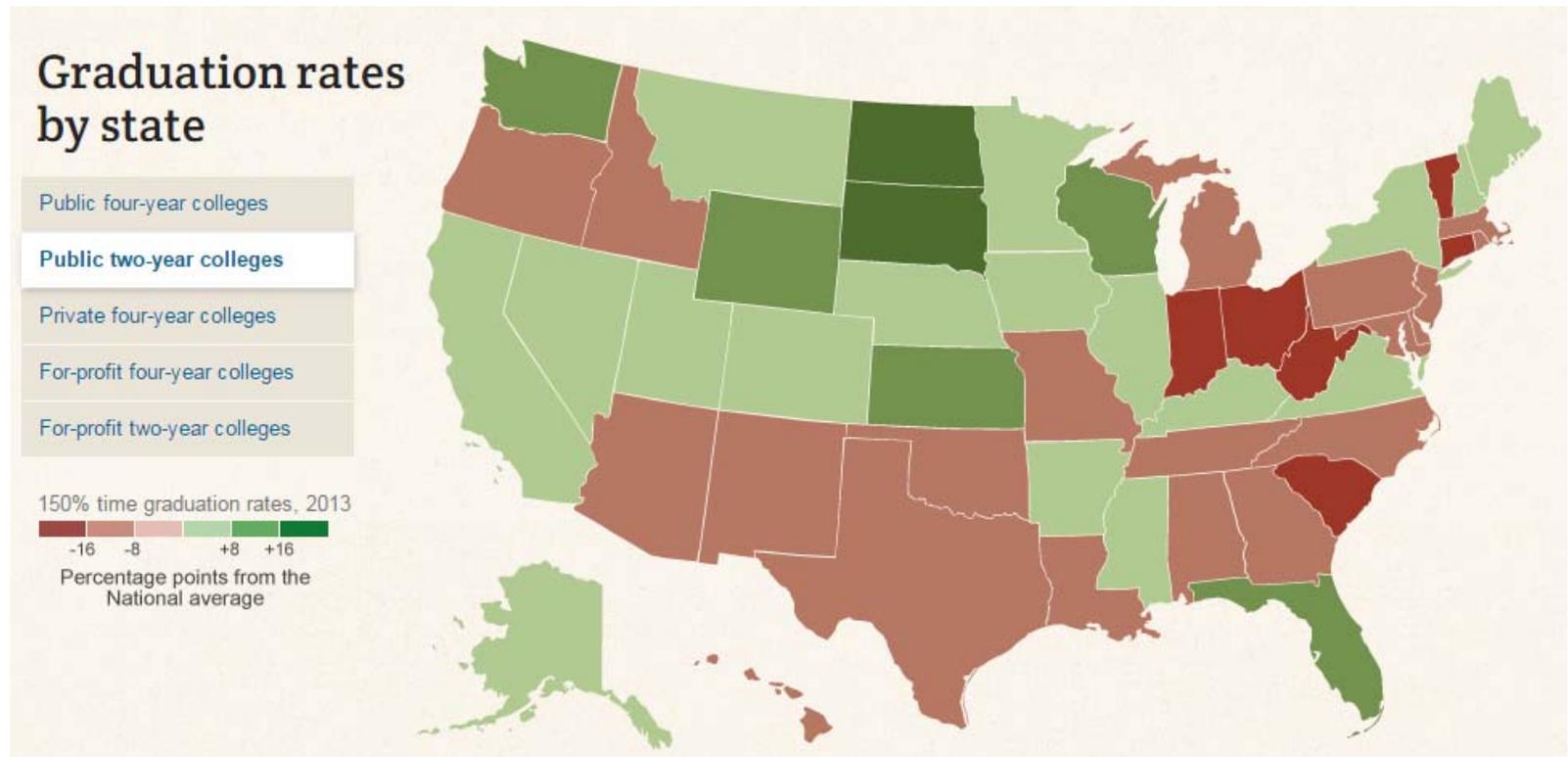


GRADUATION

In 2013, 51.2% of technical institute students graduated in 150% of expected time – highest in the country.

NOTE: Sisseton-Wahpeton Tribal College's graduation information was included in the SD 2-year public college report.

Source: The Chronicle of Higher Education



GRADUATION

graduation rates



Compare state averages for 2-year public colleges.

The national average was 19.4%. ND came in 2nd behind SD at 40.9%.

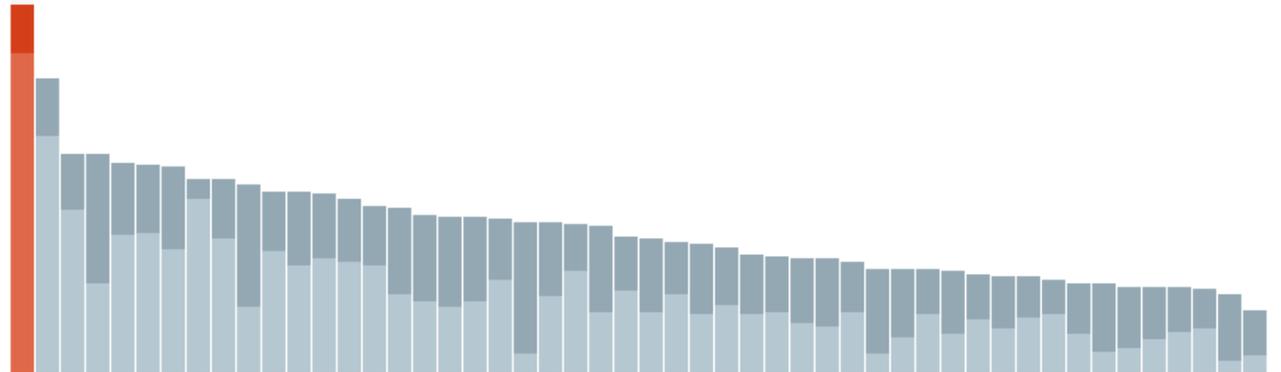
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Source: The Chronicle of Higher Education

South Dakota

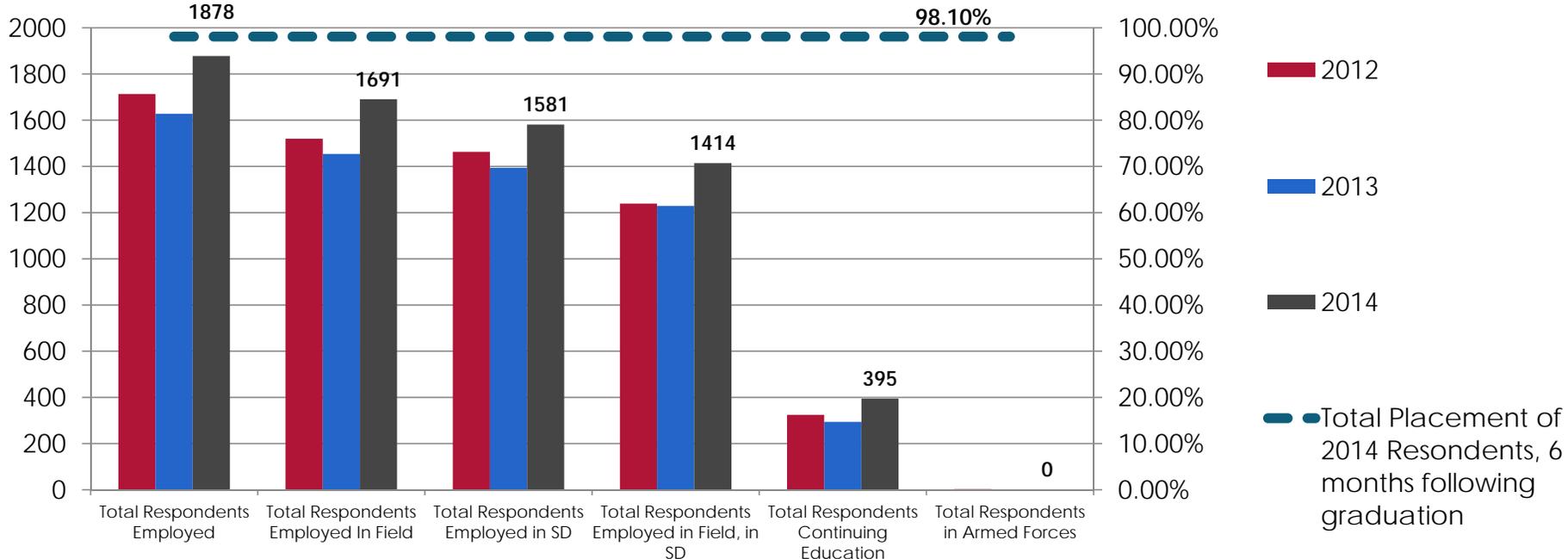
51.2% graduate in 150% time

44.5% graduate in 100% time



PLACEMENT

Placement of Technical Institute Graduates
Survey Respondents, 6 Months Following Graduation



FY17 BUDGET PROPOSAL



- Provides increased support:
 - Postsecondary State Aid - \$1,188,045
 - Per Student Allocation (PSA) - \$1,026,956
 - 2.7% Inflationary Increase
 - Full-time Equivalent (FTE) Growth
 - National Guard Tuition Assistance - \$161,088
 - Tuition Buy-Down - \$915,900

FY17 BUDGET PROPOSAL

Per Student Allocation (PSA) - \$1,026,956

- Part 1: 2.7% Inflationary Increase - \$528,260
- Part 2: Full-time Equivalent (FTE) Growth - \$498,696

Inflationary Proposal:

| | | | | | | | |
|-----------------|---------|------------------|--------------|---------------|--------------|-----------------------|--------------------|
| FY17 Est. FTE | = 5,905 | FY16 PSA | = \$3,395.71 | FY17 Prop PSA | = \$3,487.39 | PSA Increase | = \$ 91.68 |
| - FY16 Est. FTE | = 5,762 | X Inflation Inc. | 2.7% | - FY16 PSA | = \$3,395.71 | X FY16 Est. FTE | = 5,762 |
| Increase in FTE | = 143 | FY17 Prop PSA | = \$3,487.39 | PSA Increase | = \$ 91.68 | FY17 Inflation | = \$528,260 |

FTE Growth:

| | | | | | |
|----------------------|---------|-------------------------|--------------|--------------------|--------------------|
| FY17 Estimated FTE | = 5,905 | FY16 PSA | = \$3,395.71 | FY17 PSA | = \$3,487.39 |
| - FY16 Estimated FTE | = 5,762 | X Inflationary Increase | 2.7% | X Increase in FTE | = 143 |
| Increase in FTE | = 143 | FY17 Proposed PSA | = \$3,487.39 | FY17 Growth | = \$498,696 |

FY17 BUDGET PROPOSAL

- **National Guard Tuition Assistance - \$161,088**
 - Pay for half the tuition of National Guard members
 - Moved to Education from Department of Military

| | | | |
|-----------------------------------|----------------|--|---------------------|
| National Guard Tuition Assistance | | FY17 Proposed PSA | = \$3,487.39 |
| Appropriation | = \$161,088 | + National Guard Increase to PSA | = \$ 27.28 |
| <u>/ Est. FY17 FTE</u> | <u>= 5,905</u> | Total FY17 PSA for National Guard | = \$3,514.67 |
| National Guard Increase to PSA | = \$ 27.28 | | |



FY17 BUDGET PROPOSAL

- **Tuition Buy-Down - \$915,900**

- Keep state tuition at \$109 per credit hour in FY17
 - Facility Fee = \$35 per credit
 - Maintenance & Repair Fee = \$5 per credit
 - Technology Fee = \$1 per credit
- Existing tuition buy down (\$915,920) alleviates students paying approximately \$5 per credit in state tuition
- Proposed buy-down (\$915,900) will fund approximately \$10 per credit hour
- Distributed each semester after drop/add deadline by credits enrolled



STATE AID – FY17 BUDGET PROPOSAL

- Distribution of state aid detailed in **SD Administrative Rule [24:10:42:28](#)**
- **25%** of total distributed to each institute for baseline operations
- Remaining **75%** distributed based on cost of programs by weighted program factors
 - High cost, low density programs (Factor = 5)
 - High cost programs (Factor = 3)
 - Standard cost programs (Factor = 1)
- Total state aid divided into **four equal, quarterly payments**
- Payments are based on **FTE from the prior fiscal year**

STATE AID – FY17 BUDGET PROPOSAL

FY16 Example

\$24,190,959 (FY16 State Appropriation)
- \$2,708,957 (FY16 bond payment)
- \$915,920 (tuition buy down)
-\$1,000,000 (SB55 – Build Dakota capacity grants)
= \$19,566,082 (total available for distribution)
+ \$ 20,232 (FY16 Amendment)
= **\$19,586,314**

Baseline state aid received by each school (25%):
 $\$19,586,314 \times .25 = \$4,896,578.50 / 4 =$
\$1,224,144.63 per technical institute

Program category payment (75%):

$\$19,586,314 - \$4,896,578.50 = \mathbf{\$14,689,735.50}$

Weighted Per Student Value =

$\$14,689,735.50 / [(5 * 7.6) + (3 * 1,760.36) + (1 * 4,000)] = \$1,576.31$

Program Category Payments in FY16:

LATI = \$4,555,563.99

MTI = \$2,968,534.14

STI = \$5,282,166.62

WDT = \$1,883,470.74

FY17 FORMULA FOR DISTRIBUTION

| | | <i>Estimated</i> Distribution of Funds in FY17 | | | |
|--|--------------|--|-------------|-------------|-------------|
| | | LATI | MTI | STI | WDT |
| Proposed Total FY17 State Appropriation | \$24,908,796 | | | | |
| Proposed FY17 State Bond Payment | \$2,322,850 | <i>Lease payments for existing bonds.</i> | | | |
| Proposed Tuition Buy-Down Assistance | \$1,831,820 | \$602,962 | \$370,628 | \$596,706 | \$261,524 |
| Proposed National Guard Tuition Assistance | \$161,088 | | | | |
| Proposed FY17 Formula Distribution Amt. | \$20,593,038 | \$6,076,782 | \$4,408,180 | \$6,840,732 | \$3,267,345 |
| <i>FTE Calculation Using Estimates</i> | | | | | |
| Est. FY16 Tuition Collected | \$18,530,000 | | | | |
| FTE Value/Credit Hour | 30 | | | | |
| Tuition fee per credit (FY16) | \$109 | | | | |
| Proposed Per Student Allocation (FY17) | \$3,487.39 | | | | |
| Est. # of FTE Calculated (FY17 from 15-16 credits) | 5,905 | 1,800 | 1,150 | 2,030 | 925 |
| Calculation of Need for Formula Distribution | \$20,593,038 | | | | |
| (Under) or Over Need | \$ - | | | | |

FY16 AMENDMENT

- **FY16 General Bill Amendment - \$20,232**
 - Fill the budget shortfall because of higher than projected Full-Time Equivalents (FTE) in 2014-15:

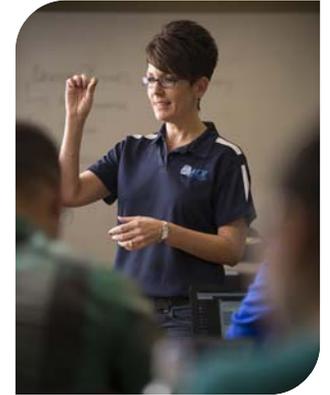
| | | Distribution of Funds in FY16 | | | |
|--|-------------------|--|----------------|----------------|----------------|
| | | LATI | MTI | STI | WDT |
| FY16 State Appropriation | \$24,190,959 | | | | |
| State Bond Payment | \$2,708,957 | <i>Lease payments for existing bonds.</i> | | | |
| Tuition Buy-Down Assistance | \$915,920 | \$273,907 | \$187,734 | \$326,463 | \$127,816 |
| 2015 Carryover (Capacity Building) | \$1,000,000 | \$250,000 | \$250,000 | \$250,000 | \$250,000 |
| Available for Formula Distribution | \$19,566,082 | \$5,773,738 | \$4,188,348 | \$6,499,591 | \$3,104,405 |
| <i>FTE Calculation</i> | | | | | |
| 2015 Tuition Collected | \$17,996,029.32 | | | | |
| FTE Value/Credit Hour | 30 | | | | |
| Tuition fee per credit (FY15) | \$104 | | | | |
| Per Student Allocation (FY16) | \$3,395.71 | | | | |
| Actual # of FTE Calculated (FY16 from 14-15 credits) | 5,767.96 | | | | |
| Calculation of Need for Formula Distribution | \$19,586,314 | Estimated distribution of FY16 Amendment: | | | |
| (Under) or Over Need | (\$20,232) | \$5,971 | \$4,331 | \$6,720 | \$3,210 |



ONE-TIME FUNDING

- **One-Time Proposed Funding in FY16: \$6,806,670**
 - Payoff Series 2007 Bonds: \$5,262,972
 - Payoff Series 2014A Bonds: \$1,543,698
- Pay off higher interest bonds, resulting in a \$386,107 decrease in general funds for the state's portion of the bond payment
- Savings will be utilized to buy-down tuition
- \$100,000 decrease in other fund authority due to no longer needing the expenditure authority

SDTECHS Work 2021



PEOPLE

Lead a system with the appropriate quality and quantity of instructors, staff and administrators.



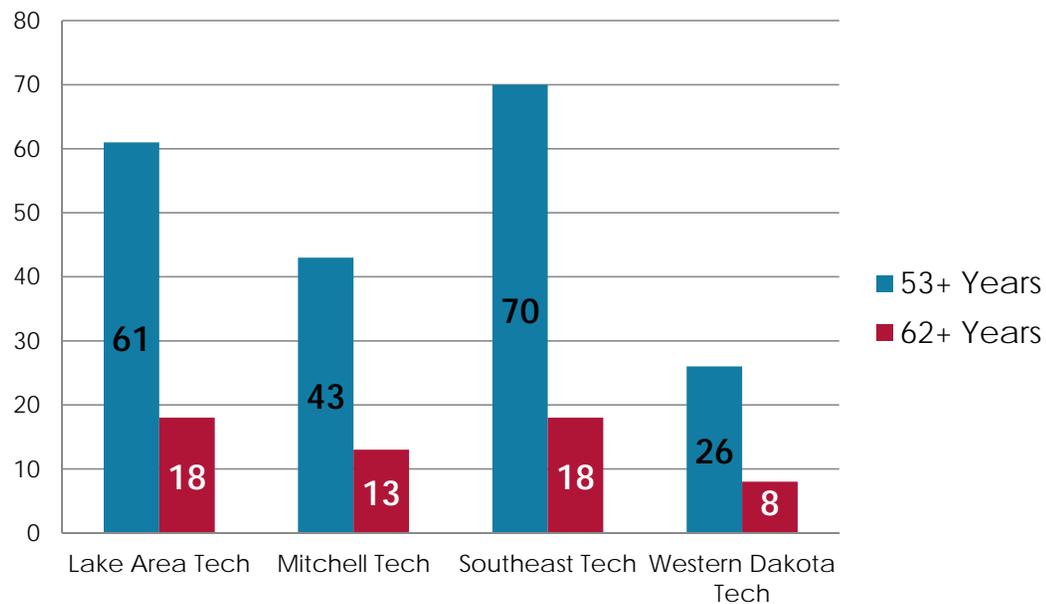
WORKFORCE

| | Admin. | Faculty | | | Staff | | |
|--------------|-----------|------------|----------------|-----------------|--------------------------|---------------|--------------|
| | | Full-time | Adjuncts (FTE) | Overloads (FTE) | Professional / Technical | Civil Service | Part-Time |
| LATI | 8 | 100 | 18 | 10 | 25 | 48 | 10 |
| MTI | 4 | 79 | .7 | .6 | 33 | 17 | 3 |
| STI | 8 | 83 | 37.5 | 2 | 37 | 47 | 7.25 |
| WDT | 5 | 44 | 11 | 5 | 12 | 26 | 22 |
| TOTAL | 25 | 306 | 67.2 | 17.6 | 107 | 138 | 42.25 |

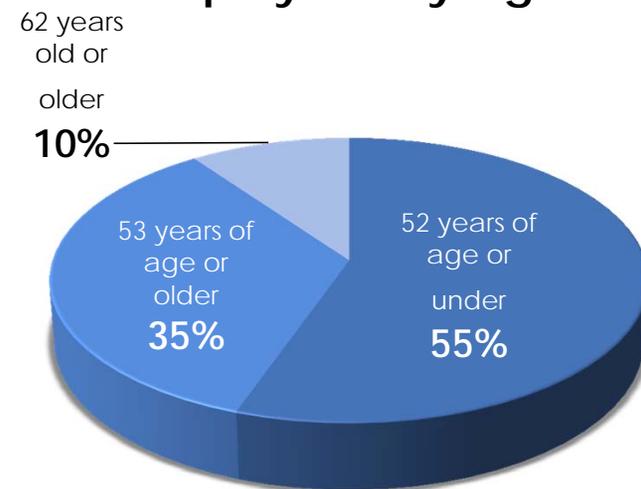


WORKFORCE

Employees Age 53 & Older

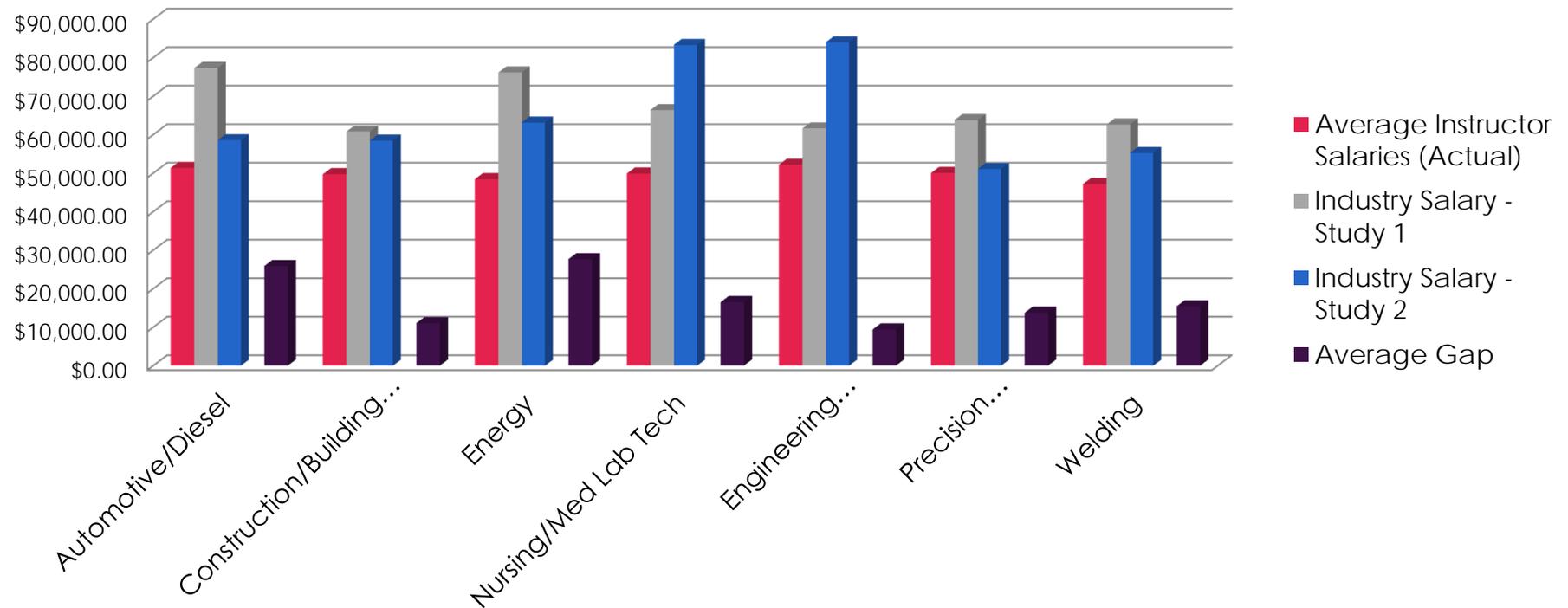


Employees by Age

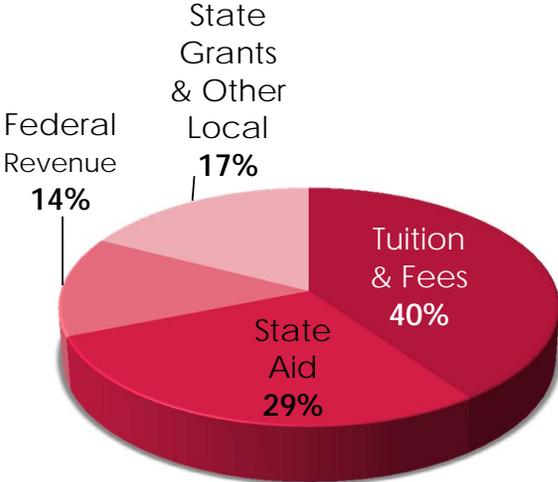


WORKFORCE

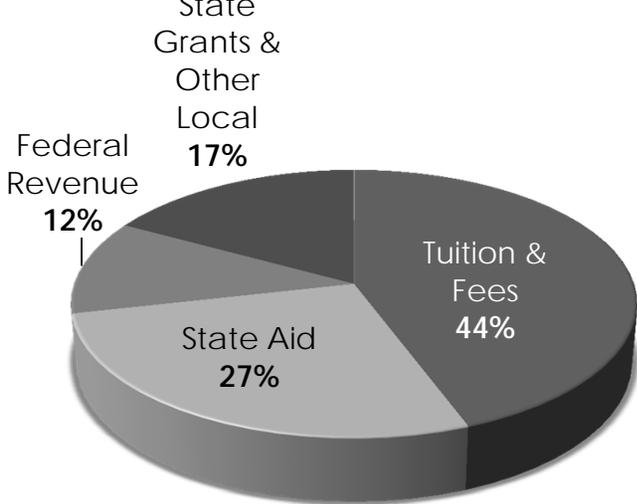
2015 SALARY STUDY IN HIGH DEMAND PROGRAMS



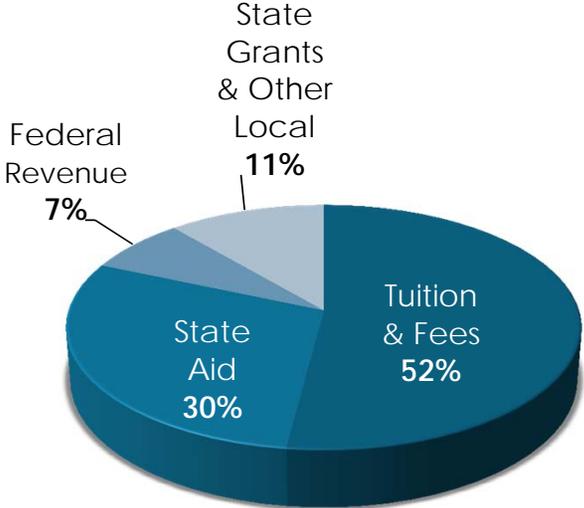
REVENUES



All TIs Actual FY15 Revenues



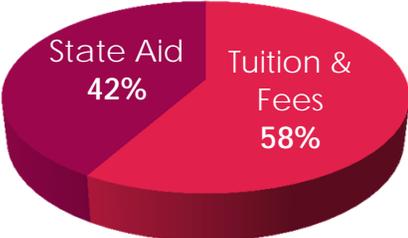
All TIs Budgeted FY16 Revenues



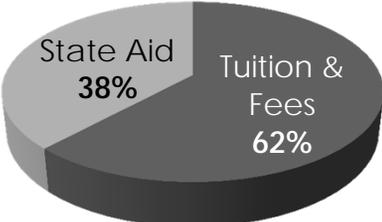
All TIs Budgeted FY17 Revenues

REVENUES

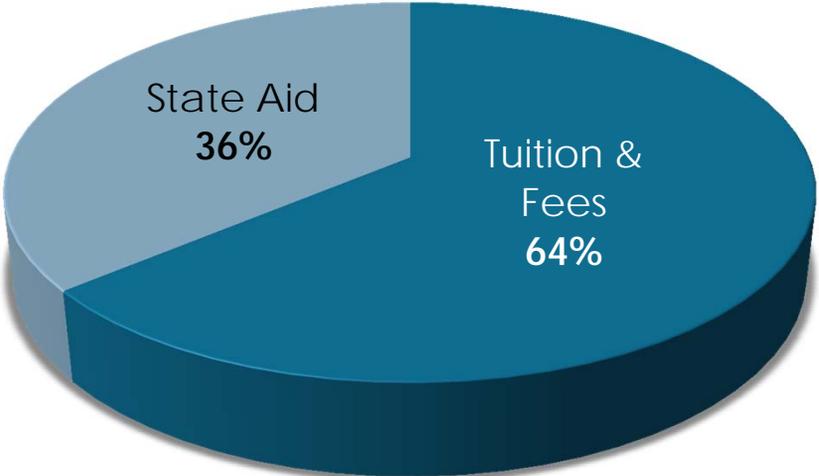
State Aid vs Student Contributions –
Actual FY15



State Aid vs Student Contributions -
Budget FY16

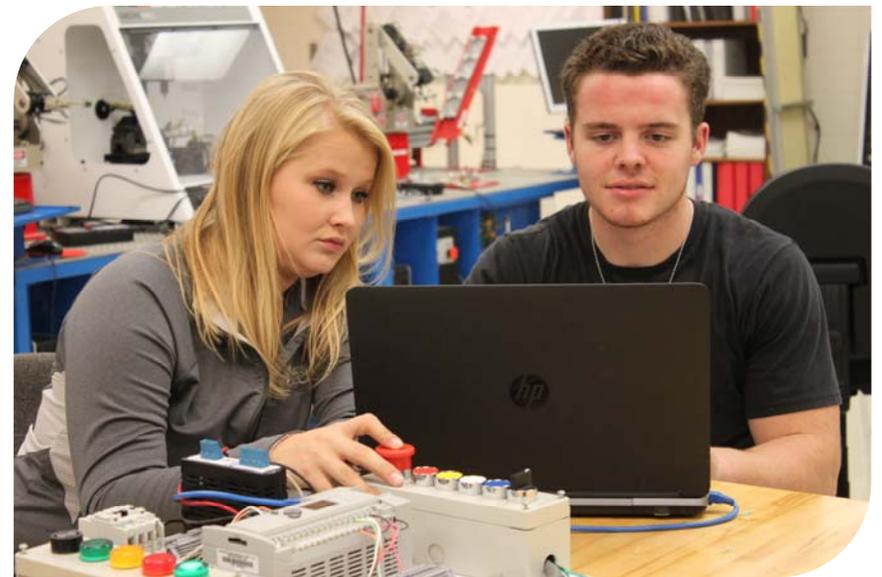
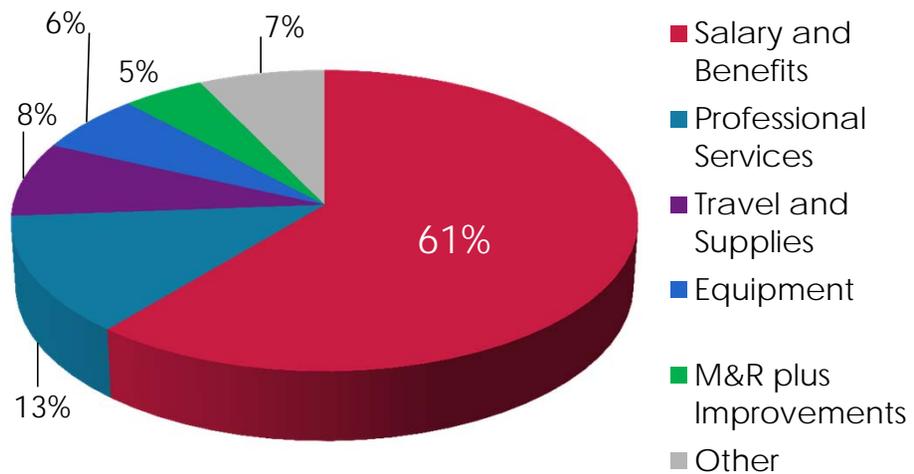


Projected State Aid vs Student
Contributions FY17

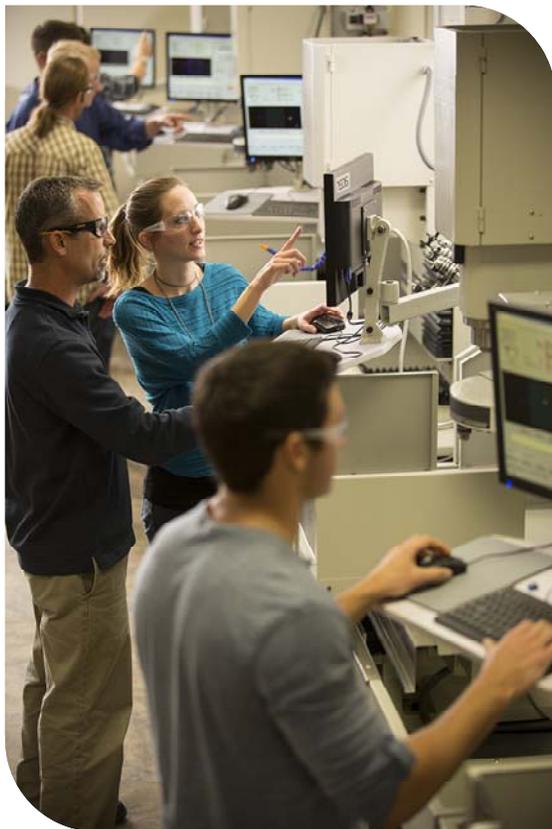


EXPENDITURES

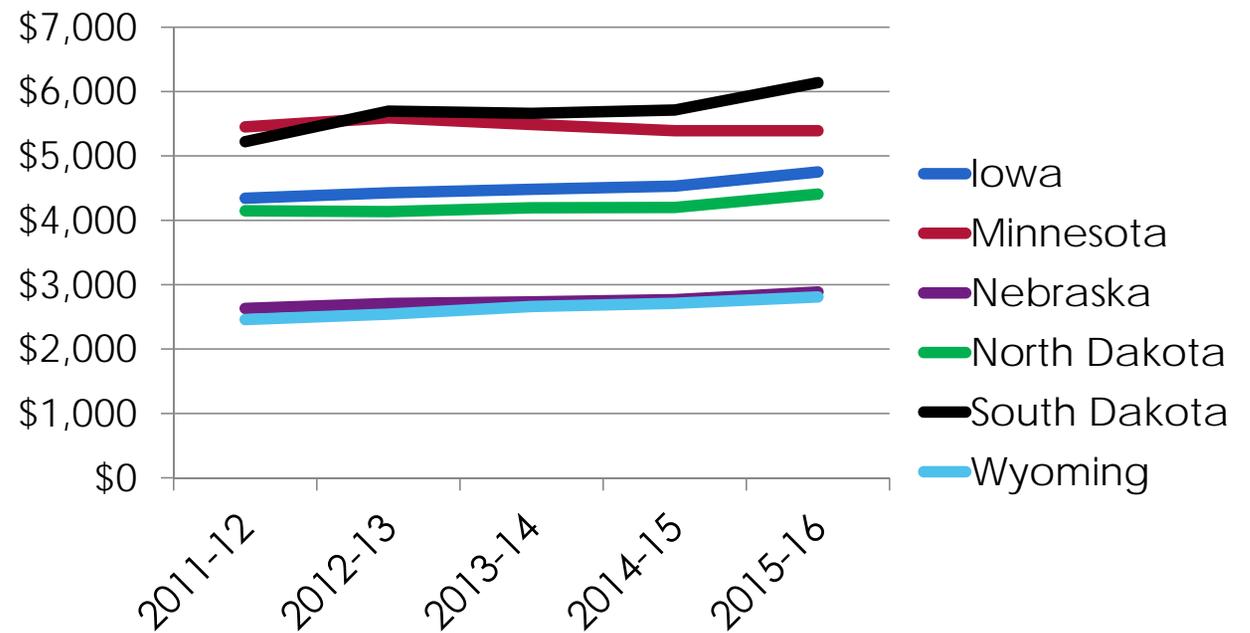
FY17 Budgeted Expenses for All TIs



STUDENT AFFORDABILITY



Regional Competitiveness
Public 2-Year Colleges, Tuition & Fees



Source: collegeboard.org, 2015 Dollars



EXAMPLES OF CHANGES & EFFICIENCIES

System Efficiencies:

- Programs are not duplicated unless the labor market demands increased capacity and training sites in multiple locations.
- All programs are reviewed annually on workforce demands, program enrollment, retention, and placement to determine if there is value in continuing them.
- New programs emerge or existing programs are revamped based on industry guidance.
- The distribution of the state appropriation supports efficient operations and ensures the most dollars go to high-demand and high-cost programs.
- Funds have been pooled between the technical institutes to seed program development, facilities maintenance and secondary to postsecondary transitions.
- Schools have jointly applied for and operated grants.



EXAMPLES OF CHANGES & EFFICIENCIES

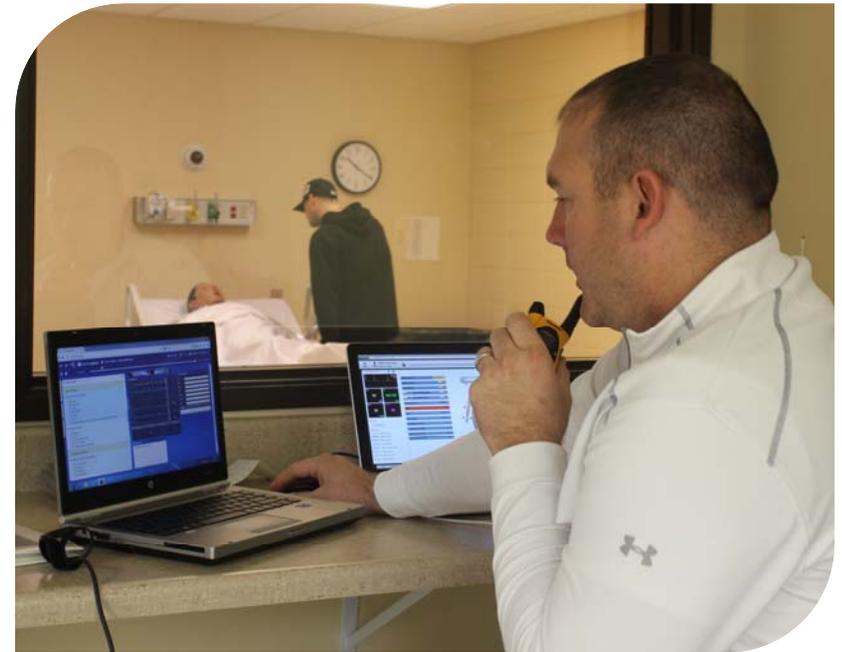
Institutional Efficiencies:

- Industry partners provide both funding and in-kind contributions.
- Student to faculty ratios are balanced to ensure safe and effective learning environments without offering inefficiently staffed programs or courses.
- Technology and equipment upgrades have slowed except where supported with federal or state grant dollars.
- Downsized or ended programs with lessened workforce needs
- Downsized instructors in programs
- Little to no equipment purchased outside of federal or state grants
- Little to no out-of-state travel unless required for grants or accreditation
- Replaced inefficient fixtures/appliances with energy efficient components
- Outsourced IT and Custodial services for savings

EXAMPLES OF CHANGES & EFFICIENCIES

Institutional Efficiencies:

- Outsourced Food Services for savings
- Froze adjunct and overload compensation
- Raised standard class sizes for non-lab classes
- Run multiple shifts of programs
- Heavier reliance online/hybrid options



SDTECHS *Work* 2021



PLANT

Ensure facilities are adequate, safe & capable of meeting industry demands & are conducive to learning.

FACILITY EXPANSION



- New construction and renovations to Ed Woods Center to house diesel, collision repair, and auto programs
- Allows program capacities to double
- Opening Fall 2016
- Supported through state bonds, \$20 Million

FACILITY EXPANSION

**SOUTHEAST
TECH**



FACILITY EXPANSION

**SOUTHEAST
TECH**



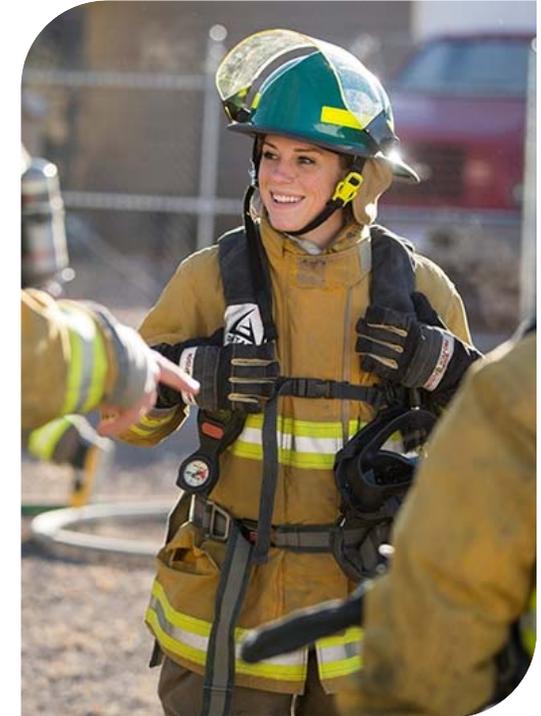
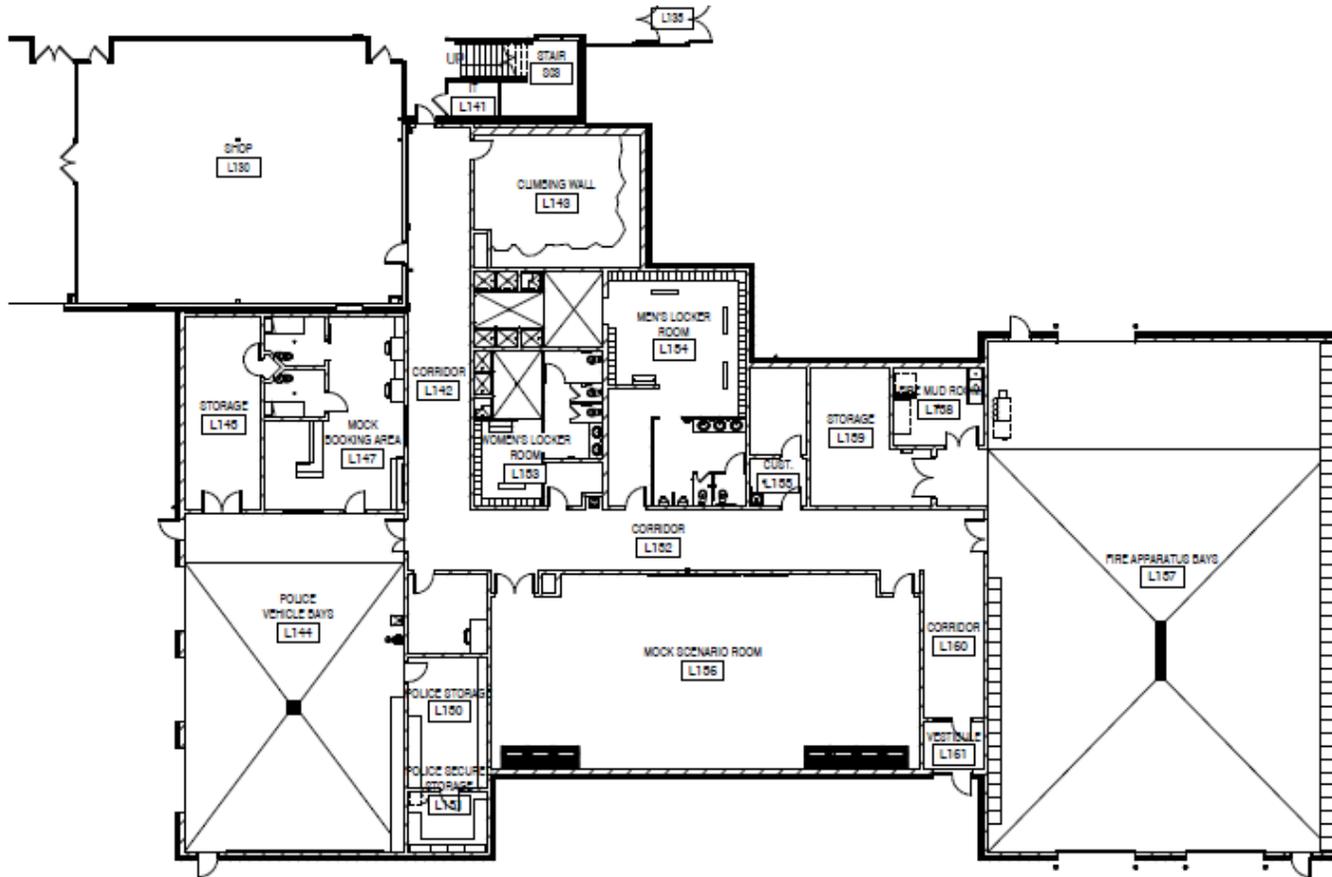
FACILITY EXPANSION



- New construction and renovations for diesel and public safety programs, medical simulation labs, cafeteria, and multi-purpose room
- Moves all programs on one campus
- Supported with state bonds, \$18.5 Million
- Staggered completions through May 2017



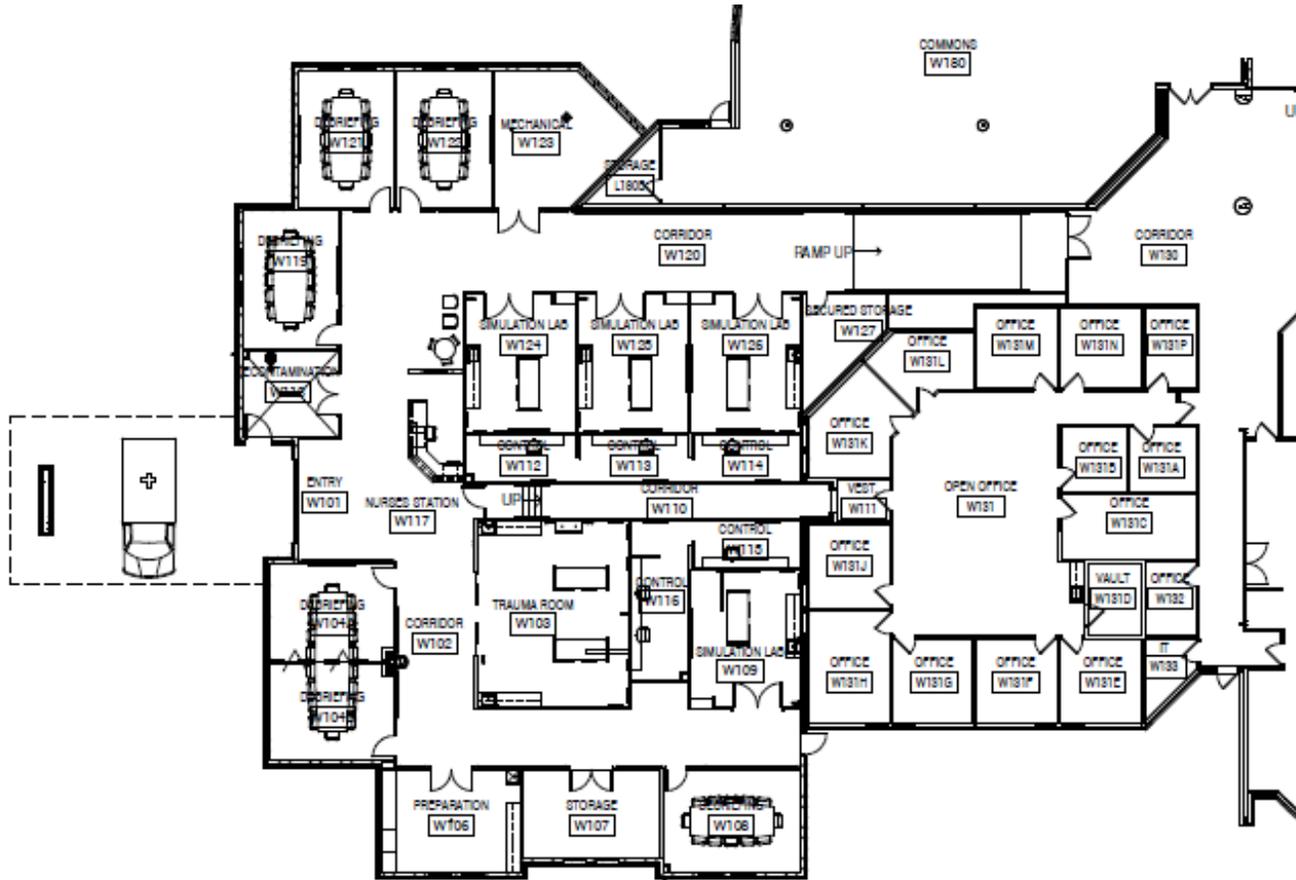
FACILITY EXPANSION



FACILITY EXPANSION



FACILITY EXPANSION





Fall 2015 Awards by Workforce Trade

October 16, 2015

| TRADE | APPLICANTS | | | | | AWARDS | | | | | IN-STATE | | | | | OUT-OF-STATE | | | | |
|-------------------------------|------------|------------|------------|------------|-------------|-----------|-----------|-----------|-----------|------------|-----------|-----------|-----------|-----------|------------|--------------|----------|-----------|----------|-----------|
| | LAT | MTI | STI | WDT | TOTAL | LAT | MTI | STI | WDT | TOTAL | LAT | MTI | STI | WDT | TOTAL | LAT | MTI | STI | WDT | TOTAL |
| Automotive | 72 | 16 | 71 | 52 | 211 | 4 | 0 | 11 | 16 | 31 | 0 | 0 | 9 | 14 | 23 | 4 | 0 | 2 | 2 | 8 |
| Building Trades/Construction | 23 | 67 | 49 | 29 | 168 | 3 | 28 | 14 | 11 | 56 | 2 | 28 | 11 | 11 | 52 | 1 | 0 | 3 | 0 | 4 |
| Energy Technician | 15 | 19 | 0 | 0 | 34 | 6 | 9 | 0 | 0 | 15 | 6 | 8 | 0 | 0 | 14 | 0 | 1 | 0 | 0 | 1 |
| Engineering Technician | 10 | 14 | 51 | 41 | 116 | 2 | 10 | 17 | 20 | 49 | 1 | 8 | 13 | 20 | 42 | 1 | 2 | 4 | 0 | 7 |
| Licensed Practical Nursing | 60 | 0 | 16 | 54 | 130 | 29 | 0 | 16 | 14 | 59 | 23 | 0 | 16 | 14 | 53 | 6 | 0 | 0 | 0 | 6 |
| Medical Laboratory Technician | 15 | 17 | 0 | 0 | 32 | 5 | 0 | 0 | 0 | 5 | 5 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 |
| Precision Manufacturing | 36 | 20 | 22 | 11 | 89 | 19 | 7 | 4 | 3 | 33 | 16 | 7 | 3 | 3 | 29 | 3 | 0 | 1 | 0 | 4 |
| Welding | 37 | 33 | 23 | 44 | 137 | 15 | 10 | 8 | 13 | 46 | 15 | 8 | 6 | 12 | 41 | 0 | 2 | 2 | 1 | 5 |
| No Program or Non-Approved | 78 | 46 | 49 | 0 | 173 | | | | | | | | | | | | | | | |
| Total | 346 | 232 | 281 | 231 | 1090 | 83 | 64 | 70 | 77 | 294 | 68 | 59 | 58 | 74 | 259 | 15 | 5 | 12 | 3 | 35 |



Industry Partnerships in 2015-16

- **Lake Area Technical Institute – “Stretch the Million”**
 - Prairie Lakes Healthcare System-\$14,380
 - Webster Scale-\$4,309
 - Watertown Community Foundation-\$7,910.50
 - Glacial Lakes Energy-\$18,286
 - Applied Engineering-\$9,654
- **Western Dakota Technical Institute:**
 - The John T. Vucurevich Foundation-\$28,000
- **Mitchell Technical Institute – “Double Edge”**
 - MASABA-\$4,000
 - Trail King-\$8,000
 - Dakota Provisions-\$24,000
 - Molded Fiber Glass MFG-\$16,000
 - Renew Energy Maintenance-\$8,000
- **Southeast Tech – “Sponsor a Scholar”**
 - 13 additional scholarships through industry partnerships



BUILD DAKOTA

SCHOLARSHIP FUND



- 2015's SB55 provided \$1 Million in one-time funds to assist in expanding the scholarship's high-demand programs through:
 - Equipment
 - Facility improvements
 - Lab renovations
 - Instructors
- THANK YOU!



BUILD DAKOTA

SCHOLARSHIP FUND

- Applications for 2016-17 being accepted through March 15th
- www.builddakotascholarships.com



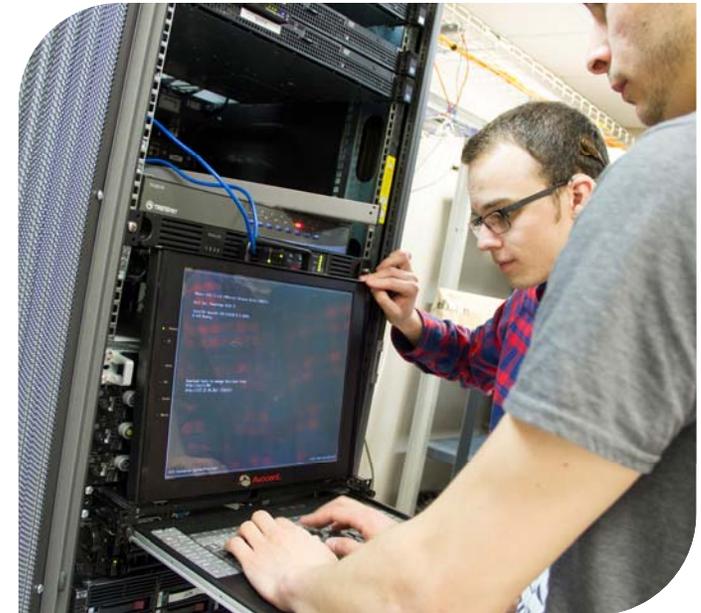
Applications as of February 1, 2016

| TRADE AREA | APPLICANTS |
|-------------------------------|------------|
| Agriculture | 37 |
| Automotive | 182 |
| Building Trades/Construction | 114 |
| Energy Technician | 26 |
| Engineering Technician | 66 |
| IT/CIS | 88 |
| Licensed Practical Nursing | 131 |
| Medical Laboratory Technician | 41 |
| Precision Manufacturing | 42 |
| Surgical Technician | 17 |
| Welding | 79 |
| TOTAL | 823 |

2015 FUTURE FUND EQUIPMENT GRANTS

- Equipment grants awarded in July 2015 for priority equipment needs in high-demand workforce programs
- All equipment used in Build Dakota-eligible programs

| | |
|--------------|--------------------|
| LATI | \$1,126,513 |
| MTI | \$1,021,698 |
| STI | \$1,026,300 |
| WDT | \$ 895,247 |
| TOTAL | \$4,069,758 |



THANK YOU

