

BIOSCIENCE STATE OF THE INDUSTRY

October 28, 2020 | 1-2:30 PM

POWERED BY

BIOCOM



LOS ANGELES COUNTY
ECONOMIC DEVELOPMENT CORPORATION

Collectively Advancing Opportunity and Prosperity for All

BILL ALLEN
CHIEF EXECUTIVE OFFICER
LAEDC

BIOSCIENCE

STATE OF THE INDUSTRY

JOE PANETTA

PRESIDENT & CEO

BIOCOM



BIOSCIENCE
STATE OF THE INDUSTRY

STEPHANIE HSlEH

**EXECUTIVE DIRECTOR, LOS ANGELES
BIOCOM**



**SUPERVISOR MARK
RIDLEY-THOMAS**
SUPERVISOR, 2ND DISTRICT
LOS ANGELES COUNTY

BIOSCIENCE

STATE OF THE INDUSTRY

RICHARD VERCHES

EXECUTIVE DIRECTOR

CENTER FOR A COMPETITIVE

WORKFORCE (CCW)



THE CENTER FOR A COMPETITIVE WORKFORCE

is leading industry-education partnerships to collaboratively strengthen our region's talent development ecosystem

1. Data-driven research on the supply and demand for talent
2. Industry Councils and Regional Program Advisories
3. Developing work-based learning and employment opportunities
4. Workforce & Education Partner Portal

For more information, visit: www.CompetitiveWorkforce.LA

Building California's Life Science Industry

Joe Panetta,
President & CEO, Biocom

BIOCOM

Who is Biocom?

Biocom harnesses the collective power and experience of the most innovative and productive life science clusters in the world, with powerful advocacy and transformative programs to help companies on their quest to **improve the human condition**.

✓ **Largest**
We are the largest state-wide association in the world.

✓ **1,300 Members**
San Diego, Los Angeles, Bay Area, Tokyo and beyond.

✓ **Founded in 1995**
Over 25 years of leadership

✓ **Experienced**
Most experienced leader and advocate



Strategic Presence

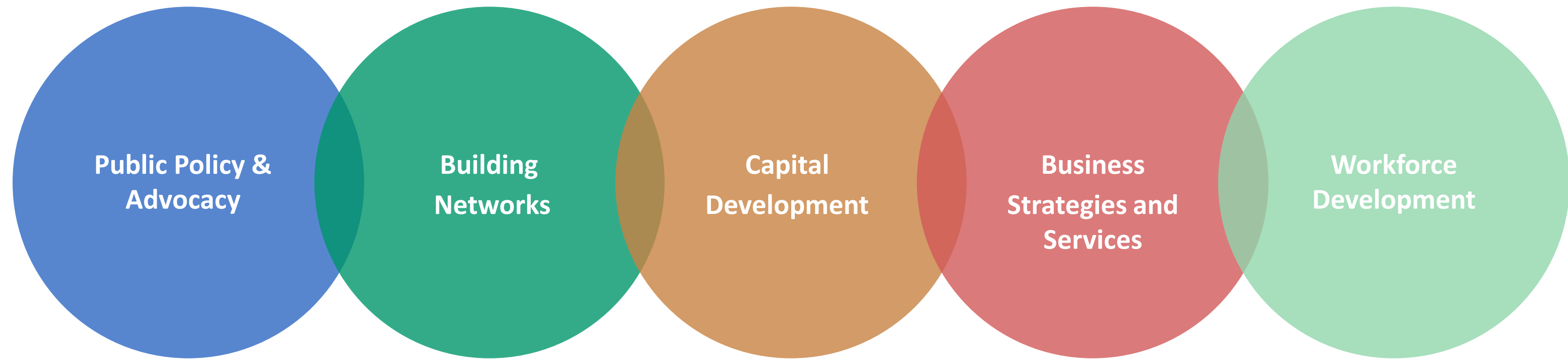


 **Offices**

 **Satellite**

 **Strategic Partnerships**

What We Do





BIOCOCOM

2020 CALIFORNIA ECONOMIC IMPACT REPORT



WWW.BIOCOCOM.ORG

LOS ANGELES COUNTY'S LIFE SCIENCE

For full report visit: www.biocom.org/eir

Annual Economic Impact

	IMPACT
Economic Activity	\$44.2B
Market Value of Goods & Services	\$24.39B
Total Jobs (direct/indirect/induced)	195,820
Labor Income (salaries/wages/benefits paid)	\$14.28B



In 2019, the Los Angeles County life science industry generated

\$44.2B

LOS ANGELES COUNTY'S LIFE SCIENCE

For full report visit: www.biocom.org/eir

Life Science Employment

BioRenewables	694
Biopharmaceutical Manufacturing	7,907
Medical Devices & Diagnostic Equip	12,578
Life Science Wholesale	14,427
Research & Lab Service	57,724



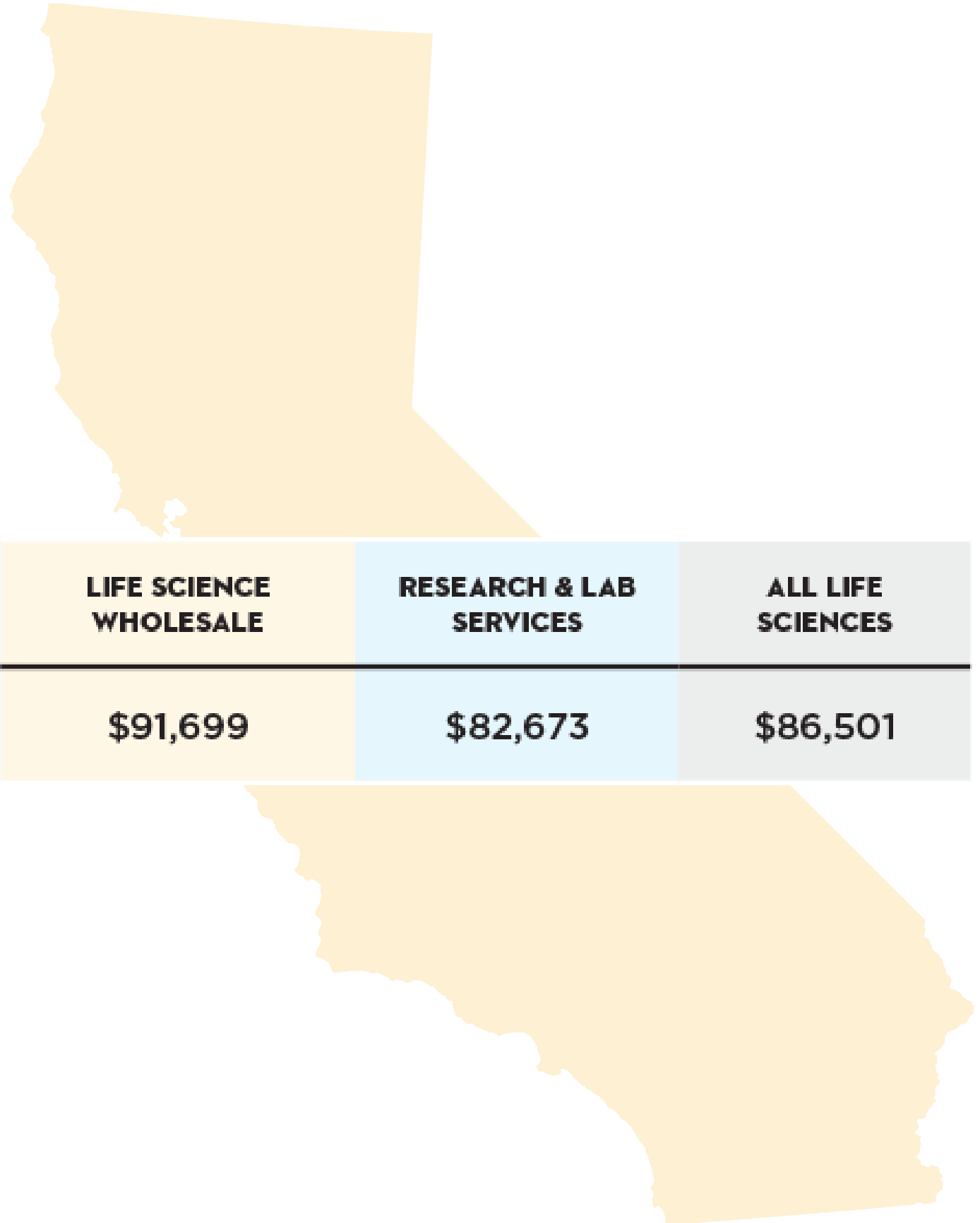
Los Angeles County directly employed

93,330
people in 2019

LOS ANGELES COUNTY'S LIFE SCIENCE

For full report visit: www.biocom.org/eir

Subsector Average Wage



	BIORENEWABLES	BIOPHARMACEUTICAL MANUFACTURING	MEDICAL DEVICES & DIAGNOSTIC EQUIP	LIFE SCIENCE WHOLESALE	RESEARCH & LAB SERVICES	ALL LIFE SCIENCES
Los Angeles County	\$55,868	\$90,882	\$97,041	\$91,699	\$82,673	\$86,501

The average wage for life science employees in Los Angeles county:

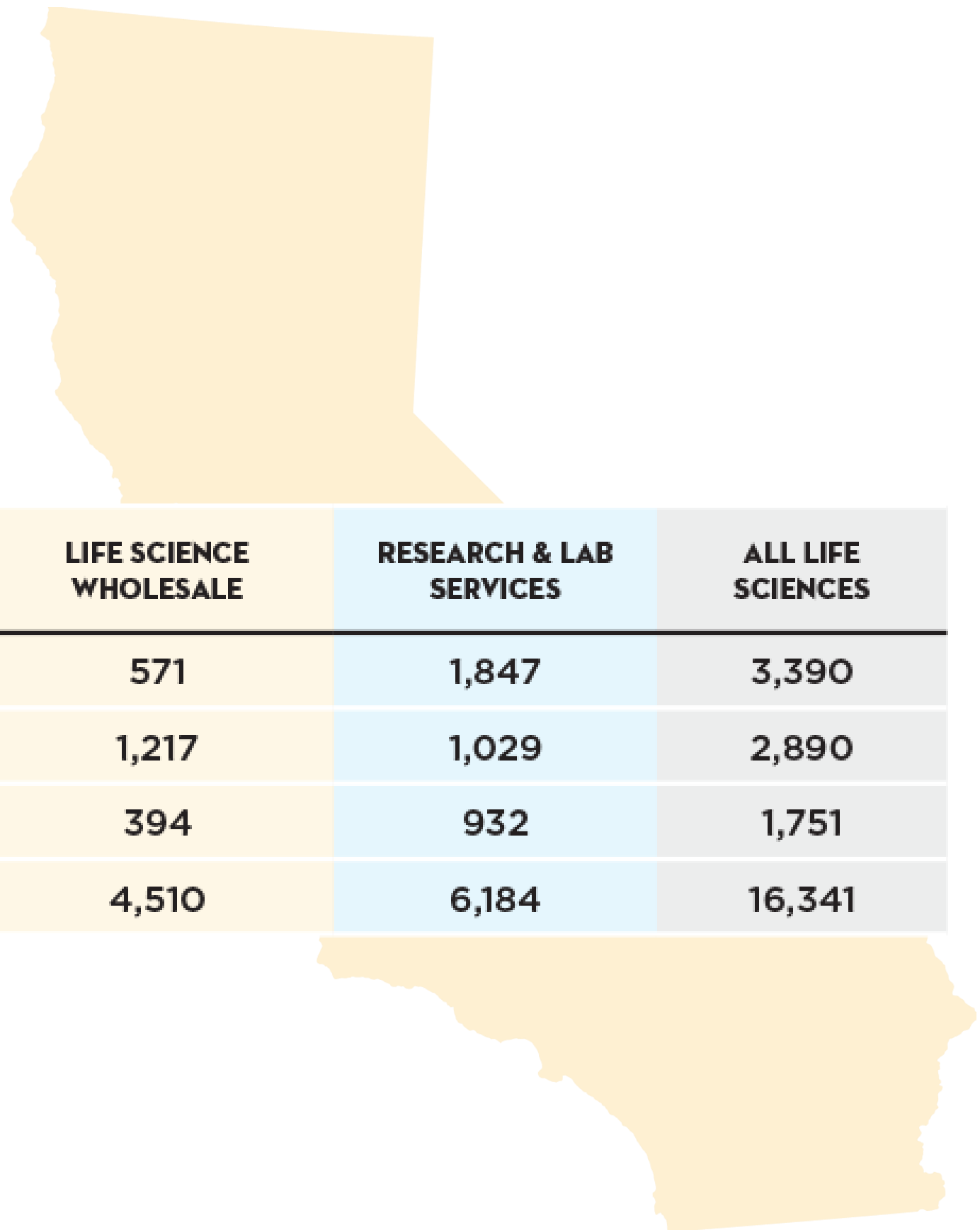
\$86,501

LOS ANGELES COUNTY'S LIFE SCIENCE

For full report visit: www.biocom.org/eir

Life Science Establishments by Sector

	BIORENEWABLES	BIOPHARMACEUTICAL MANUFACTURING	MEDICAL DEVICES & DIAGNOSTIC EQUIP	LIFE SCIENCE WHOLESALE	RESEARCH & LAB SERVICES	ALL LIFE SCIENCES
Bay Area	155	159	658	571	1,847	3,390
Los Angeles County	50	125	469	1,217	1,029	2,890
San Diego County	65	119	241	394	932	1,751
California	1,528	678	2,441	4,510	6,184	16,341



LOS ANGELES COUNTY'S LIFE SCIENCE

For full report visit: www.biocom.org/eir

NIH Funding Received by Region

	TOTAL
Bay Area	\$1.87B
Los Angeles County	\$1.15B
San Diego County	\$1.01B
California	\$4.59B



Los Angeles County
received

\$1.15B

in NIH Funding in 2019



**● Biocom Members in LA are
Addressing COVID-19**



Workforce Development Efforts in Los Angeles

Los Angeles Regional Bioscience/Biotechnology Industry-Valued Credential

In partnership with Grifols, LA Mission College, LA Valley College, Verdugo Workforce Development Board, Glendale Community College, and the Verdugo Jobs Center, Biocom and Biocom Institute supported the development of the **first regional industry-valued credential** led and designed by business for technician positions.

Credential defines a common set of skills and competencies required by hiring employers for biomanufacturing, biotechnology and laboratory technicians, **facilitating the identification of qualified job candidates.**

Additional credential design support was provided by Grifols, Amgen, Gilead, Neutrogena, Kite, Prolacta, Takeda



Amgen Biotech Experience and LabXchange

The **Amgen Biotech Experience** is an innovative science education program empowering teachers to bring biotechnology into their classrooms.

With leadership from university and key partners in the Los Angeles and San Diego regions, this initiative provides teacher professional development, teaching materials, and research-grade lab equipment to high schools.

Through **LabXchange**, a collaboration between the Amgen Foundation and Harvard University, students, regardless of income, race, gender or geography, can continue to experience the world of biotechnology with virtual Amgen Biotech Experience labs, free of charge.



Biocom Institute Internship & Fellowship Programs

Biocom Institute is launching internship and fellowship programs in Los Angeles in 2021.

Internships and Fellowships help create or increase awareness of life science careers for students by providing industry experience, mentorship, and career development opportunities.





Advocacy to Advance Science

State & Local Policy Efforts

- Resource for County and City of LA
- Support for LA County's Bioscience Overlay Zone
- Ensuring life science employees were deemed "essential workers" to continue life-saving work
- Avoiding issues between CA consumer privacy laws and federal HIPAA patient protections relating to clinical trials



Federal Policy Efforts

- March-in rights under Bayh-Dole
- Preventing catastrophic supply chain consequences and drug shortages occurring due to “Buy American” program



Support for Prop 14

- Would authorize \$5.5B in state general obligation bonds to continue funding stem cell research and the development and delivery of treatments in California.
- Will help accelerate development of treatments and achieve cures for chronic diseases and conditions.



Thank You

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@BiocomCA

www.biocom.org

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THE INDUSTRY IN LOS ANGELES COUNTY

Bioscience State of the Industry Event

Shannon Sedgwick

Director, Institute for Applied Economics

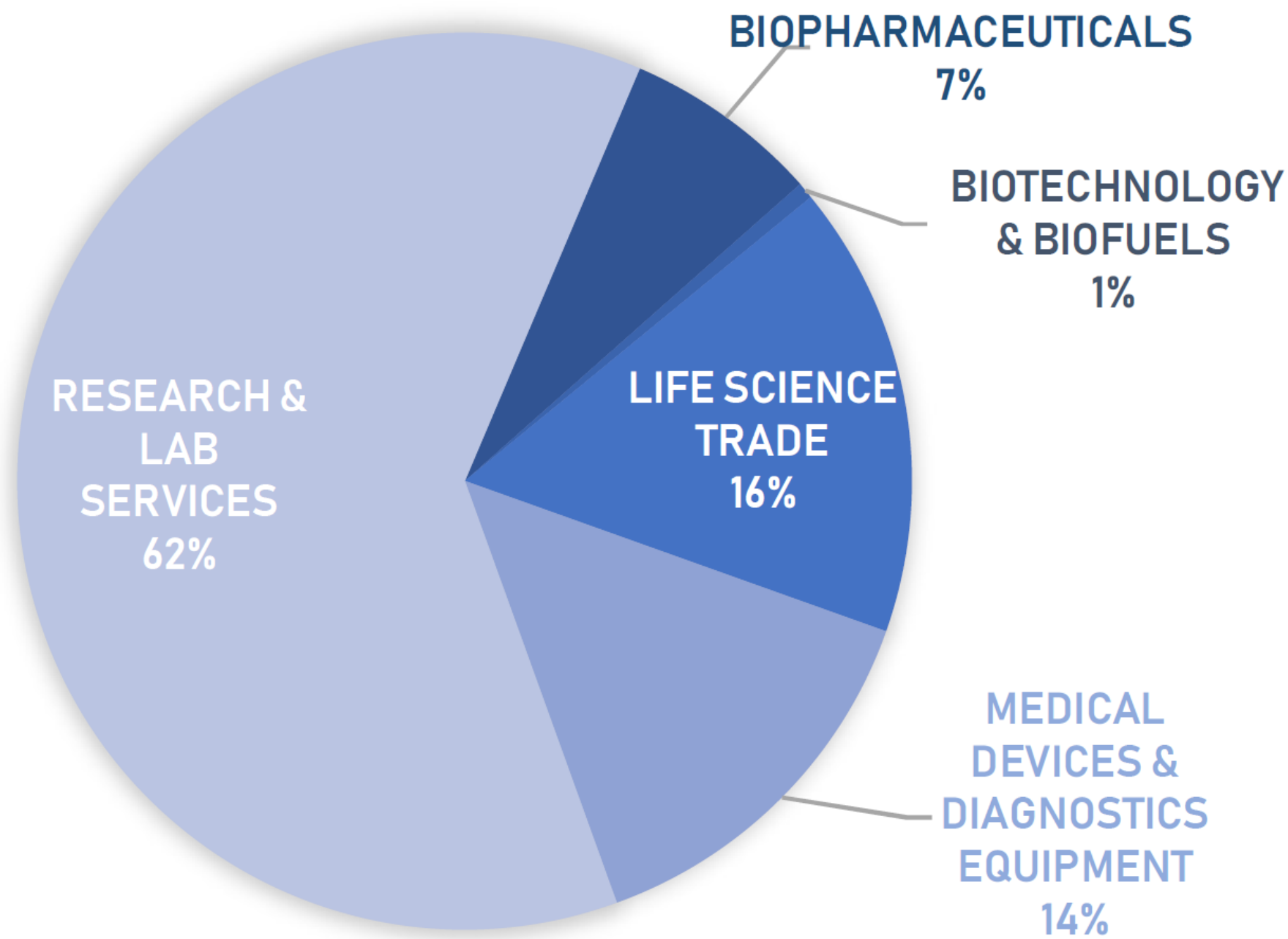
October 28, 2020

The logo for the Los Angeles Economic Development Center (LAEDC) is located in the bottom right corner. It consists of a blue square tilted at an angle, with the letters "LAEDC" in white, bold, sans-serif font inside the square.

LAEDC

BIOSCIENCE

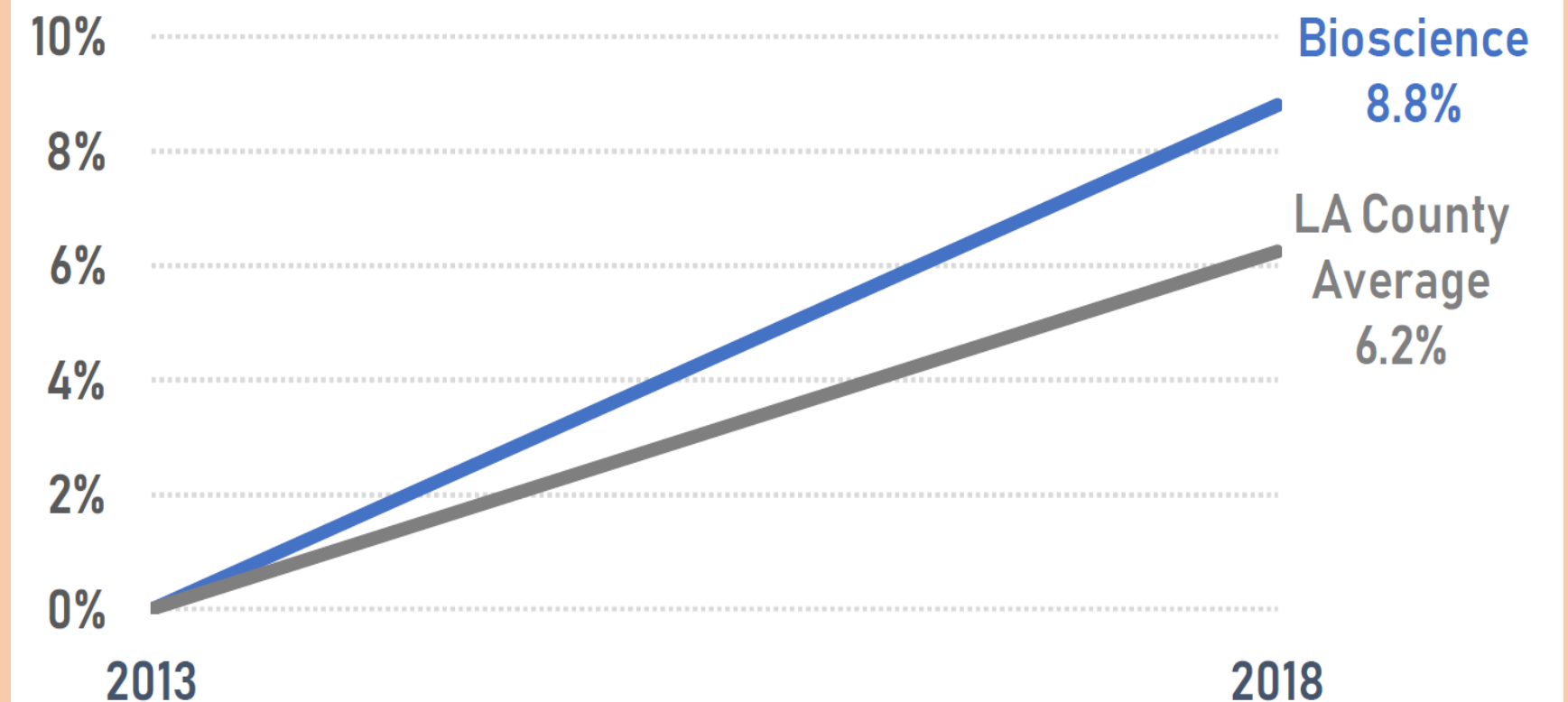
LOS ANGELES COUNTY (2018)



BIOSCIENCE JOBS



CHANGE IN REAL WAGES 2013-2018



BIOSCIENCE

KEY OCCUPATIONS IN LOS ANGELES COUNTY

- Computer and Information Systems Managers
- Computer Systems Analysts
- Software Developers, Applications
- Software Developers, Systems Software
- Biomedical Engineers
- Electrical Engineers
- Electronics Engineers, Except Computer
- Industrial Engineers
- Biochemists and Biophysicists
- Microbiologists
- Biological Scientists, All Other
- Medical Scientists, Except Epidemiologists
- Chemists
- Biological Technicians
- Chemical Technicians
- Health Specialties Teachers, Postsecondary
- Clinical Laboratory Technologists and Technicians
- Phlebotomists

BIOSCIENCE

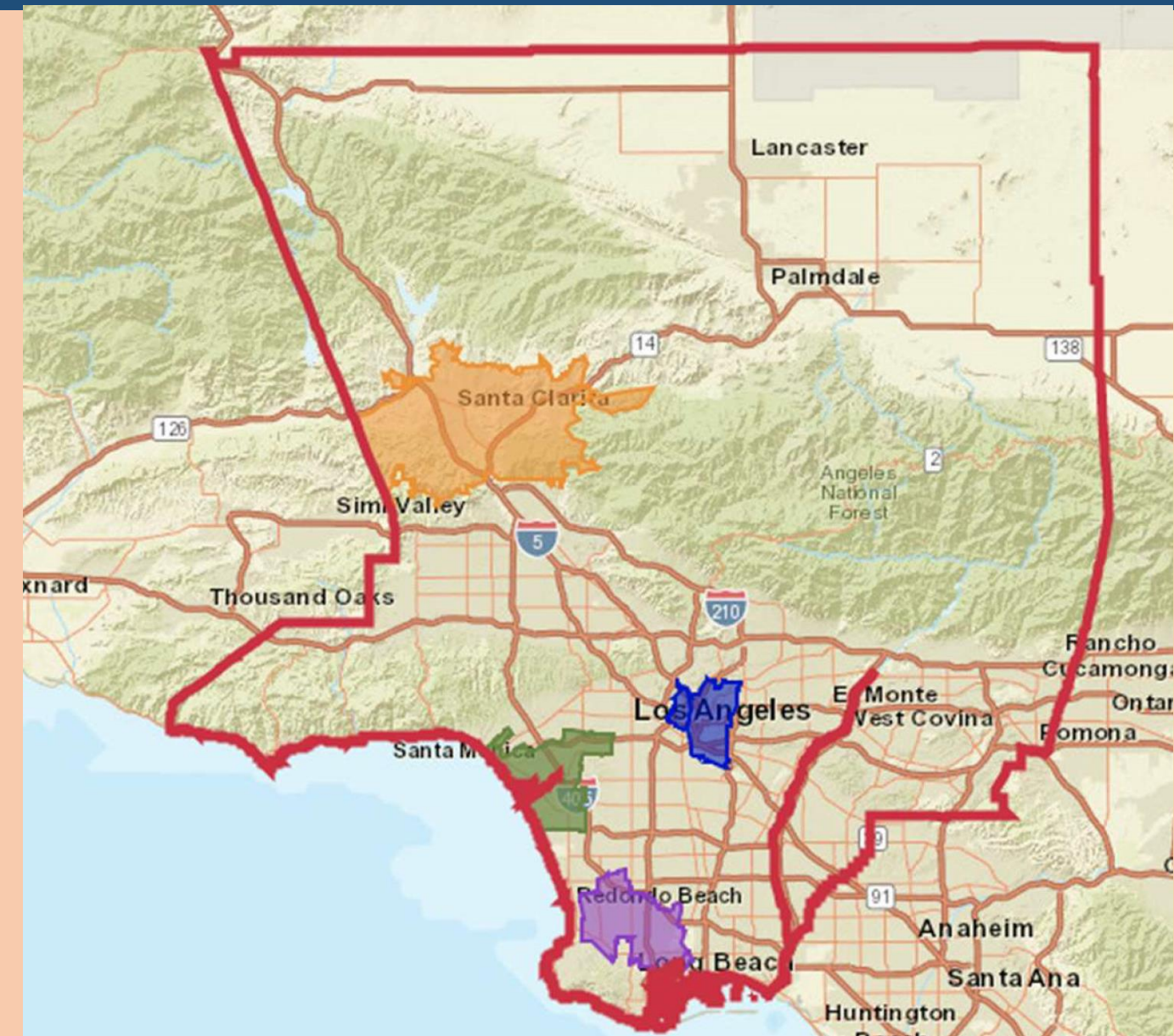
BIOSCIENCE INCUBATORS IN THE LOS ANGELES REGION

- Alexandria Innovation Center- Pasadena
- BATTIS Incubator – San Fernando
- BioLabs @ LA BioMed – Harbor-UCLA Medical Center
- Cedars-Sinai Accelerator – Beverly Grove
- CTTi Cal Poly Innovation Center - Pomona
- HATCHspaces - Alhambra
- LA Bioscience – Los Angeles
- Lab Launch - Monrovia
- LabLaunch@ToolBoxLA - Chatsworth
- Magnify, CA NanoSystems Institute at UCLA
- Momentum BioSciences – Culver City
- West Coast Consortium for Technology in Pediatrics – Los Angeles
- Pasadena Bioscience Collaborative Incubator - Pasadena
- Pasadena Bio Collaborative Incubator - Pasadena
- ScaleLA – Los Angeles
- The Alfred E. Mann Institute for Biomedical Engineering - USC
- TheLab – Santa Ana

BIOSCIENCE

THE INDUSTRY IN LOS ANGELES COUNTY

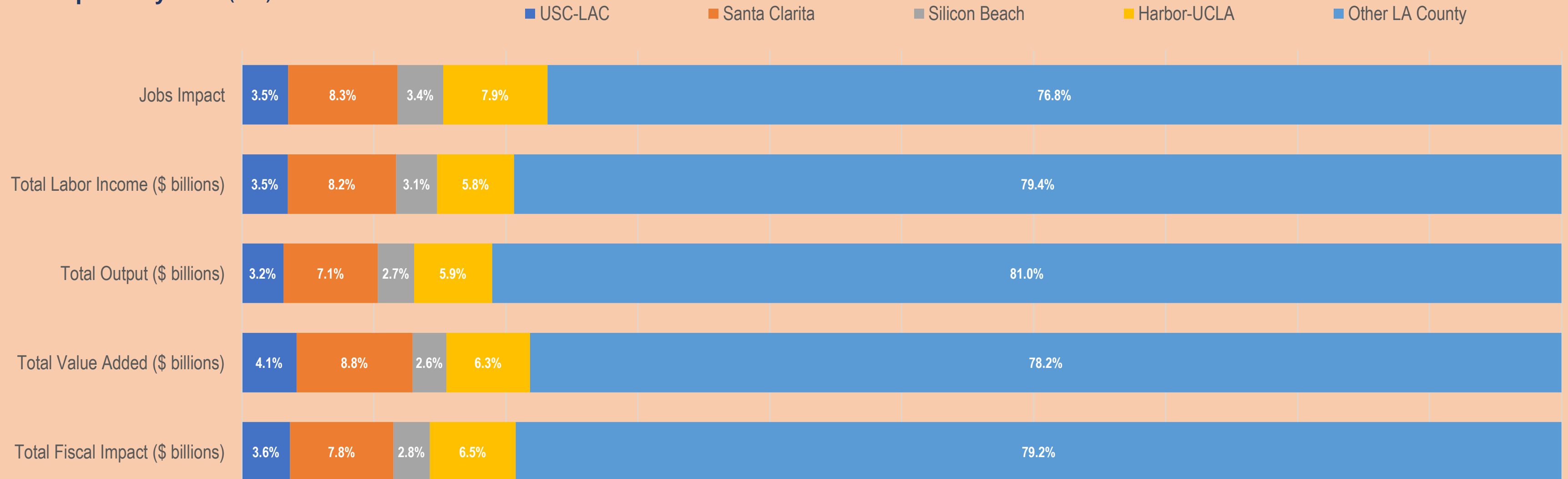
- **USC – LA County Medical Center region**
- **Culver City – Playa del Rey region**
- **Santa Clarita region**
- **UCLA Harbor Medical Center region**



BIOSCIENCE

THE INDUSTRY IN LOS ANGELES COUNTY

Distribution of Impacts by Area (2018)



BIOSCIENCE

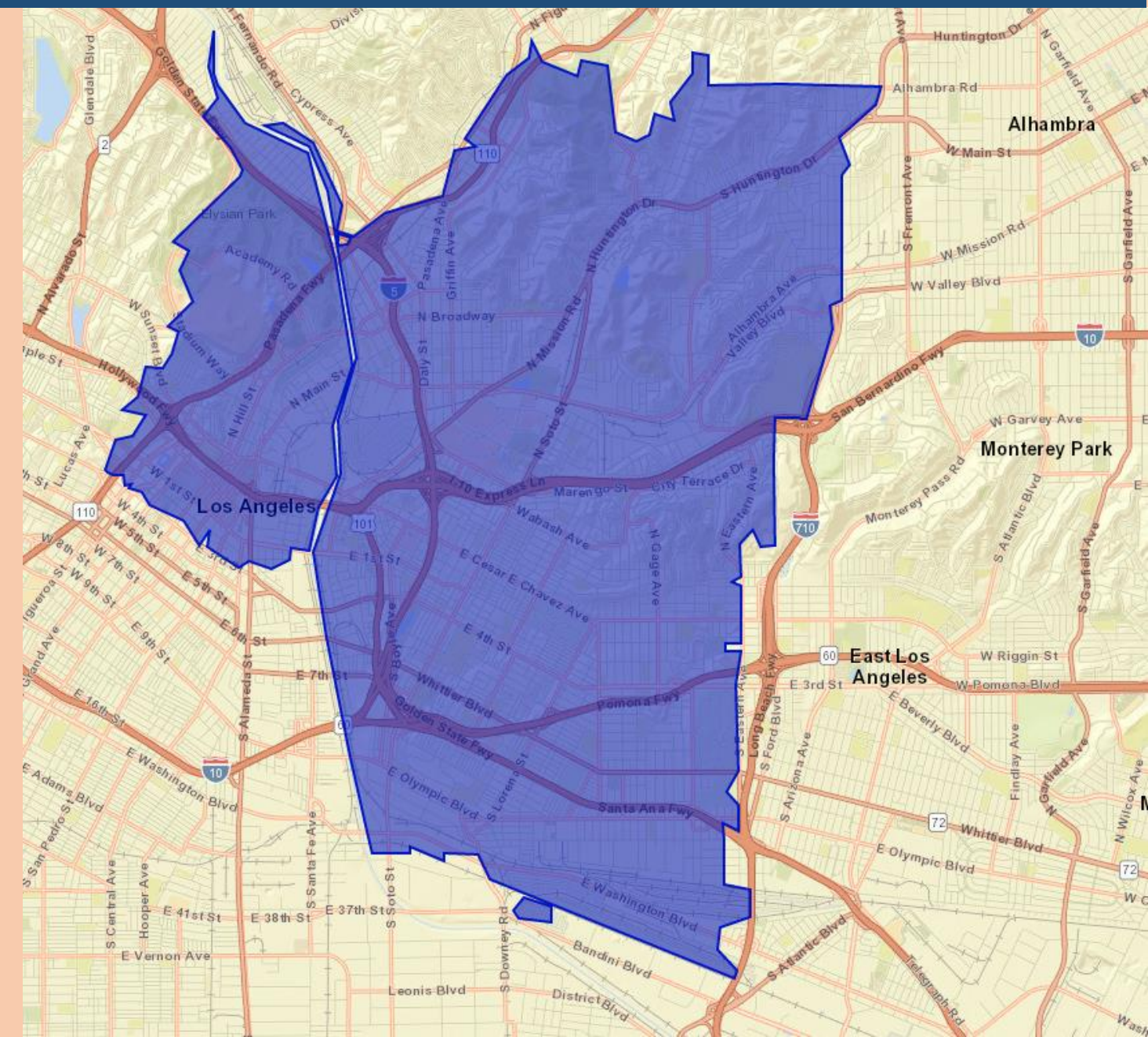
THE INDUSTRY AROUND USC-LAC

2018 BIOSCIENCE JOBS: 2,750

- **Change in jobs**
 - *2013-2018: 905 jobs added*
 - *2018-2023f: 730 jobs to be added*
 - *Job growth 2013-2018: 49.1 percent*

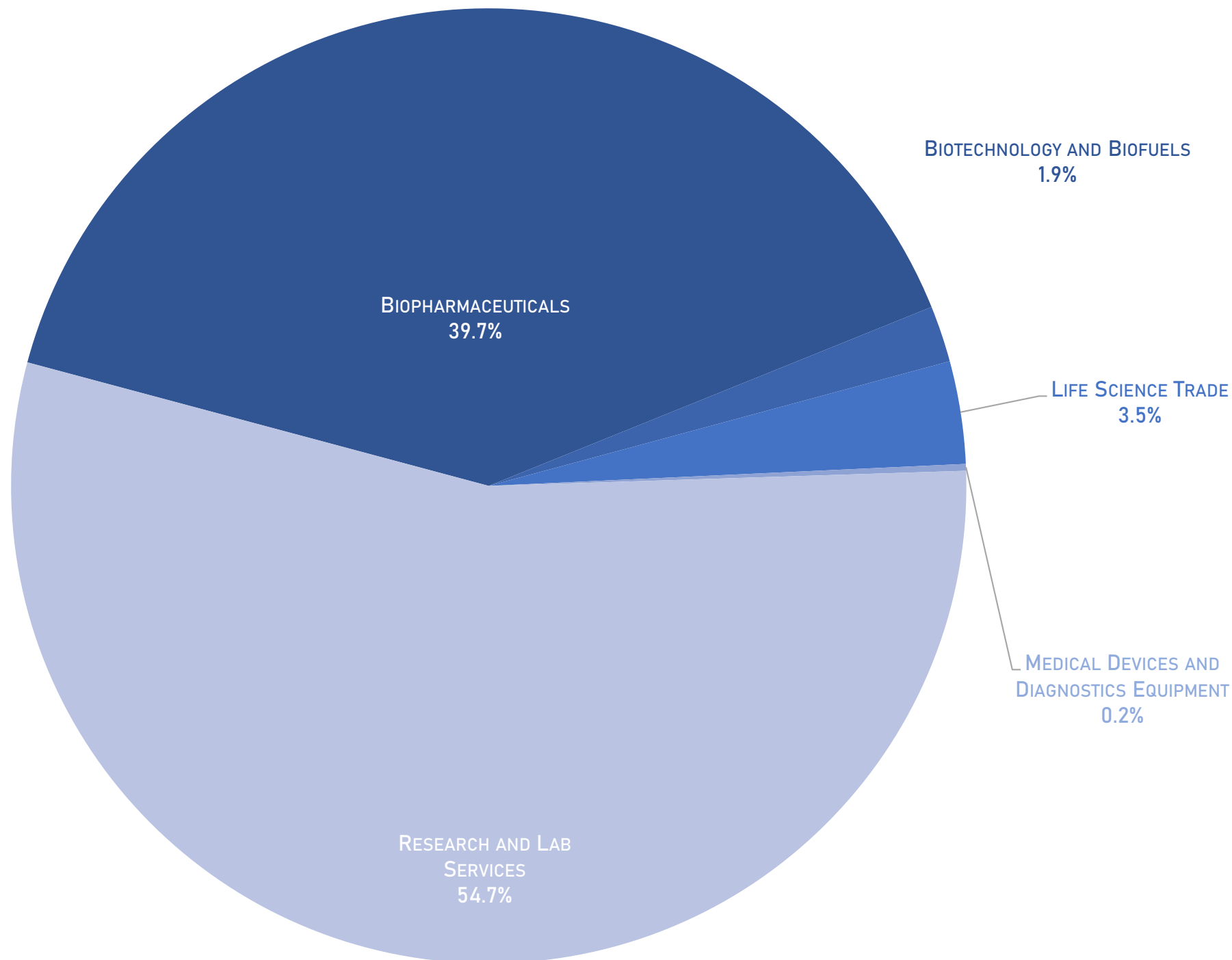
2018 AVERAGE ANNUAL WAGES

- **Bioscience Average: \$74,710**
- **LA County Average: \$64,920**



BIOSCIENCE

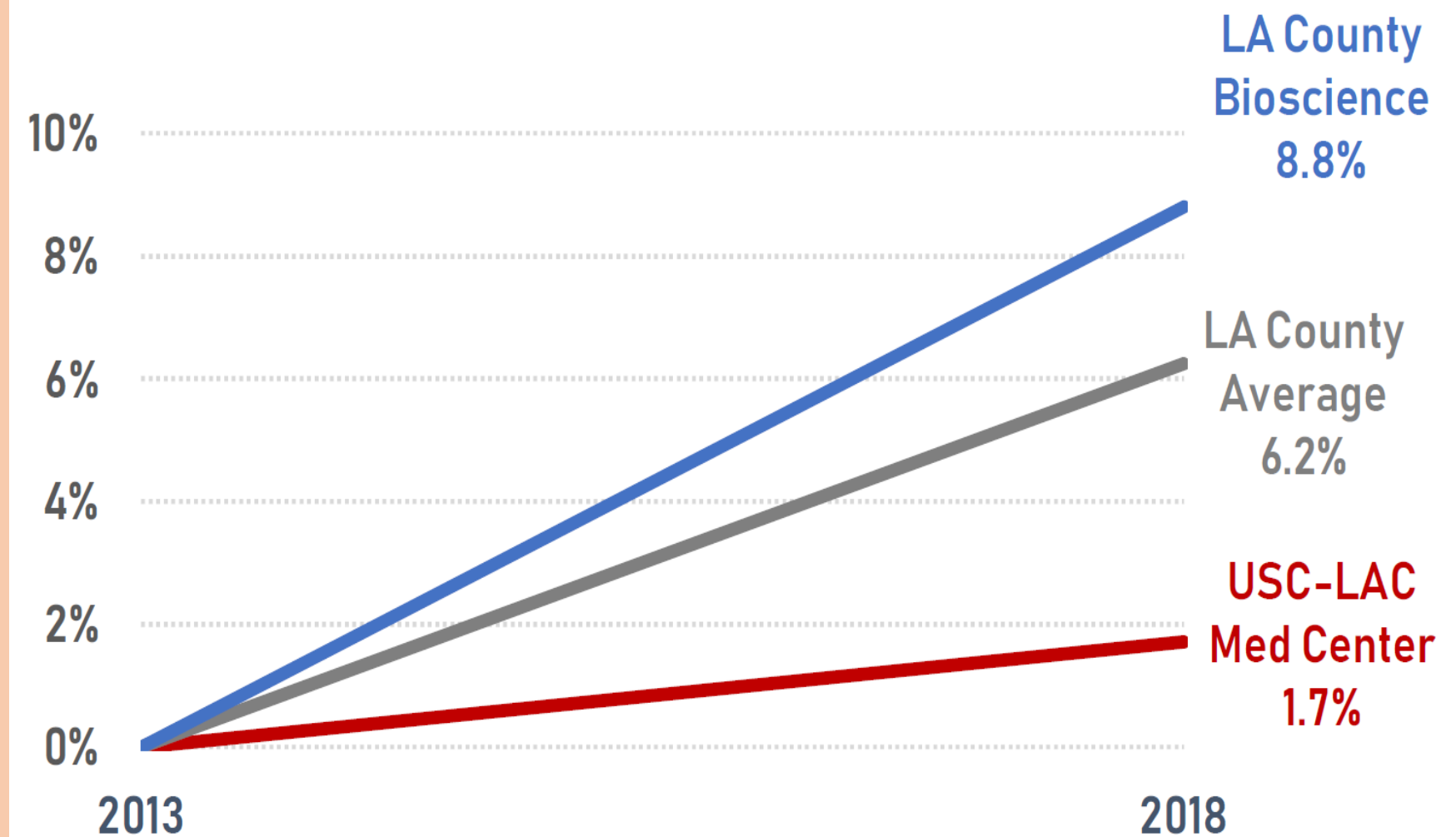
USC-LAC MEDICAL CENTER (2018)



BIOSCIENCE JOBS



CHANGE IN REAL WAGES 2013-2018



BIOSCIENCE

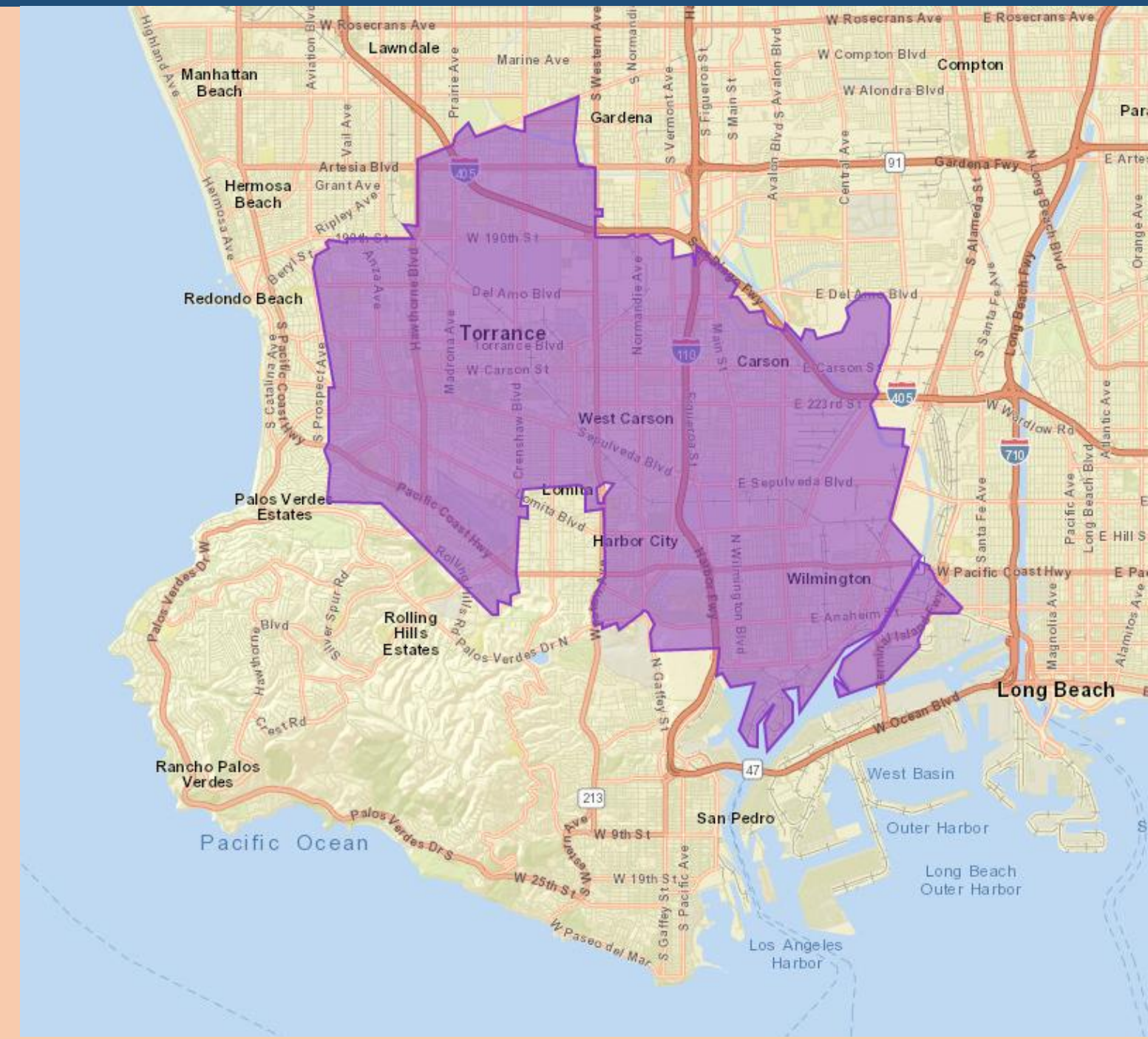
THE INDUSTRY AROUND HARBOR-UCLA

2018 BIOSCIENCE JOBS: 4,000

- Change in jobs:
 - *2013-2018: 75 jobs lost*
 - *2018-2023f: 260 jobs to be added*
 - *Job growth 2013-2018: -1.8 percent*

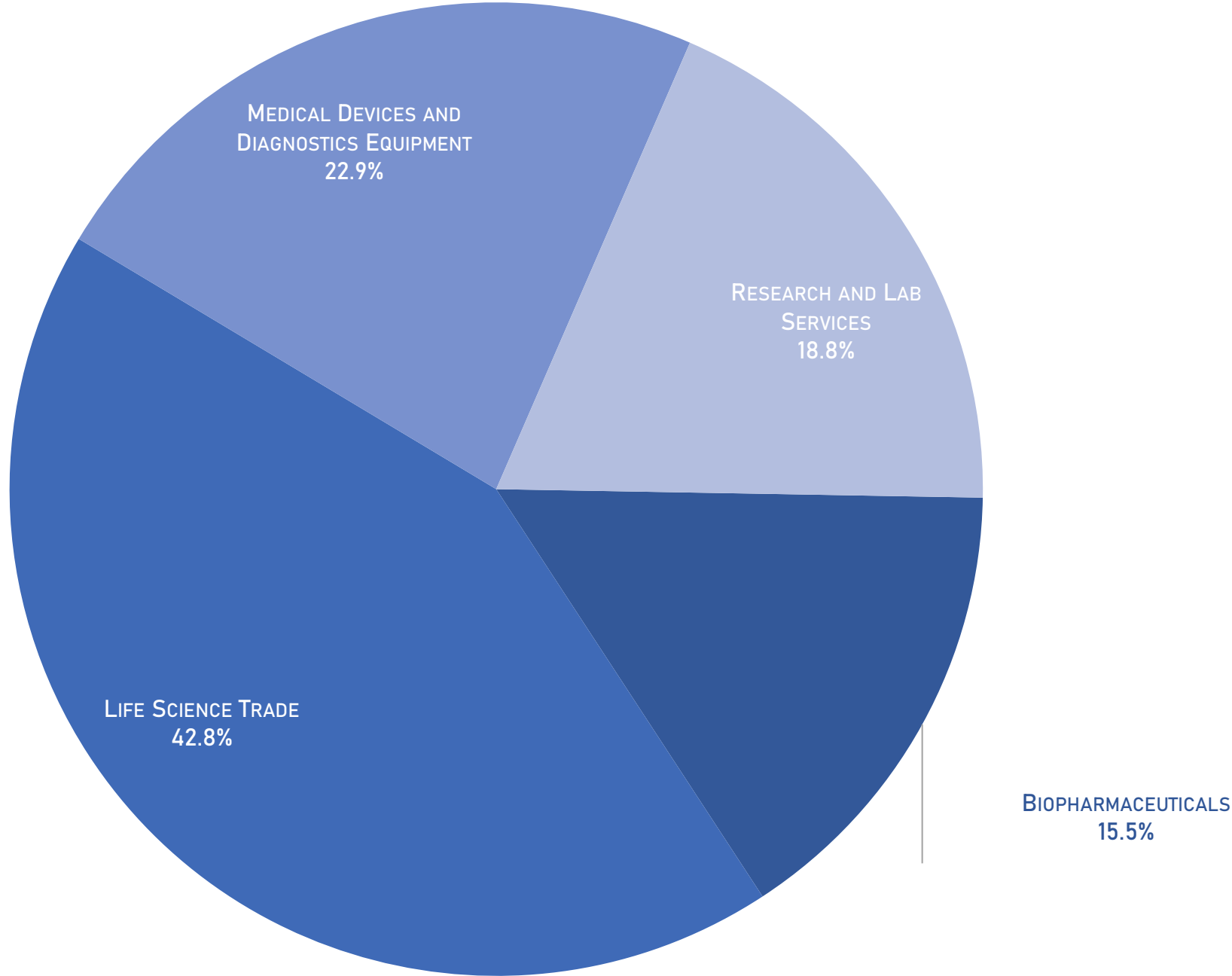
2018 AVERAGE ANNUAL WAGES

- Bioscience Average: \$96,860
- LA County Average: \$64,920



BIOSCIENCE

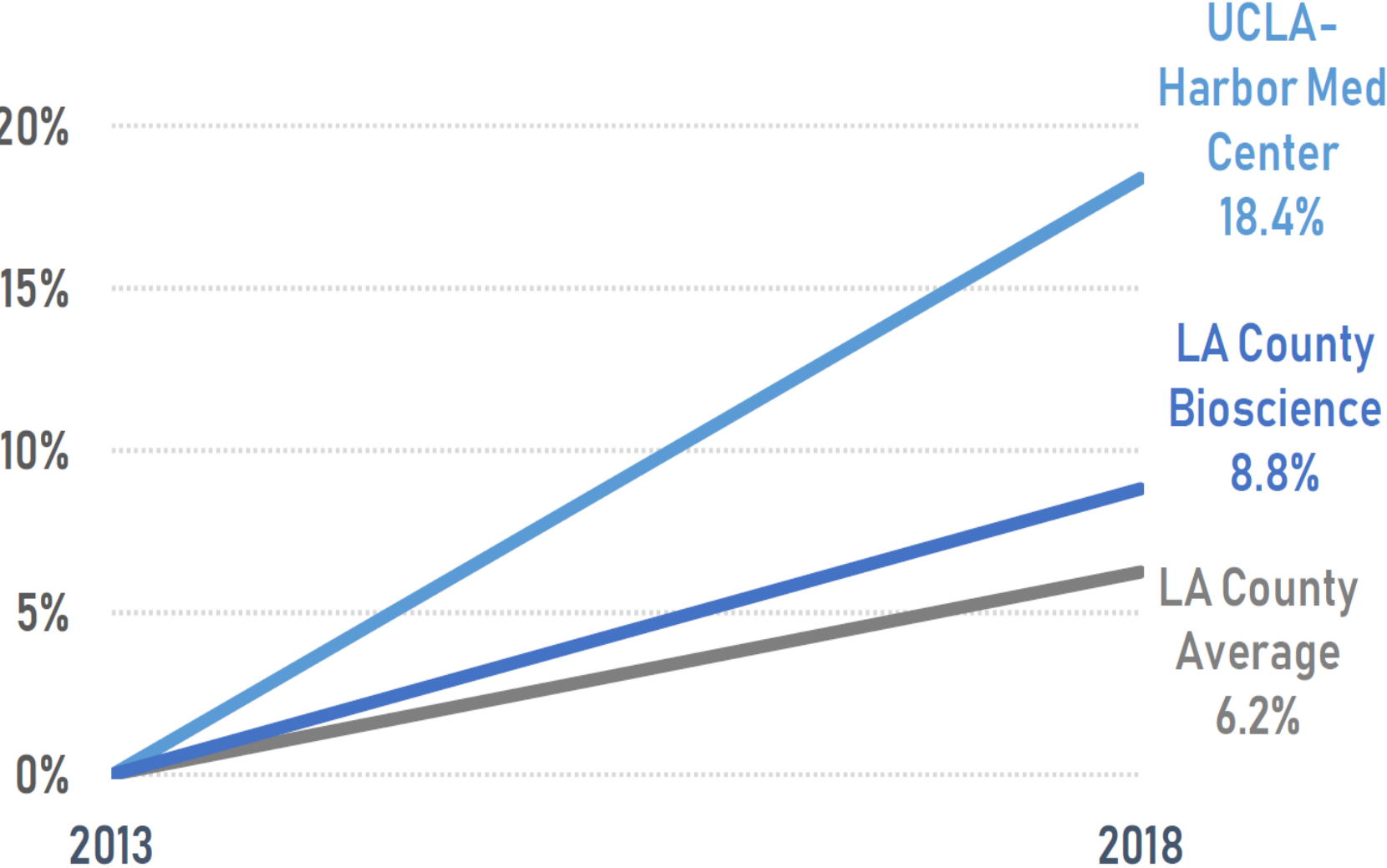
HARBOR-UCLA (2018)



BIOSCIENCE JOBS



CHANGE IN REAL WAGES 2013-2018



BIOSCIENCE

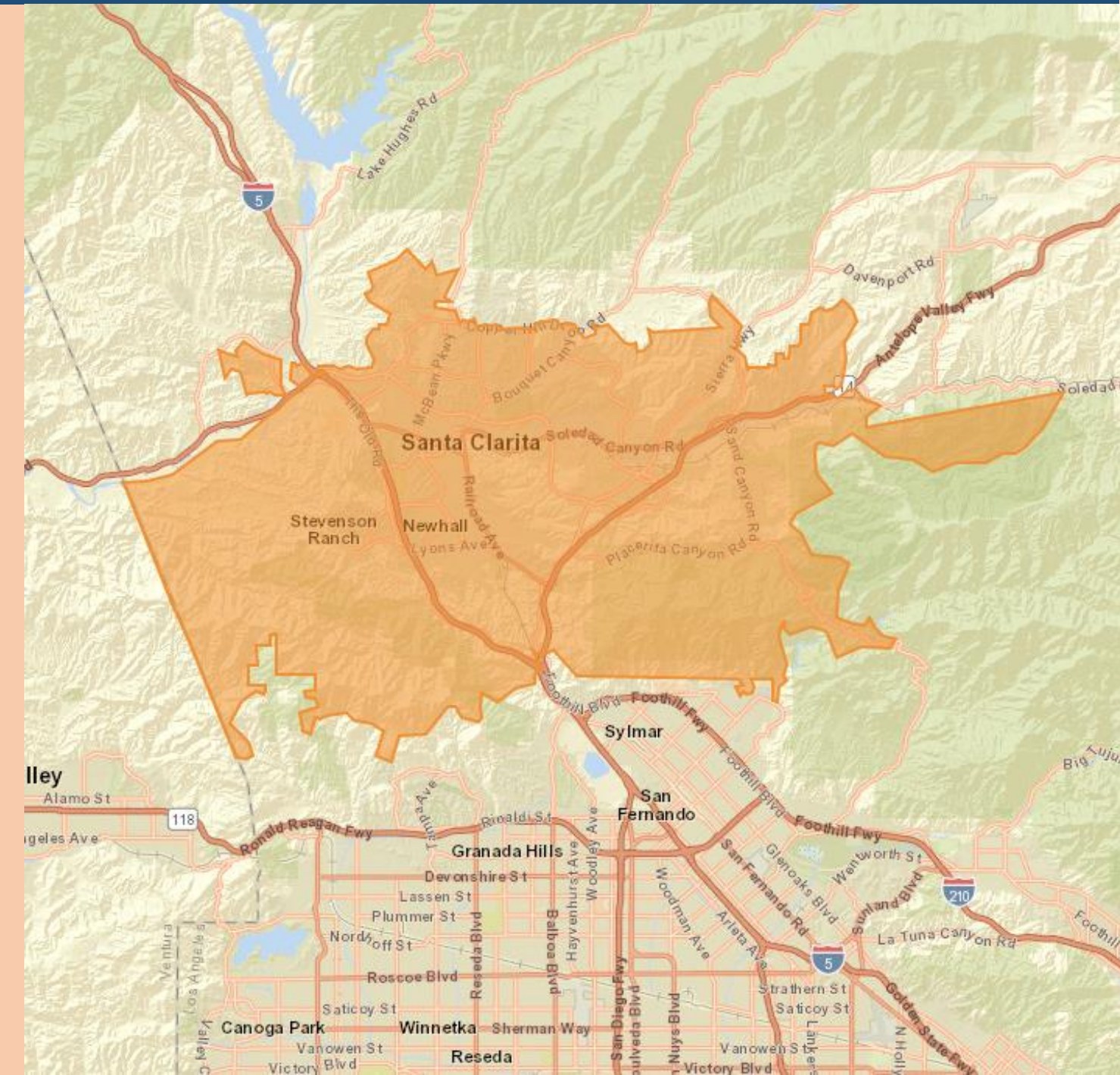
THE INDUSTRY IN SANTA CLARITA

2018 BIOSCIENCE JOBS: 6,500

- **Change in jobs:**
 - *2013-2018: 390 jobs added*
 - *2018-2023f: 460 jobs to be added*
 - *Job growth 2013-2018: 6.3 percent*

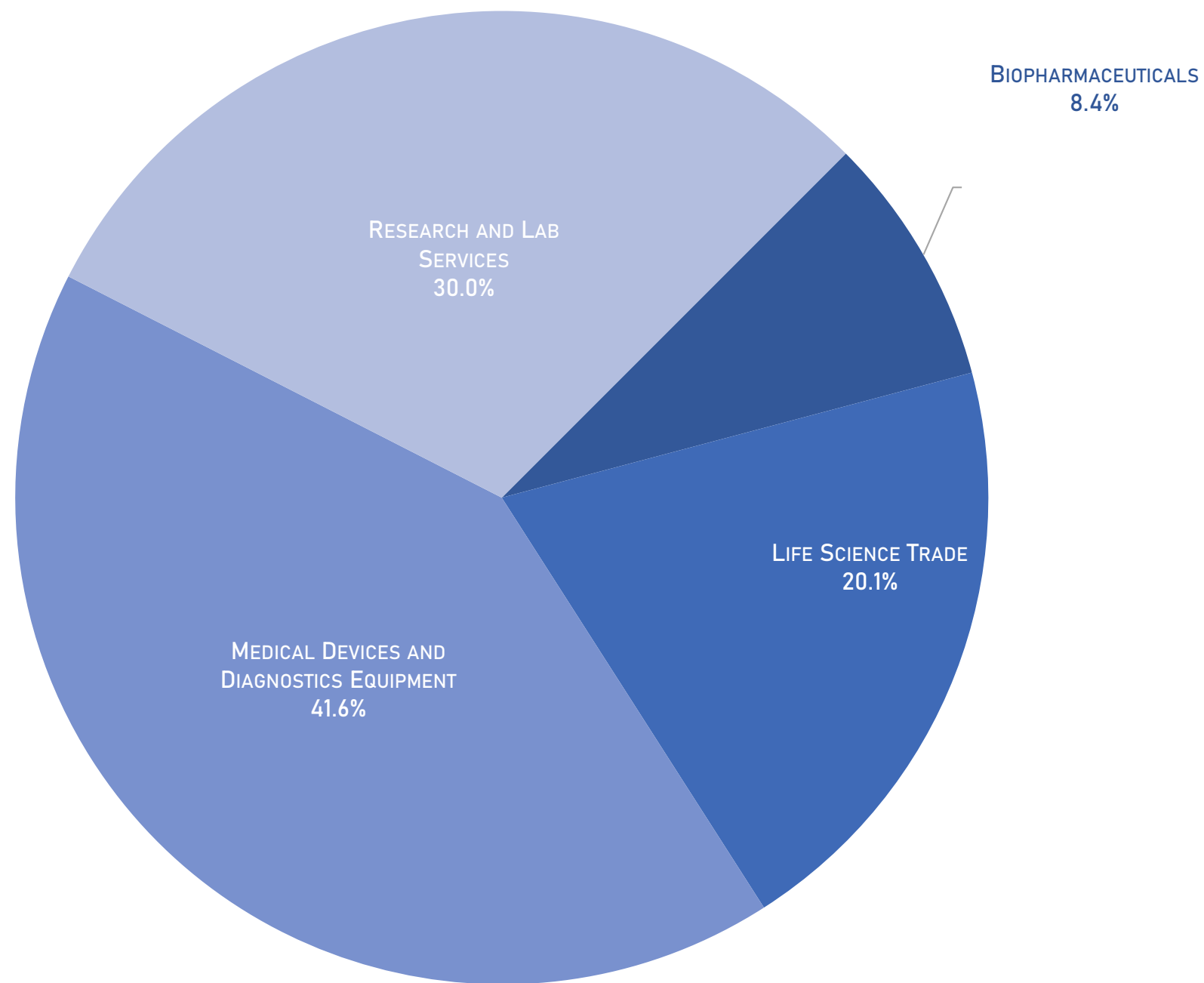
2018 AVERAGE ANNUAL WAGES

- **Bioscience Average: \$75,030**
- **LA County Average: \$64,920**



BIOSCIENCE

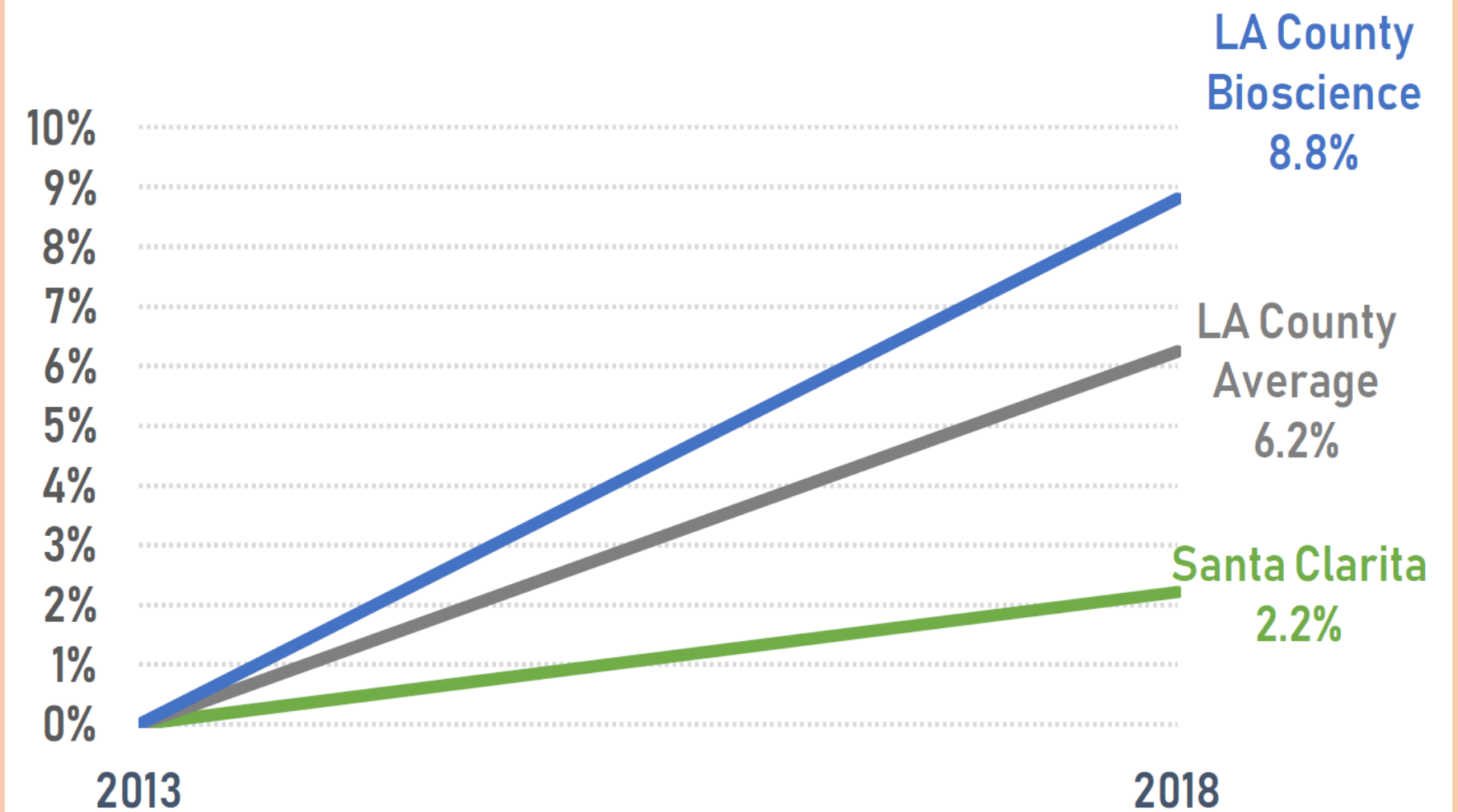
SANTA CLARITA (2018)



BIOSCIENCE JOBS



CHANGE IN REAL WAGES 2013-2018



BIOSCIENCE

THE INDUSTRY IN SILICON BEACH

2018 BIOSCIENCE JOBS: 2,700

- Change in jobs:
 - *2013-2018: 570 jobs added*
 - *2018-2023f: 600 jobs to be added*
 - *Job growth 2013-2018: 27.0 percent*

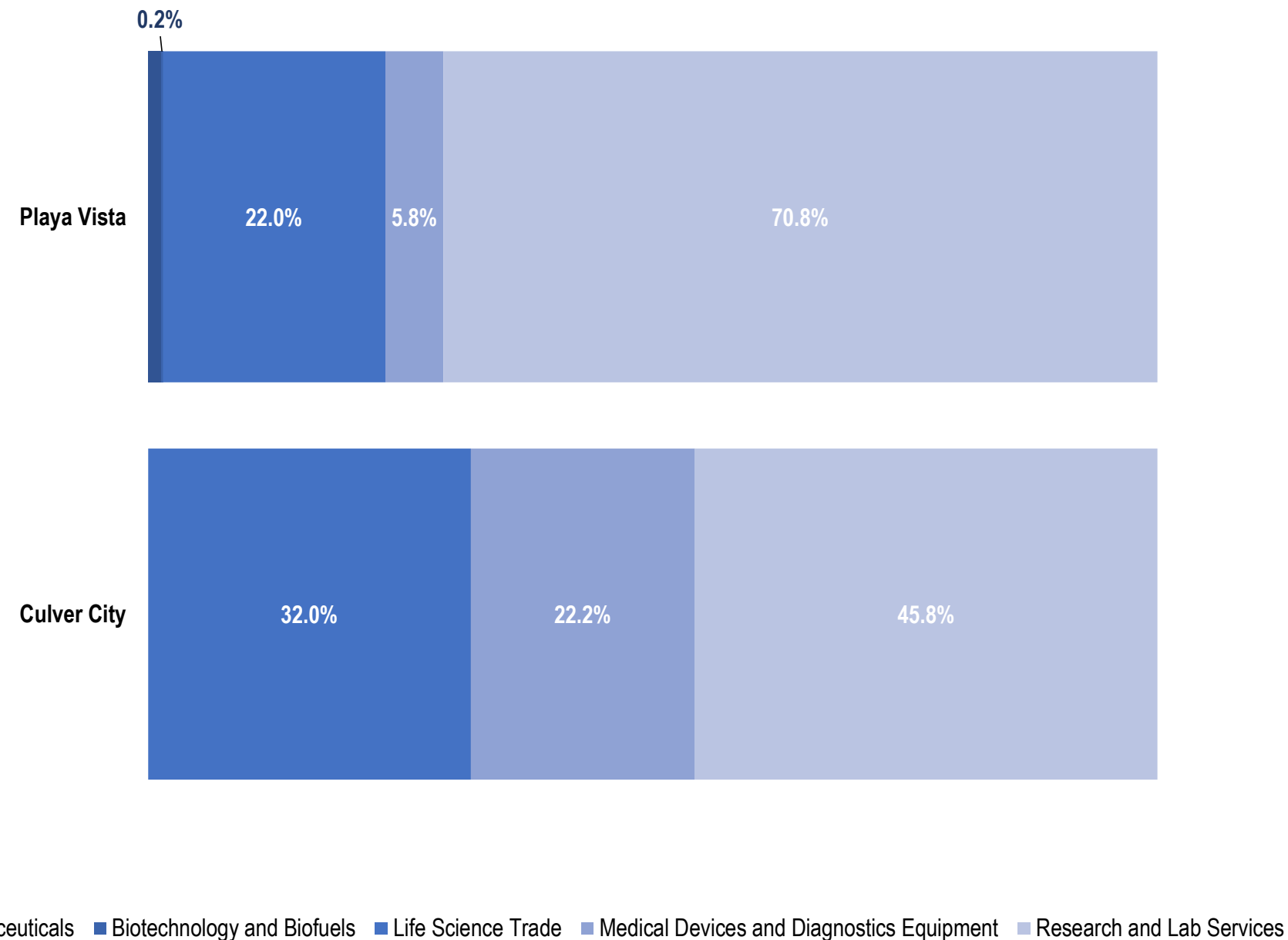
2018 AVERAGE ANNUAL WAGES

- Bioscience Average: \$71,920
- LA County Average: \$64,920



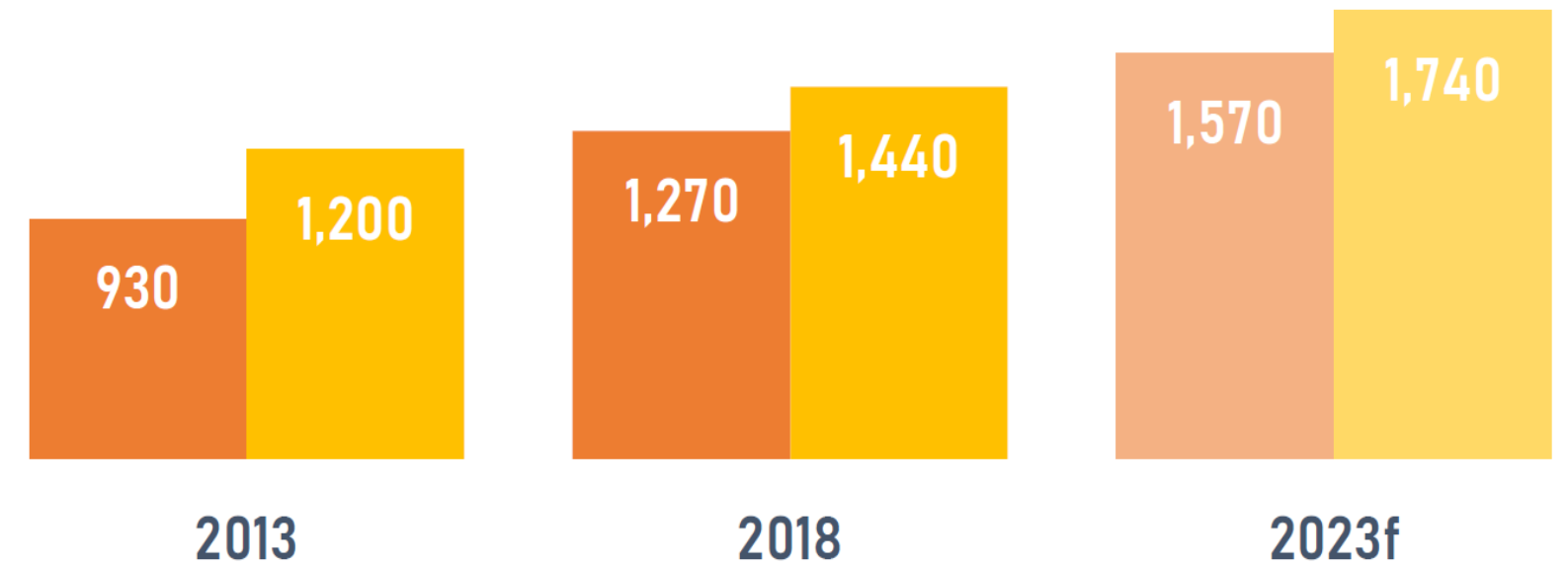
BIOSCIENCE

SILICON BEACH (2018)

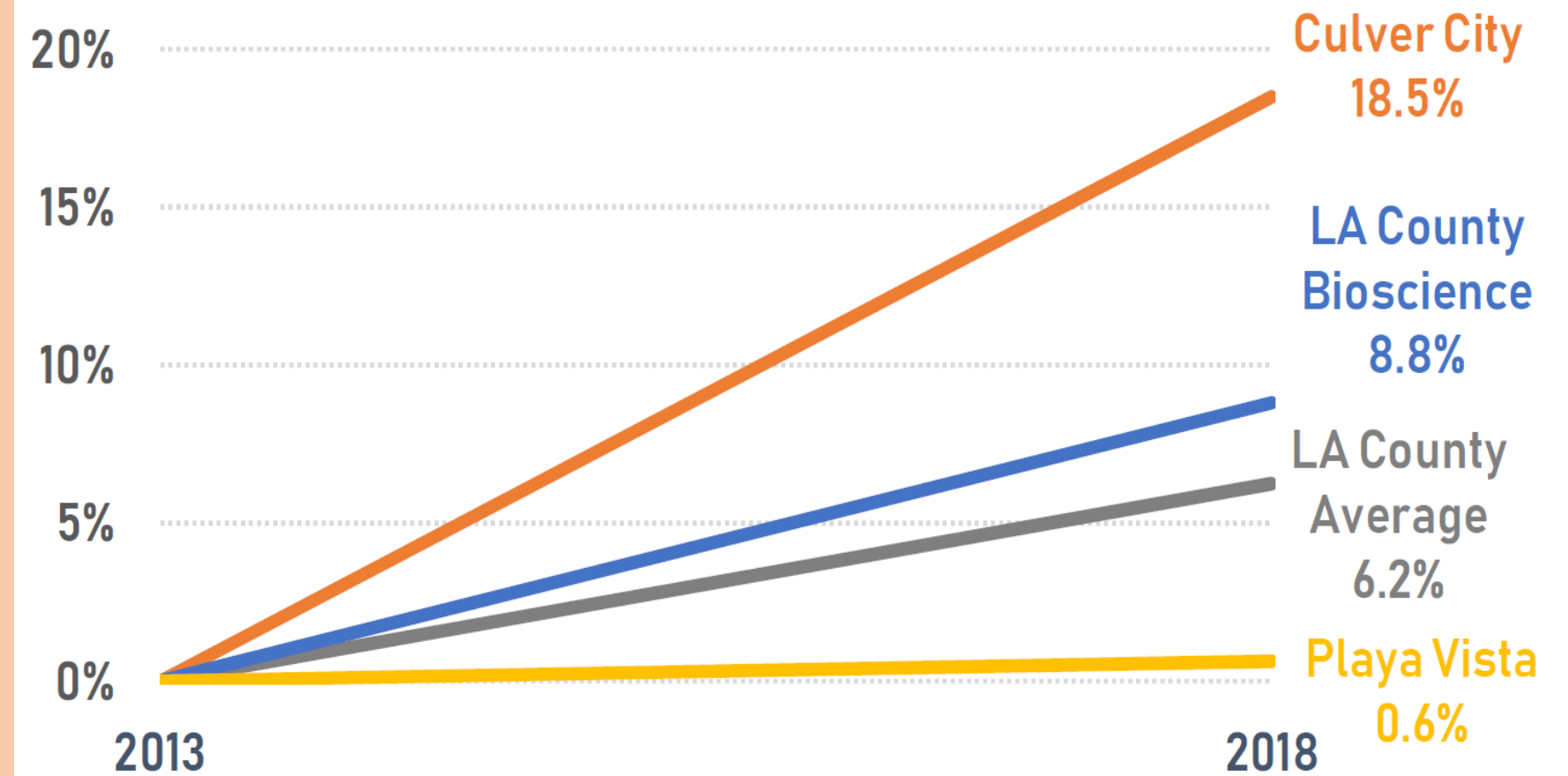


CHANGE IN BIOSCIENCE JOBS

■ Culver City
■ Playa Vista



CHANGE IN REAL WAGES 2013-2018



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THE INDUSTRY IN LOS ANGELES COUNTY

Thank you!

Shannon.Sedgwick@laedc.org



COVID-19 PANEL



ABBAS YAR-KHAN

SITE HEAD

LOS ANGELES FACILITY

EDWARD BJURSTROM

VP, OPERATIONS

LA VERNE/SAN DIMAS



BIOSCIENCE

STATE OF THE INDUSTRY

CAROLYN HULL

GENERAL MANAGER

ECONOMIC & WORKFORCE

DEVELOPMENT DEPARTMENT

CITY OF LOS ANGELES



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GENERAL MANAGER &

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DIRECTOR

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WORKFORCE DEVELOPMENT
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BIOCOM



THANK YOU!

FOR MORE INFORMATION, EMAIL
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