

**Project Title**

**Mapping Education-to-Workforce Pathways in Comal and Guadalupe Counties:  
An Applied Research Study of Opportunity, Access, and Alignment**

**Proposed by**

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## I. Executive Summary

Comal and Guadalupe Counties are experiencing rapid population growth and economic expansion alongside significant shifts in labor market demand. Employers across key industries report difficulty finding workers with the right skills, while students and residents often face unclear or fragmented pathways from education and training into stable, well-paying jobs. At the same time, regional education and workforce partners are making substantial investments in programs and initiatives without a shared, evidence-based picture of how well these efforts align with current and emerging workforce needs.

This proposal outlines a regional, applied research study designed to map and analyze education-to-workforce pathways in Comal and Guadalupe Counties. The goal of the study is to provide regional leaders, educators, employers, and workforce organizations with a clear, actionable understanding of where alignment is strong, where gaps persist, and where targeted investments can have the greatest impact.

### **Purpose and Outcomes**

The proposed study will:

- Map existing educational, training, and credentialing opportunities across K–12, higher education, and noncredit workforce programs
- Analyze current and projected workforce demand in targeted industries, including high-demand and middle-skill occupations
- Identify structural, geographic, and access barriers that limit participation for students, workers, and underserved populations
- Deliver region-specific, actionable recommendations to strengthen education-to-workforce alignment and coordination

The final product will be a comprehensive regional workforce study modeled after successful efforts such as the Pflugerville Workforce Study, but tailored specifically to the economic, demographic, and institutional context of Comal and Guadalupe Counties.

### **Research Approach**

The study will use a mixed-methods, applied research approach that integrates quantitative labor market data with qualitative insights from regional stakeholders. Quantitative data will be provided where possible by the Seguin Workforce Development Corporation, the New Braunfels Chamber of Commerce, and public labor market sources. This analysis will examine employment trends, projected growth, wages, skill requirements, and automation or AI risk for priority occupations. An optional employer survey may also be used to capture near-term (12–48 month) workforce needs and hiring challenges.

In parallel, the research team will compile a comprehensive inventory of regional education and training programs, including K–12 CTE offerings, community and technical college pathways, university programs, apprenticeships, certifications, and noncredit workforce training.

Qualitative data will be collected through structured interviews and/or focus groups with employers, education and training providers, and workforce and economic development partners to contextualize quantitative findings and identify opportunities for improved coordination.

The project will be led by the Principal Investigator and supported by a team of graduate student researchers, allowing for cost-effective, rigorous data collection and analysis.

### **Deliverables and Timeline**

Key deliverables include:

- A kickoff and stakeholder engagement plan, including presentations to the RWEA board and partner organizations
- An interim data analysis and findings memo summarizing early insights on workforce demand, education supply, and key gaps
- A final Regional Workforce Study Report featuring clear data visualizations, industry-specific findings, an education-to-workforce alignment analysis, a workforce barrier analysis, and 4–5 strategic priorities with an implementation roadmap
- Presentations and briefings for regional stakeholders, including EDCs, workforce boards, and local governments

The project is designed to be completed over approximately 9–12 months, with flexibility built in to accommodate stakeholder availability and data access.

### **Value to the Region**

This study provides the region with a practical, evidence-based tool to guide decision-making related to education, workforce development, and economic growth. It offers a shared foundation for coordination across sectors, helps ensure that investments are aligned with real workforce demand, and supports strategies that expand opportunity and access for residents.

In addition to its applied value, the project will generate a peer-reviewed scholarly article using aggregated, anonymized data, providing national visibility for the region's collaborative workforce efforts while ensuring that all applied deliverables remain the primary focus.

Taken together, this approach delivers a high-quality, actionable workforce study that is immediately usable by policymakers, educators, employers, and regional partners—and positions Comal and Guadalupe Counties for more coordinated, equitable, and resilient workforce development.

## II. Purpose and Rationale

Comal and Guadalupe Counties are experiencing rapid economic growth alongside shifting labor market demands. As employers, educational institutions, and workforce partners respond to these changes, there is a need for a clear, evidence-based understanding of how educational pathways align with current and emerging job opportunities and where gaps or barriers persist.

This project proposes a regional workforce and education study that will:

- Map existing educational, training, and credentialing opportunities in the two counties
- Analyze current and projected workforce demand in targeted industries
- Identify barriers to access and participation for students, workers, and underserved populations
- Produce actionable, region-specific recommendations for education, workforce, and economic development partners

The proposed study mirrors the scope, rigor, and deliverable style of recent regional workforce reports, including the *Austin Metro Area Master Community Workforce Plan* and the *Pflugerville Workforce Study*, while being tailored specifically to Comal and Guadalupe Counties.

## III. Research Approach and Methodology

This project will use a mixed-methods, applied research design that integrates quantitative labor market data with qualitative stakeholder insights. A research team, including the PI and a group of 4-6 graduate student researchers, will conduct data collection and analysis.

### A. Data Collection

#### 1. Quantitative Data Collection

- Quantitative data will be provided by the Seguin Workforce Development Corporation and the New Braunfels Chamber of Commerce, where possible. This may include:
  - Labor market data analysis (employment trends, projected growth, wages, skill requirements)
  - Identification of high-demand, middle-skill, and emerging occupations, consistent with the targeted industries outlined in the regional Scope of Work
  - Review of automation and AI risk for key occupations
  - Geographic and demographic analysis (by county, city, and zip code where possible)
- Additional quantitative data may be included in the study through an optional employer survey focused on 12–48 month workforce needs, hiring challenges, and skill gaps

## 2. Secondary Data Collection

- Secondary, document-based data collection will include a comprehensive inventory of:
  - K–12 CTE programs
  - Community college and technical college programs
  - University pathways
  - Apprenticeships, certifications, and non-credit workforce training

## 3. Qualitative Data Collection

- Qualitative data will be collected through structured interviews and/or focus groups with local stakeholders, including:
  - Employers in targeted industries
  - Education and training providers
  - Workforce and economic development partners
- Interviews will be conducted by the PI and student researchers.
- Interview appointments will be arranged using established relationships between Seguin and New Braunfels workforce development offices, chambers of commerce, and local industry leaders.
- The PI will be responsible for scheduling interviews between graduate student research assistants and local stakeholders.

## **B. Data Analysis**

### 1. Quantitative Analysis

- Analyze labor market data provided by the Seguin Workforce Development Corporation, the New Braunfels Chamber of Commerce, and public sources using descriptive and comparative methods.
- Identify high-demand, middle-skill, and emerging occupations aligned with targeted industries in the regional Scope of Work.
- Assess wages, projected growth, skill requirements, and automation/AI risk for key occupations.
- Conduct a gap and alignment analysis comparing employer demand indicators with the current supply of education and training programs.
- Examine workforce barriers (e.g., childcare, transportation, housing affordability, participation gaps) using geographic and demographic analysis at the county, city, and zip code levels where available.
- If implemented, analyze employer survey data descriptively to identify 12–48 month workforce needs, hiring challenges, and perceived skill gaps.

## 2. Secondary Data Analysis

- Compile and categorize a comprehensive inventory of regional education and training programs, including:
  - K–12 CTE programs
  - Community and technical college pathways
  - University programs
  - Apprenticeships, certifications, and non-credit workforce training
- Classify programs by industry sector, credential type, and skill focus.
- Compare training supply to labor market demand to identify gaps, redundancies, and alignment opportunities.

## 3. Qualitative Data Analysis

- Analyze interview and/or focus group data using thematic analysis.
- Code data to identify themes related to:
  - Workforce and skill needs
  - Training capacity and alignment
  - Structural and access barriers
  - Opportunities for improved coordination between industry and education
- Use qualitative findings to contextualize and validate quantitative and secondary data results.

## 4. Integrated Findings

- Synthesize quantitative, secondary, and qualitative findings to produce a regional workforce gap and alignment assessment.
- Identify priority occupations, critical skill gaps, key barriers to participation, and opportunities for strategic investments in the workforce and education.

# IV. Key Deliverables

## A. Kickoff & Stakeholder Engagement Plan

- Present the project proposal to the RWEA board
- Pending RWEA board approval, present the project proposal to various city councils and boards as needed.

## B. Data Analysis and Findings Memo

- Provide an interim summary of workforce demand, education supply, and key gaps after the initial data collection and analysis.

## C. Final Regional Workforce Study Report

Modeled after the structure and accessibility of the Pflugerville Workforce Study, including:

- Executive summary

- Data visualizations and tables
- Industry-specific findings
- Education-to-workforce alignment analysis
- Workforce barrier analysis
- 4–5 strategic priorities with actionable recommendations
- Implementation Roadmap
  - Short-, medium-, and long-term actions
  - Clear roles for regional partners

#### **D. Presentation to Regional Stakeholders**

- Briefing for EDCs, RWEA, and partner organizations

### **V. Research Ethics and Scholarly Component**

In addition to the applied deliverables, this project will generate a peer-reviewed research article examining regional workforce alignment, cross-sector collaboration, and education-to-employment pathways.

Key commitments:

- Any scholarly publication will use aggregated, anonymized data
- Drafts and findings intended for publication can be shared with partners in advance
- The research will reflect positively on regional collaboration and innovation

This dual-purpose model allows the counties to benefit from:

- A high-quality applied study
- National visibility through academic dissemination of regional best practices

### **VI. Value to the Region**

This approach offers several advantages:

- Cost-effective expertise grounded in workforce research and technical communication
- A researcher who understands how reports are read, used, and implemented
- Strong alignment with regional goals for education, workforce development, and economic resilience
- Deliverables that are immediately usable by policymakers, educators, and employers

### **VII. Timeline**

The proposed research aligns well with the phased timeline already outlined in the Scope of Work, with active research and reporting occurring over approximately 9–12 months, depending on participant and stakeholder availability.

### **Phase 1: Project Initiation & Alignment (Month 1)**

#### Key Activities

- Formal project kickoff with RWEA
- Presentation of proposal to RWEA board
- Identification of key stakeholders and partners
- Finalize research scope, target industries, and data-sharing agreements
- Recruit and onboard 4–6 graduate student researchers
- Develop interview protocols, survey instruments (if applicable), and data management plan

#### Deliverables

- Kickoff & Stakeholder Engagement Plan
- Finalized research instruments and workflow

### **Phase 2: Secondary Data Inventory & Quantitative Data Acquisition (Months 2–3)**

#### Key Activities

- Collect and clean quantitative labor market data from:
  - Seguin Workforce Development Corporation
  - New Braunfels Chamber of Commerce
  - Public labor market sources
- Compile a comprehensive inventory of:
  - K–12 CTE programs
  - Community/technical college programs
  - University pathways
  - Apprenticeships, certifications, and non-credit training
- Design and distribute employer survey (if implemented)

#### Deliverables

- Preliminary education & training inventory
- Initial labor market dataset prepared for analysis

### **Phase 3: Quantitative & Secondary Data Analysis (Months 4–5)**

#### Key Activities

- Analyze labor market trends, projected growth, wages, and skill requirements
- Identify high-demand, middle-skill, and emerging occupations

- Assess automation and AI risk for priority occupations
- Conduct gap and alignment analysis between workforce demand and education supply
- Analyze geographic and demographic access indicators
- Analyze employer survey data (if applicable)

#### Deliverables

- Data Analysis and Findings Memo (interim report)
- Initial visualizations and tables for stakeholder review

### **Phase 4: Qualitative Data Collection (Months 5–6)**

#### Key Activities

- Schedule and conduct stakeholder interviews and/or focus groups:
  - Employers
  - Education and training providers
  - Workforce and economic development partners
- Transcribe and organize qualitative data
- Ongoing coordination with regional partners to ensure balanced representation

#### Deliverables

- Completed interview and/or focus group dataset
- Summary memo of emerging qualitative themes (internal)

### **Phase 5: Integrated Analysis & Synthesis (Months 7–8)**

#### Key Activities

- Conduct a thematic analysis of qualitative data
- Integrate quantitative, secondary, and qualitative findings
- Identify:
  - Priority occupations
  - Critical skill gaps
  - Structural and access barriers
  - Opportunities for improved regional coordination
- Draft strategic priorities and implementation options

#### Deliverables

- Integrated findings framework
- Draft strategic priorities and recommendations

## **Phase 6: Report Writing & Visualization (Months 9–10)**

### Key Activities

- Draft final Regional Workforce Study Report, including:
  - Executive summary
  - Industry-specific findings
  - Education-to-workforce alignment analysis
  - Workforce barrier analysis
  - 4–5 strategic priorities
  - Implementation roadmap (short-, medium-, long-term)
- Develop accessible data visualizations and tables
- Internal review and revision with partners as appropriate

### Deliverables

- Draft of final Regional Workforce Study Report

## **Phase 7: Finalization & Dissemination (Months 11–12)**

### Key Activities

- Final revisions and report production
- Present findings to:
  - RWEA
  - EDCs
  - City councils and partner organizations
- Develop presentation deck and briefing materials
- Identify opportunities for scholarly publication and dissemination

### Deliverables

- Final Regional Workforce Study Report
- Presentation to Regional Stakeholders
- Conference paper and/or journal article draft (scholarly component)

<b>Phase</b>	<b>Timeframe</b>	<b>Focus</b>	<b>Key Outputs</b>
<b>Phase 1: Project Initiation &amp; Alignment</b>	Month 1	Project setup, governance, and scope alignment	Kickoff & Stakeholder Engagement Plan; finalized research instruments
<b>Phase 2: Secondary Data Inventory &amp; Quantitative Data Acquisition</b>	Months 2–3	Data collection and program inventory	Education & training inventory; cleaned labor market datasets
<b>Phase 3: Quantitative &amp; Secondary Data Analysis</b>	Months 4–5	Workforce demand and alignment analysis	Interim Data Analysis & Findings Memo; draft visualizations
<b>Phase 4: Qualitative Data Collection</b>	Months 5–6	Stakeholder interviews and focus groups	Completed interview/focus group dataset; internal themes summary
<b>Phase 5: Integrated Analysis &amp; Synthesis</b>	Months 7–8	Cross-method synthesis and prioritization	Integrated findings framework; draft strategic priorities
<b>Phase 6: Report Writing &amp; Visualization</b>	Months 9–10	Report drafting and design	Draft Final Regional Workforce Study Report
<b>Phase 7: Finalization &amp; Dissemination</b>	Months 11–12	Review, presentation, and dissemination	Final report; stakeholder briefings; scholarly article draft