



# **Biopharmaceuticals and Medical Devices in Southern California**

## Setting the Stage

LAEDC Institute for Applied Economics



### **All of NAICS 3254:**

Medicinal and Botanical Manufacturing

Pharmaceutical Preparation Manufacturing

Biological Products Manufacturing

In-Vitro Diagnostic Substance Manufacturing

**All of NAICS 3391**

**NAICS 3345:**

Electromedical / Electrotherapeutic Apparatus  
manufacturing

Analytical Laboratory Instrument Manufacturing

Irradiation Apparatus Manufacturing

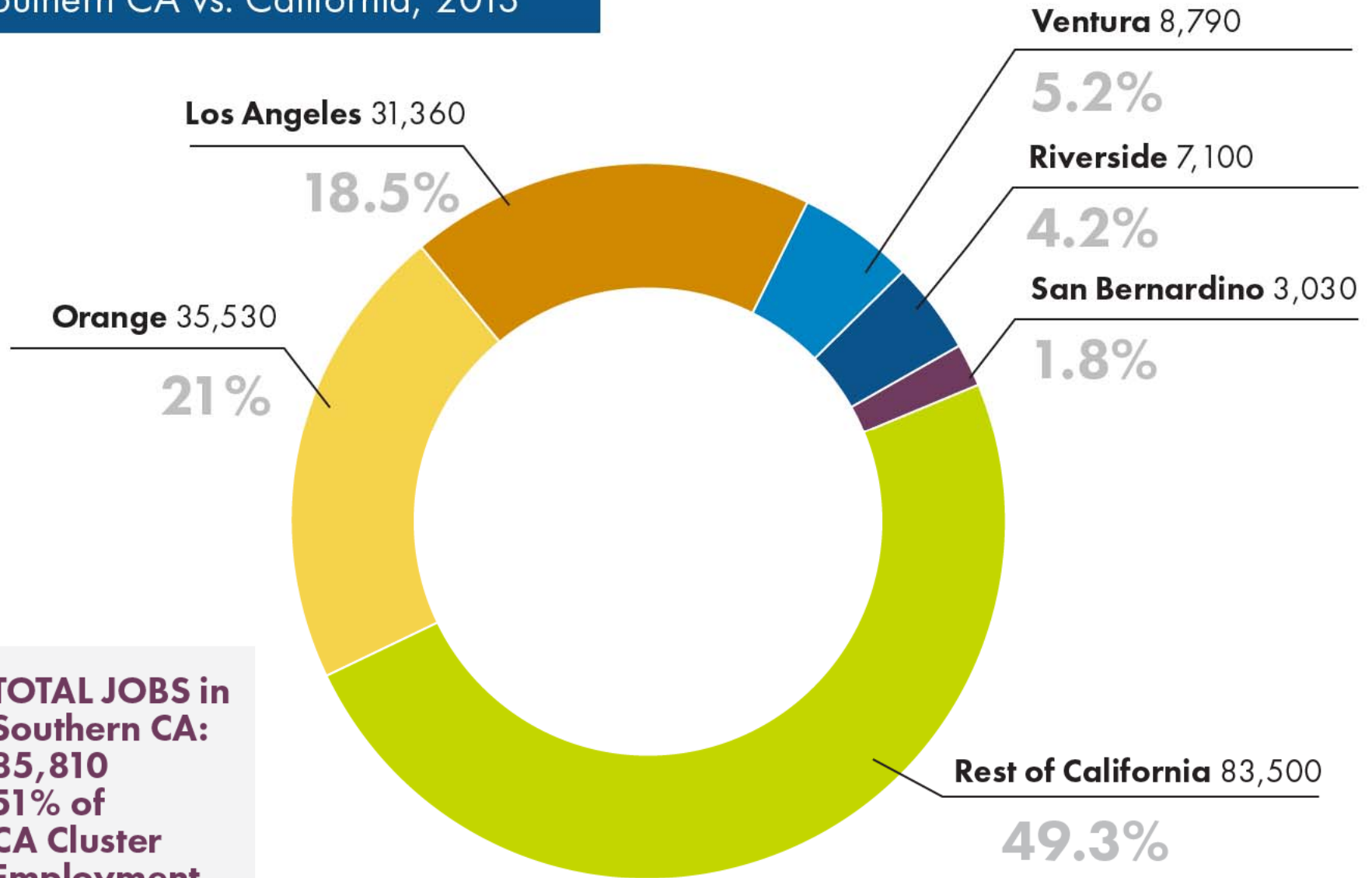
Optical Instrument and Lens Manufacturing

## Definitions Matter | **Biomedical Wholesale**

Medical, Dental, Hospital Equipment and  
Supplies Merchant Wholesalers

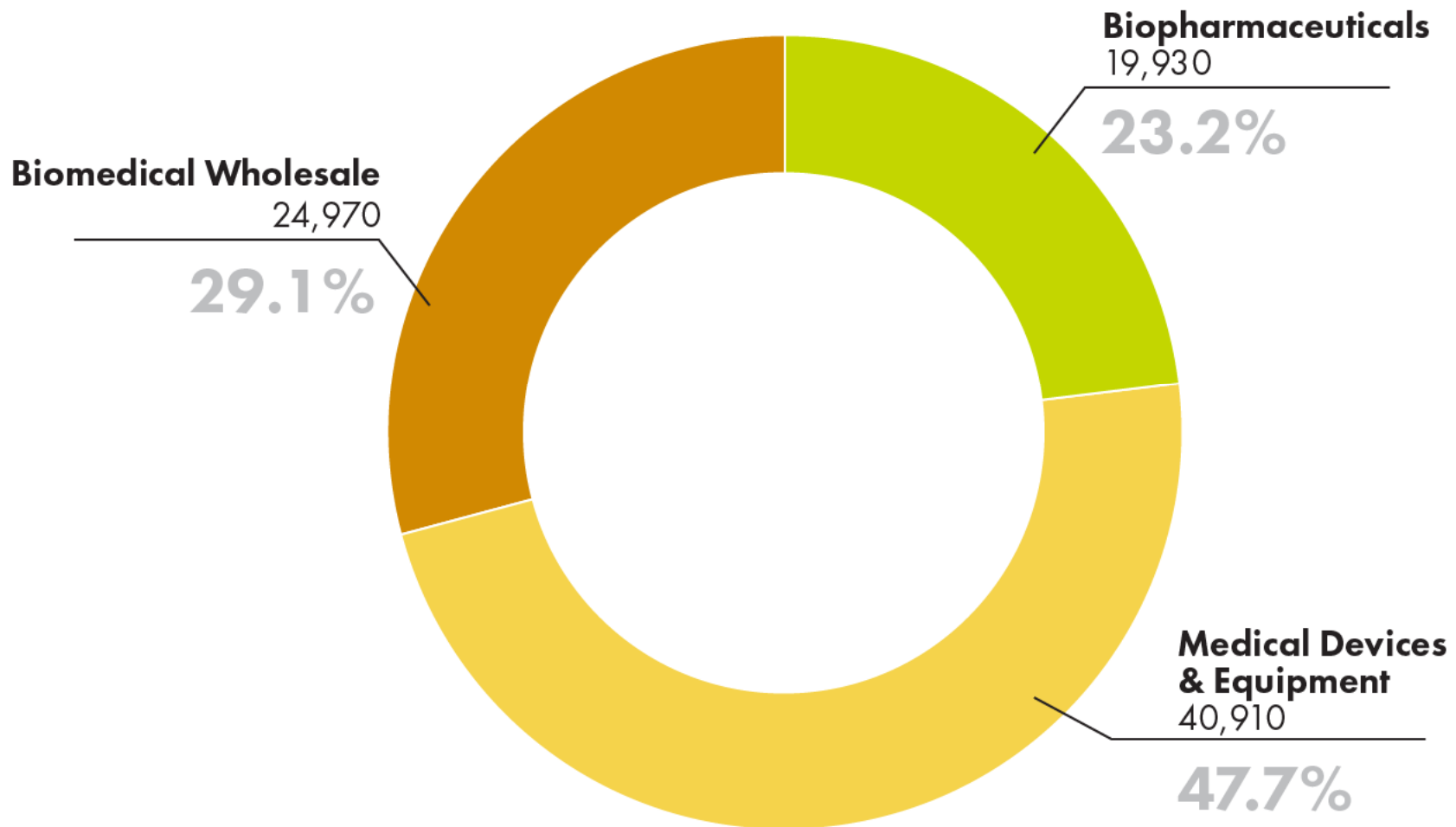
Drugs and Druggists' Sundries Merchant Wholesalers

## Total Cluster Employment Southern CA vs. California, 2013

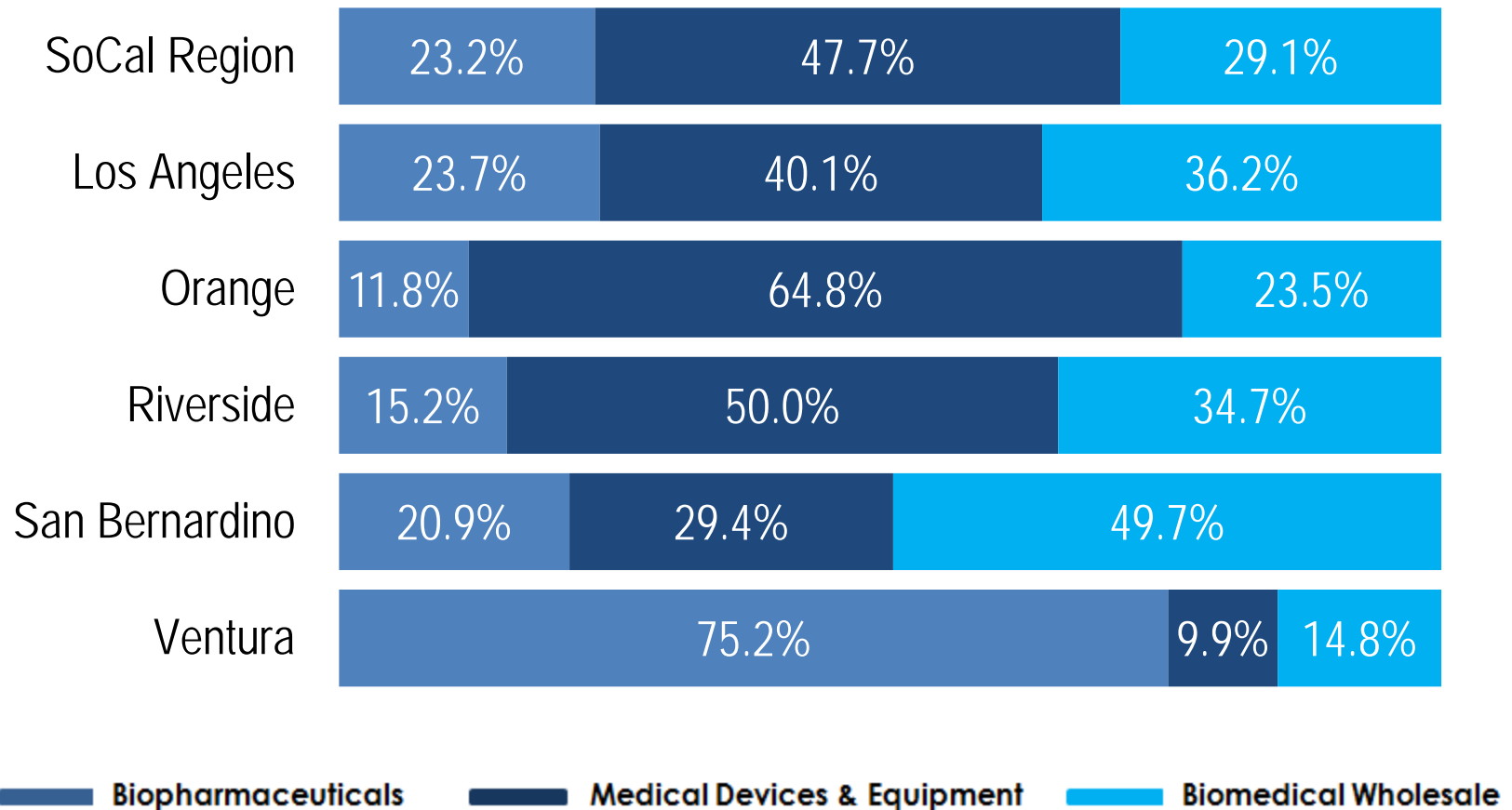


**TOTAL JOBS in  
Southern CA:  
85,810  
51% of  
CA Cluster  
Employment**

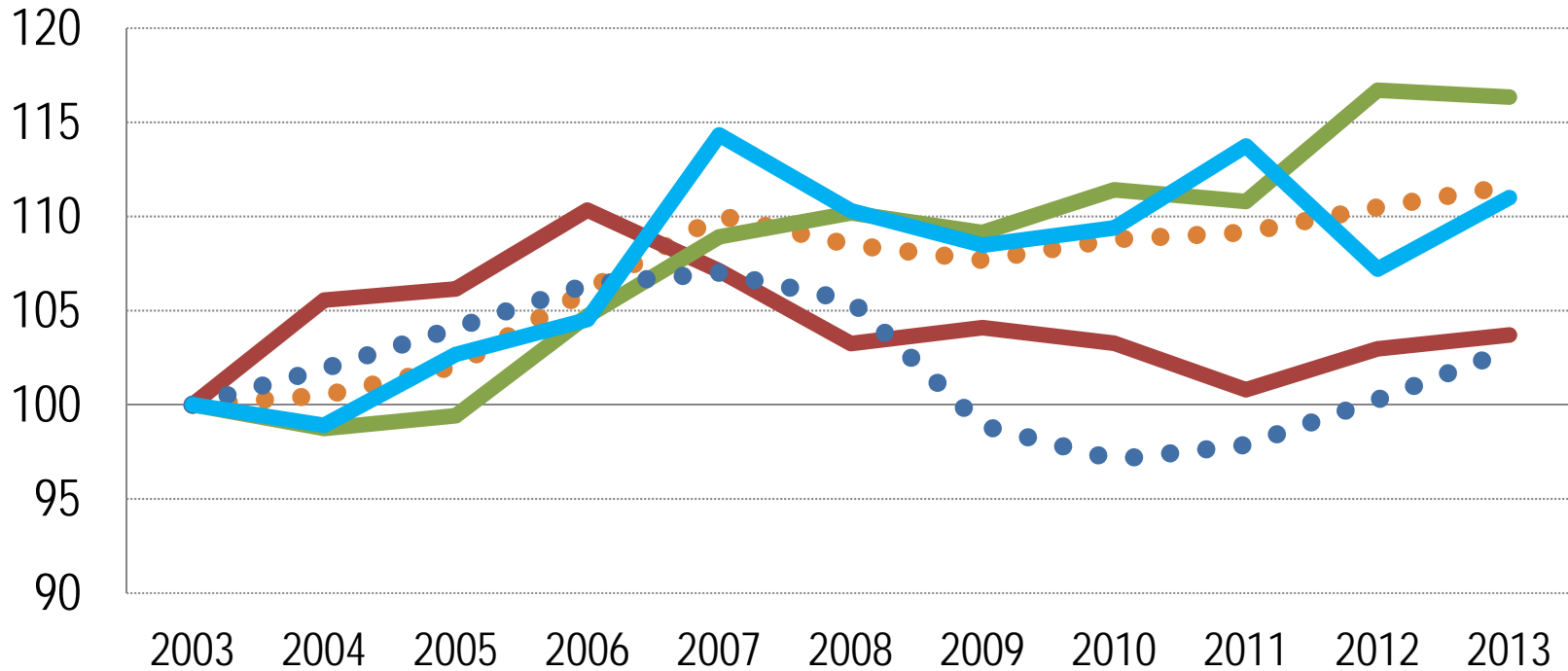
## Subcluster Employment Distribution Southern CA, 2013



## Subcluster Employment by County 2013



# Indexed Employment Growth Southern CA (2003=100)

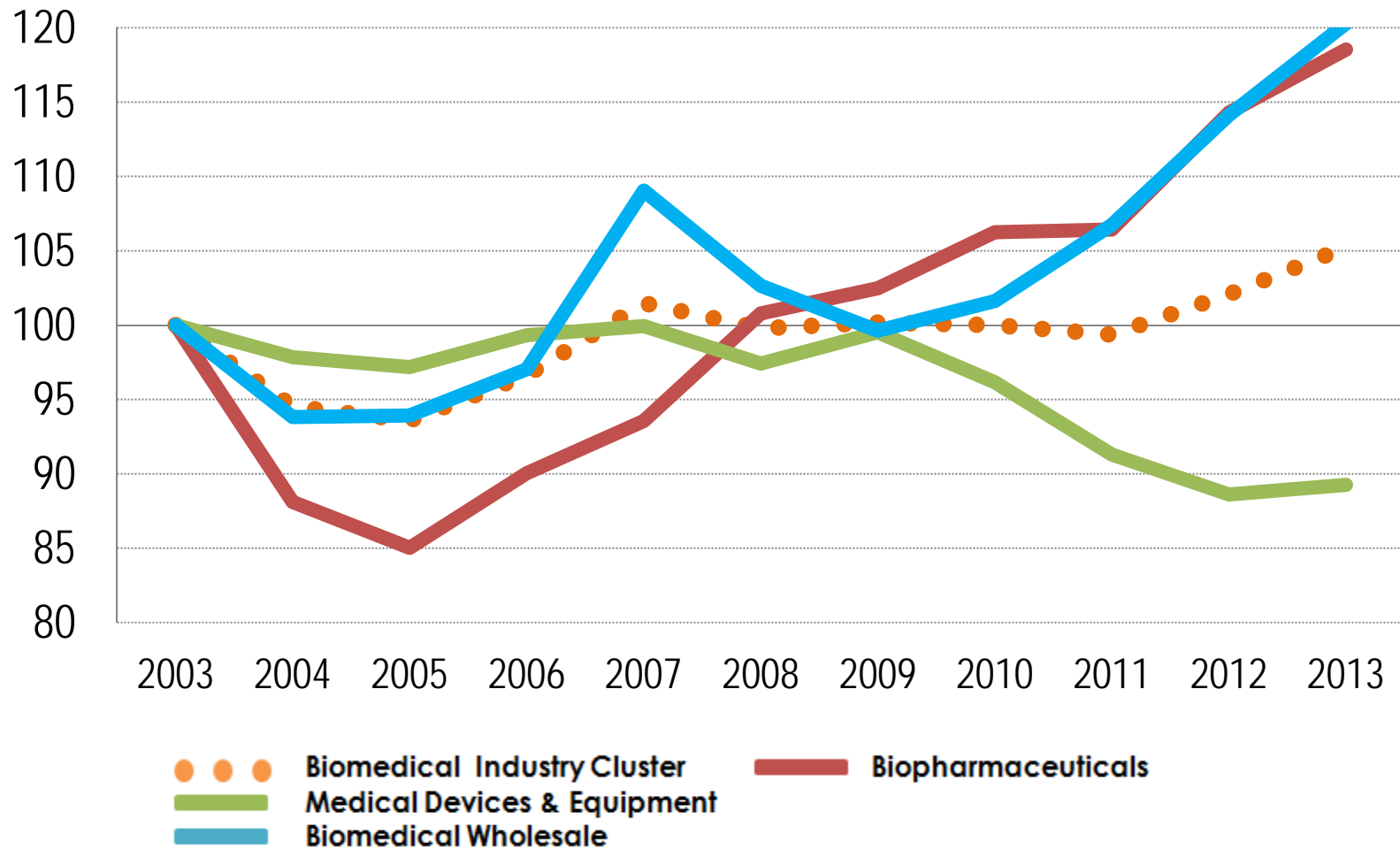


- ● ● Biomedical Industry Cluster
- Medical Devices & Equipment
- Biomedical Wholesale
- Biopharmaceuticals
- ● ● Other Noncluster Industries



# Indexed Employment Growth

Los Angeles County (2003=100)



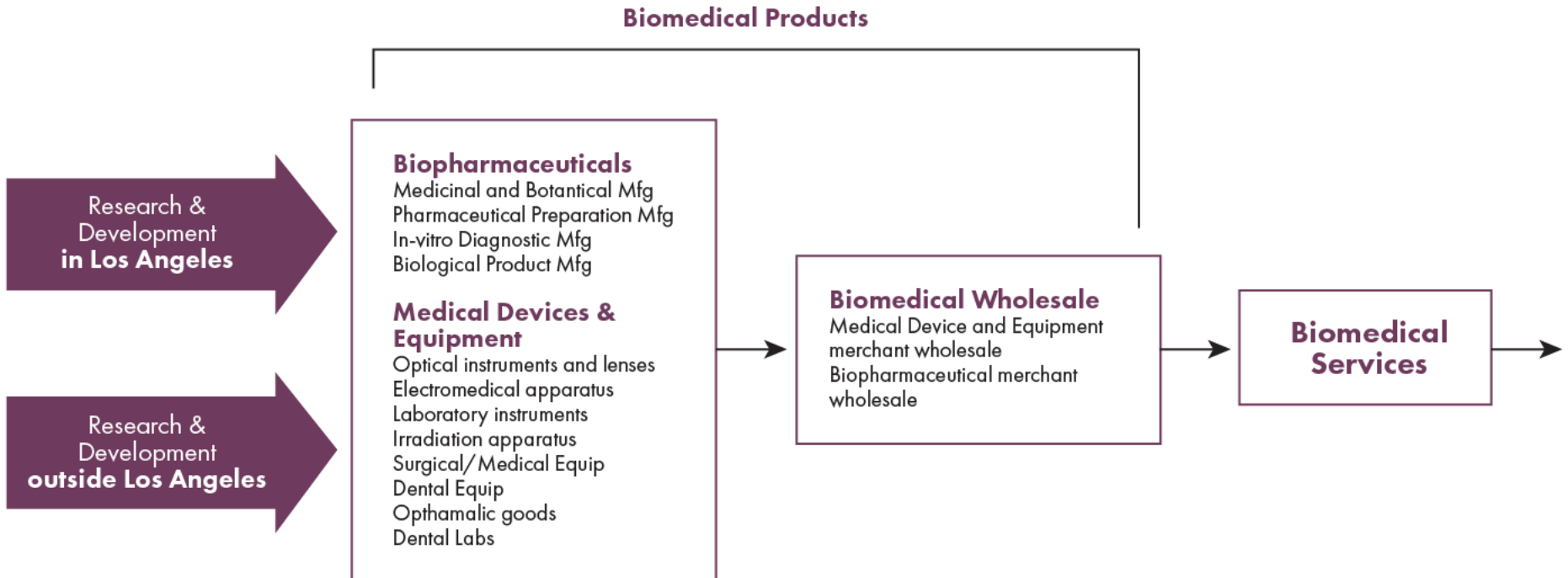


# **Biomedical Products and Services Sector** Los Angeles County

**Collaborative Economics**

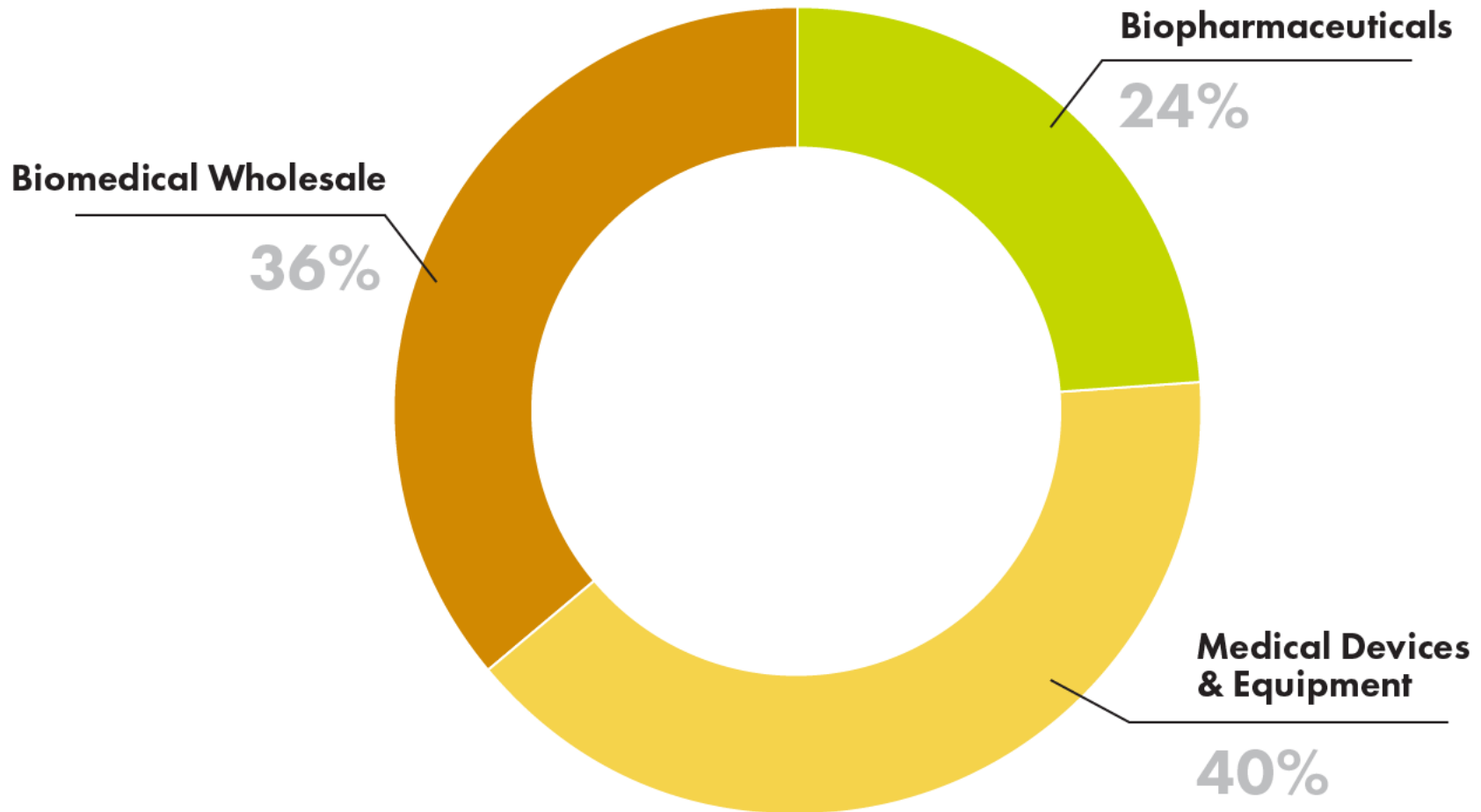


# Biomedical Products and Services Sector Value Chain



# Biomedical Products Employment

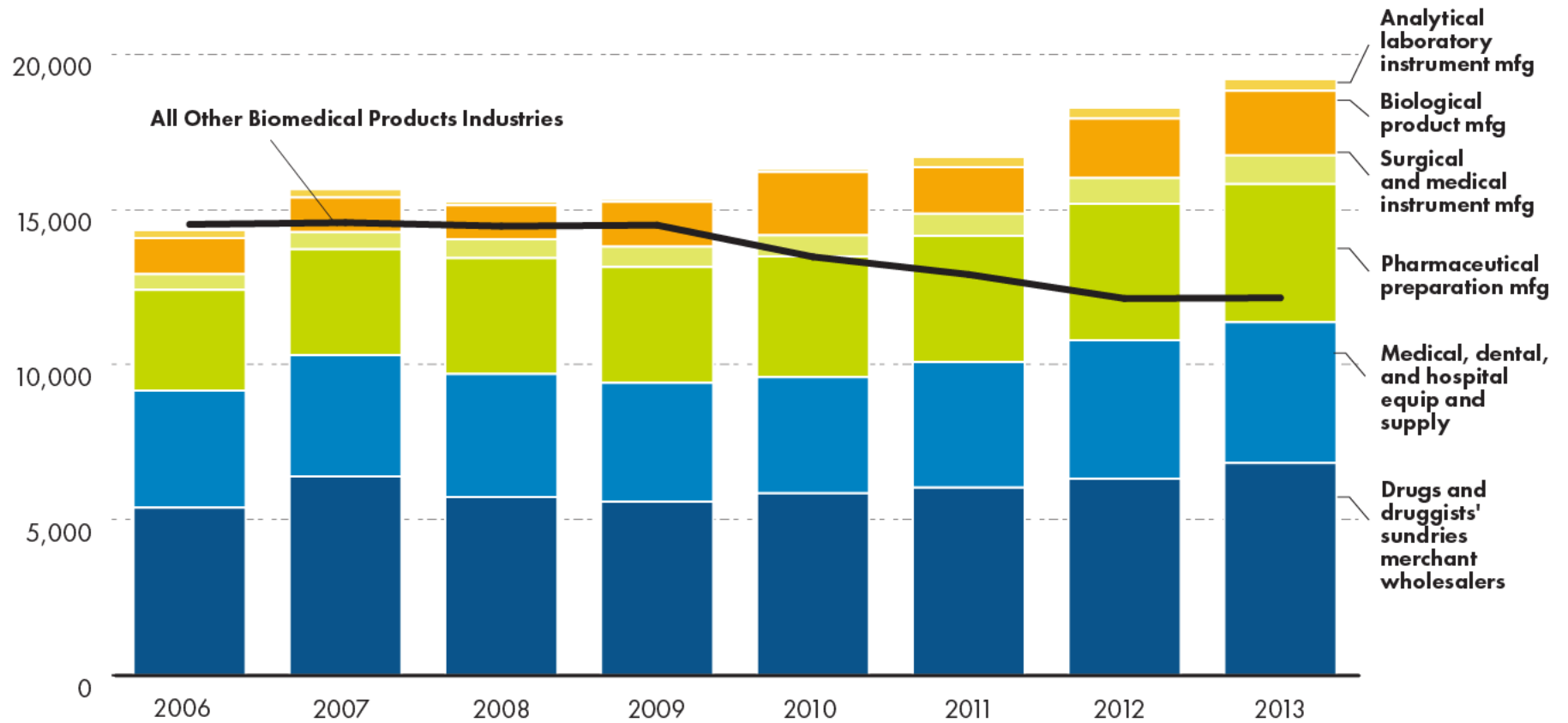
L.A. County, 2013



Data Source: BLS QCEW  
Analysis: Collaborative Economics

# Biomedical Products Jobs by Growing Segments

## L.A. County, 2006-2013



Data Source: BLS QCEW  
 Analysis: Collaborative Economics

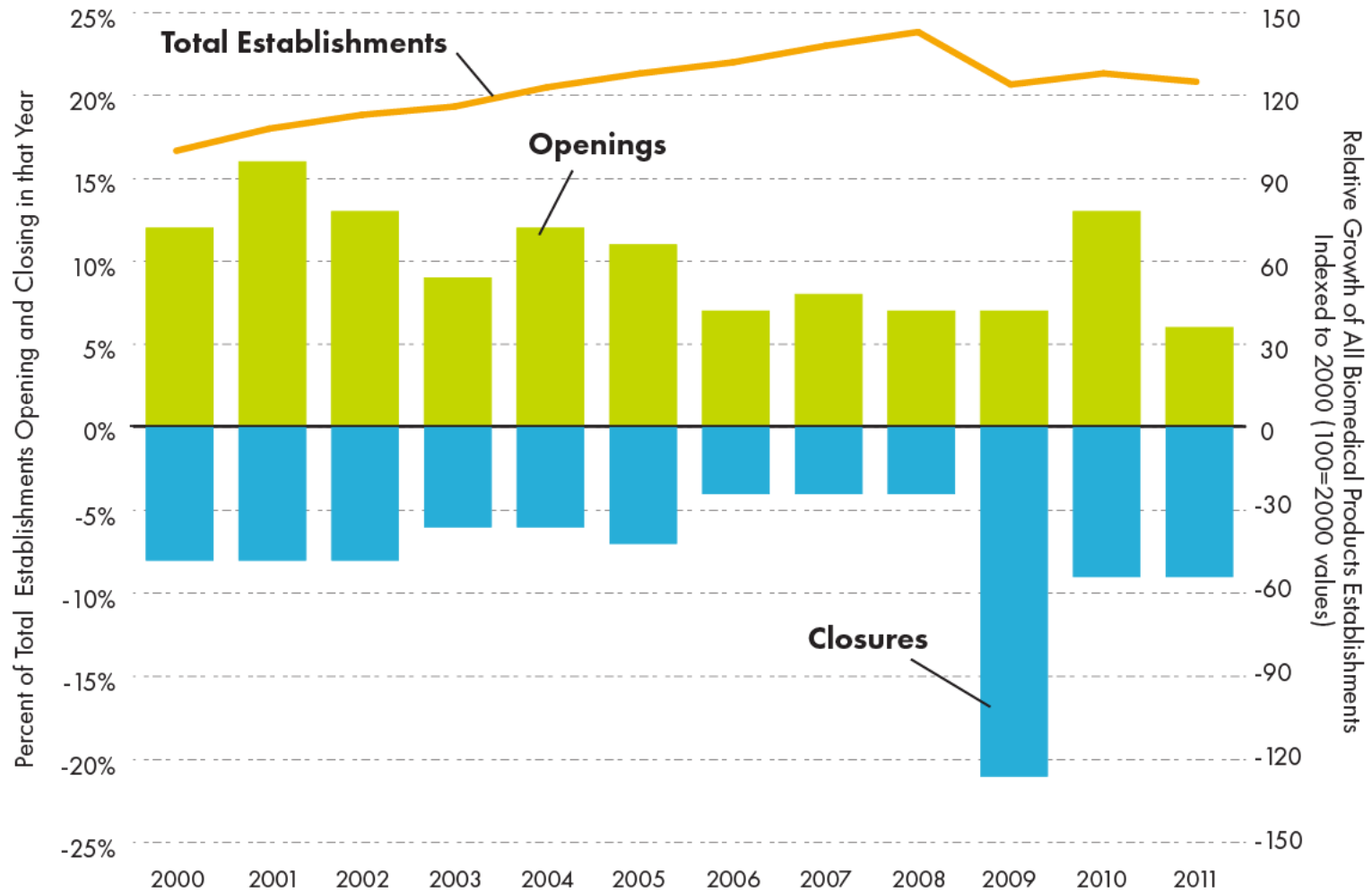
## Biomedical Products Growth Industries Change in Employment

L.A. County, 2006-2013

	% Change 2006-2013
Analytical laboratory instrument manufacturing	81%
Biological product manufacturing	78%
Surgical and medical instrument manufacturing	45%
Pharmaceutical preparation manufacturing	37%
Drugs and druggists' sundries merchant wholesalers	27%
Medical, dental and hospital equipment and supplies merchant wholesalers	20%
<b>All Other Biomedical Product Industries</b>	<b>-16%</b>

# Biomedical Products Establishment Churn

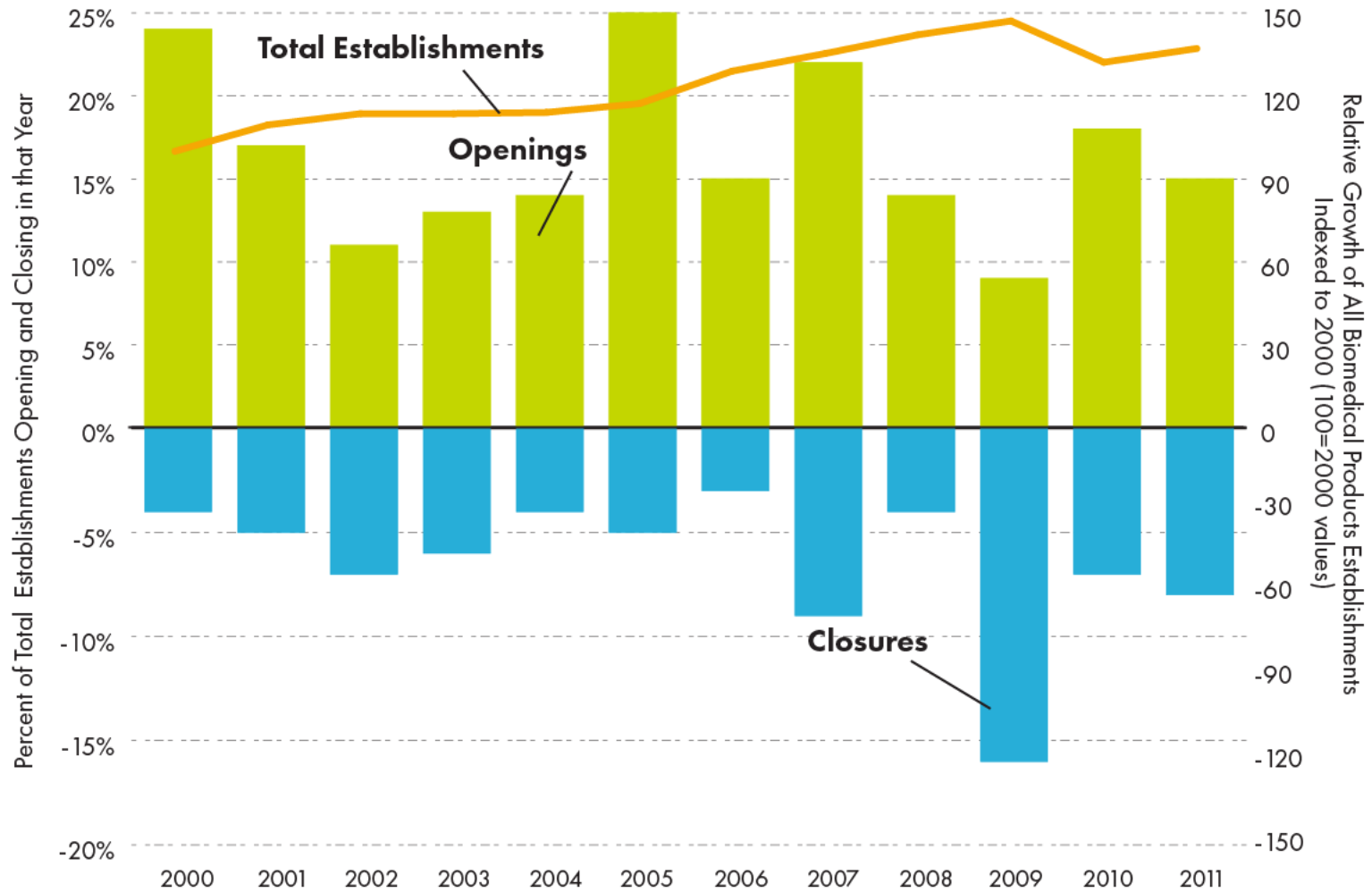
L.A. County, 2000-2011



Data Source: National Establishments Time Series Database  
Analysis: Collaborative Economics

# Biopharmaceutical Products Establishment Churn

## L.A. County, 2000-2011



Data Source: National Establishments Time Series Database  
 Analysis: Collaborative Economics



# Los Angeles MSA Growing Occupations with Ties to Biomedical Products, 2010-2020

**Medical Scientists**  
**Biomedical Engineers**  
**Logisticians**

**Medical Equipment  
Repairers**  
**Industrial Machinery  
Mechanics**  
**Manufacturing Sales Reps**

**Truck Drivers**  
**Maintenance and  
Repair Workers**  
**Shipping and  
Receiving Clerks**  
**Freight and Stock Movers**  
**Packers and Packagers**  
**Store Clerks**

**Fastest Growing Jobs**  
**Most Openings**