

SDTECHS Work 2021

Our Mission: 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.

1. Expand our pipeline and increase the number of skilled graduates to meet SD's workforce needs and to continue economic growth
 - a. Address projected skilled workforce demands
 - b. Ensure graduates are prepared for industry's evolving technology
 - c. Provide a strong return on students' investment
 - d. Open pathways to new careers for existing workers
 - e. Remain price competitive in the region while maintaining high quality
2. Allow students to earn relevant, national industry certifications
3. Engage middle and high school students in technical education to change the perception of skilled workforce careers
 - a. Work with industry on re-imaging technical careers
 - b. Increase career exploration opportunities for 7th-12th graders
 - c. Include parents as influencers
4. Provide for continued skills development of the current workforce
 - a. Provide credit transfer opportunities
 - b. Design programs with "upskilling" in mind

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

1. Ensure faculty have relevant industry certifications and experience
2. Pay employees a wage that is competitive with comparable industry positions
3. Provide compensation pathways to attract and retain master-level instructors
4. Offer professional and instructional development opportunities for new and existing employees

Plant: Ensure facilities are adequate, safe and capable of meeting evolving industry demands and are conducive to learning.

1. Maintain equipment for safety and longevity
2. Ensure adequate facilities are available and maintained with an acceptable risk management profile
3. Keep pace with industry's evolving technology and equipment
4. Provide robust networking and systems architecture to deliver instruction and services
5. Put energy efficiency and control measures in place to minimize utility cost



SDTECHS Work 2021

South Dakota's Technical Institutes

Proposed Benchmarks and Performance Measures

Over the summer of 2015, South Dakota's technical institutes crafted a focused and aggressive strategic plan to ensure, as a system, an adequate number of graduates exit as skilled professionals, equipped to meet the needs of employers throughout the state. The metrics proposed below to measure the success of the technical institute system in achieving its strategic plan align with the plan's overarching goal and "product" focus.

Overarching Goal: Provide quality postsecondary education and training to enable South Dakota's workforce and economy to grow.

- Proposed benchmarks:
 - # of graduates in South Dakota's high-need industries 2 years and 5 years following graduation
(source: DLR Grad Outcomes)
 - Wage growth of graduates in the first five years following graduation
(source: DLR Grad Outcomes)

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

- Proposed benchmarks:
 - # of graduates
(source: Appendix A)
 - System total
 - 2015 Total Graduates = 2,417
 - 2021 GOAL for Total Graduates = 3,000
 - Graduates in high-demand programs
 - 1,108 graduates in high-demand programs in 2015
 - % of graduates employed, continuing education or serving in the military 6-months following graduation
(source: technical institute survey placement report)
 - Placement in South Dakota
 - 98.1% of 2014 graduate survey respondents, 6-months after graduation, reported being employed, continuing education or enlisting in the military
 - Placement in field of study, in South Dakota
 - 83.32% of 2014 graduate survey respondents, 6-months after graduation, reported working in their field of study, in South Dakota



- % of students retained from year 1 to year 2 of their studies
(source: technical institute retention report)
 - 76% retention in Fall 2014
- % of students graduating on-time and in time and a half
(source: Council on Higher Education report)

2010 Cohort Data:

	2010 Cohort	Graduate in 100% Normal Time	Graduate in 150% Normal Time
LATI	736	62%	67%
MTI	367	58%	64%
STI	528	30%	37%
WDT	357	39%	44%

- % of eligible graduates passing applicable licensure
(source: new report – under development)
- % of students with internships/clinicals/simulation in their education
(source: new report – under development) - What percent of students have work-based learning in their field of study prior to entering a career?
- Affordability for students – cost of education vs. average debt vs. salary after attending
(source: [College Scorecard](#))

From College Scorecard:

	Average Annual Cost	Typical Total Debt	Salary After Attending
LATI	\$12,436	\$12,000	\$35,000
MTI	\$11,327	\$12,000	\$38,000
STI	\$12,271	\$13,229	\$36,000
WDT	\$11,309	\$12,065	\$31,000

Average Annual Cost: The Average annual net price for federal financial aid recipients, after aid from the school, state, or federal government. For public schools, this is only the average cost for in-state students.

Typical Total Debt: The median federal debt of undergraduate borrowers who completed. This figure includes only federal loans; it excludes private student loans and Parent PLUS loans.

Salary After Attending: The median earnings of former students who received federal financial aid, at 10 years after entering the school.

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

Plant: Ensure facilities that are adequate, safe and capable of meeting evolving industry demands are conducive to learning.

Proposed benchmarks highlighted in blue were discussed by the South Dakota Board of Regents as possible metrics at the August 31, 2015 committee meeting and could be reported as similar metrics between the systems.



System Efficiencies

At its August 31, 2015 meeting, the Legislative Planning Committee urged the technical institutes to share efficiencies within the system which demonstrate responsible use of finances and other resources to operate the technical schools while effectively supporting students in their preparation for careers.

Examples of decisions and practices in recent years to use resources most efficiently include:

- Programs are not duplicated at technical institutes unless the labor market demands increased capacity and training sites in multiple locations.
- Each year all programs are reviewed based on workforce demands, program enrollment, retention data, and placement data to determine if there is value in continuing them. Several programs have been eliminated because they are no longer in demand and/or low wages did not match with gainful employment.
- New programs emerge or existing programs are revamped based on industry needs in coordination with the Board of Education, Governor's Office of Economic Development, and SD DLR.
- The distribution of the state appropriation to the technical institutes supports efficient operations and ensures the most dollars go to those programs that are high-demand and high-cost. The first 25 percent of the appropriation is divided equally amongst the technical institutes for administration and operations. The remaining 75 percent is distributed based on the demand for and cost of operations for each program.
- Industry partners have provided both funding and in-kind contributions to support and development programs.
- Facilities are constructed and maintained at reasonable prices.
- Inefficient fixtures and appliances have been replaced with more energy efficient components.
- Student to faculty ratios are kept in balance to ensure safe and effective learning environments without offering inefficiently staffed programs or courses. The student to faculty ratio averages around 15-17 students per every faculty member.
- Technology and equipment upgrades have been slowed down except where supported with federal or state grant dollars.
- Multiple technical schools have jointly applied for grants and operated those awarded as partners.
- Funds have been pooled between the technical institutes to seed program development, facilities maintenance and secondary-postsecondary transitions work.
- Through strong local ties and sharing of key resources, South Dakota's Technical Institutes gain significant efficiencies and savings through cost-sharing business offices, real estate, and administrative duties with local school districts.
- The cost for staff and administration at each technical school is minimized for essential operations. The system is supported by portions of two Department of Education staffs' time for planning, accountability, and system reports. There are no system-level staff dedicated to administrative technical assistance in areas such as human resources, data and research, academics, student success services, legal counsel, communications and marketing, government or economic development relations, and information technology.
- An advocacy group composed of industry stakeholders from a wide variety of industries, called the Strategic Workforce Advocacy Council (SWAC), formed a non-profit organization under the umbrella of the State Chamber of Commerce. The group supports technical education, particularly at the postsecondary level. They work closely with the Governor's Office of Economic Development to support workforce development and professionals in technically skilled careers.





The South Dakota Labor Market Information Center's Graduate Outcome Data Application was released to the public July 23, 2015. This application provides the public with longitudinal, career outcome data for South Dakota graduates from the state's public universities and technical institutes. The tool is available at this link: http://dlr.sd.gov/graduate_outcomes/. The system was created as a result of a 2013 legislative bill, Senate Bill 4: <http://legis.sd.gov/docs/legsession/2013/Bills/SB4ENR.pdf>.

This report provides salary highlights for nine, high-demand training programs in the South Dakota Technical Institute system. Of note:

- Salaries are for 2007 graduates of South Dakota technical institutes over a seven-year period.
- First-year wages for graduates across all categories are low, but salaries increased dramatically for graduates in these program areas during the seven-year period, with salaries in some categories more than doubling.
- Migration, out of state, for these programs appears to be low, as the *Graduates Earning Wages in SD* column shows steady numbers for all of these occupations, and even increased numbers in a few training areas such as HVAC and Diesel Mechanic programs.

Data Limitations:

- Outcomes represent only the graduates who are reported as wage earners by South Dakota employers in quarterly reports submitted to the Unemployment Insurance program. Although about 95 percent of South Dakota workers are covered by unemployment insurance, people who are employed by federal agencies, the self-employed and those employed in other states are excluded.
- Wage and industry employment outcomes may include data on graduates who are earning wages from multiple jobs.
- Wage and industry employment outcomes may include data on graduates who re-enrolled in school after completing a degree, if they met the wage earning criteria (having been reported as a wage earner for a minimum of three quarters in a calendar year).
- Since the quarterly employment and wage reports submitted to the Unemployment Insurance program by South Dakota employers do not identify the number of hours employees work, average and median wage estimates may reflect the earnings of both full- and part-time workers.

Wages of Graduates Who Are South Dakota Wage Earners

Area of Study: Mechanic and Repair Technologies/Technicians
 Major, CIP Code: Automobile/Automotive Mechanics Technology/Technician, 470604
 Graduation Year: July 2006 - June 2007
 Beginning Year: 2008
 Ending Year: 2014

Degree	Graduates	Wage Year	Graduates Earning Wages in SD	Jobs Held by Graduates Earning Wages in SD	Average Wage	Median Wage
Associate of Applied Science	38	2008	27	30	\$18,803	\$20,102
		2009	31	36	\$23,308	\$22,873
		2010	29	33	\$26,541	\$27,252
		2011	28	30	\$32,022	\$30,308
		2012	26	27	\$39,916	\$37,428
		2013	26	27	\$42,235	\$41,172
		2014	25	27	\$44,723	\$45,679
Diploma	N/A	2008	N/A	N/A	\$29,312	\$29,312
		2009	N/A	N/A	\$23,238	\$21,983
		2010	N/A	N/A	\$22,226	\$14,827
		2011	N/A	N/A	\$37,996	\$37,996
		2012	N/A	N/A	\$26,414	\$26,414
		2013	N/A	N/A	\$31,198	\$31,198
		2014	N/A	N/A	\$27,938	\$27,938

Wage data may include graduates earning wages at more than one job.
 N/A – Data less than five suppressed to protect the confidentiality of individuals' information.
 Source: South Dakota Department of Labor and Regulation

Wages of Graduates Who Are South Dakota Wage Earners

Area of Study: Construction Trades
 Major, CIP Code: Building Construction Technology, 460415
 Graduation Year: July 2006 - June 2007
 Beginning Year: 2008
 Ending Year: 2014

Degree	Graduates	Wage Year	Graduates Earning Wages in SD	Jobs Held by Graduates Earning Wages in SD	Average Wage	Median Wage
Associate of Applied Science	42	2008	26	27	\$17,119	\$17,405
		2009	25	26	\$24,340	\$22,763
		2010	23	24	\$26,771	\$27,768
		2011	26	28	\$26,150	\$25,361
		2012	23	24	\$31,569	\$33,898
		2013	25	26	\$31,776	\$32,778
		2014	24	25	\$31,874	\$31,862

Wage data may include graduates earning wages at more than one job.
 N/A – Data less than five suppressed to protect the confidentiality of individuals' information.
 Source: South Dakota Department of Labor and Regulation

Wages of Graduates Who Are South Dakota Wage Earners

Area of Study: Mechanic and Repair Technologies/Technicians
 Major, CIP Code: Diesel Mechanics Technology/Technician, 470605
 Graduation Year: July 2006 - June 2007
 Beginning Year: 2008
 Ending Year: 2014

Degree	Graduates	Wage Year	Graduates Earning Wages in SD	Jobs Held by Graduates Earning Wages in SD	Average Wage	Median Wage
Associate of Applied Science	61	2008	35	37	\$21,271	\$19,970
		2009	43	44	\$32,789	\$34,713
		2010	43	46	\$33,154	\$35,045
		2011	39	42	\$39,171	\$38,617
		2012	37	38	\$44,595	\$42,133
		2013	37	38	\$46,331	\$45,766
		2014	38	40	\$48,365	\$49,345
Diploma	6	2008	5	5	\$24,065	\$26,400
		2009	5	5	\$24,457	\$26,608
		2010	N/A	N/A	\$26,804	\$29,191
		2011	N/A	N/A	\$34,739	\$34,800
		2012	N/A	N/A	\$40,341	\$37,048
		2013	N/A	N/A	\$34,495	\$37,200
		2014	N/A	N/A	\$39,993	\$38,400

Wage data may include graduates earning wages at more than one job.

N/A – Data less than five suppressed to protect the confidentiality of individuals' information.

Source: South Dakota Department of Labor and Regulation

Wages of Graduates Who Are South Dakota Wage Earners

Area of Study: Construction Trades
 Major, CIP Code: Electrician, 460302
 Graduation Year: July 2006 - June 2007
 Beginning Year: 2008
 Ending Year: 2014

Degree	Graduates	Wage Year	Graduates Earning Wages in SD	Jobs Held by Graduates Earning Wages in SD	Average Wage	Median Wage
Associate of Applied Science	40	2008	27	28	\$23,661	\$25,885
		2009	28	29	\$26,813	\$28,004
		2010	28	28	\$33,373	\$33,460
		2011	32	32	\$33,963	\$37,977
		2012	28	28	\$38,192	\$37,860
		2013	27	27	\$40,949	\$38,546
		2014	25	25	\$40,330	\$44,530
Diploma	10	2008	6	6	\$23,377	\$27,286
		2009	5	5	\$22,657	\$24,332
		2010	6	6	\$24,645	\$29,246
		2011	8	8	\$30,105	\$30,227
		2012	7	7	\$34,093	\$33,124
		2013	6	6	\$46,004	\$45,977
		2014	7	7	\$40,849	\$44,664

Wage data may include graduates earning wages at more than one job.

N/A – Data less than five suppressed to protect the confidentiality of individuals' information.

Source: South Dakota Department of Labor and Regulation

Wages of Graduates Who Are South Dakota Wage Earners

Area of Study: Engineering Technologies and Engineering-Related Fields
 Major, CIP Code: Heating, Ventilation, Air Conditioning and Refrigeration Engineering Technology/Technician, 150701
 Graduation Year: July 2006 - June 2007
 Beginning Year: 2008
 Ending Year: 2014

Degree	Graduates	Wage Year	Graduates Earning Wages in SD	Jobs Held by Graduates Earning Wages in SD	Average Wage	Median Wage
Diploma	15	2008	10	10	\$25,581	\$24,747
		2009	8	8	\$36,357	\$38,984
		2010	12	12	\$33,987	\$35,798
		2011	11	11	\$33,844	\$34,325
		2012	12	12	\$35,870	\$37,577
		2013	12	12	\$41,445	\$39,321
		2014	11	11	\$37,480	\$37,510

Wage data may include graduates earning wages at more than one job.

N/A – Data less than five suppressed to protect the confidentiality of individuals' information.

Source: South Dakota Department of Labor and Regulation

Wages of Graduates Who Are South Dakota Wage Earners

Area of Study: Health Professions and Related Clinical Sciences
 Major, CIP Code: Licensed Practical/Vocational Nurse Training, 513901
 Graduation Year: July 2006 - June 2007
 Beginning Year: 2008
 Ending Year: 2014

Degree	Graduates	Wage Year	Graduates Earning Wages in SD	Jobs Held by Graduates Earning Wages in SD	Average Wage	Median Wage
Diploma	139	2008	91	103	\$16,606	\$14,145
		2009	99	113	\$19,961	\$18,841
		2010	96	112	\$24,169	\$25,853
		2011	91	103	\$27,854	\$29,157
		2012	92	102	\$28,840	\$30,931
		2013	91	102	\$32,324	\$34,179
		2014	86	92	\$33,651	\$34,928

Wage data may include graduates earning wages at more than one job.

N/A – Data less than five suppressed to protect the confidentiality of individuals' information.

Source: South Dakota Department of Labor and Regulation

Wages of Graduates Who Are South Dakota Wage Earners

Area of Study: Health Professions and Related Clinical Sciences

Major, CIP Code: Clinical/Medical Laboratory Technician, 511004

Graduation Year: July 2006 - June 2007

Beginning Year: 2008

Ending Year: 2014

Degree	Graduates	Wage Year	Graduates Earning Wages in SD	Jobs Held by Graduates Earning Wages in SD	Average Wage	Median Wage
Associate of Applied Science	7	2008	N/A	N/A	\$14,392	\$12,114
		2009	5	6	\$20,421	\$23,238
		2010	5	6	\$21,355	\$26,242
		2011	N/A	5	\$20,974	\$30,268
		2012	N/A	5	\$26,843	\$32,537
		2013	N/A	5	\$25,267	\$32,593
		2014	N/A	N/A	\$32,432	\$33,020

Wage data may include graduates earning wages at more than one job.

N/A – Data less than five suppressed to protect the confidentiality of individuals' information.

Source: South Dakota Department of Labor and Regulation

Wages of Graduates Who Are South Dakota Wage Earners

Area of Study: Health Professions and Related Clinical Sciences

Major, CIP Code: Surgical Technology/Technologist, 510909

Graduation Year: July 2006 - June 2007

Beginning Year: 2008

Ending Year: 2014

Degree	Graduates	Wage Year	Graduates Earning Wages in SD	Jobs Held by Graduates Earning Wages in SD	Average Wage	Median Wage
Diploma	32	2008	21	23	\$22,583	\$23,099
		2009	21	27	\$18,982	\$17,526
		2010	22	24	\$20,433	\$23,944
		2011	21	23	\$25,908	\$25,079
		2012	18	18	\$31,801	\$28,120
		2013	17	17	\$35,353	\$32,847
		2014	17	17	\$35,217	\$34,198

Wage data may include graduates earning wages at more than one job.

N/A – Data less than five suppressed to protect the confidentiality of individuals' information.

Source: South Dakota Department of Labor and Regulation

Wages of Graduates Who Are South Dakota Wage Earners

Area of Study: Precision Production
 Major, CIP Code: Welding Technology/Welder, 480508
 Graduation Year: July 2006 - June 2007
 Beginning Year: 2008
 Ending Year: 2014

Degree	Graduates	Wage Year	Graduates Earning Wages in SD	Jobs Held by Graduates Earning Wages in SD	Average Wage	Median Wage
Associate of Applied Science	8	2008	7	7	\$14,885	\$15,124
		2009	5	5	\$20,151	\$12,192
		2010	6	6	\$23,698	\$16,011
		2011	7	7	\$24,836	\$29,016
		2012	7	7	\$32,506	\$28,980
		2013	6	6	\$39,028	\$35,853
		2014	7	7	\$46,444	\$40,925
Diploma	31	2008	16	16	\$15,257	\$15,521
		2009	18	18	\$16,979	\$12,111
		2010	16	16	\$21,750	\$21,584
		2011	17	17	\$25,635	\$26,128
		2012	20	20	\$30,247	\$30,616
		2013	18	18	\$34,592	\$39,739
		2014	17	17	\$37,307	\$38,060

Wage data may include graduates earning wages at more than one job.

N/A – Data less than five suppressed to protect the confidentiality of individuals' information.

Source: South Dakota Department of Labor and Regulation