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# Impact of Next Level Broadband Connections and Indiana Connectivity Program Investments

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# About the Author

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Roberto Gallardo is the Director of the Purdue Center for Regional Development and an Associate Professor in the Agricultural Economics Department. He holds an electronics engineering undergraduate degree, a master's in economic development, and a Ph.D. in Public Policy and Administration. Gallardo has worked with rural communities over the past decade conducting local & regional community economic development, including use of technology for development.

He has authored more than 100 articles including peer-reviewed and news-related regarding rural trends, socioeconomic analysis, industrial clusters, the digital divide, and leveraging broadband applications for community economic development. He is also the author of the book "Responsive Countryside: The Digital Age & Rural Communities", which highlights a 21st century community development model that helps rural communities transition to, plan for, and prosper in the digital age. Dr. Gallardo is a TEDx speaker and his work has been featured in a WIRED magazine article, a MIC.com documentary, and a RFDTV documentary.

# Impact of Next Level Broadband Connections and Indiana Connectivity Program Investments


## Abstract

This study analyzed the impact of broadband capital investments in Indiana and six regions between 2019 and 2023. These investments totaled $609 million and included federal, state, and private funds deployed through two programs: the Next Level Broadband Connections and the Indiana Connectivity Program. The state and regional impacts were assessed by using the Regional Economic Models, Inc., or REMI PI+, a dynamic computable general equilibrium model customized for Indiana regions. These investments resulted on average close to 1,600 jobs per year, added about 800 in population, added 580 workers to the labor force, and close to $195 million to the state's Gross Domestic Product or GDP. In addition, variables such as race and ethnicity, earnings quintiles, educational attainment, and age group characteristics of those impacts are discussed.


## Background

Indiana announced an innovative broadband program in 2018 called the Next Level Broadband Connections (NLC) program and has completed three rounds of funding since the program launched. Three years later, in 2021, Indiana announced a second broadband program called the Indiana Connectivity Program (ICP). This program is on a 90-day rolling basis and as of 2023, it is now in its sixth round.

To estimate the regional impacts of these two programs and the private match secured over time, the Regional Economic Models, Inc., or REMI PI+ version 3.0.2 model was utilized. Total investments (including private sector matches) were used as inputs for each region. The Indiana Office of Community and Rural Affairs (OCRA) is the state agency responsible for managing these programs. Data was obtained from OCRA for each of their defined regions in the state (see **Figure 1**).

**Figure 1.** *OCRA Regions**


* Marion County is included in the West Central region.

## Data & Methods

An assumption was made that most funds awarded were spent that same year. Nominal (not adjusted for inflation) dollars were used for impact analysis. **Table 1** outlines the NLC & ICP expenditures by type and year. Total public investment between 2019 and 2023 was $257 million while total investment—including private match—was $609 million during this period (no investments were made in 2021). The spatial distribution of public and private funds in Indiana regions were diverse. The northeast region received a little more than one-fifth (21%) of total investments during this period followed by the southeast and northwest regions respectively. These three regions accounted for 62% of the total investments.

**Table 1.** *NLC & ICP Expenditures by Type, Year, and OCRA Region (Nominal Dollars).*

| Public Funds | | | | | | |
|---|---|---|---|---|---|---|
| **OCRA Region** | **NLC Rd1 (2019)** | **NLC Rd 2 (2020)** | **ICP (2022)** | **NLC Rd 3 (2023)** | **Total** | **% Total** |
| East Central | $1,450,010 | $2,270,683 | $1,014,245 | $9,991,595 | **$14,726,534** | **5.7** |
| Northeast | $440,284 | $263,136 | $468,025 | $32,487,994 | **$33,659,439** | **13.1** |
| Northwest | $3,464,358 | $4,956,347 | $461,396 | $56,147,732 | **$65,029,833** | **25.3** |
| Southeast | $7,749,283 | $19,783,003 | $333,464 | $25,594,912 | **$53,460,662** | **20.8** |
| Southwest | $15,059,762 | $11,968,234 | $642,492 | $16,050,072 | **$43,720,559** | **17.0** |
| West Central | $294,236 | $16,107,409 | $741,863 | $29,782,104 | **$46,925,611** | **18.2** |
| **State Sub-Total** | **$28,457,933** | **$55,348,812** | **$3,661,485** | **$170,054,409** | **$257,522,638** | |

| Private Match | | | | | | |
|---|---|---|---|---|---|---|
| **OCRA Region** | **NLC Rd1 (2019)** | **NLC Rd 2 (2020)** | **ICP (2022)** | **NLC Rd 3 (2023)** | **Total** | **% Total** |
| East Central | $1,026,227 | $942,947 | $1,071,925 | $9,991,595 | **$13,032,695** | **3.7** |
| Northeast | $117,038 | $524,203 | $2,372,100 | $91,000,098 | **$94,013,439** | **26.7** |
| Northwest | $3,284,953 | $8,500,434 | $2,159,512 | $46,187,765 | **$60,132,664** | **17.1** |
| Southeast | $9,848,353 | $37,832,999 | $320,618 | $24,792,024 | **$72,793,994** | **20.7** |
| Southwest | $8,632,019 | $25,175,940 | $426,296 | $18,059,758 | **$52,294,013** | **14.9** |
| West Central | $413,252 | $30,363,474 | $822,795 | $28,007,888 | **$59,607,409** | **16.9** |
| **State Sub-Total** | **$23,321,842** | **$103,339,997** | **$7,173,246** | **$218,039,128** | **$351,874,213** | |

| Total | | | | | | |
|---|---|---|---|---|---|---|
| **OCRA Region** | **NLC Rd1 (2019)** | **NLC Rd 2 (2020)** | **ICP (2022)** | **NLC Rd 3 (2023)** | **Total** | **% Total** |
| East Central | $2,476,237 | $3,213,631 | $2,086,170 | $19,983,191 | **$27,759,228** | **4.6** |
| Northeast | $557,322 | $787,339 | $2,840,125 | $123,488,092 | **$127,672,878** | **21.0** |
| Northwest | $6,749,311 | $13,456,781 | $2,620,908 | $102,335,497 | **$125,162,497** | **20.5** |
| Southeast | $17,597,636 | $57,616,001 | $654,082 | $50,386,937 | **$126,254,656** | **20.7** |
| Southwest | $23,691,781 | $37,144,174 | $1,068,788 | $34,109,829 | **$96,014,572** | **15.8** |
| West Central | $707,488 | $46,470,883 | $1,564,658 | $57,789,991 | **$106,533,020** | **17.5** |
| **State Total** | **$51,779,775** | **$158,688,809** | **$10,834,731** | **$388,093,537** | **$609,396,852** | |

Source: OCRA

After consulting with REMI specialists, the input category utilized was the industry detailed sales in the power and communications structures industry. Both, the input and impact years include 2019 through 2023 (note there is no data for 2021). **Table 3** shows a summary of the impacts of total broadband investments in the state during this period.

## Statewide Impacts

**Table 2** shows the results of the total investments during this period, public and private funds. On average per year, close to 1,600 jobs were created and roughly 580 workers were added to the labor force. Of these workers, close to 70% did not have a bachelor's degree and close to three-quarters earned in the middle to low compensation quintiles based on all occupations. These investments also impacted population in the state by increasing it on average by 798 new residents per year. Of this increased labor force, one-fifth were ages 16 to 24 and more than 85% were White, non-Hispanic. Lastly, these investments added about $194 million to the state's GDP per year equal to about 0.04% of the state's average GDP during this period.

**Table 2.** *Impact of Total Broadband Investments in Indiana*

| Year | 2019 | 2020 | 2022 | 2023 | Avg. | % | % St. |
|---|---|---|---|---|---|---|---|
| **Amount Invested (millions)** | **$51.7** | **$158.6** | **$10.8** | **$388** | **$152.3** | -- | -- |
| Employment | 542 | 1,736 | 195 | 3,907 | 1,595 | | -- |
| Educational Attainment | | | | | | | |
| No bachelor's degree | 427 | 1,353 | 143 | 3,046 | 1,242 | 77.9 | 69.0 |
| Bachelor's Degree and Above | 115 | 384 | 52 | 861 | 353 | 22.1 | 31.0 |
| Compensation Quintile | | | | | | | |
| Lowest 20% | 69 | 241 | 26 | 555 | 223 | 14.0 | 26.6 |
| Second 20% | 69 | 229 | 24 | 508 | 508 | 13.0 | 20.7 |
| Middle 20% | 266 | 816 | 85 | 1,834 | 1,834 | 47.0 | 21.6 |
| Fourth 20% | 55 | 175 | 29 | 393 | 393 | 10.2 | 9.2 |
| Highest 20% | 83 | 275 | 32 | 617 | 617 | 15.8 | 22.0 |
| Population | 169 | 684 | 566 | 1,774 | 798 | -- | -- |
| Labor Force | 162 | 532 | 374 | 1,254 | 581 | -- | -- |
| Age Groups | | | | | | | |
| Ages 16-24 | 35 | 124 | 77 | 266 | 126 | 21.6 | 13.8 |
| Ages 25-54 | 89 | 315 | 252 | 798 | 364 | 62.6 | 62.6 |
| Ages 55-64 | 21 | 50 | 32 | 99 | 51 | 8.7 | 16.5 |
| Ages 65 or older | 15 | 41 | 15 | 89 | 40 | 6.9 | 7.0 |
| Race & Ethnicity | | | | | | | |
| White, non-Hispanic | 147 | 464 | 321 | 1,043 | 494 | 85.1 | 78.9 |
| Black, non-Hispanic | 6 | 30 | 23 | 84 | 36 | 6.2 | 8.8 |
| Other, non-Hispanic | 5 | 19 | 13 | 54 | 23 | 3.9 | 4.8 |
| Hispanic | 4 | 18 | 16 | 74 | 28 | 4.8 | 7.5 |
| Value added (millions; 2023 Dollars) | $76 | $207 | $39 | $453 | $194 | -- | 0.04 |

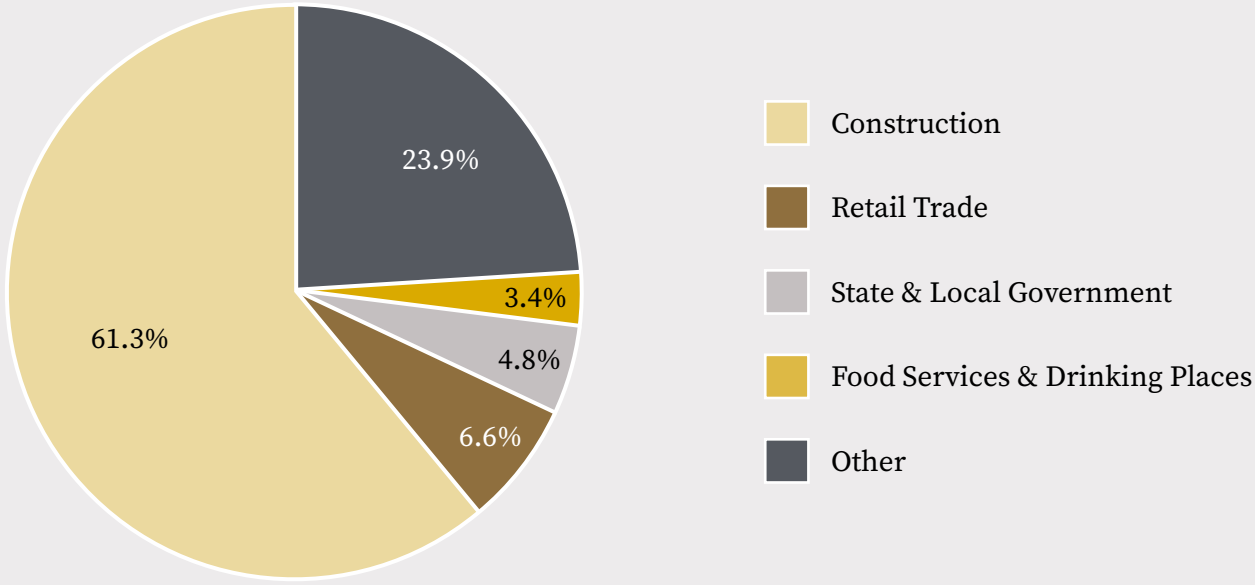
Source: REMI PI+

When compared to the state breakdown, the share of workers with less than a bachelor's was higher on average for the broadband investments than the state's overall share (without the program intervention) or 77.9% versus 69.1%. Likewise, the share of workers in the mid-to-low compensation quintiles for all occupations was also higher for the broadband investments compared to the state's overall distribution (74% versus 68.9%).

Regarding the labor force, a higher share of younger workers (ages 16 to 24) was added due to the broadband investments versus the state's overall share (21.6% versus 13.8%). On the other hand, a lower share of minority workers (black, non-Hispanic, other, non-Hispanic, and Hispanic) was added to the labor force compared to the state's overall share (14.9% versus 21.1%).

**Figure 2** shows jobs gained statewide on average by industry due to these broadband investments. As expected, most jobs went to the construction industry followed by retail trade, state and local government, and food services and drinking places. The top four industries accounted for more than three-quarters of jobs created because of the broadband investments.

**Figure 2.** *Share of Jobs by Industry Statewide*



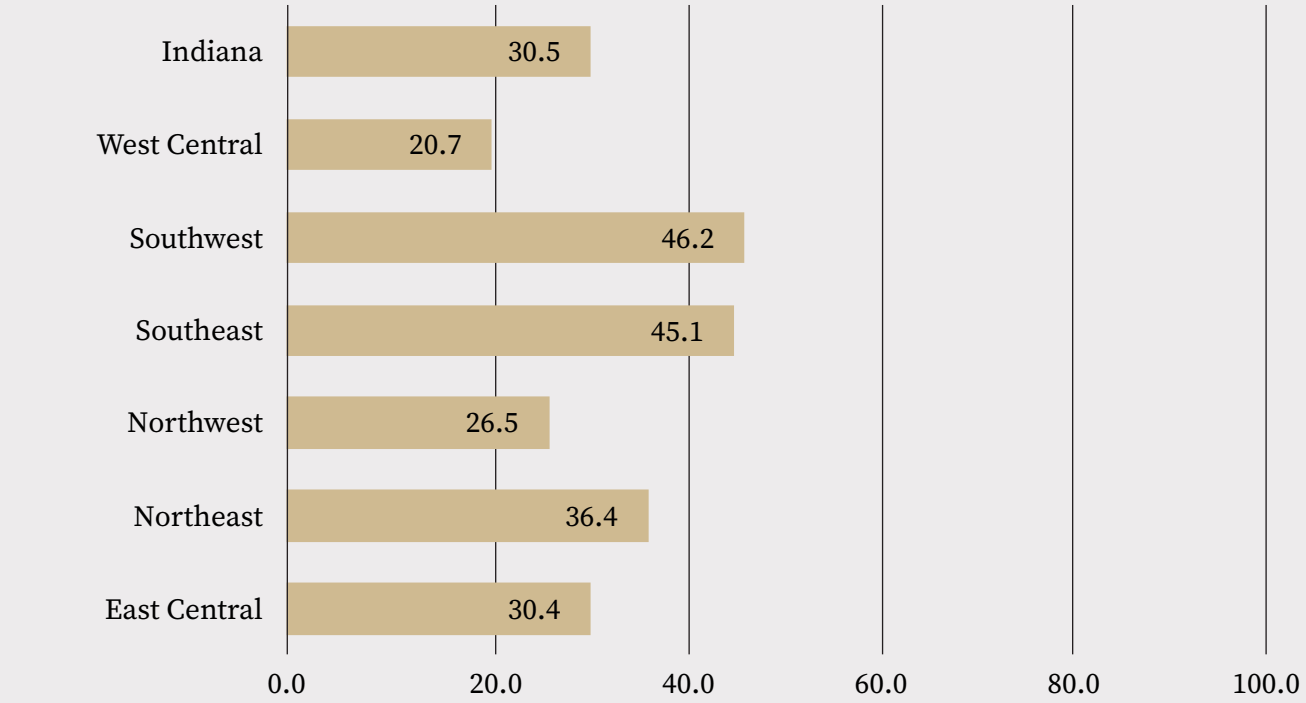

Source: REMI PI+

## Regional Impacts

As discussed above, data was analyzed across six regions in the state: northwest, northeast, west central, east central, southwest, and southeast. These regions are used by Indiana's Office of Community and Rural Affairs (see **Figure 1**) for outreach and programmatic purposes. This section discusses the impacts of these broadband investments for each region and the state. Please refer to **Appendix A** for detailed tables per region.

Specific socioeconomic characteristics for each of the regions are discussed to better understand the context under which these impacts took place. **Figure 3** shows the share of population by region that lived in rural areas based on the 2020 Census. Three of the six regions had a higher share of rural population compared to the state.

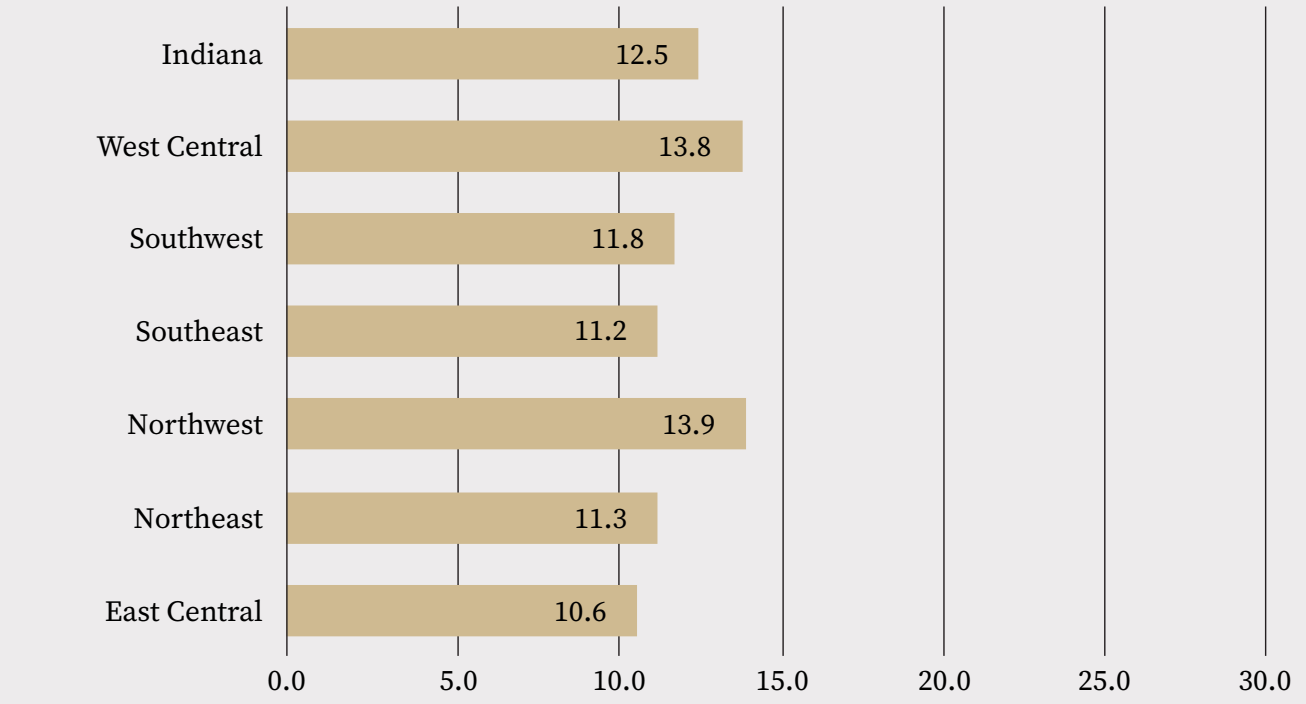
**Figure 3.** *Percent Rural Population 2020 by OCRA Region*




Source: 2020 Census

**Figure 4** shows the individual poverty rate for the state and each of the regions as of 2021. The northwest and west central regions had the highest rates at roughly 13.8% while the east central region had the lowest at 10.6%. The state's rate was 12.5%.

**Figure 4.** *Individual Poverty Rate 2021 by OCRA Region*




Source: U.S. American Community Survey 2017-2021

**Table 3** summarizes the 2019-2023 average impacts on selected variables for the state and OCRA regions. On average, there were a little more than $150 million invested per year in Indiana including federal, state, and private funds during this period. The northeast region had the highest average investment while the east central region had the lowest. Regarding value added to the GDP or GRP (Gross Regional Product), the west central region had the highest average of $48 million per year added to the GRP while the east central had the lowest with $14 million per year. As a share of a region's GRP, the southeast region had the highest share with 0.09% (shown in parenthesis).

**Table 3.** *Summary of Broadband Investment Impacts per OCRA Region; 2019-2023 average*

| | Indiana* | Northwest | Northeast | West Central | East Central | Southwest | Southeast |
|---|---|---|---|---|---|---|---|
| Amount Invested (Millions) | $152.3 | $31.2 | $31.9 | $26.6 | $6.9 | $24 | $31.5 |
| Employment | 1,595 | 302 | 304 | 342 | 81 | 190 | 296 |
| Population | 798 | 127 | 109 | 164 | 66 | 163 | 171 |
| Labor Force | 581 | 112 | 69 | 124 | 50 | 111 | 115 |
| Value added (Millions; 2023 $) | $194 | $35 (0.04) | $34 (0.04) | $48 (0.07) | $14 (0.02) | $29 (0.07) | $34 (0.09) |

* Regional amounts will not add up to Indiana's total because they are averages

## Conclusions

The COVID-19 pandemic shed a bright light on the digital divide. Fortunately, Indiana had already launched an innovative broadband program by the time the pandemic hit. A second program was added shortly after the pandemic resulting in a significant amount of money invested in broadband over the past four years. This study has quantified the impacts of these investments and found that jobs were created, workers were added to the labor force, population increased, and value was added to regional GRP and state GDP.

However, the digital divide has not been bridged. While these investments have moved the needle in the right direction (more than 70,000 homes and businesses now have or will have internet connectivity as a direct result of these programs), work remains to be done. More importantly, these investments have positioned the state to maximize additional federal dollars in the pipeline for broadband investment. The values added of affordable, high-speed, and reliable connectivity to other areas such as education, health, etc., were not quantified. It is evident that broadband increases efficiencies in almost every socioeconomic factor.

Note that impacts are shown only for Indiana and the host regions. The spillovers on the rest of the U.S. are not included for simplicity purposes. When a capital investment happens resulting in the construction and infrastructure development in a particular region, the remainder of the state can receive some spillover of the benefits such as labor force or suppliers of the raw materials, etc.

As more people get connected and learn the necessary skills to participate fully in this increasingly digitizing society and economy, the value added of these investments will be of magnitudes much higher in addition to the impacts included in this report. Future research can help document these impacts.

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# Appendix A

**Table A1.** *Impact of Total Broadband Investments in the Northwest Region*

| Year | 2019 | 2020 | 2022* | 2023 | Avg. | % | % Region | % State |
|---|---|---|---|---|---|---|---|---|
| **Amount Invested** | **$6.7** | **$13.4** | **$2.6** | **$102.3** | **$31.2** | -- | -- | -- |
| Employment | 68 | 142 | 29 | 968 | 302 | -- | -- | 18.9 |
| Educational Attainment | | | | | | | | |
| No bachelor's degree | 54 | 111 | 22 | 758 | 236 | 78.3 | 69.2 | 69.0 |
| Bachelor's Degree and Above | 15 | 32 | 7 | 211 | 66 | 22.0 | 30.8 | 31.0 |
| Compensation Quintile | | | | | | | | |
| Lowest 20% | 9 | 20 | 3 | 135 | 42 | 13.8 | 27.7 | 26.6 |
| Second 20% | 9 | 19 | 3 | 123 | 39 | 12.8 | 20.0 | 20.7 |
| Middle 20% | 33 | 67 | 14 | 463 | 144 | 47.8 | 22.1 | 21.6 |
| Fourth 20% | 7 | 14 | 4 | 98 | 31 | 10.2 | 9.5 | 9.2 |
| Highest 20% | 10 | 22 | 5 | 149 | 47 | 15.4 | 20.7 | 22.0 |
| Population | 22 | 58 | 51 | 375 | 127 | -- | -- | 15.8 |
| Labor Force | 22 | 55 | 40 | 330 | 112 | -- | -- | 19.3 |
| Age Groups | | | | | | | | |
| Ages 16-24 | 4 | 10 | 7 | 63 | 21 | 18.8 | 14.9 | 13.8 |
| Ages 25-54 | 13 | 33 | 27 | 201 | 69 | 61.3 | 61.5 | 62.6 |
| Ages 55-64 | 3 | 7 | 4 | 34 | 12 | 10.7 | 16.5 | 16.5 |
| Ages 65 or older | 1 | 4 | 1 | 30 | 9 | 8.1 | 7.1 | 7.0 |
| Race & Ethnicity | | | | | | | | |
| White, non-Hispanic | 17 | 44 | 31 | 256 | 87 | 77.9 | 72.0 | 78.9 |
| Black, non-Hispanic | 2 | 5 | 4 | 28 | 10 | 8.7 | 10.7 | 8.8 |
| Other, non-Hispanic | 1 | 2 | 1 | 15 | 5 | 4.3 | 4.5 | 4.8 |
| Hispanic | 2 | 5 | 4 | 32 | 11 | 9.6 | 12.8 | 7.5 |
| Value added (2023 Dollars) | $9 | $17 | $5 | $109 | $35 | -- | 0.04 | -- |

Source: REMI PI+; totals may not add up due to rounding

Note: dollar amounts are in millions; there was no data for 2021

**Table A2.** *Impact of Total Broadband Investments in the Northeast Region*

| Year | 2019 | 2020 | 2022* | 2023 | Avg. | % | % Region | % State |
|---|---|---|---|---|---|---|---|---|
| **Amount Invested** | **$0.5** | **$0.7** | **$2.8** | **$123.4** | **$31.9** | -- | -- | -- |
| Employment | 10 | 24 | 28 | 1,155 | 304 | -- | -- | 19.1 |
| Educational Attainment | | | | | | | | |
| No bachelor's degree | 8 | 18 | 22 | 913 | 240 | 79.0 | 71.2 | 69.0 |
| Bachelor's Degree and Above | 2 | 6 | 6 | 242 | 64 | 21.0 | 28.8 | 31.0 |
| Compensation Quintile | | | | | | | | |
| Lowest 20% | 2 | 5 | 4 | 152 | 41 | 13.4 | 24.5 | 26.6 |
| Second 20% | 2 | 5 | 3 | 146 | 39 | 12.8 | 22.9 | 20.7 |
| Middle 20% | 4 | 8 | 14 | 568 | 149 | 48.8 | 23.6 | 21.6 |
| Fourth 20% | 1 | 2 | 3 | 113 | 30 | 9.8 | 7.7 | 9.2 |
| Highest 20% | 2 | 4 | 4 | 176 | 47 | 15.3 | 21.2 | 22.0 |
| Population | 3 | 9 | 17 | 408 | 109 | -- | -- | 13.7 |
| Labor Force | 2 | 6 | 10 | 256 | 69 | -- | -- | 11.8 |
| Age Groups | | | | | | | | |
| Ages 16-24 | 1 | 1 | 3 | 64 | 17 | 25.2 | 13.8 | 13.8 |
| Ages 25-54 | 1 | 4 | 7 | 166 | 45 | 65.0 | 62.0 | 62.6 |
| Ages 55-64 | 0 | 1 | 0 | 14 | 4 | 5.5 | 16.4 | 16.5 |
| Ages 65 or older | 0 | 0 | 0 | 12 | 3 | 4.4 | 7.7 | 7.0 |
| Race & Ethnicity | | | | | | | | |
| White, non-Hispanic | 2 | 6 | 9 | 215 | 58 | 84.7 | 82.0 | 78.9 |
| Black, non-Hispanic | 0 | 0 | 0 | 12 | 3 | 4.4 | 5.1 | 8.8 |
| Other, non-Hispanic | 0 | 0 | 0 | 10 | 3 | 3.6 | 4.3 | 4.8 |
| Hispanic | 0 | 0 | 1 | 18 | 5 | 6.9 | 8.6 | 7.5 |
| Value added (2023 Dollars) | $2 | $3 | $3 | $126 | $34 | -- | 0.04 | -- |

Source: REMI PI+; totals may not add up due to rounding

Note: dollar amounts are in millions; there was no data for 2021

**Table A3.** *Impact of Total Broadband Investments in the West Central Region*

| Year | 2019 | 2020 | 2022* | 2023 | Avg. | % | % Region | % State |
|---|---|---|---|---|---|---|---|---|
| **Amount Invested** | **$0.7** | **$46.4** | **$1.5** | **$57.7** | **$26.6** | -- | -- | -- |
| Employment | 36 | 555 | 52 | 725 | 342 | -- | -- | 21.4 |
| Educational Attainment | | | | | | | | |
| No bachelor's degree | 26 | 424 | 37 | 549 | 259 | 75.7 | 67.5 | 69.0 |
| Bachelor's Degree and Above | 10 | 131 | 15 | 176 | 83 | 24.3 | 32.5 | 31.0 |
| Compensation Quintile | | | | | | | | |
| Lowest 20% | 9 | 87 | 7 | 121 | 56 | 16.4 | 26.6 | 26.6 |
| Second 20% | 7 | 79 | 7 | 105 | 50 | 14.5 | 19.7 | 20.7 |
| Middle 20% | 10 | 240 | 20 | 300 | 143 | 41.7 | 20.5 | 21.6 |
| Fourth 20% | 3 | 54 | 8 | 71 | 34 | 9.9 | 9.9 | 9.2 |
| Highest 20% | 7 | 95 | 9 | 127 | 60 | 17.4 | 23.3 | 22.0 |
| Population | 12 | 170 | 139 | 333 | 164 | -- | -- | 20.5 |
| Labor Force | 11 | 153 | 97 | 235 | 124 | -- | -- | 21.4 |
| Age Groups | | | | | | | | |
| Ages 16-24 | 3 | 32 | 21 | 52 | 27 | 21.8 | 13.8 | 13.8 |
| Ages 25-54 | 7 | 92 | 64 | 149 | 78 | 62.9 | 65.0 | 62.6 |
| Ages 55-64 | 1 | 16 | 9 | 19 | 11 | 9.1 | 15.4 | 16.5 |
| Ages 65 or older | 0 | 12 | 3 | 16 | 8 | 6.3 | 5.8 | 7.0 |
| Race & Ethnicity | | | | | | | | |
| White, non-Hispanic | 9 | 123 | 75 | 179 | 97 | 77.8 | 70.9 | 78.9 |
| Black, non-Hispanic | 1 | 16 | 12 | 30 | 15 | 11.9 | 15.6 | 8.8 |
| Other, non-Hispanic | 1 | 8 | 5 | 15 | 7 | 5.8 | 6.1 | 4.8 |
| Hispanic | 0 | 6 | 5 | 12 | 6 | 4.6 | 7.4 | 7.5 |
| Value added (2023 Dollars) | $11 | $72 | $13 | $95 | $48 | -- | 0.07 | -- |

Source: REMI PI+; totals may not add up due to rounding

Note: dollar amounts are in millions; there was no data for 2021

**Table A4.** *Impact of Total Broadband Investments in the East Central Region*

| Year | 2019 | 2020 | 2022* | 2023 | Avg. | % | % Region | % State |
|---|---|---|---|---|---|---|---|---|
| **Amount Invested** | **$2.4** | **$3.2** | **$2.0** | **$19.9** | **$6.9** | -- | -- | -- |
| Employment | 30 | 100 | 30 | 274 | 81 | -- | -- | 6.8 |
| Educational Attainment | | | | | | | | |
| No bachelor's degree | 22 | 73 | 23 | 206 | 81 | 74.7 | 67.9 | 69.0 |
| Bachelor's Degree and Above | 8 | 27 | 7 | 68 | 28 | 25.3 | 32.1 | 31.0 |
| Compensation Quintile | | | | | | | | |
| Lowest 20% | 5 | 24 | 5 | 53 | 22 | 20.0 | 27.3 | 26.6 |
| Second 20% | 4 | 17 | 4 | 41 | 17 | 15.2 | 20.4 | 20.7 |
| Middle 20% | 12 | 31 | 13 | 105 | 40 | 37.1 | 19.7 | 21.6 |
| Fourth 20% | 3 | 9 | 4 | 26 | 11 | 9.7 | 9.7 | 9.2 |
| Highest 20% | 6 | 19 | 4 | 49 | 20 | 18.0 | 22.9 | 22.0 |
| Population | 9 | 54 | 50 | 150 | 66 | -- | -- | 8.2 |
| Labor Force | 10 | 47 | 35 | 109 | 50 | -- | -- | 8.7 |
| Age Groups | | | | | | | | |
| Ages 16-24 | 3 | 12 | 8 | 28 | 13 | 25.4 | 14.0 | 13.8 |
| Ages 25-54 | 5 | 25 | 21 | 63 | 29 | 56.7 | 61.8 | 62.6 |
| Ages 55-64 | 1 | 7 | 4 | 9 | 5 | 10.4 | 17.1 | 16.5 |
| Ages 65 or older | 1 | 3 | 2 | 9 | 4 | 7.5 | 7.1 | 7.0 |
| Race & Ethnicity | | | | | | | | |
| White, non-Hispanic | 9 | 43 | 31 | 98 | 45 | 90.0 | 87.1 | 78.9 |
| Black, non-Hispanic | 0 | 2 | 1 | 4 | 2 | 3.5 | 4.4 | 8.8 |
| Other, non-Hispanic | 0 | 2 | 1 | 4 | 2 | 3.5 | 4.8 | 4.8 |
| Hispanic | 1 | 0 | 2 | 3 | 2 | 3.0 | 3.7 | 7.5 |
| Value added (2023 Dollars) | $5 | $12 | $5 | $32 | $14 | -- | 0.02 | -- |

Source: REMI PI+; totals may not add up due to rounding

Note: dollar amounts are in millions; there was no data for 2021

**Table A5.** *Impact of Total Broadband Investments in the Southwest Region*

| Year | 2019 | 2020 | 2022* | 2023 | Avg. | % | % Region | % State |
|---|---|---|---|---|---|---|---|---|
| **Amount Invested** | **$23.6** | **$37.1** | **$1.0** | **$34.1** | **$24.0** | -- | -- | -- |
| Employment | 231 | 377 | 31 | 259 | 190 | -- | -- | 15.2 |
| Educational Attainment | | | | | | | | |
| No bachelor's degree | 183 | 296 | 23 | 259 | 190 | 78.5 | 70.1 | 69.0 |
| Bachelor's Degree and Above | 48 | 80 | 9 | 71 | 52 | 21.5 | 29.9 | 31.0 |
| Compensation Quintile | | | | | | | | |
| Lowest 20% | 28 | 49 | 5 | 44 | 32 | 13.0 | 26.5 | 26.6 |
| Second 20% | 28 | 47 | 3 | 40 | 30 | 12.2 | 21.0 | 20.7 |
| Middle 20% | 117 | 185 | 13 | 161 | 119 | 49.1 | 22.3 | 21.6 |
| Fourth 20% | 24 | 39 | 5 | 34 | 26 | 10.5 | 8.5 | 9.2 |
| Highest 20% | 34 | 57 | 5 | 51 | 37 | 15.2 | 21.6 | 22.0 |
| Population | 74 | 189 | 152 | 238 | 163 | -- | -- | 20.5 |
| Labor Force | 72 | 127 | 94 | 150 | 111 | -- | -- | 19.1 |
| Age Groups | | | | | | | | |
| Ages 16-24 | 16 | 31 | 19 | 28 | 24 | 21.2 | 13.0 | 13.8 |
| Ages 25-54 | 39 | 78 | 66 | 103 | 72 | 64.6 | 60.5 | 62.6 |
| Ages 55-64 | 10 | 11 | 6 | 11 | 10 | 8.6 | 17.9 | 16.5 |
| Ages 65 or older | 7 | 7 | 3 | 8 | 6 | 5.6 | 8.5 | 7.0 |
| Race & Ethnicity | | | | | | | | |
| White, non-Hispanic | 67 | 117 | 87 | 138 | 102 | 92.3 | 90.6 | 78.9 |
| Black, non-Hispanic | 2 | 4 | 3 | 5 | 4 | 3.2 | 3.7 | 8.8 |
| Other, non-Hispanic | 2 | 3 | 2 | 4 | 3 | 2.5 | 2.8 | 4.8 |
| Hispanic | 1 | 3 | 2 | 3 | 2 | 2.0 | 2.9 | 7.5 |
| Value added (2023 Dollars) | $28 | $44 | $6 | $39 | $29 | -- | 0.07 | -- |

Source: REMI PI+; totals may not add up due to rounding

Note: dollar amounts are in millions; there was no data for 2021

**Table A6.** *Impact of Total Broadband Investments in the Southeast Region*

| Year | 2019 | 2020 | 2022* | 2023 | Avg. | % | % Region | % State |
|---|---|---|---|---|---|---|---|---|
| **Amount Invested** | **$17.5** | **$57.6** | **$0.6** | **$50.3** | **$31.5** | -- | -- | -- |
| Employment | 167 | 538 | 24 | 455 | 296 | -- | -- | 18.6 |
| Educational Attainment | | | | | | | | |
| No bachelor's degree | 134 | 430 | 16 | 361 | 235 | 79.5 | 70.8 | 69.0 |
| Bachelor's Degree and Above | 33 | 108 | 8 | 94 | 61 | 20.5 | 29.2 | 31.0 |
| Compensation Quintile | | | | | | | | |
| Lowest 20% | 17 | 56 | 2 | 50 | 31 | 10.6 | 27.2 | 26.6 |
| Second 20% | 19 | 63 | 2 | 53 | 34 | 11.6 | 21.6 | 20.7 |
| Middle 20% | 89 | 284 | 11 | 237 | 155 | 52.4 | 22.3 | 21.6 |
| Fourth 20% | 18 | 57 | 5 | 49 | 32 | 10.9 | 8.4 | 9.2 |
| Highest 20% | 24 | 78 | 4 | 66 | 43 | 14.5 | 20.4 | 22.0 |
| Population | 49 | 205 | 159 | 271 | 171 | -- | -- | 21.4 |
| Labor Force | 45 | 143 | 99 | 174 | 115 | -- | -- | 19.9 |
| Age Groups | | | | | | | | |
| Ages 16-24 | 11 | 37 | 19 | 33 | 25 | 21.7 | 12.0 | 13.8 |
| Ages 25-54 | 25 | 84 | 67 | 116 | 73 | 63.3 | 62.4 | 62.6 |
| Ages 55-64 | 6 | 10 | 7 | 12 | 9 | 7.6 | 17.9 | 16.5 |
| Ages 65 or older | 3 | 12 | 6 | 13 | 9 | 7.4 | 7.7 | 7.0 |
| Race & Ethnicity | | | | | | | | |
| White, non-Hispanic | 42 | 132 | 89 | 158 | 105 | 91.3 | 88.9 | 78.9 |
| Black, non-Hispanic | 1 | 3 | 3 | 4 | 3 | 2.4 | 2.9 | 8.8 |
| Other, non-Hispanic | 1 | 5 | 3 | 6 | 4 | 3.3 | 4.1 | 4.8 |
| Hispanic | 1 | 4 | 4 | 6 | 4 | 3.3 | 4.1 | 7.5 |
| Value added (2023 Dollars) | $21 | $59 | $6 | $51 | $34 | -- | 0.09 | -- |

Source: REMI PI+; totals may not add up due to rounding

Note: dollar amounts are in millions; there was no data for 2021