COCC 2023-2027 Comprehensive Economic Development Strategy (CEDS)

Prepared by EY for the **INCOG Economic Development District**

Executive summary

In July 2022, the Indian Nations Council of Government (INCOG) hired EY to update the INCOG Economic Development District (INCOG EDD) five-year comprehensive economic development strategy. This strategy serves as the official planning document for the district, per the U.S. EDA's requirements. The strategy is intended to build upon success of previous plans, emphasize regional resiliency, and continue work toward economic equity and inclusion.

Our research found that while the Tulsa region possesses a reasonably strong economy with steady population, GRP, and labor force growth, impacts from the COVID-19 pandemic highlight the strategic emphasis needed on fostering regional resiliency. Though the regional economy has experienced decline in three of its largest industry sectors - energy, industrial machinery, and metalworking - the aerospace, advanced materials, and software/IT sectors each saw double-digit growth; showing promise for up-and-coming sectors that the region is making big bets on.

Reflecting both empirical research and takeaways from conversations with stakeholders, our recommendations for the INCOG CEDS involve strengthening availability and access to relevant workforce training opportunities, increasing equitable access to small business and entrepreneurship resources, and removing barriers to workforce participation, such as affordable housing, childcare and transportation options. These focuses are not mutually exclusive, however. Each goal within this CEDS is interdependent; progress in addressing economic equity will inevitably result in strengthened workforce development efforts, supporting target industry growth, and boosting economic resiliency.

The Tulsa region's partners in economic and community development involve education and workforce development providers, robust nonprofit organizations, collaborative municipal leadership, chambers, Native American tribal governments, entrepreneur support organizations, and many more. These partners have a history of collaboration and intentionality that will carry this work forward. As with many growing economies emerging from the COVID-19 pandemic, this point in time is a pivotal moment for the Tulsa region, and this strategy serves as a roadmap for navigating toward an even brighter future. The vision statement for an economic development strategy should boldly reflect the values and priorities of a community. It should paint a long-term picture of where the community could be in 20 years. Below is the refreshed vision statement for the INCOG EDD that incorporates diverse voices, aspirations and possibilities identified during the planning process.

The INCOG region collaborates in an inclusive manner to build a resilient, dynamic and equitable economy for all residents and industries.

In pursuit of realizing this vision for the region, INCOG should focus on short-term goals and strategies over the next five years. The following goals and strategies could help the region achieve its identified vision.

Economic growth and diversification: Economic development partners encourage growth in industry sectors that make the INCOG region more economically resilient and create equitable opportunities for its diverse people and geographies.

- 1. Support business development activities that diversify the region's industry mix and increase resiliency to industry-specific shocks.
- 2. Cultivate a vibrant small business and entrepreneurial ecosystem to support companies with an enhanced focus on priority sectors, such as advanced mobility and energy.
- 3. Support alignment and enhancement of programs to increase labor force participation among diverse populations and attract talent to the INCOG region.
- Continue to explore and activate opportunities for inter-regional collaboration, such as with Oklahoma City and Northwest Arkansas, to bolster the region's assets and enhance overall competitiveness in business attraction.

Talent and workforce development: The INCOG region offers accessible education and workforce training opportunities that are responsive to industry needs and provide resilient career pathways for workers of all ages.

Strategic priorities

- 1. Create and maintain a comprehensive, regional asset map of workforce and education institutions, offerings, and initiatives with a focus on those that support critical occupations.
- 2. Support efforts to connect regional industry and education partners in developing programs to address evolving training and credential needs.
- 3. Convene regional partners to create and enhance programs to increase labor force participation and economic mobility by addressing barriers to employment such as childcare, housing, transportation, and degree attainment.
- 4. Partner with educational institutions, workforce training providers, tribal nations, and other organizations to study future skill needs, identify upskilling and retraining opportunities, and promote associated programs to increase labor force resiliency.
- 5. Support growth and completion of bachelor's degree programs across the region, retention of graduates, and attraction of educated professionals from outside the region.

Infrastructure and site development: The INCOG region supports intentional, long-term investments in infrastructure to enable sustainable growth.

- 1. Support site and mega-site development with industry-supportive utilities and infrastructure to make the INCOG region more competitive in attracting targeted projects.
- 2. Expand and maintain the region's water and sewer, natural gas, and electricity infrastructure to support development in more geographic areas and provide reliable service for industrial and community development.
- 3. Study and expand transportation options including shared, public, and micro transit options to improve resident access to workforce and education facilities, employment centers, healthcare and commercial corridors.
- 4. Assess housing needs and identify opportunities to increase production and improve affordability across the region.
- 5. Leverage the Tulsa Regional Advanced Mobility Project to develop bestin-class infrastructure for advanced mobility research and development, testing, manufacturing and deployment.
- 6. Connect every home and business in the INCOG region to reliable, affordable and secure broadband.
- 7. Support timely implementation of interstate standards and signage for the US 412 corridor between I-35 in Oklahoma to I-49 in Northwest Arkansas.

Equity and history: Partners throughout the INCOG region thoughtfully engage underserved communities to increase social connectivity and address their economic development needs through inclusive partnership and investment.

Strategic priorities

- 1. Increase access to mentorship, capital, customers and other resources for rural, minority-owned, and other historically underserved businesses.
- 2. Support regional community-based organizations increase their knowledge of economic development best practices and their impact.
- Conduct a regional equity assessment to identify and prioritize economic development needs and barriers in both rural and urban areas.
- 4. Assist economic development organizations in historically-conscious and inclusive redevelopment efforts.
- 5. Partner with tribal nations to expand business creation, retention, expansion and attraction programs.
- 6. Identify and track economic development metrics that measure equitable growth and prosperity across the region.

Advanced mobility: The TRAM initiative positions the INCOG region as a global leader in advanced mobility through integrated support from area partners.

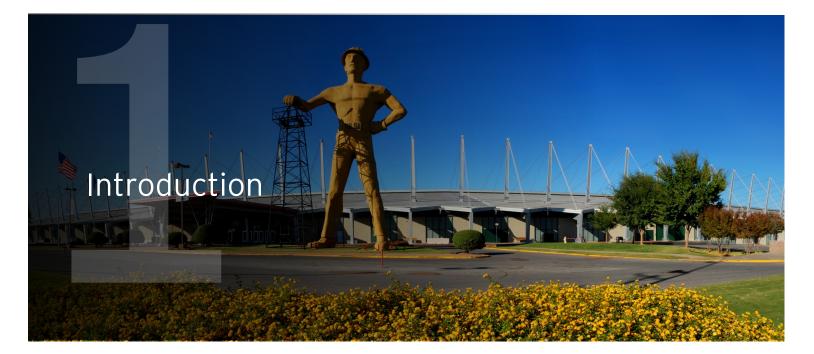
- 1. Sustain the momentum and funding created by the Build Back Better Regional Challenge through formalized, long-term partnerships to address specific goals and investment needs supporting the industry.
- Convene regional partners to create an industry-specific incubator for advanced mobility focused on commercializing technologies and growing regionally-based companies.
- 3. Identify and accelerate infrastructure projects that support advanced mobility development.
- 4. Co-create an attraction strategy with regional partners to draw advanced mobility businesses and their supply chains to the region.

Table of contents

Chapter title	Page
1 Introduction	7
2 Summary background	12
3 SWOT analysis	22
4 Strategic direction and action plan	29
5 Framework for evaluation and implementation	41
Appendix I – Detailed data	
Appendix II – Survey results	

Our Report may be relied upon by the Indian Nations Council of Governments for the purpose set out in the Scope section only pursuant to the terms of our engagement letter dated July 25, 2022. We disclaim all responsibility to any other party for any loss or liability that the other party may suffer or incur arising from or relating to or in any way connected with the contents of our report, the provision of our report to the other party or the reliance upon our report by the other party.

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In July 2022, the Indian Nations Council of Governments (INCOG) hired EY to assist in developing this Comprehensive Economic Development Strategy (CEDS) to serve as official economic development planning document for the Indian Nations Council of Governments Economic Development District (INCOG EDD) as per the requirements of the US Economic Development Administration (EDA).

About the INCOG EDD

The INCOG EDD serves as a regional resource for businesses, economic developers, community developers, and other planning organizations. Comprised of a team of skilled professionals housed within the Indian Nations Council of Governments, this non-profit agency is dedicated to sustaining regional economic growth and resiliency by fostering local, state, and federal collaboration across public and private sector lines. This may include collaboration with other organizations, such as workforce development groups, educational institutions, local governments, state governments, utility companies, community foundations, and convention and visitors bureaus. Successful coordination of this network of partners requires a shared vision for the region and collaboration on specific goals and actions, which are codified in this CEDS document.

INCOG lead the development of this CEDS for the 3-county INCOG EDD region, which is comprised of Creek, Osage, and Tulsa counties in Oklahoma. Recognizing that these counties interact with a larger regional economy, development of this strategy also included analysis of data and inclusion of stakeholders from Rogers and Wagoner counties in Oklahoma and the Tulsa Metropolitan Statistical Area (MSA), which includes Creek, Okmulgee, Osage, Pawnee, Rogers, Tulsa and Wagoner counties in Oklahoma.

About the CEDS

The CEDS contributes to effective economic development in America's communities and regions through a locally-based, regionally-driven economic development planning process. Economic development planning – as implemented through the CEDS – is not only a cornerstone of the U.S. Economic Development Administration's (EDA) programs, but successfully serves means to engage community leaders, leverage the involvement of the private sector, and establish a strategic blueprint for regional collaboration. The CEDS provides the capacity-building foundation by which the public sector, working in conjunction with other economic actors (organizations, individuals, firms, industries), creates the environment for regional economic prosperity and resiliency.

Developed through an inclusive process

The process of developing this CEDS document brought together stakeholders from across the INCOG region to identify a shared vision, specific goals, and strategic priorities. Building upon extensive review of existing plans and available data, the planning team was supported by a 41-member Strategy Committee representing key economic and workforce development organizations from across the region. Members of the Strategy Committee are listed below:

- Rose Washington-Jones, TEDC (Chair)
- Andrew Ralston, Tulsa Ports
- Andy McMillan, Cherokee Nation
- Arthur Jackson, Tulsa Regional Chamber of Commerce
- Ashli Sims, Build In Tulsa
- Brad White, City of Skiatook
- Candy Thomas, Osage Nation
- Chelsea Feary, City of Owasso
- Chris Benge, OSU-Tulsa
- Daniel Regan, Tulsa Airport Authority
- Dave Rowland, Oklahoma Manufacturing Alliance
- David Tillotson, City of Glenpool
- David Tollette, TYPROS

- Dr. Freeman Culver, Greenwood Chamber of Commerce
- Garrett Wright, Public Service Company of Oklahoma (PSO)
- Gerald Haury, City of Mannford
- Greg Pugmire, Creek County Industrial Authority
- Heather McDowell, OCAST
- Heather Turner, Jenks Chamber of Commerce
- Jake Manus, City of Bristow
- Jennifer Conway, Broken Arrow Chamber of Commerce
- Jennifer Hankins, Tulsa Innovation Labs
- Jennifer Rush, City of Broken Arrow
- Jim Sluss, OU-Tulsa

Strategy Committee members, continued

- Josh Miller, George Kaiser Family > Pam Polk, City of Collinsville Foundation
- Karen Keith, Tulsa County
- Kian Kamas, PartnerTulsa
- Krystal Crockett, Bixby Chamber of Commerce
- Laura Teague, City of Pawhuska
- Leon Warner, Creek County
- Mark Lawson, City of Sapulpa
- Mark Whinnery, City of Drumright > Wes Mitchell, Green Country
- Mike Carter, City of Sand Springs

- Phil Lakin, Tulsa Community Foundation
- Ron Dyer, Central Tech
- Steve Talburt, Osage County
- Susan Neal, The University of Tulsa
- Terra Branson, Muscogee Nation
- Tony Heaberlin, Tulsa Tech
- Workforce

Structure of this document

The INCOG Comprehensive Economic Development Strategy structure follows guidelines provided by the U.S. EDA and in addition to this introduction contains the following chapters:

Summary background: This chapter shares a summary background of key economic and demographic conditions in the INCOG region that relate to economic development. It also provides an overview of past and ongoing planning activities that provide a foundation for strategic direction in the CEDS.

SWOT analysis: The strengths, weaknesses, opportunities, and threats (SWOT) analysis provides detailed observations on current economic development conditions across the INCOG region. These findings are based on quantitative analysis of conditions in the region and qualitative perspectives shared by stakeholders. It provides context for identified goals and strategic priorities.

Strategic direction: This chapter provides an outline of economic development strategic direction for the INCOG region. This includes a long-term vision statement for the region, five-year goals that will advance the region towards that vision, and strategic priorities and actions that will help INCOG and collaborative partners achieve those goals.

Evaluation framework and implementation guide: The final chapter of the CEDS provides performance metrics that can be utilized to measure implementation of strategies and their impact on the community. It also includes a guide for how INCOG and collaborative partners can support ongoing coordination of activities through implementation of the CEDS.

Appendix I - Detailed data: This appendix contains charts showing detailed data covering economic and demographic conditions in the INCOG region and each county within the region.

Appendix II - Survey results: This appendix contains a summary of results from the CEDS community survey.

Defining and focusing on economic resiliency

Traditional measures of economic development success have focused on two data points: total job creation and capital investment. These metrics remain important however they may mask struggling subsectors in an economy and inequities in a community. For example, prior to the COVID-19 pandemic, the US economy experienced the longest period of uninterrupted growth in its history, but not all regions, industries, and populations saw the benefits of this growth. Many business owners, especially people of color, continued to face challenges accessing capital, utilizing incentives, and participating in the expanding economy.

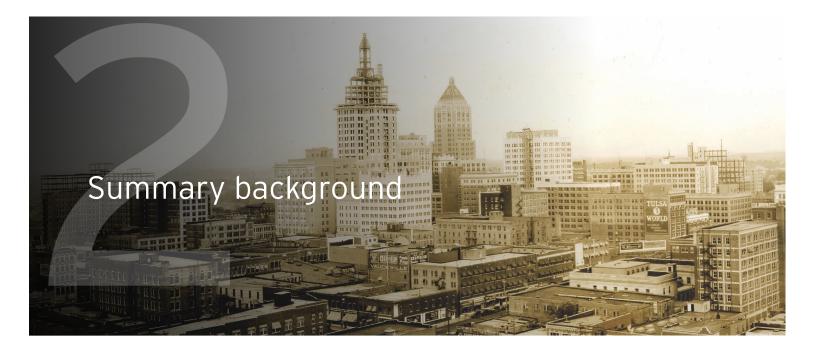
Recent data shows that cities that address these disparities experience accelerated overall economic growth. More demographically diverse and more economically inclusive cities appear more successful attracting and retaining talent, entrepreneurs, investment, and businesses. These cities often provide more equitable access to small business resources, education, capital, technical assistance, and more. These measures, in turn, make the overall economy more resilient.

The United States Economic Development Administration (U.S. EDA) defines resiliency as:

- The ability to recover quickly from a shock;
- The ability to withstand a shock;
- The ability to avoid the shock altogether

The COVID-19 pandemic brought clarity to what the modern-day building blocks of a resilient economy are. These elements include equitable access to resources and opportunity, a diverse industry base, social support networks for residents, housing and infrastructure that provides for growth, and transparency and collaboration among policymakers and economic developers alike.

As the Tulsa region's demographics and economy change, to remain competitive for talent, investment, and jobs, the region can consider how to address these topics through the strategy outlined in the following pages. This more resilient economy is one that features a diversity of growing industry clusters, support for startups and small businesses, and equitable access to opportunities for all people in the Tulsa region.



Introduction

This section of the CEDS provides a summary background of relevant economic development conditions and trends in the INCOG region. The background was developed through analysis of economic and demographic data, review of recently concluded research and planning efforts in the region, and discussions with stakeholders throughout the planning process.

This section discusses only a relevant sample of the data examined as part of the planning process. Appendix I: Detailed Data that accompanies this CEDS includes an extensive presentation of data collected and analyzed by EY. This data is referenced throughout the CEDS and provides a baseline understanding of recent trends and conditions in the INCOG region.

Much of the data shared in this appendix is from publicly available sources, including the US Census and US Bureau of Economic Analysis. Detailed employment data was purchased from Lightcast, an industry and workforce data modelling company. Venture capital data was purchased from Pitchbook.

In all contexts, the data is the most recently available at the time of this report's production.

Regional planning efforts

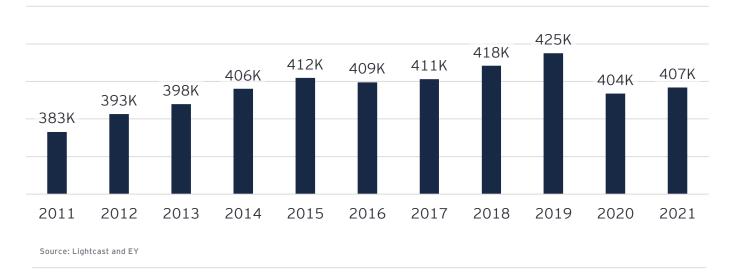
The INCOG region collaborates with a range of economic development partners within and outside the region. These organizations were included throughout the development of this CEDS, including on the steering committee, in interviews and focus groups, and direct meetings. When preparing this CEDS, the consulting team reviewed their planning efforts and discussed directly with many of the planning organizations.

Relevant economic development plans

- Tulsa Authority for Economic Opportunity Strategic Plan, 2022
- Tulsa International Airport Capital Improvement Plan, 2022
- City of Tulsa Mobility Innovation Strategy, 2022
- Tulsa's Future Strategic Plan, 2021
- Tulsa Ports Economic Impact Analysis, 2020
- Tulsa Innovation Labs Tech Niche Report, 2020
- Tulsa's Economic Development Framework, 2020
- INCOG CEDS, 2018
- Tulsa Regional Chamber Comprehensive Workforce Assessment, 2017
- INCOG Long Range Regional Transportation Plan, 2015

Economic trends

Employment, unemployment, wages, and gross domestic product are some traditional measures of the economic health of a region. They do not capture all integrated factors that contribute to a resilient economy, but they can provide an indication of whether a region is creating new economic opportunities.

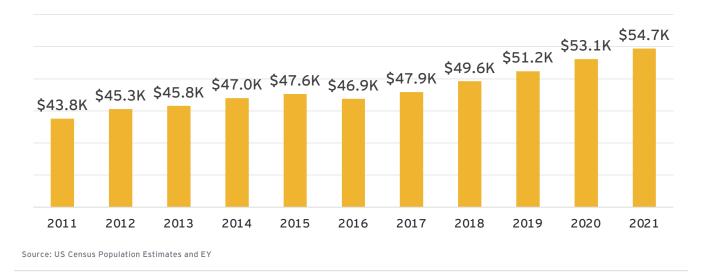


Total employment, INCOG region, 2011 - 2021

Over the past decade, the INCOG region's economy has grown relatively steadily, despite downturns in 2016 and 2020 due to impacts from volatility in the global oil and gas industry and the COVID-19 pandemic respectively. In both cases, the region began to recover jobs after only one year. The COVID-19 pandemic had the more significant impact on regional employment: leading to a loss of over 21,000 jobs in 2020. As of 2021, the region had only recovered 3,000 of these jobs.

From 2016 to 2021, the INCOG region lost 0.6% of jobs, as compared to a 0.3% loss in Oklahoma and a 1.3% gain in employment in the US overall. Prior to the pandemic, from 2016 to 2019, however, the INCOG region's employment grew 3.8%: faster than Oklahoma (2.9%) and only slightly slower than the US (4.4%).

Job losses in the region primarily occurred in Retail and Entertainment, two of the largest industry clusters and ones that were significantly impacted everywhere during the pandemic. Three of the region's more concentrated industry clusters also lost jobs during this period: Energy (-24% growth), Industrial machinery (-10%), and Metalworking (-10%). Losses in these and other industries were largely offset by strong growth in already concentrated industries such as Consumer Goods Manufacturing (32% growth), Construction (5%), Transportation & Logistics (4%), and Aerospace (99%), the region's fastest growing and most concentrated industry cluster with a location quotient (LQ) of 5.2. Many less concentrated but promising emerging industry clusters also grew rapidly during this period. These included Materials (14% growth), Agribusiness (14%), Research (8%), Biomedical (10%), and Software/IT (45%), the second fastest growing industry cluster in the region. These emerging clusters indicate that the INCOG region is becoming more economically diverse and contribute to greater resiliency.



Average annual wage, INCOG region, 2011 - 2021

Gross domestic product (GDP) in the INCOG region grew 16% from 2016 to 2019, outpacing regional employment growth. Trade, transportation & utilities (\$12.5 billion), Finance (\$8.3 billion), Manufacturing (\$6.6 billion), Professional services (\$6.2 billion), and Health care & social assistance (\$4.5 billion) were the biggest contributors to regional GDP in 2020.

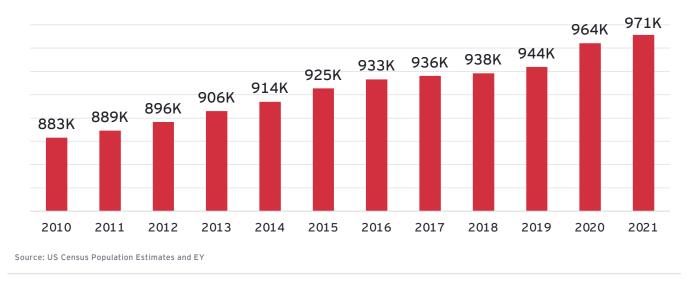
Employment in the INCOG region remains concentrated in Tulsa County, which contains 85% of regional jobs. From 2016 to 2021, however, Wagoner County experience the fastest job growth (7%), followed by Creek County (2%). Osage, Rogers, and Tulsa counties all lost employment over this period at -7.1%, -4.0%, and -0.5% respectively.

The INCOG region continues to recover jobs lost in 2020, but regional unemployment has fallen below pre-pandemic levels, reaching 3.4% in September 2022, barely higher than Oklahoma (3.3%) and the US (3.3%). Unemployment is slightly lower in Rogers (3.2%), Wagoner (3.2%), and Tulsa (3.3%) counties, and higher in Creek (3.8%) and Osage (3.8%) counties.

From 2016 to 2021, average annual wages grew steadily, likely partially due to many job losses occurring in lower wage industries. In 2021, the INCOG region had an average annual salary of \$54,700, higher than Oklahoma (\$51,300). The highest regional wages are offered in Tulsa County (\$55,900), followed by Rogers County (\$50,100), and Creek County (\$46,800).

Demographic trends

A region's economy fundamentally serves the people in the region and is made up of those people. Population growth drives demand for goods and services, which leads to the expansion of locally-serving businesses. Exporting businesses also benefit from growing populations, which reflect increased workforce availability to sustain their expansion.



Total population, INCOG region, 2010 - 2021

The INCOG region's population has grown steadily over the past decade, with a slight slow down in the growth rate from 2016 to 2018, which correlates with an employment downturn. From 2016 to 2021, however, the region's population grew 4.1%, more than double the growth rate in Oklahoma (1.5%) and faster than the US (2.8%).

The INCOG region's population is concentrated in Tulsa County (69% of regional population in 2021), followed by Rogers County (10%), Wagoner County (9%), Creek County (7%), and Osage County (5%). From 2016 to 2021, Wagoner County's population grew the fastest (8%), followed by Rogers Cunty (6%), Tulsa County (4%), and Creek County (1%). Only Osage County lost population over this period (a decline of 3%).

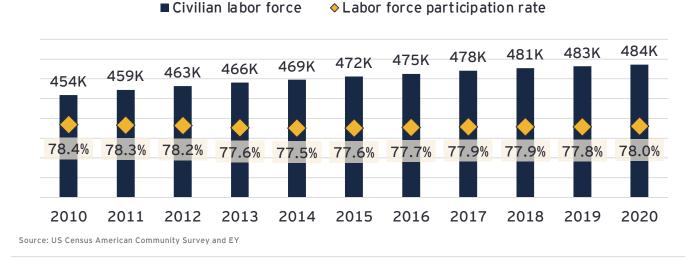
The INCOG region overall remains relatively young, with a median age of 37.1 in 2020, compared to 38.2 nationally. Tulsa County is the youngest in the region (35.8 median age), followed by Wagoner County (38.8), Rogers County (39.3), Creek County (40.4), and Osage County (43.0).

Racial diversity in the INCOG region roughly mirrors Oklahoma, with a slightly lower concentration of Black, Hispanic, and Asian residents than the US but a higher concentration of Native American residents. All regional population growth from 2016 to 2021 occurred in populations of color. The fastest growing racial groups in the region during this period were Asian (20% growth), Hispanic (18%), Other (13%), and Native American (7%), all of which outpaced national growth rates and making the INCOG region more diverse.

Talent and workforce development

Talent is one of the primary drivers of modern economic development. Businesses cite talent availability and workforce development capacity as major factors in location decisions. Regions with a growing labor force and ability to attract, train and retain individuals with the skills required by expanding industries are often more resilient.





The INCOG region's civilian working age (25 to 64 years old) labor force has grown steadily every year over the past decade, reaching 484,400 individuals in 2020. From 2015 to 2020, the region's working age labor force grew 3.1%, which was more than double the rate of growth in Oklahoma (1.4%) and faster than the US (2.2%).

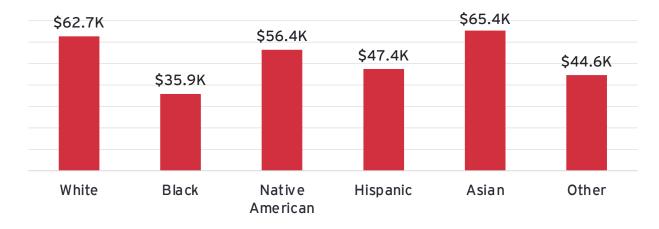
Labor force participation rates have held relatively steady at 78% over the past decade as well. This is above participation rates in Oklahoma (75%) and roughly the same as the national rate (78%). Within the INCOG region, Tulsa County has the highest working age labor force participation rate (79.2%), followed by Rogers County (78.9%), Wagoner County (78.2%), Creek County (70.7%), and Osage County (69.8%).

The INCOG region's population is better educated than Oklahoma but holds fewer bachelor's degrees and higher than the US average. In 2020, of regional residents over 25 years old, 90% have a high school degree, which is above the Oklahoma and US share of 89%. Similarly, 24% of INCOG regional residents over 25 have some college but no degree, compared to 23% in Oklahoma and 20% nationally. More than 9% of adult INCOG regional residents have an associate degree. These rates are relatively consistent across the region's counties.

In 2020, 29% of adults in the INCOG region had a bachelor's degree or higher: above Oklahoma 26% but below the US (33%). Tulsa County has the highest share (32%), followed by Rogers County (24%), Wagoner County (24%), Osage County (19%), and Creek County (16%).

Economic equity

Economic disparities in a region are often caused by barriers to equitable access to resources that prevent some individuals from fully participating in the economy. These barriers may be the result of policies, communication, geographic location, language, culture, or relationships. Addressing barriers and improving equitable access and outcomes make an economy more resilient.



Median household income by race, INCOG region, 2020

Source: US Census American Community Survey and EY

The INCOG region has a complicated racial history. The region is home to three tribal nations who provide significant contributions to its economy and culture, and each have unique needs and opportunities. The region was also home to one of the nation's most vibrant Black communities centered in the Greenwood area known as Black Wall Street. Following the 1921 Tulsa Race Massacre, Black communities experienced disinvestment and under-resourcing. Recently, Hispanic residents, who are often less well-educated, and Asian residents, who are often better educated, are the fastest growing segments of the regional population. Geographic differences also affect equity conditions, with more rural locations facing greater challenges in accessing jobs, education, housing, and healthcare.

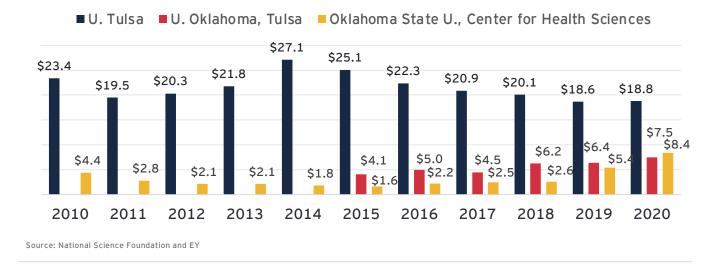
Education is one of the greatest determiners of individual economic success. In the INCOG region, racial disparities in household income, poverty, and unemployment roughly mirror educational attainment. In 2020, Asian adult residents held the largest share of bachelor's degrees or higher (36%), followed by White (32%), Other (21%), Black (20%), Native American (20%), and Hispanic (13%). The same year, Asian households had the highest median household income (\$65,400), followed by White (\$62,700), Native American (\$56,400), Hispanic (\$47,400), Other (\$44,600), and Black (\$35,900). Unemployment rates follow a similar order.

Notably, education is not the only factor influencing disparities, as seen in disproportionate negative outcomes for Black residents of the region. Access to business support resources, capital, public contracts, and other factors also contribute to economic equity.

Innovation and entrepreneurship

Innovation and entrepreneurship are fundamental drivers of economic opportunity. New and small businesses account for a high share of job creation in every region, and technological innovation creates new industries that can help grow and diversity a region's economy. Those regions with strong innovation economies are often more resilient to disruption.





Research universities are an important source of technological innovation, and the INCOG region benefits from the presence of three research institutions: the University of Tulsa, the University of Oklahoma-Tulsa, and Oklahoma State University Center for Health Sciences. Research and development expenditures are these institutions are relatively small compared to some of the nation's larger universities, but they are occurring in fields that relate to and support many of the region's expanding industry clusters. These include mechanical engineering, computer and information sciences, chemical engineering, life sciences, electrical engineering, and biological and biomedical engineering.

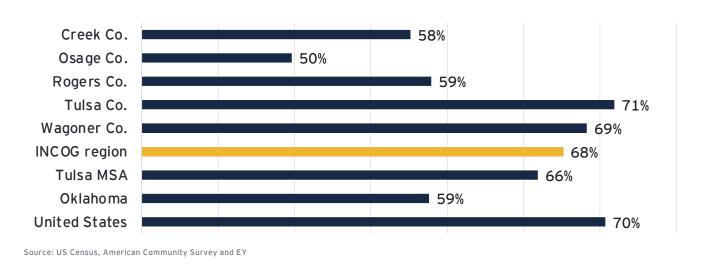
The associated education programs in these fields also provide important career pathways for local students and hiring opportunities for employers. With Tulsa Community College and Tulsa Tech, the INCOG region offers a specialized cluster in cybersecurity that is distinct from many other regions.

The region is home to many initiatives focused on expanding the entrepreneurial ecosystem, often with a focus on entrepreneurs of color. These include Build in Tulsa, Act Tulsa, Tulsa Remote, Black Tech Street, and more. The number of startups founded and kept in the region continues to grow as related capital, training and other resources expand.

According to Pitchbook, from 2017 to 2021, 59 venture capital deals were completed in the INCOG region, 31% of all deals in Oklahoma and totaling nearly \$61 million dollars.

Infrastructure

Utilities, transportation, broadband, housing and other infrastructure provide the structural framework on which a successful economy relies. Infrastructure needs are ever evolving based on industry and population demand, technological change, and age. Continuous planning, maintenance, and investment in infrastructure helps make a region more economically resilient.



Share of households with broadband service, 2020

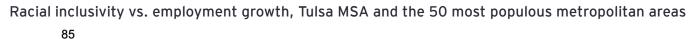
The INCOG region is home to an extensive network of highways, an international airport, and two inland ports. This infrastructure has enabled sizeable attraction and expansion wins in recent years, including the Sofidel plant, American Airlines maintenance facility, and the Whirlpool expansion. While significant investments have been made to modernize utility and transportation infrastructure, there is work to be done in positioning the region for population and business growth in terms of housing, connectivity, and transit.

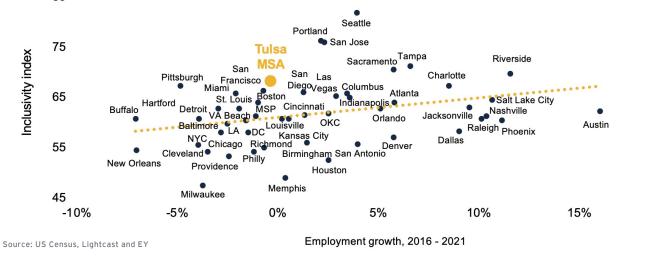
Housing availability and affordability is a concern for many residents of the INCOG region. Across the region, the number of housing units grew at approximately the same rate as population from 2015 to 2020 (3.9% growth in housing units). While this is a positive sign, it did little to alleviate strong demand for housing. The regional homeowner vacancy rate in 2010 was 1.6%, the lowest of the past decade, and the rental vacancy rate held steady at approximately 8% from 2010 to 2020. From 2015 to 2020, median home values increased 17% and median rent grew 14%. Over this same period, median household incomes grew 15%, which along with lower interest rates through 2020 kept housing relatively affordable. Rising interest rates and further declining available inventory since 2020 have likely acerbated housing concerns in the region.

The INCOG region nonetheless remains relatively affordable compared to the US average. In 2022, the region's overall cost of living index rating was 85.4 compared to 82.2 in Oklahoma and 100 nationally.

Economic resiliency

As noted in the introduction, economic resiliency is defined by the ability of a region to withstand a shock, recover quickly from a shock, and avoid a shock altogether. Economic resiliency can be measured in a variety of ways, including through a combination of industry diversity, economic disparities, available resources, communication channels, and strength of collaboration.





* Racial inclusivity index involves four factors: non-white vs. white median household income, non-white vs. white educational attainment at bachelor's degree and above, ratio of non-white workers in management positions relative to percentage of non-white workforce, non-white vs. white poverty rate

The INCOG region is growing more economically resilient but continues to face risk from shocks in a variety of forms. As seen during two economic downturns during the past decade, the region's economic growth is still heavily linked to the energy sector, exposing the economy to potential loss of jobs in the event of an industry downturn. Continued efforts to diversify the economy will help insulate the regional economy from impacts to specific industries, such as energy, aerospace, construction, and tourism.

Economic inequities between populations can also potentially slow growth and lower a region's resiliency. As seen in the chart above, employment growth correlates closely with inclusivity in regions across the US. This likely relates to two factors: regions that are growing economically create more inclusive opportunities for residents and businesses and talent are attracted to regions that are more inclusive. This can be seen in the rising number of companies evaluating local diversity, equity and inclusion as part of their site selection criteria. The Tulsa metropolitan statistical area scores relatively well in the inclusivity index, with an overall score of 66, but growth remains constrained due to other factors, likely including lack of industry diversity. When a wider share of population is economically successful, they face fewer risks to their well being during an economic shock.

This highlights one reason that efforts to address barriers to education, employment, business ownership, and economic opportunity broadly can make the region more resilient and increase its attractiveness as a destination for talent, businesses, and investment.



This chapter contains an in-depth analysis of the INCOG region's existing strengths and weaknesses alongside potential opportunities and threats facing the region. These findings reflect input from the Strategy Committee, interviews and focus groups with regional stakeholders, and background research conducted by the planning team.

The findings in this section lay a foundation of strengths on which INCOG and its regional partners can build to address challenges, increase resiliency to avoid threads, and activate promising opportunities. Specifically this helps identify and prioritize strategic actions in the near term.

The elements of the SWOT analysis can be defined as follows:

- Strengths: competitive advantages that can be leveraged to grow and sustain the regional economy
- Weaknesses: trends and characteristics that could impede the region's economic progress
- **Opportunities:** external factors that could improve the regional economy
- Threats: external forces that could negatively impact the regional economy

Strengths

- Prior to the COVID-19 pandemic, employment growth in the INCOG region was matching population growth (4.7% job growth and 4.1% population growth from 2014 to 2019). Jobs were growing twice as fast in the region compared to Oklahoma overall, and population was growing nearly three times faster than Oklahoma overall. This demonstrates the attractiveness of the region as an employment and population destination and its capacity to support expanding employment opportunities with new workforce.
- The INCOG region is home to a highly concentrated and rapidly growing Aerospace cluster and has emerging cluster strengths in Agribusiness, Software/IT, Biomedical, Research, and Materials.
- In 2021, the regional median household income (\$54,700) was higher than in Oklahoma overall (\$51,300), indicating the relative quality of jobs in the region which could help with talent attraction from surrounding areas.
- The region is seen as highly collaborative. Regional economic development partners have built trust in one another and work closely to advance shared objectives. The INCOG-led successful bid for a \$38.2 million grant to advance the Tulsa Regional Advanced Mobility Cluster through the U.S. EDA's Build Back Better Challenge is one demonstration of the strength of regional collaboration and has the potential for an \$8-9 billion economic impact.
- The INCOG region is growing more diverse, which is attractive to many potential employers. The fastest growing segments of the population by race from 2016 to 2021 were Asian (19%), Hispanic (18% growth) and Other races or multiple races (13%). All racial population groups grew over this time except White residents.
- Regional residents are better educated than in Oklahoma overall but less well educated than the US population. In 2021, 29% of the population over 25 held a bachelor's degree or higher compared to 26% in Oklahoma and 33% nationally. Within the region, 9% held associate degrees compared to 8% in Oklahoma and 9% nationally.
- The region's civilian labor force grew steadily through 2020, and workforce participation rates were the highest in 2020 (78.0%) since 2012 (78.2%).
- The INCOG region is relatively affordable, with a cost of living rating of 92.5 compared to a US benchmark of 100.
- Businesses engaged in the planning process cited the strength of regional transportation and utility infrastructure as a positive feature. Infrastructure planning has been done thoughtfully and proactively across much of the region.
- The INCOG region has numerous innovation assets that are supporting startups and entrepreneurs, including a significant focus on entrepreneurs of color.
- Remote Tulsa, Build in Tulsa, and related efforts to attract talent and investment to the region have been seen as successful.

Strengths, continued

- The INCOG region has strong existing assets to serve the advanced mobility industry cluster.
- Tulsa Port of Catoosa and Tulsa Port of Inola, logistics hubs with shovelready sites and infrastructure that favors aerospace and defense firms, are important assets for businesses in the region.
- Skyway36 Droneport and the UAV Testing Center, built at the former downtown airpark, Skyway36 boasts a 3,000 foot runway, hangar space, and Class G (uncontrolled) airspace for testing of unmanned vehicles, will help support growth of the Advanced Mobility cluster.
- Tulsa Innovation Labs is working to create a center of gravity for advanced aerial mobility companies - housing the region's Advanced Aerial Mobility Leadership Council and providing thought leadership in service of capital investment and entrepreneurship.
- Native American Tribal Governments are a unique asset for the region, work as collaborative partners, and invest heavily in economic development.
- Compared to both the state and the nation as a whole, the region's Native American population has higher level of associate's and bachelor's degree attainment. In addition to those made in education, the tribal governments have made significant investments in healthcare - the Cherokee Nation, for instance, invested a significant portion of its \$1.8B in ARPA funding in health infrastructure, behavioral health, vaccine education and outreach, and workplace health and safety improvements.

Weaknesses

- As of 2021, the INCOG region had still lost a higher share of jobs (4.3% lost) since the COVID-19 pandemic began than either Oklahoma (3.2%) or the United States overall (2.9%).
- The INCOG region also continues to remain vulnerable to disruptions in the oil and gas industry, as seen in employment downturns over the decades, including most recently from 2016 to 2017. Notably, the Energy cluster lost 24% of jobs in the region from 2016 to 2021.
- Housing availability and affordability is a concern across the region: within both urban and rural areas. In areas of Osage County, for example, existing housing supply is further limited by the use of single-family properties as short-term rentals in the tourism industry, which can exacerbate workforce challenges within that and other industries.
- While education levels in the INCOG region are above the state, bachelor's degree attainment still trails the nation and is well below many competitor regions. Economic developers have noted that this has created challenges when pursuing some business attraction opportunities.
- Workforce availability and skills remain a cited issue for many businesses. Despite strong growth in the available workforce, unemployment rates remain low (3.5% regionally in June 2022), leaving few workers readily available for hire by expanding businesses. Firms in the region's target industries may find it difficult to hire and recruit high-skill workers in the near term.
- Although the INCOG region has many educational institutions and workforce programs, some stakeholders have expressed that it can be difficult to know all the offerings available and to navigate them.
- High-speed broadband access remains an issue though for many parts of the region. Suboptimal connectivity has downstream impacts for education, workforce development, healthcare and industry growth.
- The region has limited R&D and commercialization infrastructure. While the University of Tulsa is classified as an R2 research institution, the INCOG region lacks a major university with a dedicated technology commercialization office to ease the transfer of intellectual property to the marketplace. This is not to say that new technologies are not being incubated; rather it signifies the uphill climb to commercialize new technologies at scale.
- Barriers to employment persist across the region, especially among minority populations. Public transit is not optimized to assist mobility-challenged residents in getting to and from places of employment. It was mentioned in a focus group that, "residents can't move freely around the city without access to a car," and that this serves as a common barrier to employment, alongside childcare availability.

Weaknesses, continued

- Numerous stakeholders cited a concern that community-based organizations lack the capacity to advance their missions.
- The region's physical infrastructure is not optimized for desired growth. The INCOG region continues to support investments in transportation and utility infrastructure, but many areas targeted for future commercial and industrial development require significant infrastructure investments to make them site ready.

Opportunities

- Through the investment of regional partners and the U.S. EDA, the Tulsa Regional Advanced Mobility Cluster initiative presents a tremendous opportunity to grow new, future-oriented and well-paying employment opportunities across the region.
- The designation of the U.S. 412 highway corridor as a congressionallydesignated future interstate highway has the potential to improve logistical access within the region and make recruitment of businesses easier, as proximity to interstate highways is a common site selection criteria.
- Expanded interregional economic development collaboration with Northwest Arkansas could further improve the INCOG region's ability to attract outside employers by showing an expanded labor pool and shared assets.
- Continued partnership with the region's tribal governments on economic and workforce development initiatives has the potential to increase access to education and new business and job opportunities throughout the region.
- A renewed focus on economic equity following the Centennial of the 1921 Tulsa Race Massacre has the potential to reduce racial disparities and transform the lives of regional residents of color. Many organizations and coalitions in the region have named economic equity as a priority, and their efforts are recognized by the community, but there is still room for improvement and scale of services that will lead to expanded impact on the lives of individuals.
- Development of sites near the Tulsa International Airport could lead to significant capital investment and job growth. The airport has nearly 1,500 acres of developable land on premises, however the natural gas infrastructure is a limiting factor to development. The land falls within a Tax Increment Financing (TIF) district, and improving the infrastructure to serve the site would position it well for marketing to major industrial and distribution opportunities.
- Attracting an intermodal terminal within the region would boost economic growth. Given the region's geographic location and existing logistics assets, attracting an intermodal terminal to enable the transfer of goods between trains, trucks and barges would spur economic growth and utilize the resources of the private sector.
- The region's inventory of industrial mega-sites, such as the Tulsa Port of Inola, the Robson Ranch property, and Mid-America Industrial Park, positions it well for substantial investment and job creation in the years to come.
- Better coordinating and aligning educational programs and workforce development initiatives could avoid duplication of efforts and increase access and utilization.

Threats

- If educational attainment does not continue to increase, the region may continue to lose out on business attraction opportunities that require advanced degrees.
- While population growth has been strong in recent years, workforce availability remains a concern that could slow future growth. Relatedly, the relatively small size of the region's labor pool may make it difficult to attract larger, mega projects to the region.
- Without expanded housing stock, the region may find it difficult to attract and retain workforce.
- If necessary improvements to US-412 are delayed, it could limit benefits of designation as a future interstate highway.
- Lack of industry diversification could continue to make the region susceptible to economic shocks.
- Modernization and automation of existing manufacturing businesses may disrupt the regional economy, especially if not combined with expanded training for new skills required by Industry 5.0.
- State-level social policies could have an impact on the region's success in attracting corporate location decisions as ESG continues to become more important.
- If racial disparities in education and access to jobs and new business opportunities persist, faith in renewed efforts to improve economic equity and outcomes for diverse populations may lessen, undermine their effectiveness, and make the region more susceptible to shocks due to the fragile economic position of many residents of color.
- Lack of continuity planning across the region's economic development organizations may interrupt momentum.

Strategic direction and action plan

The vision statement for an economic development strategy should reflect the values and economic priorities of a community. It should be bold and aspirational – painting a long-term vision of where the community could be in 20 years. At the same time, the vision statement should feel attainable and measurable so that the community feels that it's been tasked with a challenging, but achievable, goal.

The INCOG EDD's vision statement provides a guidepost to inform the creation of goals and strategies. It should also act as a reference point when making future decisions. When executing assignments, prioritizing investments, developing programs, and communicating about the region, INCOG and economic development partner organizations should ask whether their choices match this vision for the region.

Below is a vision statement for the INCOG EDD that incorporates diverse voices, aspirations and possibilities identified during the planning process. At its core, this vision is focused on aligning partners toward a more inclusive and resilient regional economy.

Vision statement

The INCOG region collaborates in an inclusive manner to build a resilient, dynamic and equitable economy for all residents and industries.

Economic development goals

The 2018 INCOG CEDS outlined five goal areas for the region: environment and quality of life, diversified business mix, quality job creation, entrepreneurship and innovation, and transportation infrastructure. The region's emphasis on these pillars provided a solid foundation for investment and stability amid the COVID-19 pandemic and subsequent economic shock. These goals also positioned INCOG and the EDD partners to play a specific role in many of the pillars: through pursuit of infrastructure-related federal funding, aligning workforce development partnerships with industry needs, and fostering the climate needed to spur new business growth.

The 2018 CEDS has been a successful strategy, and stakeholders expressed a desire to continue with foundational economic development work while exploring ways to emphasize economic resiliency, address new challenges and opportunities, and establish a cohesive strategy around the advanced mobility industry. Among stakeholders' goals, we heard common themes around ensuring accessibility and inclusion in workforce development efforts, raising educational attainment levels across the region, and diversifying the regional economy.

Based on these objectives, we recommend building upon the work of the 2018 CEDS by adjusting and re-envisioning the pillars to reflect the progress made toward previous objectives, the changing economic climate in a post-pandemic world, and the heightened emphasis on regional resiliency. Included in this CEDS are strategies and tactics to amplify workforce development efforts that grow attractive jobs, train individuals and connect them to profitable career pathways, and facilitate strategic investment in the Tulsa region. None of these goals stand separately - they should be considered mutually reinforcing focus areas that each help the INCOG EDD accomplish its mission and the region achieve its vision of inclusive resiliency. Additionally, within this updated CEDS, INCOG as an organization can play a more active role in activating the goals as a convener and catalyst.

- Economic growth and diversification
- Talent and workforce development
- Infrastructure and site development
- Equity and history
- Advanced mobility

Economic growth and diversification

Goal: Economic development partners encourage growth in industry sectors that make the INCOG region more economically resilient and create equitable opportunities for its diverse people and geographies.

The Tulsa region is home to a large and diverse industry base, traditionally anchored by the energy and aerospace sectors. While opportunities exist for advancement and innovation within these clusters, further diversification is encouraged to realize a greater degree of economic resiliency. Opportunities abound to further develop the clusters of advanced mobility, software and cybersecurity, and agribusiness through targeted partnerships and inclusive workforce development.

In addition to industry diversification, the network of support organizations to support early-stage business formation and growth is critical to the region's success. This is an area in which the Tulsa region is doing quite well - with assets like Tulsa Innovation Labs, Build In Tulsa, i2E, and the region's chambers of commerce all supporting through mentorship, business model refinement and access to capital. Evidence of success as it relates to economic diversification can be found in Energy Innovation Capital's Rose Rock Venture Fund - a collaboration between three Fortune 500 energy companies meant to find and invest in scalable energy innovations. INCOG and regional partners can continue supporting these initiatives, as well as identify gaps in service to entrepreneurs, to cultivate a robust startup and small business ecosystem.

Underpinning the partnerships and investments made in diversifying the regional economy should be the emphasis on inclusion and accessibility. This might mean forming partnerships with the region's Native American tribal governments in attraction and job creation endeavors, prioritizing investment in underserved parts of the community, and removing barriers to workforce development and participation for underinvested populations. The following strategies outline how the INCOG-EDD partners can begin raising the tide that will lift all ships toward a more resilient, inclusive regional economy.

Economic growth and diversification

- 1. Support business development activities that diversify the region's industry mix and increase resiliency to industry-specific shocks.
- 2. Cultivate a vibrant small business and entrepreneurial ecosystem to support companies with an enhanced focus on priority sectors, such as advanced mobility and energy.
- 3. Support alignment and enhancement of programs to increase labor force participation among diverse populations and attract talent to the INCOG region.
- 4. Continue to explore and activate opportunities for inter-regional collaboration, such as with Oklahoma City and Northwest Arkansas, to bolster the region's assets and enhance overall competitiveness in business attraction.

Talent and workforce development

Goal: The INCOG region offers accessible education and workforce training opportunities that are responsive to industry needs and provide resilient career pathways for workers of all ages.

Talent and workforce development is a key driver of a region's economic development prowess. While businesses require skilled workers and supportive educational programs, effective talent development also helps build a thriving, resilient community. Without the infrastructure needed to re-skill and upskill talent, the attraction of quality jobs to a community does not raise incomes or economic mobility.

This goal focuses on understanding the current and future workforce needs of the INCOG region's businesses, filling gaps in the educational system and pipeline to match those needs, and efficiently connecting individuals and businesses to educational resources and to each other.

Over the last five years, the INCOG region has experienced explosive employment growth in the aerospace, agribusiness, and software & technology sectors. As the region diversifies its employment base, ensuring appropriate pathways for both new and existing talent to be developed will prove important. As such, regional partners should focus on increasing collaborations across education and workforce partners and more effectively communicate the availability of programs to workers regionwide. Underpinning all strategies and initiatives should be a focus on inclusivity at every step, ensuring that learners of different ages, socioeconomic status, race and gender are positioned to take advantage of quality employment opportunity.

Talent and workforce development

- 1. Create and maintain a comprehensive, regional asset map of workforce and education institutions, offerings, and initiatives with a focus on those that support critical occupations.
- 2. Support efforts to connect regional industry and education partners in developing programs to address evolving training and credential needs.
- 3. Convene regional partners to create and enhance programs to increase labor force participation and economic mobility by addressing barriers to employment such as childcare, housing, transportation, and degree attainment.
- 4. Partner with educational institutions, workforce training providers, tribal nations, and other organizations to study future skill needs, identify upskilling and retraining opportunities, and promote associated programs to increase labor force resiliency.
- 5. Support growth and completion of bachelor's degree programs across the region, retention of graduates, and attraction of educated professionals from outside the region.

Infrastructure and site development

Goal: The INCOG region supports intentional, longterm investments in infrastructure to enable sustainable growth.

The Tulsa metro region is rife with infrastructure assets, boasting up-andcoming unmanned aerial systems testing ground, one of the nation's largest inland river ports, an international airport, rail, and highways. The region is centrally located in the United States and realizes substantial economic impact from distribution and logistics activity.

Infrastructure is an enabler. The Tulsa region has ambitious aspirations of increasing its population and workforce, diversifying its industry presence, and ensuring equity and inclusion in the region's economic success. The region's roads, bridges, ports, airports, housing inventory and internet infrastructure are all factors that can either limit or catalyze this economic success. For this reason, it is imperative that the region's partners continue to support infrastructure growth and modernization.

As an organization, INCOG is active in and well-positioned to support infrastructure modernization, by both convening key partners and attracting and deploying federal funding. The organization and its many regional partners are currently driving initiatives that will lead to increased access to internet connectivity, implementation of an interstate highway designation, and megasite development initiatives that attract large-scale development. This CEDS builds on that progress and introduces additional strategies to position the region for sustainable growth and create momentum far beyond the next five years.

Infrastructure and site development

- 1. Support site and mega-site development with industry-supportive utilities and infrastructure to make the INCOG region more competitive in attracting targeted projects.
- 2. Expand and maintain the region's water and sewer, natural gas, and electricity infrastructure to support development in more geographic areas and provide reliable service for industrial and community development.
- 3. Study and expand transportation options including shared, public, and micro transit options to improve resident access to workforce and education facilities, employment centers, healthcare and commercial corridors.
- 4. Assess housing needs and identify opportunities to increase production and improve affordability across the region.
- 5. Leverage the Tulsa Regional Advanced Mobility Project to develop best-inclass infrastructure for advanced mobility research and development, testing, manufacturing and deployment.
- 6. Connect every home and business in the INCOG region to reliable, affordable and secure broadband.
- 7. Support timely implementation of interstate standards and signage for the US 412 corridor between I-35 in Oklahoma to I-49 in Northwest Arkansas.

Equity and history

Goal: Partners throughout the INCOG region thoughtfully engage underserved communities to increase social connectivity and address their economic development needs through inclusive partnership and investment.

The Tulsa region has a rich and diverse history, both as the home to one of the country's most prosperous black communities in the early 1900s and as a region settled by the Cherokee and Muscogee (Creek) Tribes in the mid-1800s. The region's history is not without tribulation, however. In 1921, The Tulsa Race Massacre decimated the Greenwood District, which was once a center of Black commerce.

Today, the region is home to the Cherokee, Muscogee (Creek) and Osage Nations, who each contribute substantially to the region's economic and workforce development efforts. The Greenwood District is being revitalized, and the ecosystem to support minority entrepreneurs with mentorship, capital and connections has never been stronger. The work is far from finished, however.

In order to create a resilient and inclusive economy, regional partners must collaborate to eliminate disparities and barriers that hinder equitable outcomes for residents. These barriers exist in terms of the availability and quality of business assistance and mentorship, access to housing and transit, and pathways to quality training and employment.

Equity and history

Strategic priorities

- 1. Increase access to mentorship, capital, customers and other resources for rural, minority-owned, and other historically underserved businesses.
- 2. Support regional community-based organizations increase their knowledge of economic development best practices and their impact.
- 3. Conduct a regional equity assessment to identify and prioritize economic development needs and barriers in both rural and urban areas.
- 4. Assist economic development organizations in historically-conscious and inclusive redevelopment efforts.
- 5. Partner with tribal nations to expand business creation, retention, expansion and attraction programs.
- 6. Identify and track economic development metrics that measure equitable growth and prosperity across the region.

Advanced mobility

Goal: The TRAM initiative positions the INCOG region as a global leader in advanced mobility through integrated support from area partners.

With a bold vision for the future, the Tulsa Regional Advanced Mobility corridor successfully captured a major federal investment through the U.S. Economic Development Agency's Build Back Better Regional Challenge. This initiative involves the development of a cluster to support both manned and unmanned advanced aerial mobility, battery and electric vehicle manufacturing through the continuum of research, education and industrial aptitude. The coalition intends to lead the region in becoming a world-leading hub for advanced mobility.

In order to achieve its vision, TRAM will leverage both existing and new assets in urban, rural, and Native American Tribal land. Assets include the OSU Unmanned Systems Research Institute, the Osage Nation Skyway 36 testing grounds, the vast workforce employed in aerospace and defense, and the investment capital ready to deploy into new technologies and early-stage companies. Though TRAM includes many existing partners and well-defined initiatives, there is opportunity to augment the work in collaboration with a broad base of economic development partners.

The strategies outlined in this CEDS provide a framework to make targeted investments of time and resources into cultivating an advanced mobilityfocused startup scene, an attraction plan for companies along the supply chain of the advanced mobility industry, and to prioritize projects that enable more robust physical environs for firms and their testing needs.

Advanced mobility

Strategic priorities

- 1. Sustain the momentum and funding created by the Build Back Better Regional Challenge through formalized, long-term partnerships to address specific goals and investment needs supporting the industry.
- 2. Convene regional partners to create an industry-specific incubator for advanced mobility focused on commercializing technologies and growing regionally-based companies.
- 3. Identify and accelerate infrastructure projects that support advanced mobility development.
- 4. Co-create an attraction strategy with regional partners to draw advanced mobility businesses and their supply chains to the region.



Introduction

While developing a strategic plan of action is the first step, following through with implementation is the journey. Implementation, especially within the context of a regional CEDS, is a continuous process requiring the continuous coordination of myriad individuals and organizations. Circumstances and opportunities will undoubtedly change throughout the process, so the community must be agile and prepared to adapt strategies and renew focus based upon changing economic dynamics.

While INCOG is the designated Economic Development District by the U.S. EDA, there are numerous regional partners throughout Creek, Osage and Tulsa Counties that will directly carry out much of the implementation steps. As the lead implementation organization, INCOG will ensure progress and accountability toward goal realization through its role creating new initiatives, convening partners, or aligning existing activities.

Fortunately, the Tulsa region is known for being remarkably cooperative, which will be an incredible asset for INCOG and its partners. INCOG is already known as a convener in the community and is uniquely suited to gather a diverse group of partners and work toward a common set of goals for the community, as outlined in this CEDS. Continuing to intentionally bring together organizations to build a shared understanding of economic development priorities and collaborate to address needs will be important to continued success.

The following section provides guidance for INCOG and partner organizations to implement the CEDS. We provide an overview of best practices for garnering stakeholder involvement and alignment, next steps for implementation and the evaluation framework for determining progress toward achieving the region's vision, goals and objectives.

Goal: Economic growth and diversification							
Performance Measure	2017	2018	2019	2020	2021	Source	
Total employment	411k	418k	425k	404k	407k	Lightcast / US Bureau of Labor Statistics	
Annual total employment growth	0.4%	1.7%	1.6%	-5.0%	0.9%	Lightcast / US Bureau of Labor Statistics	
Gross regional product	\$52.02b	\$56.04b	\$56.76b	\$52.40b	-	US Bureau of Economic Analysis	
Average wage	\$47.9k	\$49.6k	\$51.2k	\$53.1k	\$54.7k	Lightcast / US Bureau of Labor Statistics	
Total number of businesses	23,596	23,608	23,797	23,753	-	US Census, County Business Patterns	
New business formations	118	12	189	-44	-	US Census, County Business Patterns	

Goal: Talent and workforce development							
Performance Measure	2017	2018	2019	2020	2021	Source	
Working age (25 - 65) labor force	478k	481k	483k	484k	492k	US Census, American Community Survey	
Working age (25- 65) labor force growth	0.4%	0.4%	0.5%	0.6%	1.6%	US Census, American Community Survey	
Unemployment rate	4.1%	3.3%	3.1%	6.5%	4.0%	US Bureau of Labor Statistics	
Working age labor force participation rate	77.9%	77.9%	77.8%	78.0%	77.9%	US Census, American Community Survey	
Total regional population	936k	938k	944k	964k	971k	US Census, Annual Population Estimates	
Internships and apprenticeships posted and filled in the region						Self-reported	
Share of population over 25 with a bachelor's degree: Total and by race	White: 30.6% Black: 19.8% Hispanic: 11.3% Native American: 19.2% Asian: 36.1%	White: 31.0% Black: 19.7% Hispanic: 12.1% Native American: 19.4% Asian: 37.4%	White: 31.8% Black: 19.5% Hispanic: 12.4% Native American: 20% Asian: 37.1%	White: 31.9% Black: 19.5% Hispanic: 13% Native American: 20.4% Asian: 35.7%	White: 32.9% Black: 19.8% Hispanic: 14.1% Native American: 21.1% Asian: 34.9%	US Census, American Community Survey	

Goal: Infrastructure and site development							
Performance Measure	2017	2018	2019	2020	2021	Source	
Miles of Interstate mileage constructed on U.S. 412						Self reported	
Net new water and sewer capacity on-line						Self reported	
Ridership rates for public transportation						Self reported	
Percentage of households with access to broadband	77.7%	80.6%	83.1%	86.1%	87.5%	American Community Survey	

Goal: Equity and history								
Performance Measure	2017	2018	2019	2020	2021	Source		
Median household income	\$52.9k	\$54.8k	\$56.4k	\$57.9k	\$60.4k	US Census, American Community Survey		
Unemployment rate (by race)	White: 4.8% Black (Tulsa County): 12.2% Native American (Tulsa County): 5.9% Hispanic (Tulsa County): 8.4% Asian (Tulsa County): 4.7%	White: 3.9% Black (Tulsa County): 10.7% Native American (Tulsa County): 6.5% Hispanic (Tulsa County): 4.1% Asian (Tulsa County): unavailable%	White: 3.9% Black (Tulsa County): 10.5% Native American (Tulsa County): 6.1% Hispanic (Tulsa County): 5.4% Asian (Tulsa County): unavailable	Unavailable	White: 5.4% Black (Tulsa County): 14.1% Native American (Tulsa County): 10.8% Hispanic (Tulsa County): 6.3% Asian (Tulsa County): 5.1%	American Community Survey		
Homeownership (by race)	White: 70.6% Black: 36.8% Native American: 61.1% Hispanic: 46.9% Asian: 55.2%	White: 70.4% Black: 36.7% Native American: 62.1% Hispanic: 48.3% Asian: 56.5%	White: 70.2% Black: 37.3% Native American: 62.4% Hispanic: 48.1% Asian: 56.9%	White: 70.5% Black: 38% Native American: 62.9% Hispanic: 50.4% Asian: 60.9%	White: 70.7% Black: 37.1% Native American: 64.6% Hispanic: 51.9% Asian: 60.2%	US Census, American Community Survey		

Goal: Advanced mobility						
Performance Measure	2017	2018	2019	2020	2021	Source
Advanced mobility firms with a presence in the region						Self reported
# of workers employed in advanced mobility industries						Self reported
# of new businesses launched in the advanced mobility sector						Self reported

Implementation committee

The creation of an implementation committee is essential to the success of the INCOG CEDS. Rather than create a new committee, we recommend keeping the existing strategy committee and transitioning their role to implementation. Members of this committee are already familiar with the strategy (having been a part of the strategic planning process), and their intimate knowledge of the strategy will be useful during implementation moving forward.

The implementation committee members can serve multiple roles, depending on their expertise and experience. Regardless of specific role, however, all committee members should champion and advocate for the strategy throughout implementation.

As necessary, smaller task forces can be formed throughout this process to implement tactics to take advantage of the experience and expertise of all members. For example, creating an Equity and History task force to bring together regional organizations operating in this space for regular meetings and strategy sessions can help advance goals and build greater alignment of efforts and resources. Where possible, the committee could utilize existing working groups, such as the one formed around the TRAM initiative, to serve this purpose for specific goals.

Individual members can also assist INCOG with implementing certain tasks, bringing diverse members of the community to the table, and consistently sharing updates with a wide network in the Tulsa region. To avoid meeting fatigue, task forces can be dissolved when necessary.

INCOG can serve as the administrative body, keeping the implementation committee fully up to date about the progress of implementation and of ways the committee members can step in and help. INCOG can also consider the makeup of the committee and ensure that it is representative of the Tulsa region. It is important that this committee have connections to diverse groups throughout the region to ensure this strategy is inclusive in its reach and service.

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