

# REGIONAL SNAPSHOT

Eastern Shore Region, Virginia





#### **Table of contents**

01

Overview

02

Demography

03

Human capital

04

Labor force

05

Industry and occupation

# 01 overview

**Eastern Shore Region, VA** 

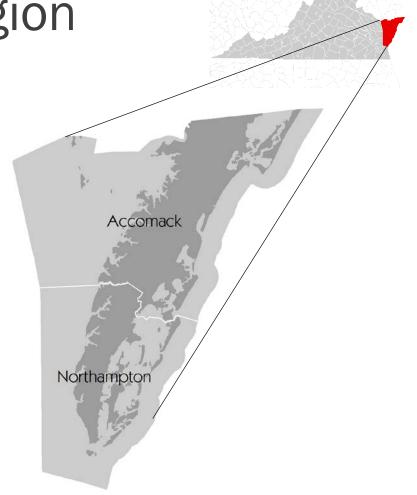
What is a regional snapshot?

#### **Overview**

**Eastern Shore Region** 

The Eastern Shore Region is comprised of two counties in eastern Virginia. U.S. Highway 13 passes through the central part of the region connecting to Maryland and Delaware to the north and city of Norfolk, VA to the south.

- Accomack
- Northampton



#### **Overview**

# What is a regional snapshot?

#### What is the snapshot?

This snapshot is a demographic and economic assessment of the Eastern Shore Region in Virginia. Using county-level data, PCRD analyzed a number of indicators to gauge the overall economic performance of the Eastern Shore Region in comparison to the rest of the state.

#### What is its purpose?

The snapshot is intended to inform the region's leaders, organizations and residents of the key attributes of the region's population and economy. In particular, it takes stock of the region's important assets and challenges. With such data in hand, regional leaders and organizations are in a better position to invest in the mix of strategies that will spur the growth of the economy and provide a higher quality of life for residents of the region.

#### What are its focus areas?

PCRD secured and analyzed recent data from both public and private sources to generate the snapshot. In order to build a more comprehensive picture of the region, the report presents information under four key categories.

- Demography
- Human Capital
- Labor Force
- Industry & Occupation

When appropriate or relevant, the report compares information on the region with data on the remainder of the state. By so doing, the region is better able to determine how well it is performing relative to the state on a variety of important metrics.

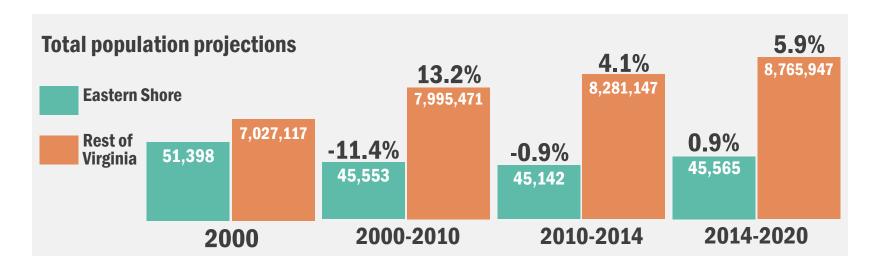
# 02 demography

**Population change** 

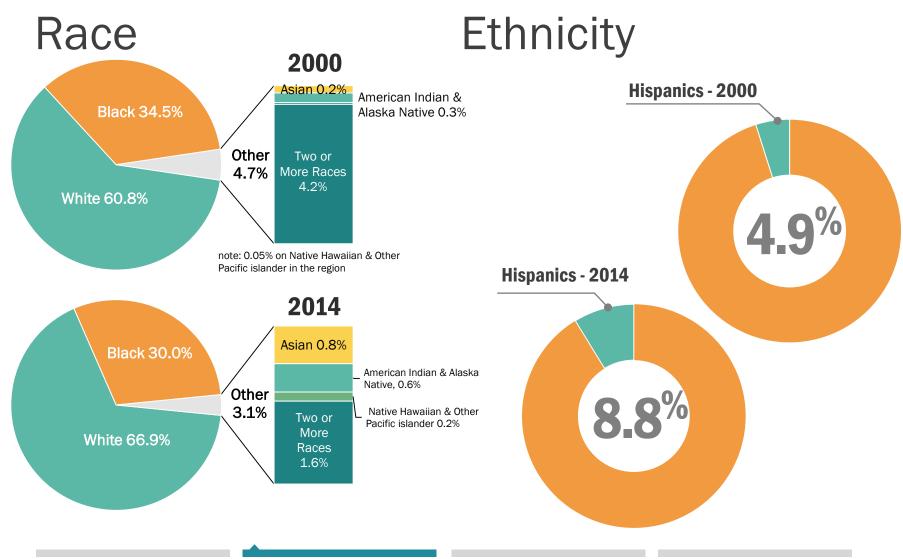
**Age structure** 

**Income and poverty** 

# Population change

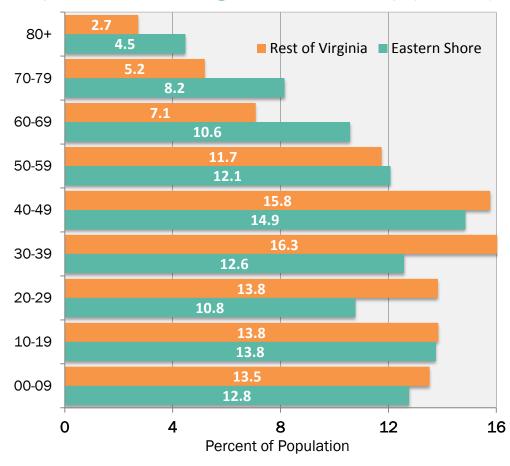


- How does the region's population trend compare to that of the state?
- What may be some of the elements driving the trends in the region? In the state?
- What strengths or challenges might these trends present?



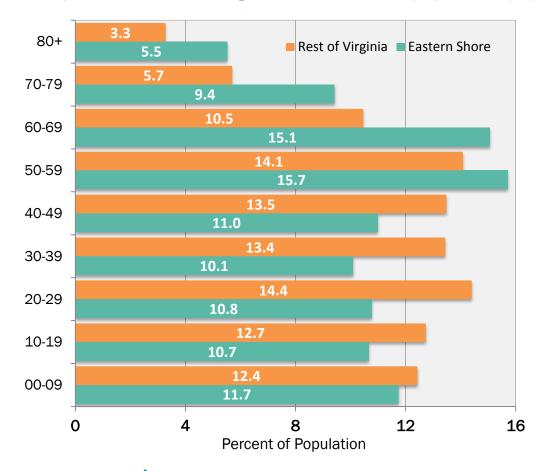
# Population Age Structure, 2000

A visual presentation of the age distribution of the population (in percent)



# Population Age Structure, 2014

A visual presentation of the age distribution of the population (in percent)



- Is the region experiencing an aging of its population? How does this compare to the rest of the state?
- Is there a sizable number of people of prime working age (20-49 years of age) in the region?
- Is the youth population (under 20 years old) growing or declining?
- What are the implications of the region's age structure for the economic development efforts of the region?

# Income and poverty

|   | 2003     | 2008     | 2013     |
|---|----------|----------|----------|
| Total Population in Poverty                   | 16.2%    | 20.3%    | 20.1%    |
| Minors (Age 0-17) in<br>Poverty               | 25.3%    | 29.9%    | 30.7%    |
| Real Median<br>Household Income*<br>(\$ 2013) | \$37,891 | \$39,765 | \$37,570 |

- Is the poverty rate for individuals in the county getting better or worse?
- Is poverty for minors in the county lower or higher than the overall poverty rate for all individuals? Why?
- Has real median income (adjusted for inflation) improved or worsened over the 2003 to 2013 time period? What may be reasons for these changes?

# 03 human capital

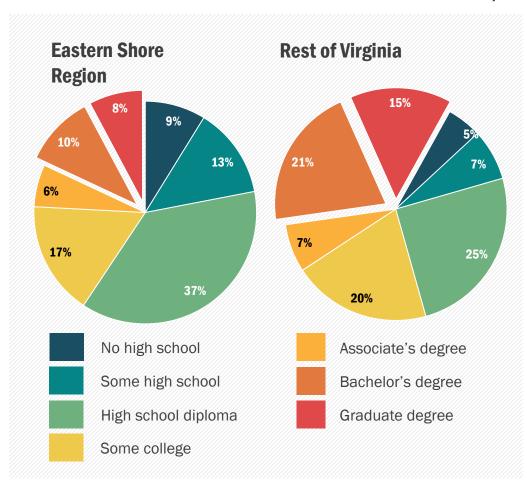
**Educational attainment** 

**Graduation rates** 

**Patents** 

#### **Human capital**

# Educational attainment, 2013



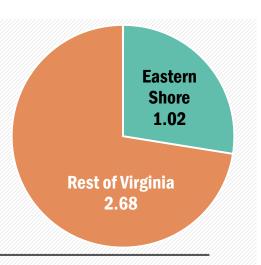
- What proportion of the adult population in the region has only a high school education?
- How many are college graduates (bachelors degree or higher)?
- How does the educational profile of the region compare to that of the rest of the state?
- What are the implications of the educational profile of the region in terms of the region's economic opportunities or workforce challenges?

#### **Human capital**

## **Patents**



From 2001 to 2013, Eastern Shore counties were issued patents at a rate of 1.02 per 10,000 jobs, while the remaining Virginia counties garnered 2.68 patents per 10,000 jobs.



Eastern Shore 0.53

Rest of Virginia 1.63

# Patents per 10,000 residents 2001-2013

From 2001 to 2013, 0.53 patents per 10,000 residents were issued in Eastern Shore counties. The Rest of Virginia amassed 1.63 patents per 10,000 residents.

Patenting trends are an important indicator of the level of innovation in a region.

Commercializing this innovation can lead to long-term growth for regional economies.

#### Questions:

- How does the region's patent rate compare to that of the rest of the state?
- How have rates changed over time?
- What might this data suggest for the future of the region?

section 03

Source: U.S. Patent and Trademark Office, Census, BEA, and EMSI

# 04 labor force

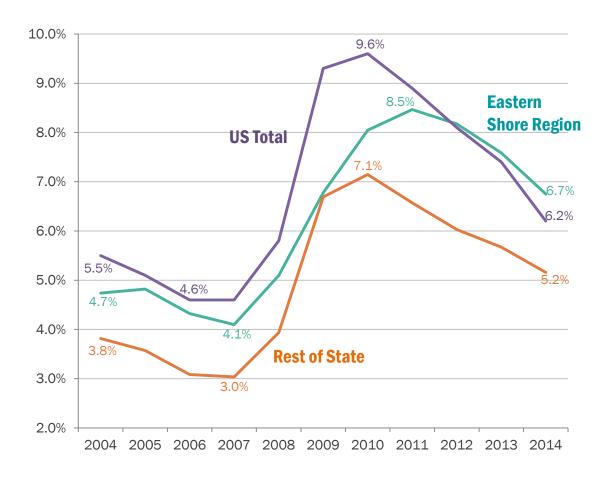
**Unemployment rates** 

**Earnings per worker** 

**Source of labor for the region** 

#### **Labor force**

# Unemployment rates



- How does the region's unemployment rate compare to the rest of the state and nation?
- How does the region's unemployment peak and post-2009 recovery compare to the state and nation?
- What might this suggest for the region's economic future?

#### **Labor force**

# Earnings per worker in 2014

#### Questions:

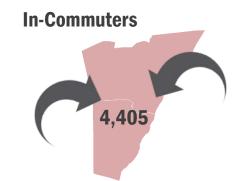
- How does the region's average earnings compare to that of the rest of the state?
- What might be some driving factors for the differences?
- Do these represent potential strengths or challenges for the region?

NOTE: Earnings include wages, salaries, supplements and earnings from partnerships and proprietorships

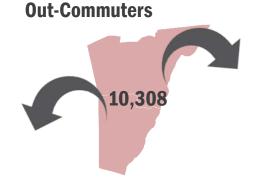


#### **Labor force**

## Journey to Work







| Population                               | 2013<br>Jobs | Proportion |  |
|--|--------------|------------|--|
| Employed in Region                       | 15,473       | 100.0%     |  |
| Employed in Region but<br>Living Outside | 4,405        | 28.5%      |  |
| Employed and Living in Region            | 11,068       | 71.5%      |  |

| Population                                   | 2013<br>Jobs | Proportion |  |
|--|--------------|------------|--|
| Region Residents                             | 21,376       | 100.0%     |  |
| Employed Outside Region but Living in Region | 10,308       | 48.2%      |  |
| Employed and Living in Region                | 11,068       | 51.8%      |  |

- How many people employed in the region actually reside outside the region? How many who
  live in the region commute to jobs outside the region?
- What are the implications for the region's economic development efforts?

**Establishments** 

**Employment by industry** 

**Cluster analysis** 

**Top occupations** 

**STEM occupations** 

## **Establishments**

# **Components of Change for Establishments 2000-2011**

| Establishments Launched   | 4,338 |
|---|-------|
| Establishments Closed   | 2,937 |
| Net Change  | 1,401 |
| Net Migration<br>(Establishments moving into minus<br>Establishments moving out of the<br>region) | 75    |
| Total Change  | 1,476 |
| Percent Change  | 62.5% |

An establishment is a physical business location.

Branches, standalones and headquarters are all considered types of establishments.



#### **Definition of Company Stages**

Selfemployed 1

2-9 employees

10-99 employees 3

100-499 employees

500+ employees

## **Establishments**

#### **Number of Establishments by Company Stages**

|         | 2000                      |       | 2011           |            |  |
|---------|---------------------------|-------|----------------|------------|--|
| Stage   | Establishments Proportion |       | Establishments | Proportion |  |
| Stage 0 | 599                       | 25.4% | 1,159          | 30.2%      |  |
| Stage 1 | 1,362                     | 57.7% | 2,294          | 59.8%      |  |
| Stage 2 | 373                       | 15.8% | 362            | 9.4%       |  |
| Stage 3 | 22                        | 0.9%  | 20             | 0.5%       |  |
| Stage 4 | 5                         | 0.2%  | 2              | 0.1%       |  |
| Total   | 2,361                     | 100%  | 3,837          | 100.00%    |  |

- What stage businesses have shaped the region's economic growth in the last 10 years?
- Which ones are growing or declining the most?
- Which stage of establishments are likely to shape the region's future economic growth?

## **Establishments**

| <b>Number of Jo</b> | bs by Con | ipany Stages |
|---------------------|-----------|--------------|
|---------------------|-----------|--------------|

|         | <u> </u> |        |          |
|---------|----------|--------|----------|
| Year    | 2000     | 2011   | % Change |
| Stage 0 | 599      | 1,159  | 93.5%    |
| Stage 1 | 4,888    | 6,871  | 40.6%    |
| Stage 2 | 8,764    | 9,114  | 4.0%     |
| Stage 3 | 3,567    | 3,627  | 1.7%     |
| Stage 4 | 4,917    | 1,667  | -66.1%   |
| Total   | 22,735   | 22,438 | -1.3%    |

#### Sales (\$ 2012) by Company Stages

| Year    | 2000            | 2011            | % Change |
|---------|-----------------|-----------------|----------|
| Stage 0 | \$64,450,521    | \$78,279,741    | 21.5%    |
| Stage 1 | \$612,414,629   | \$527,518,023   | -13.9%   |
| Stage 2 | \$968,479,026   | \$790,836,525   | -18.3%   |
| Stage 3 | \$336,293,243   | \$379,581,722   | 12.9%    |
| Stage 4 | \$429,990,498   | \$211,889,449   | -50.7%   |
| Total   | \$2,411,627,917 | \$1,988,105,460 | -17.6%   |

- What establishments are the most numerous based on company stages?
- What stages have experienced the largest growth? The greatest decline?
- What company stage employs the largest number of people?
- What stage captures the most sales?
- Which ones have experienced the greatest percentage loss over the 2000-11 period?

## Top ten industry sector employment growth

| NAICS | Description                                      | <b>2009</b> Jobs | <b>2014 Jobs</b> | Change | Change (%) | State<br>Change (%) |
|-------|--|------------------|------------------|--------|------------|---------------------|
| 61    | Educational Services                             | 135              | 201              | 66     | 49%        | 13%                 |
| 21    | Mining, Quarrying, and Oil and Gas Extraction    | 86               | 110              | 24     | 28%        | -4%                 |
| 71    | Arts, Entertainment, and Recreation              | 344              | 430              | 86     | 25%        | 13%                 |
| 53    | Real Estate and Rental and Leasing               | 965              | 1,119            | 154    | 16%        | 15%                 |
| 52    | Finance and Insurance                            | 516              | 582              | 66     | 13%        | 14%                 |
| 54    | Professional, Scientific, and Technical Services | 1,140            | 1,255            | 115    | 10%        | 2%                  |
| 44    | Retail Trade                                     | 2,200            | 2,417            | 217    | 10%        | 4%                  |
| 81    | Other Services (except Public Administration)    | 1,131            | 1,215            | 84     | 7%         | 9%                  |
| 51    | Information                                      | 138              | 148              | 10     | 7%         | -10%                |
| 48    | Transportation and Warehousing                   | 314              | 336              | 22     | 7%         | 5%                  |

- 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?

## Top ten industry sector employment decline

| NAICS | Description   | <b>2009</b> Jobs | <b>2014 Jobs</b> | Change | Change (%) | State<br>Change (%) |
|-------|---|------------------|------------------|--------|------------|---------------------|
| 23    | Construction  | 1,455            | 1,031            | -424   | -29%       | -7%                 |
| 11    | Crop and Animal Production  | 3,712            | 2,666            | -1046  | -28%       | -2%                 |
| 56    | Administrative and Support and Waste<br>Management and Remediation Services | 1,077            | 900              | -177   | -16%       | 9%                  |
| 42    | Wholesale Trade   | 382              | 330              | -52    | -14%       | -1%                 |
| 31    | Manufacturing   | 4,027            | 3,496            | -531   | -13%       | -2%                 |
| 22    | Utilities   | 101              | 89               | -12    | -12%       | -7%                 |
| 55    | Management of Companies and Enterprises                                     | 119              | 113              | -6     | -5%        | 2%                  |
| 62    | Health Care and Social Assistance   | 2,536            | 2,459            | -77    | -3%        | 11%                 |
| 90    | Government  | 4,066            | 4,209            | 143    | 4%         | 0%                  |
| 72    | Accommodation and Food Services   | 1,688            | 1,773            | 85     | 5%         | 9%                  |

- How does the industry sector make-up of the region compare to the rest of the state?
- Which industry sectors are growing and declining the most in employment?

#### **Industry cluster analysis**

# How to interpret cluster data results

The graph's four quadrants tell a different story for each cluster.

Contains clusters that are more concentrated in the region but are declining (negative growth).

These clusters typically fall into the lower quadrant as job losses cause a decline in concentration.

#### **Mature**

Top left (strong but declining)

#### **Stars**

Top right (strong and advancing)

Contains clusters that are more concentrated in the region and are growing. These clusters are strengths that help a region stand out from the competition. Small, high-growth clusters can be expected to become more dominant over time.

Contains clusters that are under-represented in the region (low concentration) and are also losing jobs.
Clusters in this region may indicate a gap in the workforce pipeline if local industries anticipate a future need. In general, clusters in this quadrant show a lack of competitiveness.

#### **Transforming**

Bottom left (weak and declining)

### **Emerging**

Bottom right (weak but advancing)

Contains clusters that are under-represented in the region but are growing, often quickly. If growth trends continue, these clusters will eventually move into the top right quadrant. Clusters in this quadrant are considered emerging strengths for the region.

# Distribution of clusters in the Region by quadrants



#### **Industry cluster analysis**

#### **Mature Clusters**

Agribusiness, Food Processing & Tech (7.37; 5,264)

Chemicals/Chemical-based Products (1.36; 399)

Energy (Fossil & Renewable) (1.08; 1,407)

#### **Star Clusters**

Arts, Ent, Recreation. & Visitor Industries (1.00; 983)

#### **Percent Growth in Specialization**

#### **Transforming Clusters**

Biomed/Biotechnical (Life Science) (0.81; 1,522)

Forest & Wood Products (0.49; 170)

Printing & Publishing (0.27; 112)

Advanced Materials (0.27; 192)

Primary Metal Manufacturing (0.17; 9)

Apparel & Textiles (0.15; 27)

Computer & Electronic Product Mfg. (0.12; 18)

Manufacturing Supercluster (0.05; 39)

Machinery Manufacturing (0.03; 5)

#### **Emerging Clusters**

Defense & Security (0.77; 785)

Business & Financial Services (0.63; 2,015)

Transportation & Logistics (0.52; 394)

Information Technology & Telecom. (0.46; 436)

Education & Knowledge Creation (0.21; 119)

Mining (0.18; 13)

Transportation Equipment Mfg. (0.03; 7)

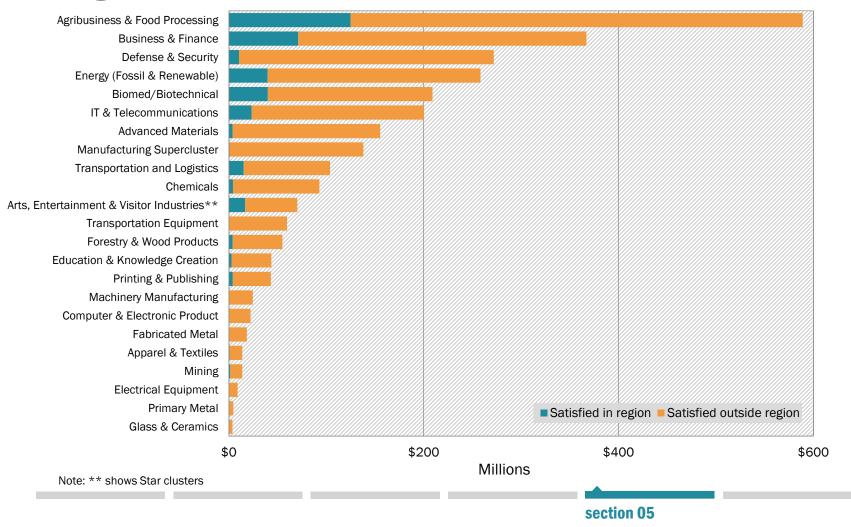
Note: Manufacturing Supercluster, Machinery Manufacturing, Primary Metal Manufacturing, Computer & Electronic Product Manufacturing, Transportation Equipment Manufacturing sub-clusters as well as Apparel & Textiles and Mining clusters have too few jobs. Glass & Ceramics, Fabricated Metal Product Manufacturing and Electrical Equipment, Appliance & Component Manufacturing sub-cluster do not exist in the region.

Level of Specialization

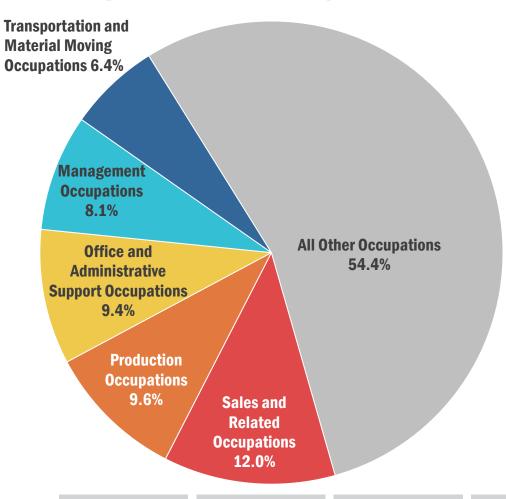
#### section 02

#### **Industry Clusters: Leakages**

# Regional requirements, 2013

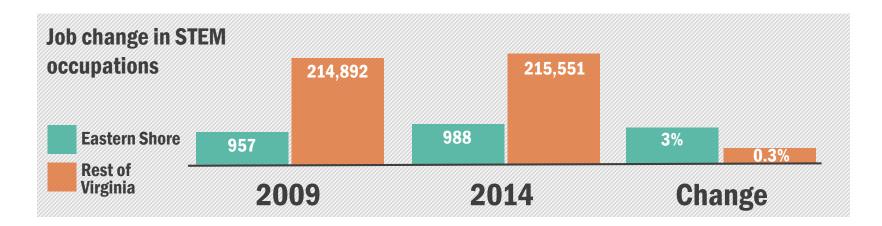


# Top five occupations in 2014



- What are the education and skill requirements for these occupations?
- Do the emerging and star clusters align with the top occupations?
- What type salaries do these occupations typically provide?

# Science, Technology, Engineering & Math



- 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?

# Report Contributors

This report was prepared by the Purdue Center for Regional Development, in partnership with the Southern Rural Development Center and USDA Rural Development, in support of the Stronger Economies Together program.



#### **Report Authors**

Bo Beaulieu, PhD Indraneel Kumar, PhD Andrey Zhalnin, PhD



#### **Data Analysis**

Ayoung Kim Francisco Scott



#### **Report Design**

Tyler Wright

This report was supported, in part, by grant from the USDA Rural Development through the auspices of the Southern Rural Development Center. It was produced in support of the Stronger Economies Together (SET) program.





The Purdue Center for Regional Development (PCRD) seeks to pioneer new ideas and strategies that contribute to regional collaboration, innovation and prosperity.

For more information, please contact:

Dr. Bo Beaulieu, PCRD Director: ljb@purdue.edu

Or

765-494-7273

September 2015