

EDGE CCA Program Alignment Analysis

EDGE CCA Programs Evaluated Against Local Labor Market Data

Source: JobsEQ® | Data as of 2025Q4 | Prepared for EDGE College & Career Academy | July 2026

Statement of Significance for EDGE CCA Grant

The nine-county EDGE Academy service area combines exceptional high-wage assets with a large, under-connected workforce — and EDGE CCA’s programs map directly onto both. The region’s energy sector is concentrated more than **five times the national average** (Utilities LQ 5.06, avg wage \$163,975); **Health Care is its single largest and fastest-growing employer** (10,780 workers, +113 jobs forecast); and Manufacturing, Education, and Agriculture all exceed national concentration. Yet just **56.4%** of residents are in the labor force (vs. 63.3% nationally), **21.6%** live in poverty, and 13.7% lack a high school diploma — leaving thousands of working-age adults disconnected from jobs that already pay **\$57,000 to \$164,000 a year**. EDGE CCA’s current credentials in nursing and allied health, welding, diesel, machining, materials handling, and early education already serve the region’s largest sectors; the CCA-grant programs in advanced manufacturing, mechatronics, and NCCER construction trades close the remaining high-wage gaps. This grant converts a documented workforce disconnect into a durable, homegrown talent pipeline that keeps workers and wages in the community.

Executive Summary

Purpose & Key Finding

This analysis evaluates EDGE College & Career Academy (EDGE CCA) programs against the workforce needs of the nine-county EDGE Academy Service Influence Area. The regional economy is anchored by two forces. First, **Health Care and Social Assistance** is the single largest employer (10,780 workers) and posts the largest 1-year job-growth forecast by count (+113); EDGE CCA’s newly added nursing and allied-health credentials — CNA, Practical Nursing Essentials, EMR, and Patient Care Technician — position the academy to serve this dominant sector directly. Second, the region carries an **exceptional energy concentration**: the Utilities sector has a location quotient of 5.06 (the highest wages in the region at \$163,975) and the Coal/Oil/Power cluster an LQ of 3.63 (\$152,628 average wage), but this cluster is projected to contract about 0.8% per year — creating urgent demand for transition and pipeline credentials in electrical, instrumentation, and industrial maintenance. Manufacturing (LQ 1.29), Educational Services (LQ 1.53), and Agriculture/Forestry (LQ 2.88) round out the region’s distinctive strengths and align closely with EDGE CCA’s nursing, welding, diesel, machining, materials-handling, and education programs. A 56.4% labor force participation rate (vs. 63.3% nationally) and a 21.6% poverty rate signal a large untapped worker pool that short-term, stackable EDGE credentials are well positioned to reach.

Key Economic Indicators (2025Q4)

Total Employment	74,669	Unemployment Rate (May 2026)	3.4%
Population (2025 Estimate)	212,954	Unemployment Rate (May 2025)	3.6%
Pop. Annual Growth	+0.8%/yr	Avg. Annual Wage	\$50,189
Civilian Labor Force	94,560	US Purchasing Power (COLI 84.8)	\$59,166
Labor Force Participation	56.4%	Median Household Income	\$54,695
Prime-Age (25–54) Participation	76.5%	Poverty Rate	21.6%
No HS Diploma (25–64)	13.7%	Uninsured	13.4%
Total GDP (2024)	\$9,960,131,000	1-Year Employment Forecast	+410 jobs

Top Industries by Employment (2025Q4)

Industry	Empl	% of Total	LQ	Avg Ann Wage	5-Yr Chng	1-Yr Fcst
Health Care and Social Assistance	10,780	14.4%	0.93	\$50,523	+1,271	+113
Educational Services	9,266	12.4%	1.53	\$52,749	-189	+32
Retail Trade	8,905	11.9%	1.24	\$35,068	+305	+23
Manufacturing	7,452	10.0%	1.29	\$57,841	+286	+9
Accommodation and Food Services	7,119	9.5%	1.10	\$19,391	+1,295	+58
Construction	4,349	5.8%	0.97	\$63,325	-5,677	+41
Public Administration	4,218	5.6%	1.20	\$47,757	+352	+23
Admin. & Support & Waste Mgmt.	3,270	4.4%	0.73	\$37,721	+419	+19
Transportation and Warehousing	3,262	4.4%	0.86	\$55,792	+311	+22
Other Services (ex. Pub. Admin.)	3,254	4.4%	1.03	\$31,473	+413	+22
Agric., Forestry, Fish. & Hunt.	2,575	3.4%	2.88	\$48,969	-66	+4
Wholesale Trade	2,075	2.8%	0.76	\$57,586	-333	+11
Utilities	1,985	2.7%	5.06	\$163,975	-60	-19
Total — All Industries	74,669	100%	1.00	\$50,189	-1,329	+410

Utilities (LQ 5.06) and Agriculture/Forestry (LQ 2.88) rank outside the top ten by headcount but represent the region's most concentrated — and highest-wage — industry advantages. Utilities alone averages \$163,975 per worker.

Top Occupations by Employment (2025Q4)

Occupation Group	Empl	LQ	Mean Ann Wages	5-Yr Change	1-Yr Forecast
Office and Admin. Support	7,218	0.85	\$43,400	-373 (-1.0%)	-4 (-0.1%)
Food Prep. and Serving Related	6,930	1.13	\$29,200	+1,099 (3.5%)	+52 (0.8%)
Transportation & Material Moving	6,711	1.05	\$43,300	+92 (0.3%)	+49 (0.7%)
Sales and Related	6,481	1.01	\$41,300	+2 (0.0%)	+4 (0.1%)
Educational Instruction & Library	5,913	1.45	\$58,500	-29 (-0.1%)	+20 (0.3%)
Management	5,466	0.93	\$112,600	+140 (0.5%)	+39 (0.7%)
Production	5,145	1.30	\$47,600	+46 (0.2%)	+1 (0.0%)
Healthcare Practitioners & Tech.	4,440	0.98	\$92,900	+523 (2.5%)	+46 (1.0%)
Business & Financial Operations	3,840	0.79	\$76,600	+133 (0.7%)	+27 (0.7%)
Installation, Maint. & Repair	3,375	1.18	\$58,000	-1,623 (-7.6%)	+24 (0.7%)
Construction and Extraction	3,204	0.95	\$53,200	-2,388 (-10.5%)	+30 (0.9%)
Healthcare Support	3,162	0.86	\$35,200	+578 (4.1%)	+41 (1.3%)
Building & Grounds Cleaning/Maint.	2,497	1.02	\$35,300	+166 (1.4%)	+14 (0.6%)
Protective Service	2,084	1.27	\$49,600	+197 (2.0%)	+6 (0.3%)
Personal Care and Service	1,937	1.00	\$33,000	+297 (3.4%)	+12 (0.6%)
Farming, Fishing, and Forestry	1,081	2.54	\$41,300	-10 (-0.2%)	0 (0.0%)
Computer and Mathematical	1,080	0.46	\$87,600	+31 (0.6%)	+9 (0.8%)
Total — All Occupations	74,669	1.00	\$55,900	-1,329 (-0.4%)	+405 (0.5%)

Current Program Alignment

The 24 credentials EDGE CCA currently offers are rated below against the nine-county labor market. Programs shown in **red** are the nursing and allied-health credentials recently added to the current inventory.

STRONG ALIGNMENT — Priority Delivery and Marketing

These programs correspond directly to the region's largest employers, highest-concentration industries, and clearest workforce needs.

Health Care — Nursing & Allied Health

Certified Nursing Assistant (CNA), Practical Nursing Essentials, Emergency Medical Responder (EMR), Introduction to PCT (Patient Care Technician) (newly added)

Data: Health Care and Social Assistance is the region's single largest employer (10,780 workers, +1,271 over 5 years) and posts the largest 1-year job-growth forecast of any sector by count (+113). Healthcare Support occupations (3,162, LQ 0.86) grew +578 over 5 years (+4.1%) and carry the fastest-growing support-occupation forecast (+41, +1.3%); Healthcare Practitioners & Technical (4,440) added +523 (+2.5%) with a +46 forecast; 13.4% of residents are uninsured, underscoring access need.

Action: Priority delivery. These four credentials serve the region's largest and fastest-growing sector directly; stack CNA → Patient Care Technician → Practical Nursing as a career ladder and pair EMR with local EMS; partner with area hospitals, clinics, long-term-care, and EMS agencies for clinical placements; market as a high-mobility pathway for the region's untapped workforce.

Welding Suite (Welding Blueprint Reading, Basic Shielded Metal Arc Welder, Gas Metal Arc Welder, Flux Cored Arc Welder)

Data: Manufacturing is the region's 4th-largest sector (7,452 workers, LQ 1.29, +286 over 5 years, avg wage \$57,841); Production occupations 5,145 (LQ 1.30 — 30% above national concentration); Construction avg wage \$63,325; the Auto/Auto-related (LQ 1.53) and Wood/Paper (LQ 2.53) clusters both consume welding skills.

Action: Top-priority delivery of the four welding credentials as a stackable pathway; market the manufacturing wage premium; pursue dual enrollment with area high schools; position graduates for both fabrication shops and energy-sector maintenance.

Diesel Technology (Diesel Electrical/Electronic System Technician, Diesel Engine Service Technician)

Data: Transportation & Material Moving is a top occupation group (6,711 workers, LQ 1.05) with the strongest 1-year forecast by count (+49); Installation, Maintenance, and Repair 3,375 (LQ 1.18); Transportation and Warehousing sector 3,262 (+311 over 5 years); Agriculture/Forestry (LQ 2.88) depends on diesel farm and timber equipment.

Action: Priority delivery; market to trucking, agricultural, and heavy-equipment employers; frame diesel credentials as durable, high-demand infrastructure for a freight- and farm-dependent rural economy.

Basic Machinist

Data: Manufacturing LQ 1.29 (7,452 workers); Production occupations LQ 1.30 (5,145); avg manufacturing wage \$57,841.

Action: Priority delivery; aligns with the Advanced Manufacturing pathway (a CCA-grant program below); recruit incumbent manufacturing workers for upskilling.

General Industry Materials Handling Specialist (OSHA 10 + Forklift Certification)

Data: Transportation & Material Moving 6,711 (LQ 1.05, +49 forecast — largest occupation forecast by count); Manufacturing (7,452) and Retail Trade (8,905) both require warehouse and logistics labor; Transportation and Warehousing sector +311 over 5 years.

Action: High-priority short-term credential and strong stackable entry point; market OSHA 10 + forklift as an immediate-employment package to manufacturing, distribution, and retail employers.

Early Childhood Care & Education / Paraprofessional Education

Data: Educational Services is the 2nd-largest sector (9,266 workers, LQ 1.53); Educational Instruction & Library occupations 5,913 (LQ 1.45, +20 forecast); 22.2% of the population is under 18; 44.3% of children live in single-parent families and 21.6% live in poverty — driving demand for child care and classroom support.

Action: Priority delivery of both credentials; evening options for working parents; partner with school districts and pre-K/Head Start providers; frame as community-need and economic-mobility pathways.

MODERATE ALIGNMENT — Active Delivery with Targeted Marketing

These programs have clear demand but smaller employment bases, structural constraints, or foundational/exploratory roles.

Residential Wiring

Data: Construction sector 4,349 (LQ 0.97) with a positive 1-year forecast (+41 — the largest construction job gain of any sector by count); Construction and Extraction occupations 3,204 (+30 forecast); avg construction wage \$63,325; energy-sector electrical maintenance demand from Utilities.

Action: Active delivery; a natural feeder for the NCCER Basic Electrical Systems Tech pathway proposed under the CCA grant; market both residential and industrial/energy electrical tracks.

Basic Heavy Equipment Operator

Data: Construction (+41 forecast, \$63,325); Transportation & Material Moving LQ 1.05; Agriculture/Forestry LQ 2.88; Mining, Quarrying, and Oil and Gas LQ 1.09 (\$89,302).

Action: Active delivery; market to construction, land-clearing, timber, and utility employers; strong wage story for a rural region.

Customer Contact Specialist

Data: Retail Trade is the 3rd-largest sector (8,905, LQ 1.24); Office and Administrative Support (7,218) and Sales and Related (6,481) are among the largest occupation groups; high separation demand keeps annual openings elevated.

Action: Active delivery; short-term stackable credential; market to retail, call-center, and service employers as a fast entry-to-work option.

Small Business Development Basics

Data: Management occupations 5,466 (\$112,600); Business & Financial Operations 3,840; Management of Companies sector +208 over 5 years (+14.0%); rural entrepreneurship and self-employment demand.

Action: Active delivery; evening/online; market to aspiring entrepreneurs and existing small-business owners across the nine counties.

Accounting Fundamentals

Data: Business & Financial Operations 3,840 (LQ 0.79, +133 over 5 years); Finance and Insurance sector 1,550; small-business density supports bookkeeping demand.

Action: Active delivery; evening/online; position for small-business and government back-office roles.

Introduction to Criminal Justice

Data: Protective Service occupations 2,084 (LQ 1.27 — above the competitive-advantage threshold, +197 over 5 years); Public Administration sector 4,218 (LQ 1.20).

Action: Active delivery; an LQ above 1.25 signals a genuine local advantage; market as a pathway into county, municipal, and correctional employment.

Salon and Spa Support Specialist

Data: Personal Care and Service occupations 1,937 (LQ 1.00, +297 over 5 years, +3.4%); Other Services sector 3,254 (LQ 1.03).

Action: Active delivery; self-employment / entrepreneurship angle; evening cohorts.

Basic sUAS – Drone Technology

Data: Agriculture/Forestry sector LQ 2.88 (2,575 workers) and Farming/Fishing/Forestry occupations LQ 2.54 (1,081) support precision-agriculture, crop-scouting, and timber-survey applications; Utilities (LQ 5.06) and Construction use drones for infrastructure and site inspection.

Action: Active delivery as an emerging-technology credential; market to agricultural, forestry, utility, and surveying employers; pair with agribusiness and construction pathways.

Engineering and Technology

Data: Architecture and Engineering occupations 881 (LQ 0.75, \$100,100); Computer and Mathematical 1,080 (LQ 0.46); serves as a foundational/exploratory pathway feeding manufacturing, utilities, and post-secondary transfer.

Action: Active delivery as a career-exploration and transfer-preparation pathway; connect to the Advanced Manufacturing and Mechatronics tracks; support dual enrollment.

WEAK ALIGNMENT — Regional/Online Delivery; Targeted Niche Marketing

These programs serve broader needs, but the nine-county labor market does not support a stand-alone local cohort on general demand alone.

Cybersecurity Fundamentals

Data: Computer and Mathematical occupations employ only 1,080 (LQ 0.46) and the Information sector 429 (LQ 0.31) — both well below national concentration; advanced IT employment is largely metro-based.

Action: Deliver online/regionally rather than as a county-specific cohort. One genuine niche exists: the region's exceptional Utilities concentration (LQ 5.06) and critical energy infrastructure create demand for operational-technology / critical-infrastructure security — pursue that angle with energy-sector employers specifically rather than broad-market IT.

Future Programs (CCA Grant) — Added Alignment

The five programs below would be added if EDGE CCA receives the CCA grant. The current catalog already aligns strongly with the region's largest sectors (health care, education, entry-level manufacturing, logistics, and agriculture/diesel). These additions target the two remaining high-wage, positive-forecast areas the current catalog only partially serves: advanced/automated manufacturing and energy-sector maintenance, and the skilled construction trades.

CCA-GRANT PROGRAMS — Alignment Each Program Adds

Advanced Manufacturing

Data: Manufacturing 7,452 (LQ 1.29, +286 over 5 years); Production occupations 5,145 (LQ 1.30); distinctive manufacturing clusters — Textile/Leather (LQ 2.03), Auto/Auto-related (LQ 1.53), Food Mfg. (LQ 1.15).

Adds: Elevates EDGE's manufacturing coverage from entry-level (welding, machining) to advanced/automated processes, deepening alignment with the region's 4th-largest sector and its high-concentration Production workforce.

Mechatronics Specialist

Data: Installation, Maintenance, and Repair 3,375 (LQ 1.18); Production LQ 1.30; the Utilities sector (LQ 5.06, \$163,975 avg wage) and the Coal/Oil/Power cluster (LQ 3.63, \$152,628, contracting ~0.8%/yr) require high-skill electro-mechanical maintenance technicians.

Adds: Creates the region's only dedicated energy-sector maintenance and transition pathway — the single highest-wage technical opportunity in the service area and the direct answer to the Coal/Oil/Power contraction. Largest single alignment gain of any proposed program.

NCCER Carpentry Fundamentals

Data: Construction posts the largest 1-year job forecast of any sector (+41) at a \$63,325 avg wage; Construction and Extraction occupations 3,204 (+30 forecast).

Adds: Builds dedicated capacity in the county's clearest high-wage construction-growth pathway, which the current catalog does not serve.

NCCER Basic Electrical Systems Tech

Data: Construction (+41 forecast, \$63,325) plus energy/industrial electrical demand from Utilities (LQ 5.06); Installation, Maintenance & Repair LQ 1.18.

Adds: Extends the current Residential Wiring program into a full construction and industrial/energy electrical pathway, connecting residential entry skills to higher-wage industrial work.

NCCER Plumbers Assistant

Data: Construction sector +41 forecast (largest by count) at \$63,325 avg wage; Construction and Extraction occupations 3,204.

Adds: Completes a three-trade NCCER construction cluster (carpentry, electrical, plumbing) matched to the sector's positive forecast and above-average wages.

Net Effect on Program Alignment

Adding these five programs moves EDGE CCA from strong alignment in most sectors to **comprehensive coverage of the region's highest-value pathways**. Specifically, the grant would (1) raise manufacturing coverage from entry-level to advanced and automated production, matching the sector's LQ 1.29 base and its high-concentration Production workforce; (2) stand up the service area's **only** dedicated energy-sector maintenance and transition pathway through Mechatronics — directly addressing the Utilities/Coal-Oil-Power concentration (LQ 5.06 / 3.63) and its projected contraction; and (3) build full NCCER construction-trades capacity (carpentry, electrical, plumbing) aligned to Construction's +41 job forecast (the largest of any sector by count) and \$63,325 average wage. Together, these additions close the two high-wage, positive-forecast gaps the current catalog only partially serves — substantially strengthening EDGE CCA's overall alignment with the nine-county labor market.

Critical Gaps — Strategic Opportunities

These represent the most important strategic opportunities for EDGE CCA to address workforce and community needs specific to the nine-county service area.

- 1. Energy Sector Transition & Pipeline.** The Coal/Oil/Power cluster carries an LQ of 3.63 (2,197 workers, \$152,628 avg wage) and the Utilities sector an LQ of 5.06 (\$163,975) — but the cluster is projected to contract ~0.8%/yr and Utilities employment is forecast to fall (-19 jobs, -1.0%). The proposed Mechatronics program, plus Diesel, industrial/residential Electrical, and Welding, serve as both transition credentials for incumbent energy workers and a pipeline for new technicians. Engage plant and utility employers now, and offer Prior Learning Assessment (PLA) for experienced workers.
- 2. Health Care — Scale to Meet the Region's Largest Sector.** With CNA, Practical Nursing Essentials, EMR, and Patient Care Technician now in the catalog, EDGE CCA covers the region's largest employer (10,780) and largest 1-year forecast by count (+113). Healthcare Support grew +578 over 5 years (+4.1%) with a +41 forecast (+1.3%, the fastest-growing support occupation); 13.4% of residents are uninsured. The remaining opportunity is capacity and stacking: expand clinical-placement partnerships with area hospitals, clinics, long-term-care, and EMS; build the CNA → PCT → Practical Nursing ladder; and add online theory to reach rural students.
- 3. Advanced Manufacturing Pipeline.** Manufacturing (7,452, LQ 1.29, +286 over 5 years) and Production occupations (LQ 1.30) anchor a diverse manufacturing base spanning Textile/Leather (cluster LQ 2.03), Auto/Auto-related (1.53), and Food Mfg. (1.15). The proposed Advanced Manufacturing and Mechatronics programs directly address this; stack them with Welding and Basic Machinist into a coherent career ladder.
- 4. Construction Skilled-Trades Capacity.** Construction posts the largest 1-year job forecast of any sector (+41) at a \$63,325 average wage. Grant-funded NCCER Carpentry, Electrical, and Plumbing credentials build local capacity; use dual enrollment with area high schools and track demand against energy-related construction cycles.
- 5. Agriculture and Forestry Workforce.** Agriculture/Forestry carries an LQ of 2.88 (\$48,969 avg wage) and Farming/Fishing/Forestry occupations an LQ of 2.54 (1,081 workers). Diesel Technology, Heavy Equipment Operator, and sUAS-Drone Technology all serve this base; add agribusiness and precision-agriculture framing and partner with local agricultural and timber employers.
- 6. Workforce Barrier Removal.** 56.4% labor force participation (vs. 63.3% nationally) and 76.5% prime-age participation (vs. 83.2%) point to a large untapped worker pool; 21.6% poverty, 20.2% SNAP receipt, and 13.7% without a high

school diploma are real barriers. Prioritize short-term stackable credentials, evening/weekend scheduling, HiSET/GED partnerships, and PLA for experienced workers without formal credentials.

- 7. Wage-Ladder Marketing.** Average wages (\$50,189) and median household income (\$54,695) sit well below state and national levels, yet the cost of living is 15.2% below the U.S. average. Build service-area marketing that shows a clear pathway from entry-level work to Utilities (\$163,975), Construction (\$63,325), Manufacturing (\$57,841), and Agriculture (\$48,969) wages that already exist locally — framing EDGE credentials as the bridge.
- 8. Online and Flexible Delivery.** The nine-county footprint is rural: only 7.1% work from home (vs. 15.1% nationally), the mean commute is 25.9 minutes, and 7.1% of occupied units have no vehicle. Deliver theory-heavy programs asynchronously online, stand up satellite sites for hands-on programs, and pursue transportation partnerships for students reaching campus and lab facilities.

Region Definition

The EDGE Academy Service Influence Area is defined as the following nine counties, matching the JobsEQ region and the Emanuel-centered service footprint identified by EDGE CCA:

Bulloch County, Georgia	Jenkins County, Georgia
Burke County, Georgia	Johnson County, Georgia
Candler County, Georgia	Toombs County, Georgia
Emanuel County, Georgia	Treutlen County, Georgia
Jefferson County, Georgia	

Per EDGE CCA, the core Emanuel-area service counties are Emanuel, Treutlen, Jenkins, Johnson, Candler, and Toombs; the bordering counties of Burke, Bulloch, and Jefferson complete the nine-county influence area.

Prepared for: EDGE College & Career Academy (EDGE CCA)

Source: JobsEQ®, Chmura Economics & Analytics. Employment and occupation data as of 2025Q4. Demographic data per American Community Survey 2020–2024. Gross Domestic Product per the Bureau of Economic Analysis through 2024. Program list per EDGE CCA (24 current credentials, including four recently added nursing/allied-health programs; five CCA-grant programs evaluated separately as future additions). Data do not auto-update; figures reflect the 2025Q4 JobsEQ Economic Overview for the EDGE Academy influence region.