CECILIA Y. CUELLAR, PH.D.

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PROFESSIONAL SUMMARY

Applied labor economist (Ph.D., summa cum laude) with seven years of research and consulting experience. Builds empirical models of wages, employment, and gender gaps using selection correction, decomposition, and quasi-experimental methods, and assembles analysis-ready datasets from large public and proprietary sources such as the ACS, CPS, JobsEQ, and Mexican national surveys. Writes reports for public-sector, nonprofit, and economic development clients and defends methods before non-technical decision makers. Works in Stata, R, and Python, using AI coding tools to automate data workflows.

EDUCATION

Ph.D. in Economics, summa cum laude, Universidad Autónoma de Nuevo León (UANL), Mexico 2019–2023
Fields in Labor Economics and Applied Econometrics; secondary field in Applied Macroeconomics
Job market paper published in the Latin American Journal of Central Banking (2022)

M.Sc. in Economics, UANL 2017–2019

B.B.A. in International Business, UANL

MIT MicroMasters in Data, Economics, and Design of Policy 2025

PROFESSIONAL EXPERIENCE

Research Analyst, Hibbs Institute for Business & Economic Research, UT Tyler | Tyler, TX Oct 2022–Present
Applied economic research unit of the Soules College of Business, University of Texas at Tyler

- Lead quantitative research projects for economic development corporations, city leadership, and nonprofits, from scoping the question and assembling data through the final written report.
- Co-authored economic impact analyses, including an input-output assessment of the UT Tyler-Longview Small Business Development Center's contribution over 2020–2024, and a commissioned economic development report for the Wood County Economic Development Commission.
- Build and validate ACS and CPS microdata pipelines for 5+ econometric studies, documenting completeness and quality checks before modeling.
- Harmonized 2010 and 2018 SOC occupation codes across JobsEQ employment data and two AI exposure indexes for all 254 Texas counties, raising matched employment coverage from 95.2% to 98.7%.
- Author 20+ policy briefs and applied reports for 1,000+ professionals and policymakers; present results to economic development corporations and city councils and defend methods under questioning.
- Designed and built the Hibbs Economic & Community Dashboard, a public data visualization tool, and its underlying data pipeline using AI coding tools, with a student co-designer; maintain the pipeline.
- Lead the Research Leadership Fellows Program, supervising and mentoring four student researchers in quantitative methods, data workflows, and research communication.

Economic Consultant, Ascendo Strategies | Remote Jan 2022–May 2022; Sep 2023–Jun 2024
Economic development consulting engagements for regional planning agencies and city governments

- Contributed to inclusive industry-cluster and workforce analyses for the North Central Washington Development District (Washington State) and the Pioneer Valley Planning Commission (Massachusetts), analyzing location quotients, occupational wages, workforce accessibility, and economic inclusion.
- Developed the datasets, tables, and figures used in client deliverables across these engagements.
- Analyzed demographic, labor market, and industry conditions for the City of Socorro, Texas economic development strategy.
- Quantified retail leakage by comparing local consumer demand with retail sales across NAICS industries, separating unmet demand from spending inflows, and contributed recommendations on retail recruitment and business development.

Adjunct Faculty, Soules College of Business and Department of Economics, UT Tyler Sep 2023–Present

- Teach Business Statistics and Microeconomics; previously taught Macroeconomics and Economic Development; designed workshops on Behavioral Economics and Causal Inference for 90+ students.

ADDITIONAL EXPERIENCE

Economic Researcher, Centro de Investigaciones Económicas, UANL | Monterrey, Mexico Sep 2019–Sep 2022

- Led five stakeholder surveys with Mexican and U.S. partners on foreign investment strategy, feeding a study consulted by 200+ professionals and policymakers.
- Co-developed a social mobility measurement framework for Nuevo León (R, Stata), adopted by UANL for public reporting.
- Built consistent time series from large-scale employment survey microdata under a COVID-19 grant that produced a peer-reviewed publication.

International Trade Consultant, Habilidad Aduanera y Comercio Exterior | Monterrey, Mexico Feb 2016–Aug 2019

- Managed customs valuation analyses, trade compliance audits, and NOM quality certification for two manufacturing clients.

RESEARCH AND PUBLICATIONS

Job Market Paper

Employment, wages, and the gender gap in Mexico: Evidence of three decades of the urban labor market (with J. O. Moreno). *Latin American Journal of Central Banking*, 3(2), 100055, 2022.

- Harmonizes three national employment surveys into consistent quarterly series (1988:Q1 to 2019:Q4) for 16 metropolitan areas.
- Estimates Heckman selection-corrected participation and wage equations by gender and quarter, then applies Blinder-Oaxaca and Mulligan-Rubinstein decompositions to separate differences in characteristics from differences in returns.

Peer-Reviewed Publications

- Urban Public Transportation Access and Women's Labor Supply: Evidence from a Natural Spatial Experiment in Monterrey, Mexico (with J. J. Escobedo and J. O. Moreno). *Feminist Economics*, 31(2), 351–382, 2025.
- Household Debt in Mexico: A Study on the Determinants of the Financial Burden and Default Risk (with L. Farfán-Pérez and J. O. Moreno). *Economic Analysis Review*, 41(2), 43–71, 2026.
- Employment, Gender Gap, and the Mexican Industry: The Effect of COVID-19 on the Dynamic Structure and Recovery in the Labor Market (with J. O. Moreno and M. E. Ramos). In *Creating Economic Stability Amid Global Uncertainty*, Springer, 141–164, 2023.
- Informality, Gender Employment Gap, and COVID-19 in Mexico: Identifying Persistence and Dynamic Structural Effects (with J. O. Moreno). *Revista Mexicana de Economía y Finanzas*, 16(3), 2021.

Working Paper

- Why Women Study More but Earn Less: Gender Discrimination, Human-Capital Accumulation, and the Business Cycle (with M. Torres-Favela and J. O. Moreno). *SSRN Working Paper* No. 7570607, 2026. New Keynesian DSGE model with intra-household bargaining and Ben-Porath human capital. Posed the research question and led the calibration to OECD data.

Current Research

- The AI Divide in Texas: Exposure, Readiness, and Use across 254 Counties (with M. Reyes-Loya). County AI exposure, readiness, and use, with spatial tests and a model of expected versus estimated use. Presented at the AUBER 2026 Conference, Boston, MA.
- Human Reliance and AI Exposure by Occupation (with L. Moraes). Five-component index built from twelve O*NET 31.0 Work Context items and linked to AI Occupational Exposure scores through official SOC crosswalks, with explicit quality and coverage rules (783 of 867 occupations scored).
- Labor Market Effects of Automation Exposure: Evidence from East Texas Occupations. Propensity score reweighting on ACS microdata merged with the LMI Automation Exposure Score. Presented at the AUBER 2025 Fall Conference, Missoula, MT; results forthcoming.

Selected Applied Reports and Policy Briefs (Hibbs Institute)

- Reyes-Loya, M., C. Y. Cuellar, M. Young, S. Maldonado, and P. Gallardo-Toledo (2025). Economic Impact Analysis for the UT Tyler-Longview Small Business Development Center. *Hibbs Institute Technical Report*, April 2025.
- Reyes-Loya, M., and C. Y. Cuellar (2024). The Best Places to Raise a Family in Texas: Developing the Hibbs Institute Family Index. *Hibbs Institute Technical Report*, December 2024.
- Reyes-Loya, M., and C. Y. Cuellar (2026). Access to Capital in East Texas: How SBA Lending Supports Small Business. *Hibbs Brief*, May 2026.
- Reyes-Loya, M., and C. Y. Cuellar (2025). The New Reality of Work: Automation and AI in Tyler. *Hibbs Brief*, June 2025.
- Reyes-Loya, M., and C. Y. Cuellar (2024). Housing Affordability: How Big is This Problem in Tyler? *Hibbs Brief*, 2024.

TECHNICAL SKILLS

Statistical Software	Stata, R, Python, SQL (BigQuery), Excel, EViews; Git and GitHub
Econometric Methods	Regression analysis, Heckman selection correction, Blinder-Oaxaca and Mulligan-Rubinstein decomposition, propensity score matching and reweighting, difference-in-differences, VAR models, spatial autocorrelation tests, small-area estimation
Applied Economics	Economic impact analysis (input-output), industry cluster analysis (location quotients), retail leakage analysis, labor market analysis, survey design
Data and Visualization	ACS, CPS, INEGI national surveys, O*NET, BLS, BEA, JobsEQ, USDA ERS, Microsoft AI Diffusion data; data cleaning, harmonization, and validation; dashboard development; AI coding assistants

TRAINING, HONORS, AND SERVICE

- Certificates in Causal Inference (NABE), Agent-Based Modeling (UNU-MERIT, Maastricht University), and AI Automation and Agentic AI (UT Austin, 2026); Google Advanced Data Analytics (in progress).
- Consuelo Meyer L'eppe Best Research Paper Award (2020, 2021, 2022); CHIRP Fellowship Award, Texas (2023).
- Referee, Ensayos and Latin American Policy Journal; Member, CI-FIMEF Research Commission, IMEF (2026–2027).
- Board Member, Habitat for Humanity of Smith County (Oct 2024–Present), Treasurer (Aug 2025–Oct 2026); Leadership Tyler, Class 39.
- Spanish (native), English (fluent). Former member, Mexican National Karate Team (2007–2017).