

IMPACT ALABAMA

ALABAMA PRODUCTIVITY CENTER 2024 ANNUAL REPORT



History and Mission

In an effort to improve economic development in the state of Alabama, the Alabama Productivity Center was established on January 1, 1986, on The University of Alabama campus. The mission of the APC is to focus research and educational resources on the enhancement of productivity and quality within Alabama businesses and the state's industry. The Alabama Productivity Center, a nonprofit organization, is an outcome of a 1983 joint venture of The University of Alabama and General Motors to save a Tuscaloosa GM plant from closing. The positive experience utilizing university faculty and students to save Alabama jobs led to the establishment and sponsorship by Alabama Power Company and The University of Alabama.

In 1996, APC became home to Region 3 of the Alabama Technology Network (ATN), the Manufacturing Extension Partnership program of the National Institute of Standards and Technology (NIST) for the state of Alabama. Headquartered in Montgomery, the ATN brings together a set of sixteen regional centers covering the entire state and serving the technical assistance and workforce development needs of small- and medium-sized manufacturing firms. The APC's accomplishments, such as recognition by the National Council for Urban Development and the U.S. Economic Development Administration as an "innovative" and "imaginative" program, demonstrate that the APC is a valuable resource for Alabama businesses.

The mission of the Alabama Productivity Center is to enhance economic development in Alabama using UA resources to increase productivity in organizations by solving real-world problems while providing positive experiences for students.

Message from the Director

I am honored to present our Annual Report for Fiscal Year 2024. This year, the Alabama Productivity Center (APC) celebrated a milestone in financial support for students in our internship program, providing exceptional opportunities for these talented individuals. Our operational budget exceeded \$1.74 million, enabling us to contribute \$723,000 to student payroll and benefits. Throughout the year, APC completed 135 industry projects across 16 Alabama counties, including 7 rural counties.

APC has a long-standing history of supporting workforce development and business growth initiatives, collaborating closely with the State of Alabama's Department of Commerce. This past year, we expanded our support to include the tourism industry, a vital sector for Alabama. We take pride in supporting all industries through our projects, which have resulted in over \$20 million in cost savings and investments reported by our clients. These remarkable impacts are a testament to the dedication and hard work of our APC staff and student interns.

We deeply appreciate the unwavering support from our APC Advisory Board, Culverhouse College of Business, and the University of Alabama. The new year brings much excitement, with new industry and college partnerships, innovative ideas from new student interns, and the continued efforts of our APC staff team.



Thank you for your continued support and dedication. The Alabama Productivity Center exists to serve our state's industries and student interns. We are forever grateful for the support we receive from all.

Best regards,

A handwritten signature in black ink that reads "Alan Hill". The signature is written in a cursive, flowing style.

Alan Hill, Director

Financial Overview and Management

The 2024 fiscal year showcased APC's strong financial stability and effective resource management. By prioritizing smart planning and thoughtful allocation, we strengthened our financial position, enabling us to efficiently deliver our wide array of services and programs.

Expenditures Breakdown

During the fiscal year, managing expenses was a key focus of our financial strategy. We allocated \$626,000 to staff payroll and \$161,000 to staff benefits, showing our dedication to supporting a skilled and committed team.

We also invested in our students, with \$613,000 allocated to student payroll and \$110,000 for student benefits. This funding not only strengthened our program but also provided financial support to students.

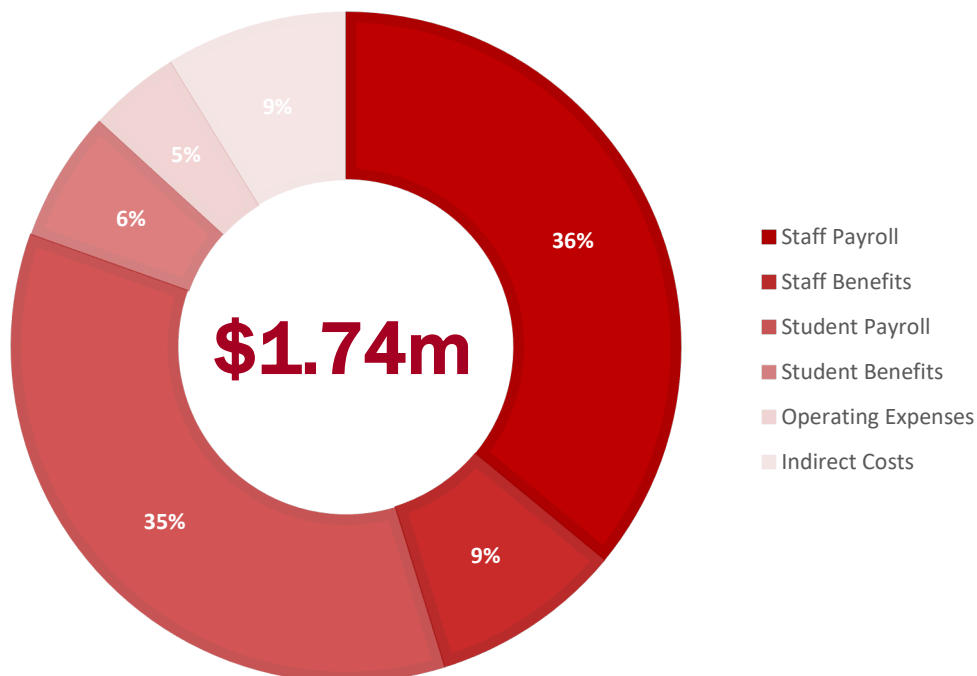
To maintain efficiency, \$77,000 was used for operating expenses, and \$153,000 was allocated for indirect costs

Revenue Streams and Funding Sources

The APC continued to strengthen its financial foundation by securing multiple revenue streams in support of its mission. For the fiscal year, \$391,000 came from UA Internal funding, reflecting strong backing and recognition from the university community.

External funding also played a key role, with \$137,650 from the ATN Federal Grant and \$175,000 from the ATN State Grant. This year, APC was also awarded an Alabama Power Foundation Grant in the amount of \$40,000. These grants highlight our dedication to building partnerships that support and expand our initiatives.

Additionally, the APC generated \$996,350 through Fees-for-Service, highlighting the value and demand for our offerings. This significant contribution reinforced our commitment to sustainability and growth, forming a vital part of our \$1.74 million operational budget.



Project Highlights

Regional Influence

This fiscal year, the APC continued to have a meaningful regional influence, extending its support to sixteen counties across Alabama. Upholding our commitment to regional development and the advisory board, we focused on expanding our presence in rural areas. This included active engagement in counties such as Greene, Hale, Talladega, Fayette, Randolph, Coffee, Marengo, and Clarke, highlighting our dedication to driving growth in underserved communities.

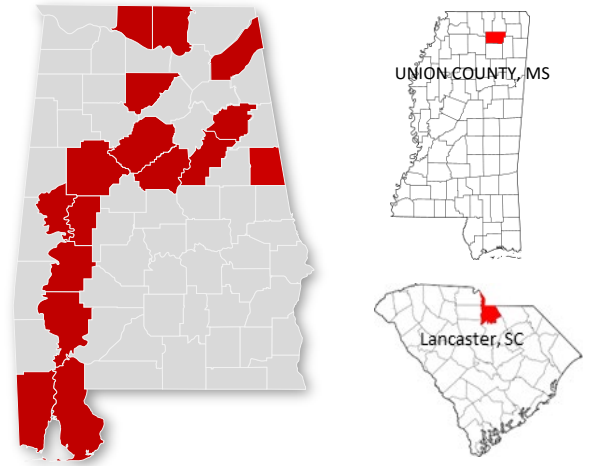
Our reach also extended beyond Alabama, with initiatives supporting projects in Union County, Mississippi, and Lancaster County, South Carolina, directly benefiting businesses with ties to Alabama. This broader regional effort underscores our commitment to fostering collaboration and growth across state lines.

Collaboration

APC's dedication to collaboration shines through our partnerships with the Alabama Small Business Development Center and The University of Alabama Office of Research and Economic Development. These alliances have enhanced APC's ability to support Alabama's businesses and industries, reinforcing our commitment to driving innovation, economic growth, and professional development across the state.

In addition, the Alabama Productivity Center (APC) has joined forces with leading higher education institutions, including The University of Alabama, Auburn University, Athens State University, The University of Alabama at Birmingham, The University of South Alabama, Calhoun Community College, The University of Mississippi, Mississippi State University, Northwest Florida State College, Purdue University, Alabama A&M University and The University of Alabama at Huntsville. These collaborations bridge the gap between academia and industry, leveraging university resources to benefit businesses while providing students with meaningful learning opportunities and delivering innovative solutions to real-world challenges.

The APC is excited to share a record-breaking achievement in FY24, with 111 internship projects and 24 professional services projects completed. These milestones represent the highest number of student projects ever recorded in a single fiscal year, highlighting our dedication to fostering growth and building strong partnerships.



Alabama, Mississippi, and South Carolina counties served



Trainings

The APC continues to support its client partnerships by providing a range of professional training programs. Over the past fiscal year, the APC successfully delivered training in 5S, Lean and Lean Hospitality, ISO 9001, and Leadership and Communication. These programs demonstrate our dedication to enhancing skills and driving continuous improvement for our clients.



Oxford City Schools – 5S Training Certificate Recipients

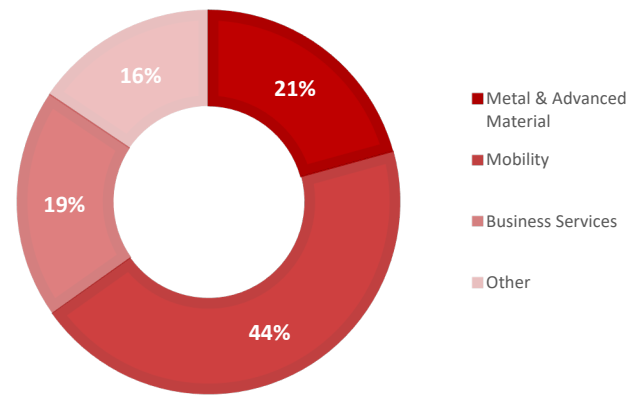
Industry Sectors Served

In October 2024, Governor Kay Ivey received a new economic strategic plan from Commerce Secretary Ellen McNair. In response, the APC realigned its industry sectors to better align with the goals outlined in the plan.

One notable adjustment was the creation of the "Mobility" category, which combines the automotive and aerospace industries. This sector emerged as our largest, with 60 projects completed. Key contributors to this success include clients like Mazda Toyota Manufacturing, Mercedes-Benz U.S., Inc., and Austal.

Following the Mobility sector, the Metal & Advanced Materials category accounted for 28 projects, while APC supported 26 projects in the Business Services sector. Additional industries round out the remaining projects, showcasing the diversity of our efforts.

The APC values its partnerships and is honored to contribute to the growth and prosperity of Alabama's economy.



Industry Sectors Served during FY24

Internship Program Information

Student Degrees

In FY24, the Alabama Productivity Center welcomed 108 students into its dynamic and diverse internship program, drawing participants from a variety of academic disciplines. This program provides a hands-on platform for students pursuing degrees in multiple fields, blending learning with real-world experience.

The range of disciplines represented reflects APC's dedication to fostering a collaborative environment. More than just numbers, the program thrives on its diversity, creating an inclusive space where students from different backgrounds come together to contribute, learn, and develop professionally.



Tamira Perry & Trey Faulkner – Mazda-Toyota Interns

Degrees by Student Interns

Operations Management	12	Management Information Systems	13
Mechanical Engineering	21	Finance	8
Electrical Engineering	2	Business Management	7
Chemical Engineering	2	Marketing	2
Civil Engineering	3	Accounting	2
Industrial & System Engineering	14	Public Relations	2
Aerospace Engineering	2	Communication & Information Science	2
Computer Science	12	Psychology	2
Journalism	1	Studio Art	1

Industry Impacts

Client Reported Impacts

This past year, APC successfully executed 110 student internship projects and 25 professional service projects for businesses across Alabama. Of these, 53 student internship projects were surveyed by our team, revealing an impressive impact of \$20,354,000. Additionally, 8 past projects were independently surveyed by NIST MEP, reporting further impacts of \$3,339,000. These impacts include significant cost savings, investments, and cost avoidance for our clients. The surveys also highlighted the creation of 21 new jobs and the retention of 76 existing jobs as a result of our project work. These achievements underscore the contributions of Alabama’s emerging industry leaders.

Success Stories

AI Integration Internship Project Lear Corporation – Vance, AL

Lear Corporation, a global leader in automotive technology specializing in seating and E-Systems, is at the forefront of innovation, delivering superior in-vehicle experiences for consumers worldwide. With a mission of “Making every drive better™,” Lear develops technology that prioritizes safety, intelligence, and comfort for drivers and passengers alike. Ranked 174 on the Fortune 500, Lear Corporation proudly serves every major automaker in the world.

For years, Lear has collaborated with the Alabama Productivity Center to provide valuable internship opportunities to university students, fostering hands-on learning and professional growth. One such student, Anabelle Zuluaga, a junior studying Operations Management at The University of Alabama's Culverhouse College of Business, gained real-world experience interning at Lear Corporation’s Vance, Alabama facility during the summer of 2024. Anabelle worked in the Engineering Change Department, where she took on a variety of impactful projects.



Anabelle Zuluaga – Lear Intern

Among her achievements, Anabelle made notable strides in integrating Artificial Intelligence (AI) automation into Lear's processes. Leading her team, she spearheaded the adoption of an AI-driven software solution to automate file updates, significantly improving efficiency and streamlining operations. Leveraging Palantir Foundry, Anabelle developed a system to automate the configuration of a dynamic "live" document. Remarkably, she accomplished this with no prior experience in the software or coding languages, teaching herself the necessary skills to effectively utilize the platform.

Konrad Piepke, Lear Engineering Change Coordinator, worked closely with Anabelle on this project, and this is what he had to say, "Anabelle has been a vital member to the team. She has been responsible for the plant's change notification process, making sure that responsible parties acknowledge notification and submit documentation in a timely manner. Anabelle has led the team in AI integration for the automation of processes. This work will save time for team members for key tasks regarding model year change overs. Her performance has been key in driving improvements in Lear processes with the integration of AI. She is a great employee and has a bright future ahead of her."

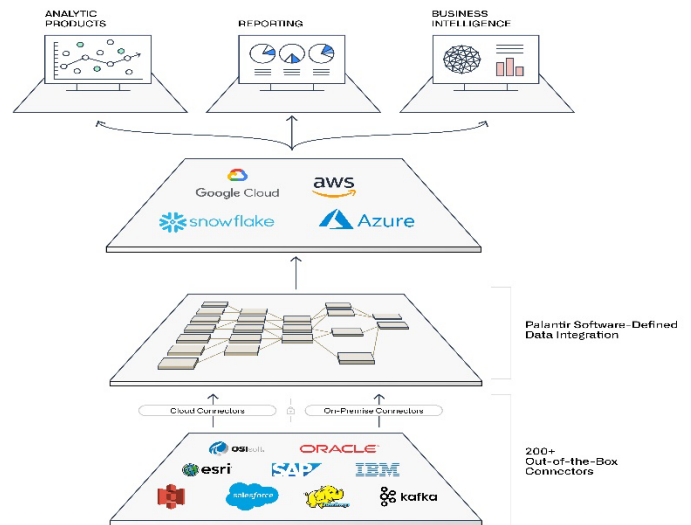
Impacts of Anabelle's project for Lear Corporation include a time and cost reduction of \$29,184 and investments of \$24,280 for a total of \$53,464 in impacts.

Anabelle's innovative contributions during her internship at Lear Corporation exemplify the transformative potential of hands-on experience, self-directed learning, and technological innovation. Her work not only advanced the company's operational efficiency but also underscored the value of empowering emerging talent.

TEBA Data Transfer Internship Project Mazda Toyota Manufacturing – Huntsville, AL

Workplace safety and ergonomics have taken center stage at Mazda Toyota Manufacturing in Huntsville, Alabama, thanks to efforts led by Anna Smith, a Kinesiology/Psychology major at The University of Alabama, during her safety internship. Her groundbreaking project not only improved operational efficiency but also enhanced employee well-being.

Anna spearheaded the adoption of Ergo Vision, an advanced AI-powered system that replaced the outdated Toyota Ergonomic Burden Assessment (TEBA). This transition yielded remarkable results: the assessment process time dropped from 1.5 hours to just 5 minutes, significantly boosting time efficiency. Ergo Vision's ability to



Anna Smith – Mazda Toyota Intern

provide physiological visuals offers a deeper understanding of employee discomfort, pinpointing areas for targeted intervention. Furthermore, the system's inclusivity allows ergonomic evaluations for any employee reporting discomfort.

Anna also streamlined the management of workers' compensation cases. By organizing 2,000 medical cases into categorized data, she enhanced clarity and efficiency, enabling management to easily track open cases and pending claims. This effort led to a reduction in unresolved compensation cases, positively impacting organizational productivity.

One of the cornerstone achievements of Anna's project was addressing shoulder injuries. Using data insights and ergonomic diagnostics, Anna developed a strengthening station to combat repetitive overhead movements and twisting which are key contributors to these injuries. The station includes customizable exercise plans tailored to various skill levels, along with self-care resources like comprehensive kits and usage instructions to promote recovery and prevention. Its portable, adjustable design ensures accessibility across multiple workstations, offering a space-efficient solution.

Anna's project significantly contributed to Mazda Toyota Manufacturing's goal of achieving a Total Recordable Incident Rate (TIR) below 5.5. Additionally, her initiatives empowered employees with the tools and knowledge to manage their ergonomic health, fostering a proactive and safety-oriented workplace culture. Her work also strengthened collaboration between safety specialists and engineering teams, ensuring the sustainability of these improvements.

The success of Anna's project underscores the critical role of ergonomics in workplace safety. Her contributions demonstrate the power of innovation, data-driven decision-making, and a deep commitment to worker well-being. The project's measurable impacts include avoiding OSHA/EHS fines totaling \$235,710, achieving a time and cost reduction impact of \$5,312, and providing \$20,616 in investments to employees. These efforts culminated in an impressive \$261,638 in positive impacts for Mazda Toyota Manufacturing.



Front and Side Views of Strengthening Station



Alabama Productivity Center

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