

# Knoxville Chamber

## 2016 Labor Education Alignment Program (LEAP 2.0)

“Building the Talent Pipeline:

A Demand-Driven Approach to Closing the Skills Gap”

Knoxville Chamber

In Partnership With

1. Tennessee College of Applied Technology-Knoxville
2. Knox County Schools
3. Exedy America, Fresenius, Tomcat, Reily Foods,  
Steel Plate Fabricators and J& J Machining



Michael Edwards  
President & CEO  
Knoxville Chamber



Sharon Shanks  
Workforce Development Mgr.  
Knoxville Chamber  
LEAP Project Director

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JUL 27 2016

THEC  
Legal Affairs

## Abstract

“Building the Talent Pipeline: A Demand-Driven Approach to Closing the Skills Gap” is a partnership between employers and education institutions to uplift at-risk students and adult learners in Knoxville’s center city by linking them with high-wage, high skilled jobs in Knox County.

Data, from both public and private sources, tells us that job candidates who have training in electromechanical technology or machining technology are in high-demand currently and projected to remain so over the next 10 years. Manufacturers are also concerned about the lack of available talent now and in the future.

This grant proposal – a partnership of local employers, Knoxville Chamber, Knox County Schools and Tennessee College of Applied Science (TCAT) – will provide this training at two urban high schools, Central and Fulton, where more than half of the students are economically disadvantaged and lag behind their peers in attainment of post-secondary education.

The two high schools will be equipped with state-of-the-art equipment for electromechanical and machining technology programs that Knox County Schools will utilize during the day and TCAT will use in the evening for Tennessee Reconnect adult learners.

The machining technology program will be a first for Knox County Schools, and both programs will alleviate waiting lists that TCAT currently has for some of its industrial training programs.

Students participating in the high school programs will have the opportunity to earn dual-enrollment credits that will account for about one-third of the hours necessary to earn additional certificates at TCAT.

The Knoxville Chamber will work with employers – using the U.S. Chamber Foundation’s Talent Pipeline Management model – to identify the skills and competencies students need to be successful

employees; provide feedback to education providers and the students on their progress; and to provide work-based learning opportunities for students.

The results of the successful implementation of this grant will be:

- Better identification by employers of the skills and competencies they require from students who graduate from high school and post-secondary institutions.
- Clear career pathways for urban youth and adults to attain the skills they need to secure high wage, high skilled jobs
- A partnership between employers and education providers to ensure that students are receiving the best possible instruction
- An center city community in which more residents are earning family-sustaining wages and breaking the poverty cycle
- A prosperous regional economy where employers have the workforce they need to grow and thrive.

# **“Building the Talent Pipeline: A Demand-Driven Approach to Closing the Skills Gap”**

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## **Section 1. Demonstrated need**

*Localized data demonstrating need for action:* Knox County is the third-largest county in Tennessee and the economic hub of the larger nine-county Knoxville Metropolitan Statistical Area. The county's unemployment rate is 3.4 percent, which many economists consider full employment. Its labor participation rate stands at 64 percent, the highest in East Tennessee and greater than the state's labor participation average.

And the county's economy is poised to continue to grow.

A record number of jobs and capital investments were announced in 2015. Over the past five years, more than 8,300 new jobs were announced, with 42 percent of those announcements coming in the past two years, according to the Knoxville Chamber, which serves as the economic development agency for the city of Knoxville and Knox County governments.

Employers consistently cite "workforce readiness" in their dialogues with the Knoxville Chamber. They cite the lack of soft/critical skills as measured by attendance, substance abuse, problem solving, and reading and math skills, in addition to more advanced technical competencies.

The talent pool, however, will continue to shrink.

Over the next five years, between 81,000 and 87,000 individuals will retire, but only between 48,000 and 54,000 graduates will enter the workforce, according to a workforce report by the Nashville Area Chamber of Commerce for the Tennessee Department of Labor and Workforce Development's Local Workforce Development Area 3, which consists of Knox County.

That's one reason that it's imperative that no students be left behind in earning the education and training that will allow them to secure immediate employment and provide them a pathway to additional educational opportunities to advance their careers and increase their wages.

Advanced manufacturing offers that opportunity.

The demand for jobs that require training in machining technology and electromechanical technology at both the high school and post-secondary levels has grown since the Great Recession and will continue to grow.

The state's Jobs4TN database, based on Bureau of Labor data, paints the picture of demand for individuals trained in electromechanical technology and machining technology. Private economic data advisers, using employers' current help-wanted advertisements, confirm that occupational growth and, in many cases, project even greater growth, reflecting the record new jobs announced in the past two years.

	Occupation Name	Starting Wage	Median Wage	Job Openings Per Potential Candidate	Education Requirements	Average Annual Openings - 2024
<b>Low Skills</b>	Control and Valve Installers and Repairers	\$ 32,206.00	\$ 45,984.00	33.33	High School Diploma	77
	Security and Fire Alarm System Installation	\$ 29,264.00	\$ 40,337.00	4.35	High School Diploma	55
	Electronic Home Entertainment Equipment Installers and Repairers	\$ 26,173.00	\$ 31,583.00	14.29	High School Diploma	35
<b>Middle Skills</b>	Tool & Die Maker	\$ 32,300.00	\$ 46,179.00	1.43	Vocational School Certification (53.32%)	50
	Machinist	\$ 27,412.00	\$ 38,131.00	0.55	Vocational School Education + Vocational Certification (61.12%)	345
	Heating and Air Conditioner Mechanics and Installers	\$ 29,160.00	\$ 39,700.00	3.33	Vocational School Education + Vocational Certification (57.47%)	80
	Stationary Engineer and Boiler Operators	\$ 33,591.00	\$ 55,362.00	1.49	Vocational Education 33.33%, Associate Degree (16.67%)	25
<b>High Skills</b>	Non-Destructive Testing Specialist	\$ 30,862.00	\$ 56,284.00	14.29	Associate Degree (50%)	20
	Electronics Engineering Technician	\$ 36,879.00	\$ 52,602.00	0.66	Associate Degree (49.06%) Bachelor Degree (18.87%)	65
	Mechanical Engineering Technician	\$ 34,420.00	\$ 52,727.00	0.70	Associate Degree (35.29%), Vocational Education(17.65%),	45

The chart above, created with data from Jobs4TN, reflects the demand and career pathway for just some positions that require training in electromechanical technology and machining technology.

Economic data advisors Emsi and Jobs EQ, below, confirm this analysis:

<b>Job Description</b>	<b>2016-2026 % change</b>
Computer-controlled machine tool operators	27%
Industrial machinery mechanics	22%
Mine cutting and channeling machine operators	22%
Machine feeders and offbearers	22%
Computer-controlled machine tool programmers	17%
Machinists	5%

*Clear linkage between grant activities and local needs:* In contrast to Knox County's relative prosperity, residents in the center city have not participated to the same extent in the economic recovery.

This opportunity gap disproportionately impacts African-Americans, Hispanics and English-language learners, who represent a large and growing pool of potential workers.

The demographics of the student population at two high schools in Knoxville's center city – Central and Fulton – mirror the disparities and the challenges of the community in which they live.

The median household income in the neighborhoods zoned for the two schools is \$36,001 - 24 percent lower than the median income for Knox County, according to U.S. Census data.

More than 50 percent of students at these two schools are economically disadvantaged, according to the Tennessee Department of Education's Report Card.

English-language learners (ELL) are clustered in Knoxville's center city, and their numbers are expected to continue to increase. Central High School reported a 30 percent increase in ELL students in the past two years and is expecting to see the same increase in the 2016-2017 academic year.

Currently, the two schools' Career and Technical Education Programs (CTE) have no manufacturing-related training and few dual enrollment courses in CTE that can be transferred to the Tennessee College of Applied Technology-Knoxville, where additional training would address employers' job needs and allow students to earn a family-sustaining income.

*Alignment with Drive to 55 goals:* During the 2015-2016 academic year, only a few CTE students received post-secondary training – 25 at Central High and 21 at Fulton High. Even fewer received industry certifications and were employed in their field – 17 students at Central earned industry certifications and six were employed; 0 earned industry certifications at Fulton High and nine were employed, according to data Knox County Schools submitted for the Tennessee Department of Education's Report Card.

"Building the Talent Pipeline: A Demand-Driven Approach to Closing the Skills Gap" aims to change this paradigm by creating more and better employment prospects for students by enabling them to earn dual enrollment hours for post-secondary certificates; creating clear pathways for them to access post-secondary education in alignment with the state's Drive to 55 goals; engaging employers to ensure that training is meeting their needs to close the skills gap; and providing employers with the talent they need to grow and thrive in Tennessee.

## **Section 2. Program Plan**

*Overview:* When this grant is awarded, the funds will be used to create two new advanced manufacturing programs – electromechanical technology at Central High School and machining technology at Fulton High School.

The machining program at Fulton will be the first of its kind in Knox County Schools, providing a new career pathway that reflects the availability of jobs in our community now and in the future.

Both programs will be open to students from both schools, which are 3.4 miles away from each other and served by public transit.

*Measurable objectives:* Knox County Schools will use the funds to purchase equipment that will allow 120 students at each school (240 total) to enter the programs in the 2017-2018 academic year. The programs will be at capacity in the second year of implementation.

Knox County teachers, who under an existing agreement also serve as Tennessee College of Applied Technology-Knoxville adjuncts, will start serving students in the ninth grade to engage them in high-wage, high-skills career paths. The students can receive up to 400 dual enrollment hours – or about a third necessary – to receive a TCAT certificate under an existing Memorandum of Understanding between the two parties.

In addition, the two schools' principals have agreed to pilot Knox County's Work Ethic Diploma, which will address many of their students' barriers to employment including attendance, interview skills and substance abuse.

Students completing Central High School's electromechanical technology program and Fulton's machining technology program will have the opportunity to graduate with a Work Ethic Diploma, as well as industry certificates including OSHA 10, National Industry for Machining Specialists, Certified Production Technician and Level 1 Siemens.

Dual-enrollment hours will transfer to TCAT's programs in Industrial Maintenance, Machine Tool, Electrical, and HVAC. All of these TCAT programs currently have a wait list from 21 students for Industrial Maintenance to 41 students in Electrical.

Implementing these new program areas at Central and Fulton High Schools will also allow TCAT to use the facilities for evening classes, thereby giving TCAT additional capacity to serve students. The

evening classes will serve CTE graduates from these schools – so access is not a barrier to post-secondary education – and Tennessee Reconnect adult students in alignment with Drive to 55 goals.

Knox County Schools will provide 50 percent of the cost of a Career Coach, who will serve Central and Fulton High Schools. The Career Coach will work to ensure students leave with a high school diploma plus an industry certification, create more post-secondary opportunities for students, and ensure they have a potential career pathway mapped out.

The Coach and the LEAP grant manager will secure employers to provide work-based learning opportunities for students, including but not limited to: interviews, “real world” speakers and tours, internships and apprenticeships.

*Equipment justification:* New, state-of-the-art equipment will allow students to meet current industry demand and skill sets. Knox County Schools has created its equipment request using TCAT and Mississippi State as models to ensure students have a seamless transition between CTE and post-secondary institutions, as well as to meet current industry technology needs.

*Clear alignment of localized need and academic credentialing:* This grant will kick-start and lay the foundation for the Knoxville Chamber to take a leadership role in engaging employers in developing a new demand-driven approach — Talent Pipeline Management — to help them better identify and communicate their needs to training providers.

The Knoxville Chamber brings as equity to the proposed program the U.S. Chamber of Commerce Foundation’s Talent Pipeline Management (TPM) model. This model applies supply chain management principles to forecasting future employment needs and the competencies needed for those positions. The model makes use of strategies that improve communication between employers and education partners; provide clear metrics for measuring partner effectiveness; and better align employers’ incentives to encourage real change in education and workforce systems.

The U.S. Chamber of Commerce Foundation has agreed to work with the state of Tennessee under the leadership of State Economic and Community Development Commissioner Randy Boyd to create a Tennessee Talent Pipeline Management Academy. This academy will provide training for membership organizations, such as the Knoxville Chamber, to work with employers to implement supply chain strategies to forecast employment needs.

The Knoxville Chamber will pilot the use of TPM with support from local employers identified as “end-users” of the new manufacturing career pathways this grant would fund at Central and Fulton High Schools.

The Chamber has already identified employers – including Exedy America, Fresenius, Tomcat, Reily Foods, Steel Plate Fabricators, and J&J Machine – that are willing to assess program alignment with employers’ needs, engage with students working on their Work Ethics Diploma or provide work-based learning support to students in these programs.

*Employer engagement:* The Chamber and its partners will provide the training, support, and technical assistance to understand, adapt, and implement supply chain strategies with these employers allowing them to better identify and communicate their needs to the education community.

A facilitator will work with a Skills Panel, industry-specific employers assembled by the Chamber, to identify the competencies that students need to be successful employees.

The Skills Panel’s work will become the agenda of the Works Council, which will be comprised of employers, education providers and others who will provide the expertise and guidance on the soft/critical skills and technical training needed for successful employees.

*Student impact:* This work will result in:

- Annual program capacity of 240 students at the secondary level, and additional program capacity at the post-secondary level of 40 students
- The piloting by Knox County Schools of a Work Ethic Diploma, in response to employer demand, at Central and Fulton High Schools
- Increased access for CTE high school students to earn up to 400 dual-enrollment hours that can be applied to TCAT certificates
- A pathway for students to attain high-skilled, high-wage jobs and increase the number of students on track to complete post-secondary training in alignment with the state's Drive to 55 goals
- Additional capacity for TCAT to offer evening classes at these two high schools for adult learners under Tennessee Reconnect

(Please see following Project Timeline)

### **Section 3. Strength of Partnership**

*Partners' roles and capabilities:* This work is a priority of Michael Edwards, the president and CEO of the Knoxville Chamber, who serves on the board of the directors of the U.S. Chamber of Commerce Foundation and is very knowledgeable about the talent pipeline management model and its successful implementation in other communities. His passion for public education is evident by his service as secretary/treasurer of the Great Schools Partnership, a private-public foundation striving to take Knox County Schools from good to great, as well as his recent nomination by Gov. Bill Haslam to a second term on the Tennessee Board of Education.

The Knoxville Chamber's workforce development manager, Sharon Shanks, Ed.S., will serve as the LEAP grant manager. Prior to joining the Chamber in January 2015, Ms. Shanks served as a completion coach for the Southeastern Economic & Education Leadership Consortium at Pellissippi State. Since joining the Chamber, she has served on the Workforce Connections' board of directors, more than doubled participation in the Chamber's summer "Educators in the Workplace" in partnership with Knox County Schools and local employers; and called on more than 40 local employers at their place of business.

Ms. Shanks, along with Chamber staff and volunteers, will oversee the work of the Skills Panel and Works Council, ensure the grant funds are used appropriately, and that metrics are tracked and met.

The creation of advanced manufacturing pathways at Central and Fulton High Schools comes at a time when Knox County Schools is focusing on greater responsiveness and effectiveness in its Career and Technical Education offerings.

The Knox County Schools has been fortunate to establish partnerships with post-secondary institutions for dual enrollment. The school system, however, also recognizes it must establish support systems that make the transition to the TCATs and other post-secondary institutions easier and more accessible for students.

TCAT-Knoxville is currently at capacity in serving students, and is working now closely with Knox County Schools to increase capacity to ensure CTE high school students do not have to wait to enroll and, therefore, postpone or not pursue.

TCAT will be able to utilize Central and Fulton High Schools in the evenings – a first in Knox County - to increase its capacity to offer advanced manufacturing training. That will allow these students a seamless transition to post-secondary achievement.

TCAT and Knox County Schools continue to refine and expand on its dual-enrollment opportunities with TCAT providing high school-based instruction and, in other cases, Knox County teachers serving as TCAT adjuncts. This type of partnership creates a sustainable environment where all parties can maximize funding opportunities.

TCAT has gained an enviable reputation in responding to individual employer's requests for training specific cohorts. The model outlined in this application would allow it to serve a wider industry sector, and serve as a model for how it serves other industries.

Members of the Works Council will include:

- Employers representative of the Skills Panel, where they have identified their needs.
- Sharon Shanks, Ed.S., LEAP grant manager and Knoxville Chamber workforce development manager
- Don Lawson, director of Knox County Schools' Career and Technical Education Department
- Patrick Wade, assistant director of TCAT-Knoxville
- Windie Wilson, director of Workforce Connections
- Teri Brahms, executive director of economic and workforce development at Pellissippi State
- Ara Rickman, career and community coordinator at Fulton High School
- Russ Wise, assistant principal at Central High School
- Others may be named as the process continues

Letters of support from partners and supporters are attached.

#### **Section 4: Budget plan**

*Clear alignment between request and activities:* The state-of-the-art requested equipment to create an electromechanical technology program at Central High School and machining technology program at Fulton High School is responsive to employers' communications with Knox County Schools' CTE that 'real-world' equipment is preferable to so-called suitcase trainers in providing students the skills they need in the workplace. The equipment is also much more durable and longer-lasting than less expensive alternatives.

In addition to the required Budget Table, specific quotes of the equipment that will be are also attached.

Salary information is attributable to the LEAP grant project manager, Sharon Shanks, and the support she will receive from Chamber staff for communication among employers, partners and stakeholders; event coordination, planning and execution; developing and tracking metrics; and assuring fidelity of grant expenditures.

The Leap project manager will continue to build relationships among all stakeholders and ensure that the commitments and goals of the grant are exceeded.

Knox County Schools will provide two CTE instructors for the projects and additional equipment as part of its match.

Line items 5-10 also support the project manager's responsibilities travel to employers' sites, equipment rental needed to execute gatherings of the Skills Panel and Works Council, and marketing of the program to students, parents and employers.

(Please see following Budget Detail)

## **Section 5. Sustainability**

Once grant funding has been utilized, Knox County Schools intends to continue to support the advanced manufacturing programs at Central High School and Fulton High School by continuing to fund the teaching positions, the Career Coach and the district level CTE Facilitator assigned to advanced manufacturing in alignment with employers' needs after the grant's conclusion.

The school system will also update equipment as needed through the Carl D. Perkins Vocational and Technical Act Program, as well as through local funds.

The results gained by the work of the Skills Panel and Works Council – aligning employers' talent needs with education providers' training – will pay dividends for employers. The Knoxville Chamber is confident that employers will invest in TPM, just as they do other member services, because it will prove to minimize the cost to them of recruiting, training and retaining employees.

This program will also invest in an urban community that is struggling with generational poverty and the resulting social ills. Giving students from this community the opportunity to attend state-of-the-art industrial training programs, receive feedback and work-based learning opportunities with real-life employers, and a career path to earning additional education and higher wages will give these youth the ability to change the trajectory of their lives and contribute to the renewal of their communities.

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## Grant Budget

### LEAP Program Competitive Grant

**Applicable**

**Period:            Begin: September 14, 2016   End: March 13, 2019**

Policy 03

Object

Line-item

Reference

		GRANT CONTRACT	GRANTEE PARTICIPATION	TOTAL PROJECT
1,2	Salaries, Benefits & Taxes	162,700	133,762	296,462
4,15	Professional Fee, Grant & Award	0	0	0
5,6,7,8, 9,10	Supplies, Telephone, Postage & Shipping, Occupancy, Equipment Rental and Maintenance, Printing and Publications	61,290	0	61,290
11,12	Travel, Conferences & Meetings	4,000	0	4,000
18	Other Non-Personnel	24,300	0	24,300
20	Capital Purchases	458,496	156,234	614,730
22	Indirect Cost	41,501	0	41,501
24	In-Kind Expense	0	0	0
<b>25</b>	<b>GRAND TOTAL</b>	<b>752,287</b>	<b>289,996</b>	<b>1,042,283</b>

**PO Box 1419**  
**Calhoun, GA 30703-1419**  
**Phone: (706) 629-4624**  
**Fax: (706) 629-6761**

Date	Quote No.
4/12/2016	2844

Name/Address	16924
KNOX COUNTY SCHOOLS CAREER & TECHNOLOGY EDUCATION 912 S GAY ST - 10TH FL KNOXVILLE, TN 37902	

Ship To
MR. LAWSON

Regional Mgr: BR

Item	Qty	Description	Unit Price	Total
77-1201-0000	1	PLEASE REFERENCE METRO NASHVILLE RFP mnps 11-21 LM7 dedicated hosting for a single school. Includes hosting and set up for up to 100 users	800.00	800.00
50-1201-0003	1	LM7 Additional 3 years of hosting for 100 users (flat rate)	1,500.00	1,500.00
10-LS00-0200	1	Mobile Learning Station	5,500.00	5,500.00
10-PC04-0000	1	Single Phase Power Supply	1,200.00	1,200.00
10-PC06-0000	1	Three-Phase Power Supply	1,267.00	1,267.00
10-PPSU-0001	1	Panel Storage Rack	2,200.00	2,200.00
JM-BASE-EA01A	1	Electrical Circuits	4,092.00	4,092.00
JM-BASE-EA01B	1	Resistors & Conductors	1,700.00	1,700.00
JM-BASE-EA01C	1	LCR Circuits	3,992.00	3,992.00
JM-BASE-EA01D	1	Motors & Generators	1,295.00	1,295.00
JM-CTRL-EA02	1	Electric Circuit Protection & Monitoring	3,134.00	3,134.00
26-E002-0000	1	E002 BOARD	350.00	350.00
26-E004-0000	1	E004 BOARD	450.00	450.00
26-E012-0000	1	E012 BOARD	500.00	500.00
26-E019-0000	1	E019 BOARD	834.00	834.00
JM-CTRL-EA03	1	Three-Phase Transformers	1,600.00	1,600.00
JM-POWR-EB02A	1	DC Power Supplies	2,330.00	2,330.00
JM-POWR-EB02B	1	Single Phase & Three Phase Power Supplies	2,166.00	2,166.00
77-8046-0000	1	Electrical Systems - content only	2,495.00	2,495.00
JM-EMMC-1600	1	Electro-mechanical Maintenance Cell KIT 110V	74,162.00	74,162.00

\$156,234

*each split in 2 @ 1/2 in Peckers*

Learning Labs, Inc. gladly accepts school checks for payment of orders.  
 Payment using Credit Cards or P-Cards may be subject to a Credit Card Processing Fee.

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Item	Qty	Description	Unit Price	Total
00-5505-0110	1	CNC BenchMill 6000 110V	16,009.25	16,009.25
10-1108-1110	1	Coolant System - 110 VAC	436.50	436.50
10-1111-1000	1	Jog Pendant Handwheel	852.00	852.00
10-1113-1000	1	4-Station ATC, Table-mount	572.50	572.50
10-5810-0000	1	Machinist Kit	2,278.00	2,278.00
77-3140-0001	1	Virtual. CNC Milling w/BenchMill 6000(I)	2,995.00	2,995.00
JM-FOUN-SKILLS-...	1	Foundations Skills Virtual Content for High School	14,994.00	14,994.00
CNC-7000-STRT	1	BenchTurn 7000 Starter Bundle 110V (Imperial) or 220V (Metric)	18,517.00	18,517.00
77-3141-0001		Virtual., CNC Turning w/BenchTurn 7000(I)	2,995.00	2,995.00
10-1111-1000	1	Jog Pendant Handwheel	852.00	852.00
10-1110-9000	1	Pneumatic Air Chuck(7000)	2,031.00	2,031.00
10-1110-5000	1	Pneum. Shield Opener with Sens.(7000)	572.50	572.50
10-1110-7000	1	Dual Axis Pneumatic Vise	793.50	793.50
10-9140-0000	1	Brass rod for Turning 50 Pieces	1,257.00	1,257.00
00-1293-0000	1	Mobile Workbench 1500x1140mm (incl. Wheels)	2,573.00	2,573.00
JM-HYDR-0001	1	Fundamentals of Hydraulics 1 Trainer & Curriculum 110V	14,678.00	14,678.00
JM-PNEU-0001	1	Fundamentals of Pneumatics 1 Trainer & Curriculum	9,890.00	9,890.00
JM-PLC-MLOGIX	1	PLCLine - Training Panel with A/B (Allen Bradley) MicroLogix PLC Trainer & Curriculum	8,862.00	8,862.00
00-0413-0000	1	Scorbot ER4u	11,795.00	11,795.00
77-3046-0000	1	Scorbot-ER 4u Fundamentals	2,995.00	2,995.00

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Regional Mgr: BR

Item	Qty	Description	Unit Price	Total
00-0609-0000	1	End Effector Attachment for ER4U Gripper	134.00	134.00
00-1021-0000	1	Linear Slide base	8,005.00	8,005.00
001110	1	Palletizing rack with pegboard design and including pins	615.00	615.00
10-2521-0000	1	Pneumatic Feeder for Round Products	1,540.00	1,540.00
10-2521-7000	1	Pneumatic Feeder for Rectangular products	1,500.00	1,500.00
WB253990TN	2	Bench, Mobile 72X30 Maple Top	782.21	1,564.42
CMW-61300	1	Mechatronic Control Training System	19,500.00	19,500.00
MFPC44	1	MakerFab 4X4 Plasma Cutter	14,999.00	14,999.00
DL 2110ITS-1200	1	Interactive training system for PLC	10,170.59	10,170.59
SDS-60100	1	Shape Detection & Sorting Station	13,980.00	13,980.00
DE500M8N4AU-Y...	1	Polariod 50" Monitor	860.00	860.00
550635895	1	Wall Mount Kit w/ HDMI Cable	35.00	35.00
FREIGHT		Freight	7,550.00	7,550.00
INSTALL		Installation and Instructor Orientation	4,500.00	4,500.00
Quote Valid for 90 Days				

Quoted By Ben Richardson	<b>Subtotal</b>	\$312,468.26
	<b>Sales Tax (0.0%)</b>	\$0.00
Learning Labs, Inc. gladly accepts school checks for payment of orders. Payment using Credit Cards or P-Cards may be subject to a Credit Card Processing Fee.	<b>Total</b>	\$312,468.26



# Haas Factory Outlet

A Division of Phillips Corporation

# PROPOSAL

Number  
Date

BW.01071816  
7/18/2016

Customer
Mr. Don Lawson Knox County Schools 535 Chickamauga Ave Knoxville, TN 37917

Salesman	Terms	FOB	Delivery
Bill Walsh	Net 30 days from shipment at factory; Subject to credit approval.	Oxnard, CA	8-9 wks

### Machine 1

Qty	Part Number	Description	Unit Price	Ext Price
1	TM-1P	Toolroom Mill with Tool Changer; 30" x 12" x 16" (762 x 305 x 406 mm), 40 taper, 7.5 hp (5.6 kW) vector drive, 6000 rpm, full enclosure, 10-station automatic tool changer, Intuitive Programming System, 1 MB program memory, memory lock keyswitch, 15" color LCD monitor and USB port and 20-gallon (76 liter) flood coolant system.	35,995.00	\$ 35,995.00
1	4AXBLMM	4th-Axis Drive and Wiring	2,295.00	2,295.00
1	WIPS-R	Wireless Intuitive Probing System; Renishaw, includes Probe Install & Calibration.	5,995.00	5,995.00
1	CCTM-P	Chip Auger	2,595.00	2,595.00
1	RTAPMM	Rigid Tapping	1,395.00	1,395.00
		Subtotal		\$48,275.00
		Haas School Discount		-4,778.00
		Haas School Price		\$43,497.00
1	Tooling	\$5000 Tooling Certificate		5,000.00
		Freight		1,500.00
		<b>Total Investment* Haas TM-1P</b>		<b>\$49,997.00</b>

**\*NOTE—Haas Special offer for Schools:** This price includes one free Haas control simulator per machine purchased and one year extended warranty for a total of two years' warranty.

8500 Triad Drive – Colfax, NC 27235  
Phone: 336-665-1080 – Fax: 336-665-1980  
E-mail: sales@jeffreysmfg.com – Web: www.haascnc.com

**Other Locations:** Haas Factory Outlet/ Duncan, SC – Flowery Branch, GA - Franklin, TN  
Little Rock, AR - Birmingham, AL

**Machine 2**

Qty	Part Number	Description	Unit Price	Ext Price
1	TM-1P	Toolroom Mill with Tool Changer; 30" x 12" x 16" (762 x 305 x 406 mm), 40 taper, 7.5 hp (5.6 kW) vector drive, 6000 rpm, full enclosure, 10-station automatic tool changer, Intuitive Programming System, 1 MB program memory, memory lock keyswitch, 15" color LCD monitor and USB port and 15-gallon (57 liter) flood coolant system.	35,995.00	\$35,995.00
1	4AXBLMM	4th-Axis Drive and Wiring	2,295.00	2,295.00
1	WIPS-R	Wireless Intuitive Probing System; Renishaw. Probe Install & Calibration.	5,995.00	5,995.00
1	CPKTM	Coolant Pump Kit, 1/4 hp (186 W), 15-gallon (57 liter) tank	0.00	0.00
1	RTAPMM	Rigid Tapping	1,395.00	1,395.00
1	CCTM-P	Chip Auger	2,595.00	2,595.00
1	HRT160	160 mm (6.3") Servo Rotary Table. Requires Haas mill with 4th-axis drive for full 4th-axis operation, or a rotary control box for stand-alone operation.	8,195.00	8,195.00
		Total		\$56,470.00
		Special Haas School Price		\$50,823.00
1		\$5000 Tooling Certificate		5,000.00
		Freight (does not include rigging)		1,500.00
		<b>Total Investment* Haas TM-1P with HRT160</b>		<b>\$57,323.00</b>

**\*NOTE—Haas Special offer for Schools:** This price includes one free Haas control simulator per machine purchased and one year extended warranty for a total of two years' warranty.

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**Other Locations:** Haas Factory Outlet/ Duncan, SC – Flowery Branch, GA - Franklin, TN  
 Little Rock, AR - Birmingham, AL

**Machine 3**

Qty	Part Number	Description	Unit Price	Ext Price
1	ST-20	CNC Lathe, 15" x 21" (381 x 533 mm) max capacity, 2.0" (51 mm) bar, 31.75" (806 mm) swing, 20 hp (14.9 kW) vector drive, 4000 rpm, A2-6 spindle, 8.3" (210 mm) chuck, 12-station bolt-on turret, 15" color LCD monitor, memory lock keyswitch, USB port and rigid tapping. Standard toolholder kit included with BOT or Hybrid turret	59,995.00	\$ 59,995.00
1	ATP	Automatic Tool Presetter, manual and automatic modes. User-friendly interface.	3,995.00	3,995.00
1	LCC2	Belt-Type Chip Conveyor; quick, high-volume chip removal for increased productivity	3,995.00	3,995.00
1	PC1	Parts Catcher System	2,495.00	2,495.00
1	PTS-1	Programmable Hydraulic Tailstock	5,995.00	5,995.00
1	IPS	Intuitive Programming System	1,995.00	1,995.00
1	RJH-C	Remote Jog Handle with Color LCD	1,295.00	1,295.00
1	SO	Spindle Orientation	895.00	895.00
		Total		\$80,660.00
		Haas School Discount		-8,066.00
		Special Haas School Price		\$72,594.00
1		\$5000 Tooling Certificate		5,000.00
		Freight		2,600.00
		<b>Total Investment* Haas ST-20</b>		<b>\$80,194.00</b>

**\*NOTE—Haas Special offer for Schools:** This price includes one free Haas control simulator per machine purchased and one year extended warranty for a total of two years' warranty.

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 E-mail: sales@jeffreysmfg.com – Web: www.haascnc.com

**Other Locations:** Haas Factory Outlet/ Duncan, SC – Flowery Branch, GA - Franklin, TN  
 Little Rock, AR - Birmingham, AL

**Machine 4**

Qty	Part Number	Description	Unit Price	Ext Price
1	TL-1	CNC Toolroom Lathe; 16" x 30" (406 x 762 mm) max capacity, chip enclosure, 20" (508 mm) swing, 12 hp (8.9 kW) vector drive, 2000 rpm, A2-6 spindle, Intuitive Programming System, coolant pump, 1 MB program memory, memory lock keyswitch, air blow gun, 15" color LCD monitor and USB port. No workholding, toolpost, or toolholders included.	29,995.00	\$29,995.00
1	MC8-6	8" (203 mm) Manual 3-Jaw Scroll Chuck; hard top reversible jaws, A2-6 mount; 3500 rpm max. rating, 2.3" (58 mm) through bore.	1,295.00	1,295.00
1	CPKTL	Coolant Pump Kit, 1/4 hp (186 W), 15-gallon (57 liter) tank	1,095.00	1,095.00
1	MTS	Manual Tailstock, MT4 manual quill	2,495.00	2,495.00
1	RTAPMM	Rigid Tapping	1,395.00	1,395.00
1	SO	Spindle Orientation	895.00	895.00
1	TP3/4	Quick-Change Tool Post; 2 position, 4 each 3/4" turn/face, 1 each 1.0" boring bar holder and T-nut	995.00	995.00
		Total		\$38,165.00
		Special Haas School Price		\$33,449.00
1		\$5000 Tooling Certificate		5,000.00
		Freight (does not include rigging)		1,500.00
		<b>Total Investment* Haas TL-1</b>		<b>\$39,949.00</b>

**\*NOTE—Haas Special offer for Schools:** This price includes one free Haas control simulator per machine purchased and one year extended warranty for a total of two years' warranty.

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 E-mail: sales@jeffreysmfg.com – Web: www.haascnc.com

**Other Locations:** Haas Factory Outlet/ Duncan, SC – Flowery Branch, GA - Franklin, TN  
 Little Rock, AR - Birmingham, AL

**Machine 5**

Qty	Part Number	Description	Unit Price	Ext Price
1	VF-2	Vertical Machining Center; 30" x 16" x 20" (762 x 406 x 508 mm), 40 taper, 30 hp (22.4 kW) vector drive, 8100 rpm, inline direct-drive, 20-station carousel tool changer, 1000 ipm (25.4 m/min) rapids, 1 MB program memory, 15" color LCD monitor, USB port, memory lock keyswitch, rigid tapping and 55-gallon (208 liter) flood coolant system.	52,995.00	\$52,995.00
1	TSC	Through-Spindle Coolant, 300 psi (21 bar)	5,995.00	5,995.00
1	4AXBL	4th-Axis Drive and Wiring	2,295.00	2,295.00
1	WIPS-R	Wireless Intuitive Probing System; Renishaw. Probe Install & Calibration.	5,995.00	5,995.00
1	P-COOL	Programmable Coolant Nozzle. Coolant system is required.	1,595.00	1,595.00
1	TAB	Through-Tool Air Blast. Requires the Haas Through-Spindle Coolant (TSC) option. Available for inline spindles only.	995.00	995.00
1	CC	Chip Auger	2,595.00	2,595.00
1	HSM	High-Speed Machining	2,595.00	2,595.00
1	PS24CT	24 Pull Studs, CT40	495.00	495.00
		Total		\$75,555.00
		Haas School Discount		-7,556.00
		Haas School Price		\$67,999.00
1		\$5000 Tooling Certificate		5,000.00
		Freight		1,800.00
		<b>Total Investment*</b>		<b>\$74,799.00</b>

**\*NOTE—Haas Special offer for Schools:** This price includes one free Haas control simulator per machine purchased and one year extended warranty for a total of two years' warranty.

**Total 5 Haas Machine Investment: \$302,262.00**

Quotation valid thirty (30) days from date of issue.

Haas Warranty: 2 Years

Haas Machine Standard Voltage: 208-230 VAC, 3 Phase, 60 Hz

8500 Triad Drive – Colfax, NC 27235  
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 E-mail: sales@jeffreysmfg.com – Web: www.haascnc.com

**Other Locations:** Haas Factory Outlet/ Duncan, SC – Flowery Branch, GA - Franklin, TN  
 Little Rock, AR - Birmingham, AL

**Bank Wires**

**Account Name: Phillips Corporation**

**Acct#: 1233252889**

**ACH ABA Number: 121000358**

**Wire ABA Number: 026009593**

**Routing Number: 122000030**

**Swift Code: BOFAUS3N**

**Bank of America**

**6000 Feldwood Rd**

**College Park, Ga 30349**

**\*All ACH Wire Remittance notifications should be sent to: [rvick@phillipscorp.com](mailto:rvick@phillipscorp.com)**

**\*REQUIRED**

**\*Checks via US Mail, FedEx or UPS**

**Phillips Corporation Haas Factory Outlet**

**8500 Triad Drive**

**Colfax, NC 27235**

**\*Salesman can also accept down payment checks.**

**Order Approval:**

**Knox County Schools**

**Account #:**

\_\_\_\_\_  
Authorized Signature

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Date

\_\_\_\_\_  
Purchase Order Number

**An order resulting from this proposal should be addressed as follows:**

Phillips Corporation

Haas Factory Outlet

8500 Triad Drive

Colfax, NC 27235

FAX: 336-665-1980

Email: [machineorders@jeffreysmfg.com](mailto:machineorders@jeffreysmfg.com)

**Thank you for your consideration!**

Phillips Corporation

Haas Factory Outlet

*Bill Walsh*

Sales Engineer

Cell: 865-599-3372

[bwalsh@phillipscorp.com](mailto:bwalsh@phillipscorp.com)

8500 Triad Drive – Colfax, NC 27235

Phone: 336-665-1080 – Fax: 336-665-1980

E-mail: [sales@jeffreysmfg.com](mailto:sales@jeffreysmfg.com) – Web: [www.haascnc.com](http://www.haascnc.com)

**Other Locations:** Haas Factory Outlet/ Duncan, SC – Flowery Branch, GA - Franklin, TN  
Little Rock, AR - Birmingham, AL

## Optional Training/Preventive Maintenance

**Lifetime Training and Support ..... \$1,995.00**

Purchasing "Lifetime Training & Support" entitles you to send up to two (2) people to the Haas Factory Outlet for complete operator and programming training prior to receipt of your mill or lathe machine. This machine dependent training will consist of teaching all machine set up functions and basic programming formats for drilling, milling, tapping and/or simple turning. At any subsequent time, for as long as you own your Haas, you may send additional personnel for this training at no additional charge. All travel and expenses of your personnel are your responsibility.

**Single Class Operator Training.....\$ 795.00**

Purchasing Single Class Operator Training entitles you to send (1) operator to (1) training class at the Haas Factory Outlet for complete operator and programming training.

**On-Site ..... \$1,300.00/day**

On-Site Training at your facility, by our Applications Engineer.

**Preventative Maintenance Program ..... \$ 1,095.00 - \$1,495.00**

Protect your investment and maximize your productivity by utilizing locally available Haas factory-certified professionals to keep your machine in the best possible condition. Maintenance of Mechanical System / Way Lube System / Air System / Electrical System .

For more information on the above programs, contact your Haas Sales Engineer.

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E-mail: sales@jeffreysmfg.com – Web: www.haascnc.com

**Other Locations:** Haas Factory Outlet/ Duncan, SC – Flowery Branch, GA - Franklin, TN  
Little Rock, AR - Birmingham, AL

# FULTON HIGH SCHOOL

Rob Speas, Executive Principal

July 19, 2016

To Whom It May Concern:

The goal at Fulton High School is for every student to leave FHS with the skills and plan to have a successful post secondary education experience. We do this by connecting student with a Career Academy Pathway that aligns their interest. Our Career Academies are housed in our three upper grade Small Learning Communities or SLCs. Along with building strong student relationships, we attempt to increase student engagement in this personalized framework.

Showing economically disadvantaged youth a path to earn a living wage remains a challenge for us. Candidly, we struggle to capture their hearts and minds. Many are caught in a generational poverty cycle.

We believe that the addition of an Advanced Manufacturing pathway is a way to reach these students. If we are strategic about selecting candidates for these courses as early as 8<sup>th</sup> grade, we can generate a spark in them that can be fueled over the years. By using a cohort type model, the students can learn and grow with one another. Experiences like Work-Based Learning, Summer Internships, and other workplace activities allow them to see a different future for themselves and their families.

The administrative team at Fulton High School is committed to supporting the addition of this program through recruitment, by facilitating Work Based Learning opportunities for the students in this and other programs, by working with the CTE department and TCAT to support technical career pathways beyond graduation, and by playing an active role in the Works Council for Advanced Manufacturing. Through collaboration with the CTE department, we will identify the appropriate learning environment for the program and we will work together to provide the teacher and students with the resources needed to create and sustain a viable, current program. We will support the Career Coach as they work with parents and students to identify programs that “fit” the interests and needs to that individual student. We will ensure fidelity in the program through teacher evaluation and progress monitoring and support the program’s success beyond the life of the LEAP 2.0 grant.

We welcome any opportunity to support and enhance the post-secondary education of all of our Fulton High School students and we look forward to working in partnership with the Knoxville Chamber, Career and Technical department, TCAT, and others to bring this opportunity to Fulton High School.

Rob Speas  
Principal

Desiree Jones  
Curriculum Principal

# Central High School

**JD Lambert**  
Athletic Director  
Assistant Principal  
Class of 2017

**Russ Wise**  
Assistant Principal  
Class of 2018



**Michael Reynolds**  
Principal

5321 Jacksboro Pike  
Knoxville, Tennessee 37918  
Phone (865) 689-1400 - FAX (865) 689-1403

**Tracy Poulsen**  
Curriculum Principal  
Class of 2019

**Debbie Sayers**  
Assistant Principal  
Class of 2020

July 19, 2016

To Whom It May Concern:

Central High School is committed to providing personalized educational opportunities to all students. We are a diverse population with 9% being English Language Learners (ELL) and many of those students have not had formal education since the early elementary years. One of our biggest challenges is retaining these students beyond their 18<sup>th</sup> birthday to graduation. Many of our ELL students are faced with the burden of needing to work and help support their families. Adding an Advanced Manufacturing program to our current CTE programming would provide all students the opportunity to graduate from Central High School with an industry certification in an area with high employability, ready to enter the work force, or prepared to enter TCAT to complete that certification. This supports the Drive to 55 initiative and providing better post-secondary opportunities for students.

As an administrative team at Central High School we are committed to supporting the addition of this program through recruitment, by facilitating Work Based Learning opportunities for the students in this and other programs, by working with the CTE department and TCAT to support technical career pathways beyond graduation, and by playing an active role in the advisory council for Advanced Manufacturing. Through collaboration with the CTE department we will identify the appropriate learning environment for the program and we will work together to provide the teacher and students with the resources needed to create and sustain a viable, current program. We will support the Career Coach as they work with parents and students to identify programs that "fit" the interests and needs to that individual student. We will ensure fidelity in the program through teacher evaluation and progress monitoring and support the program's success beyond the life of the LEAP 2.0 grant.

We welcome any opportunity to support and enhance the post-secondary education of all of our Central High School students and we look forward to working in partnership with our Career and Technical department, TCAT, and others to bring this opportunity to Central High School.

Michael Reynolds  
Principal

Tracy Poulsen  
Curriculum Principal



July 21, 2016

Mr. Michael Edwards  
President & CEO  
Knoxville Chamber  
17 Market Square, Suite 201  
Knoxville, TN 37920

Dear Mike:

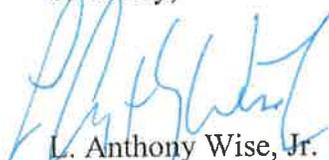
Pellissippi State Community College is pleased to support the LEAP 2.0 grant application, "Building the Talent Pipeline: A Demand-Driven Approach to Closing the Skills Gap," put forth by a partnership of the region's employers, Knox County Schools and the Tennessee College of Applied Technology-Knoxville.

Pellissippi already has an agreement with TCAT to ensure that students enrolled in TCAT's HVAC, Electrical, Industrial Maintenance and Machinist programs will earn hours that can be transferred and applied to an associate's degree at Pellissippi State.

Pellissippi State is pleased at the level of engagement of Knoxville employers in the proposed program to ensure that students are training for in-demand jobs and earning the necessary skills to be successful in those jobs. Their collaboration with education providers will provide students in the high-needs Fulton and Central High Schools clear and accessible career pathways to meaningful employment.

Pellissippi State wholeheartedly endorses this grant application's goals of providing at-risk and economically disadvantaged students with the skills and pathways to pursue successful careers and to help local manufacturers find the employees they need. The college will be an active partner in meeting the goals and objectives of this grant proposal.

Sincerely,



L. Anthony Wise, Jr.  
President



**EXEDY America Corporation**

PO Box 8  
2121 Holston Bend Dr.  
Mascot, TN 37806

## Champion Level

Dear Sir/Madam:

Exedy America Corporation, in Knox County, is pleased to support the application for a LEAP 2.0 grant to create a demand-drive talent pipeline in our community.

As part of its commitment, the company's representatives will participate in the program's Skills Panels to offer guidance and feedback to education providers on the competencies needed and the quality of training for students enrolled in the Electro-Mechanical Technology and Machining Technology programs at Central and Fulton High Schools.

We are particularly pleased that the grant application contains and strong emphasis on closing the soft skills gap – attendance, teamwork, the ability to learn and relearn, problem solving and lack of substance abuse – and work-based learning.

Exedy America Corporation commits, as part of this application, to work with school personnel, peers and others to develop a work ethic diploma and to provide work-based learning opportunities for students in accordance with Knox County Schools' guidelines. With an aging workforce and a shrinking numbers in the coming generation in which to fill those positions, Exedy America Corporation places a premium on recruiting trained employees. We are pleased, therefore, to support this grant application, "Building the Talent Pipeline: A Demand-Driven Approach to Closing the Skills Gap" to provide better employment opportunities to Knoxville's urban youth and diverse population and to ensure our company has qualified employees moving forward.

With highest regard,

A handwritten signature in black ink, appearing to read "Miriam Jagels".

Miriam Jagels  
Human Resources Manager  
Exedy America Corporation



## SUPPORTER LEVEL

Dear Sir/Madam:

Steel Plate Fabricators, is pleased to support the application for a LEAP 2.0 grant to create a demand-drive talent pipeline in our community.

As part of its commitment, the company's representatives will participate in the program's Skills Panels to offer guidance and feedback to education providers on the competencies needed and the quality of training for students enrolled in the Electro-Mechanical Technology and Machining Technology programs at Central and Fulton High Schools.

We are particularly pleased that the grant application contains a strong emphasis on closing the soft skills gap – attendance, teamwork, the ability to learn and relearn, problem solving and lack of substance abuse.

Steel Plate Fabricators commits, as part of this application, to work with school personnel, peers and others to develop a work ethic diploma and actively engage with students to stress the importance and help them to meet these criteria.

With an aging workforce and a shrinking numbers in the coming generation in which to fill those positions, Steel Plate Fabricators places a premium on recruiting trained employees. We are pleased, therefore, to support this grant application, "Building the Talent Pipeline: A Demand-Driven Approach to Closing the Skills Gap" to provide better employment opportunities to Knoxville's urban youth and diverse population and to ensure our company has qualified employees moving forward.

With highest regard,

A handwritten signature in black ink that reads "Mike Russell". The signature is stylized and cursive.

Mike Russell

President & General Manager

Steel Plate Fabricators



SUPPORTER LEVEL

Dear Sir/Madam:

Reily Foods Co. is pleased to support the application for a LEAP 2.0 grant to create a demand-drive talent pipeline in our community.

As part of its commitment, the company's representatives will participate in the program's Skills Panels to offer guidance and feedback to education providers on the competencies needed and the quality of training for students enrolled in the Electro-Mechanical Technology and Machining Technology programs at Central and Fulton High Schools.

We are particularly pleased that the grant application contains a strong emphasis on closing the soft skills gap – attendance, teamwork, the ability to learn and relearn, problem solving and lack of substance abuse.

Reily Foods commits, as part of this application, to work with school personnel, peers and others to develop a work ethic diploma and actively engage with students to stress the importance and help them to meet these criteria.

With an aging workforce and a shrinking numbers in the coming generation in which to fill those positions, Reily Foods places a premium on recruiting trained employees. We are pleased, therefore, to support this grant application, "Building the Talent Pipeline: A Demand-Driven Approach to Closing the Skills Gap" to provide better employment opportunities to Knoxville's urban youth and diverse population and to ensure our company has qualified employees moving forward.

With highest regard,

A handwritten signature in black ink, appearing to read "Jeff Gamble", is written over a light blue circular stamp.

Jeff Gamble

Plant Engineer

Reily Foods Co.



**FRESENIUS  
MEDICAL CARE**



## Champion Level

Dear Sir/Madam:

Fresenius, in Knox County, is pleased to support the application for a LEAP 2.0 grant to create a demand-drive talent pipeline in our community.

As part of its commitment, the company's representatives will participate in the program's Skills Panels to offer guidance and feedback to education providers on the competencies needed and the quality of training for students enrolled in the Electro-Mechanical Technology and Machining Technology programs at Central and Fulton High Schools.

We are particularly pleased that the grant application contains and strong emphasis on closing the soft skills gap – attendance, teamwork, the ability to learn and relearn, problem solving and lack of substance abuse – and work-based learning.

Fresenius commits, as part of this application, to work with school personnel, peers and others to develop a work ethic diploma and to provide work-based learning opportunities for students in accordance with Knox County Schools' guidelines.

With an aging workforce and a shrinking numbers in the coming generation in which to fill those positions, Fresenius places a premium on recruiting trained employees. We are pleased, therefore, to support this grant application, "Building the Talent Pipeline: A Demand-Driven Approach to Closing the Skills Gap" to provide better employment opportunities to Knoxville's urban youth and diverse population and to ensure our company has qualified employees moving forward.

With highest regard,

Eric Schultz

Human Resources Manager

Fresenius Medical Care North America

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### **Fresenius Medical Care North America**

**Corporate Headquarters: Reservoir Woods Waltham, MA 02451 (781) 699-9000**  
**Knoxville Manufacturing Plant: 5105 S. National Drive Knoxville, TN 37914 (865) 540-5931**

TOMCAT USA, INC.  
5427 N National Drive  
Knoxville, TN 37914



Tel: (865) 219-3700  
Fax: (865) 673-5818  
[www.tomcatglobal.com](http://www.tomcatglobal.com)

15 July, 2016

## SUPPORTER LEVEL

Dear Sir/Madam:

TOMCAT, is pleased to support the application for a LEAP 2.0 grant to create a demand-drive talent pipeline in our community.

As part of its commitment, the company's representatives will participate in the program's Skills Panels to offer guidance and feedback to education providers on the competencies needed and the quality of training for students enrolled in the Electro-Mechanical Technology and Machining Technology programs at Central and Fulton High Schools.

We are particularly pleased that the grant application contains a strong emphasis on closing the soft skills gap – attendance, teamwork, the ability to learn and relearn, problem solving and lack of substance abuse.

TOMCAT commits, as part of this application, to work with school personnel, peers and others to develop a work ethic diploma and actively engage with students to stress the importance and help them to meet these criteria.

With an aging workforce and a shrinking numbers in the coming generation in which to fill those positions, TOMCAT places a premium on recruiting trained employees. We are pleased, therefore, to support this grant application, "Building the Talent Pipeline: A Demand-Driven Approach to Closing the Skills Gap" to provide better employment opportunities to Knoxville's urban youth and diverse population and to ensure our company has qualified employees moving forward.

With highest regard,

Scott Johnson  
President/CEO  
TOMCAT

*Our people and our products consistently perform with "Strength under Pressure".  
It's engineered into everything we do.*

## Champion Level

Dear Sir/Madam:

J & J Machine, in Knox County, is pleased to support the application for a LEAP 2.0 grant to create a demand-drive talent pipeline in our community.

As part of its commitment, the company's representatives will participate in the program's Skills Panels to offer guidance and feedback to education providers on the competencies needed and the quality of training for students enrolled in the Electro-Mechanical Technology and Machining Technology programs at Central and Fulton High Schools.

We are particularly pleased that the grant application contains and strong emphasis on closing the soft skills gap – attendance, teamwork, the ability to learn and relearn, problem solving and lack of substance abuse – and work-based learning.

J & J Machine commits, as part of this application, to work with school personnel, peers and others to develop a work ethic diploma and to provide work-based learning opportunities for students in accordance with Knox County Schools' guidelines.

With an aging workforce and a shrinking numbers in the coming generation in which to fill those positions, J & J Machine places a premium on recruiting trained employees. We are pleased, therefore, to support this grant application, "Building the Talent Pipeline: A Demand-Driven Approach to Closing the Skills Gap" to provide better employment opportunities to Knoxville's urban youth and diverse population and to ensure our company has qualified employees moving forward.

With highest regard,

Scott Jackson

J & J Machine

A handwritten signature in black ink, appearing to be 'S. Jackson', written over the printed name 'J & J Machine'.

KNOX COUNTY SCHOOLS  
ANDREW JOHNSON BUILDING

*Buzz Thomas, Interim Superintendent*



July 20, 2016

Mr. Michael Edwards, President & CEO  
Knoxville Chamber  
17 Market Square, #201  
Knoxville, TN 37902

Dear Mr. Edwards,

It is with great enthusiasm that Knox County Schools supports the the LEAP 2.0 grant application being submitted by the Knoxville Chamber.

Our proposed partnership with the Knoxville Chamber and the Tennessee College of Applied Technology, Knoxville will enhance Knox County's Career and Technology Education efforts to better impact a diverse population of students at Fulton and Central High Schools.

The new advanced manufacturing pathway at Fulton will be the first in the district to offer Machining Technology, training that the Chamber has identified as in demand by employers.

We are excited that the additional CTE programs at Fulton and Central High Schools will bring new opportunities and build capacity, while increasing the number of dual-enrollment and post-secondary options for every student.

This partnership will build the talent pipeline, close the skills gap, and contribute to the workforce development efforts that support the Drive to 55 initiative.

In closing, Knox County Schools fully supports this LEAP 2.0 grant application and looks forward to partnering with the Knoxville Chamber and TCAT to create meaningful employment for economically disadvantaged youth, meet the needs of local employers and help to create more prosperity in Knoxville's urban core.

Thank you for your consideration,

Sincerely,

A handwritten signature in blue ink that reads "Buzz Thomas".

Buzz Thomas  
Interim Superintendent



July 18, 2016

Mike Edwards, President  
Knoxville Chamber of Commerce  
17 Market Square #201  
Knoxville, TN 37902

Dear Mr. Edwards:

Workforce Connections and the Workforce Board for Local Workforce Development Area 3 are pleased to support the Knoxville Chamber's application for a LEAP 2.0 grant to create a demand-driven talent pipeline in our community.

Workforce Connections' current partnerships with the Chamber, local education entities, and area businesses include efforts to expand and improve the base of skilled workers to address business needs in our region. We are happy to collaborate with this initiative to create Skills Panels to offer guidance and feedback to education providers on the competencies needed and the quality of training for students enrolled in the Electro-Mechanical Technology and Machining Technology programs at Central and Fulton High Schools.

We recognize the importance of addressing technical and content skills needs in our community, as well as closing the soft skills gap – attendance, teamwork, the ability to learn and relearn, problem solving and lack of substance abuse. Workforce Connections will work with the Knoxville Chamber, school personnel, and area employers to develop a work-ethics diploma using evidence based practice and building on successful similar initiatives in our neighboring workforce region.

With demographic shifts including an aging workforce and shrinking labor force participation, the local Workforce Board notes the need for collaborative efforts to expand our regional talent pipeline. We are pleased to support this grant application, "Building the Talent Pipeline: A Demand-Driven Approach to Closing the Skills Gap" to provide better employment opportunities for Knoxville's urban youth and diverse populations and to ensure economic growth for our region.

Sincerely,

A handwritten signature in blue ink that reads "Windie Wilson".

Windie Wilson  
Director



TENNESSEE COLLEGE  
OF APPLIED TECHNOLOGY  
KNOXVILLE

July 25, 2016

Mr. Michael Edwards, President & CEO  
Knoxville Chamber of Commerce  
17 Market Square, #201  
Knoxville, TN 37902

Dear Mr. Edwards:

The Tennessee College of Applied Technology, Knoxville is pleased to partner with the Knoxville Chamber and Knox County Schools in applying for a LEAP 2.0 grant application.

Our proposed partnership will better align training with employers' needs, allow more economically disadvantaged students to earn a living wage, and increase the capacity of TCAT Knoxville to serve recently graduated students, as well as adults, in alignment with the state's Drive to 55 goals.

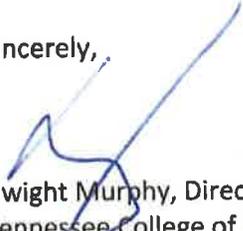
The additional CTE programs at Fulton and Central High Schools will bring new opportunities and build capacity, while increasing the number of dual-enrollment and post-secondary options for every student.

The addition of these programs will also help assist in eliminating waiting lists, which has been repeatedly identified as a barrier to graduates and adults earning post-secondary education, advancing their careers and earning higher wages.

In closing, the Tennessee College of Applied Technology Knoxville fully supports this LEAP 2.0 grant application and looks forward to partnering with the Knoxville Chamber and Knox County Schools to create meaningful employment for economically disadvantaged youth, meet the needs of local employers, and help to create more prosperity in Knoxville's urban core.

Thank you for your consideration.

Sincerely,



Dwight Murphy, Director  
Tennessee College of Applied Technology



Graduation Really Achieves Dreams

July 25, 2016

Mr. Michael Edwards, President & CEO  
Knoxville Chamber of Commerce  
17 Market Square, #201  
Knoxville, TN 37901

Dear Mr. Edwards:

Project GRAD Knoxville is honored to support the grant application of the Knoxville Chamber of Commerce and Knox County Schools titled ***Building the Talent Pipeline: A Demand-Driven Approach to Closing the Skills Gap***. We are a proud member of the Knoxville Chamber and we have been in partnership with the Knox County Schools since 2001.

Project GRAD (Graduation Really Achieves Dreams) is a nonprofit, K-16 college/career access initiative that has partnered with Knox County Schools and the Great Schools Partnership since 2001 to provide an additional layer of support for 14 urban schools and 7000 students/families in the Center City.

**North:** Fulton High, Whittle Springs Middle, Belle Morris, Christenberry, Spring Hill  
**South:** Dogwood, South Knoxville  
**East:** Austin East High, Vine Middle, Green, Sarah Moore Greene  
**West of Downtown:** Maynard, Lonsdale, Beaumont

If we are going to complete the transition of our region to *Innovation Valley*, we will need to retain and attract diversity in our workforce, government, philanthropy, business base and entrepreneurship. One of the things we must do is become more intentional about *growing our own talent*, investing in new ways and new opportunities—particularly for citizens who are from low income circumstances, students of color, and first generation college (even first generation high school in some instances).

GRAD has access to the families of 7,000 students enrolled in the 14 GRAD supported, urban schools and to more than 700 postsecondary scholars and alumni who have siblings, cousins and friends who need to pursue or complete some form of secondary education. Our ongoing collaboration with the youth serving organizations and faith-based organizations serving the 14 GRAD neighborhoods provides additional reach. As we serve as a supportive partner, we help students and families from communities of concentrated challenges connect with organizations providing training and employment opportunities.

At Project GRAD Knoxville we know that education can change the trajectory of an entire family for generations to come. We look forward to supporting the Chamber, the District, and the community in new ways through our continuing involvement with such initiatives as Drive to 55, Expect More/Achieve More, TN Promise/Reconnect, TN Achieves, TN Pathways, TN and National College Access Networks.

This grant will be a catalyst for our entire region.

Sincerely,

A handwritten signature in black ink that reads "Vrondelia Chandler". The signature is fluid and cursive, with a long horizontal flourish extending to the right.

Vrondelia (Ronni) Chandler  
Executive Director

