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Assessing Housing & Workforce Conditions and Needs in the Eastern Indiana Region

July 13, 2018 – Richmond, IN

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What We'll Present Today

Key Features of the Region	Housing & Workforce Characteristics

Key Features of the Region

- Demographic Snapshot

- Regional Industry Clusters

Housing & Workforce Characteristics

- Housing Studies
  - *Data Snapshot*
  - *Focus Group Sessions*
  - *Survey of Employees*
- Workforce Assessment
  - *Data Snapshot of Economic Growth Region 6*

Demographic Data Snapshot

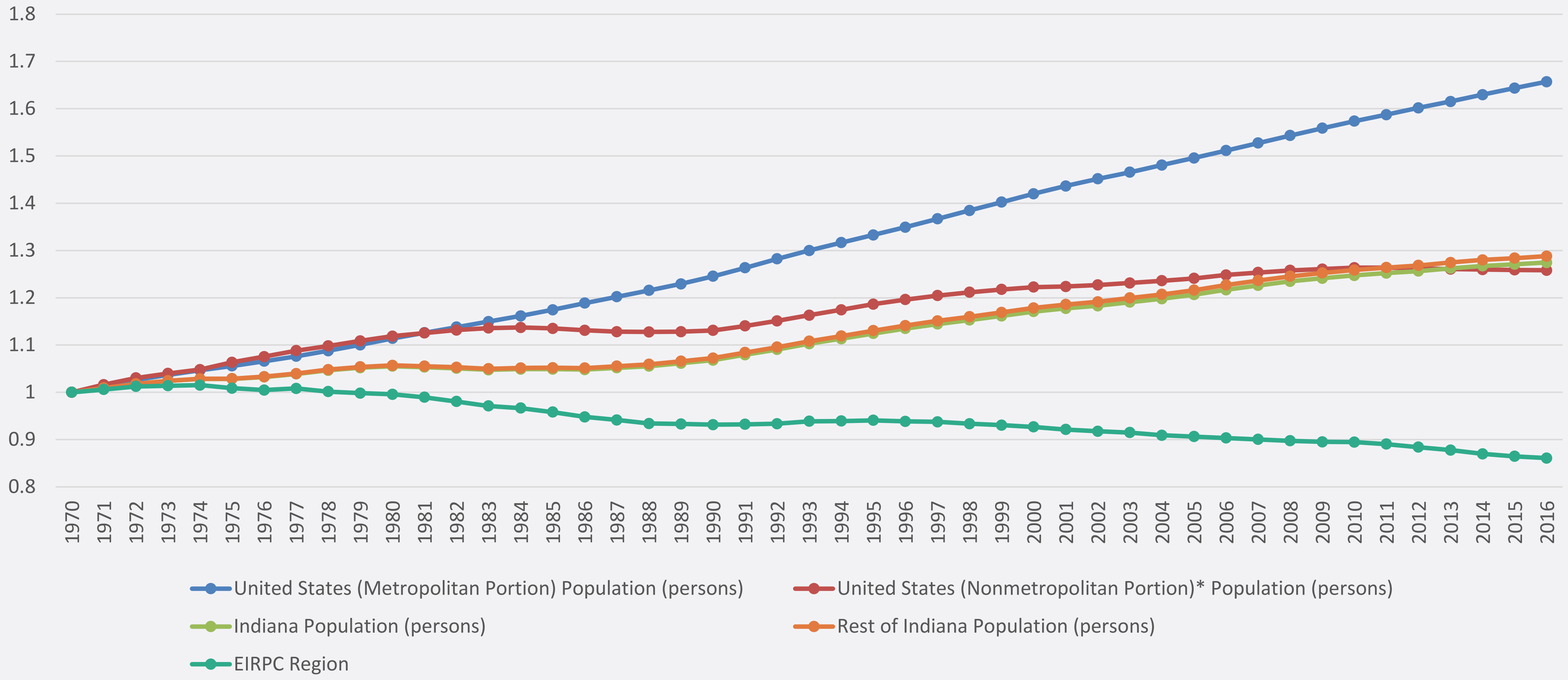
Eastern Indiana Regional Planning Commission (EIRPC)

Regional Data Snapshot Series
July 2018

Photo: Rush County, Indiana Courthouse

Purdue University | Center for Regional Development — Advancing Collaboration : Energizing Regions

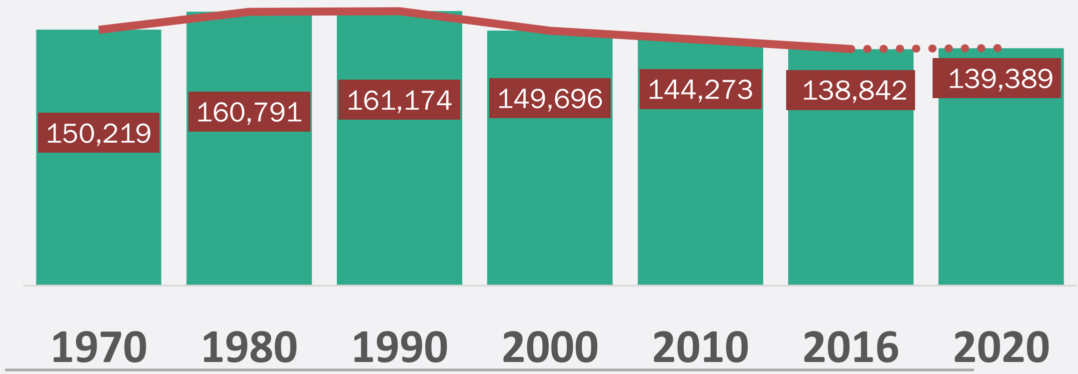
Population Trend



Sources: BEA

Population Change

Total Population Projections



The total population is projected to increase by 0.4 percent between 2016 and 2020.

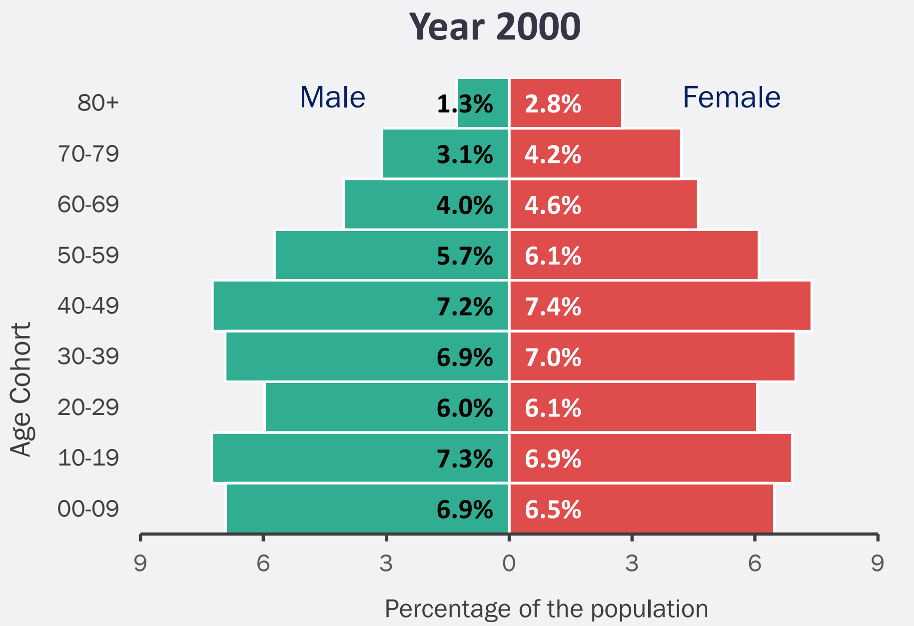
The region's total population decreased by 7.6 percent between 1970 to 2016. From 2010 to 2016, the region experienced 3.8 percent decrease (5,431 individuals). From 2000 to 2016, the region decreased by 7.3 percent losing 10,854 individuals over that time period. The key contributor to that decrease was Domestic migration (number of people moving into the region minus moving out from the region to other parts of the state or the U.S.) which caused a decrease of 15,213 individuals. Natural increase (births minus deaths) and International migration (people moving in versus moving out to outside the U.S.) resulting into an increase of 1,978 individuals.

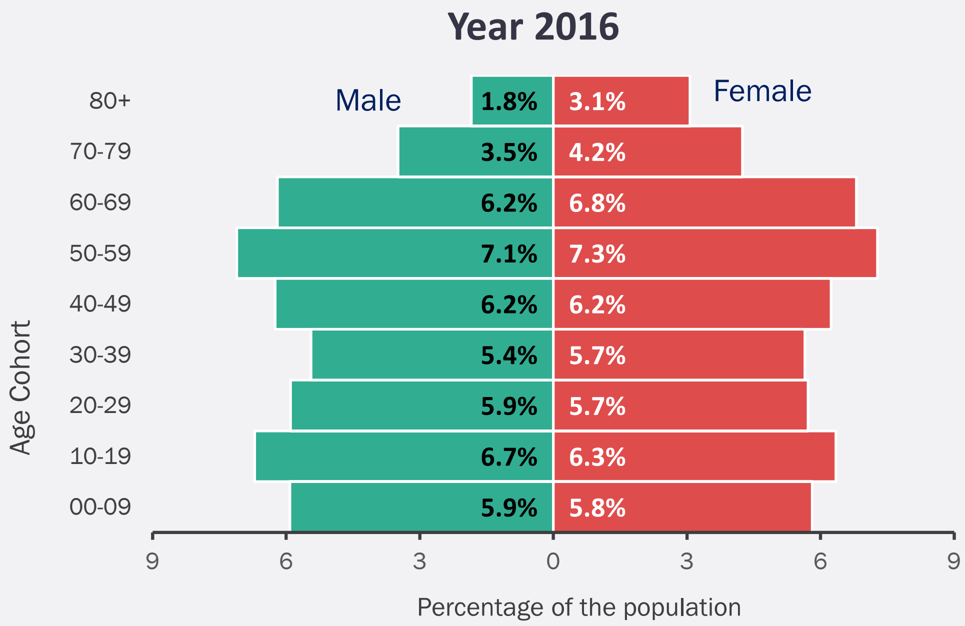
Components of Population Change, 2000-2016

	2000-2010	2010-2016
Natural Increase	1,942	-656
International Migration	667	25
Domestic Migration	-10,513	-4,700
Total Change	**-8,674**	**-5,473**

Sources: STATSIndiana, U.S. Census Bureau – 1990 Census, 2000 Decennial Census, 2010 Decennial Census, 2016 Estimates, Estimates of the Components of Resident Population Change

Population Pyramids



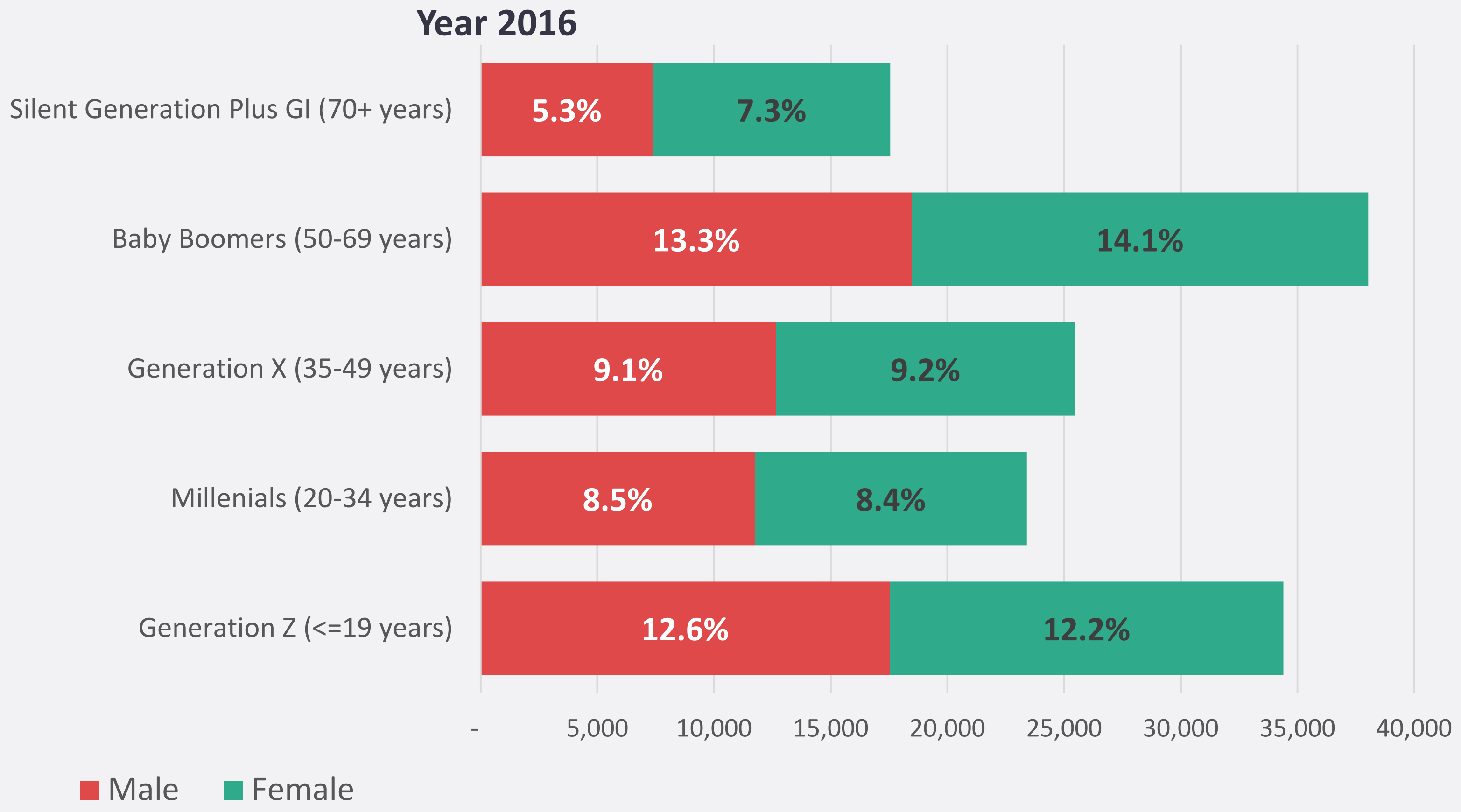


The proportion of males and females in the EIRPC region changed slightly between 2000 and 2016. Approximately 51.5 percent of the population was female in 2000, that slightly increased to 51.16 percent. A bigger change, however, occurred among other age groups in the region. For example, the proportion of individuals (males and females) 50 years of age and older expanded from 31.8 percent to 40.0 percent from 2000 to 2016.

Several other age categories suffered a decline in EIRPC region. The percentage of people under 20 years old fell 2.8 percentage points from 2000 to 2016. Among them, individuals under 10 years old (age 0-9) shrank from 13.4 to 11.7 percent. How about those of prime working age – those between 20-49 years of age? They, too, experienced a downturn from 40.6 percent to 35.2 percent over the 2000-2016 time span.

Source: U.S. Census Bureau – 2000 Decennial Census and 2016 Annual Population Estimates
Table names: Census 2000 SF1 QTP1, PEP2016 PEPAGESEX

Generational Chart



Silent Generation and Great Generation or the Lost Generation are 70 years and above. Some of them fought in Word Wars and experienced the Great Depression of 1930s.

Baby Boomers is generation after World War II. They are now 50 to 70 years old and nearing retirement age. They experienced the U.S. economic growth and prosperity. This is a large generational cohort with strong work ethics.

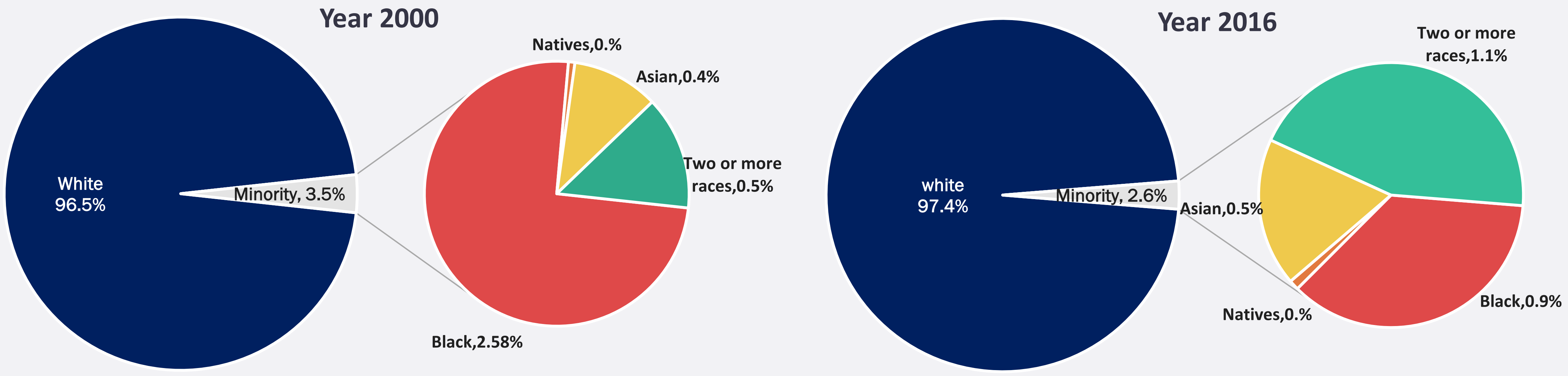
Generation X is now 35 to 50 years old. This generation has experienced technological advances (internet and automation) and tries to cope up with the new technology.

Millennials are now 20 to 34 years old. This generation is diverse and has adapted to technology.

Generation Z is in teens and the most technologically savvy generation.

Source: Population Estimates, U.S. Census Bureau

Race



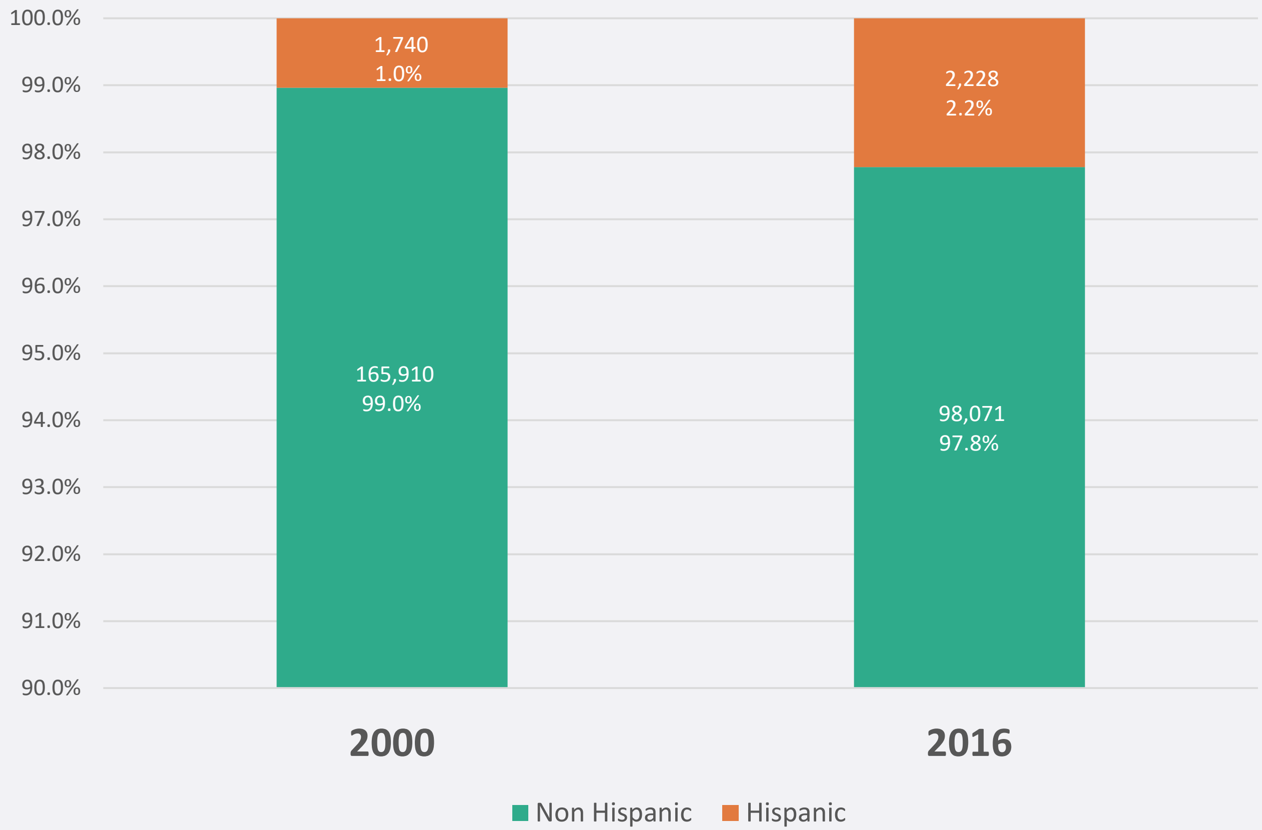
Note: Natives are comprised of American Indian and Alaskan Native, and Native Hawaiian and Other Pacific Islander.

The number of White residents in EIRPC region increased from 96.5 percent to 97.4 percent between 2000 and 2016.

The percentage of non-White races decreased between 2000 and 2016 from 3.5 percent to 2.6 percent. The number of Blacks or African Americans decreased by 3,345 individuals, from 2.58 percent to 0.9 percent of the total population during the 16-year period. The population of Asians also decreased with 145 less individuals in 2016. The Native population decreased by 14 individuals. Meanwhile individuals with two or more races experienced an increase (0.7 percentage point with 340 more individuals) over the same time period.

Source: U.S. Census Bureau – 2000 Decennial Census and 2016 Annual Population Estimates
Table names: Census 2000 SF1 P008, PEP2016 PEPSR6H

Ethnicity



Hispanics are individuals of any race whose ancestry are from Mexico, Puerto Rico, Cuba, Spain, the Dominican Republic or any other Spanish-speaking Central or South American country.

There were 1,740 Hispanics residing in EIRPC region in 2000. This figure increased by 2016, reaching to 2,228 individuals.
In terms of percentage growth, the Hispanic population expanded by 28 percent between 2000 and 2016. As such, the Hispanic community represented nearly 2.2 percent of EIRPC region's population in 2016.

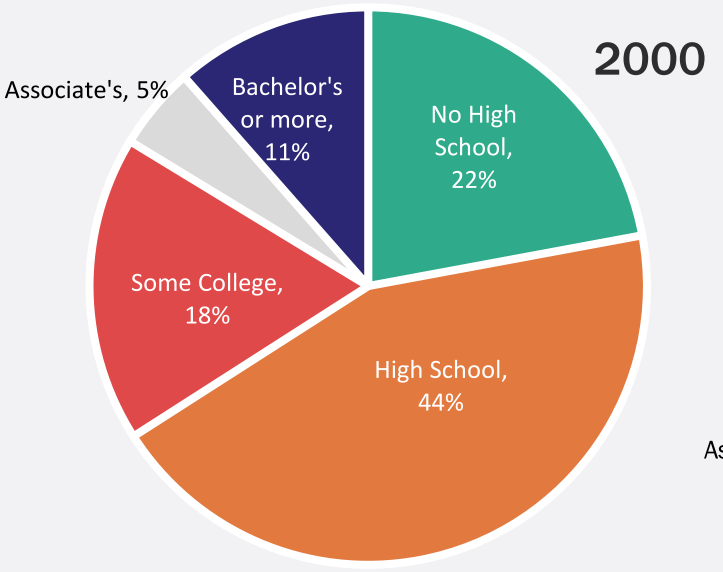
Source: Decennial Census, Population Estimates, U.S. Census Bureau

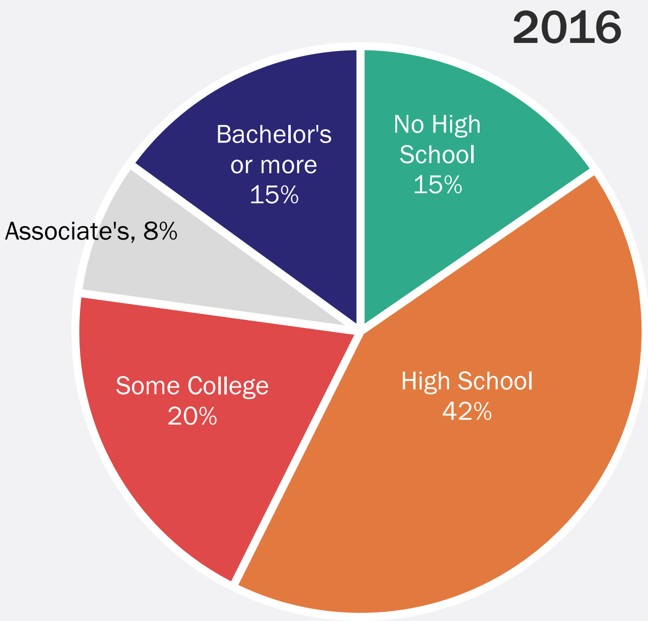
Educational Attainment

EIRPC region's share of adults (25 years and older) with bachelor's or higher degree increased by 4 percentage points from 2000 to 2016.

The proportion of adults 25+ years of age with a high school education decreased by 2 percentage points between 2000 and 2016. Residents with less than a high school education dipped by nearly 7 percentage points over this period. There were 21,988 adult individuals who did not have a high school degree in 2000 and that number dropped to 14,884 individuals by 2016.

The number of adults with an associate's degree increased by 2,767 individuals while adults with some college education also increased by 1,434 individuals in between 2000 and 2016.





Source: U.S. Census Bureau – 2000 Decennial Census and 2016 ACS
Table names: Census 2000 SF4 QTP20, ACS 2016 S1501

Regional Industry Data Snapshot

Eastern Indiana Regional Planning Commission, Indiana (EIRPC)

Industry Cluster Analysis
July 2018

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Components of Changes in Jobs

Changes in Jobs (2010-2016)		Jobs
Gained by	New Start-ups	34,529
	Spin-offs	2,239
	Expansion	10,802
	In-migration	558
Lost by	Closings	30,767
	Contractions	9,657
	Out-migration	342
Net Change		**7,362**

How to Interpret the Accompanying Table

New Start-ups
A completely new business from births/openings without any affiliation to an existing business.

Spin-offs
New businesses that were spun off from existing businesses.

Expansions
Existing businesses that have expanded in jobs.

In-migration
Businesses that have moved-in from outside of the Region.

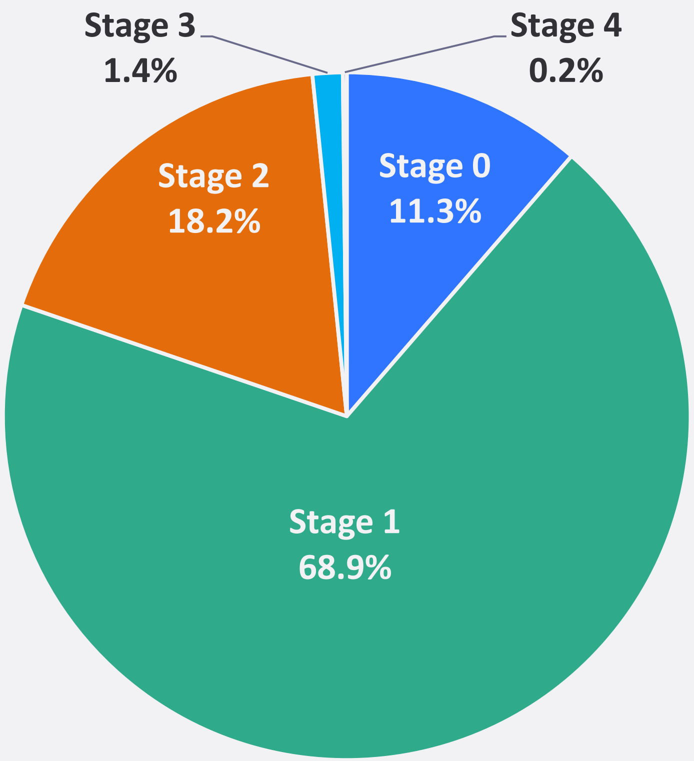
Closings
Closure of existing businesses.

Contractions
Existing businesses that have shed/reduced jobs.

Out-migration
Businesses that have moved-out from the Region.

Source: YourEconomy.org

Company Stages



Establishment Distribution by Stages
Indiana, 2016

An establishment is a physical business location. Branches, standalones and headquarters are all considered types of establishments.

Definition of Company Stages	
Stage 0	Self-employed
Stage 1	2-9 employees
Stage 2	10-99 employees
Stage 3	100-499 employees
Stage 4	500+ employees

Note: Based on Edward Lowe's research, http://thegrowthsociety.com/links/SecondStage.pdf/

Number of Establishments, Jobs, Sales by Stage/Employment Category in the Region

Stage	Establishments 2016	% Change (2010-2016)	Jobs* 2016	% Change (2010-2016)	Sales 2016 ($2016, Billion)	% Change (2010-2016, $ 2016)
Stage 0	1,196	-1.5%	1,171	-3.5%	0.19	13.7%
Stage 1	5,326	24.7%	19,875	20.4%	4.13	39.3%
Stage 2	1,442	28.6%	32,578	12.6%	6.98	54.8%
Stage 3	78	-4.9%	13,102	-14.7%	4.12	-0.2%
Stage 4	7	0%	5,150	7.3%	0.63	28.1%
Total	**8,049**	**20.2%**	**71,876**	**7.6%**	**16.05**	**30.9%**

Note: The change in jobs from 2000 to 2016 might not match with the components of change in jobs because of residuals.

Source: YourEconomy.org

Top Ten Industry Sector Employment Growth

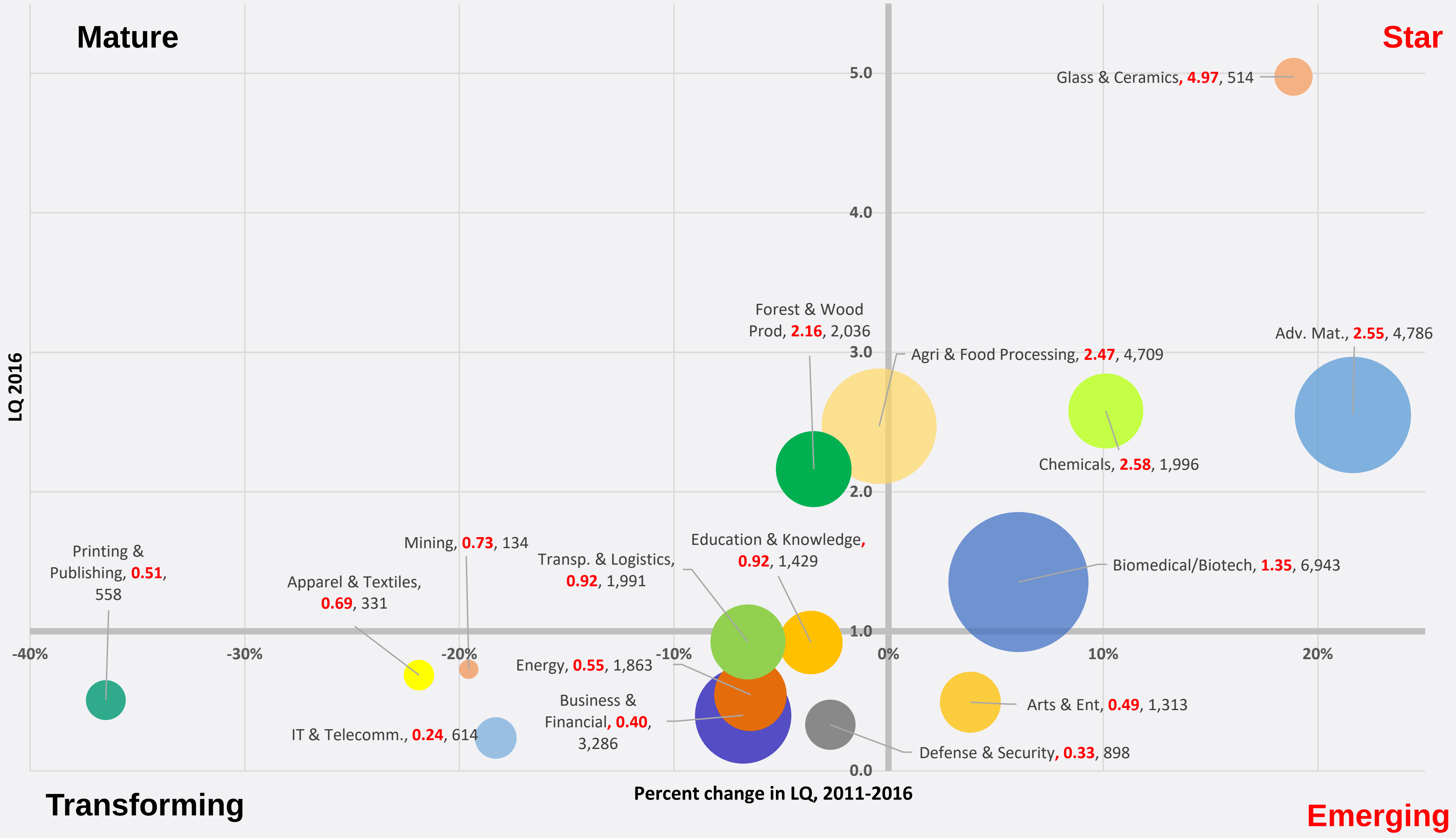
NAICS	Description	2003 Jobs	2016 Jobs	2003-2016 Change	2003-2016 % Change	2003-2016 State's % Change
21	Mining, Quarrying, and Oil and Gas Extraction	60	118	58	97%	38%
53	Real Estate and Rental and Leasing	1,687	1,949	262	16%	36%
62	Health Care and Social Assistance	7,346	8,339	993	14%	28%
54	Professional, Scientific, and Technical Services	1,521	1,715	194	13%	27%
72	Accommodation and Food Services	4,441	4,894	453	10%	18%
61	Educational Services	1,370	1,434	64	5%	46%
11	Agriculture, Forestry, Fishing and Hunting	3,068	3,161	93	3%	2%
56	Administrative and Support and Waste Management and Remediation Services	3,511	3,570	59	2%	27%
48	Transportation and Warehousing	2,168	2,117	-51	-2%	26%

Questions:

- What regional industry sectors have seen the greatest growth?
- Did they grow at the same rate as the state?
- What factors are causing the growth?

Source: EMSI – 2018.1 – QCEW Employees, Non-QCEW Employees, Self-Employed, and Extended Proprietors

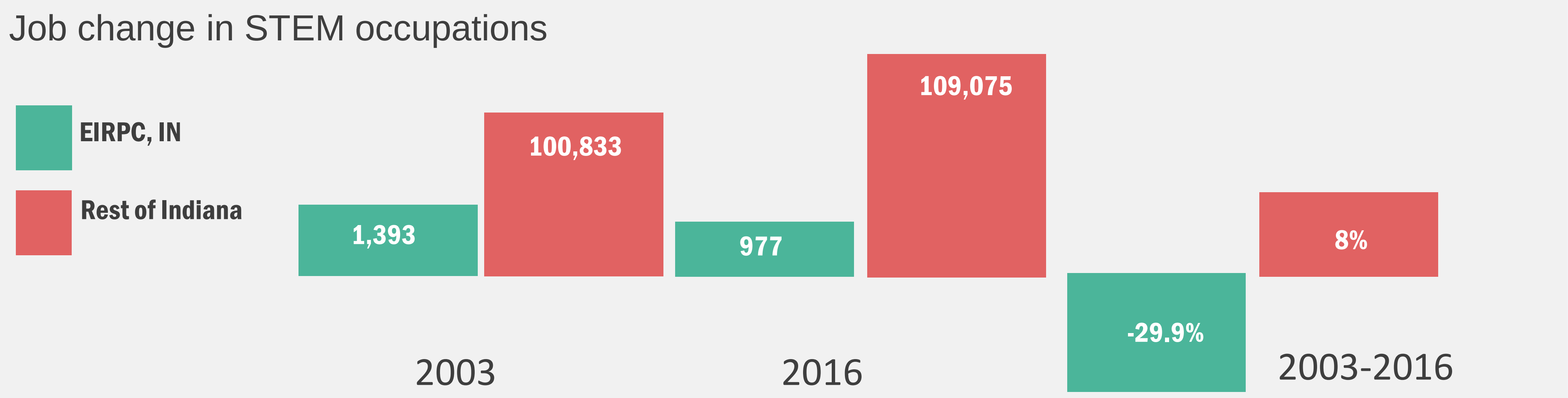
Industry cluster bubble chart 2011-2016



Note: Label includes cluster name, LQ in 2016, and Employment in 2016.

Source: Economic Modeling Specialists International (EMSI) – 2018.2 – QCEW Employees, Non-QCEW Employees, Self-Employed, and Extended Proprietors

Science, Technology, Engineering & Math



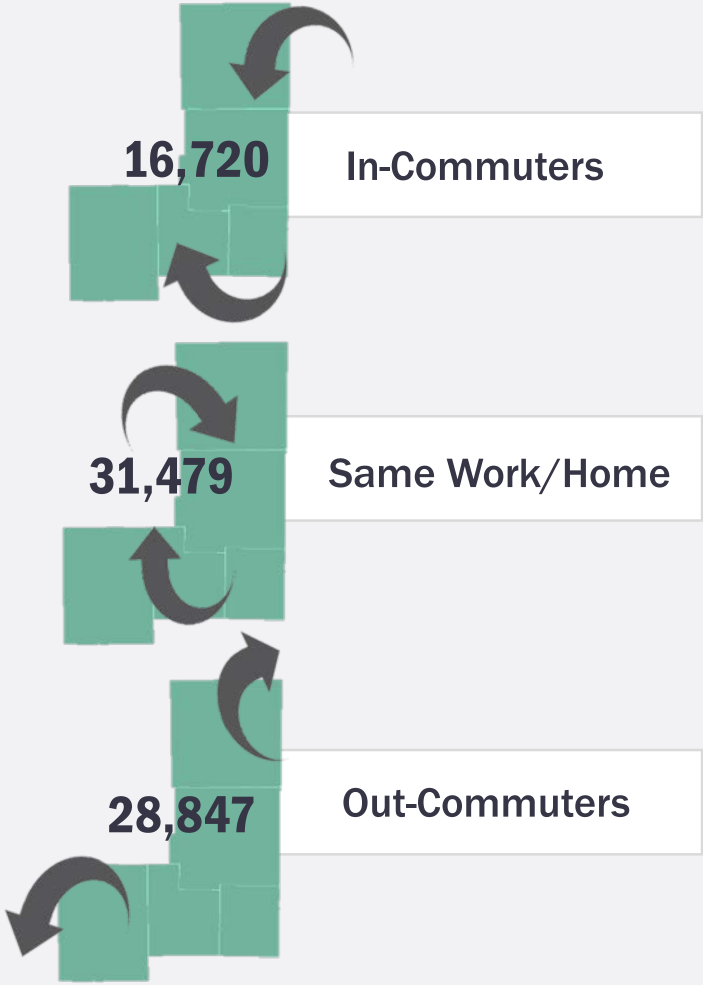
Questions:

- How do STEM jobs compare to the state?
- What has been the trend of STEM jobs over time?
- How important are STEM jobs to the region’s Star and Emerging clusters?

*Note: STEM and STEM-related occupation definitions from ESA, NSF and BLS (2010)

Source: Economic Modeling Specialists International (EMSI) – 2018.1 – QCEW Employees, Non-QCEW Employees, Self-Employed, and Extended Proprietors

Journey to Work



EIRPC region has more workers commuting out than commuting in the region for work.

Net commuting is negative in EIRPC region with a deficit of 12,127 commuters. About 65.3% of the region's workforce both live and work in the EIRPC region, however, outgoing commuters exceed incoming labor force in numbers. This suggest that the region is not serving as a major job center for the larger region.

	2015 Count	Proportion
Living in EIRPC Region	**60,326**	**100.0%**
Both living and employed in the region	31,479	52.2%
Living in the region but employed outside	28,847	47.8%
Employed in EIRPC Region	**48,199**	**100.0%**
Both employed and living in the region	31,479	65.3%
Employed in the region but living outside	16,720	34.7%

Source: On The Map

Income and Poverty

	2000	2008	2016
Total Population in Poverty	10.1%	15.1%	16.3%
Minors (Under Age 18) in Poverty	13.9%	23.0%	25.1%
Real Median Household Income ($2016)*	$51,819	$45,931	$45,065
Real Per Capita Income ($2016)*	$34,767	$33,866	$37,959
Percent of Household in Upper Income Bracket ($100,0000 +)**	5.4%	N/A	11.7%

*Real median household income is the middle income value in the Region. Half of the region's households fall above this line and half below. Real per capita personal income is the average income per person in the region.

**Percent of household in upper income bracket: 2016 is 5 year ACS, 2008 is 3 year ACS, 2000 is Census summery file 3 (SF-3).

Median household income in EIRPC region dropped by $6,754 between 2000 and 2016 in real dollars (that is, adjusted for inflation), while average income per person increased by $3,191 in real dollars over the same period.

The total population in poverty increased from 10.1 percent to 16.3 percent between 2000 and 2016. Child poverty grew at an even faster pace, expanding by nearly 11.2 percentage points during this same time period.

Source: SAIPE, ACS 2012-2016, BEA- Regional Personal Income Summary

Eastern IN Region Housing Studies

Regional Housing Snapshot

Eastern Indiana Regional Planning Council (EIRPC)

Housing Data Snapshot Series
March 2018

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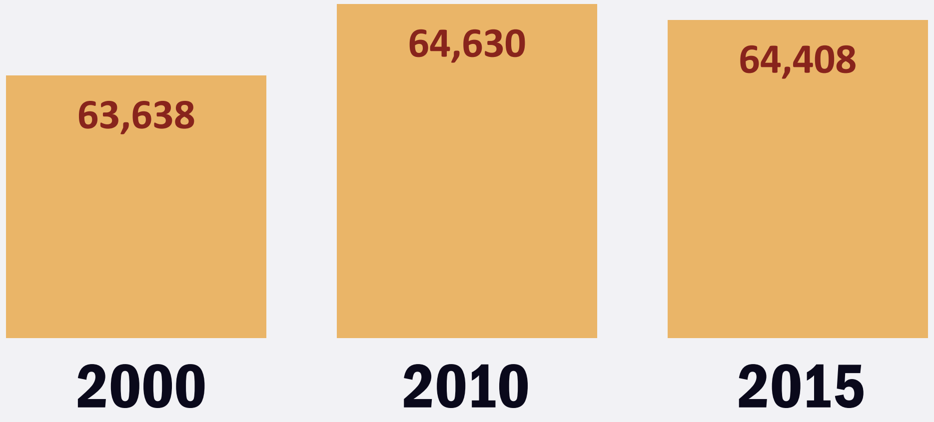
Total Housing Units



The number of housing units in EIRPC region increased by 1.2% between 2000 and 2015, but has dipped from the number of units in 2010.

The number of people residing in housing units in the region fell from 146,282 in 2000 to 137,741 individuals in 2015, a decrease of nearly 6%.

The major factor behind this drop was among people living in owner-occupied housing units, falling by over 10,000 individuals. On the other hand, the number of people in renter-occupied housing grew by nearly 2,0000.

	2000		2015	
Total Population in Housing Units	**146,282**	**100%**	**137,741**	**100%**
Owner-Occupied	106,856	73%	96,434	70%
Renter-Occupied	39,426	27%	41,307	30%

Source: 2011-2015 ACS 5-year Estimates

Housing Units by Tenure

	2000		2015	
Total Occupied Housing Units	59,321	93.2%	56,938	88.4%
Owner-Occupied	42,389	66.6%	39,874	61.9%
Renter-Occupied	16,932	26.6%	17,064	26.5%
Total Vacant Housing Units	4,317	6.8%	7,470	11.6%

Source: 2000 & 2010 Census Bureau and 2011-2015 ACS 5-year Estimates

Type of Housing Structures

	2000		2015	
1 detached	48,450	76.1%	49,796	77.3%
1 attached	1,187	1.9%	1,104	1.7%
2 apartments	3,294	5.2%	2,774	4.3%
3-4 apartments	2,348	3.7%	2,428	3.8%
5-9 apartments	1,622	2.5%	1,873	2.9%
10 or more apartments	2,550	4.0%	2,922	4.5%
Mobile or other types (boat, RV)	4,187	6.6%	3,511	5.5%
Total	**63,638**	**100%**	**64,408**	**100%**

Source: 2000 Census Bureau, SF3 and 2011-2015 ACS 5-year Estimates

Household Units by Type of Households

	2000		2015	
Family Households	**41,376**	**70%**	**37,796**	**66%**
Married-couple family household	**33,113**	**80%**	**27,847**	**74%**
Owner-occupied housing units	27,794	84%	23,099	83%
Renter-occupied housing units	5,319	16%	4,748	17%
Single-parent headed family household	**8,263**	**20%**	**9,949**	**26%**
Male householder, no wife present:	2,202	27%	2,797	28%
Owner-occupied housing units	1,270	58%	1,837	66%
Renter-occupied housing units	932	42%	960	34%
Female householder, no husband present:	6,061	73%	7,152	72%
Owner-occupied housing units	3,053	50%	3,451	48%
Renter-occupied housing units	3,008	50%	3,701	52%
Nonfamily Households	**17,945**	**30%**	**19,142**	**34%**
Owner-occupied housing units	10,272	57%	11,487	60%
Renter-occupied housing units	7,673	43%	7655	40%
Total (Family + Nonfamily) Households	**59,321**	**100%**	**56,938**	**100%**

Source: 2000 Census Bureau, SF1 and 2011-2015 ACS 5-year Estimates

Household Size, 2015

Number in the household	Occupied housing unit		Owner-occupied housing unit		Renter-occupied housing unit	
1-person household	16,206	28.5%	9,962	25.0%	6,249	36.6%
2-person household	20,513	36.0%	16,305	40.9%	4,193	24.6%
3-person household	9,085	16.0%	6,111	15.3%	2,982	17.5%
4-or-more-person household	11,130	19.5%	7,484	18.8%	3,634	21.3%
Total	**56,934**	**100%**	**39,863**	**100%**	**17,059**	**100%**

** Note: The total number of households has some residuals from raw data.*

Percent of Income	2000	2015
Less than 15%	22.1%	11.6%
15% to 29%	37.7%	32.5%
30% to 49%	17.4%	22.8%
50% or more	13.8%	22.0%
Not computed	9.0%	11.1%
Total	**100%**	**100%**

Cost Burdened Renters, 2000 & 2015

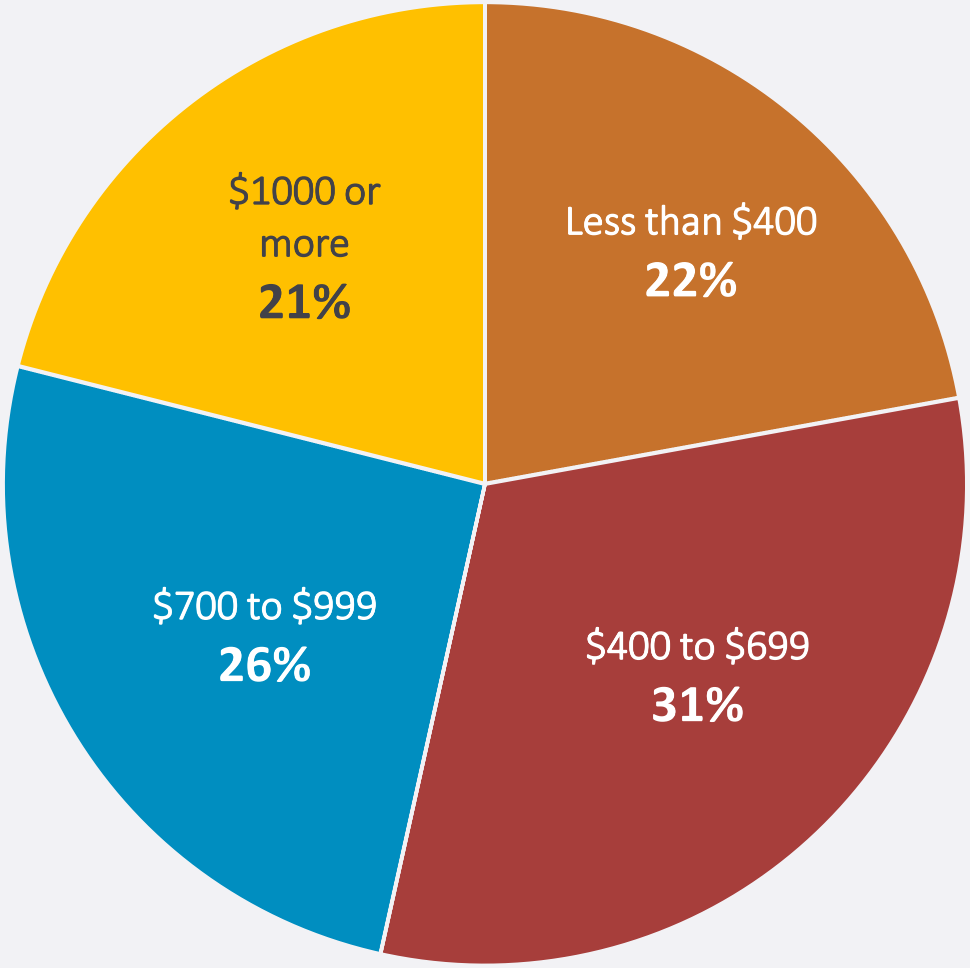
Renters are cost-burdened when they pay 30% or more of their income for housing. Based upon this information, nearly 45% of renters in the EIRPC were cost-burdened in 2015, indicating that affordable rental housing units may not be readily available in the region.

Source: 2000 Census Bureau, SF3 and 2011-2015 ACS 5-year Estimates

Monthly Housing Cost, 2015*

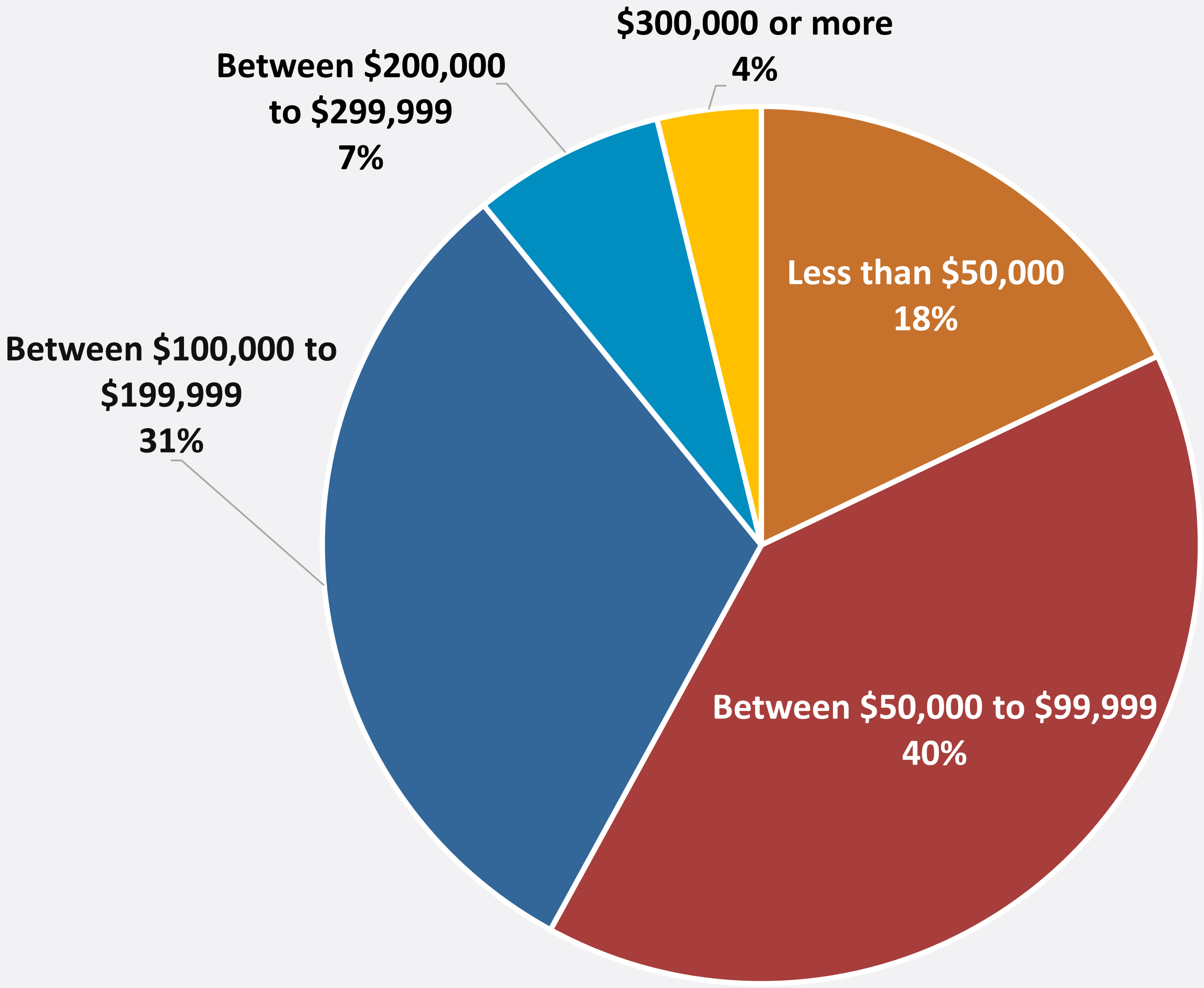
- Monthly housing costs are based on both owner- and renter-occupied housing units.
  - For owners, such costs include mortgage payments, property taxes, flood insurance, utilities, etc.
  - For renters, these costs include rents, utilities and condominium fees.
  - For mobile home units, the costs include site rent, registration and license fees, as well as property taxes.
- The largest share of households (31%) in the region paid between $400 and $699 per month in housing costs.
- On the other hand, 1 in 5 households had housing expenses of more than $1,000 per month.

** Note: Occupied housing units, excluding no cash rent housing units*



Source: 2011-2015 ACS 5-year Estimates

The Value of Housing Units in the EIRPC, 2015

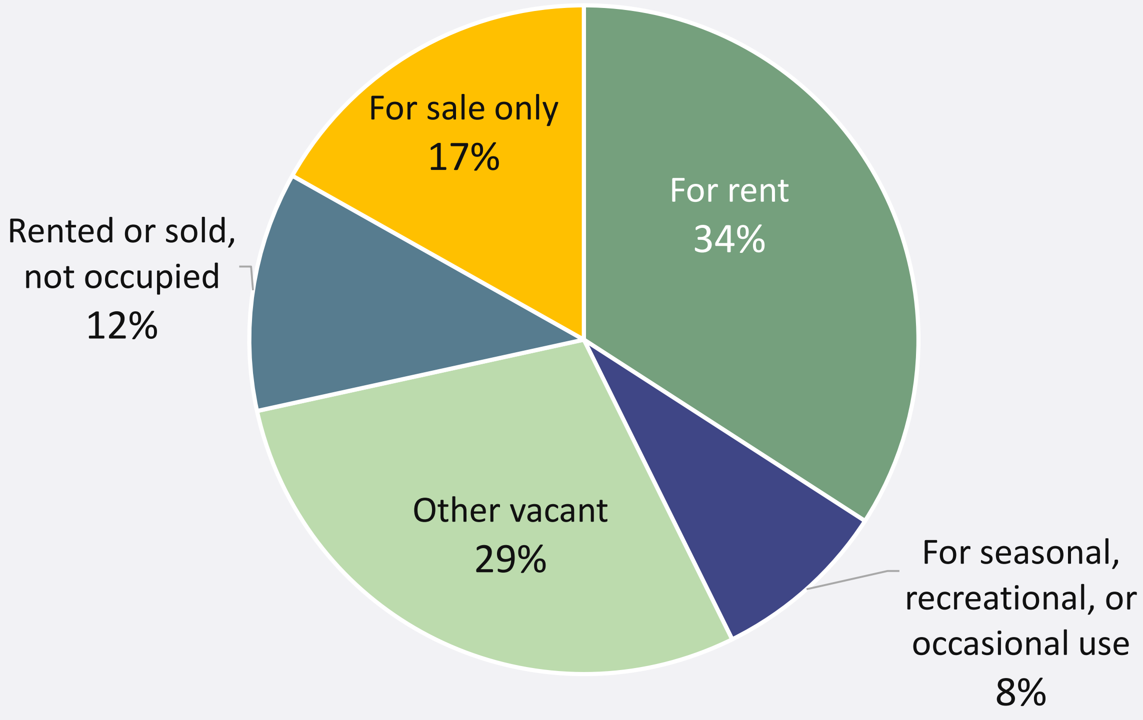


* Note: Occupied housing Units

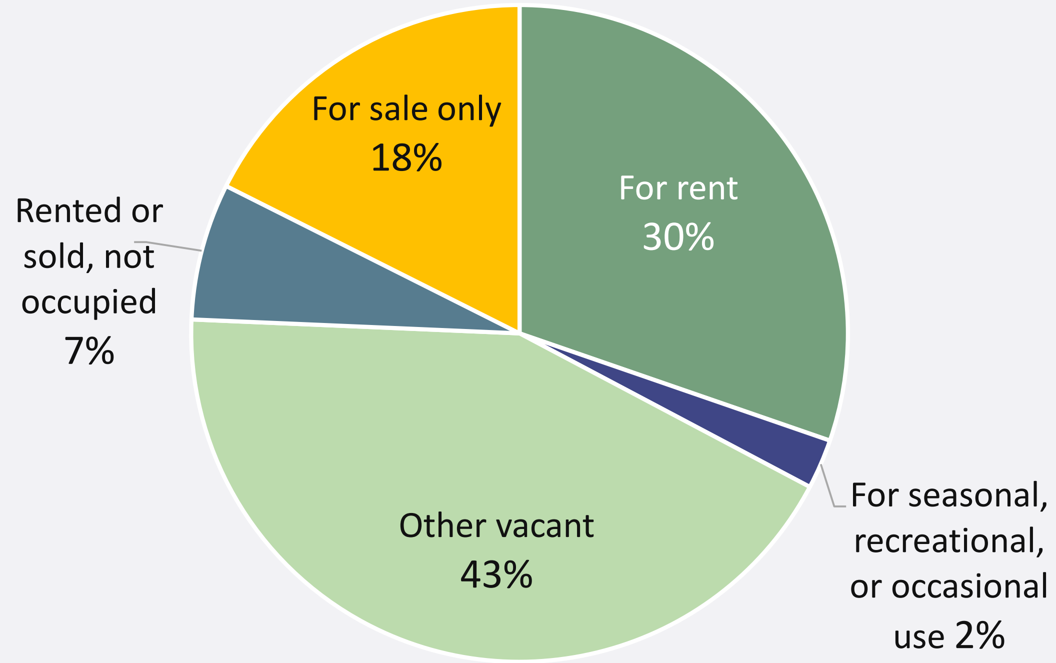
Source: 2011-2015 ACS 5-year Estimates

Vacancy Status

YEAR 2000



YEAR 2015

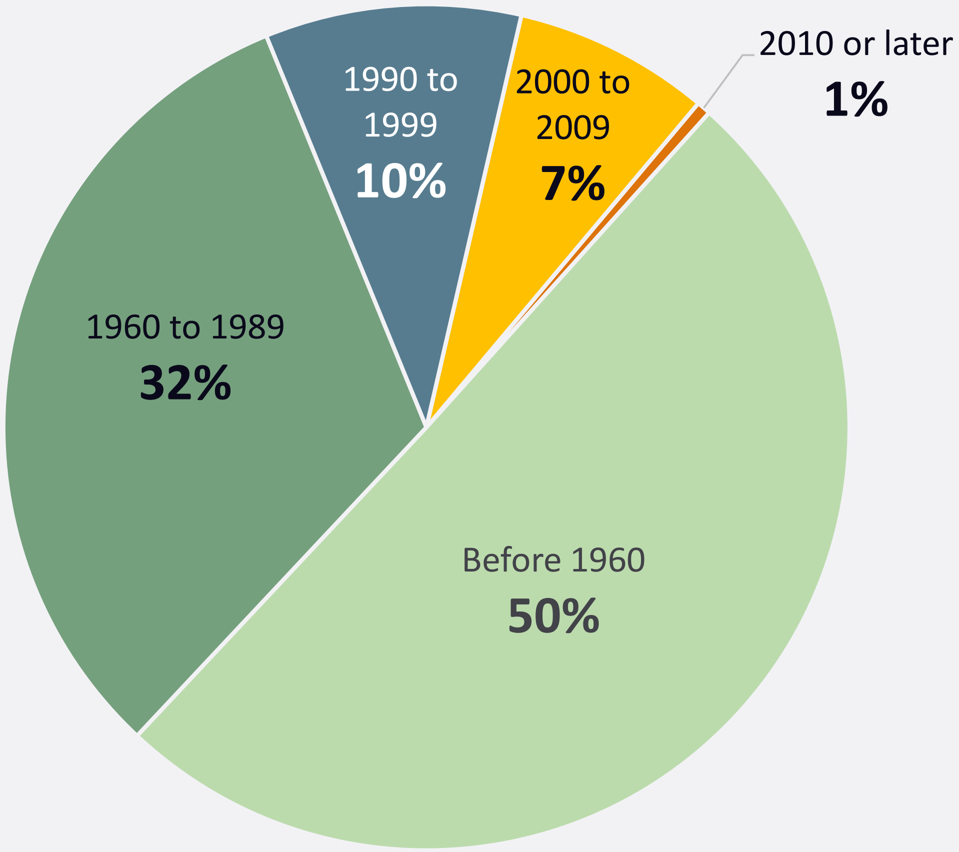


- **Other Vacant**: Includes abandoned, boarded-up or foreclosed properties, as well as units in repair, those used for storage, or those owned by elderly persons living in assisted living, nursing homes, or with family.

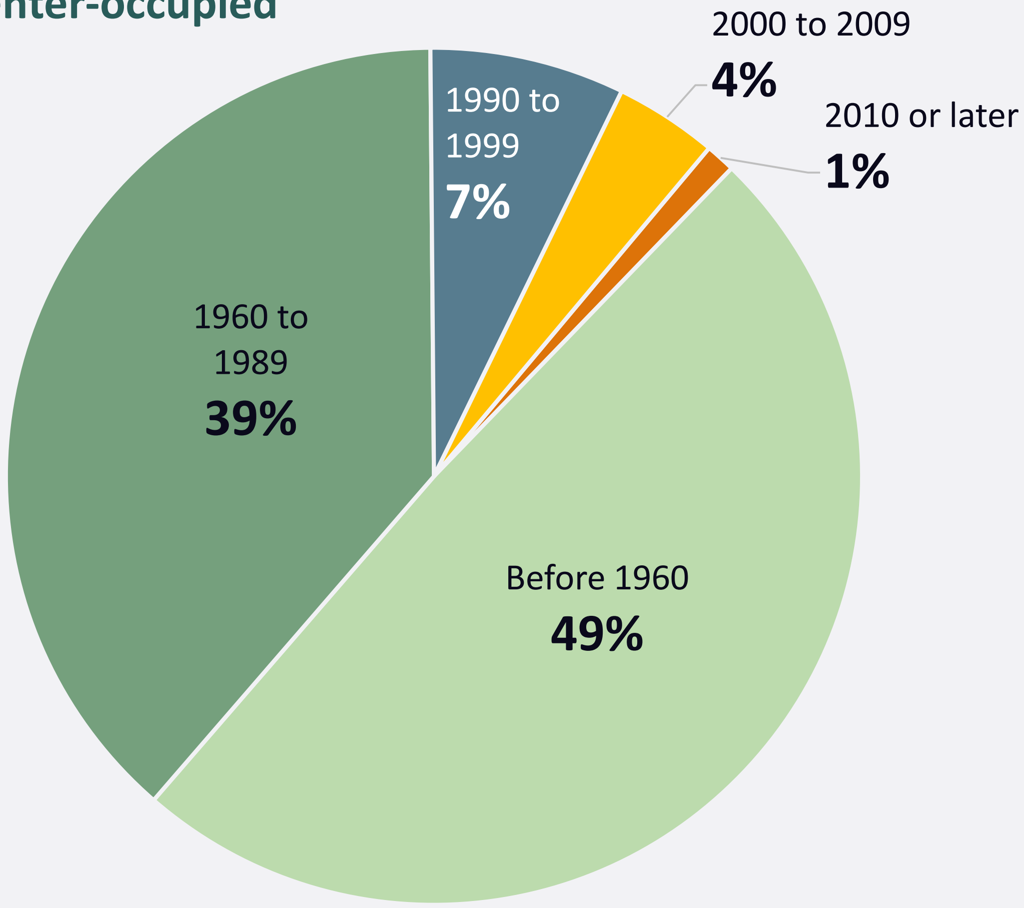
Source: 2000 Census Bureau, SF1 and 2011-2015 ACS 5-year Estimates

Year Structure Built by Occupancy Type

Owner-occupied

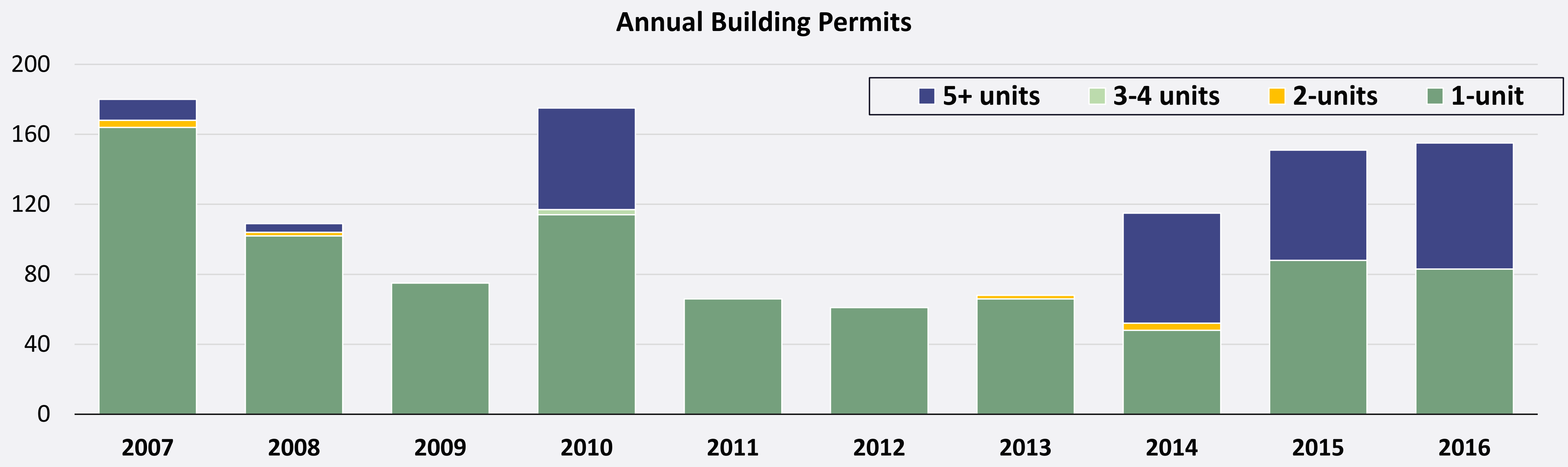


Renter-occupied



Source: 2011-2015 ACS 5-year Estimates

Building Permits: Single and Multi-Family Units



- The EIRPC Region has experienced declines in building permits since 2007, which coincides with the end of the housing bubble and the beginning of the Great Recession.

- After a spike in 2010, permitting remained low until 2014 when the number of building permits started to increase. In 2016, building permitting had not yet reached pre-recession levels.

Source: 2011-2015 ACS 5-year Estimates

Housing Focus Groups

Eastern Indiana Regional Planning Commission (EIRPC)

Regional Data Snapshot Series
July 2018

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Center for Regional Development
Advancing Collaboration : Energizing Regions

Focus Group Overview

Methodology & Participation

- **5 counties**: Fayette, Randolph, Rush, Union, and Wayne
- **55 participants** across these sectors: **education, planning , government, realtors, construction, manufacturing, financial, health care, nonprofit, and faith-based organizations**

Regional Housing Assets

Regional Housing Concerns

Top 10 Housing Challenges

#1: Poor Availability of Housing/Shortage of Housing

#2: Income and Financing

#3: Developer Interest and Capacity

#4: Commuter Mentality and Workforce

#5: Single-Family Housing Demand

#6: Rental Demand

#7: Population Loss and Brain Drain

#8: Zoning Tension

#9: Broadband

#10: Infrastructure Needs

Top 10 Housing Strategies

#1: Sense of Place

#2: Comprehensive Plan & Collaboration

#3: Infrastructure Improvements

#4: House Remodeling & Building Permits

#5: Housing Incentives & Tax Abatements

#6: Public/Private Financing Options

#7: Home Buyer Education & Assistance

#8: Marketing Strategies & Surveys

#9: Downtown & Rental Housing Options

#10: Low-Maintenance & Senior Housing

#1: Sense of Place

Strategies suggested by focus group participants:

- Develop trails to connect parks and community amenities
- Balance the desire to remain a small town while having big-city amenities
- Build family attractions like sports/entertainment parks
- Use local events/festivals as a draw for tourism
- Do a better job of appreciating what we already have—and publicizing it

#2: Comprehensive Plan & Collaboration

Strategies suggested by focus group participants:

- Host a “housing summit” where developers could meet with local elected officials, realtors and bankers
- Start a housing networking group to provide a regional vision for development and access to funding
- Build regional partnerships to solve housing issues
- Call on state elected officials to help fund solutions developed at the grassroots levels

#3: Infrastructure Improvements

Strategies suggested by focus group participants:

- Fix sewer system inequities (between Wayne and Fayette counties) that affect housing decisions
- Make public water available region-wide
- Write grants/find subsidies to pay for rehabilitation of waterlines so builders don't have to make that investment
- Identify places that should be strategically inter-connected to achieve overall improvement of the community

#4: House Remodeling & Building Permits

Strategies suggested by focus group participants:

- Provide incentives for companies to rehabilitate homes for their employees to live in (as a perk of employment)
- Create chapters of Habitat for Humanity in each county
- Analyze the process, data and constraints of obtaining building permits in the five counties
- Encourage county building inspectors to enforce existing codes in each of the five counties

#5: Housing Incentives & Tax Abatements

Strategies suggested by focus group participants:

- Use TIF revenue to invest in residential infrastructure to incentivize builders to develop housing in the five counties
- Create a “land bank” in each county (like the one in Wayne County) where lots can be “banked” & used as future sites
- Offer tax breaks to potential residents who buy a home that requires remodeling—to motivate them to take risk
- Help potential residents who can’t come up with 20% down, but who have reasonable credit, to make payments

#6: Public/Private Financing Options

Strategies suggested by focus group participants:

- Connect local developers—as well as potential developers—with county-city officials to collaborate on big-ticket projects that could benefit the region
- Lower the risk for developers by splitting the cost of infrastructure investment between parties
- Forge a partnership between county-city officials and interested developers for affordable housing development

#7: Home Buyer Education & Assistance

Strategies suggested by focus group participants:

- Provide homeowner education workshops/classes (on home maintenance, repair, safety/preparedness) as a condition of renting/leasing
- Create an incentivized education program to teach first-time homebuyers (possibly former renters) how to handle mortagage taxes, insurance and maintenance

#8: *Marketing Strategies & Surveys*

Strategies suggested by focus group participants:

- Get the word out about all the amenities each county already possesses
- Administer a survey or convene a regional community forum to assess what amenities commuters value when considering purchasing a home in a community – tap into local employers to discover needs of workforce
- Leverage public policy(ies) favorable to the removal of blighted properties and community clean-up

#9: *Downtown & Rental Housing Options*

Strategies suggested by focus group participants:

- Use the upper and lower levels of buildings in the downtown to create a more urban/walkable feel
- Build amenity-rich, apartment-style living with a planned community concept to attract college students/millennials
- Improve public transportation system, including more stops and longer operating hours. Pair with a public perception campaign to increase utilization.

#10: *Low-Maintenance & Senior Housing*

Strategies suggested by focus group participants:

- Create senior housing that is not assisted-living or subsidized, but that offers an affordable price point with maintenance included (to free up single-family homes)
- Tap the resources of USDA-RD to build a housing development targeted to most-demanded income level and price range, leveraging their 100% financing offer
- Relax restrictions on development to accomplish subdivision in phases, instead of building 100 lots at once

Housing Survey Data

Eastern Indiana Regional Planning Commission (EIRPC)

Regional Data Snapshot Series
July 2018

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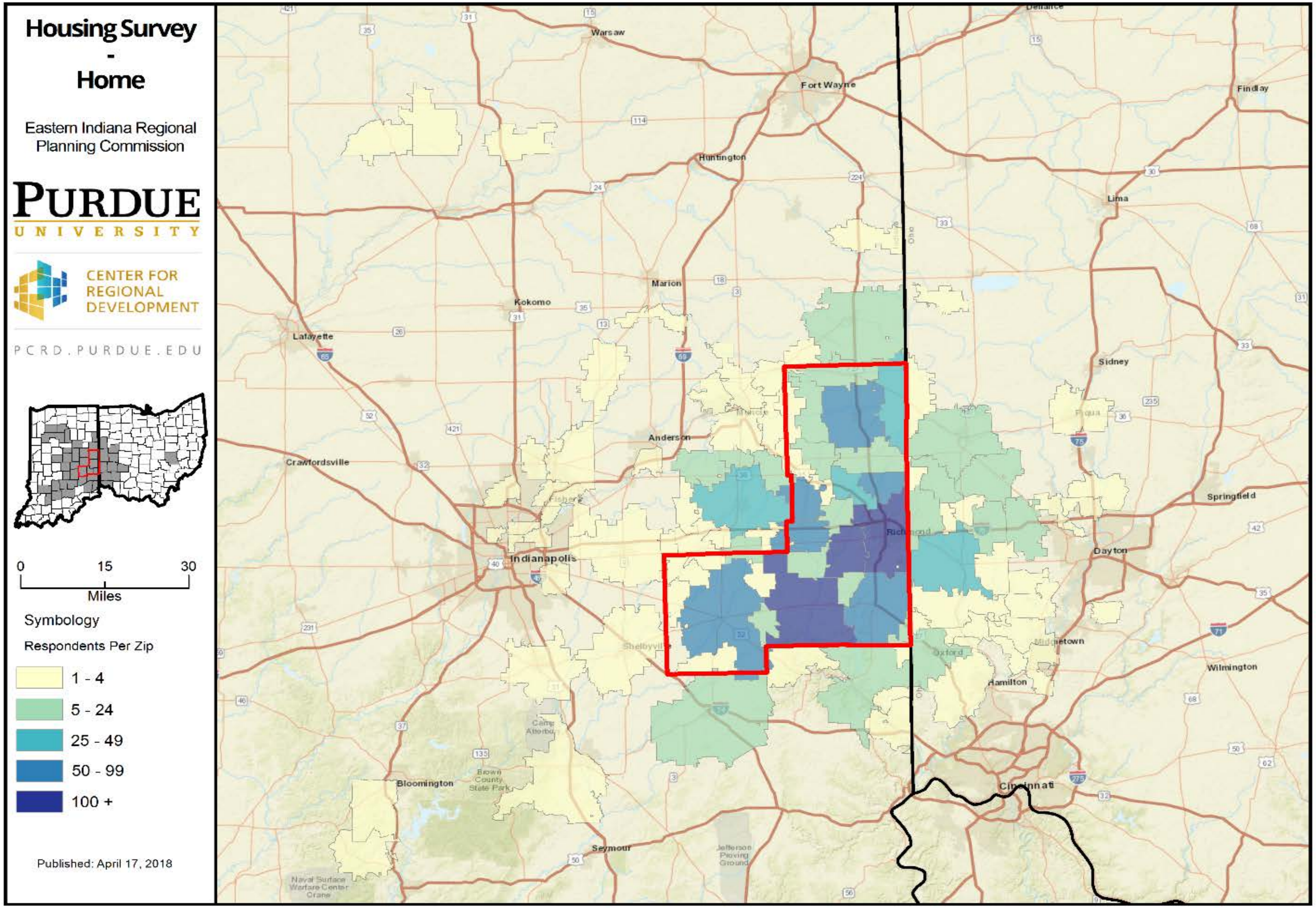
Survey Data Overview

- Data Collection Period: March 7, 2018 and April 14, 2018
- 2,506 recorded responses
- 2,103 participants fully completed the survey
- Low response rate (42%) for the question asking where participants currently live by zip code


Housing Survey
-
Home
Eastern Indiana Regional Planning Commission
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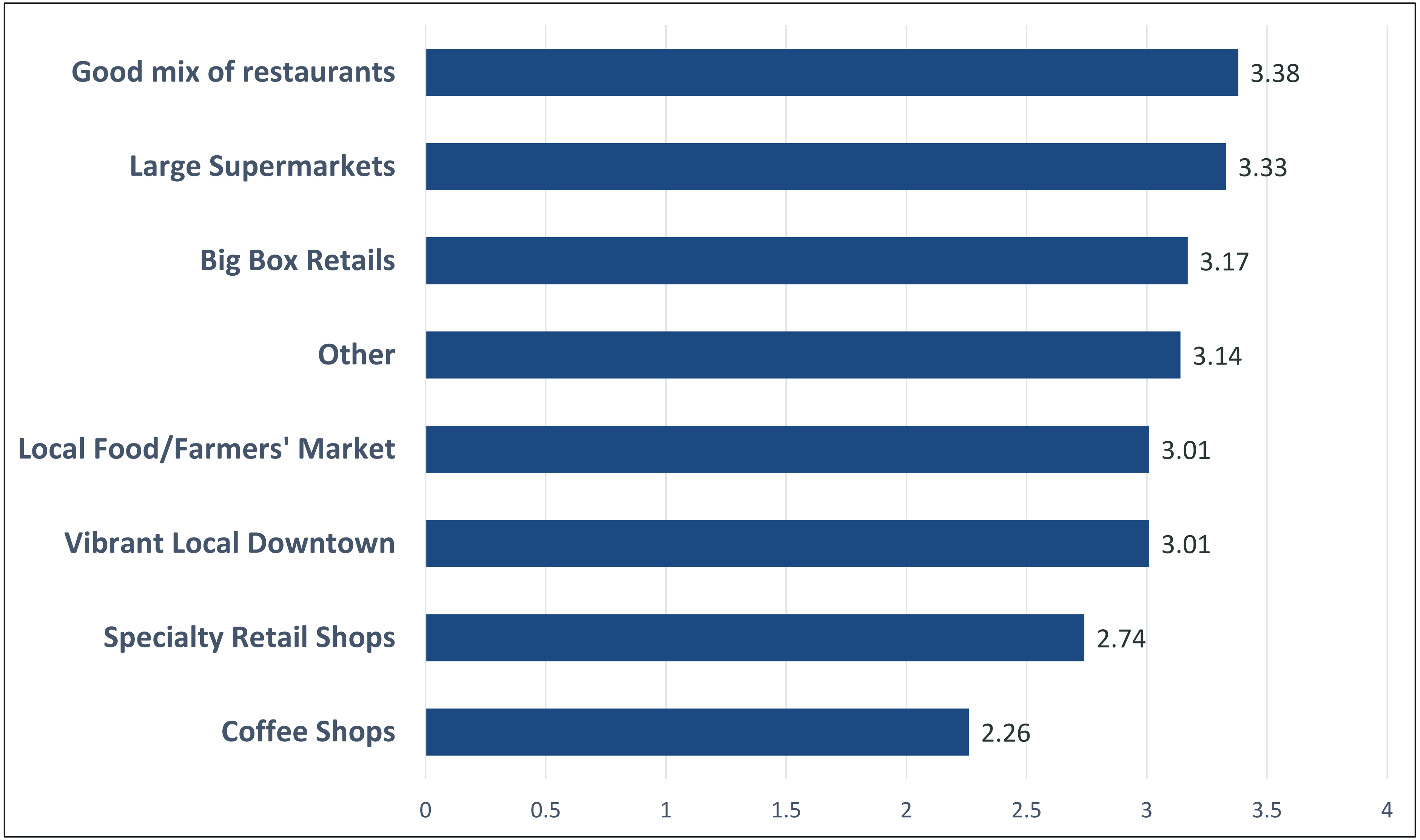
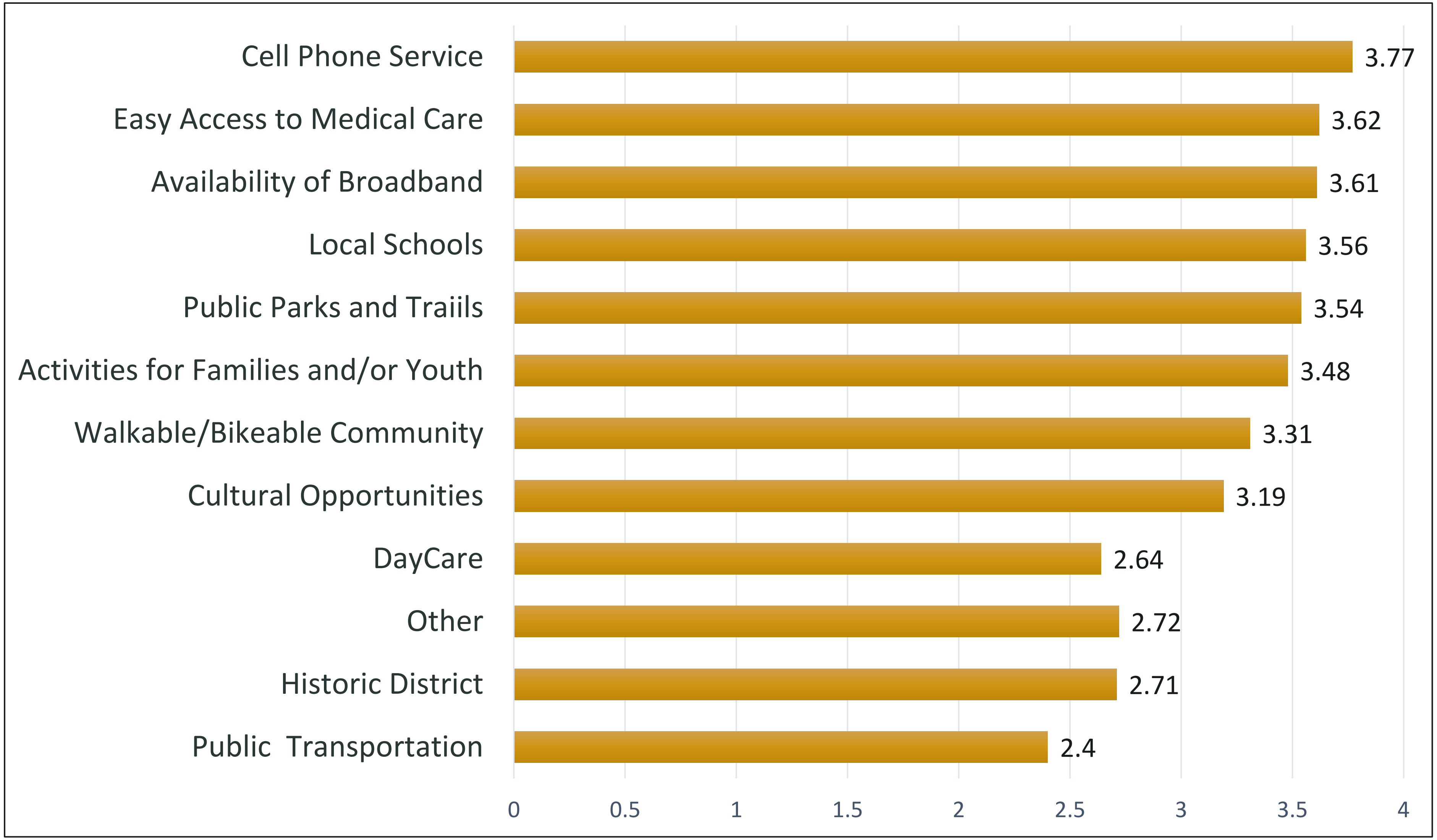
PCRD.PURDUE.EDU
0
15
30
Miles
Symbology
Respondents Per Zip
1 - 4
5 - 24
25 - 49
50 - 99
100 +
Published: April 17, 2018
Warsaw
Fort Wayne
Findlay
Huntington
Lima
Marion
Kokomo
Lafayette
Sidney
Anderson
Crawfordsville
Springfield
Richmond
Indianapolis
Dayton
Shelbyville
Oxford
Hamilton
Wilmington
Bloomington
Cincinnati
Seymour

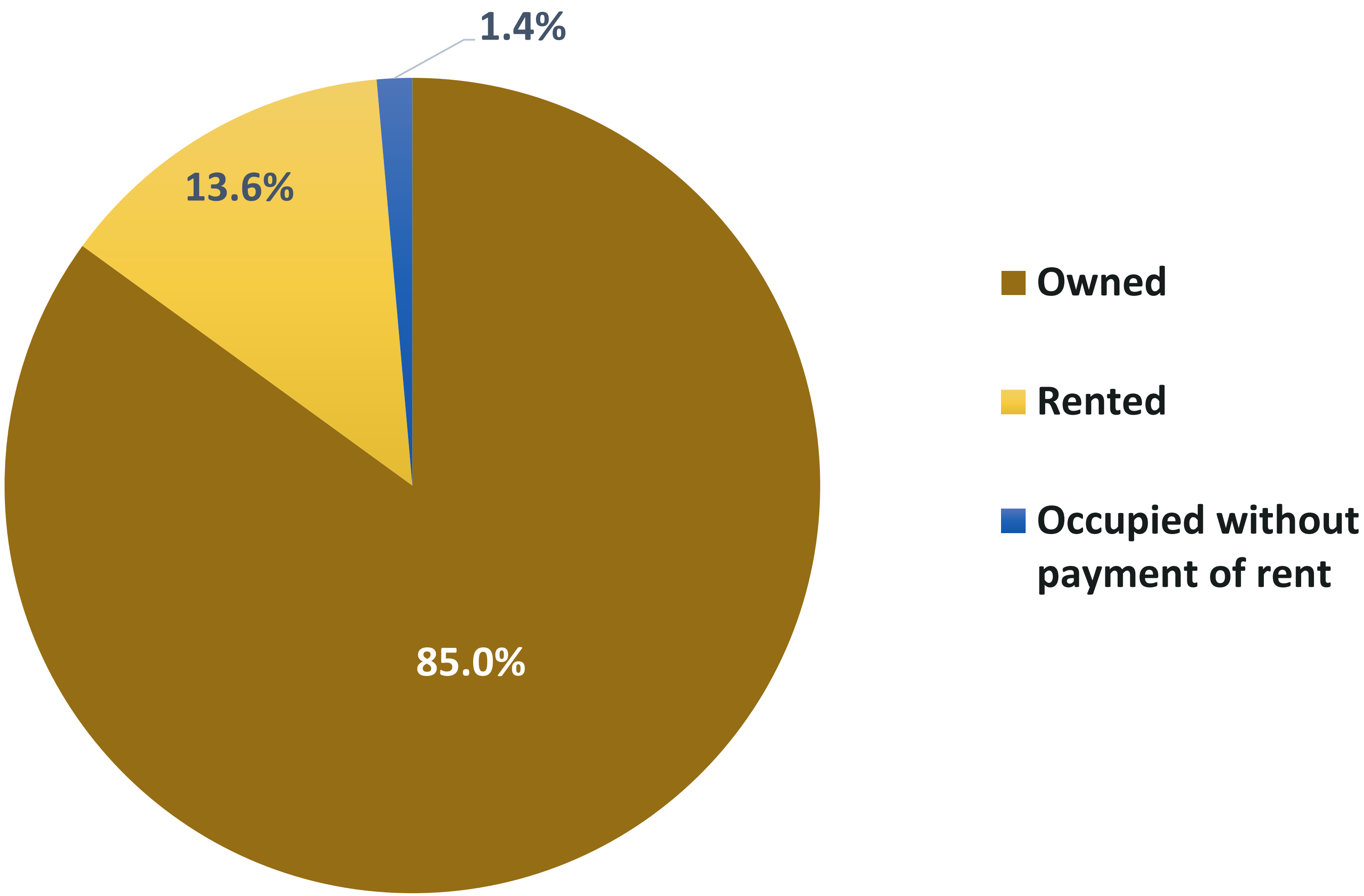
Desired Shopping and Retail Amenities
(mean scores)



Desired Community Amenities



Is your current home owned, rented or occupied without payment?



What are your future housing plans?

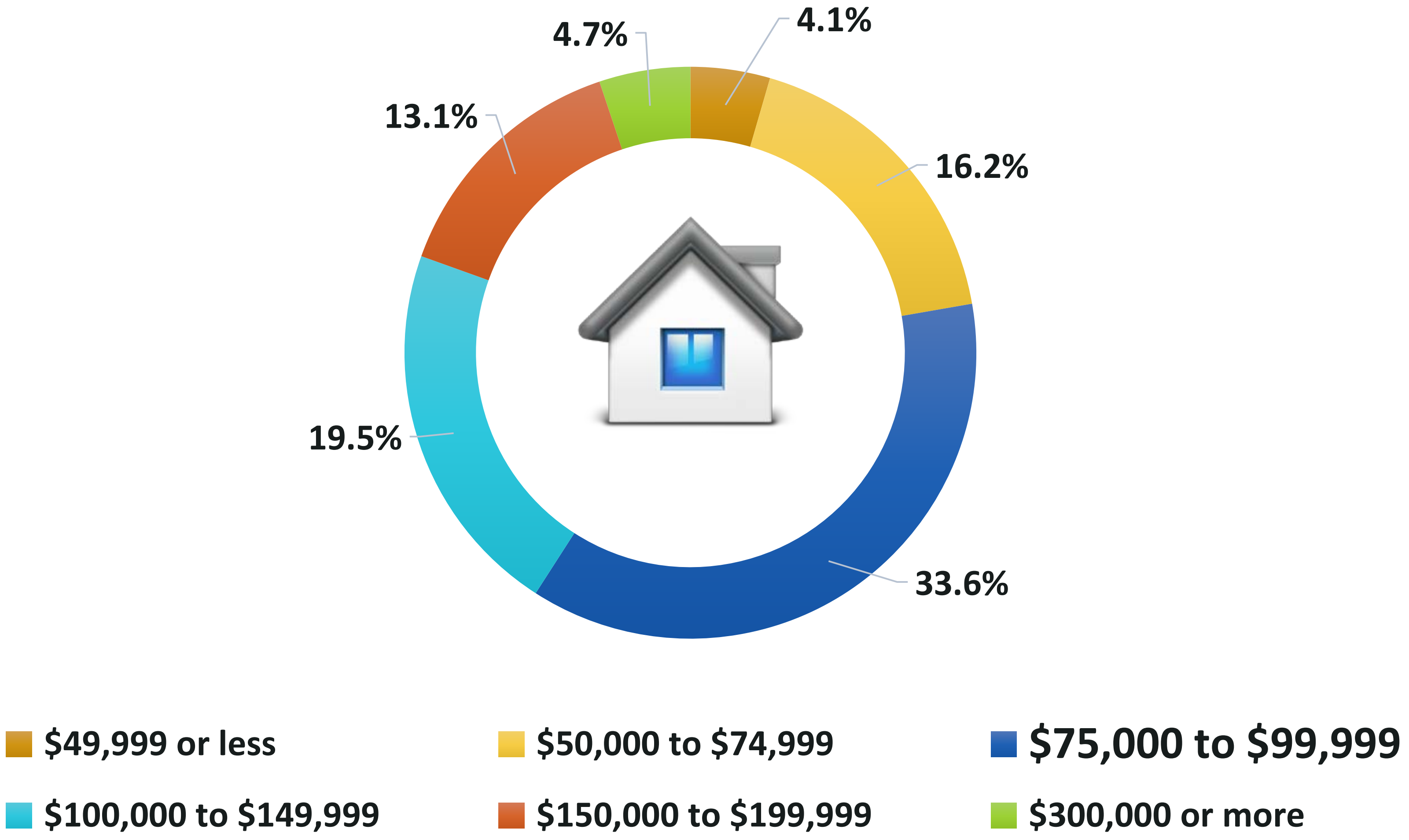
I do not plan to move	71%
I plan to buy a home	25%
I plan to rent	4%

Insight Into Existing Homeowners

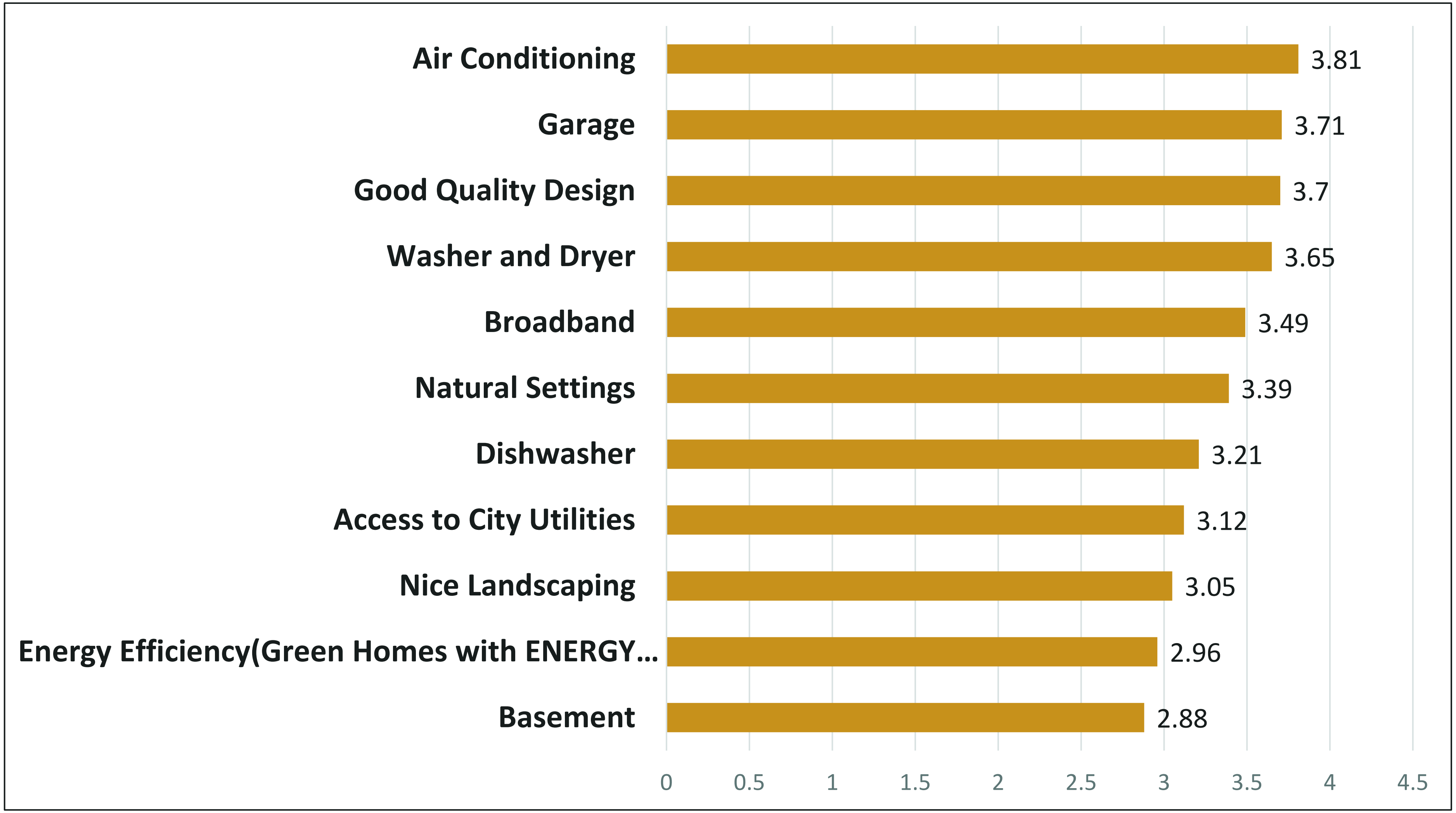
How soon are your future plans in terms of buying a new home?	65%: 1 to 3 years
What type of home will you be looking to purchase?	96%: Single family (house or townhouse)
How many bedrooms will you need in your new home?	57%: Three bedrooms
How many bathrooms will you need in your new home?	78%: Two bathrooms

Future Homeowners

What is the highest range of home prices that you would be willing to consider for your new home purchase?

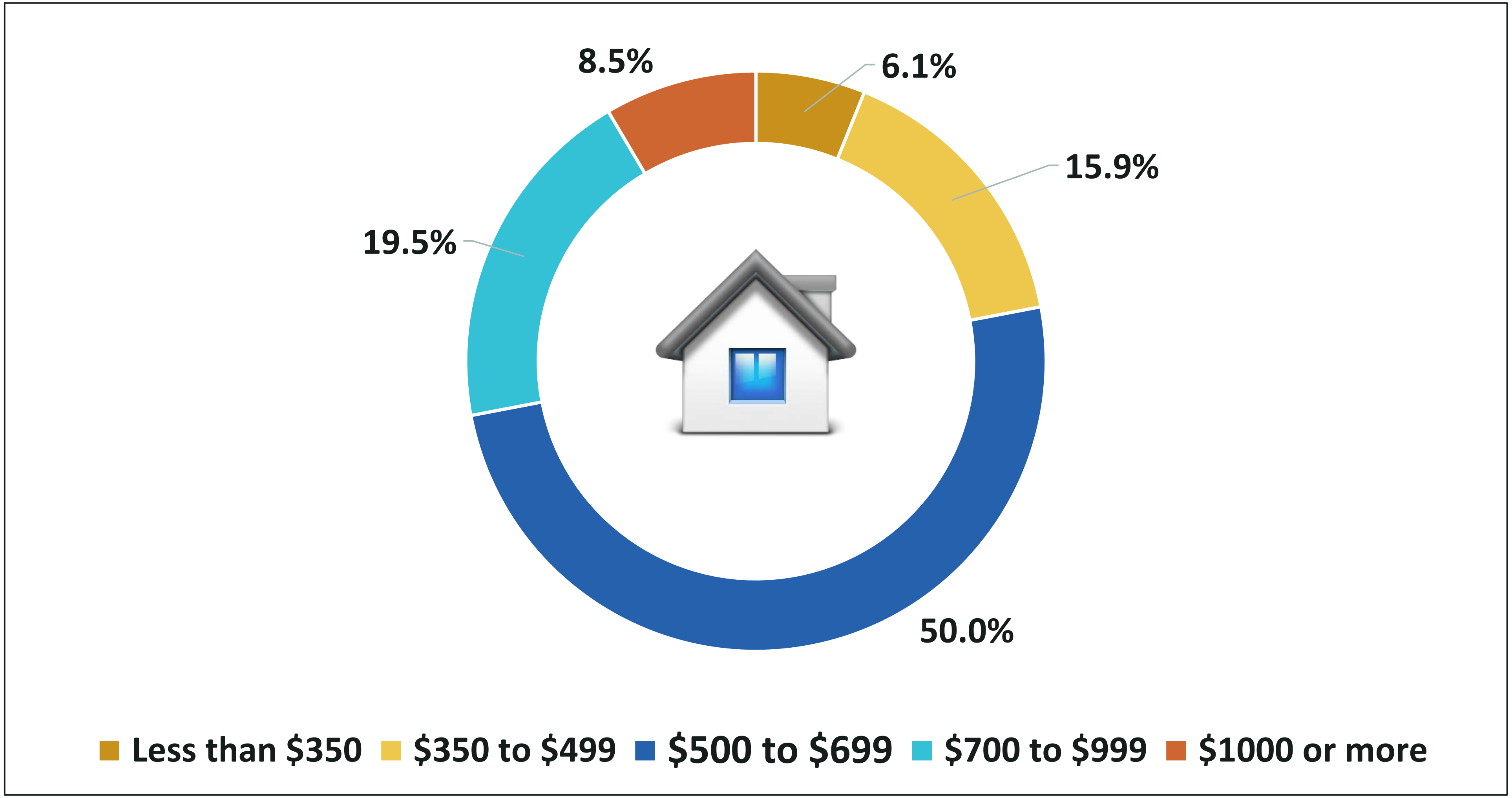


Desired Features for Future Homeowners



Insight into Future Renters

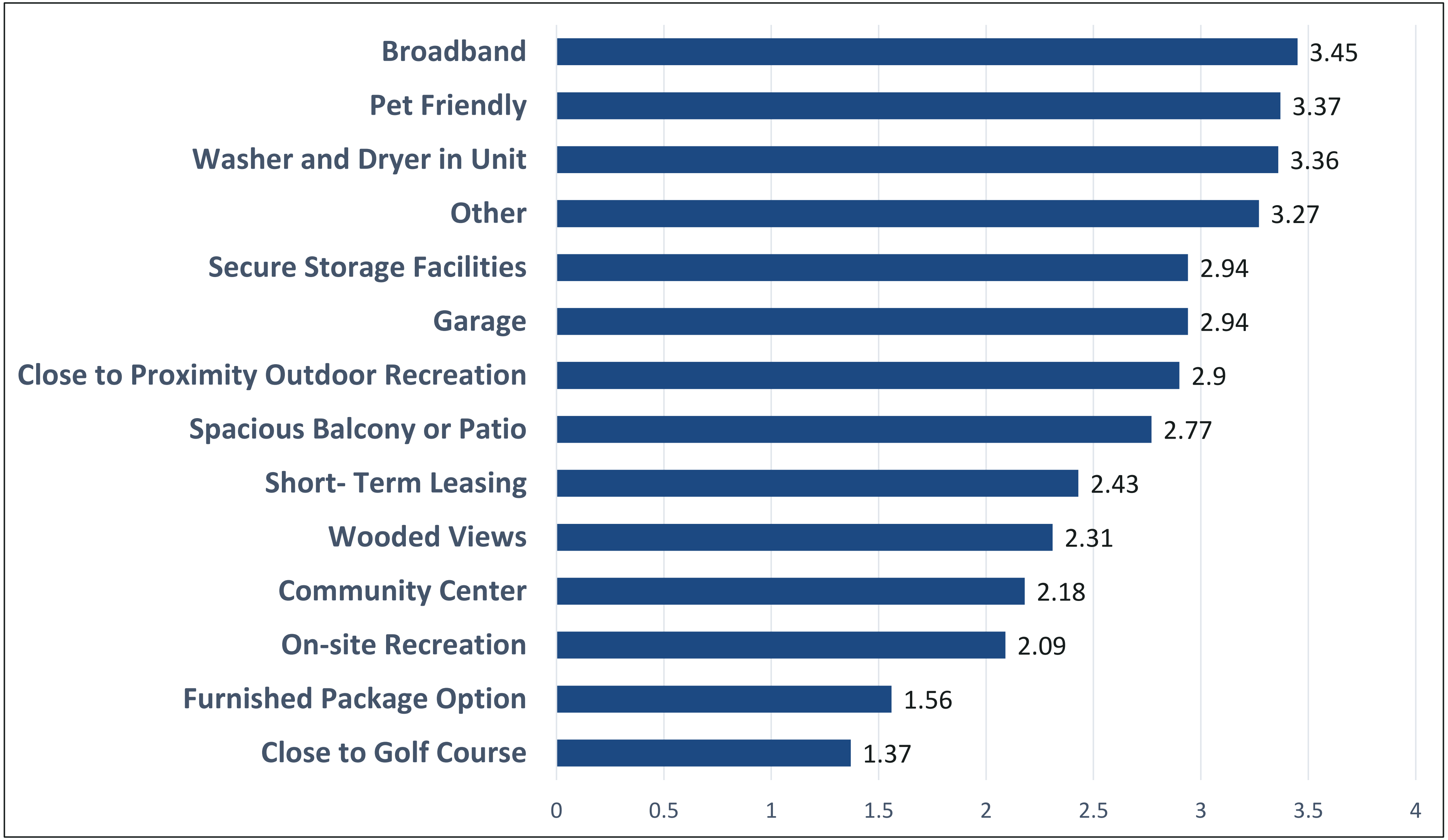
What is the highest range of monthly rental prices that you would be willing to pay in your preferred community?



Insight into Future Renters

How soon are your future plans in terms of renting a new home? (out of 82 survey responses)	66%: 1.5 years or less
How many bedrooms will you need in your new home? (out of 82 survey responses)	43%: two bedrooms
How many bathrooms will you need in your new home? (out of 82 survey responses)	99%: one to two bathrooms

Insight into Future Renters



Workforce Snapshot

Economic Growth Region 6 (EGR 6)

Workforce Data Snapshot
July 2018

Photo: Downtown Muncie, Indiana. Source: https://edlmiddletown.com/portfolio/history/#jp-carousel-1175

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EASTERN INDIANA WORKS

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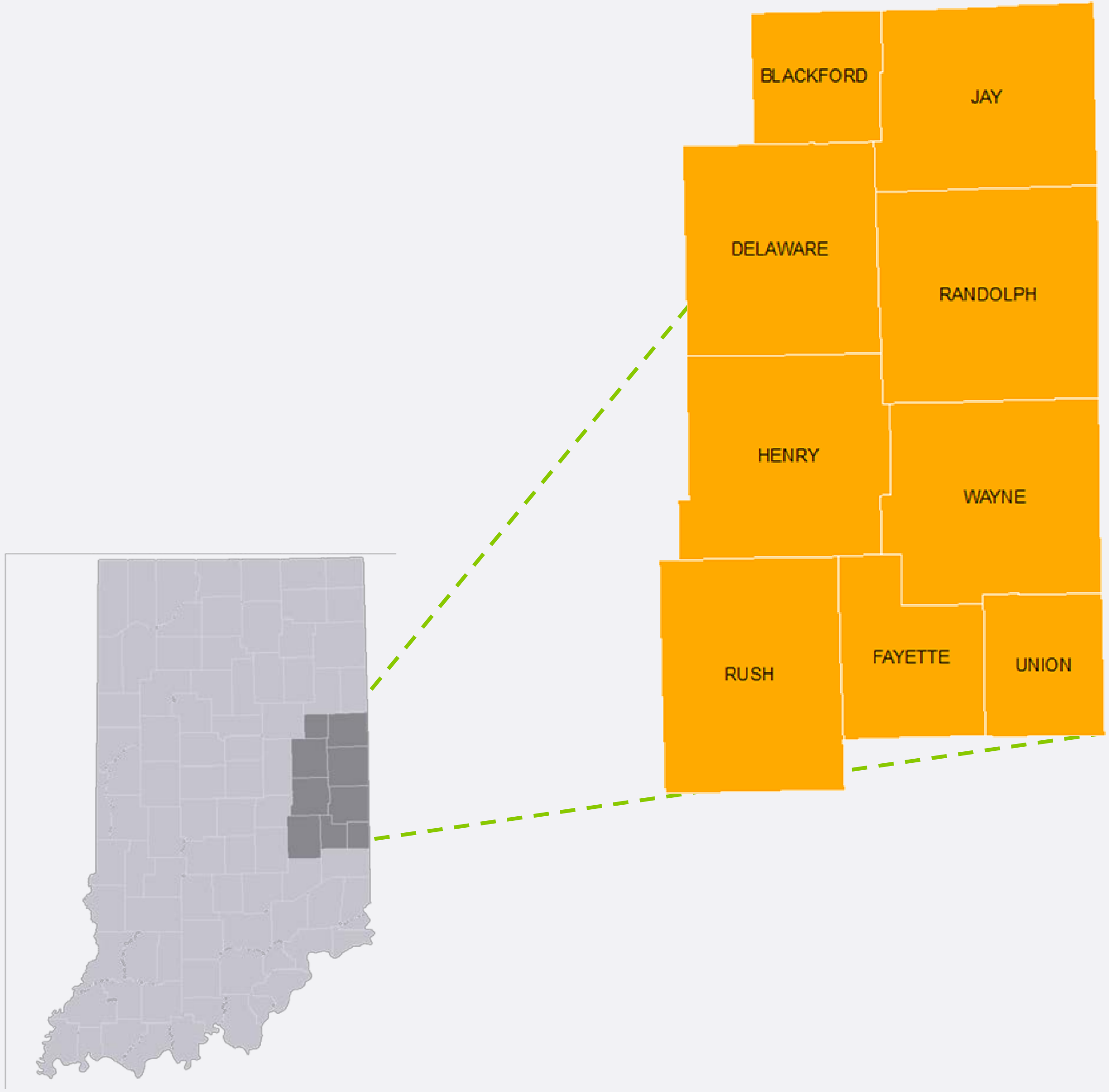
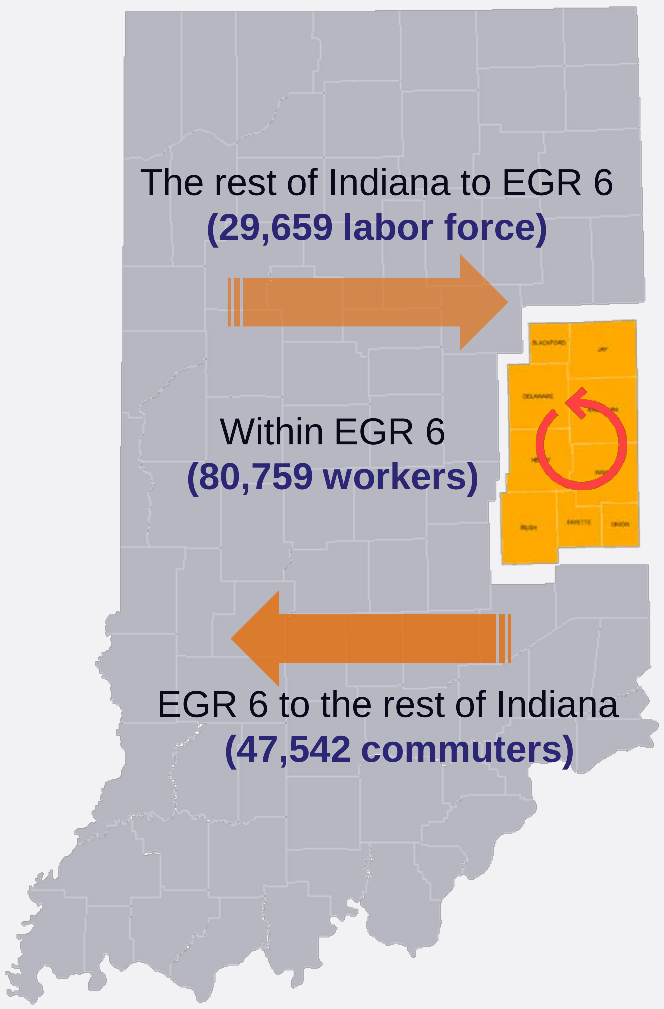
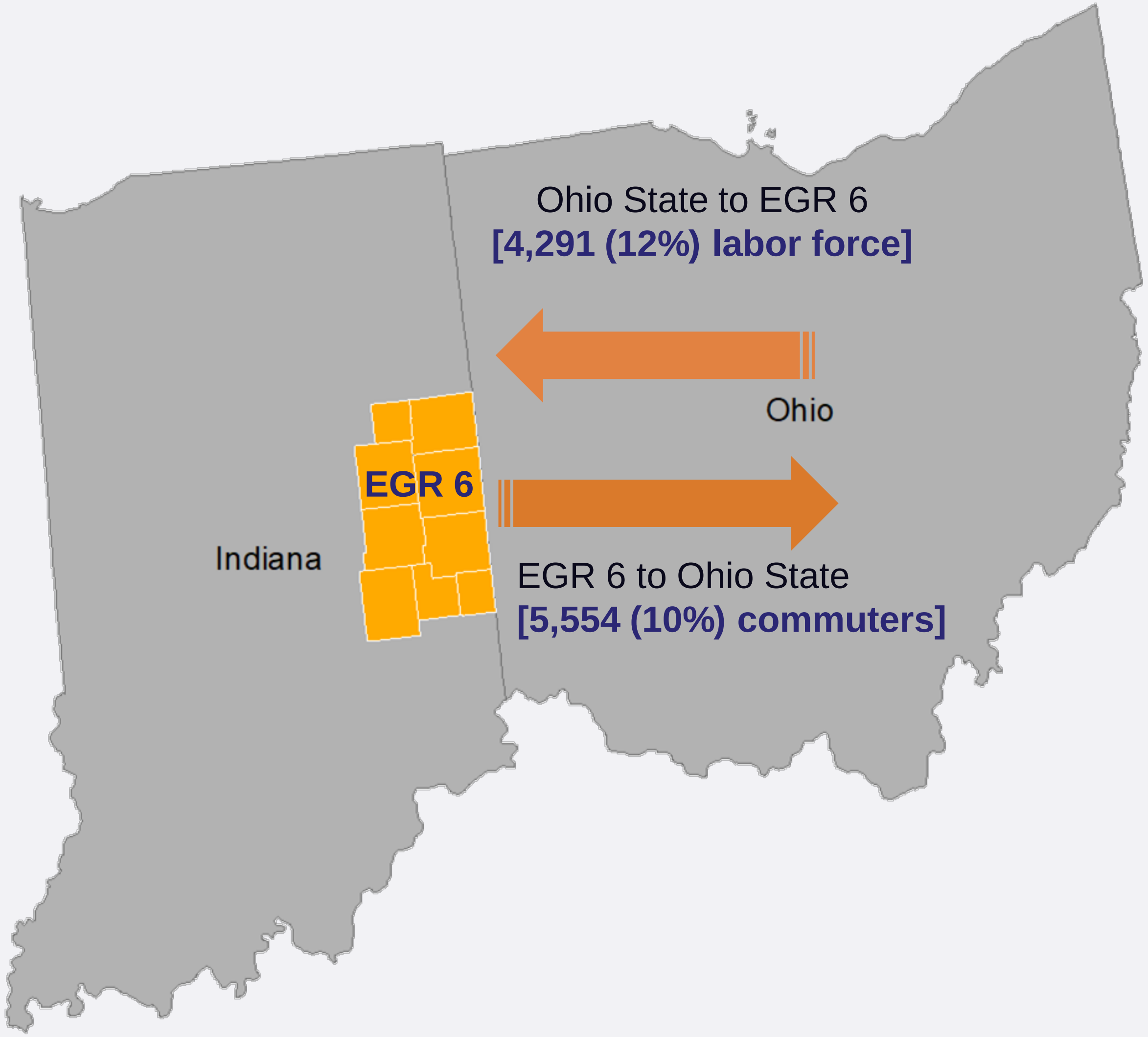


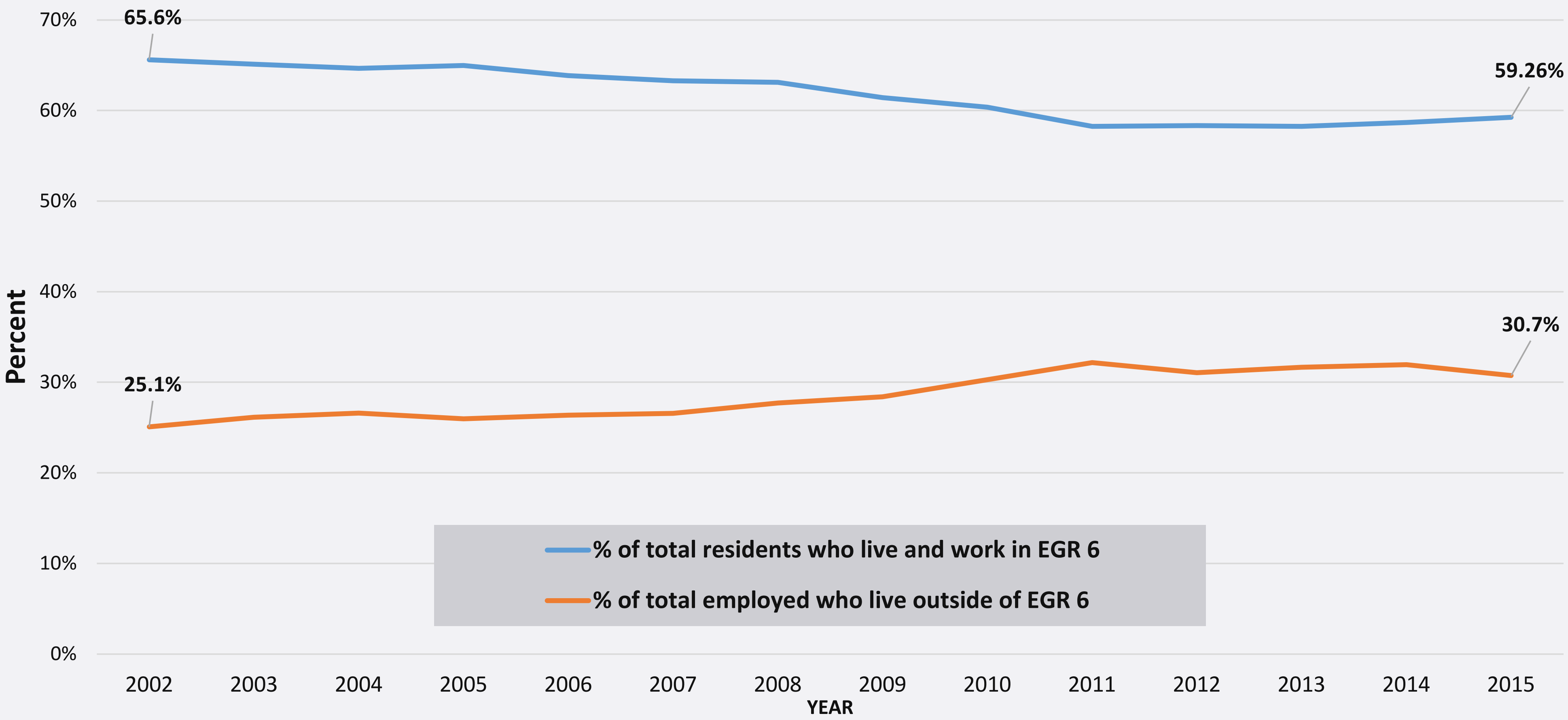
Paired Area Analysis (2015) EGR 6, Indiana, and Ohio





Source: OTM, LEHD

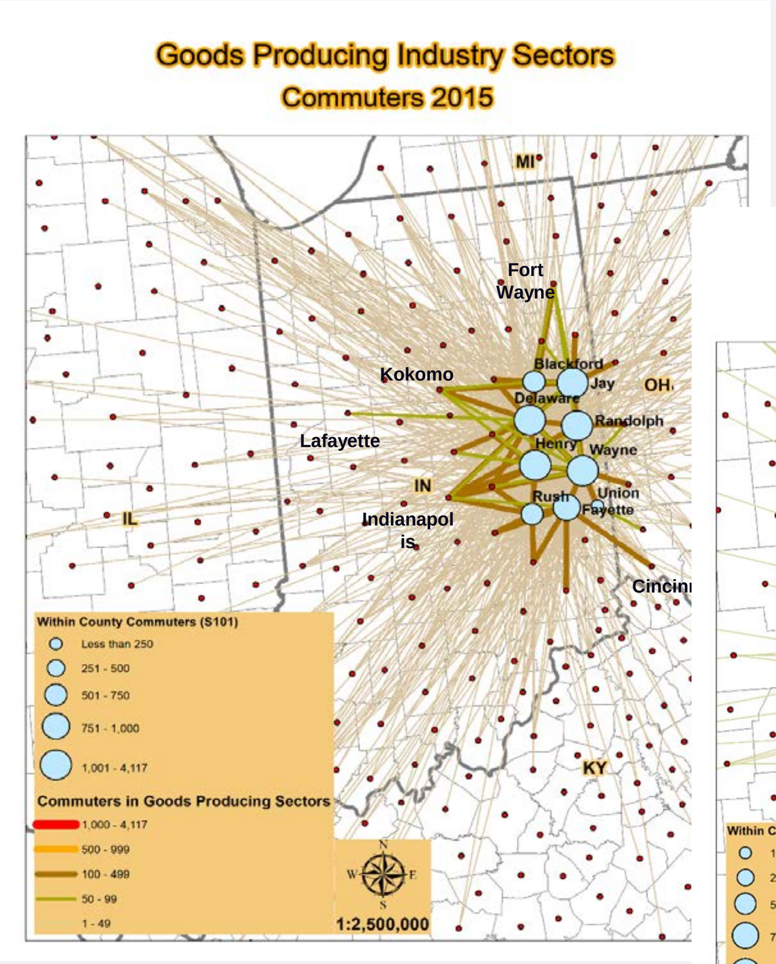
Commuting Patterns, 2002 - 2015

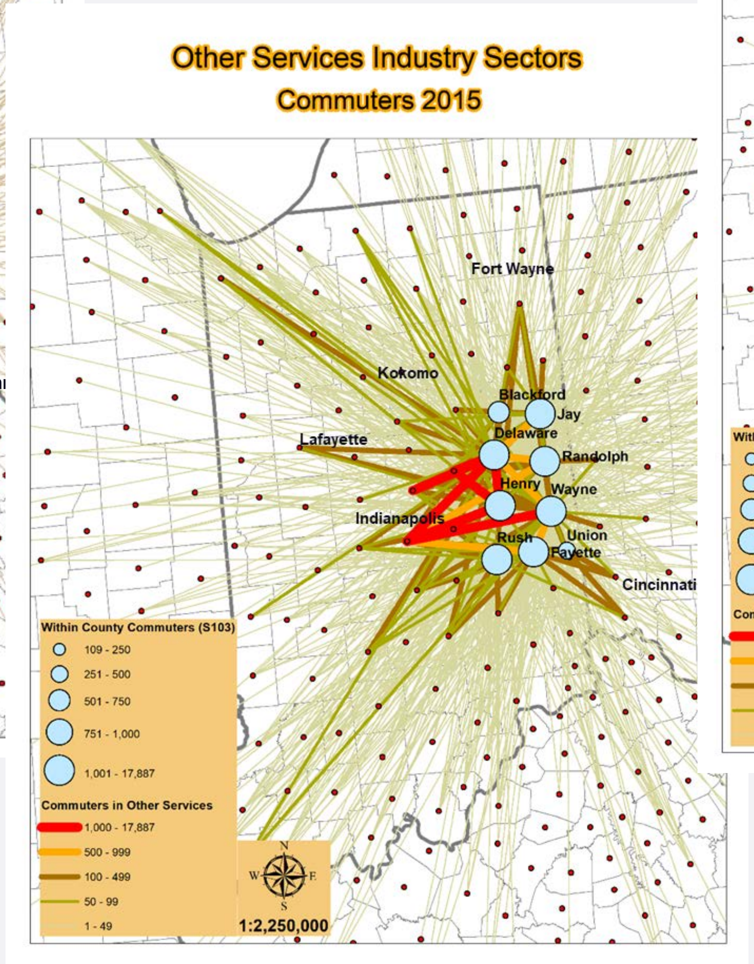


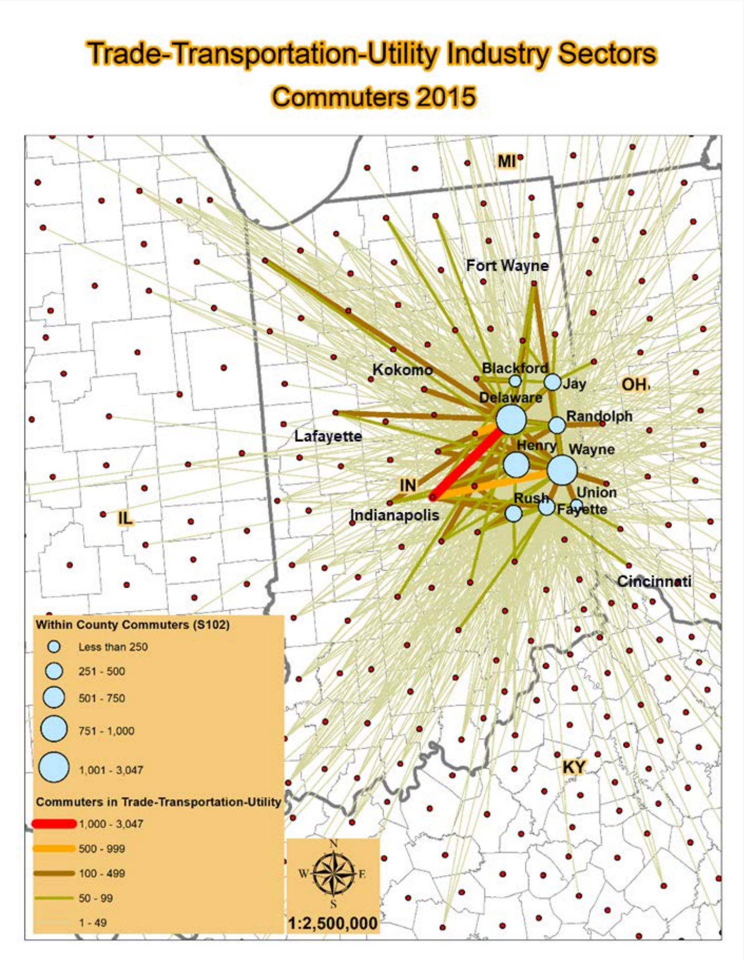
- Percent of total employed who commute from outside of EGR 6 region increased between 2002 and 2015, from 25.1% to 30.7% in 2015.
- During the same time period, the proportion of residents employed and living in EGR 6 region declined by 6 percentage points (65.6% to 59.3%).
- **Almost 31,000 workers commute 25 miles or more to work in EGR 6.**

Source: LEHD, OTM

Origin-Destination Analysis: Goods Producing, Trade and Transportation, and Other Services (2015)







- Commuting pattern footprints vary by industry sectors, has implications for the labor markets.

Source: LEHD, OTM

In which industries matured workers (55 years or older) are less than Indiana?

- Agriculture, Forestry, Fishing and Hunting
- Utilities
- Administrative and Support and Waste Management and Remediation
- Healthcare and Social Assistance
- Arts, Entertainment, and Recreation
- Accommodation and Food Services

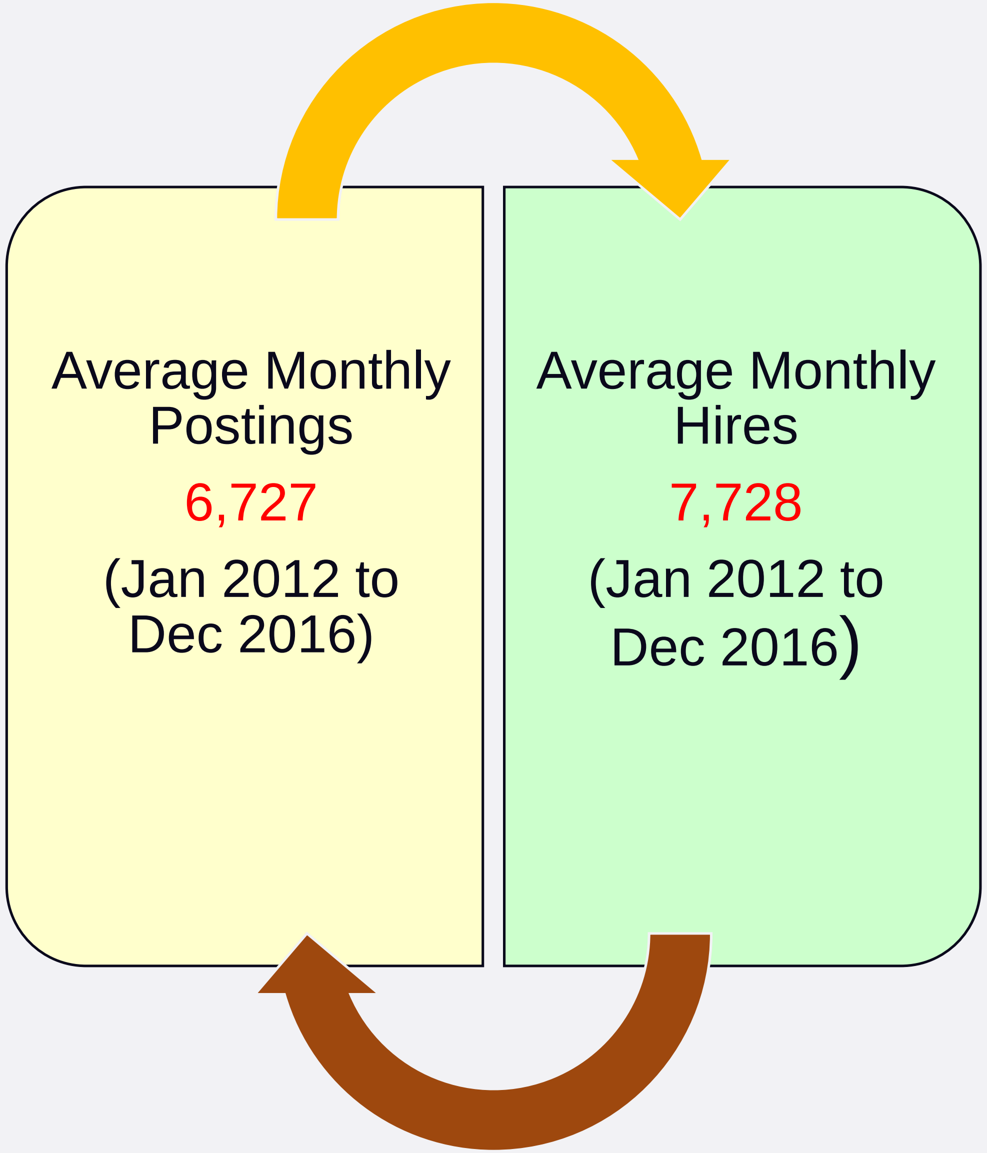
Source: Economic Modeling Specialists International (EMSI) – 2018.1 – QCEW Employees, Non-QCEW Employees, Self-Employed, and Extended Proprietors

In which occupations matured workers (55 years or older) are less than Indiana?

- Community and social services
- Arts, design, entertainment, sports and media
- Healthcare practitioners
- Protective services
- Building and grounds
- Farming and fishing
- Military occupations

Source: Economic Modeling Specialists International (EMSI) – 2018.1 – QCEW Employees, Non-QCEW Employees, Self-Employed, and Extended Proprietors

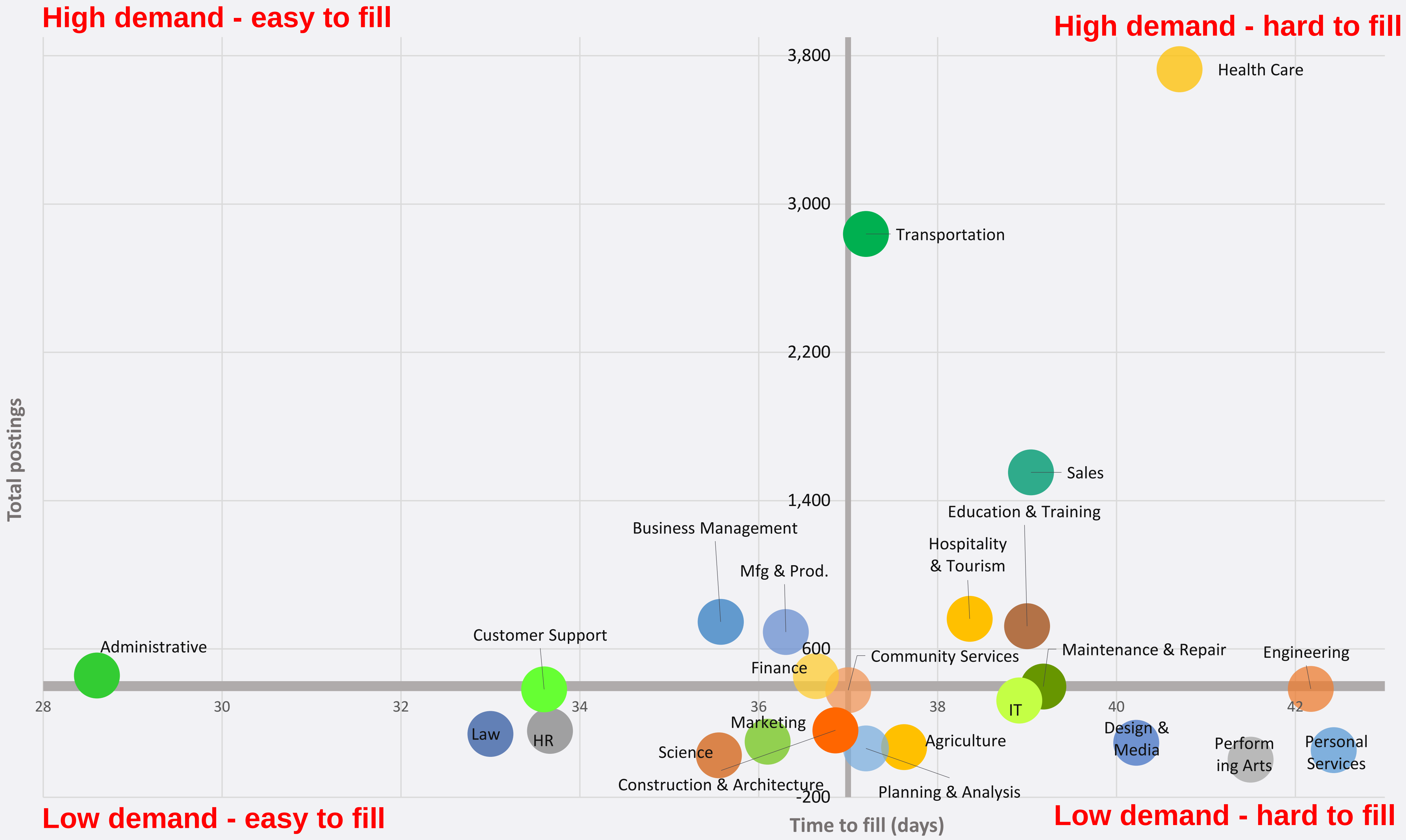
Overview: Job Posting Analytics (Long-term and Near-term Analysis)



- From January 2012 to December 2016, on average, 6,727 unique job postings were made every month.
- Over the same time period, 7,728 monthly hires were made each month.
- For every unique job posting, there was approximately 1 hire.
- Job postings came out for almost all types of 786 occupations with varying intensity.

Source: Economic Modeling Specialists International (EMSI) – 2018.1 – QCEW Employees, Non-QCEW Employees, Self-Employed, and Extended Proprietors

Hard to fill jobs 2017-2018



Source: Burning Glass Technologies

Overview: Top Jobs Postings: 2012-2016

By total postings

1. Truck Drivers
2. Commercial Driver's License Drivers
3. Regional Truck Drivers
4. Flatbed Drivers
5. Over the Road Drivers
6. Owner Operators
7. Retail Sales Associates
8. Registered Nurses
9. Restaurant Managers
10. Sales Managers

By unique postings

1. Truck Drivers
2. Commercial Driver's License Drivers
3. Owner Operators
4. Flatbed Drivers
5. Regional Truck Drivers
6. Over The Road Drivers
7. Retail Sales Associates
8. Customer Service Rep.
9. Registered Nurses
10. Sales Managers

By posting intensity

1. Lawn Technicians (Building and Grounds Cleaning and Maintenance)
2. Sergeants (Military)
3. Route Service Representatives (Transportation and Material Moving)
4. Policy and Procedure Writers (Arts, Design, Entertainment, Sports, and Media)
5. Construction Engineers (Architecture and Engineering)

Source: Economic Modeling Specialists International (EMSI) – 2018.1 – QCEW Employees, Non-QCEW Employees, Self-Employed, and Extended Proprietors

Overview: Top Programs versus Completions

Regional completions exceed openings

1. Special education and teaching
2. General studies
3. Psychology, general
4. Radio and television
5. Biology/Biological sciences

Regional openings exceed completions

1. Retailing and retail operations
2. Selling skills and sales operations
3. Health services/allied health/health sciences
4. Food preparation/professional cooking/kitchen assistant
5. Institutional food workers

- Regional openings (new jobs + replacements) far exceed the regional completions in the areas of retailing, health services, and professional food workers

Source: Economic Modeling Specialists International (EMSI) – 2018.1 – QCEW Employees, Non-QCEW Employees, Self-Employed, and Extended Proprietors

Labor Force Participation Rate: EGR 6

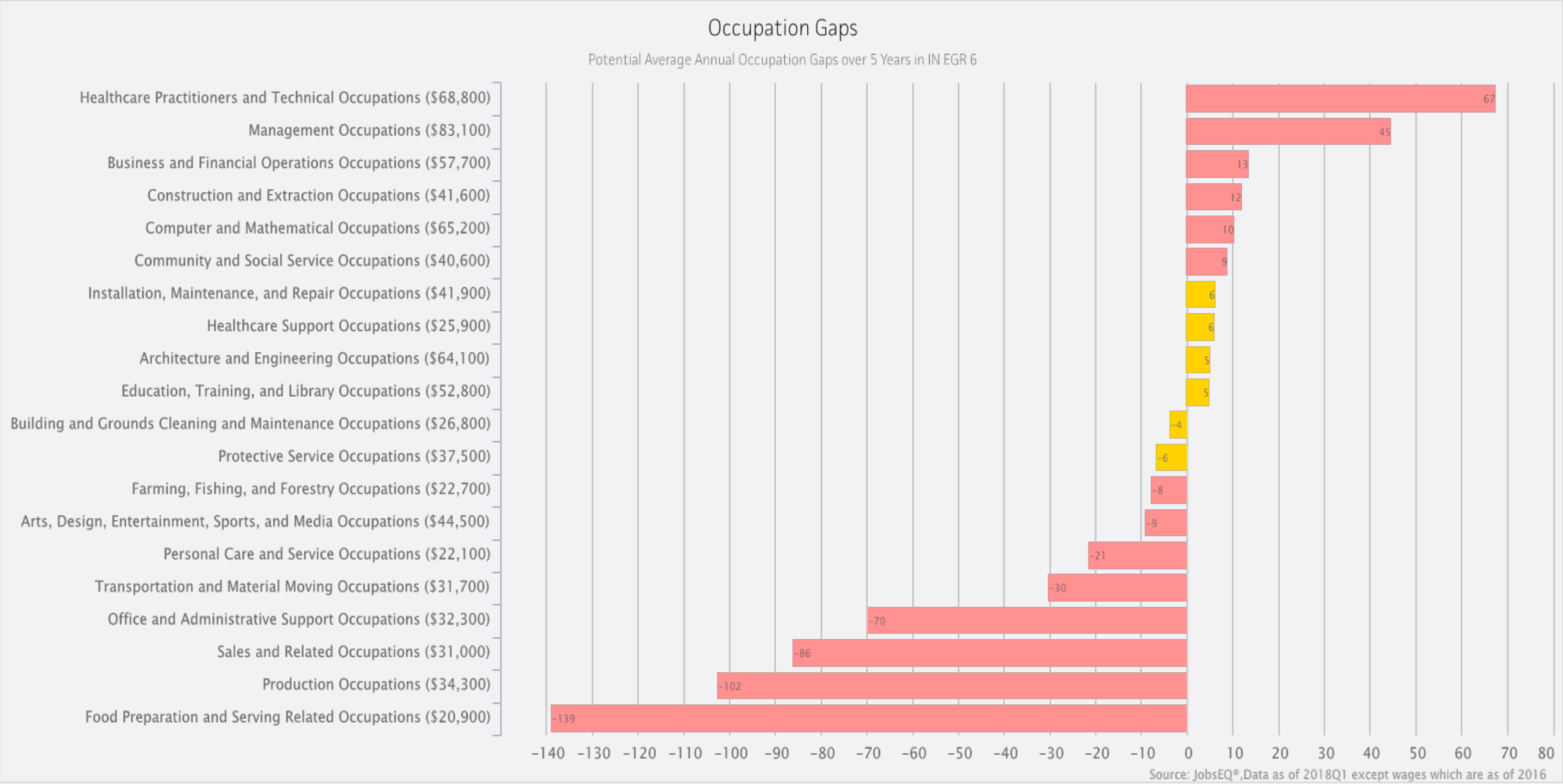
	2001	2008	2016
Labor Force	174,751	165,334	157,979
Potential Workers	216,963	213,372	204,879
Labor Force Participation Rate	80.5%	77.5%	77.1%

The labor force participation rate in EGR 6 region decreased between 2001 and 2016.

The number of individuals in the region's labor force decreased by 16,772 individuals between 2001 and 2016. Among all the potential workers (defined as those between 18 to 64 years old), more than 20% were not participating in the labor force market in 2016.

Source: BLS LAUS data

Occupation Gap: Five Year Projection (By 2-digit SOC Codes)



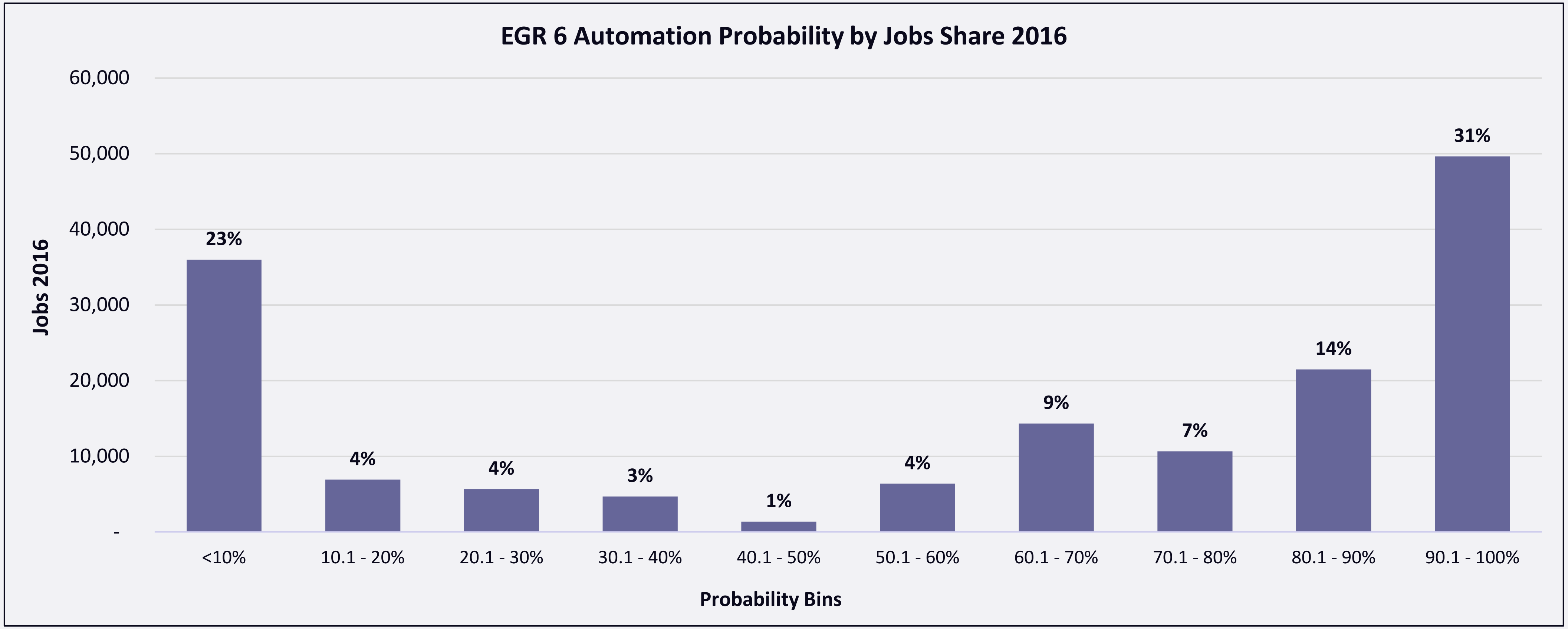
Source: Job EQ Database

Top Compatible Occupations: Registered Nurses

O*NET	O*NET Occupation	Median Hourly Earnings*	2011 Jobs*	2016 Jobs*	2017 Jobs*	2011-2016 Change*	2011-2016 Estimated Annual Openings*	Compatibility Index
29-1141.03	Critical Care Nurses	$26.91	2,962	2,973	3,082	120	221	97
29-2061.00	Licensed Practical and Licensed Vocational Nurses	$19.18	1,110	1,114	1,110	0	101	96
29-1141.01	Acute Care Nurses	$26.91	2,962	2,973	3,082	120	221	95
29-1123.00	Physical Therapists	$38.25	128	129	135	7	9	95
29-9099.01	Midwives	$14.10	35	40	41	6	3	94
29-1071.01	Anesthesiologist Assistants	$44.40	36	25	27	(9)	2	94
29-1128.00	Exercise Physiologists	$20.05	17	16	17	0	2	94
31-2021.00	Physical Therapist Assistants	$26.05	70	82	85	15	12	94
29-1171.00	Nurse Practitioners	$42.50	138	142	147	9	11	94
29-1071.00	Physician Assistants	$44.40	36	25	27	(9)	2	94
29-9091.00	Athletic Trainers	$20.42	23	26	27	4	2	94
29-1161.00	Nurse Midwives	$43.57	<10	<10	<10	0	0	94
29-1122.00	Occupational Therapists	$36.78	91	94	98	7	7	94
31-2011.00	Occupational Therapy Assistants	$26.43	43	49	50	7	7	94
29-1126.00	Respiratory Therapists	$26.24	164	160	170	6	11	93

Source: EMSI

Automation Probability



- More than 60% jobs have 0.5 or higher probability of automation. 30%+ jobs have probability of 0.9 or higher. Nearly 23% jobs have low probability value or 0.1 or less.

Source: Frey and Osborne 2017, EMSI

Top Jobs Postings and Automation Probability

Jobs with highest unique postings (EMSI) 2012-2016	Automation probability	Automation Probability (%)
Truck Drivers	0.930	**93**
Commercial Driver's License Drivers	0.690	**69**
Owner Operators	0.790	**79**
Flatbed Drivers	0.790	**79**
Regional Truck Drivers	0.790	**79**
Occupations requiring bachelor's with highest postings (Burning Glass) Jan 2016 to May 2018	**Automation Probability**	**Automation Probability (%)**
Registered Nurses	0.009	**0.90**
First-Line Supervisors of Retail Sales Workers	0.280	**28.00**
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	0.850	**85.00**
Food Service Managers	0.083	**8.30**
Medical and Health Services Managers	0.007	**0.73**
Physical Therapists	0.021	**2.10**
Physicians and Surgeons, All Other	0.004	**0.42**
Managers, All Other	0.250	**25.00**
Speech-Language Pathologists	0.006	**0.64**
Postsecondary Teachers, All Other	0.032	**3.20**

Source: Frey and Osborne 2017, Burning Glass Technologies, EMSI

Takeaways and strategies

- EGR 6 Region can employ two-pronged strategies for workforce development.

- Short-term strategies would be to fill-in the gaps and high-demand jobs in trade and transportation industries
    - identify compatible occupations
    - Identify discouraged and underemployed workers

- Long-term strategies should address high-demand, low-automation jobs in healthcare, architecture and engineering, design and performing arts, IT, etc.
    - partner with educational institution and employers
    - increase seats and intake capacity
    - assess compatible occupations
    - educate existing workers on career ladder opportunities
    - educate young students on career pathways
    - retain young graduates and talent within the region

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