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## Modesto Junior College Market Assessment Briefing: Talent and Governance Excerpts

March 28, 2022

# REDEFINING ECONOMIC SUCCESS TO GUIDE EFFORTS

## GROWTH



More jobs created and expanded output that increases labor demand and wages, plus young firms that generate greater wealth, employment, and earnings.

### METRICS

Jobs  
Gross Metropolitan Product  
Entrepreneurship (*Jobs at Young Firms*)

## PROSPERITY



More productive firms to grow the economy from within and generate higher-paying jobs, so the region competes on quality versus low wages.

### METRICS

Productivity (*GMP per Job*)  
Standard of Living (*GMP per capita*)  
Average Annual Wage

## INCLUSION



Access to opportunities that raise employment and income, enabling residents across all community segments to participate to the fullest of their ability.

### METRICS

Employment Rate  
Median Wage  
Relative Poverty  
*\*differences by Race and Geography*

# Stanislaus faces two key economic challenges:

*A* Growth produces too little opportunity

*B* Drivers of competitiveness are lagging

## WHY TRADED SECTORS MATTER

Firms selling goods and services to customers from outside the region bring new money into the local economy.

When this wealth is spent, it creates a multiplier effect spurring three to five new locally-serving jobs, depending on the industry.

Participating in trade also makes businesses and regions more productive.

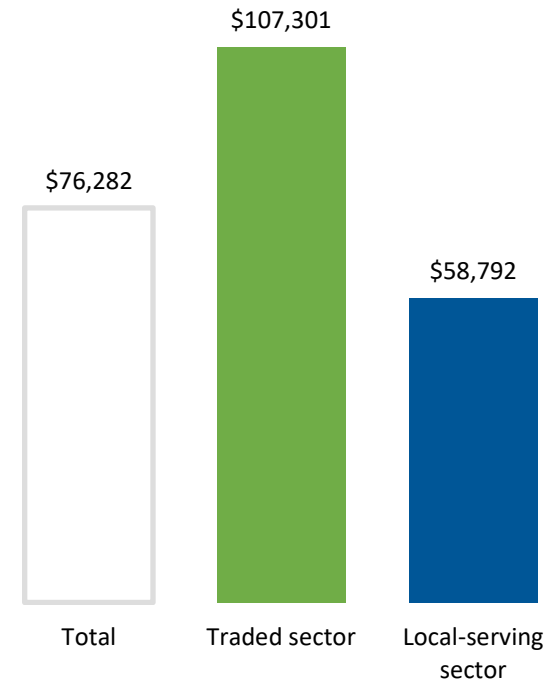
Firms that link and learn through global value chains perform better than peers in growth, job creation, and wages, and are more resilient to economic downturns.

Regionally, a 1% increase in international trade results in a 0.5% to 2% gain in per capita income.

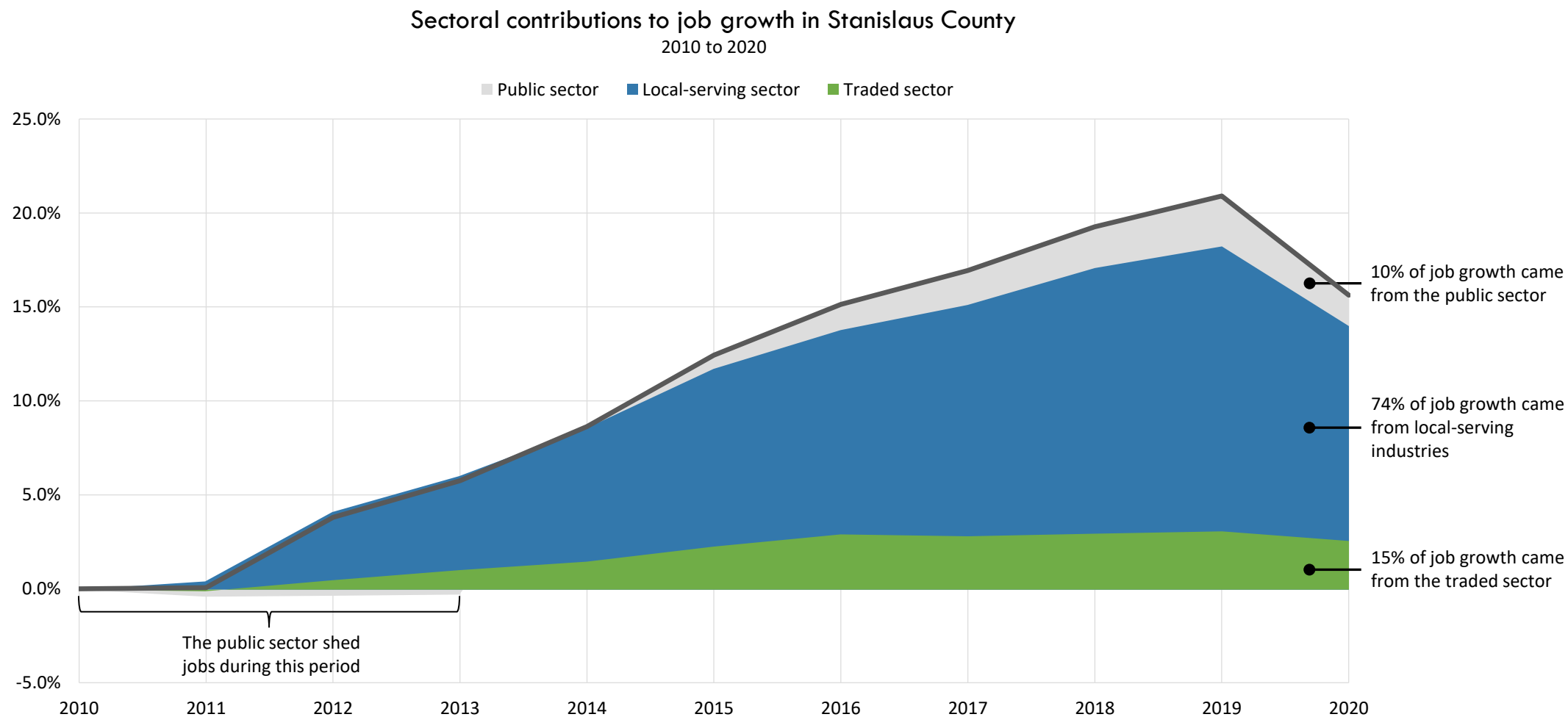
### Traded sectors create prosperity

Traded sector firms tend to require more knowledge and skills to compete, reflected in higher wages for workforce

Average annual earnings  
nationwide in 2020

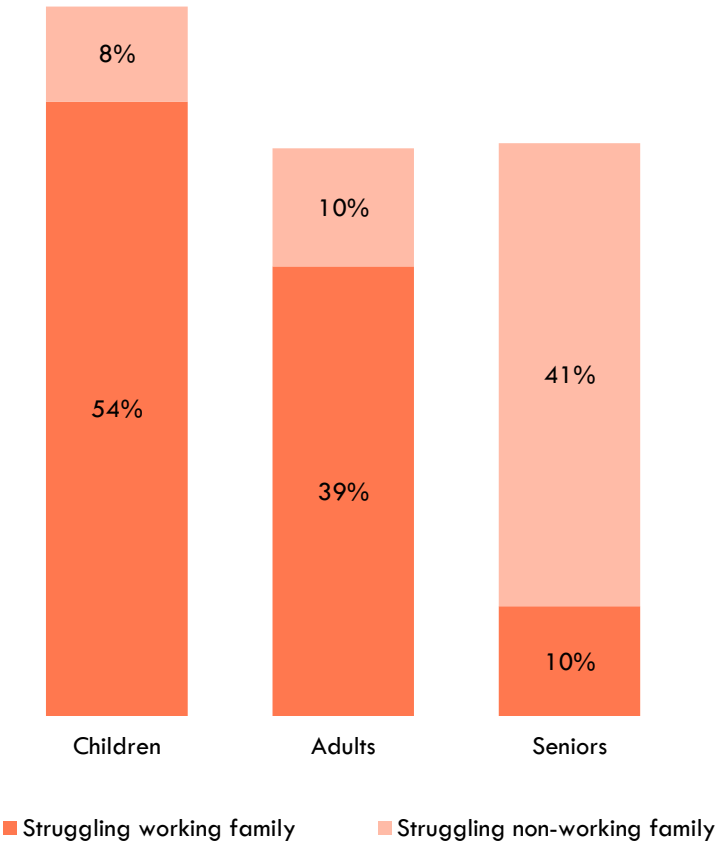
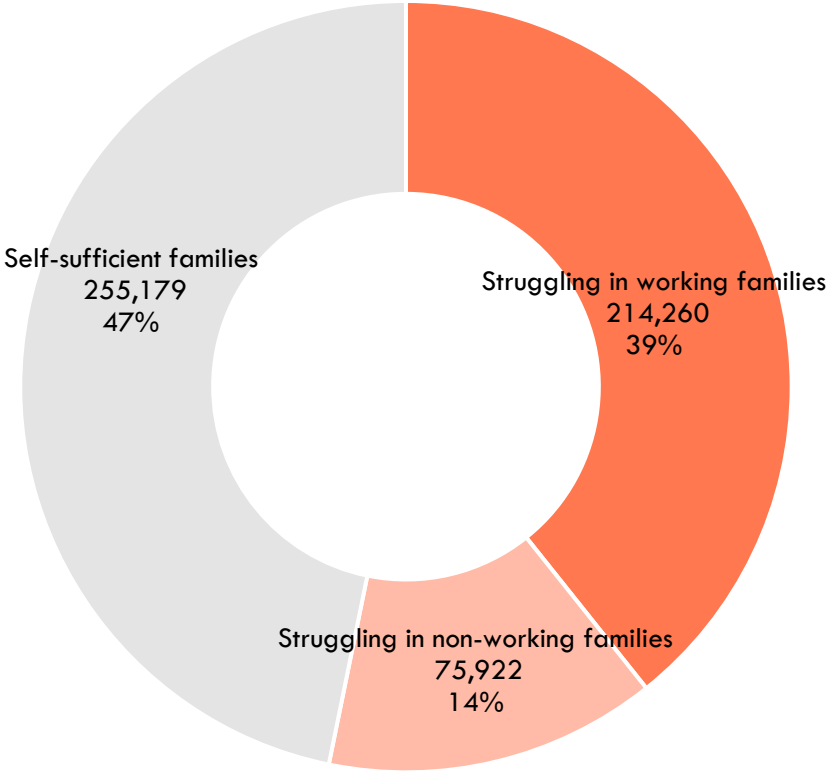


# TRADED SECTORS DROVE A SMALL PORTION OF JOB GROWTH



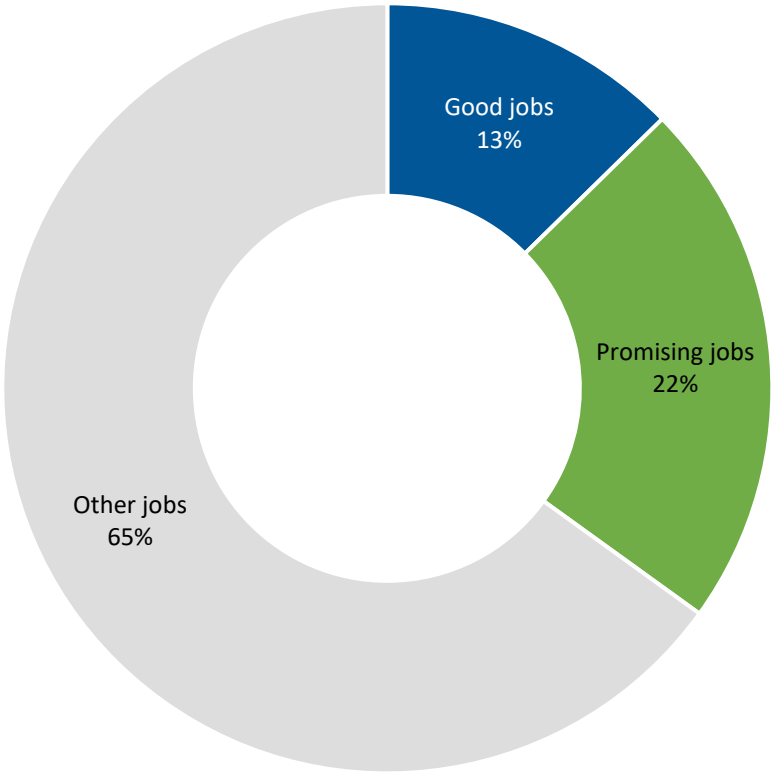
# OVER HALF THE COUNTY'S POPULATION STRUGGLES TO MAKE ENDS MEET

Stanislaus County population that belongs to a struggling family  
2019

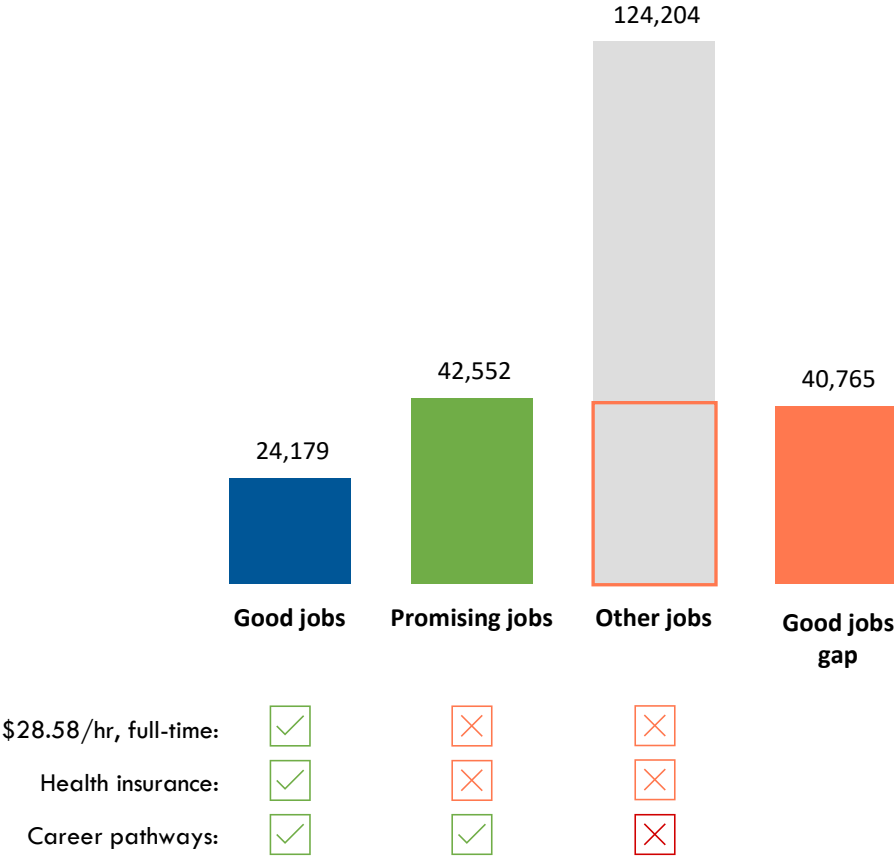


# ONE-THIRD OF THE COUNTY'S JOBS PROVIDE PATHWAYS TO PROSPERITY

Share of Stanislaus County's jobs by quality  
2020



Stanislaus County's job quality numbers  
2020



## DRIVERS OF COMPETITIVENESS



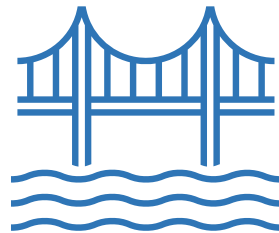
**Clusters**



**Talent**



**Innovation**



**Infrastructure**



**Governance**





# Clusters

## CLUSTER PRIORITIZATION APPLIES SEVERAL FACTORS

Traded Sector concentration and recent performance by industry definitions

Global market demand and value chain position / competitive niche

Economic multiplier effects

Policy environment

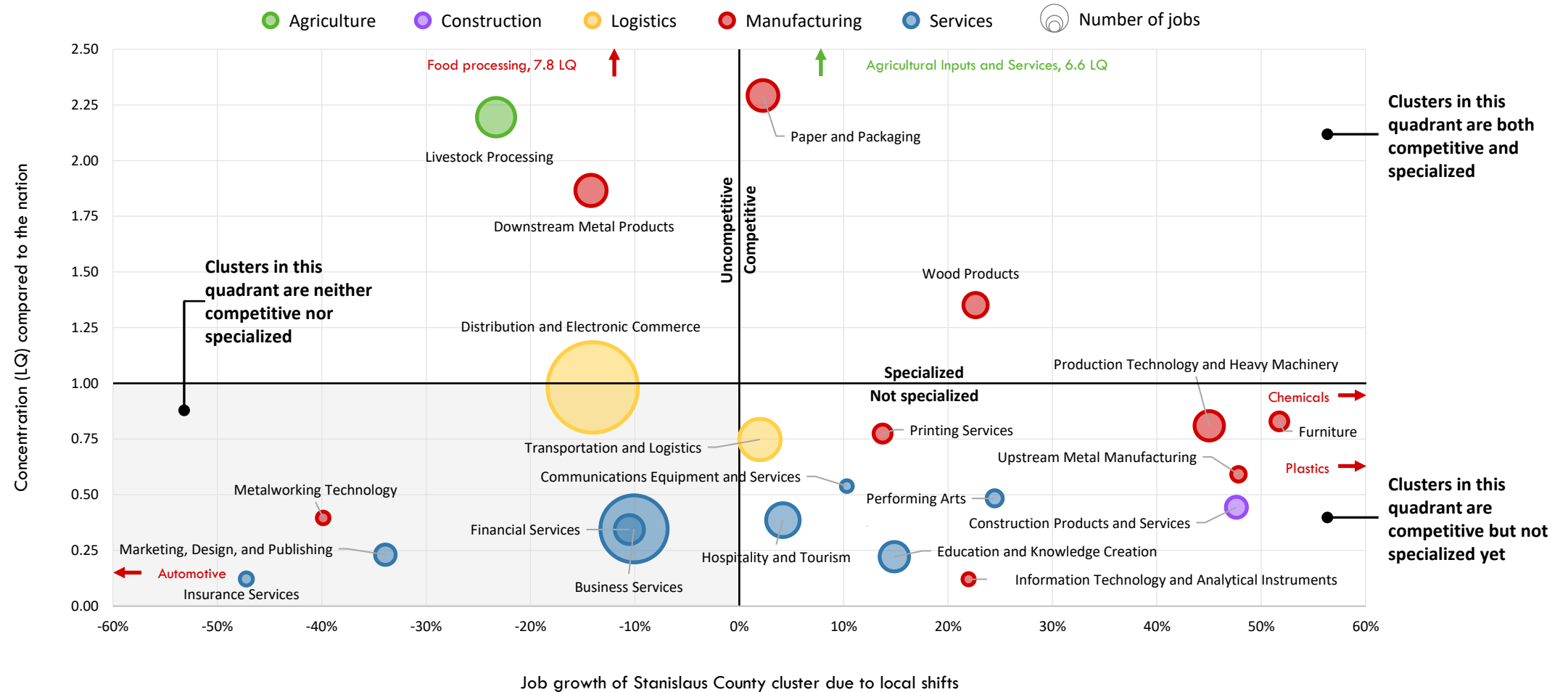
Talent adjacencies

Innovation capacities and connections

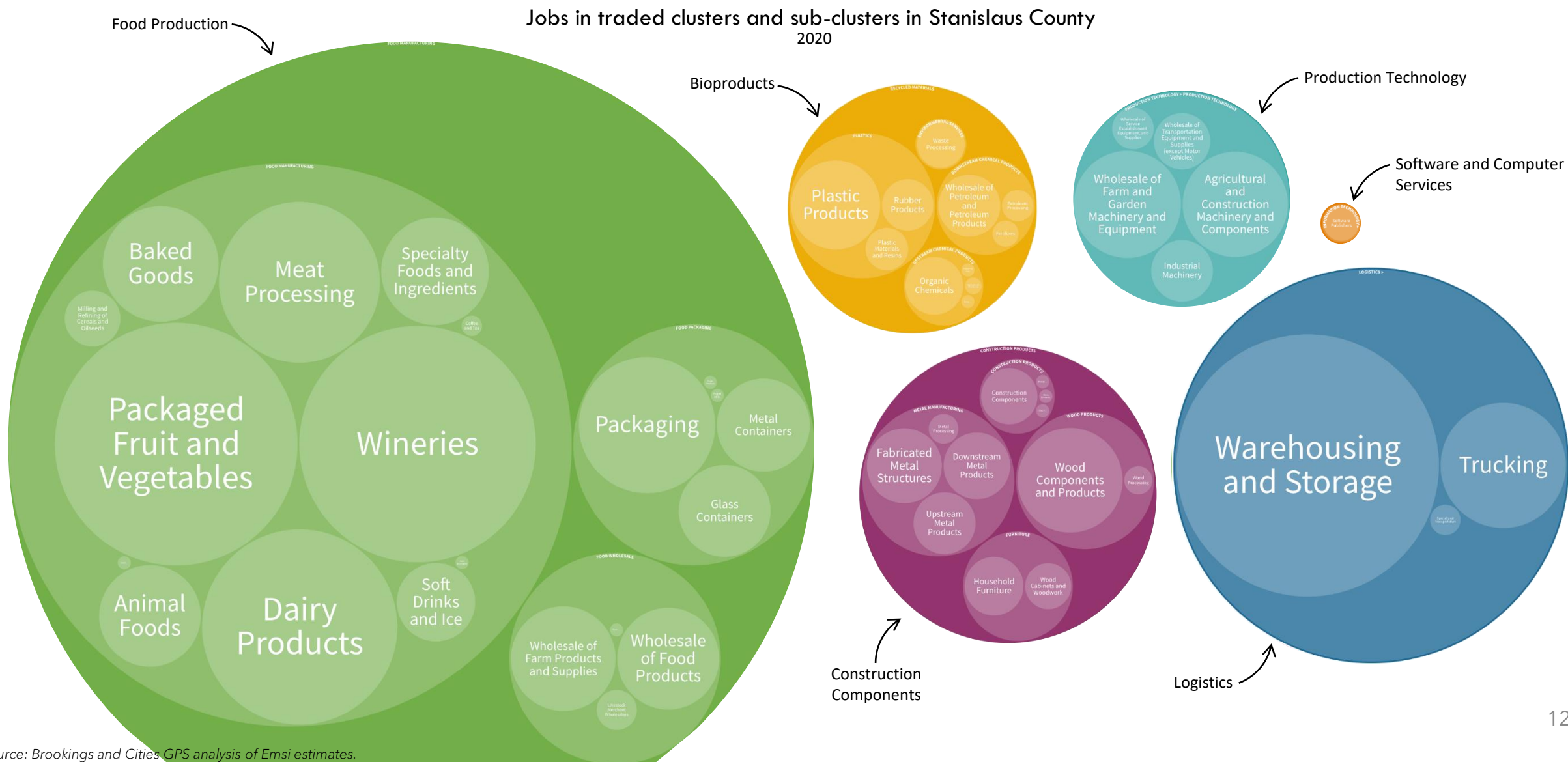
Job quality and opportunity

FEW TRADED CLUSTERS ARE SPECIALIZED AND COMPETITIVE

## Competitive position of tradable clusters in Stanislaus County 2010 to 2020



# SUB-SECTORS CAN BE REGROUPED INTO CLUSTERED OPTIONS





**Talent**

## WHY TALENT MATTERS

In the modern economy, workforce capabilities far surpass any other single input to regional economic development.

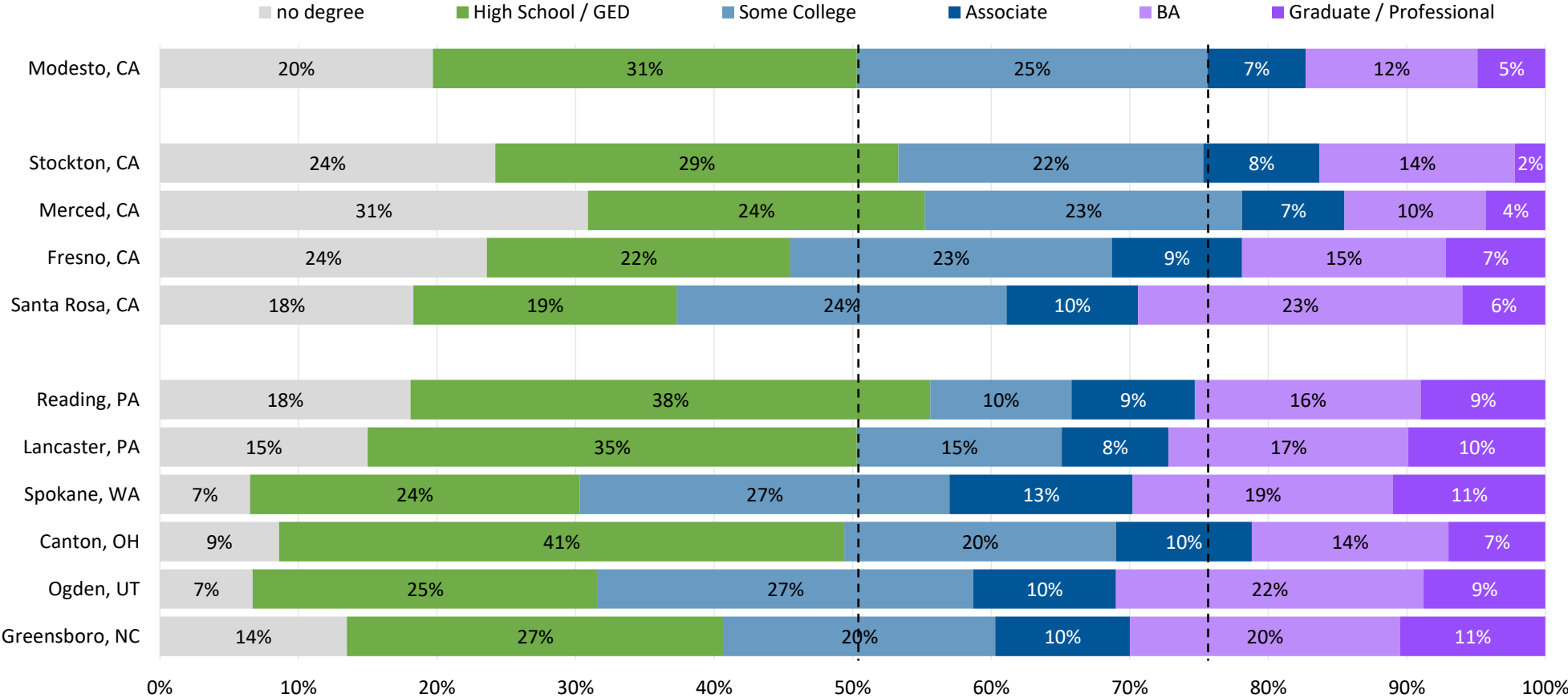
Regions grow when they develop and deploy residents to maximize their productive potential.

The pool of available knowledge, skills, and expertise – and ability to cultivate more – is the top factor in cluster formation and business location decisions.

The economic success of individuals, firms, and regions correlates closely to educational attainment and the density of relevant talent to draw from.

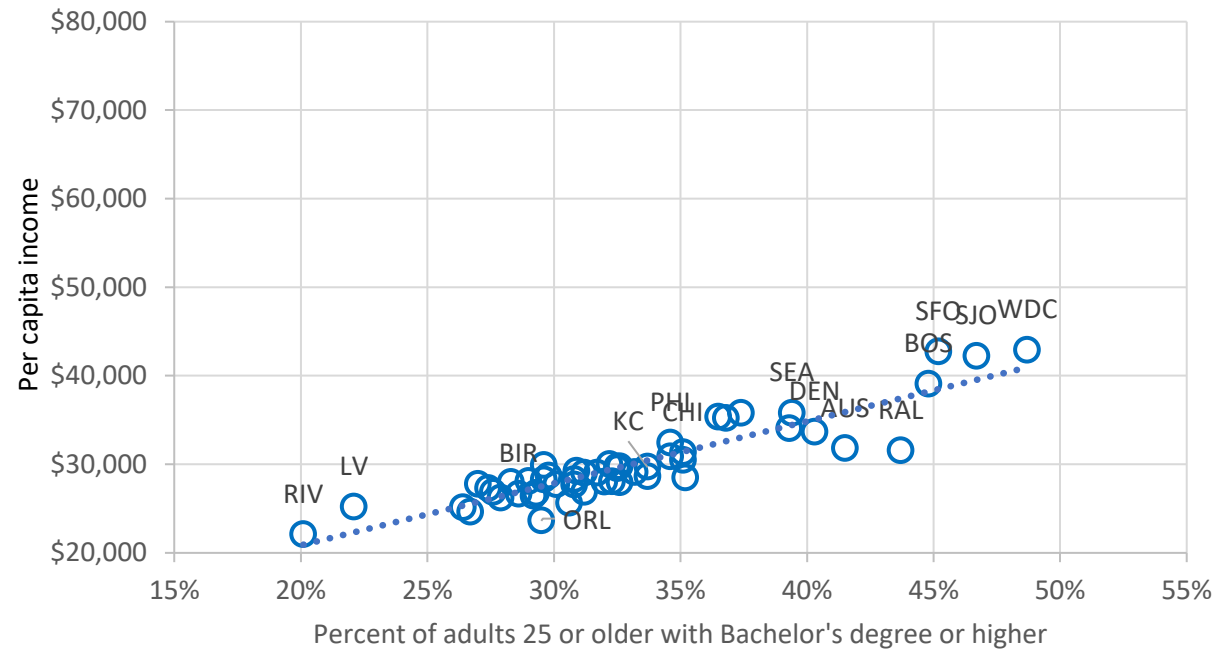
# THE COUNTY HAS FEWER DEGREED WORKERS THAN PEER METROS

Educational attainment vs. California and national peer metro areas

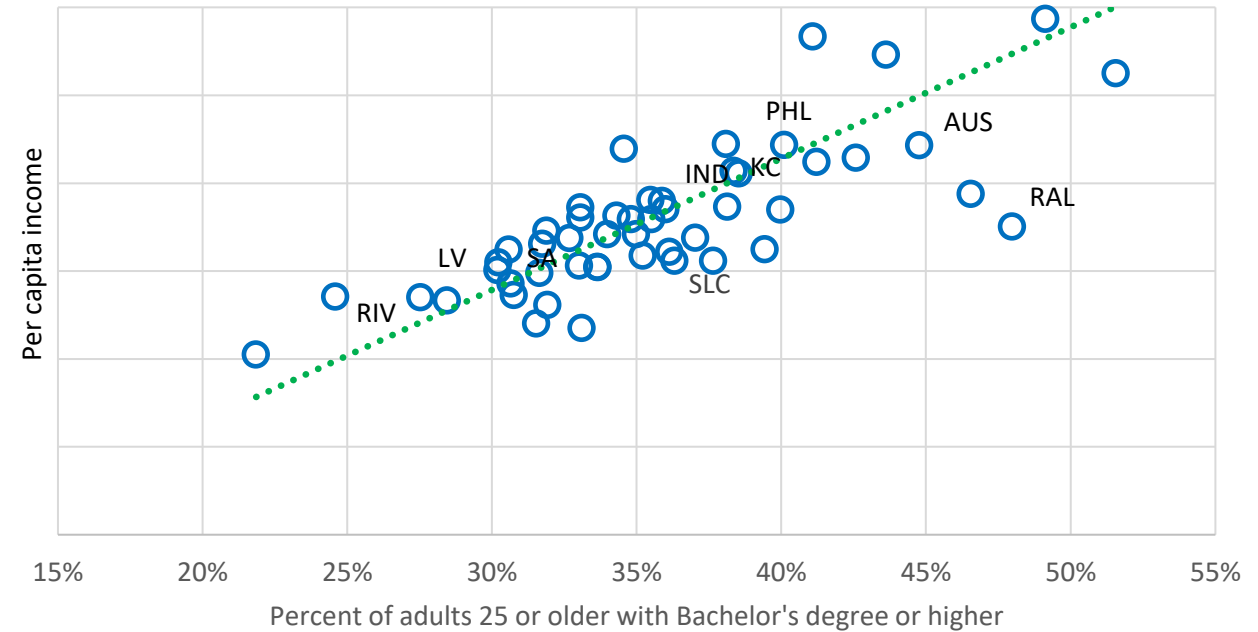


# EDUCATIONAL ATTAINMENT CORRELATES TO ECONOMIC PERFORMANCE

**Metro per capita income vs educational attainment, 2010**



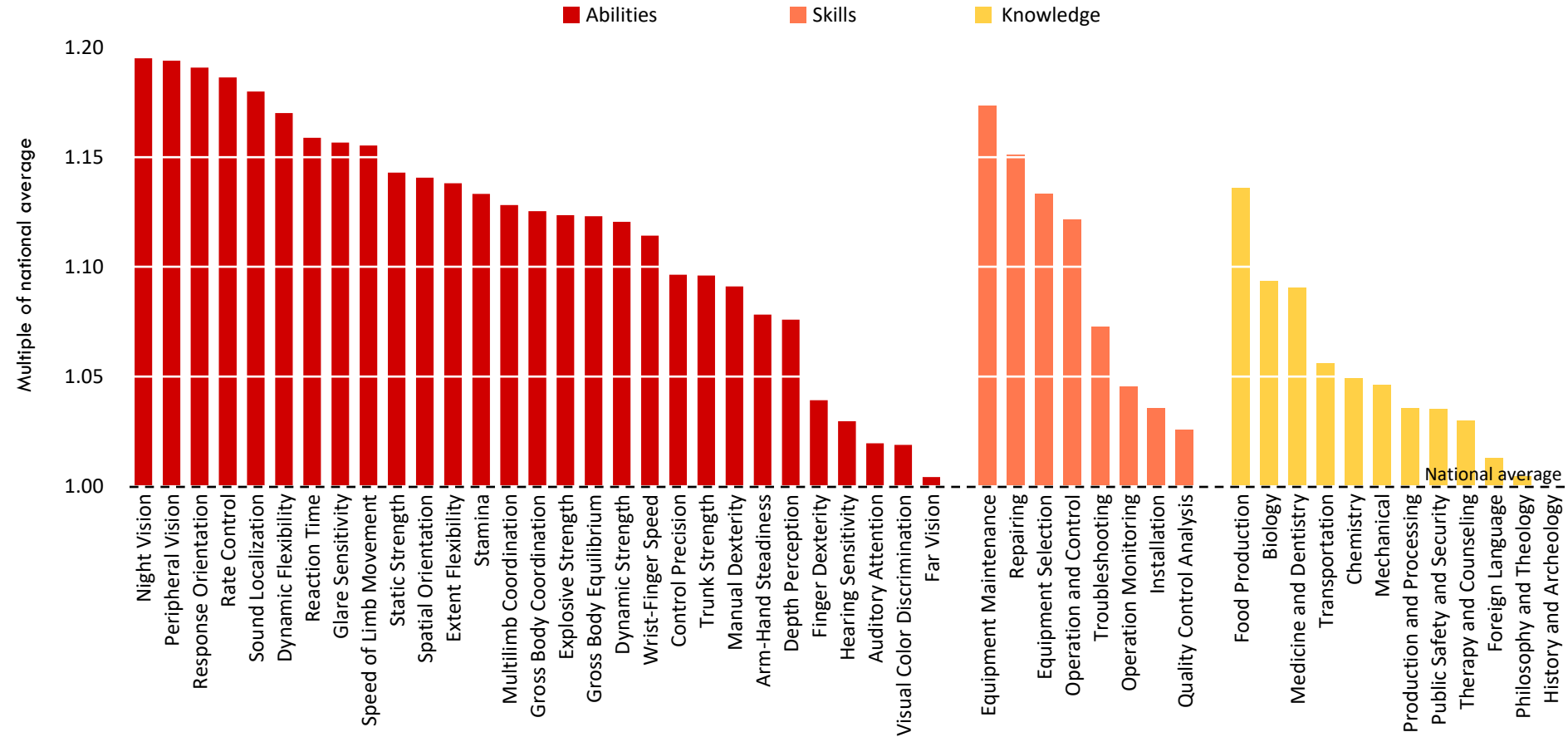
**Metro per capita income vs educational attainment, 2018**





# CURRENT INDUSTRY MIX VALUES PHYSICAL ABILITY VS KNOWLEDGE, SKILLS

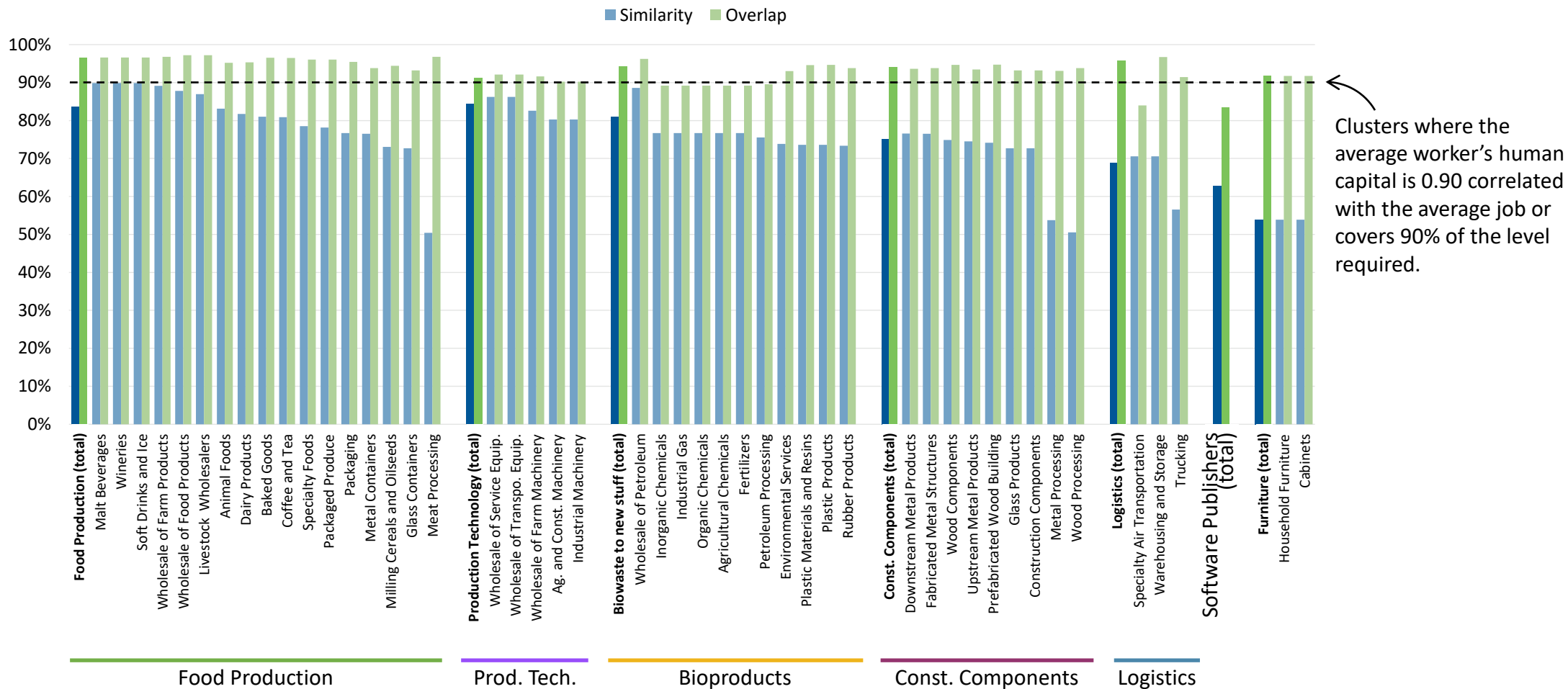
Relative importance of human capital elements among all Stanislaus County workers\*  
Compared to national average, circa 2020



\* Displays only those elements relatively more important in the county's economy compared to the national average.  
Source: Brookings and Cities GPS analysis of O\*Net data and Emsi estimates.

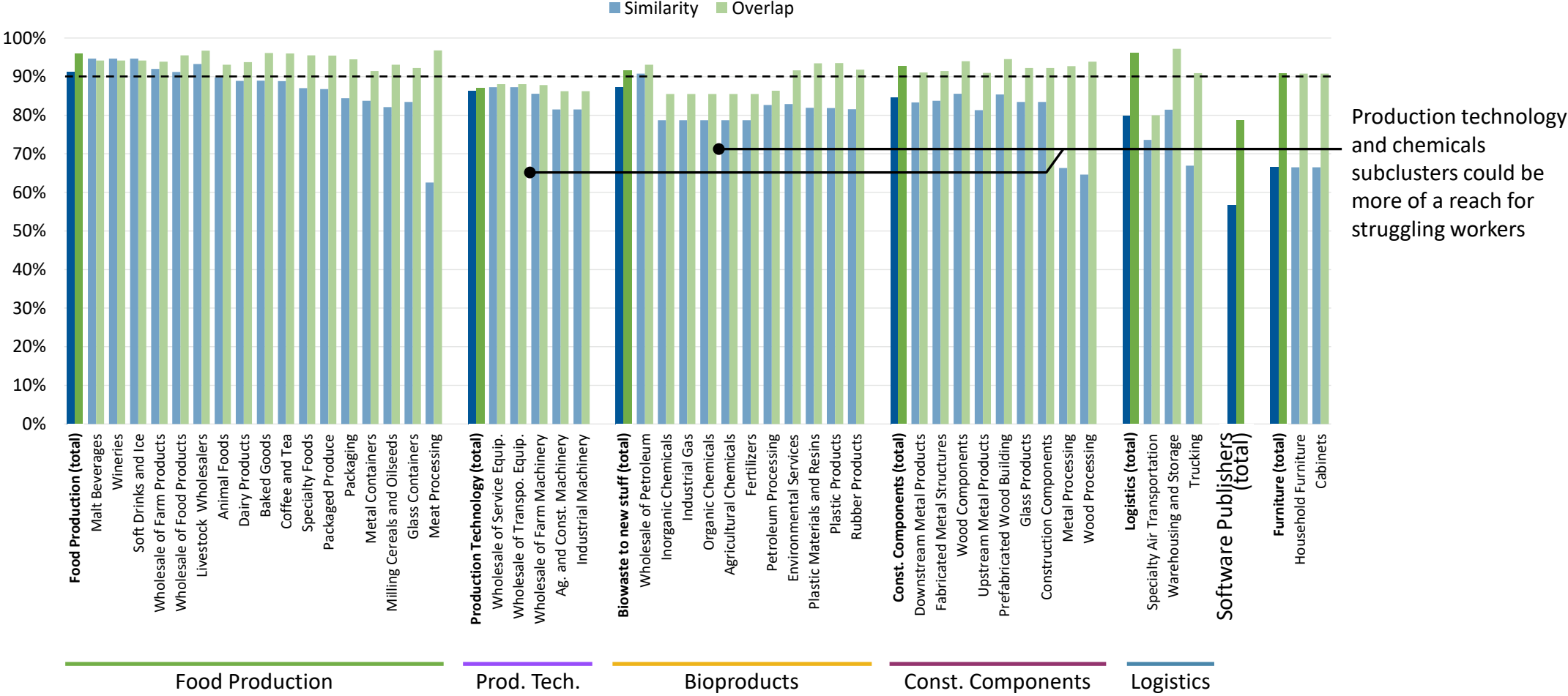
# WORKFORCE HAS ADJACENT SKILLS REQUIRED IN SOME TARGET CLUSTERS

Similarity of Stanislaus County workers' human capital to that demanded in target clusters  
2020



# STRUGGLING WORKERS' SKILLS ARE BETTER SUITED TO TARGET CLUSTERS

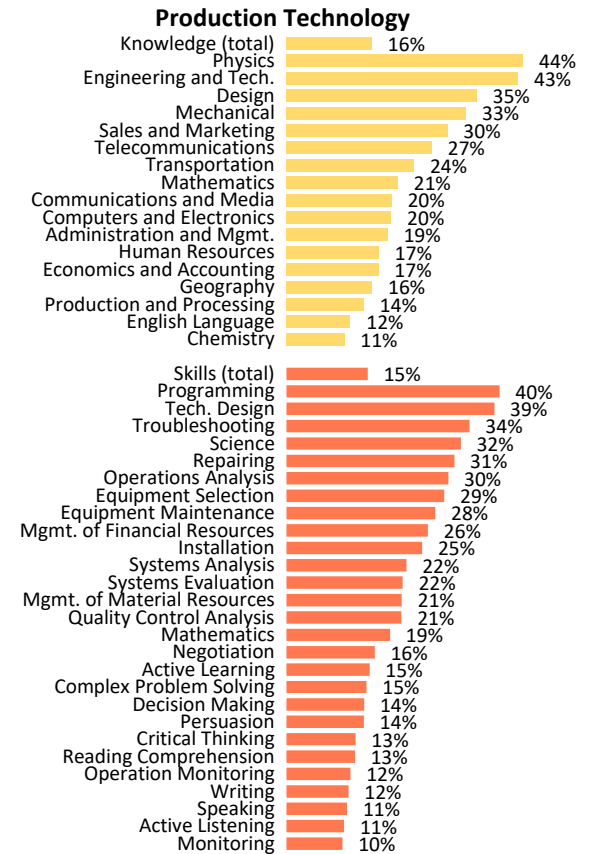
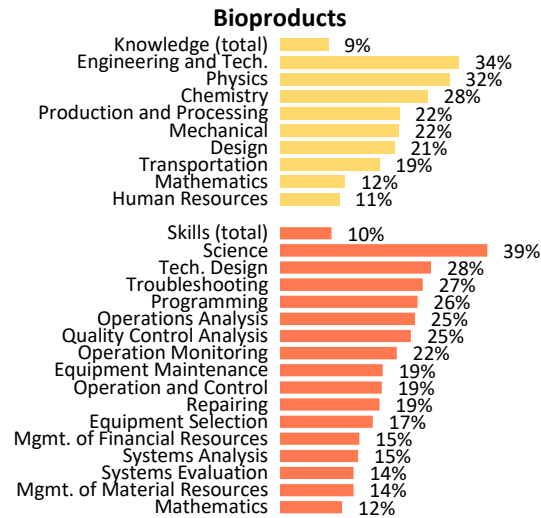
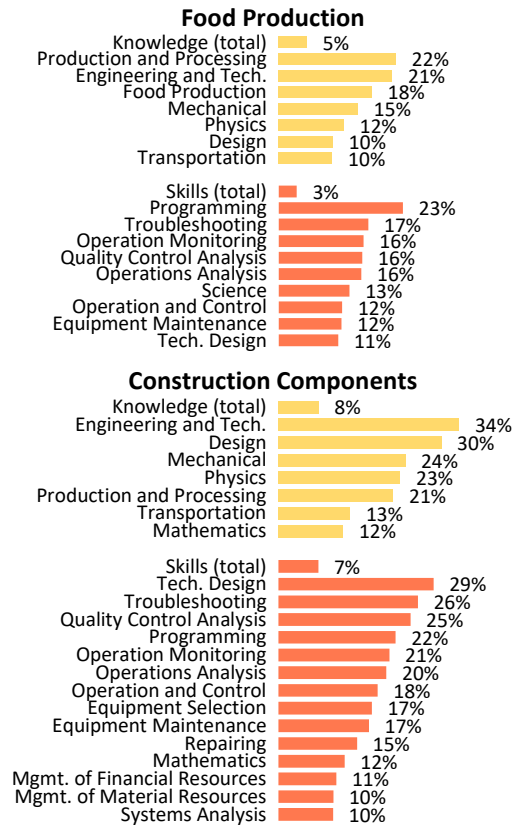
Similarity of *struggling workers'* human capital to that demanded in target clusters  
Circa 2020



# STRUGGLING WORKERS WILL NEED TRAINING FOR TARGET CLUSTER JOBS

Key knowledge and skill gaps between struggling workers and target cluster jobs\*  
Circa 2020

■ Skill gaps ■ Knowledge gaps



\* Gaps measure the extent to which the average struggling worker's knowledge or skill level would need to increase to meet job requirements. Gaps greater than 10 percentage points are shown.

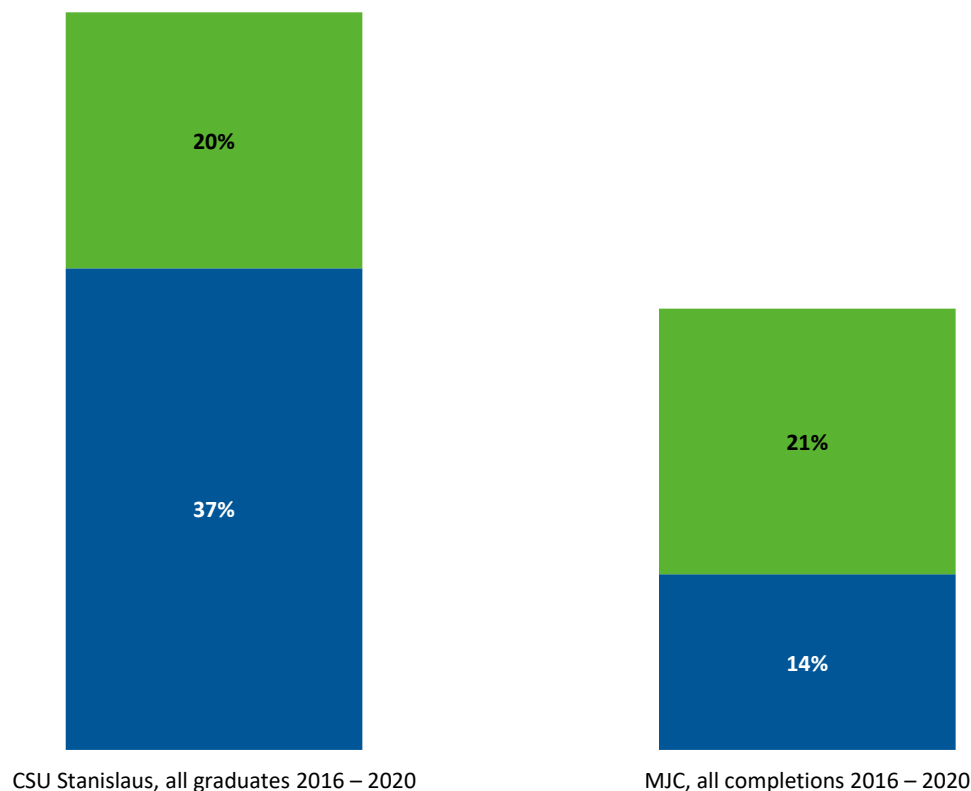
Note: Logistics is not shown because it has only minor knowledge and skill gaps with struggling workers.

Source: Brookings and Cities GPS analysis of O\*Net data and Emsi estimates.

# ALIGNMENT BETWEEN QUALITY JOB SUPPLY AND EDUCATIONAL OUTPUT

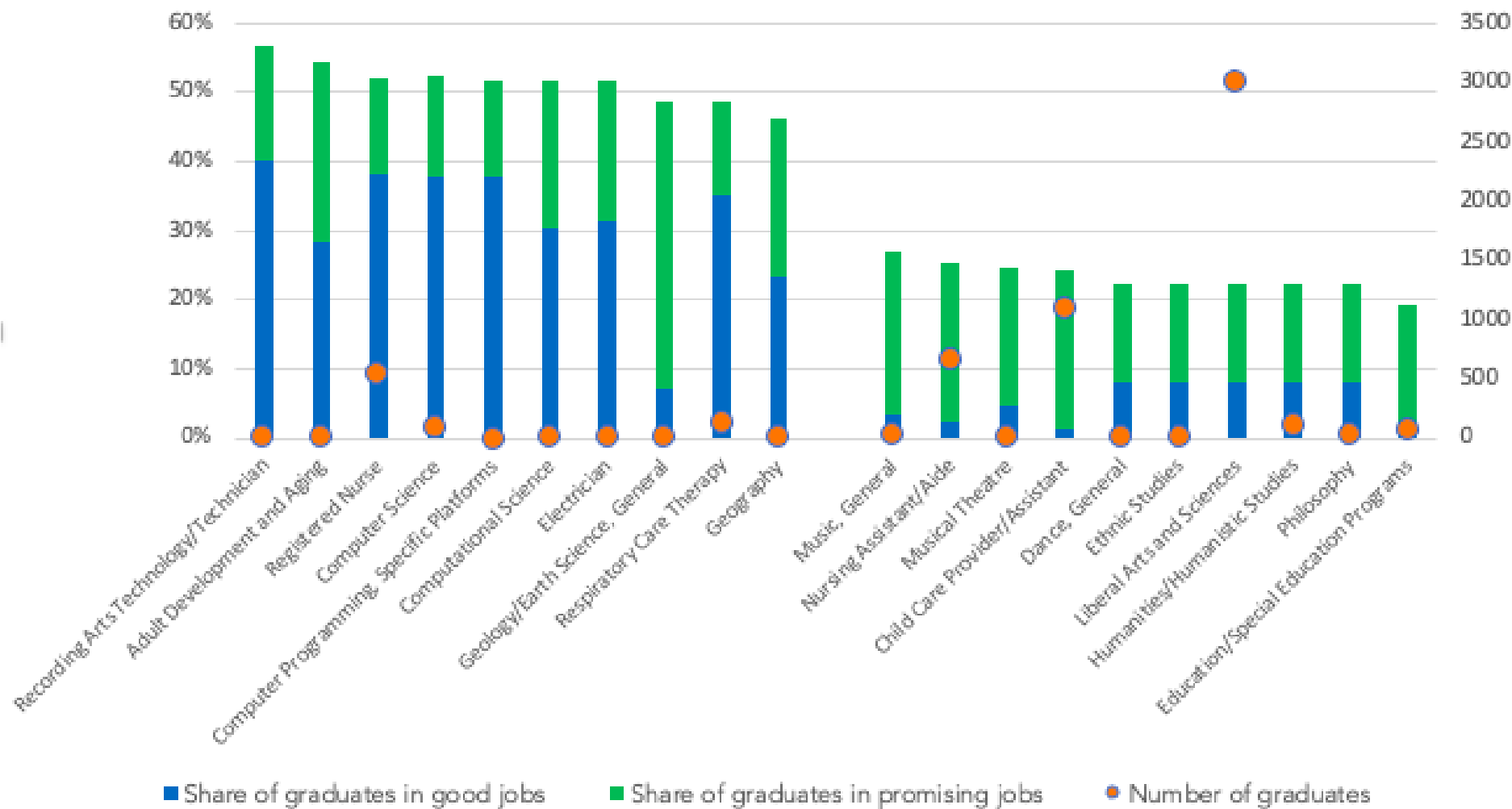
Estimated availability of quality jobs in the region for graduates based upon occupational qualifications

■ Estimated share of graduates in good jobs      ■ Estimated share of graduates in promising jobs



# ALIGNMENT OF EDUCATIONAL OUTPUT WITH QUALITY JOB AVAILABILITY

MJC's top and bottom 10 programs for availability of quality jobs, with number of graduates





# Governance

Regional competitiveness relies on the capacity of private, public, and civic institutions to focus, marshal, and execute strategy and investment for a common economic development agenda.

Governance is the formulation and execution of collective action across political and institutional boundaries at the scale and geography where the economy operates with shared assets – workforce commutes, business networks, university access, transportation systems.

- objectives and metrics to jointly focus time and resources for maximum impact
- alignment or fragmentation in program choices and activities among diverse contributors
- private sector roles and private-public collaboration
- policies consistent with economic success principles
- organizing at the functional economic scale



# Governance

- While there is long-standing recognition of core regional economic challenges, **Stanislaus has struggled to articulate a collective and specific vision** to address these issues at scale.
- **Collective action on economic outcomes in the region is limited**, inhibiting a common agenda and the long-term effort and investment needed to achieve impact.
- Major **workforce and economic development organizations lack strategic or programmatic alignment**, particularly in support of inclusive economic outcomes.
- The geography and number of **contributors needed to advance an inclusive economic development agenda is less fragmented** than in other regions, and the region shows capacity for establishing new institutions to fill gaps.



# COMMUNITY COLLEGES AND REGIONAL ECONOMIC DEVELOPMENT

## *Demand-driven talent pipeline*

- Industrial Technical Learning Center (InTech): Chaffey College Economic Development (Rancho Cucamonga) public-private regional training center serving manufacturing, working with 150 employers and producing 1,700+ graduates over five years.
- Chicago Apprentice Network: City Colleges of Chicago partnership with Aon, Accenture, JPMorgan Chase, McDonalds, Allstate, and 25+ other firms for entry-level IT talent, connecting 1,000+ residents to corporate careers to date.
- "Nextversity": Prince George's Community College and Northern Virginia Community College collaboration with Connected DMV regional business leadership group to meet needs in professional services careers by underserved populations through cohort-based program encompassing experiential learning, mentorship, skills development, financial training, networking and other supports.
- Kentucky Federation for Advanced Manufacturing Education (KY FAME): Bluegrass Community and Technical College engagement to scale Toyota-developed two-year earn-and-learn Advanced Manufacturing Technician Programs statewide.

## *Cluster / sector development and support:*

- Fresno DRIVE Agrifood Technology and Engineering Collaborative: Eight community colleges responding to comprehensive cluster initiative for interdisciplinary training, stackable certificates, and competency-based education.
- National Center for Aviation Training: Wichita Area Technical College managed in supporting regional aerospace cluster with employer-driven training programs, including "Wichita Promise" program to expand access to sector.

## *Anchor for entrepreneurship supports and facilities:*

- Procurement Technical Assistance Center: Riverside Community College District to identify and compete for government contracts, primarily supporting small minority, women, veteran-owned small businesses.

## POTENTIAL FOCUS AREAS FOR WORKGROUPS

- 1 Bioproducts and the circular economy growth strategy:** Leverage alignment with existing agricultural strengths and proximity to Bay Area innovation. Focus on R&D, tech transfer, financial and business supports, ag support and organization, supply chain mapping and development, matched workforce programs and upskilling, etc.
- 2 Technology and skill adoption in the Ag sector:** Consider adoption of innovation to improve job quality, movement up the value chain through new solutions to ag technology or products, and/or expansion into complementary industries. Focus on the latest in R&D, tech transfer, financial and business supports, supply chain mapping and development, matched workforce programs and upskilling, etc.
- 3 Entrepreneurship and small business dynamism:** Potential focus on mainstream supports for small business and entrepreneurship such as access to capital, qualified technical assistance, and business accelerators and incubators; with a special sub-focus on women- and minority-led/owned business.
- 4 Talent development:** Consider how workforce activities can increase focus on quality job creation and access for new and incumbent workers, link to economic development efforts, and improve accessibility and responsiveness to business, such as "talent-industry" exchange models through which providers can integrate their services around opportunity sectors.
- 5 Address non-skill barriers to jobs and training:** Focus on uncovering and diagnosing barriers and installing systematic improvements (for example: access to affordable childcare for working parents/ caregivers, English Language programs, etc.) and other barriers to diverse and widespread labor force participation in Stanislaus.

# Discussion

# Appendix

# Talent

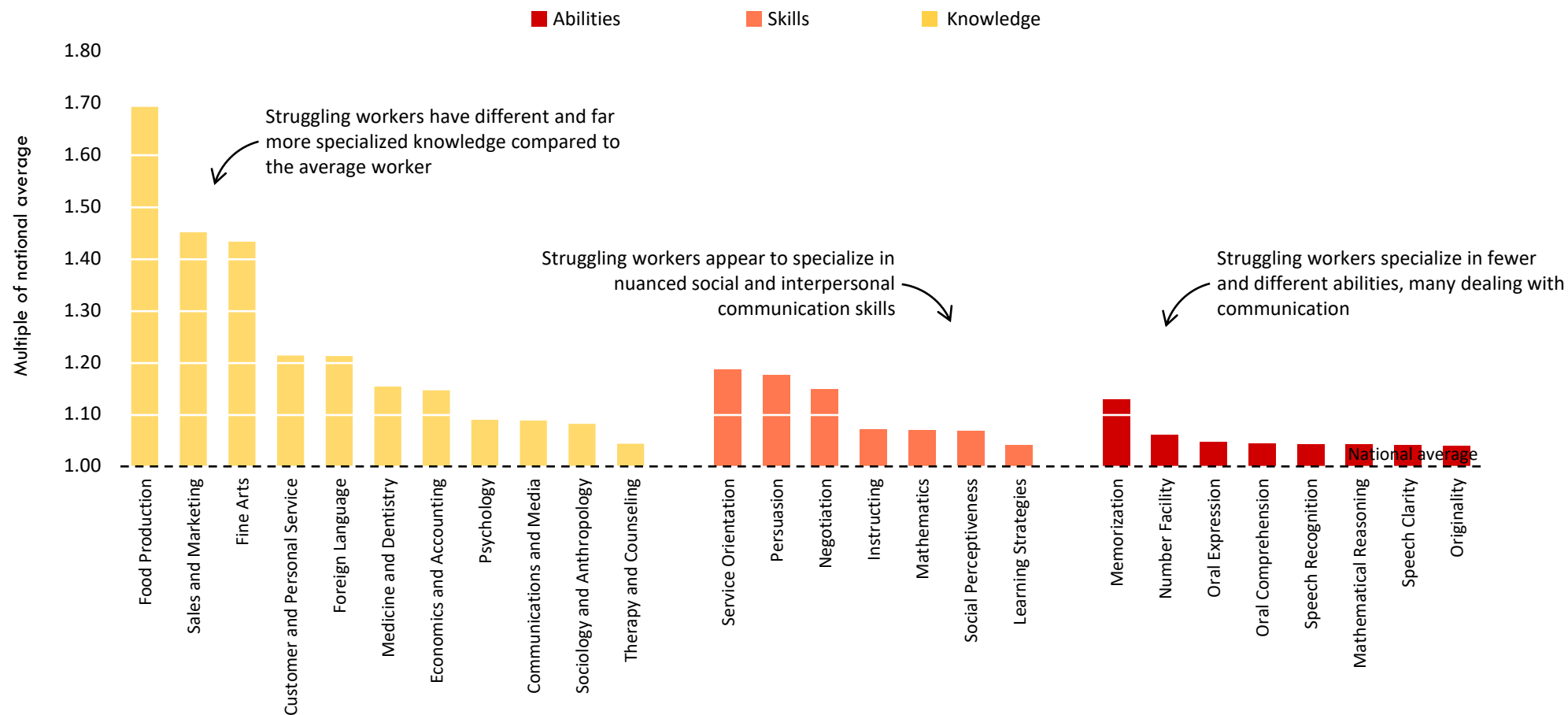
## Key findings:

1. The county's jobs are disproportionately concentrated in occupations in which innate physical abilities are more important than learned knowledge or skills.
2. Struggling workers have fewer human capital specializations, on average, but specialize in knowledge and skills related to food production, sales, and service.
3. The county's struggling workers possess much of the human capital needed in target clusters, though some training would be needed in certain target clusters.
4. Adults who do not work appear to face certain barriers to employment that may also be relevant to struggling workers, including childcare and limited English proficiency.

# STRUGGLING WORKERS HAVE FEWER BUT STRONGER SPECIALIZATIONS

Relative importance of human capital elements among Stanislaus County's struggling workers\*

Compared to national average, circa 2020



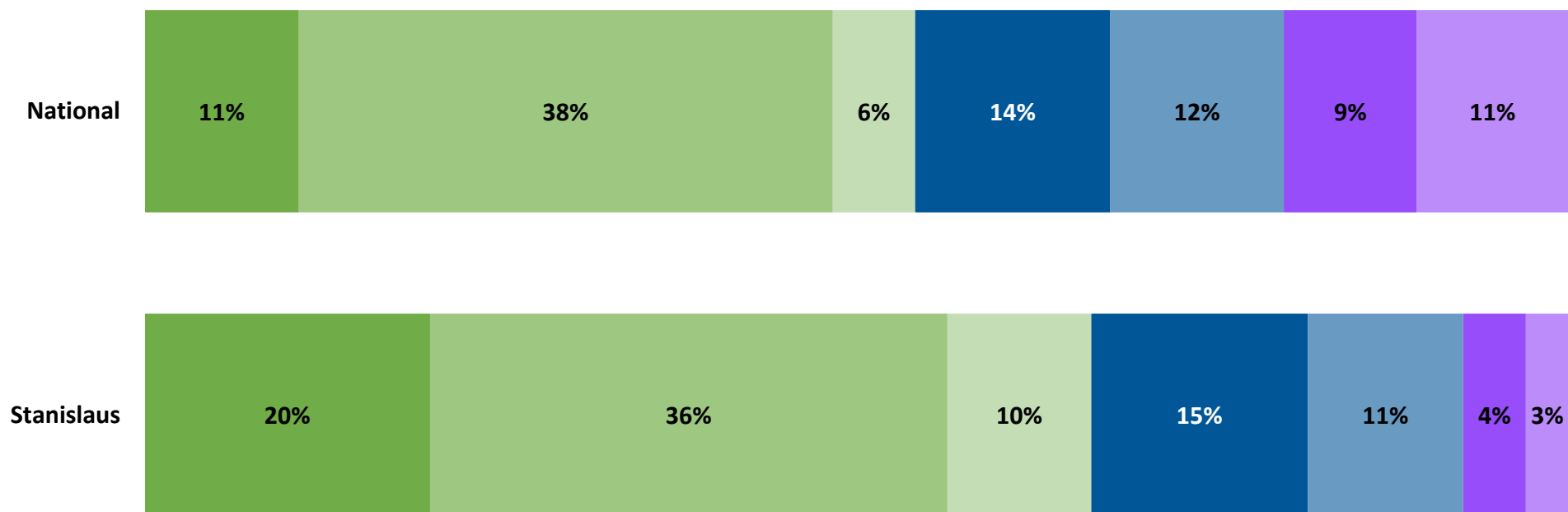
\* Displays only those elements relatively more important in the county's economy compared to the national average.

Source: Brookings and Cities GPS analysis of O\*Net data and Emsi estimates.

# EDUCATION WAS A MAJOR BARRIER TO WORK PRIOR TO THE PANDEMIC

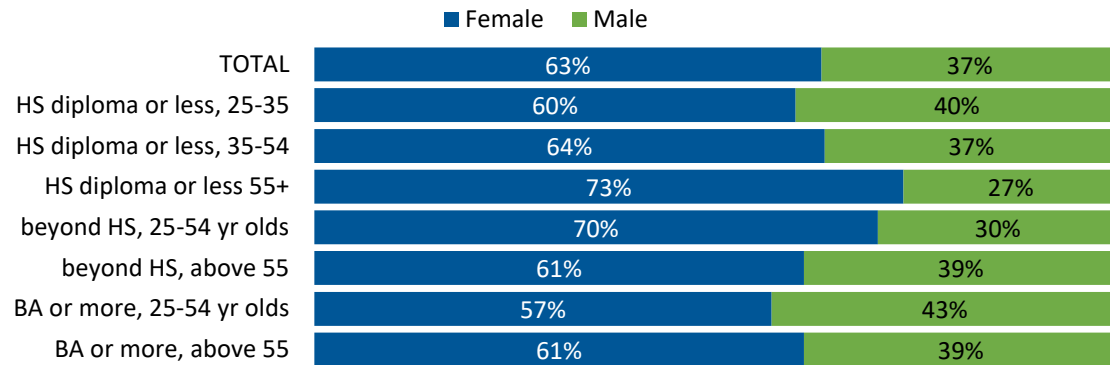
Stanislaus County out-of-work prime-age population by skill level vs. national average benchmark

■ HS diploma or less, 25-35   ■ HS diploma or less, 35-54   ■ HS diploma or less 55+   ■ beyond HS, 25-54 yr olds   ■ beyond HS, above 55   ■ BA or more, 25-54 yr olds   ■ BA or more, above 55

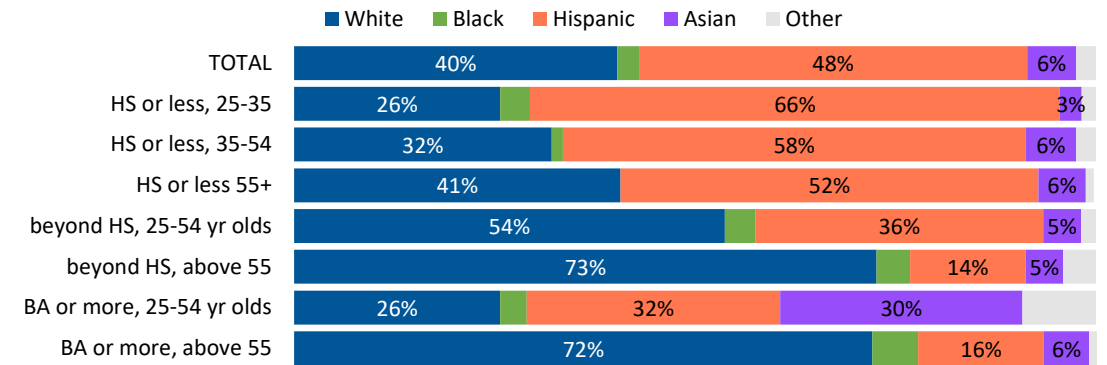


# CHILDCARE AND ENGLISH ARE KEY BARRIERS TO WORK IN THE COUNTY

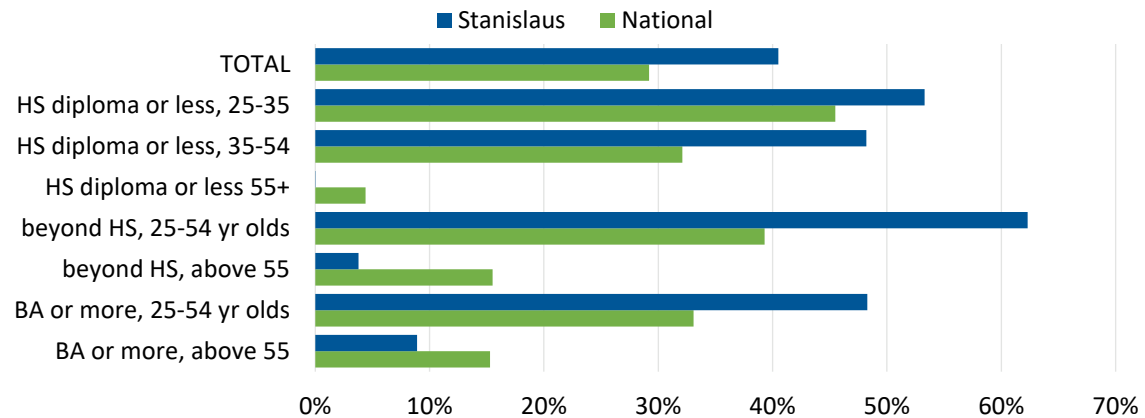
Proportion of out-of-work by gender



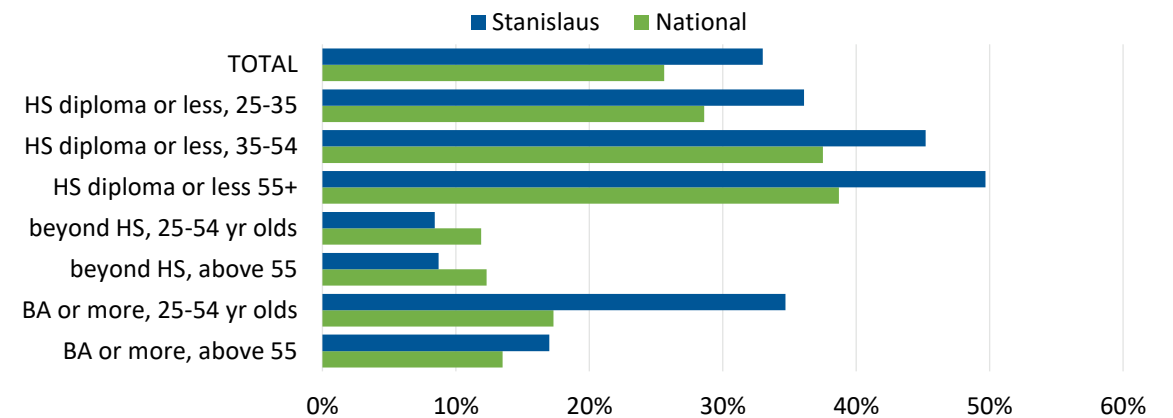
Proportion of out-of-work by race



Out-of-work caring for children



Out-of-work with limited English proficiency







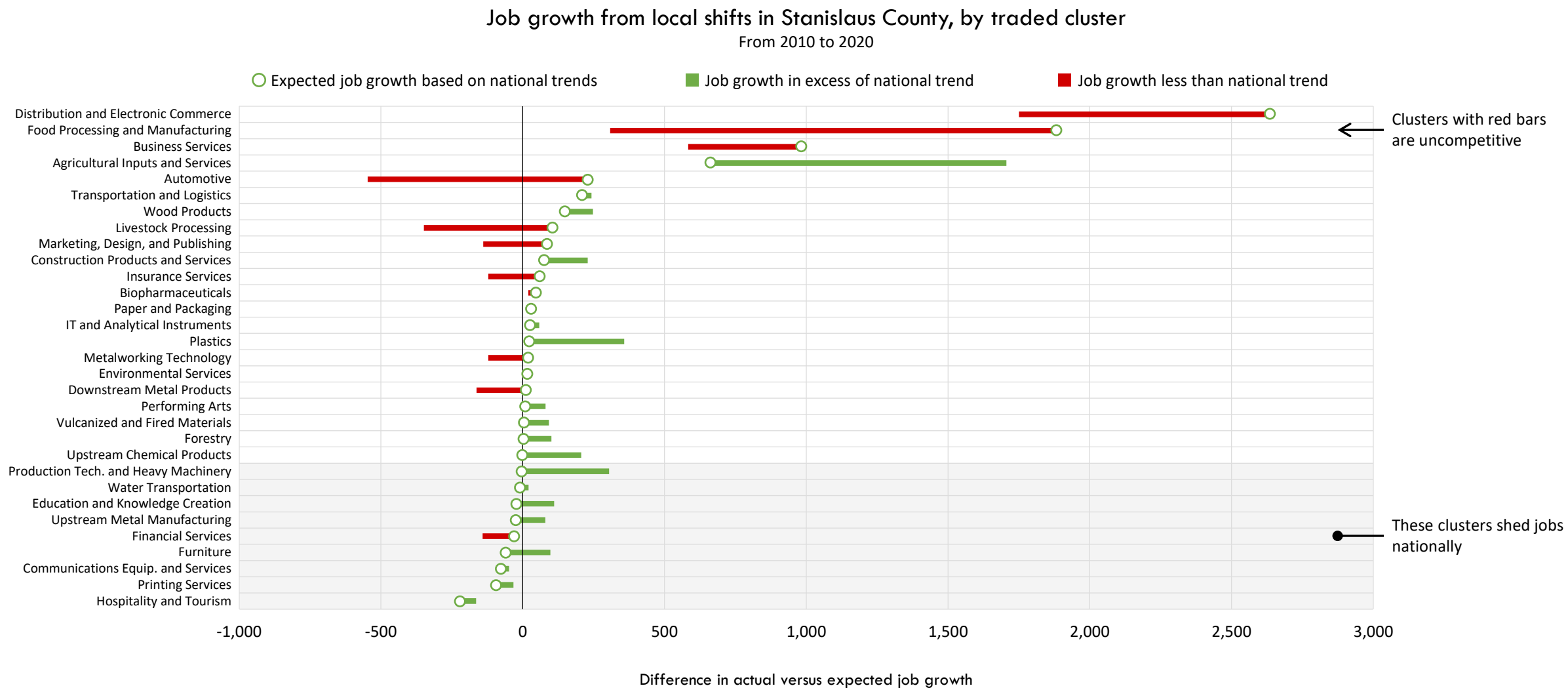
# Economic Performance

# Economic Performance: Growth

## Key findings:

1. Stanislaus County's jobs growth exceeded 15% over the 10-year period from 2010 to 2020, surpassing the nation's job growth due to "local shifts" in industry structure.
2. These local shifts are a result of faster-than-average growth in the local-serving sector, which caters to local consumers, and the public sector. This type of growth is likely a reflection of an influx of new residents seeking lower costs of living.
3. Meanwhile, the traded sector, which exports locally-produced products and services, added jobs slower than the national average, suggesting waning competitiveness.
4. A closer look reveals that many of the county's traded clusters are growing and competitive, but some of its largest employment generators are not, such as food manufacturing, wholesale distribution, and various business services.

# THE COUNTY'S LARGEST TRADED CLUSTERS HAVE FALLEN BEHIND

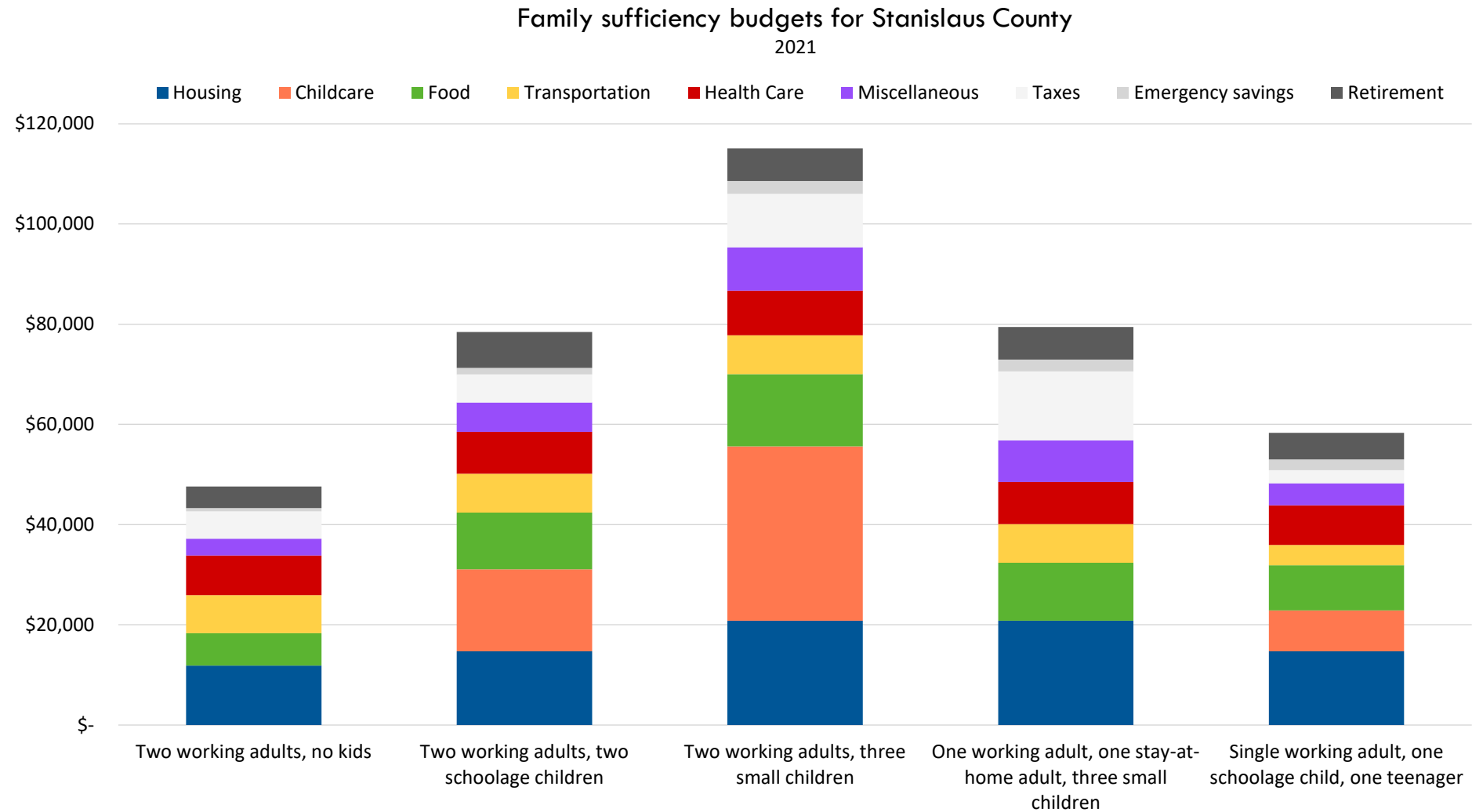


# Economic Performance: Opportunity

## Key findings:

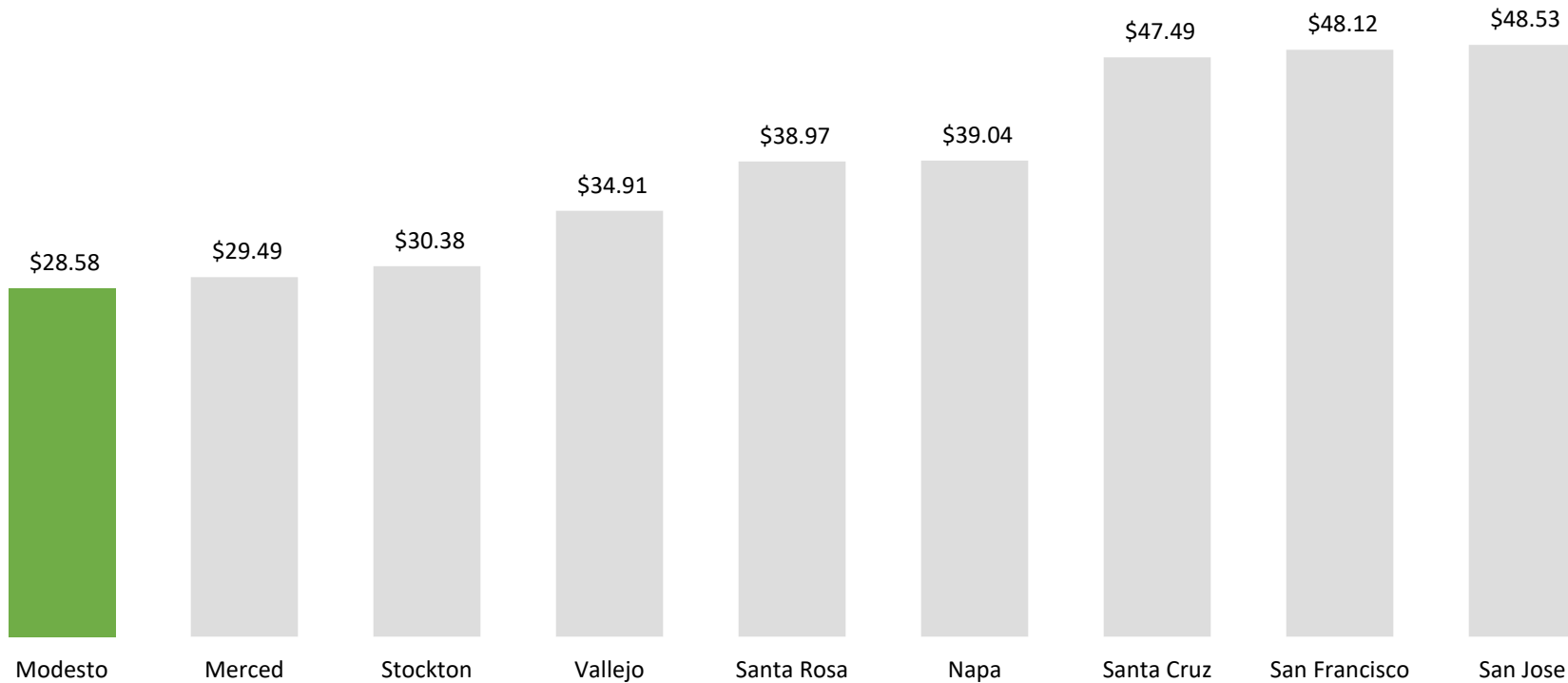
1. Over half of Stanislaus County's residents and 62% of its children belong to families that struggle to afford necessities, such as nutritious food, suitable housing, and childcare.
2. Most of these "struggling families" (74%) contain at least one working adult. Most of the workers in these families (83%) have a degree. Over a third have some post-secondary education.
3. The high ratio of people in struggling families largely reflects high cost of living in Northern California, but also reflect the poor quality of jobs in Stanislaus County.
4. Only 13% of jobs in the county are "good jobs" and only 22% of jobs will lead an incumbent worker to a good job within 10 years, leaving a huge gap of nearly 41,000 struggling workers in the county who need a good job that does not currently exist.

# RAISING A FAMILY IN STANISLAUS COUNTY REQUIRES A SIZABLE INCOME



# NORTHERN CALIFORNIA IS AN EXPENSIVE PLACE TO RAISE A FAMILY

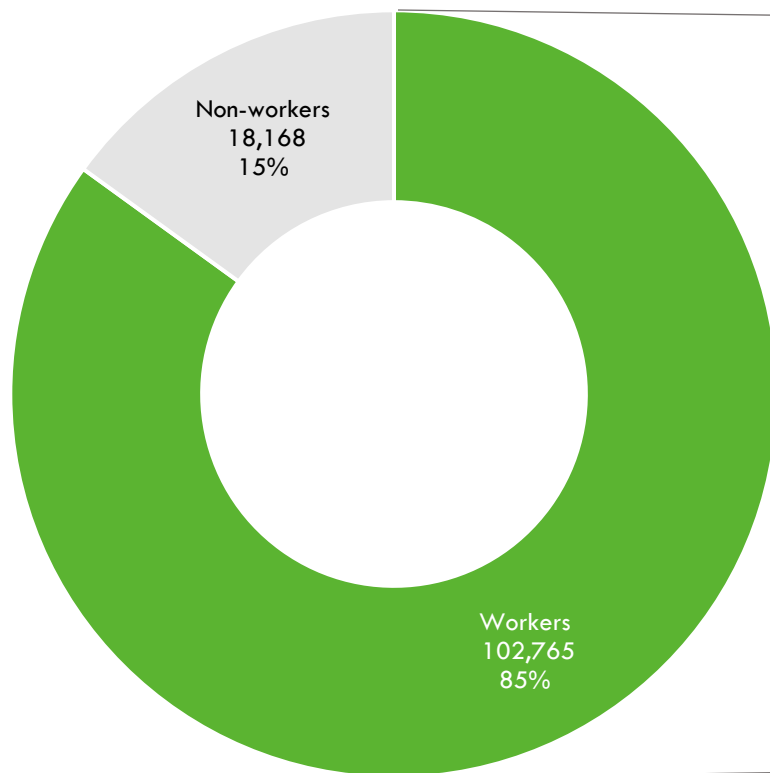
**Sufficiency wage in Northern California metropolitan areas**  
Wage needed to make families of half of struggling children self-sufficient, 2015 – 2019



# MOST STRUGGLING ADULTS WORK, MANY WITH MORE THAN H.S. DEGREE

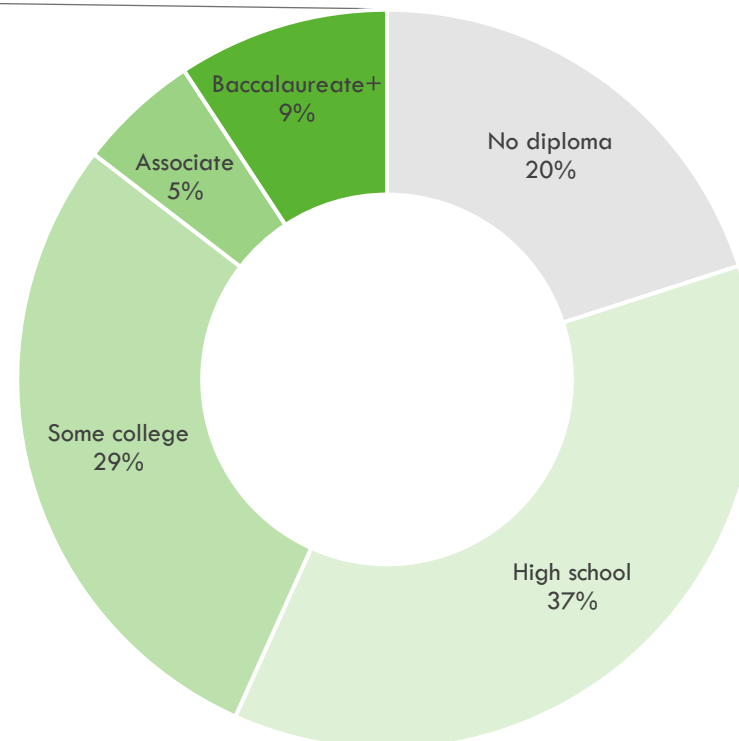
Labor status of adults in struggling working families

2019



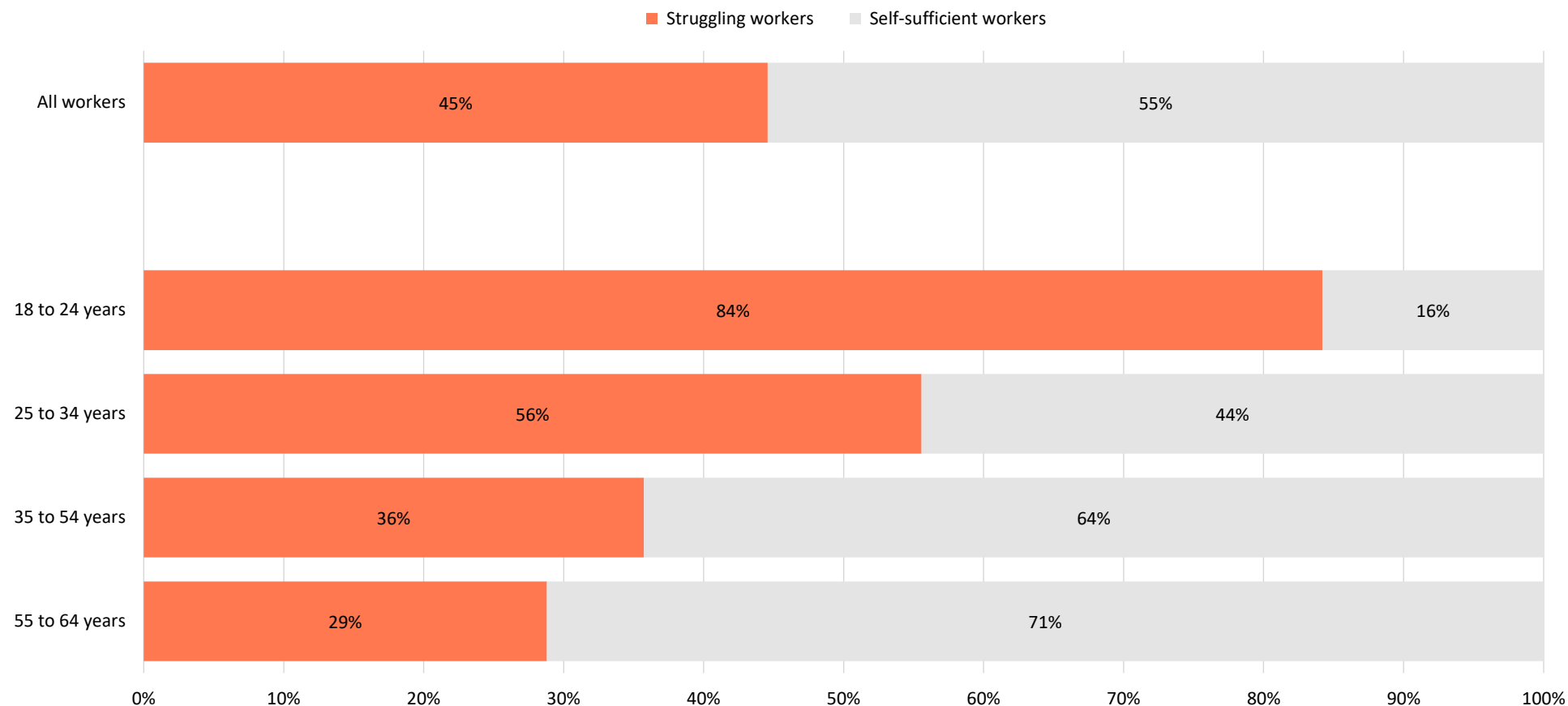
Educational attainment of struggling adult workers

2019



# YOUNGER WORKERS ARE MORE LIKELY TO STRUGGLE

Share of Stanislaus County's working-age adults in the labor force by struggling status  
2019



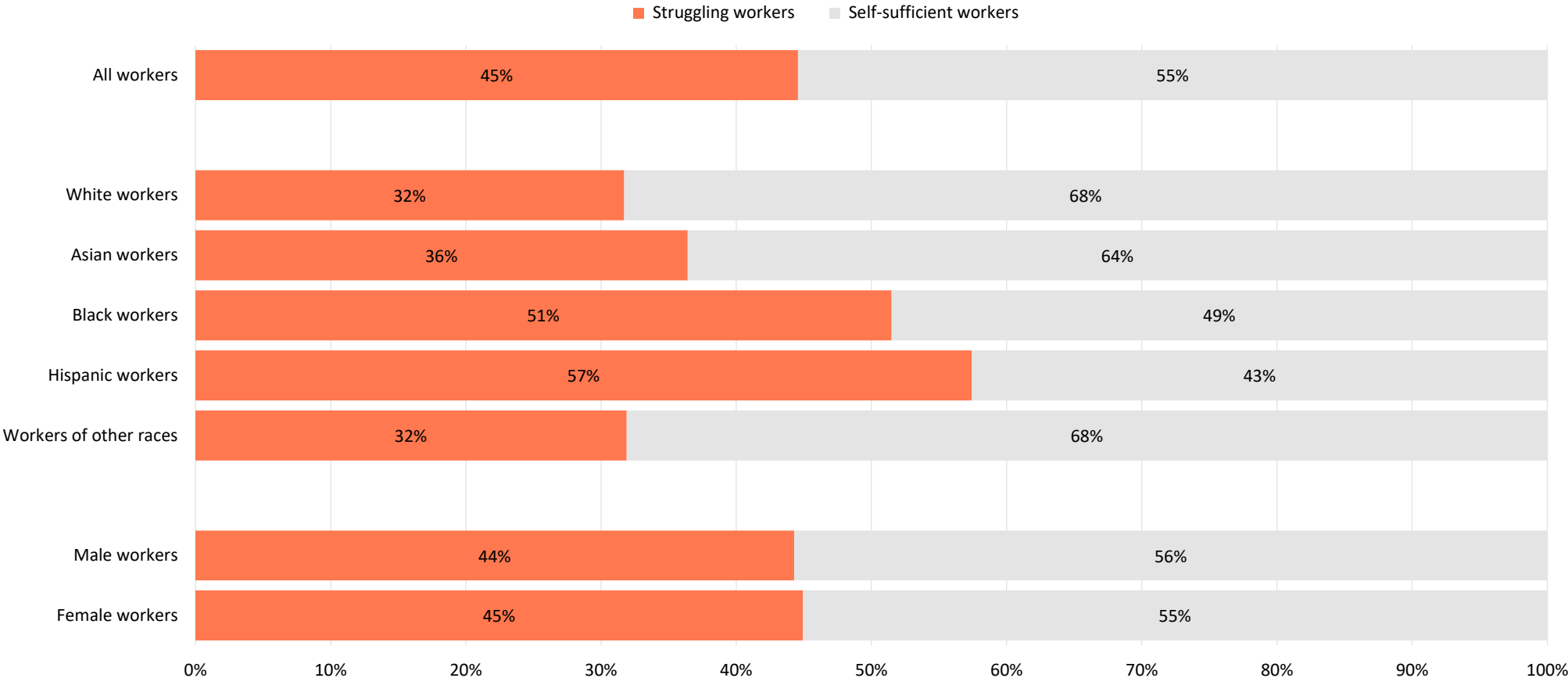
Note: "Adults" refers to working-age adults aged 18 to 64. "Workers" and "working" refers to adults that are employed or looking for work.

Source: Brookings and Cities GPS analysis of American Community Survey public-use microdata and University of Washington estimates.



# WORKERS OF COLOR ARE MORE LIKELY TO STRUGGLE

Share of Stanislaus County's working-age adults in the labor force by struggling status  
2019

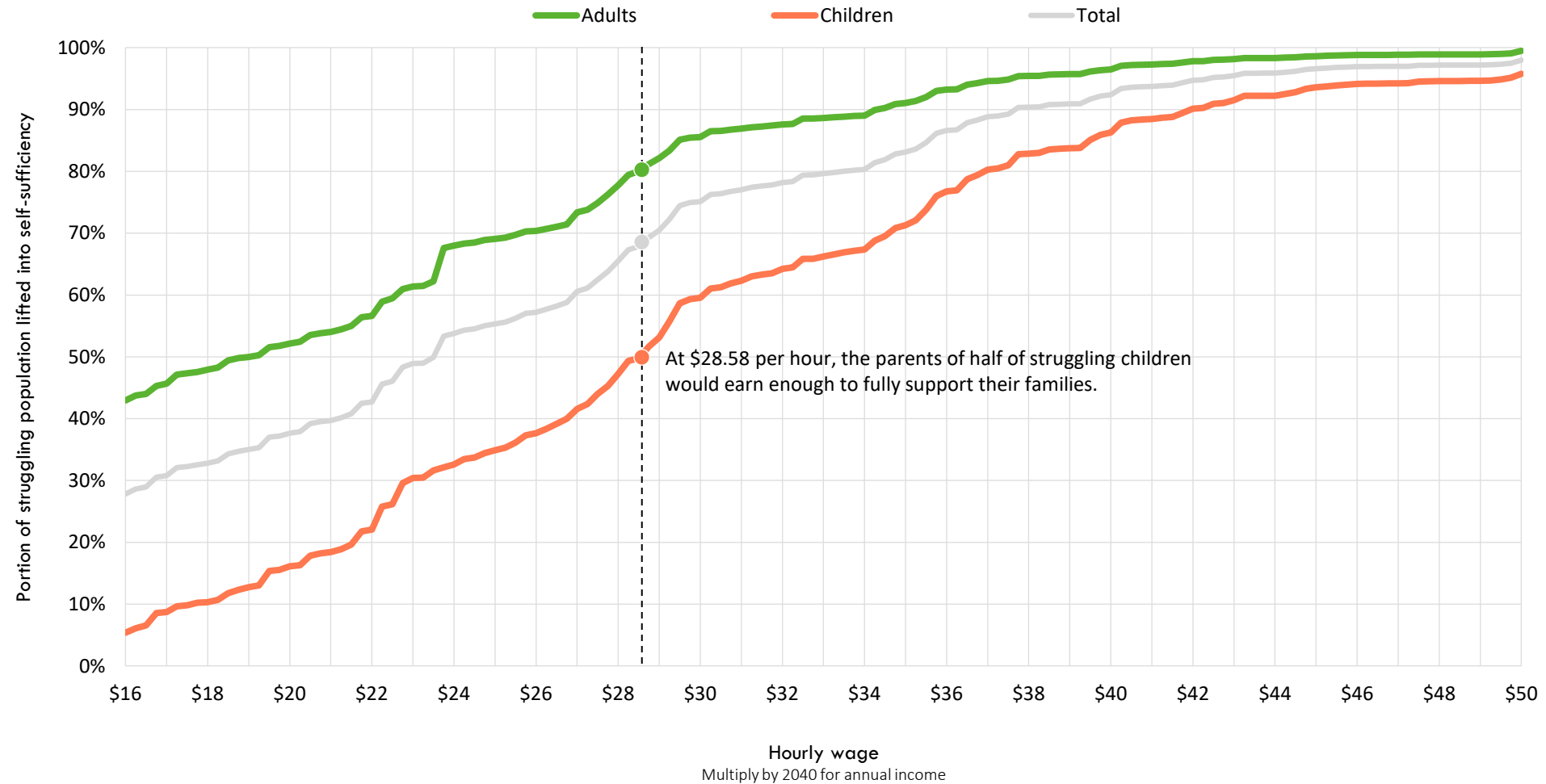


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# EARNINGS MUST RISE TO MAKE MORE FAMILIES SELF-SUFFICIENT

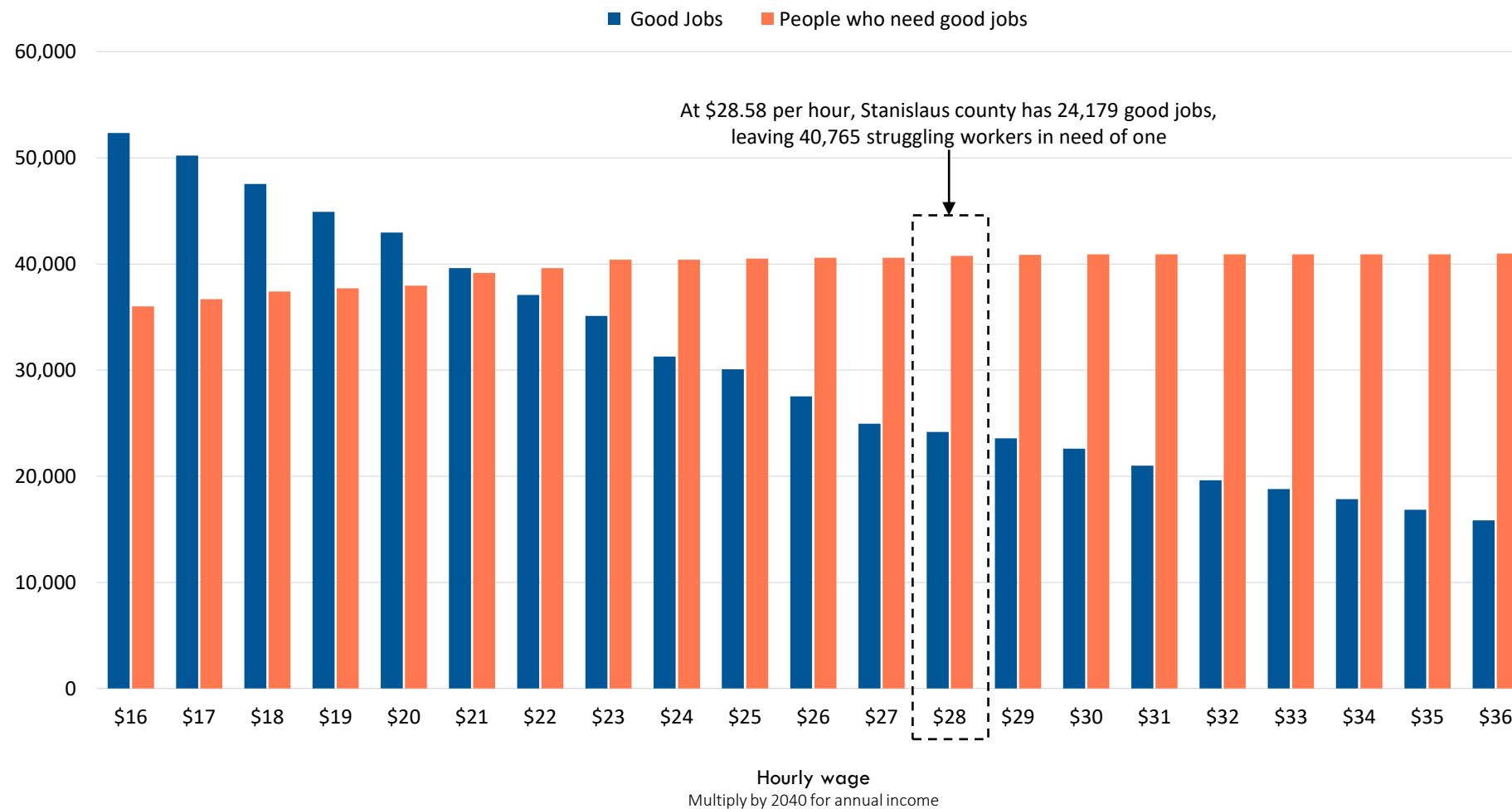
Share of people in struggling families that would be self-sufficient at different wage thresholds  
2015 – 2019, pooled



# THE COUNTY NEEDS MORE GOOD JOBS FOR STRUGGLING WORKERS

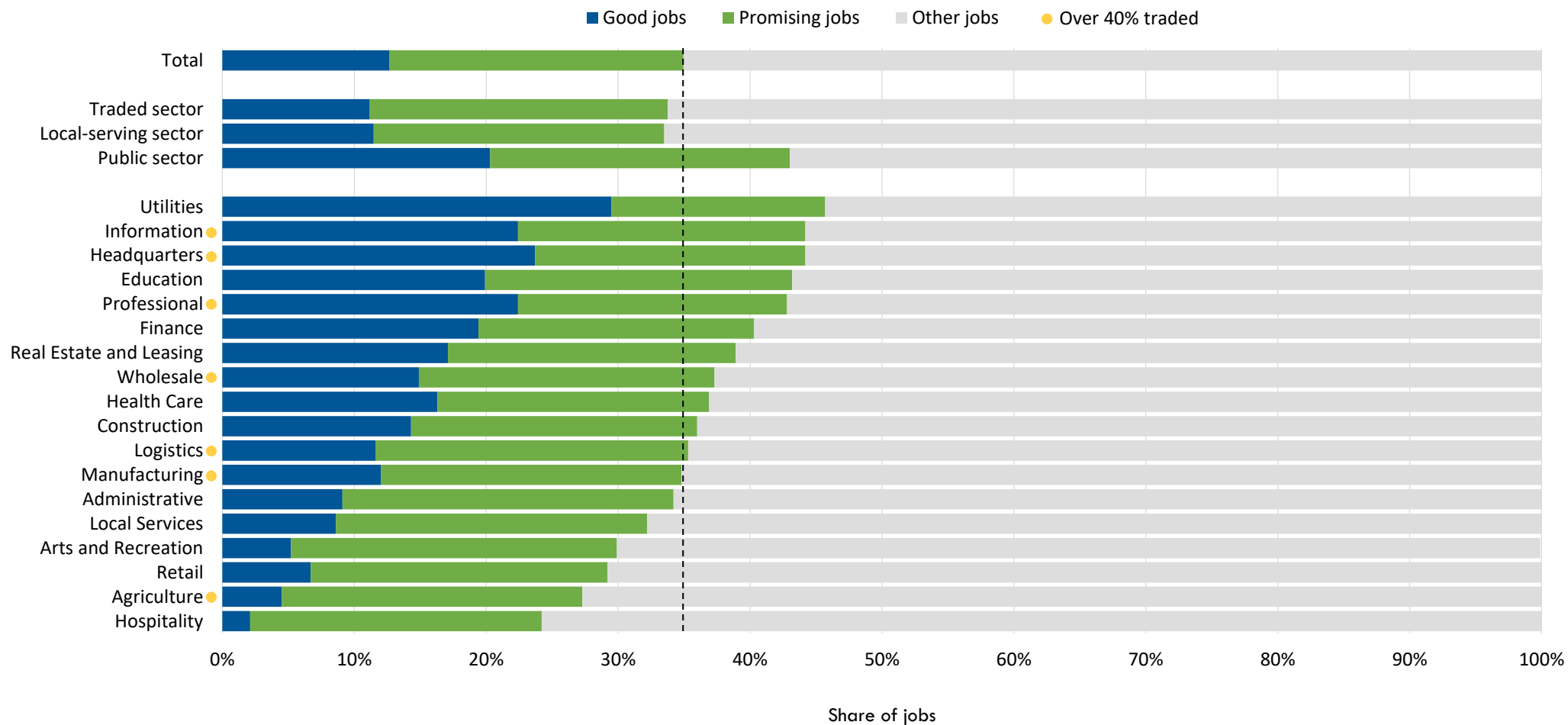
Stanislaus County's number of good jobs and struggling workers at different wage thresholds

Circa 2020



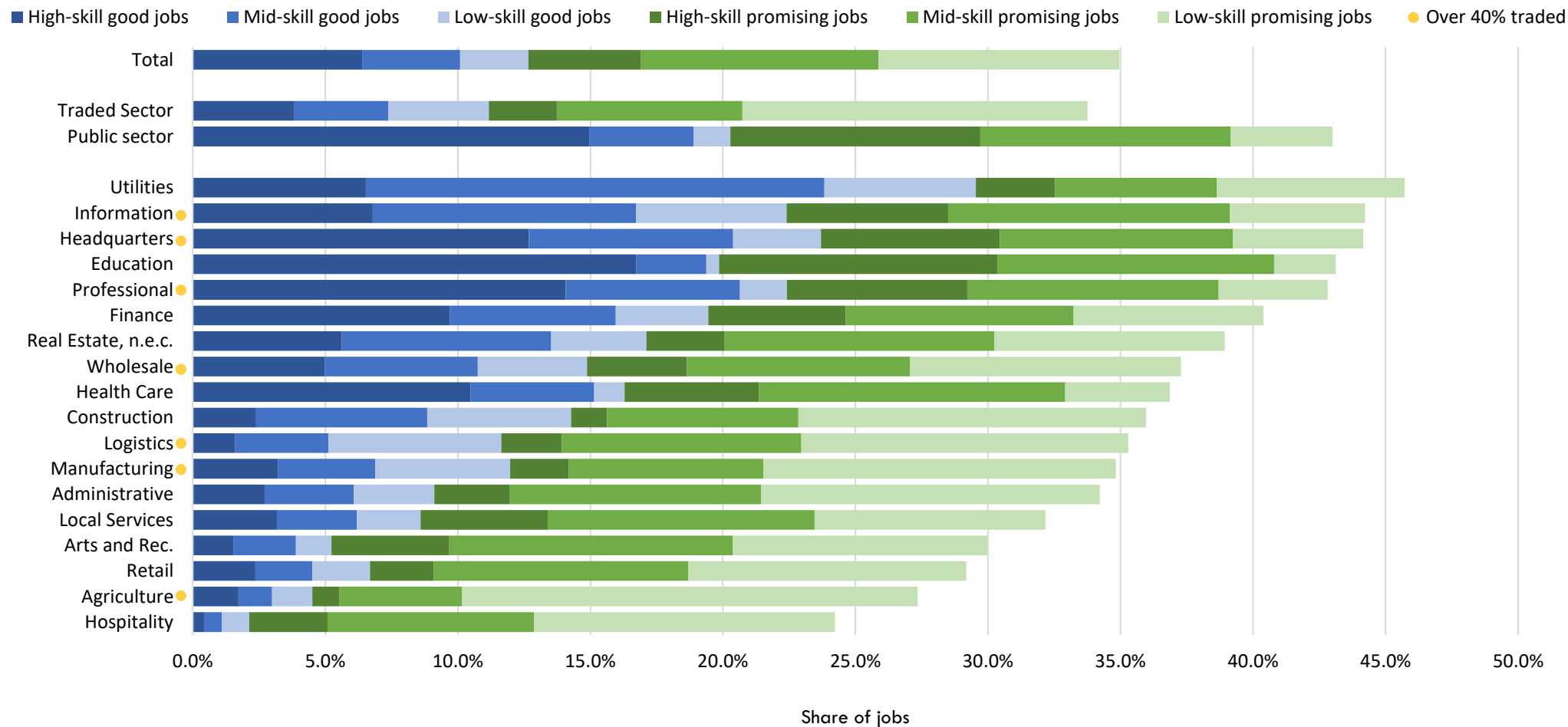
# JOB QUALITY VARIES BY SECTOR AND INDUSTRY

Share of jobs according to job quality type, by sector  
2020



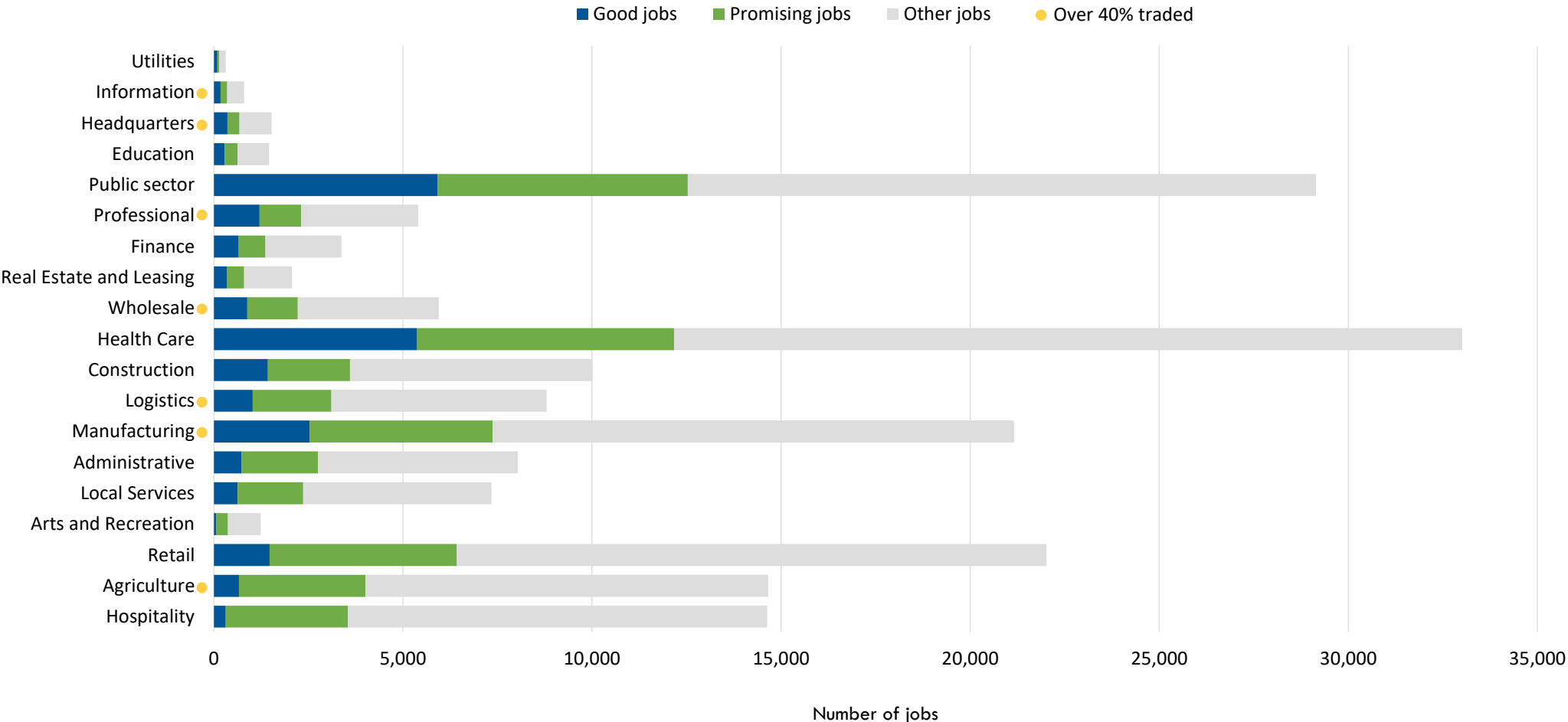
# JOB QUALITY VARIES BY SKILL LEVELS WITHIN SECTORS

Share of jobs according to job quality type, by sector  
2020



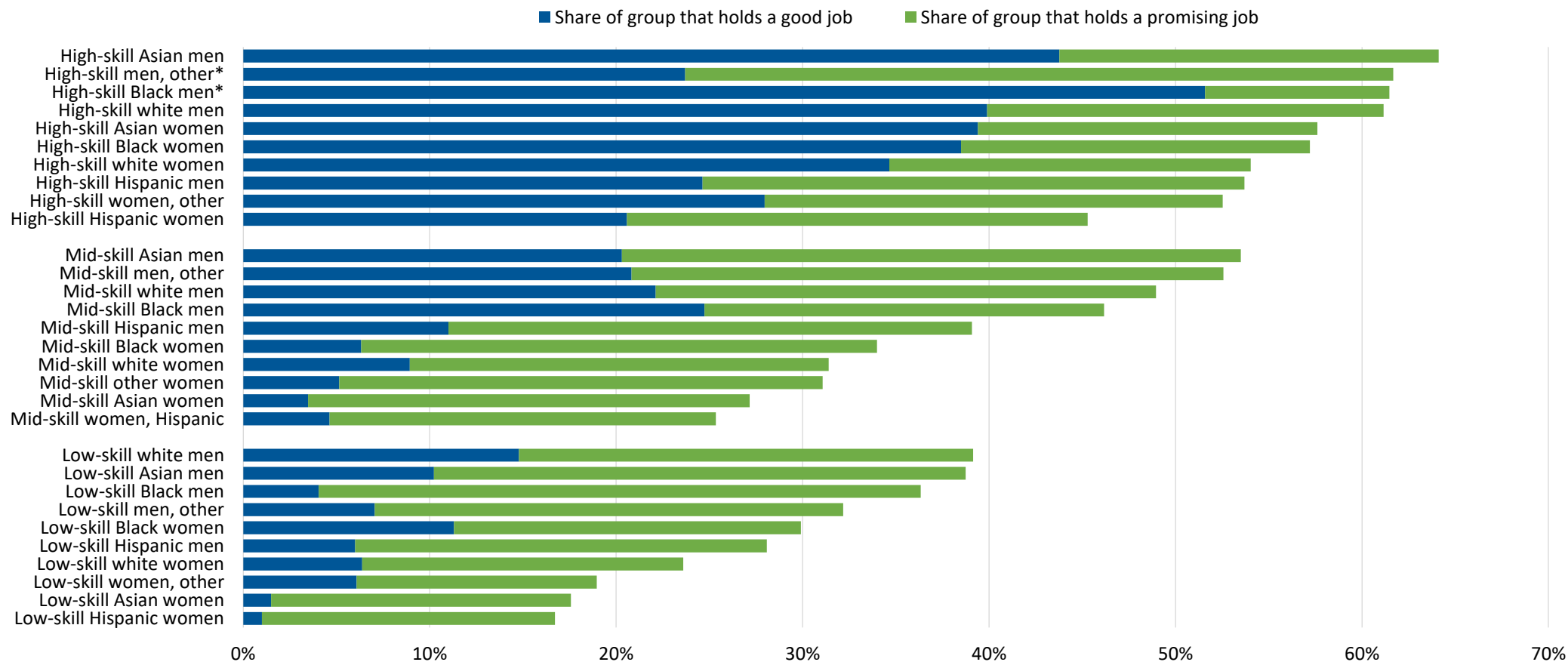
# SECTORS THAT CONCENTRATE OPPORTUNITY TEND TO CONTAIN FEW JOBS

Share of jobs according to job quality type, by sector  
2020



# EDUCATION ALONE DOES NOT EQUALIZE ACCESS TO OPPORTUNITY JOBS

Disparities in access to opportunity jobs by sex, race, and skill-level



\* Small sample size; interpret with caution

Source: Brookings and Cities GPS analysis.



# Innovation and Business Dynamism



## WHY INNOVATION MATTERS

A region's innovative capacity represents the ability to create new value, uncover new products and services, start new businesses, adopt solutions to improve productivity, and adapt to rapid technological change.

Strength in four categories mark the most competitive regional economies –

- research and development
- commercialization
- entrepreneurial dynamism
- advanced industrial production

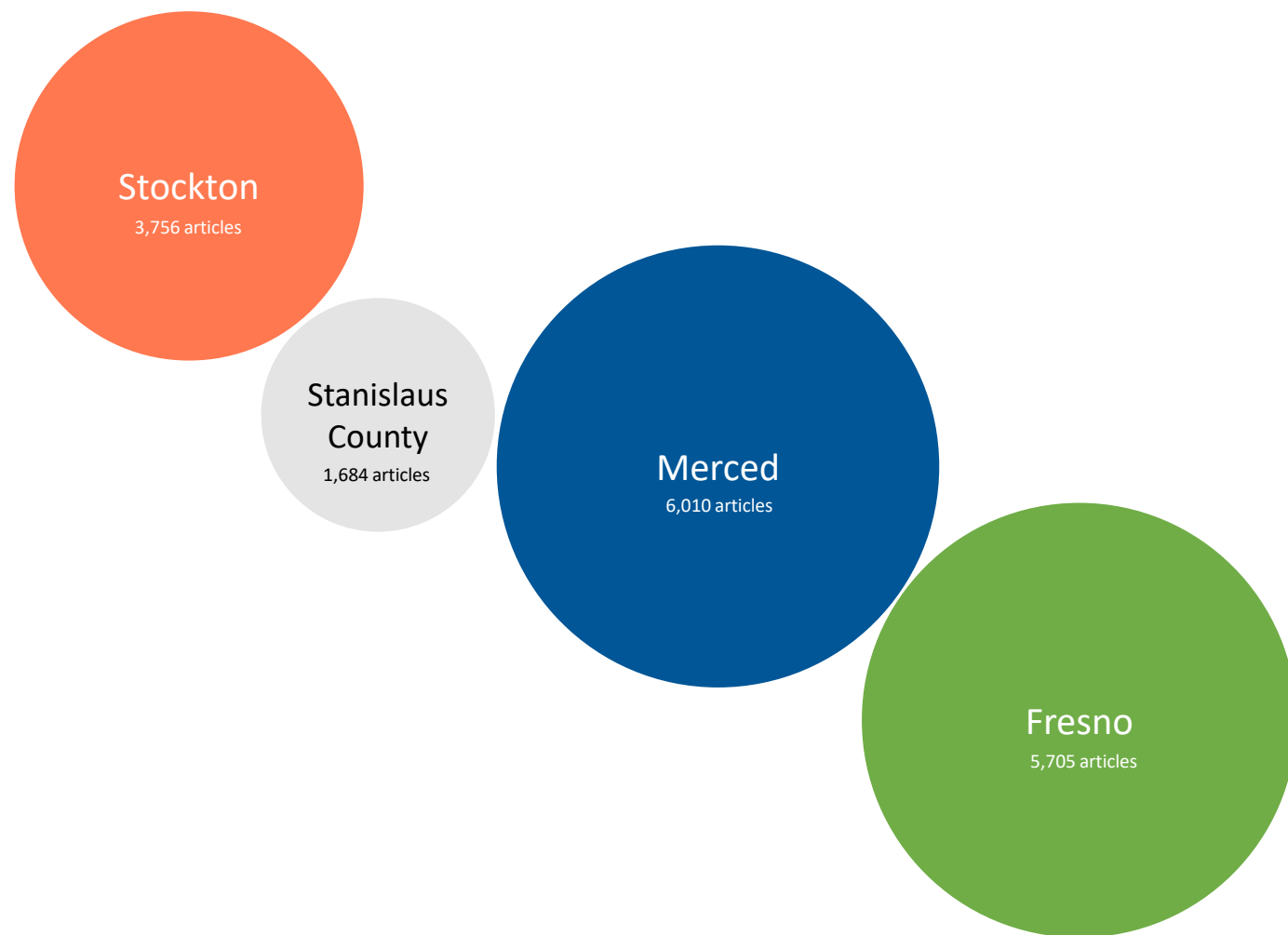
# Innovation and Business Dynamism

## Key findings:

1. Stanislaus County produces low volumes of novel R&D compared to other cities in Northern and Central California.
2. CSU Stanislaus is the county's largest producer of novel R&D followed by the business community, for which Gallo Winery is the leader.
3. The county boasts R&D links to many parts of the world, though these links are not especially strong due to the low volume of novel R&D.
4. Some of the county's novel R&D relates to four key areas of science relevant to target clusters: Biochemistry, Plant Science, Animal Science, and Cybernetics.
5. Though little of the county's novel R&D is commercialized, some of the portion that is relates to breakthroughs in biomaterials, especially waste-to-energy and materials made from recycled biowaste, such as chemicals, plastics, or textiles.

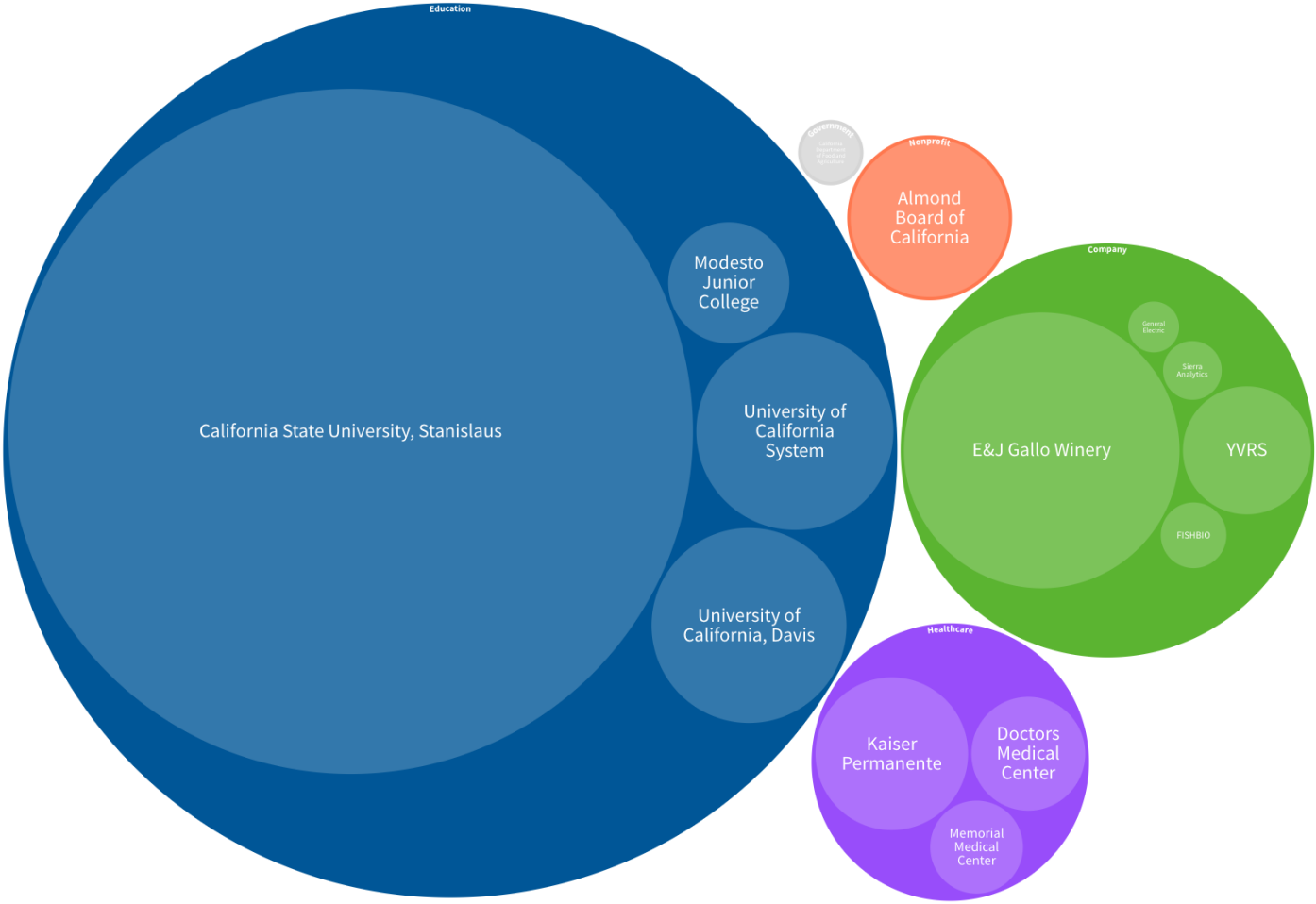
# R&D PRODUCTION LAGS REGIONAL PEERS

Peer-reviewed articles by locality  
2010 to 2021



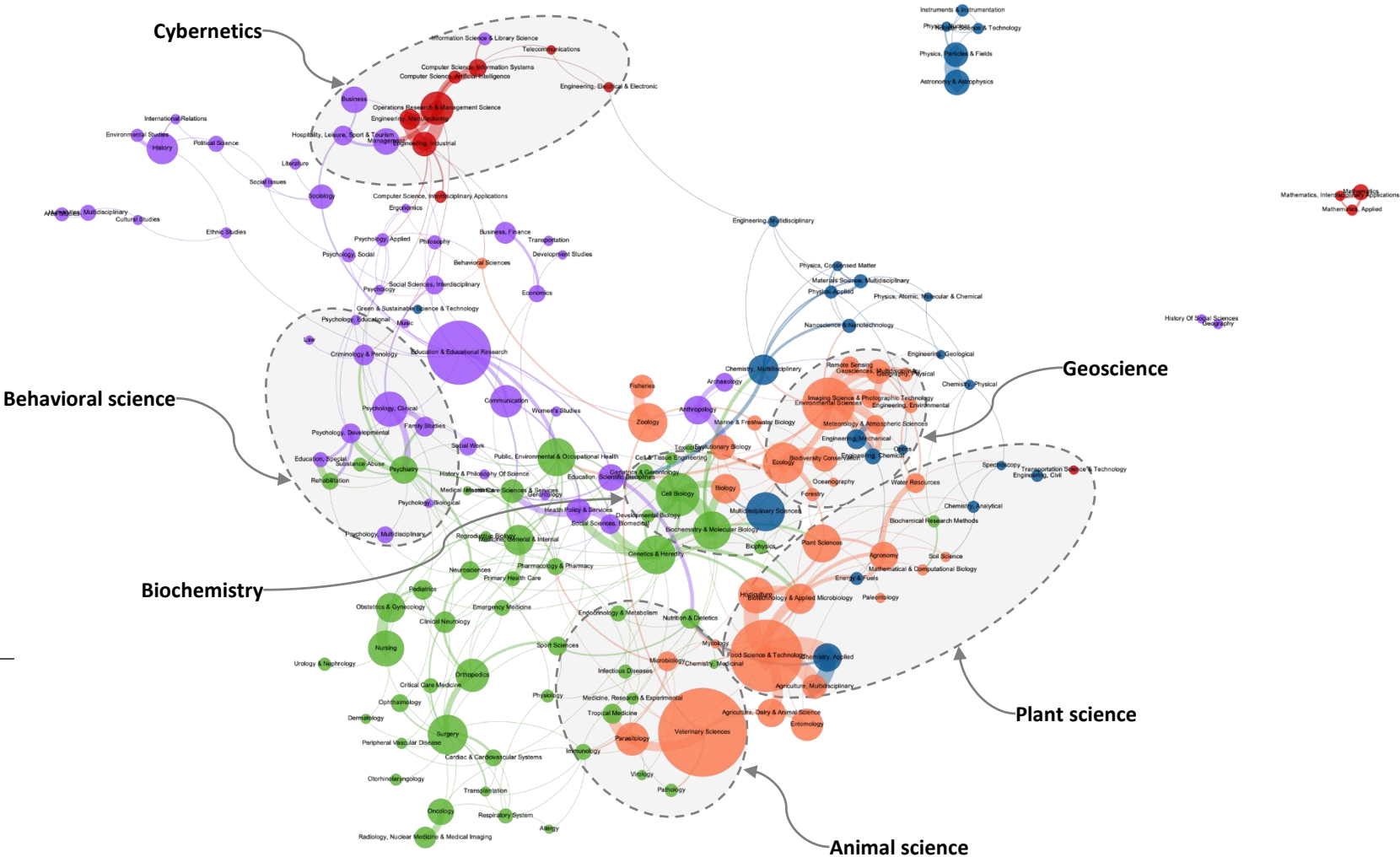
# CSU AND GALLO ARE THE MOST PRODUCTIVE R&D ORGANIZATIONS

Stanislaus County's top R&D-producing organizations  
By number of peer-reviewed articles published from 2010 to 2021



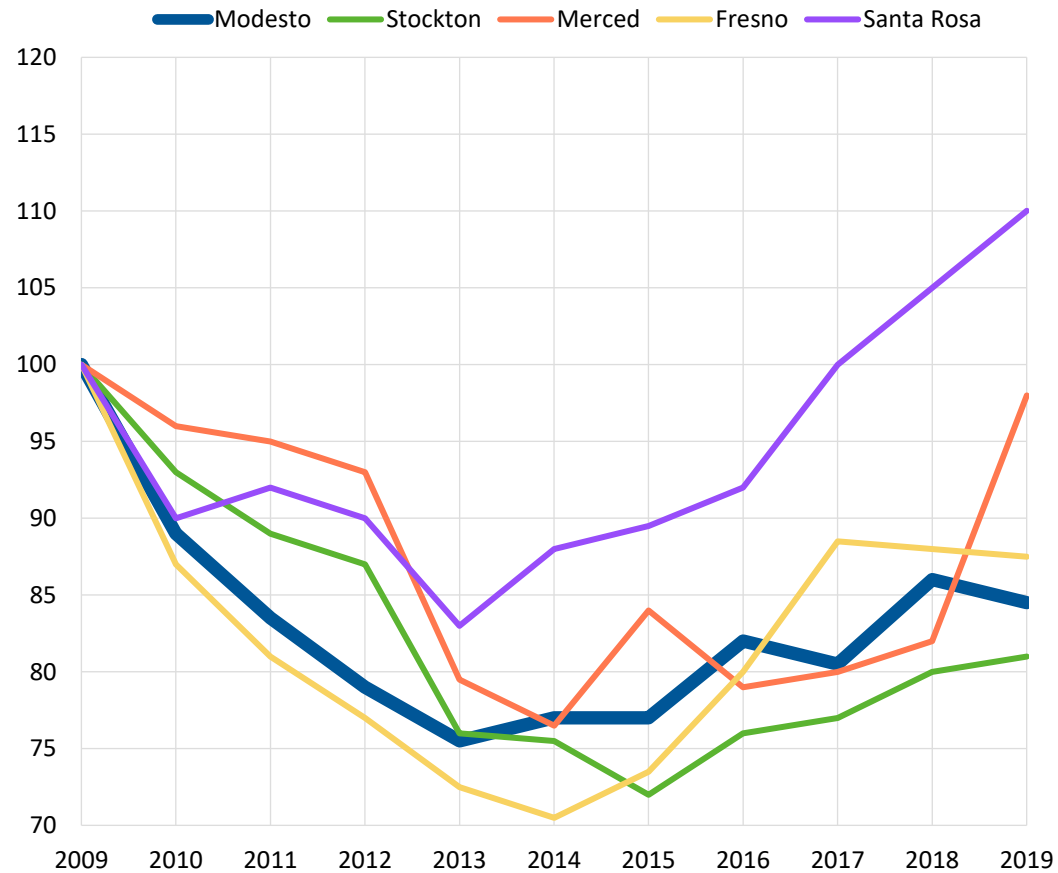
## CROSS-DISCIPLINARY CONNECTIONS REVEAL R&D SPECIALIZATIONS

Stanislaus County's volume of cross-disciplinary articles by discipline  
2010 to 2021

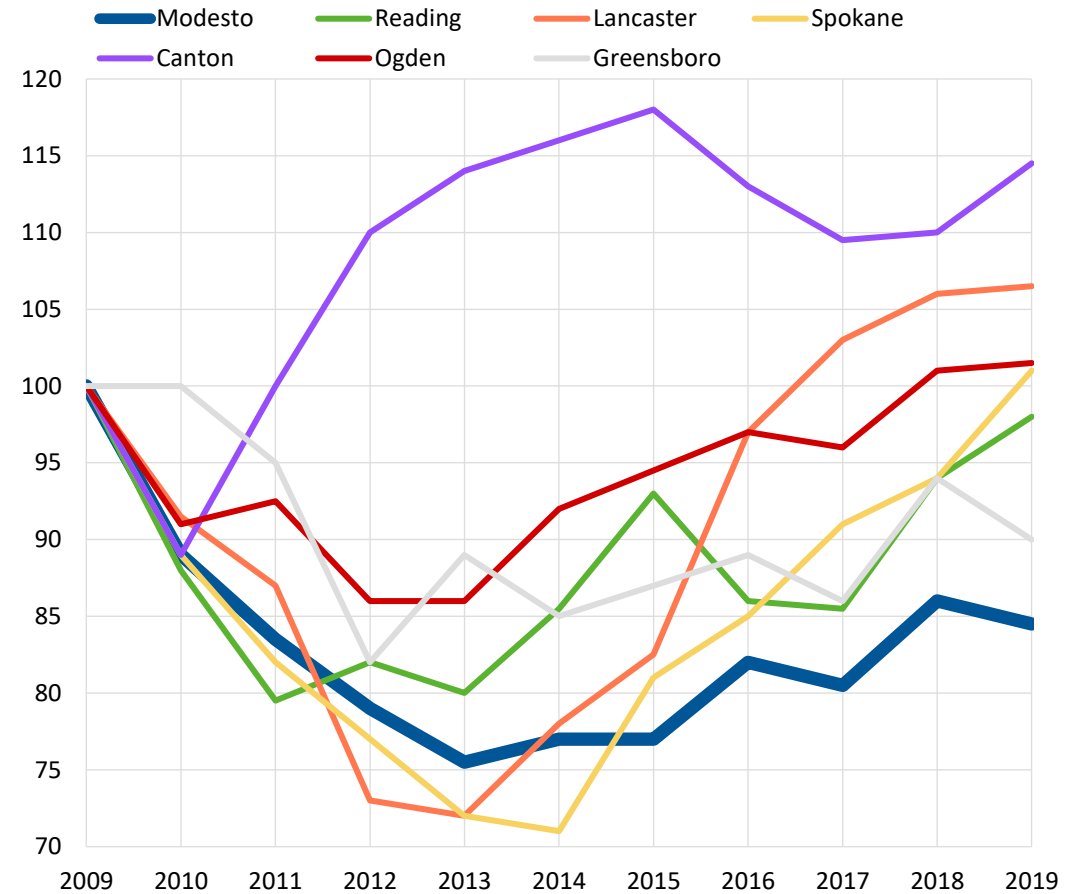


# ENTREPRENEURSHIP AND BUSINESS DYNAMISM ARE COMPARATIVELY LOW

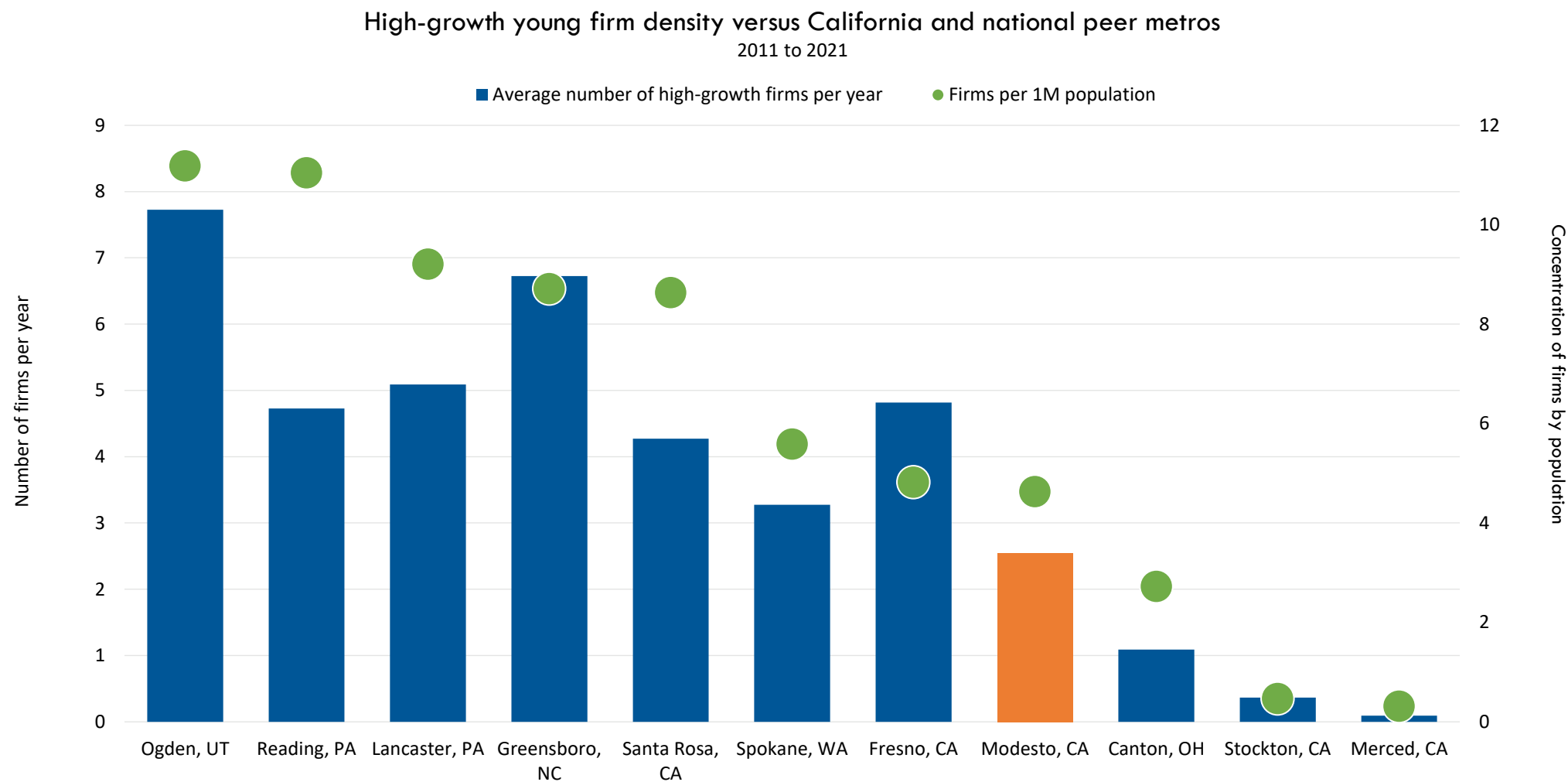
Change in jobs at young firms among California peer metro areas  
2009 – 2019



Change in jobs at young firms among national peer metro areas  
2009 – 2019



# THE METRO GENERATES FEWER HIGH-GROWTH FIRMS THAN PEERS



# DISPARITIES EXIST IN BUSINESS OWNERSHIP BY GENDER AND RACE

Proportion and job impacts of women and minority business owners versus population in Stanislaus County

