

DATE: November 16, 2016

SUBJECT: Drive to 55 Capacity Building Fund Recommendations

ACTION RECOMMENDED: Approval

BACKGROUND

On June 28, THEC staff released the Drive to 55 Project Capacity Fund grant request for proposals (RFP). Funded through a \$24.25 million non-recurring appropriation included in the 2016-17 budget, this grant is intended to help public universities, community colleges, colleges of applied technology, and other entities—such as the agricultural units and medical schools—increase program capacity to better meet Drive to 55 objectives. Successful proposals will develop plans to increase academic or technical program capacities in a manner that increases postsecondary credentials that align with the state’s workforce needs.

Projects were classified in one of two categories: *Program Expansion*—the purchase of new equipment or renovation of an existing facility to expand the capacity of an existing program—or *New Capital Construction/Major Renovation (NCC/MR)*—the construction of a new facility or the major renovation of existing facilities to expand or create programs.

Proposals were due October 7. In total, 44 proposals were submitted, requesting a cumulative \$120.9 million. Twenty-two of the 27 TCATs, all of the community colleges, eight of the nine universities, and the University of Tennessee Institute of Agriculture submitted a proposal. Sixteen proposals were submitted from the East Grand Division, 15 from the Middle, and 13 from the West. Twenty-five proposals were classified as *NCC/MR* and 19 as *Program Expansion*.

ACTION

Representatives from across state government, including the Department of Economic and Community Development and the Department of Labor and Workforce Development, and both higher education systems reviewed and scored the proposals, as determined by the scoring rubrics outlined in the RFP. On October 26, the group of representatives convened and certified the rank order based on composite scores (see Appendix A).

The Commission selects projects for funding and, per the RFP, may deviate from the ranked order of scores based on other criteria (e.g., geographic distribution, type of program, etc.) as determined by the Commission.

In addition to showing the ranked order of composite scores, Appendix A provides brief details of the proposal and the applying institution. Appendix B provides the

proposal abstracts for all proposals that score an 80.0 or above (in total, over \$65 million in requests).

THEC staff will be prepared to address questions related to all proposals during the Commission meeting.

Appendix A: Drive to 55 Project Capacity Fund Grant Composite Scores

Institution	Sector	Grand Division	Classification*	Abbr. Project Title	Composite Score	Comp. Score Range	Funding Requested	Total Funding	\$/Student Served
TCAT - Memphis	TCAT	West	NCC/MR	Drive to 55 Project Capacity Fund Grant	95.0	8	\$4,000,000	\$4,000,000	\$ 16,667
TCAT - Harriman	TCAT	East	Program Expansion	Loudon County Instructional Service Center Allied Health Academy	93.3	11	\$264,000	\$4,264,000	\$ 3,300
Motlow State Community College	CC	Middle	NCC/MR	Advanced Robotics Training Center	93.3	8	\$5,500,000	\$9,764,000	\$ 13,750
Tennessee Technological University	Univ	Middle	NCC/MR	Tennessee Center for Poultry Science Excellence	92.0	17	\$2,070,000	\$11,834,000	\$ 1,656
TCAT - Knoxville	TCAT	East	NCC/MR	Construct a New TCAT Training Facility in Anderson County	90.0	23	\$5,700,000	\$17,534,000	\$ 12,667
TCAT - Pulaski	TCAT	Middle	NCC/MR	Constructing Capacity - Creating Credentials	89.0	15	\$3,171,350	\$20,705,350	\$ 19,821
Volunteer State Community College	CC	Middle	NCC/MR	VSCC Warf Science Building Addition	88.3	23	\$1,560,000	\$22,265,350	\$ 32,500
TCAT - Shelbyville	TCAT	Middle	NCC/MR	Franklin County Training Facility	87.3	14	\$4,990,000	\$27,255,350	\$ 41,583
TCAT - Crump	TCAT	West	Program Expansion	Chester County Welding Program Expansion	87.0	5	\$114,380	\$27,369,730	\$ 2,288
Dyersburg State Community College	CC	West	Program Expansion	Building Capacity for the DSCC Nursing Program	86.7	21	\$1,075,000	\$28,444,730	\$ 3,839
East Tennessee State University	Univ	East	Program Expansion	ETSU at Sevierville Program Expansion	84.7	9	\$818,000	\$29,262,730	\$ 8,611
University of Memphis	Univ	West	Program Expansion	Infrastructure to Address Advanced Manufacturing Needs	83.7	25	\$2,100,000	\$31,362,730	\$ 21,000
Jackson State Community College	CC	West	Program Expansion	Respiratory Care Technology and Radiography Programs	83.3	7	\$575,293	\$31,938,023	\$ 12,506
Northeast State Community College	CC	East	Program Expansion	Expanding Academic and Career Pathways in Northeast Tennessee	83.0	22	\$922,040	\$32,860,063	\$ 7,684
Middle Tennessee State University	Univ	Middle	NCC/MR	Building Excellence for Concrete and Construction Education	83.0	4	\$5,000,000	\$37,860,063	\$ 10,000
TCAT - Covington	TCAT	West	NCC/MR	Healthcare Training Facility	82.7	34	\$3,260,000	\$41,120,063	\$ 5,433
Nashville State Community College	CC	Middle	NCC/MR	NSCC Southeast Campus Program/Enrollment Expansion Project	82.0	20	\$4,875,000	\$45,995,063	\$ 2,438
TCAT - Jacksboro	TCAT	East	Program Expansion	Dual Enrollment Welding Program	81.7	22	\$84,925	\$46,079,988	\$ 2,831
University of Tennessee at Martin	Univ	West	NCC/MR	Innovation and Product Realization Facility	81.0	22	\$1,000,000	\$47,079,988	\$ 3,333
Pellissippi State Community College	CC	East	NCC/MR	Blount Works	80.7	15	\$11,000,000	\$58,079,988	\$ 9,565
Austin Peay State University	Univ	Middle	NCC/MR	Increasing the Workforce Development in Advanced Manufacturing	80.3	14	\$2,685,000	\$60,764,988	\$ 2,441
TCAT - Livingston	TCAT	Middle	NCC/MR	Transportation Building	80.3	22	\$2,000,000	\$62,764,988	\$ 40,000
TCAT - Ripley	TCAT	West	Program Expansion	Industrial Electricity Program Expansion	80.3	30	\$380,154	\$63,145,142	\$ 5,069
Roane State Community College	CC	East	NCC/MR	Center for Innovation and Training Excellence (CITE)	80.0	32	\$4,800,000	\$67,945,142	\$ 9,600
TCAT - Hartsville	TCAT	Middle	Program Expansion	Work-Ready Tennessee	77.7	9	\$774,600	\$68,719,742	\$ 3,873
TCAT - Athens	TCAT	East	NCC/MR	Center for Advanced Manufacturing & Business Innovation	77.0	46	\$3,558,000	\$72,277,742	\$ 12,985
TCAT - Jackson	TCAT	West	Program Expansion	Driving to Meet Trucking Industry Needs	76.7	23	\$811,000	\$73,088,742	\$ 16,896
TCAT - Nashville	TCAT	Middle	Program Expansion	Aviation Maintenance Technology Expansion Project	74.7	42	\$301,650	\$73,390,392	\$ 4,022
TCAT - Newbern	TCAT	West	NCC/MR	Transportation Building, Welding Renovation, CDL Training Area	74.0	11	\$3,392,840	\$76,783,232	\$ 13,792
Walters State Community College	CC	East	Program Expansion	Greeneville/Greene County Campus Expansion Project	74.0	40	\$2,050,253	\$78,833,485	\$ 1,777
TCAT - Dickson	TCAT	Middle	Program Expansion	HVAC/R Careers: Hot Opportunities for Cool Careers	73.7	2	\$410,000	\$79,243,485	\$ 6,833
TCAT - Whiteville	TCAT	West	NCC/MR	Brownsville Extension Campus -- Classroom and Shop Addition	71.0	33	\$1,231,000	\$80,474,485	\$ 11,951
TCAT - Morristown	TCAT	East	Program Expansion	Sevierville Instructional Service Center Expansion	70.3	37	\$161,000	\$80,635,485	\$ 5,367
TCAT - McMinnville	TCAT	Middle	Program Expansion	Drive to 55 Capacity Grant	69.0	40	\$389,347	\$81,024,832	\$ 5,191
Columbia State Community College	CC	Middle	NCC/MR	Lawrence County Higher Education Center	66.7	34	\$4,506,904	\$85,531,736	\$ 2,253
University of Tennessee Institute of Agriculture	Univ	West	NCC/MR	Increasing Postsecondary STEM Enrollment in West Tennessee	66.3	48	\$1,550,000	\$87,081,736	\$ 155
Chattanooga State Community College	CC	East	NCC/MR	Expanding Regional STEM & Advanced Manufacturing Skills	65.7	26	\$5,000,000	\$92,081,736	\$ 3,165
Southwest Tennessee Community College	CC	West	Program Expansion	Train and Equip A Career in Health (TEACH)	62.3	23	\$575,921	\$92,657,657	\$ 192
University of Tennessee, Chattanooga	Univ	East	NCC/MR	MacLellan Student Success Center	58.0	23	\$8,150,000	\$100,807,657	\$ 780
TCAT - Crossville	TCAT	East	Program Expansion	Increased Certification through Training Consolidation	56.7	69	\$183,367	\$100,991,024	\$ 815
Cleveland State Community College	CC	East	NCC/MR	Career Education Expansion and Renovation	56.0	8	\$4,500,000	\$105,491,024	\$ 1,286
TCAT - Hohenwald	TCAT	Middle	NCC/MR	Health Care Careers Building	56.0	28	\$3,750,000	\$109,241,024	\$ 18,750
University of Tennessee, Knoxville	Univ	East	Program Expansion	Retail, Hospitality, and Tourism Management: Culinary Institute	55.3	16	\$3,341,000	\$112,582,024	\$ 11,137
TCAT - Elizabethton	TCAT	East	NCC/MR	Johnson County Extension Campus	48.0	24	\$8,336,000	\$120,918,024	\$ 55,573

* NCC/MR: New Capital Construction / Major Renovation

Appendix B: Drive to 55 Project Capacity Fund Grant Proposal Abstracts¹

Institution: TCAT - Memphis

Program Classification: New Capital Construction / Major Renovation

Title: Drive to 55 Project Capacity Fund Grant

Request: \$4,000,000

Composite Score: 95.0

The Tennessee Higher Education Commission has identified an annual deficit of 4,557 qualified Tennesseans to fill jobs within the precision production sector. This *new construction/major renovation* project seeks to align the supply deficit of qualified Tennesseans with the demand requirement of industry, by creating an industry-driven training institute in Bartlett, TN. This proposal includes \$1 million of guaranteed in-kind matching funds provided by the City of Bartlett. This facility will train approximately 240 Tennesseans annually in three high demand programs with a focus on the medical device sector. This proposal also offers Tennessee the opportunity to establish the first Haas designated training center in the Mid-South, which will result in an additional \$1 million donation from the Gene Haas Foundation. The proposed facility supports the Drive to 55 initiative by adding approximately 1,600 post-secondary credentials by 2025.

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Institution: TCAT - Harriman

Program Classification: Program Expansion

Title: Loudon County Instructional Service Center Allied Health Academy

Request: \$264,000

Composite Score: 93.3

TCAT-Harriman will increase capacity and postsecondary credentialing at its Loudon County Instructional Service Center through a program expansion. The mission will be accomplished using existing space to create a sustainable Allied Health Academy with state-of-the-art training equipment.

Classroom and lab space combination in existing spaced will be used to deliver postsecondary educational opportunities in Practical Nursing, Nurse Aide (CNA), Phlebotomy, and Medical Office Assisting through program expansions at an existing TCAT-Harriman Instructional Service Center. Dual enrolled high school students and adult postsecondary students will gain from access from this program expansion. All students will have the opportunity to gain portable credentials using the equipment requested in this proposal. Students will be able to carry competencies to all TBR institutions for continuation of postsecondary education or they will be able to enter the workforce in the

¹ In declining ranked composite score order. All abstracts for proposals that score 80.0 or above are included.

medical field. The overall objective is to meet or exceed the benchmarks set forth in the Drive to 55 initiatives with sustainable, technical education offerings to benefit the student and the allied health related employers.

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Institution: Motlow State Community College
Program Classification: New Capital Construction / Major Renovation
Title: Advanced Robotics Training Center
Request: \$5,500,000
Composite Score: 93.3

Motlow State Community College requests \$5,500,000 for a new capital construction project to add an Advanced Robotics Training Center (ARTC) to the McMinnville campus. The 12,425 square-foot facility will house robots and training equipment by the top three national robot manufacturers —ABB, Fanuc, and Yaskawa/Motoman—to instruct students in design, operation, and maintenance of industrial robots. Responding to the local manufacturing need for a workforce trained in robotics, the ARTC will serve both traditional and nontraditional students in Tennessee’s Upper Cumberland region through a new Associate Degree program in Mechatronics with a Robotics concentration, as well as non-credit certification courses in industrial robot operations. Manufacturing businesses in Tennessee and the entire southeast United States will be able to send their employees to the ARTC for valuable robotics skills training, which is currently in high demand. This project perfectly aligns with Drive to 55 goals of increasing post-secondary credentials, serving traditional and non-traditional students, and preparing students with in-demand skills for careers that are projected to have employment deficits in the coming years. Knowledge and skills in the field of robotics is an industry need that continues to grow locally, regionally, and nationally. Motlow State Community College is poised to meet the need for a trained workforce, which will mutually benefit Tennessee residents and industry, preparing our workforce and state for the future.

Institution: Tennessee Technological University
Program Classification: New Capital Construction / Major Renovation
Title: Tennessee Center for Poultry Science Excellence: Addressing Tennessee Workforce Needs & Promoting Rural Economic Development
Request: \$2,070,000
Composite Score: 92.0

Tennessee Technological University (TTU) requests \$2,070,000 for the new capital construction project, *Tennessee Center for Poultry Science Excellence: Addressing Tennessee Workforce Needs & Promoting Rural Economic Development*. This facility will impact the higher education attainment rate across the state through expanded course offerings and certifications. In addition, it will be the only university poultry center in Tennessee and will provide both educational and research opportunities for undergraduate and graduate students within the College of Agriculture and Human Ecology (CAHE) and in other colleges across campus. It is expected that this facility will provide hands-on educational activities related to both live production and processing. The buildings used in live production will include two barns, a litter shed, and a feed mill. Processing education will be provided by a single, multi-purpose building. This building will have an office and a classroom as well as a USDA-compliant processing plant and commercial kitchen. In the live production center, students will learn about management, lighting programs, feeding, the importance of water, ventilation, brooding, litter management, composting, growth, mortality, research techniques, and other day-to-day activities associated with a poultry growing operation. The multi-purpose building will provide education in food science, processing, handling and food security. Food science, and its associated fields, serves to increase the course offerings and workshops available through the College of Agriculture and Human Ecology and expand access to and participation in post-secondary education for all Tennesseans. This is important as the world population continues to expand and demand more and healthier food options. This facility will be conveniently located at Shipley Farm, which is two miles from the edge of campus on a well-maintained, two-lane paved highway and has provided TTU and its students with educational opportunities since 1965.

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Institution: TCAT - Knoxville
Program Classification: New Capital Construction / Major Renovation
Title: Construct a New TCAT Training Facility in Anderson County, Tennessee
Request: \$5,700,000
Composite Score: 90.0

The "Drive to 55" Project Capacity Grant submitted by the Tennessee College of Applied Technology Knoxville will be used for new capital construction for a new 30,000 square foot facility in Anderson County, Tennessee. The facility will be located in the I-75 Industrial Park

on eight (8) acres of land donated by SL Tennessee. The new campus will offer the following programs: Welding, Diesel Powered Equipment Technology, Truck Driving, Machine Tool Technology, Industrial Maintenance/ Mechatronics Technology, Automotive Technology, and Special Industry Training. The campus will have a day capacity of 130 post-secondary students and night capacity of 120 students.

The expansion of the new campus will allow the Tennessee College of Applied Technology Knoxville (TCAT) to dual enroll approximately 150 high school juniors and seniors from Anderson County Career and Technical Center and Oak Ridge High School. The programs offered at the Clinton, Tennessee, location are the high-demand programs that TCAT Knoxville presently offers on the main campus but has long waiting lists. The expansion will provide space for the College to better serve the Special Industry training needs for the companies located in Anderson, Blount, and Knox Counties.

Moving Truck Driving to the new campus will allow the main campus on Liberty Street in Knoxville to add up to 200 new parking spaces that are so desperately needed. The Tennessee College of Applied Technology Knoxville is seeking \$5,700,000 in capacity funds and can provide the required matching funds.

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Institution: TCAT - Pulaski
Program Classification: New Capital Construction / Major Renovation
Title: Constructing Capacity – Creating Credentials
Request: \$3,171,350
Composite Score: 89.0

The Tennessee College of Applied Technology – Pulaski (TCAT-P) will purchase a building adjacent to its main campus and equip both that building and vacated space in our main building in order to introduce, expand, or upgrade several programs that are in demand and contribute to Drive to 55.

BUILDING	PROGRAMS
New Building	<ul style="list-style-type: none"> • Expand and upgrade Advanced Manufacturing Education • Separate Industrial Maintenance Technology into its own self-contained program, rather than the current situation where IMT students attend classes designed for other programs • Introduce a Special Industry Training program to serve the specialized training needs of employers
Existing Building	<ul style="list-style-type: none"> • Utilize vacated space to expand Computer Operating Systems and Network Technology (COSNT) program • Introduce a new program in Dental Assisting • Expand current enrollment capacity in HVACR, Welding, and Industrial Electricity
Entire Campus	<ul style="list-style-type: none"> • Expand Dual Enrollment programs with Giles County High School and Richland High School by 5 FTEs (30 students per term)

We are requesting \$3,171,350 for this major capacity and programmatic expansion, including acquisition and renovation of the property, additional equipment, and operating expenses for the ramp-up. The building can be purchased and renovated far less expensively than new construction, and the 3.02 acres of land that comes with the building will provide our campus with expansion land for the future. This is a unique opportunity for TCAT-Pulaski to expand in property contiguous to its main campus.

The last expansion of the campus was over 20 years ago, and our programs and current facility are at capacity. The Master Planner has approved this expansion as part of our long-term plan.

The overall project will be under the direction of Mr. Mike Whitehead, Assistant Director of TCAT- Pulaski. TCAT-Pulaski is under the direction of Mr. Tony Creecy.

Institution: Volunteer State Community College
Program Classification: New Capital Construction / Major Renovation
Title: VSCC Warf Science Building Addition
Request: \$1,560,000
Composite Score: 88.3

Volunteer State Community College proposes a new capital construction/major renovation project to build a 6,054 square foot addition to our existing Warf Science Building on the Gallatin campus. The addition will provide instructional and laboratory space for the Certificate in Mechatronics and Associate of Applied Science in Mechatronics Programs. The space includes a classroom, large open laboratory which will house equipment allowing students to gain hands-on experience, and two faculty offices. The addition will be a showcase element for our Gallatin campus and the planned location facing Nashville Pike will enhance the college's image in the community.

This project directly supports the two core components of the Drive to 55 in that it will both increase the number of post-secondary degrees and certificates and will make those awards responsive to the needs of the state-wide, regional, and local economies. A report prepared by Workforce Essentials projects an 18.7% increase in mechatronics related occupations in Sumner, Robertson, Wilson, Trousdale and Macon counties during the next 10 years. The educational pathway of the Mechatronics program will provide students with hands-on training in desired industry skills while offering options (high school dual enrollment, TCAT diploma programs and articulation to a community college, community college AAS degrees, and articulation to a university 4-year BS degree) that will benefit the region's economy by increasing productivity and putting upward pressure on employee wages.

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Institution: TCAT - Shelbyville
Program Classification: New Capital Construction / Major Renovation
Title: Franklin County Training Facility
Request: \$4,990,000
Composite Score: 87.3

The proposed project is requesting funds for a new capital construction of a 29,003 square foot off-campus training facility to be located in Winchester, Tennessee (Franklin County) and the implementation of six technical programs to support the workforce needs for business and industry in Franklin and surrounding counties. The new facility will house six high tech, high demand, high skilled programs offered by the Tennessee College of Applied Technology-Shelbyville (TCAT-S). The six programs are Industrial Maintenance, Machine

Tool Technology, Welding Technology, Computer Information Technology, Licensed Practical Nursing and Certified Nursing Assistant.

The new capital construction will be located at the previous site of Franklin County High School located on 925 Dinah Shore Blvd. There is 8.5 acres of land available for the site. The land offers adequate space for parking and space for expansion in the future. The land will be donated by the Franklin County Board of Education for the construction of the facility pending, approval of this proposed project. The site is currently ready for construction. The Franklin County Government has agreed to donate \$1 million dollars in support of this project.

The new facility is in support of the Governor's Drive to 55 goals with new certifications and diplomas achieved.

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Institution: TCAT - Crump
Program Classification: Program Expansion
Title: Chester County Welding Program Expansion
Request: \$114,380
Composite Score: 87.0

This Drive to 55 Project Capacity Fund Grant proposal, "Chester County Welding Program Expansion," is a partnership between the Chester County School System and the Tennessee College of Applied Technology (TCAT) Crump to provide dual enrollment educational opportunities in Welding Technology to students at Chester County High School. The aim of the program is to link high school students with high- wage, high skill, high demand welding related jobs in the Southwest Tennessee region.

A significant number of young adults do not have the skills and credentials needed for success in today's demanding economy. Governor Haslam's "Drive to 55" initiative hopes to change this by setting the goal for 55 percent of Tennesseans to hold a college degree, diploma or industry recognized credential by the year 2025. Students participating in the Chester County High School Welding Technology Program will have the opportunity to earn TCAT certificates, an industry recognized American Welding Society credential, and dual-enrollment credits that will account for up to one-third of the hours necessary to earn the Combination Welder Diploma at TCAT Crump.

This project is classified as a *program expansion*. The requested funding for this project is \$114,380.

Institution: Dyersburg State Community College
Program Classification: Program Expansion
Title: Building Capacity for the DSCC Nursing Program
Request: \$1,075,000
Composite Score: 86.7

Dyersburg State Community College (DSCC) requests \$1,075,000 for program expansion. The proposed project will expand capacity of DSCC’s nursing program by providing additional equipment, an additional laboratory, and renovating existing laboratory space to increase the number of students these rooms can accommodate. By renovating these spaces, DSCC will be able increase the number of degrees it awards in support of the state’s Drive to 55 initiative by offering its Paramedic to RN program at the Dyersburg campus (it is currently only offered at the DSCC Jimmy Naifeh Center at Tipton County), which will double the capacity of the fast-track program to 48 students.

In addition to providing more space to offer the Paramedic to RN program in Dyersburg, the project will help DSCC attract an increased number of applicants to its traditional RN and Licensed Practical Nurse (LPN) to RN programs by providing provide state-of-the-art equipment for students in the nursing laboratories. It will also allow DSCC to meet accreditation requirements for the renovation of laboratory space to more closely simulate a hospital environment and will increase the number of RNs in rural West Tennessee, which is currently experiencing an extreme shortage of employees in this field.

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Institution: East Tennessee State University
Program Classification: Program Expansion
Title: ETSU at Sevierville Program Expansion
Request: \$818,000
Composite Score: 84.7

The ETSU at Sevierville Program Expansion project seeks funds to equip and renovate unused space at ETSU’s site at 2025 Red Bank Road, in Sevierville, Tennessee. In addition to strengthening current programs in applied science, business, education, human services, professional studies, psychology, radiography, nursing (online), and social work; the project will enable delivery of a new, on- ground nursing program. The two-part project, which closely aligns with area workforce needs, will increase program access, student success, and educational attainment in the area.

The first part is the installation of a Nursing Skills/Simulation Laboratory. With the Laboratory, ETSU will be able to offer the Accelerated BSN program and, with additional

courses, the Licensed Practical Nurse (LPN) to BSN program. The accelerated program will allow students to earn the degree in five consecutive terms and enter the workforce more quickly than the traditional program. The Lab will also enhance the current online Registered Nurse (RN) to BSN program. The Accelerated BSN is designed for traditional students and for *working adults*. ETSU plans to staff the Accelerated BSN with three faculty, an advisor/recruiter, and an executive aide.

The second part is the installation of a student Collaborative Learning Lab (CLL) that will assist not only the new Nursing program, but also those students in other programs at the site. The CLL will give students a comfortable, modern work space where they can study, work in groups, and use the latest technology. It will improve student success and retention and will assist traditional students and adult students, especially *adults with limited access to computers*.

The requested funding for the project is \$818,000.

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Institution: University of Memphis

Program Classification: Program Expansion

Title: Infrastructure Development to Address Advanced Manufacturing Workforce Needs in West

Tennessee: A Program Expansion Proposal

Request: \$2,100,000

Composite Score: 83.7

The University of Memphis requests \$2.1 million for a program expansion project that includes funds to acquire a suite of Advanced Manufacturing machines and laboratory renovations to allow existing facilities to accommodate these instruments. The University of Memphis will leverage these resources to infuse advanced manufacturing training into 10 existing courses and develop and implement 2 new trans-engineering courses. Together, these courses will form a new undergraduate minor and a new graduate certificate in Quality Assurance in Advanced Manufacturing (TnAdvM). In addition, the University will package two courses into an Intensive Industry Training Institute for individuals with Associates, Bachelors, or Masters Degrees; the completion credentials from these Institutes can then be used towards the University's undergraduate minor or graduate certificate in TnAdvM.

Specific advanced manufacturing capacity to be added falls into the descriptive category of 3D metal Additive Manufacturing, an advanced manufacturing technique to fabricate functional metal parts directly from computer files via layer-by-layer scanning of fine metal powders using a high-energy laser at a prescribed scan pattern. This technique allows for

significant and cost- effective component customization, effective complex design realization, and more responsive quality control. Industries including biomedical device, aerospace, automotive, consumer electronics and durable goods are adopting this technology to manufacture their products with impacts on hiring plans in all branches of production and design engineering, quality assurance/control, and machining fields. At present, there are no other similar training or academic programs in west Tennessee (or elsewhere in Tennessee) that address this need.

We expect to annually credential 55 undergraduate and 5 graduate students through these AM programs and to provide industry training to 40 individuals annually, with 10% of these individuals electing to pursue a baccalaureate degree following this training.

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Institution: Jackson State Community College
Program Classification: Program Expansion
Title: Health Science Building – Respiratory Care Technology and Radiography Programs
Request: \$575,293
Composite Score: 83.3

The purpose of this proposal is to seek funding for program expansion of the Allied Health Programs at Jackson State Community College. Specifically, this proposal focuses on the expansion of the Allied Health Programs in Radiography and Respiratory Care Technology. Jackson State Community College is the only education provider of Radiography and Respiratory Care Technology in the 20 county rural West Tennessee Region. Jackson State has begun construction of a new 44,000 square foot Health Sciences Building that will house the allied health programs offered by Jackson State Community College. The new Health Sciences

Building is scheduled for completion in March-April 2017. The new building will provide ample space for classrooms, offices, laboratories, and student study space.

Jackson State Community College requests funding to expand the current Radiography Program with the purchase of specific equipment that will allow the program to admit more students on an annual basis increasing from 24 to 31. The more modern new equipment purchase will also provide for the most current student training that promotes learning and their employability. The College also requests funding to purchase laboratory equipment to allow the reinstatement of the Respiratory Care Technology Program that was discontinued some years ago. The College anticipates the Respiratory Care Technology Program will admit 15 students a year. Both the Radiography and Respiratory Care

Technology Programs are five (5) semesters in length. The proposed allied health expansion of the radiography and respiratory care technology programs support the Tennessee and rural West Tennessee efforts to meet Drive to 55 goals of increasing higher education attainment and meeting the needs of local employers. An amount of \$575,293 is requested for this project.

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Institution: Northeast State Community College
Program Classification: Program Expansion
Title: Expanding Academic and Career Pathways in Northeast Tennessee
Request: \$922,040
Composite Score: 83.0

Northeast State Community College, with its primary campus in Blountville, will expand course offerings in academic and career pathways by offering technical degree and certificate programs for students in four "off-campus" locations. This project, *Expanding Academic and Career Pathways in Northeast Tennessee*, will build on current articulations and partnerships to create career pathway for students as they pursue dual-enrollment credits and industry certifications in selected Business and Advanced Technology areas - information technology and HVAC, CAD and Aviation. Developing these pathways will result in a stronger pipeline of employees for these areas. This program expansion will provide access to a technical program within 20 miles of most citizens in the College's five-county service area (Carter, Johnson, Sullivan, Unicoi and Washington counties).

The proposed project is fully aligned with and supports the tenets of the Drive to 55 initiative by providing new educational opportunities in designated communities and increasing the number of dual- enrollment and postsecondary training options for students in the region. By following expanded career pathways, students will be able to complete a certificate or an AAS degree and/or complete credits applicable to another technical education program. By providing additional seats in four emerging programs, Northeast State will enhance access to academic and career pathways in Northeast Tennessee where barriers to training and employment abound.

Institution: Middle Tennessee State University

Program Classification: New Capital Construction / Major Renovation

Title: Building Excellence for Concrete and Construction Education and Workforce in TN

Request: \$5,000,000

Composite Score: 83.0

Skilled labor shortages, at all talent levels, continue to plague the \$700 billion a year construction industry. Multiple efforts are taking place in Tennessee to direct high school graduates, veterans and non-traditional students into the construction trades. The School of Concrete and Construction Management (SCCM) at Middle Tennessee State University are serving vital roles across the state as advisory board members to high schools, as ACE mentors, internship contacts, curriculum developers, lab collaborators, guest lecturers and contributing options for awarding credentials through dual credit and 1 and 2 year programs.

This proposal is a request for new construction of a \$15M facility to house the Center of Building Excellence for Concrete and Construction Education in TN, with \$5M from industry,

\$5M from MTSU and \$5M from the Drive to 55 capacity building fund. SCCM has been a beacon of light for recruiting and retaining talent and attracting a diverse population of TN residents into the building science industry despite the economic downturn. A growth plan of increasing our current number of graduates from 78 per year to 125 per year by 2025 will be strengthened by having the space and physical representation of what this industry truly has to offer in the various sectors of construction. In addition, this building would serve as a Center of Excellence for the K-12 and post-secondary programs focused in Concrete and Construction for dual credit, continuing education, virtual lectures and industry demonstrations. The Drive to 55 award to MTSU is the right move for the State of TN to leverage industry resources and mutually increase the workforce base in the concrete construction industry while receiving a high return on State investment.

Institution: TCAT - Covington

Program Classification: New Capital Construction / Major Renovation

Title: Healthcare Training Facility

Request: \$3,260,000

Composite Score: 82.7

The Tennessee College of Applied Technology (TCAT) - Covington is pursuing \$3,260,000 through the Drive to 55 Capacity Grant to expand technical training to meet the needs of our surrounding community, which includes Tipton, Lauderdale, Dyer, Crockett, Haywood, Fayette, and Shelby counties. The proposed new capital construction is estimated to cost \$3,749,000.00. Tipton County Government has agreed to contribute a 15% match to any funding received from the grant, which quantifies the commitment from Tipton County and the need for the healthcare training facility.

TCAT Covington is proposing a New Capital Construction project to build a state of the art healthcare training facility that will provide healthcare related training that is greatly needed in the surrounding areas. With the extraordinary potential that the Memphis Regional Megasite will bring to our area, this healthcare facility will be an excellent extension to the manufacturing/industrial related fields, which are all requiring highly skilled workers to meet industry demands. In addition to healthcare, the new project will allow expansion opportunities to add an additional program in Computer Aided Drafting Technology which will support all existing technical programs at the Tennessee College of Applied Technology Covington campus.

These workforce needs align directly with the governor's goals for the State of Tennessee. Tipton County currently falls below state and national educational attainment levels. In order to increase these numbers, and meet the governor's goal of 55% by 2025, Tipton County and surrounding areas must increase the capacity of a highly skilled workforce. It is expected that the Memphis Regional Megasite will exert a pull on approximately 70% of its workforce from Shelby and other surrounding counties including Tipton County. This new healthcare facility will ensure that we continue to meet the needs that the market dictates and the industry demands to support the communities in West Tennessee.

Institution: Nashville State Community College
Program Classification: New Capital Construction / Major Renovation
Title: NSCC Southeast Campus Program/Enrollment Expansion Project
Request: \$4,875,000
Composite Score: 82.0

As one of Nashville State Community College's five satellite campus's, the Southeast Campus is situated in Southeast Nashville/Davidson County off 1-24, providing specialty degree programs in Culinary Arts and Law Enforcement, including general education learning opportunities that serves a student population of approximately 2,000. Classified as MAJOR RENOVATION, the project proposes build out of the remaining second floor of the Southeast Campus facility, converting 50,000 square feet into class rooms, common areas, offices, labs, conference rooms and bathrooms, including with new equipment purchases, at an estimated project cost of \$4.875 million dollars. Ideally, the project would be funded in full. However, the project is well-suited for partial funding as the full narrative witnesses. Since establishment, the Southeast Campus continues to outpace NSCC's main campus, outgrowing its initial facility footprint due to increasing student enrollment annually, while also exceeding growth at other Tennessee Bureau of Regents (TBR) community colleges and universities. Proposed build out of Southeast Campus's remaining second floor essentially mirrors the blueprint completing the first half of the second floor in January 2016, which included construction of both staircase and elevator access. Expansion of existing building capacity, by adding 13 extra classrooms, 3 more faculty offices replacing the utility room, further addresses annual increases in student enrollment as well as expanded program development and classroom needs. This project supports the State's Drive to 55 initiative and related goals of increasing higher education access as well as educational attainment levels, particularly among populations defined as first-generation college, adult learners, low-socioeconomic and underrepresented minority students. Currently, adult learners comprise 40 percent of the students attending Southeast Campus, with African Americans making up 43 percent, and Hispanics representing nearly 12 percent of campus enrollment numbers; over a 100 percent higher than just four years ago. As such, the proposed build out of the Southeast Campus is necessary to facilitate a growing student population including annual student enrollment increases in adult learners, as well as underrepresented low-income and minority student populations. Greater building capacity also provides opportunities for expanded degree program development that supports a thriving Hospitality and Healthcare industry sector, further aligning students with area workforce demands and appropriate skill sets for an ever changing Nashville/Davidson County and middle Tennessee regional economy of the future.

Institution: TCAT - Jacksboro
Program Classification: Program Expansion
Title: Dual Enrollment Welding Program
Request: \$84,925
Composite Score: 81.7

This proposal requests funding to purchase welding equipment to be housed at the Campbell County High School welding laboratory. TCAT Jacksboro and Campbell County have committed to serving more dual enrolled students by implementing welding technology on the high school campus. TCAT Jacksboro will be able to serve more students by expanding the welding program. By expanding the welding program, many students will be ready to enter the workforce upon graduation from high school. This will meet Drive to 55 goals.

A total of \$84,925 is being requested as a program expansion. All funds will be used to purchase welding equipment as outlined in the proposal. Sustainability is addressed within the TCAT Jacksboro annual budget.

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Institution: University of Tennessee at Martin
Program Classification: New Capital Construction / Major Renovation
Title: Innovation and Product Realization Facility
Request: \$1,000,000
Composite Score: 81.0

The University of Tennessee at Martin proposes to apply funds obtained from this grant to the construction of an Innovation and Product Realization Facility. As the name implies, this new facility will support several tenants each of which are concerned with promoting innovation and turning ideas into real world products. The facility will contain equipment and support staff required to create prototypes of products developed by students or start-up companies. Having students working side by side with companies developing new and innovative products will serve as a catalyst for the students who see how new products are developed. This same equipment will also be used to support manufacturing related laboratories and to provide adult certificate programs. This facility will be different from the traditional classroom/laboratory building which are designed for "clean" activities. The facility will be designed for manufacturing/fabricating processes that are more "dirty" by nature.

Institution: Pellissippi State Community College
Program Classification: New Capital Construction / Major Renovation
Title: Blount Works
Request: \$11,000,000
Composite Score: 80.7

Blount County has had an explosion of new jobs (2,145 in 16 months). The unemployment rate is 4.4% (2,760 individuals). U.S. economists identify 5% as full employment. Baby Boomers are retiring. The result is Blount County has a jobs surplus.

Blount County leaders; such as Bryan T. Daniels, the president and CEO of the Blount Partnership; are asking THEC, TBR, and PSCC to provide space to train workers in advanced manufacturing, computer-based, and health care service firms.

The Blount County Campus does not have the space needed to add the necessary Engineering Technology and Computer Science and Information Technology. Current Nursing space cannot accommodate a complete Simulation Laboratory.

Blount County leaders; including management at Alcoa, Inc. and DENSO North America, Tennessee; are requesting THEC award PSCC \$11 million toward the \$16.5 million cost of a second building on the Blount County Campus. Community leaders and PSCC are pledging to raise \$5.5 million for the building and equipment from private donations. Rather than contributing the customary 10%, PSCC and local donors will provide 33% of the cost of construction and equipment.

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Institution: Austin Peay State University
Program Classification: New Capital Construction / Major Renovation
Title: Increasing the Workforce Development Capacity at APSU to Meet the Needs of Tennessee as the Growing Leader in Advanced Manufacturing
Request: \$2,685,000
Composite Score: 80.3

“Increasing the Workforce Development Capacity at APSU to Meet the Needs of Tennessee as the Growing Leader in Advanced Manufacturing” is an initiative designed to expand the field of skilled applicants in the rapidly growing industrial sector in Tennessee by improving while also increasing the capacity of the current and future degree programs at APSU that emphasize advanced manufacturing.

This *New Capital Construction/Major Renovation* project will expand the academic capacity of APSU's Engineering Technology and Computer Science programs through the addition of a 48-seat computer classroom and a 24-seat lecture space. This will come through the addition of a second floor in 2/3rds of the former Hemlock Semiconductor (HSC) Laboratory.

Currently, APSU has an expansive set of degree programs related to advanced manufacturing. Among these is one of the only degree programs in engineering technology that has associate, bachelor, and master degree tracks. This proposal will establish a manufacturing and mechatronics training facility on the first floor of the former HSC Laboratory. The addition of a 48-seat computer classroom will increase the capacity of our computer-aided design (CAD) course, the entry point into these degrees, along with our mechanical and mechatronics design, and electronic simulation courses.

The secondary benefit of the renovation will be increasing APSU's capacity to produce job ready graduates from our Computer Science programs, most importantly graduates with an expertise in Information Assurance and Security (Cyber Security). The presence of Fort Campbell in our market, gives our community a steady stream of students who possess the requisite skills and acumen to be successful students in APSU's new Cyber Security program. Graduates of this program will aid in the fight against cyber-terrorism, potentially the most critical issue facing our national security and defense infrastructure.

The requested funding for this project is \$2.685 million.

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Institution: TCAT - Livingston
Program Classification: New Capital Construction / Major Renovation
Title: Transportation Building
Request: \$2,000,000
Composite Score: 80.3

The Tennessee College of Applied Technology – Livingston (TCAT Livingston) is requesting funding to construct a new Transportation Building on the campus of TCAT Livingston located at 740 Hi Tech Drive in Livingston. The building will contain 12,000 gross square feet and will house a new Diesel Technology program and a new Transportation, Distribution, and Logistics program. The project would classify as a new capital construction project and the College is requesting \$2,000,000 to build the facility. The project would not require the acquisition of any land.

With the success of the Governor's Drive to 55 Initiatives, the TCAT Livingston has seen an increase in enrollment over the past two years and continues to see the demand for technical training growing in the Upper Cumberland. The current facility, originally built in 1966, does not have the infrastructure or capacity to meet the demands for enrollment needed to increase the number of postsecondary credentials awarded by the College and the workforce training provided by the College. The Transportation Building would provide training to approximately 30 adult students and 20 dual enrolled secondary students during the first year. A Diesel Technology program would train individuals to enter the job market as ASE Diesel Mechanics. The Transportation, Distribution, and Logistics program would allow graduate to obtain jobs in logistics, shipping, receiving, material handling, and inventory management.

Both of these programs align with the regional and state workforce needs and funding for this project would provide the College with the ability to have a major impact on the availability of skilled workers in the Transportation, Distribution, and Logistics Cluster. The grant proposal aligns with the goals of the Governor's Drive to 55 and will increase the number of post-secondary credentials the College can award.

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Institution: TCAT - Ripley
Program Classification: Program Expansion
Title: Industrial Electricity Program Expansion
Request: \$380,154
Composite Score: 80.3

The Tennessee College of Applied Technology (TCAT) Ripley is pursuing \$380,154.00 through the Drive to 55 Capacity Grant to expand newly reallocated space in an effort to better align our training capabilities to meet current industry demands in Lauderdale, Tipton, Haywood, Madison, and Shelby counties. Our workforce needs align with the governor's goals for the state of Tennessee. Lauderdale County currently falls below state and national educational attainment levels. IN order to increase these numbers, and meet the governor's goal of 55% by 2025, Lauderdale County must increase the capacity for skilled training.

It is expected that the Memphis Regional Mega Site will exert a pull on approximately 70% of its workforce from Shelby and other surrounding counties including Lauderdale County. This is ample opportunity for topnotch industries to make their mark on this site, but our local communities have to be prepared to provide a diverse and well-trained workforce to meet the needs of such industries.

In support of this sector and the anticipation of the Memphis Regional Mega Site and governor's Drive to 55 initiative, TCAT Ripley plans to facilitate and encourage continued alignment of the education capacity and local workforce requirements within the career path in Industrial Electricity by leveraging TN Reconnect and TN Promise programs. In cooperation with local industry, TCAT Ripley seeks to enhance the training abilities in the areas of mechatronics, PLCs, and robotics training to better prepare students entering the workforce.

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Institution: Roane State Community College
Program Classification: New Capital Construction / Major Renovation
Title: Center for Innovation and Training Excellence (CITE)
Request: \$4,800,000
Composite Score: 80.0

Roane State Community College (RSCC), in partnership with Anderson County Schools, proposes to use *Drive to 55 Project Capacity* funds to build a 29,340 square foot facility to house Plastics Technology and other manufacturing programs. Funding is requested in the amount of \$4,800,000 for this new capital construction project. There is a critical need to develop training programs that will allow Tennessee residents to gain employment in Plastics Technology and similar occupations. Although there are over 130 Plastics Manufacturers in Anderson and nearby counties who employ over 4,500 employees, only two programs (both at the TCAT level) offer training in Plastics Technology throughout the state of Tennessee. Roane State is prepared to develop certificate and degree programs for skilled manufacturing workers, but the college is unable to do so until it has an adequate facility in which to offer them. The new Center for Innovation and Training Excellence (CITE) will allow Roane State to offer its eight-county service area the credentials most needed by local employers to fill manufacturing positions that are in high demand. In doing so, the college will support the state's *Drive to 55* initiative.