



College of Lake County

Advanced Technology Center



WELCOME TO THE FUTURE OF MANUFACTURING

The college's 2024 strategic plan focuses on providing innovative education and workforce solutions to fulfill its mission of offering equitable high-quality education, cultural enrichment and collaborative partnerships to the diverse communities we serve. The new Advanced Technology Center (ATC) is a culmination of that vision.



In Lake County, nearly 51,000 workers — or about one in seven residents — are employed in the manufacturing sector. While the county's workforce needs are continuing to accelerate, the current talent supply is not meeting the demand for competent, skilled workers. This presents a need and an opportunity.

When completed, the new center will vastly increase the number of local, diverse and highly trained talent to fuel area industry and expand economic development, while also attracting, retaining and growing manufacturing in Lake County.

ATC programs will be informed by industry, designed for accelerated learning and taught by faculty experts. The far-sighted, philanthropic investors partnering with the college will ensure the center's physical and virtual environments meet the demands of the region's manufacturing sector far into the future.

Please join us.

Lori Suddick
Dr. Lori Suddick, president

MEETING THE INDUSTRY 4.0 CHALLENGE

As the second largest manufacturing county in Illinois, Lake County is an economic powerhouse, outputting \$35.7 billion in goods a year. To maintain a labor force that is competitive on the world stage, the need for a next-level training and educational facility is pressing. When the state-of-the-art Advanced Technology Center opens its doors in fall 2022, it will allow the region to remain at the forefront of modern, global manufacturing and deliver an industry-responsive career path to students that aligns with the economic-development needs of the area's manufacturing and technology sectors.

With the backing of community partners, visionary business leaders and industry experts, the College of Lake County Advanced Technology Center will offer its students and local employers an unparalleled facility, complete with knowledgeable faculty who provide the expertise needed for hands-on training with the latest equipment and technology. Most importantly, this vital resource will be local, affordable and accessible to all.



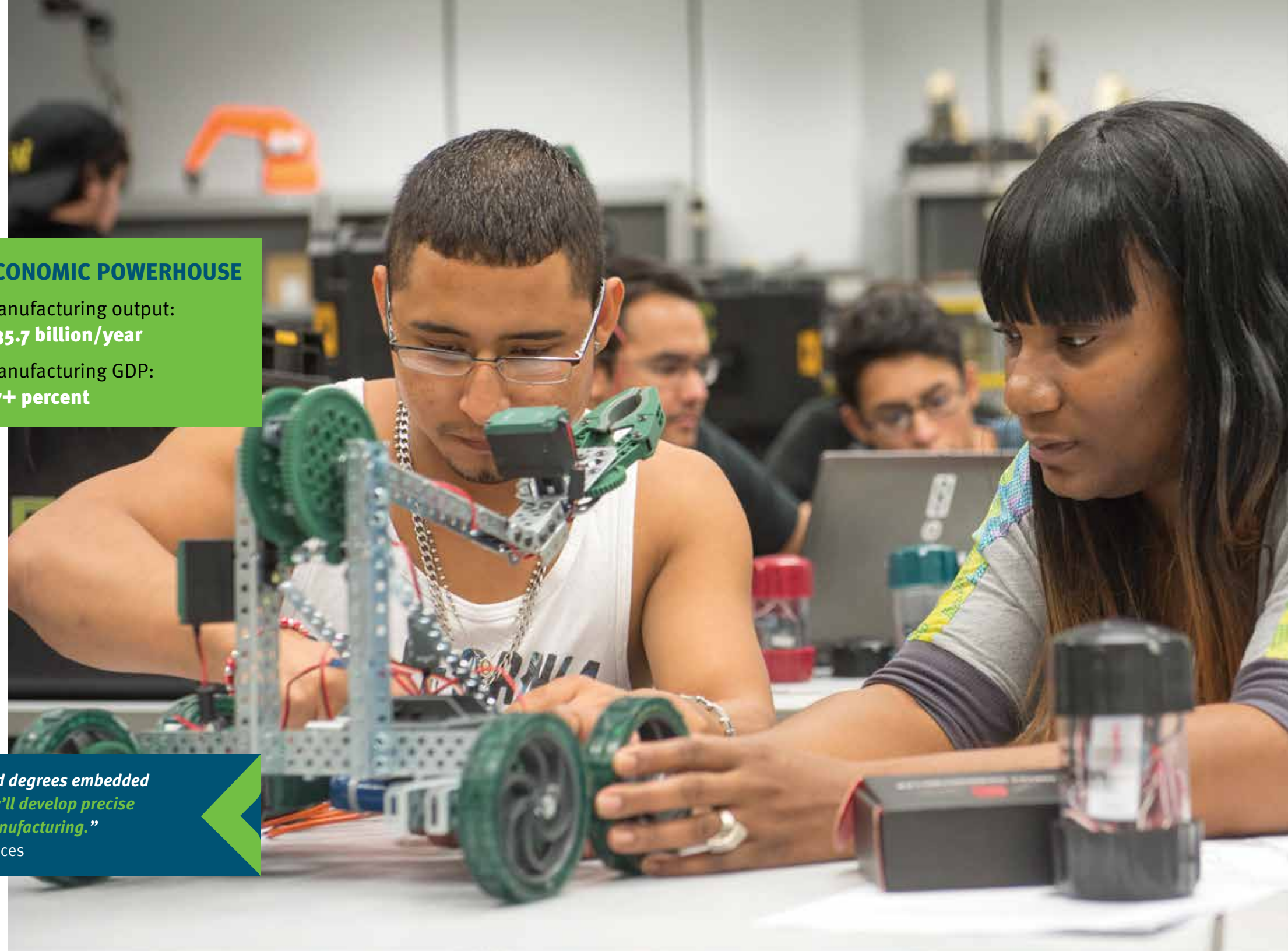
ECONOMIC POWERHOUSE

Manufacturing output:
\$35.7 billion/year

Manufacturing GDP:
27+ percent

“The ATC will offer students and current workers industry certifications and degrees embedded in hands-on classes with engaging, detailed and guided instruction. They’ll develop precise technical skills on the same sophisticated technology used in modern manufacturing.”

DR. RICHARD AMMON, dean, Engineering, Mathematics and Physical Sciences





PREPARING THE WORKFORCE OF TOMORROW

The surge in demand for employees with high-tech manufacturing expertise will only continue to grow. By providing the space, equipment, education and staff to train the next generation of workers, the ATC is positioned to provide 40 percent of Lake County's skilled labor force in the next five years.



ANSWERING THE NEED

Recommended by the National Coalition for Advanced Technology Centers

Fast new-industry credentialing and competency-based education

New-talent pipeline addresses critical workforce shortages

Continuing education/training for current employees

The ATC will offer students industry certifications embedded in hands-on classes with engaging, detailed and guided instruction along with experiential learning opportunities through internships and apprenticeships at local companies. Graduates will be well prepared for further education or immediate employment. Those receiving an Associate in Applied Science degree can advance their careers by transferring to a four-year college or university to work toward a bachelor's degree.

Our success will be measured by the number of graduates who enter the manufacturing workforce in Lake County.

STUDENT CAPACITY

CERTIFICATES AND DEGREE PROGRAMS	CURRENT	GOAL
Automation, Robotics and Mechatronics/ Mechanical Engineering Technology	168	312
CNC and Machine Tool Trades	117	378
Industrial Maintenance (new program)	0	312
Welding/Fabrication	134	429

"It's been great getting my associate degree in machine-tool trades from CLC. Not only did I get top-level training and instruction from my professors, but I also completed a five-year apprenticeship at LMT Onsrud LP in Waukegan while in school. I'm now a full-time CNC operator there and am excited about my future." JOKYM PENBENITO, AAS '20

THE NEW ATC WILL INCREASE THE COLLEGE'S ABILITY TO TRAIN MORE THAN 1,000 NEW STUDENTS EACH YEAR.

INDUSTRY BOOTCAMP THAT MAKES ECONOMIC SENSE

The acceleration of change in the manufacturing industry requires businesses keep their workers' skillsets up to date. At the same time, the local economy does best when its residents have meaningful and challenging work that provides them with promising career opportunities and the ability to advance in their profession. The ATC will do both.

With easy access to short-term, industry-specific training through intensive one- to eight-week onsite courses, Lake County businesses will prosper and grow — and so will their employees. The college's programs provide participants with intensive skills-based training and certifications in welding, industrial repairs, computerized numerical controlled programming and automation, robotics and mechatronics.



“The ATC is the missing puzzle piece to creating Lake County’s workforce of the future. In the past, the concept of traineeships was not well known here, so our talent pool is drying up. But the ATC will enable us to rapidly increase our pool of skilled workers, and they’ll have a clear pathway to well-paying careers.” ANDREW WARRINGTON, CEO, United Conveyor Corporation



1 THE CENTER ATRIUM

SPEED-TO-LAUNCH

Recognizing the need to act, the college purchased a former big-box store in Gurnee to house the ATC in December 2020. Its large, open spaces offer an expansive venue with program areas that can be tailored to each discipline. Its fab lab/ makerspace, multilevel common-use atrium, flexible learning spaces, computer labs, conference rooms and offices will be soundproofed to keep the whirl of the machine shops at bay.



INVESTING IN THE FUTURE

Industry 4.0 is transforming global manufacturing and the way Lake County does business. The new Advanced Technology Center's slate of classes, ultramodern equipment and technologies and high-level training make this innovative new facility a sound — and necessary — investment in the area's future.

JOIN US

We invite you to join us in making the College of Lake County Advanced Technology Center as bright and promising as the students and local employees who will train there. You can leave a lasting legacy to Lake County and CLC students by naming an area of the new facility.

VISIT

www.clcillinois.edu/ATC



6 FLEXIBLE LEARNING SPACES

ACHIEVING OUR GOAL

Complete project estimate: **\$89 million**

Philanthropic goal: **\$30 million**



2 WELDING/FABRICATION

LEARN MORE

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ADVANCED TECHNOLOGY CENTER

7735 Grand Avenue, Gurnee, IL 60031

PHASE 1

The 59,000-square-foot first phase of the ATC includes completing the welding/fabrication lab, the industrial maintenance area and the center atrium on the southern half of the main floor.

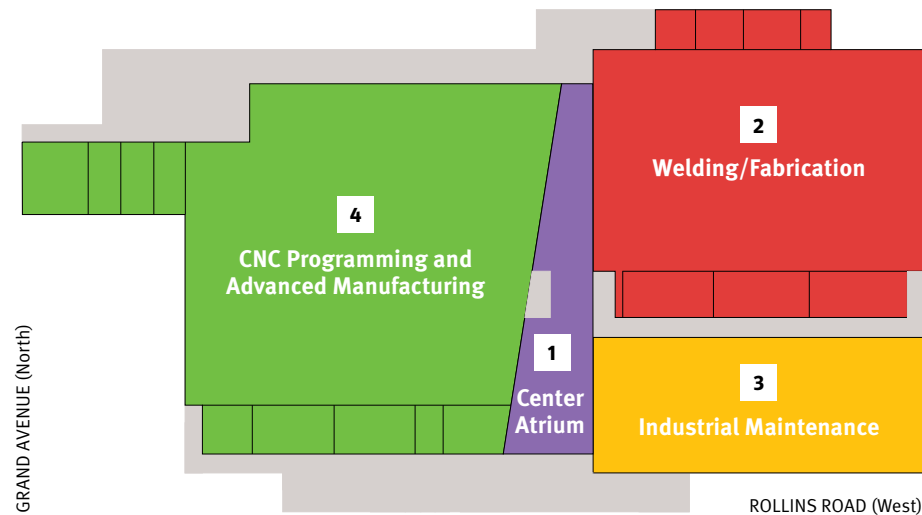
ESTIMATED COSTS

Building Purchase	\$5M
Design and Construction	\$22M
Equipment	\$7M
TOTAL	\$34M

PROJECT FUNDING

College Seed Funding	\$9M
College Investment	\$20M
Philanthropic/Grant Goal	\$5M
TOTAL	\$34M

1ST FLOOR



1 THE CENTER ATRIUM

The dramatic multilevel 10,000-square-foot atrium will greet students and visitors as they enter the new ATC. The light-filled soaring space will create a high-energy, collaborative and flexible learning environment where students and faculty can gather to have lunch, meet in study groups, share ideas about their disciplines or enjoy a break before heading back to the shop floor.

2 WELDING/FABRICATION

The welding/fabrication space on the southeast side of the first floor includes 42 self-contained and ventilated welding booths, a weld-inspection classroom/lab, robotic welding systems, a dedicated space for fabrication-skill instruction, hydraulic-press-brake machines, metalworking shears, lathes and mills, a grinding room, a specialty computer lab, a tool crib, faculty/adjunct workspaces and storage.

3 INDUSTRIAL MAINTENANCE

The industrial maintenance area will provide a space to train and certify industrial maintenance mechanics in a vast range of complex skills and is a new CLC credential. In addition to students learning parts removal, inspection and adjustment, they will become adept at performance measurements and tests, preventive maintenance, mechanical observation, downtime and inventory control, resource conservation, information collection, data analytics, continuity management and facility maintenance.

PHASE 2

The second phase includes equipping the north half of the first floor and adding and outfitting the second floor's automation, robotics and mechatronics lab and its mechanical engineering technology and industrial engineering areas. The second-floor addition increases the ATC square footage from 142,000 to 182,000 square feet.

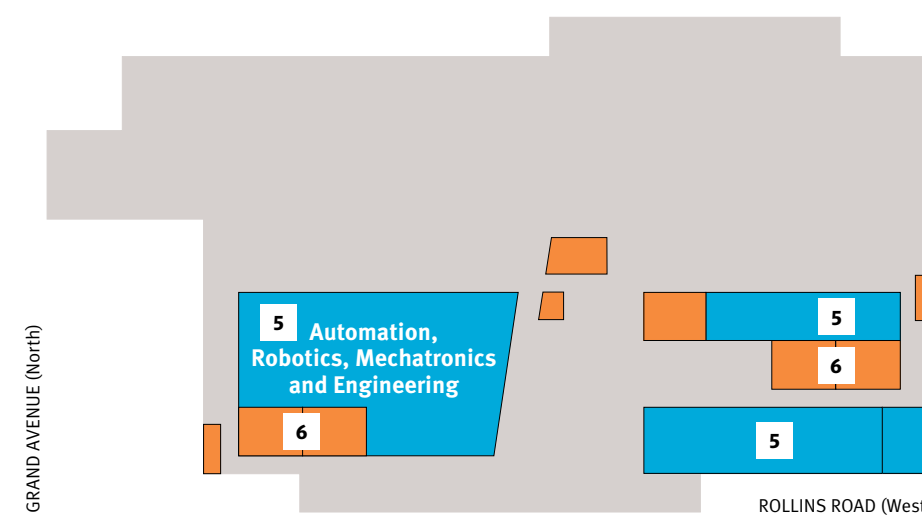
ESTIMATED COSTS

Design and Construction	\$44M
Equipment	\$11M
TOTAL	\$55M

PROJECT FUNDING

College Investment	\$30M
Philanthropic/Grant Goal	\$25M
TOTAL	\$55M

2ND FLOOR



4 CNC PROGRAMMING AND ADVANCED MANUFACTURING

The expansive first-floor lab will increase access to student credit-hour training by 100 percent and offer an Associate in Applied Science degree and two certification options to prepare students to program controlled lathes, milling machines and electrical discharge machines. Advanced placement in the program is offered for experienced programmers and operators. The lab will include work and instruction spaces for CNC, metallurgy inspection and programming and metrology. It also will house a pedestal grinding room, a CNC router room, a tool crib, faculty workspaces and storage.

5 AUTOMATION, ROBOTICS, MECHATRONICS AND ENGINEERING

The second-floor space will allow students to train for high-tech careers in automation, robotics and mechatronics, mechanical engineering technology and industrial engineering. The lab will include work and instruction spaces for mechatronics, programmable logic controllers, process-control stations, Industry 4.0 logistics and instruction, research and development and faculty/adjunct workspaces and storage.

6 FLEXIBLE LEARNING SPACES

Most of the center's soundproofed classrooms, conference rooms and other learning spaces will be on the second floor and visible to the rest of the building. The mezzanine walkway on the upper floor will allow students to visually connect to each other and see their classmates at work on the shop floors below.

OUR MISSION **TO PREPARE**
TOMORROW'S
WORKFORCE
TO MEET THE INDUSTRY
4.0 MANUFACTURING
AND TECHNOLOGY NEEDS OF
LAKE COUNTY.

OUR VISION To create a world-class center of excellence in manufacturing workforce development at the College of Lake County Advanced Technology Center.

OUR GOAL TO PROVIDE 40 PERCENT OF LAKE COUNTY'S MANUFACTURING WORKFORCE IN THE NEXT 5 YEARS.

OUR PROMISES

To provide Lake County residents advanced education and training to pursue industry-responsive careers aligned with the workforce and economic needs of the local manufacturing and technology sector.

To develop an educational culture that values and promotes advanced technologies and manufacturing training and instruction.

To offer a flexible skillset with nationally recognized trade credentials that makes students immediately employable in the high-demand fields of Industry 4.0.

To offer students and current workers stackable certificates that lead to an Associate of Applied Science degree that can be transferred to a bachelor's degree at a four-year school.



COLLEGE OF LAKE COUNTY ADVANCED TECHNOLOGY CENTER

7735 Grand Avenue, Gurnee IL 60031

COLLEGE OF LAKE COUNTY FOUNDATION

19351 West Washington Street, Grayslake, Illinois 60030