



Alabama  
Department of Labor

Labor Market Information  
James Henry, Division Director

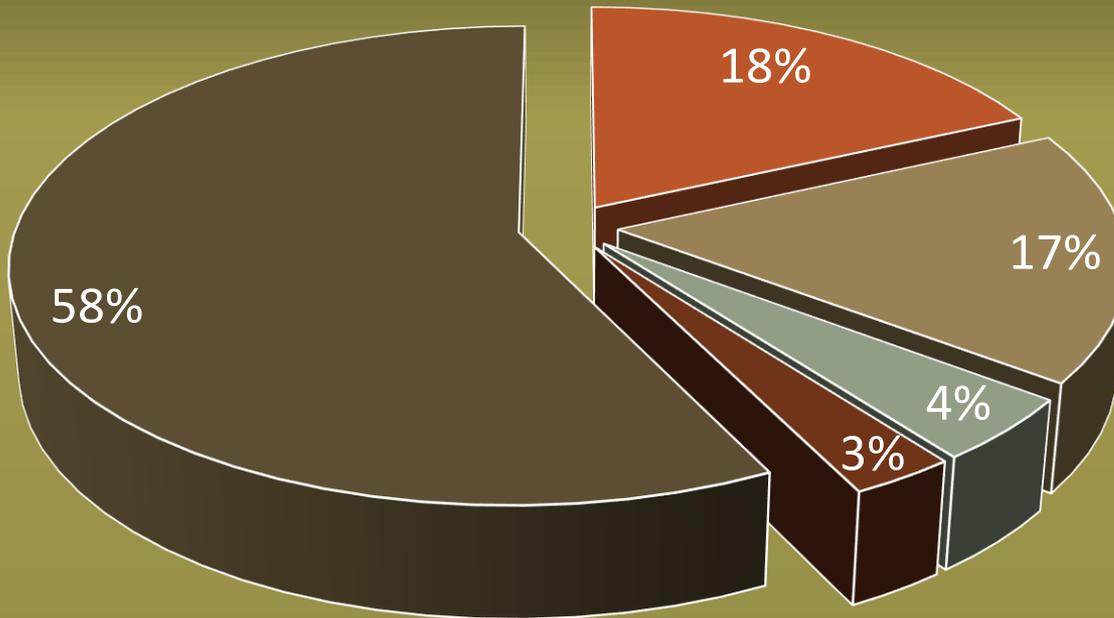


# Accelerate Alabama Chemical

Alabama Department of Labor  
Labor Market Information Division



# Alabama Chemical Employment by Industry Sectors



- Basic Chemical Manufacturing
- Resin, Synthetic Rubber, and Artificial Synthetic Fibers and Filaments Manufacturing
- Paint, Coating, and Adhesive Manufacturing
- Other Chemical Product and Preparation Manufacturing
- Plastics Product Manufacturing



## Alabama Chemical Industry Overview

| Sector   | # of Companies | # Employed |
|--|----------------|------------|
| Basic Chemical Manufacturing   | 67             | 3,069      |
| Resin, Synthetic Rubber, and Artificial Synthetic Fibers and Filaments Manufacturing | 28             | 2,880      |
| Painting, Coating, and Adhesive Manufacturing  | 26             | 737        |
| Other Chemical Product and Preparation Manufacturing                                 | 25             | 498        |
| Plastics Product Manufacturing   | 170            | 9,673      |



# Basic Chemical Manufacturing

## 3251 Basic Chemical Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemicals using basic processes, such as thermal cracking and distillation. Chemicals manufactured in this industry group are usually separate chemical elements or separate chemically-defined compounds.

67 companies; 3,069 employed;  
18% of Chemical Industry Employment

| # of Employees | % of Companies |
|----------------|----------------|
| 1-49           | 87%            |
| 50-99          | 4%             |
| 100-249        | 3%             |
| 250+           | 6%             |

**Source:** Quarterly Census of Employment and Wages, 2013 annual average. *Note: Numbers may not equal 100% due to rounding.*

### Top 5 Job Categories:

- 22% Chemical Equipment Operators and Tenders
- 12% Chemical Plant and System Operators
- 5% Industrial Engineers
- 4% First-Line Supervisors of Production and Operating Workers
- 4% Maintenance and Repair Workers, General

**Source:** 2014 Release of the Occupational Employment Statistics (OES) Report in cooperation with the Bureau of Labor Statistics. Wage data aged using latest Employment Cost Index (ECI) factors.



## Basic Chemical Manufacturing Firm Age Workforce Indicators

| Firm Age      | Employment | Monthly Earnings | Monthly Earnings New Hires | Turnover |
|---------------|------------|------------------|----------------------------|----------|
| 0 – 1 Year    | 59         | \$6,339          | \$5,108                    | 3.6%     |
| 2 – 3 Years   | *          | \$3,124          | \$1,931                    | *        |
| 4 – 5 Years   | *          | *                | *                          | *        |
| 6 – 10 Years  | 16         | \$4,692          | *                          | 8.8%     |
| 11+ Years     | 2,816      | \$7,260          | \$5,739                    | 2.4%     |
| All Firm Ages | 2,911      | \$7,206          | \$5,514                    | 2.5%     |



# Resin, Synthetic Rubber, and Artificial Synthetic Fibers and Filaments Manufacturing

**32521 Resin and Synthetic Rubber Manufacturing** This industry comprises establishments primarily engaged in one or more of the following: (1) manufacturing synthetic resins, plastics materials, and non-vulcanizable elastomers and mixing and blending resins on a custom basis; (2) manufacturing non-customized synthetic resins; and (3) manufacturing synthetic rubber. **32522 Artificial and Synthetic Fibers and Filaments Manufacturing** This industry comprises establishments primarily engaged in (1) manufacturing cellulosic (e.g., rayon, acetate) and non-cellulosic (e.g., nylon, polyolefin, polyester) fibers and filaments in the form of monofilament, filament yarn, staple, or tow or (2) manufacturing and texturing cellulosic and non-cellulosic fibers and filaments.

28 companies; 2,880 employed;  
17% of Chemical Industry Employment

| # of Employees | % of Companies |
|----------------|----------------|
| 1-49           | 50%            |
| 50-99          | 18%            |
| 100-249        | 18%            |
| 250+           | 14%            |

**Source:** Quarterly Census of Employment and Wages, 2013 annual average. *Note: Numbers may not equal 100% due to rounding.*

## Top 5 Job Categories:

- 14% Chemical Equipment Operators and Tenders
- 9% Chemical Plant and System Operators
- 6% Industrial Machinery Mechanics
- 6% First-Line Supervisors of Production and Operating Workers
- 5% Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders

**Source:** 2014 Release of the Occupational Employment Statistics (OES) Report in cooperation with the Bureau of Labor Statistics. Wage data aged using latest Employment Cost Index (ECI) factors.



# Resin, Synthetic Rubber, and Artificial Synthetic Fibers and Filaments Manufacturing

## Firm Age Workforce Indicators

| Firm Age      | Employment | Monthly Earnings | Monthly Earnings New Hires | Turnover |
|---------------|------------|------------------|----------------------------|----------|
| 0 – 1 Year    | 29         | \$3,344          | \$3,010                    | *        |
| 2 – 3 Years   | 69         | \$3,157          | \$2,151                    | 7.5%     |
| 4 – 5 Years   | *          | \$4,230          | \$4,061                    | *        |
| 6 – 10 Years  | *          | \$4,671          | \$3,418                    | *        |
| 11+ Years     | 2,577      | \$6,842          | \$5,211                    | 2.3%     |
| All Firm Ages | 2,866      | \$6,544          | \$4,497                    | 2.7%     |



# Painting, Coating, and Adhesive Manufacturing

**3255: 32551 Paint and Coating Manufacturing** This industry comprises establishments primarily engaged in (1) mixing pigments, solvents, and binders into paints and other coatings, such as stains, varnishes, lacquers, enamels, shellacs, and water repellent coatings for concrete and masonry, and/or (2) manufacturing allied paint products, such as putties, paint and varnish removers, paint brush cleaners, and frit. **32552 Adhesive Manufacturing** This industry comprises establishments primarily engaged in manufacturing adhesives, glues, and caulking compounds.

26 companies; 737 employed;  
4% of Chemical Industry Employment

| # of Employees | % of Companies |
|----------------|----------------|
| 1-49           | 85%            |
| 50-99          | 8%             |
| 100-249        | 8%             |
| 250+           | 0%             |

**Source:** Quarterly Census of Employment and Wages, 2013 annual average. *Note: Numbers may not equal 100% due to rounding.*

## Top 5 Job Categories:

- 28% Mixing and Blending Machine Setters, Operators, and Tenders
- 10% Packaging and Filling Machine Operators and Tenders
- 10% First-Line Supervisors of Production and Operating Workers
- 6% Chemical Technicians
- 4% Industrial Engineering Technicians

**Source:** 2014 Release of the Occupational Employment Statistics (OES) Report in cooperation with the Bureau of Labor Statistics. Wage data aged using latest Employment Cost Index (ECI) factors.



# Painting, Coating, and Adhesive Manufacturing Firm Age Workforce Indicators

| Firm Age      | Employment | Monthly Earnings | Monthly Earnings New Hires | Turnover |
|---------------|------------|------------------|----------------------------|----------|
| 0 – 1 Year    | *          | *                | *                          | *        |
| 2 – 3 Years   | *          | \$5,112          | \$4,126                    | *        |
| 4 – 5 Years   | *          | *                | *                          | *        |
| 6 – 10 Years  | *          | *                | *                          | *        |
| 11+ Years     | 762        | \$4,491          | \$3,082                    | 4.3%     |
| All Firm Ages | 767        | \$4,490          | \$3,062                    | 4.3%     |



# Other Chemical Product and Preparation Manufacturing

## 3259 Other Chemical Product and Preparation Manufacturing

This industry group comprises establishments primarily engaged in manufacturing chemical products (except basic chemicals; resins, synthetic rubber, cellulosic and non-cellulosic fibers and filaments; pesticides, fertilizers, and other agricultural chemicals; pharmaceuticals and medicines; paints, coatings, and adhesives; soaps and cleaning compounds; and toilet preparations).

25 companies; 498 employed;  
3% of Chemical Industry Employment

| # of Employees | % of Companies |
|----------------|----------------|
| 1-49           | 88%            |
| 50-99          | 13%            |
| 100-249        | 0%             |
| 250+           | 0%             |

### Top 5 Job Categories:

- 21% Mixing and Blending Machine Setters, Operators, and Tenders
- 14% Chemical Equipment Operators and Tenders
- 10% Heavy and Tractor-Trailer Truck Drivers
- 7% First-Line Supervisors of Production and Operating Workers
- 6% Laborers and Freight, Stock, and Material Movers, Hand

**Source:** Quarterly Census of Employment and Wages, 2013 annual average. *Note: Numbers may not equal 100% due to rounding.*

**Source:** 2014 Release of the Occupational Employment Statistics (OES) Report in cooperation with the Bureau of Labor Statistics. Wage data aged using latest Employment Cost Index (ECI) factors.



# Other Chemical Product and Preparation Manufacturing Firm Age Workforce Indicators

| Firm Age      | Employment | Monthly Earnings | Monthly Earnings New Hires | Turnover |
|---------------|------------|------------------|----------------------------|----------|
| 0 – 1 Year    | *          | \$4,744          | *                          | *        |
| 2 – 3 Years   | *          | \$5,550          | *                          | *        |
| 4 – 5 Years   | *          | \$4,647          | *                          | *        |
| 6 – 10 Years  | *          | \$2,535          | \$1,713                    | *        |
| 11+ Years     | 436        | \$4,712          | \$4,104                    | 3.6%     |
| All Firm Ages | 475        | \$4,579          | \$3,850                    | 4.1%     |



# Plastics Product Manufacturing

## 3261 Plastics Product Manufacturing

This industry group comprises establishments primarily engaged in processing new or spent (i.e., recycled) plastics resins into intermediate or final products, using such processes as compression molding; extrusion molding; injection molding; blow molding; and casting. Within most of these industries, the production process is such that a wide variety of products can be made.

170 companies; 9,673 employed;  
58% of Chemical Industry Employment

| # of Employees | % of Companies |
|----------------|----------------|
| 1-49           | 70%            |
| 50-99          | 10%            |
| 100-249        | 17%            |
| 250+           | 4%             |

**Source:** Quarterly Census of Employment and Wages, 2013 annual average. *Note: Numbers may not equal 100% due to rounding.*

### Top 5 Job Categories:

- 10% Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and Plastic
- 7% Inspectors, Testers, Sorters, Samplers, and Weighers
- 6% Packers and Packagers, Hand
- 5% Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic
- 5% Team Assemblers

**Source:** 2014 Release of the Occupational Employment Statistics (OES) Report in cooperation with the Bureau of Labor Statistics. Wage data aged using latest Employment Cost Index (ECI) factors.

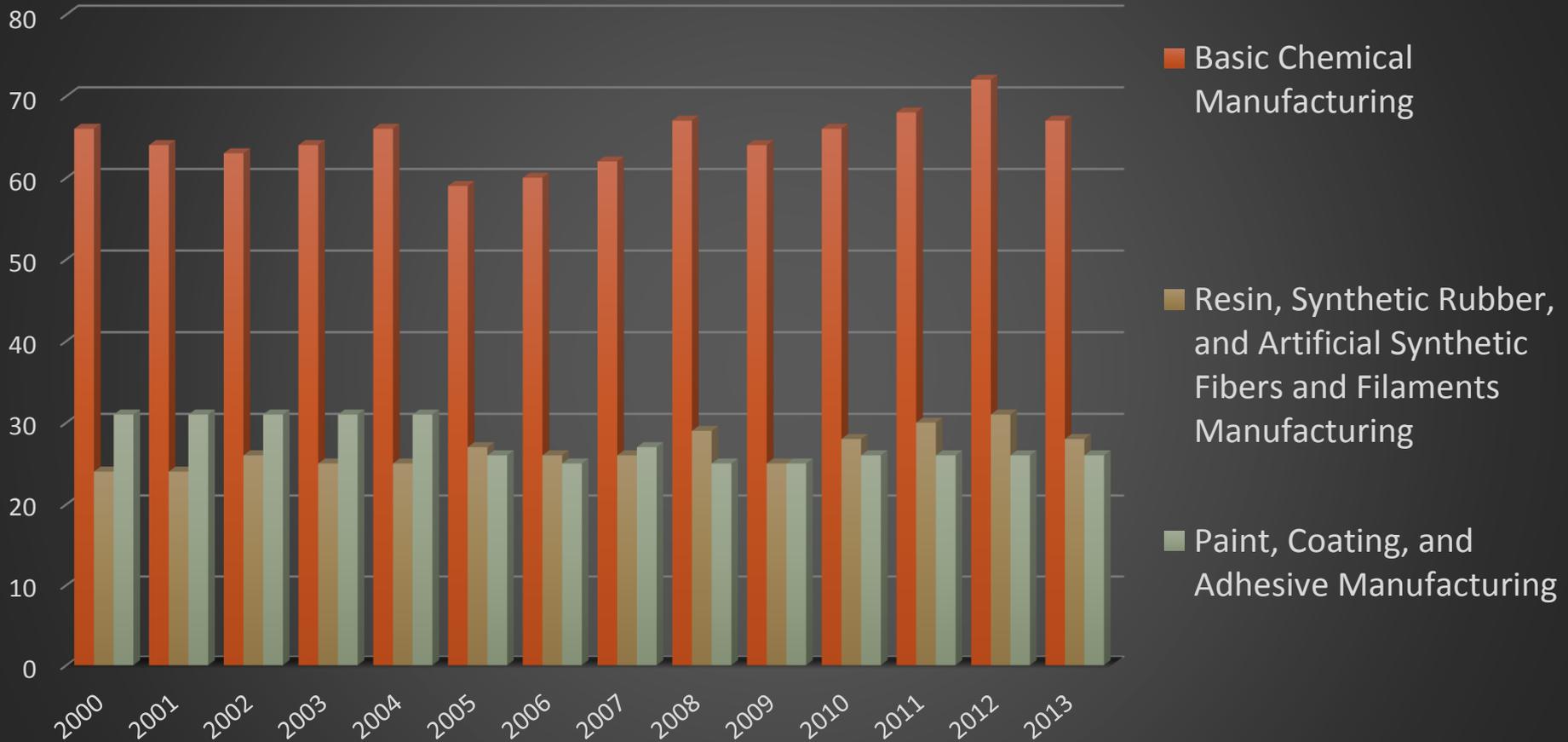


## Plastics Product Manufacturing Firm Age Workforce Indicators

| Firm Age      | Employment | Monthly Earnings | Monthly Earnings New Hires | Turnover |
|---------------|------------|------------------|----------------------------|----------|
| 0 – 1 Year    | 227        | \$4,408          | \$3,893                    | 13.3%    |
| 2 – 3 Years   | 628        | \$3,040          | \$2,557                    | 6.1%     |
| 4 – 5 Years   | 404        | \$3,291          | \$2,468                    | 12.1%    |
| 6 – 10 Years  | 607        | \$3,520          | \$2,697                    | 8.0%     |
| 11+ Years     | 7,140      | \$3,558          | \$2,809                    | 5.9%     |
| All Firm Ages | 9,005      | \$3,526          | \$2,812                    | 6.5%     |

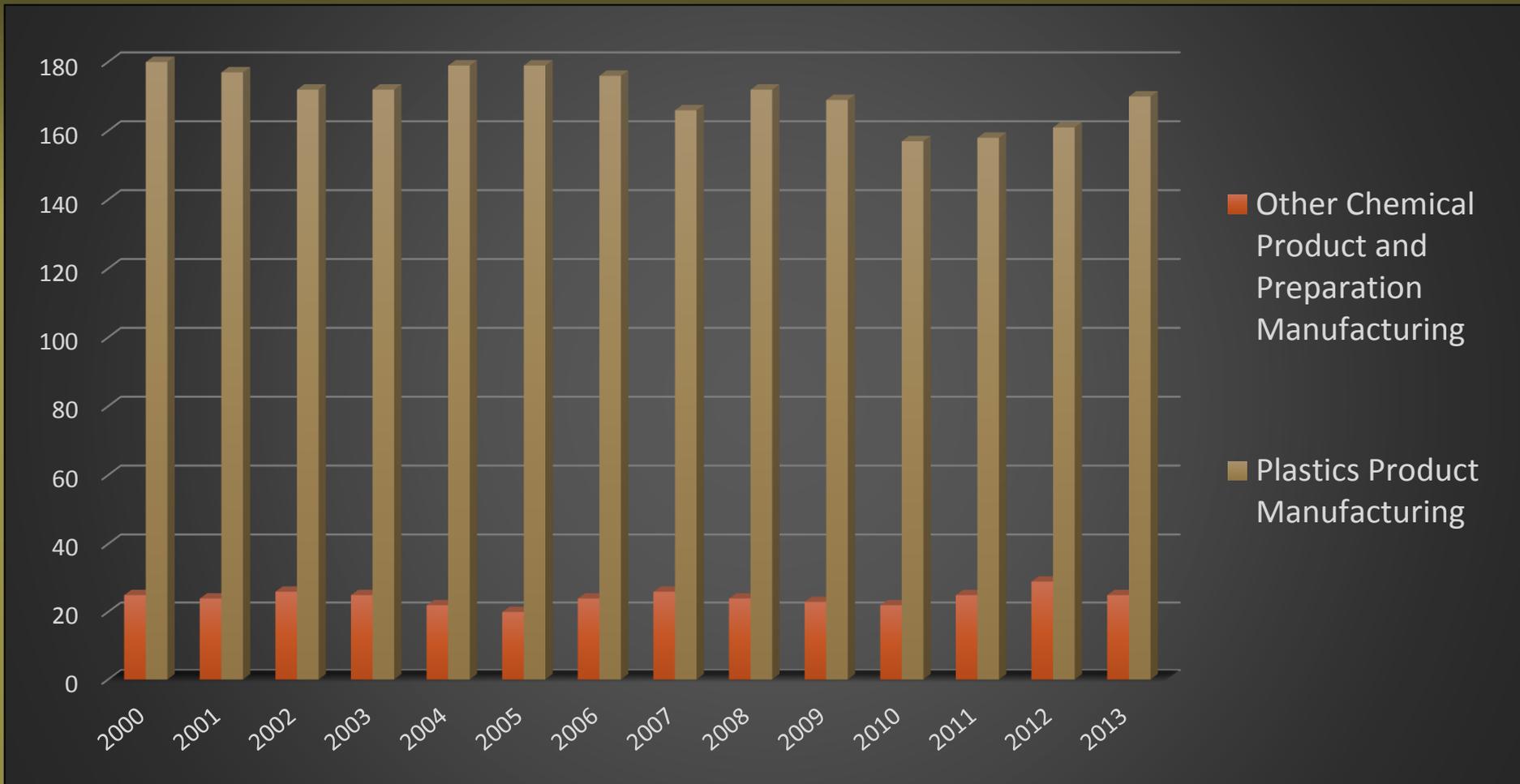


# Development of Alabama's Chemical Industry by Company



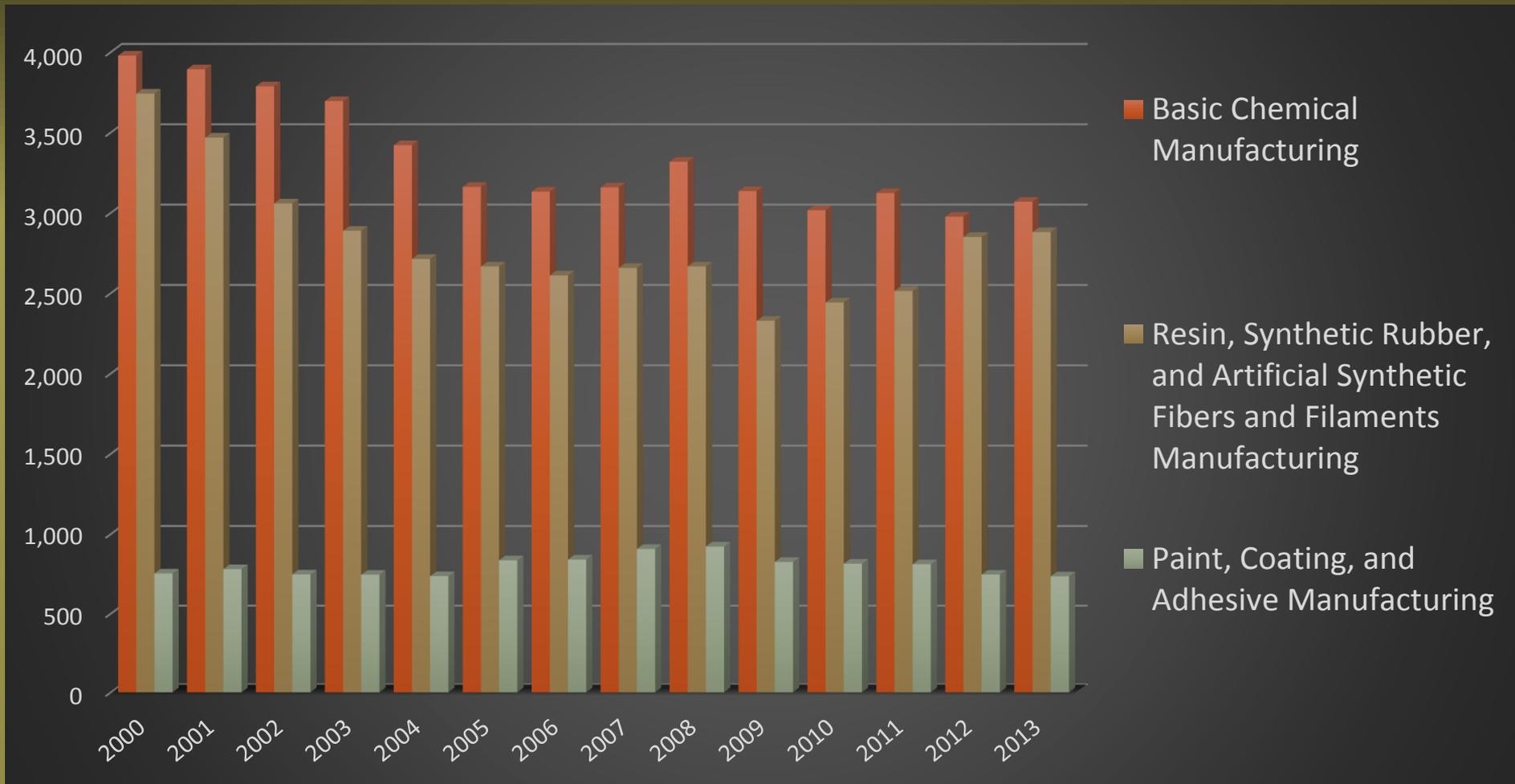


# Development of Alabama's Chemical Industry by Company



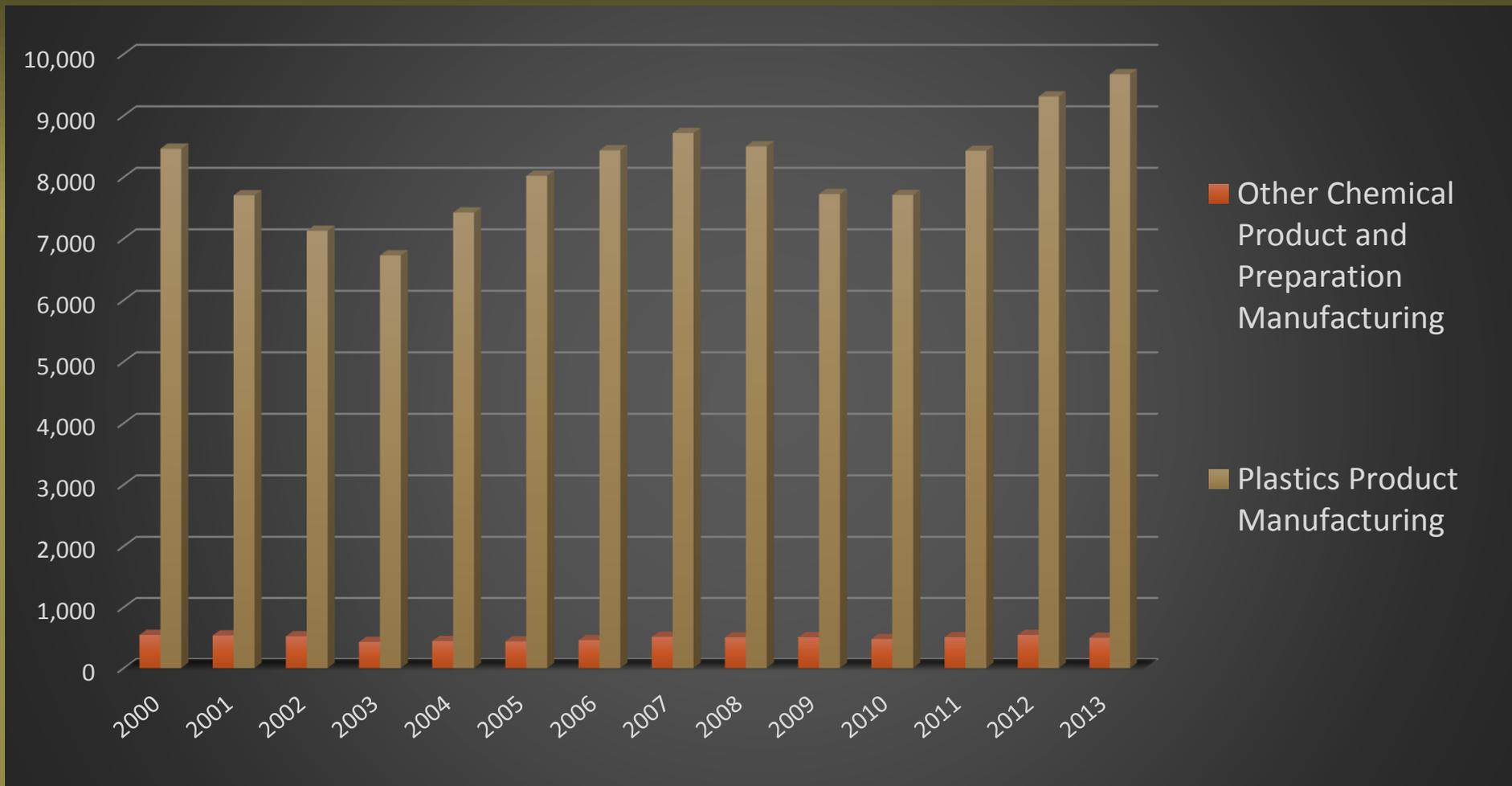


# Development of Alabama's Chemical Industry by Employment





# Development of Alabama's Chemical Industry by Employment





## Top Occupations for Chemical by Rounded Employment

| Occupations   | # of Jobs | % of Total |
|---|-----------|------------|
| Chemical Equipment Operators and Tenders  | 1,140     | 7%         |
| Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and Plastic            | 950       | 6%         |
| First-Line Supervisors of Production and Operating Workers                                  | 820       | 5%         |
| Inspectors, Testers, Sorters, Samplers, and Weighers  | 780       | 5%         |
| Packers and Packagers, Hand   | 700       | 4%         |
| Industrial Machinery Mechanics  | 690       | 4%         |
| Mixing and Blending Machine Setters, Operators, and Tenders                                 | 680       | 4%         |
| Chemical Plant and System Operators   | 620       | 4%         |
| Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic | 510       | 3%         |
| Remaining Occupations   | 9,900     | 59%        |



# Wage Information

## Top 10 by Rounded Occupational Employment

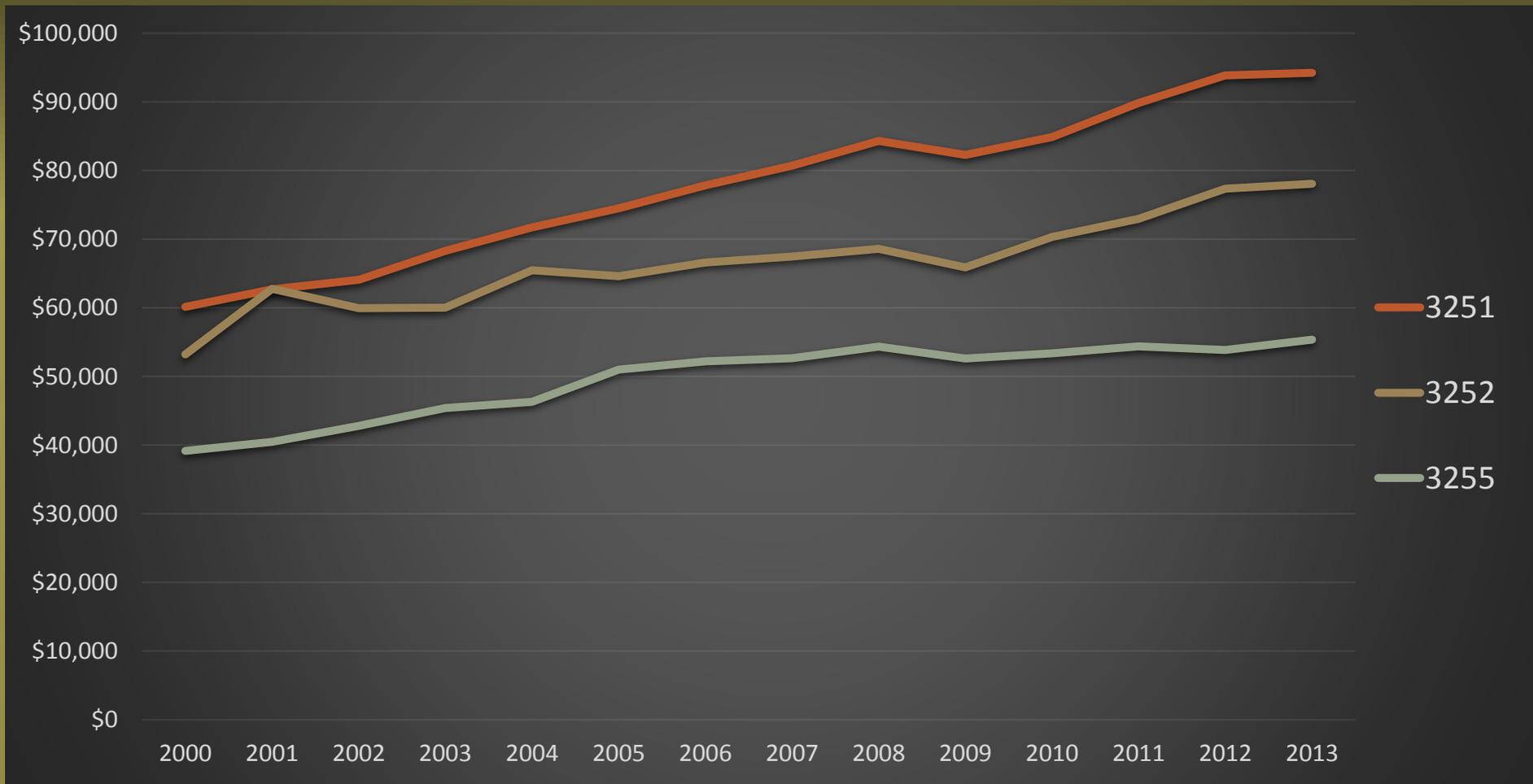
| Occupation  | Rounded Emp. | Mean Hourly | Mean Annual | Entry Hourly | Entry Annual | Experience Hourly | Experience Annual |
|---|--------------|-------------|-------------|--------------|--------------|-------------------|-------------------|
| Chemical Equipment Operators and Tenders  | 1,140        | \$26.44     | \$54,990    | \$18.19      | \$37,823     | \$30.56           | \$63,574          |
| Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and Plastic            | 950          | \$16.13     | \$33,546    | \$11.33      | \$23,567     | \$18.53           | \$38,541          |
| First-Line Supervisors of Production and Operating Workers                                  | 820          | \$27.07     | \$56,294    | \$16.86      | \$35,083     | \$32.17           | \$66,910          |
| Inspectors, Testers, Sorters, Samplers, and Weighers  | 780          | \$15.42     | \$32,060    | \$9.35       | \$19,452     | \$18.45           | \$38,369          |
| Packers and Packagers, Hand   | 700          | \$10.17     | \$21,165    | \$8.27       | \$17,202     | \$11.13           | \$23,141          |
| Industrial Machinery Mechanics  | 690          | \$24.00     | \$49,911    | \$16.18      | \$33,644     | \$27.90           | \$58,035          |
| Mixing and Blending Machine Setters, Operators, and Tenders                                 | 680          | \$18.81     | \$39,107    | \$11.80      | \$24,538     | \$22.30           | \$46,386          |
| Chemical Plant and System Operators   | 620          | \$28.08     | \$58,397    | \$23.84      | \$49,591     | \$30.19           | \$62,806          |
| Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic | 510          | \$14.59     | \$30,341    | \$9.68       | \$20,120     | \$17.05           | \$35,447          |
| Industrial Truck and Tractor Operators  | 440          | \$14.49     | \$30,139    | \$10.06      | \$20,943     | \$16.71           | \$34,747          |

Source: 2014 release of the Occupational Employment Statistics (OES) Report in cooperation with the Bureau of Labor Statistics; wage data aged using the most current Employment Cost Index (ECI) factors. Annual wage information rounded to the nearest whole dollar. *Note: Data reflects wages across all industries, not specifically to respective industry cluster.*



# Wage Information

## Total Wages by NAICS Code 2000-2013

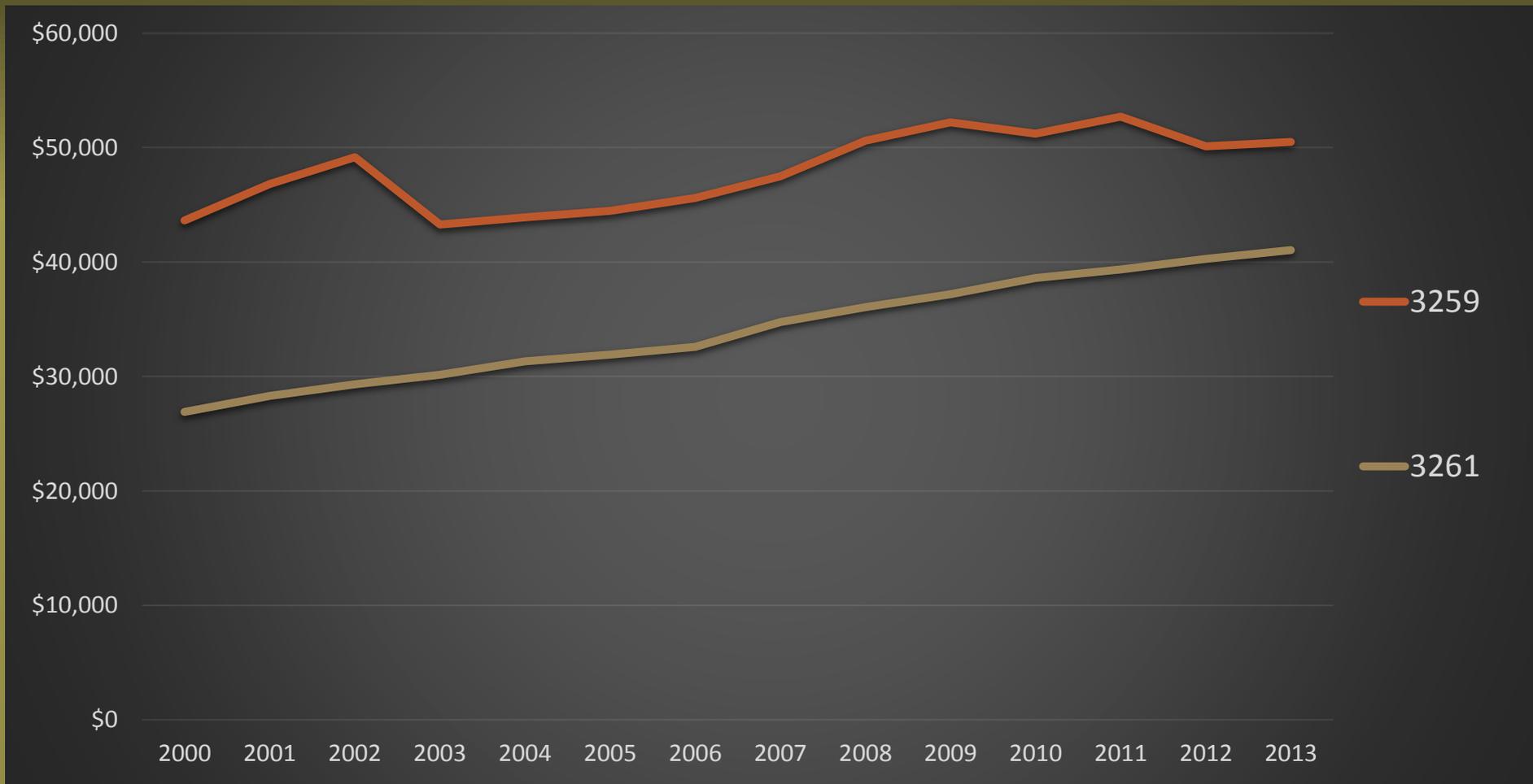


Source: Alabama Department of Labor, Quarterly Census of Employment and Wages



# Wage Information

## Total Wages by NAICS Code 2000-2013



Source: Alabama Department of Labor, Quarterly Census of Employment and Wages



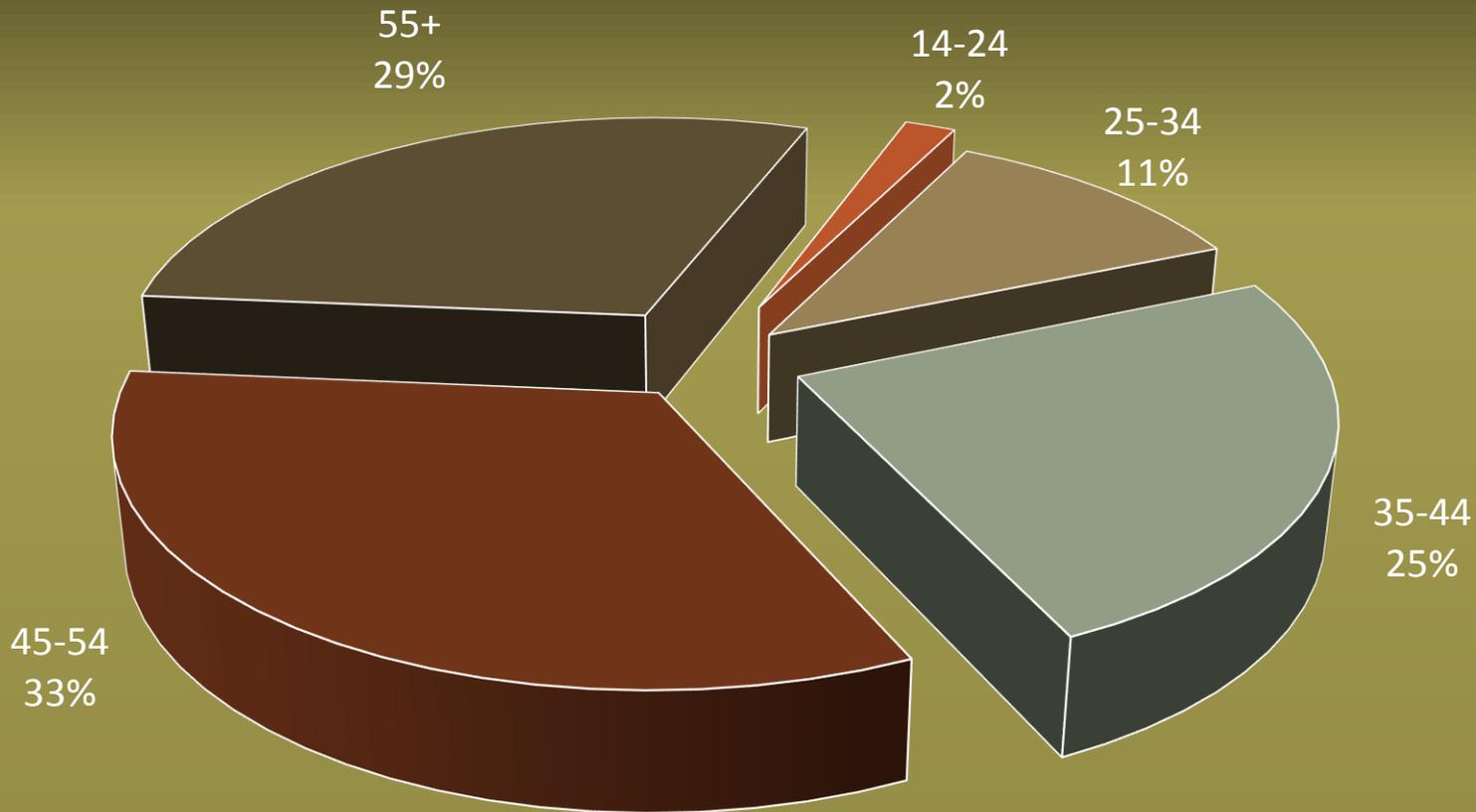
## 2013 Quarterly Workforce Indicators

| NAICS | Industry   | Average Turnover Rate | Average Job Gains | Average Net Job Flows | Average Monthly Earnings | Average Monthly Earnings – New Hires |
|-------|--|-----------------------|-------------------|-----------------------|--------------------------|--------------------------------------|
| 3251  | Basic Chemical Manufacturing   | 2.5%                  | 41                | 19                    | \$7,197                  | \$5,444                              |
| 3252  | Resin, Synthetic Rubber, and Artificial Synthetic Fibers and Filaments Manufacturing | 2.8%                  | 33                | 12                    | \$6,543                  | \$4,564                              |
| 3255  | Painting, Coating, and Adhesive Manufacturing  | 4.3%                  | 11                | -8                    | \$4,505                  | \$3,033                              |
| 3259  | Other Chemical Product and Preparation Manufacturing                                 | 4.0%                  | 5                 | -12                   | \$4,567                  | \$3,885                              |
| 3261  | Plastics Product Manufacturing   | 6.6%                  | 324               | 147                   | \$3,508                  | \$2,772                              |



# 3251 Basic Chemical Manufacturing

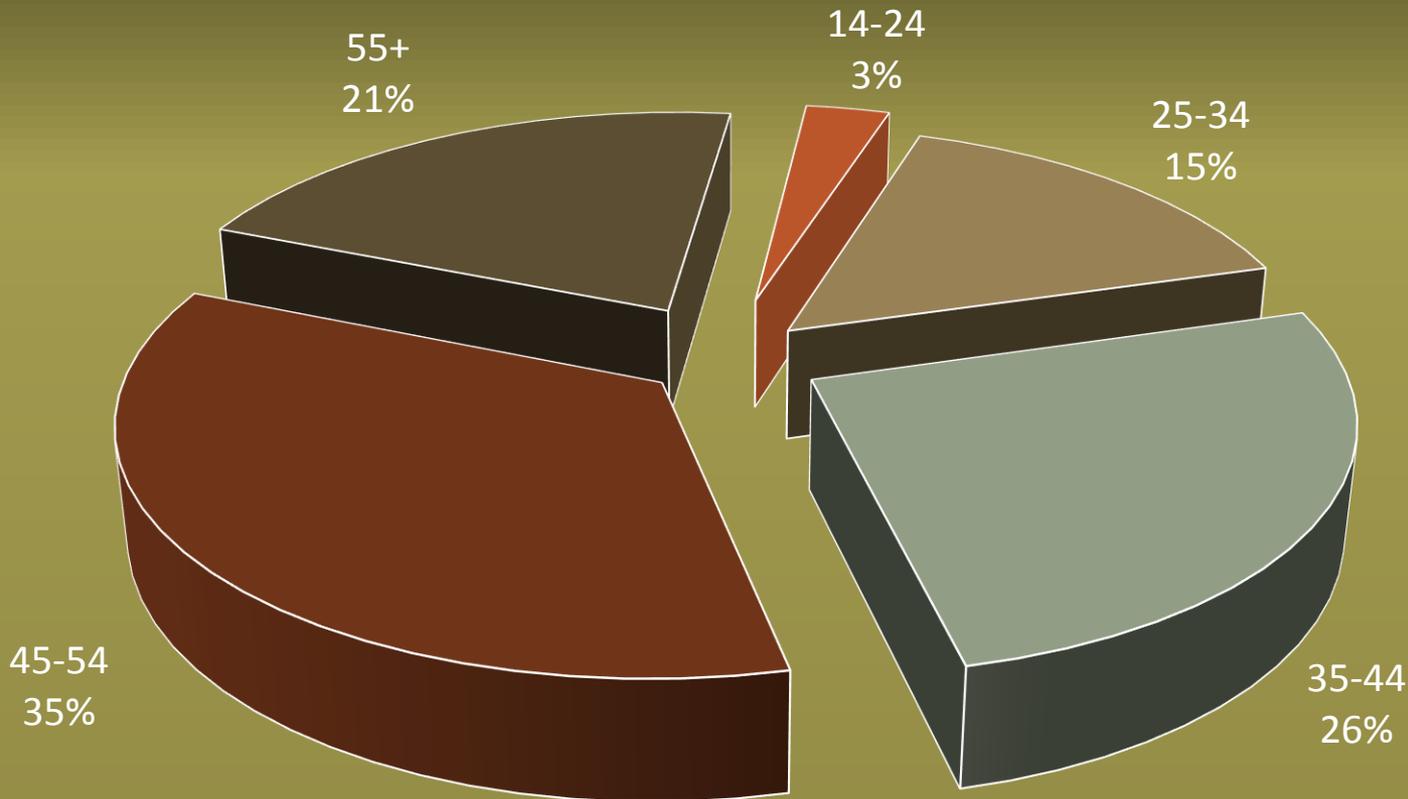
## 2013 Average Annual Employment by Age Group





# 3252 Resin, Synthetic Rubber, and Artificial Synthetic Fibers and Filaments Manufacturing

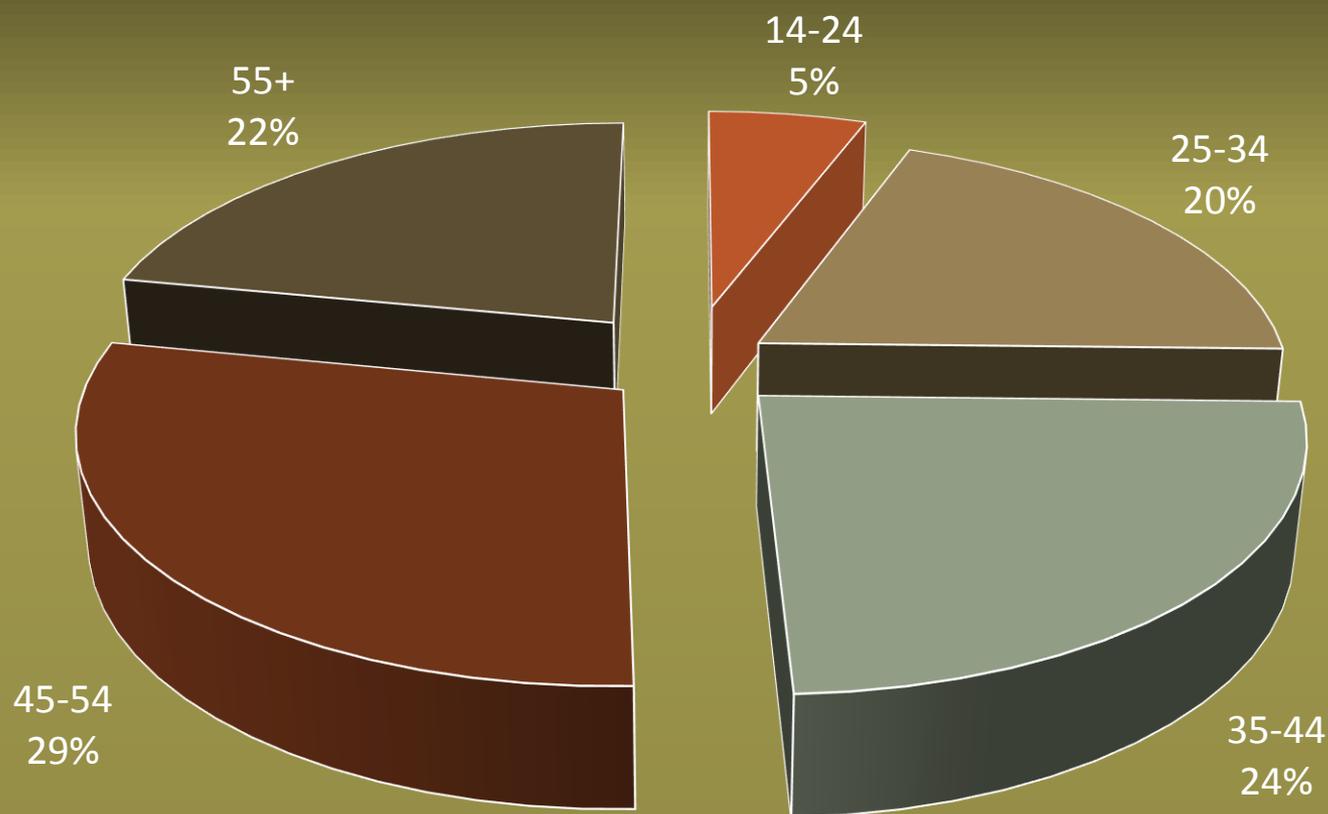
## 2013 Average Annual Employment by Age Group





# 3255 Painting, Coating, and Adhesive Manufacturing

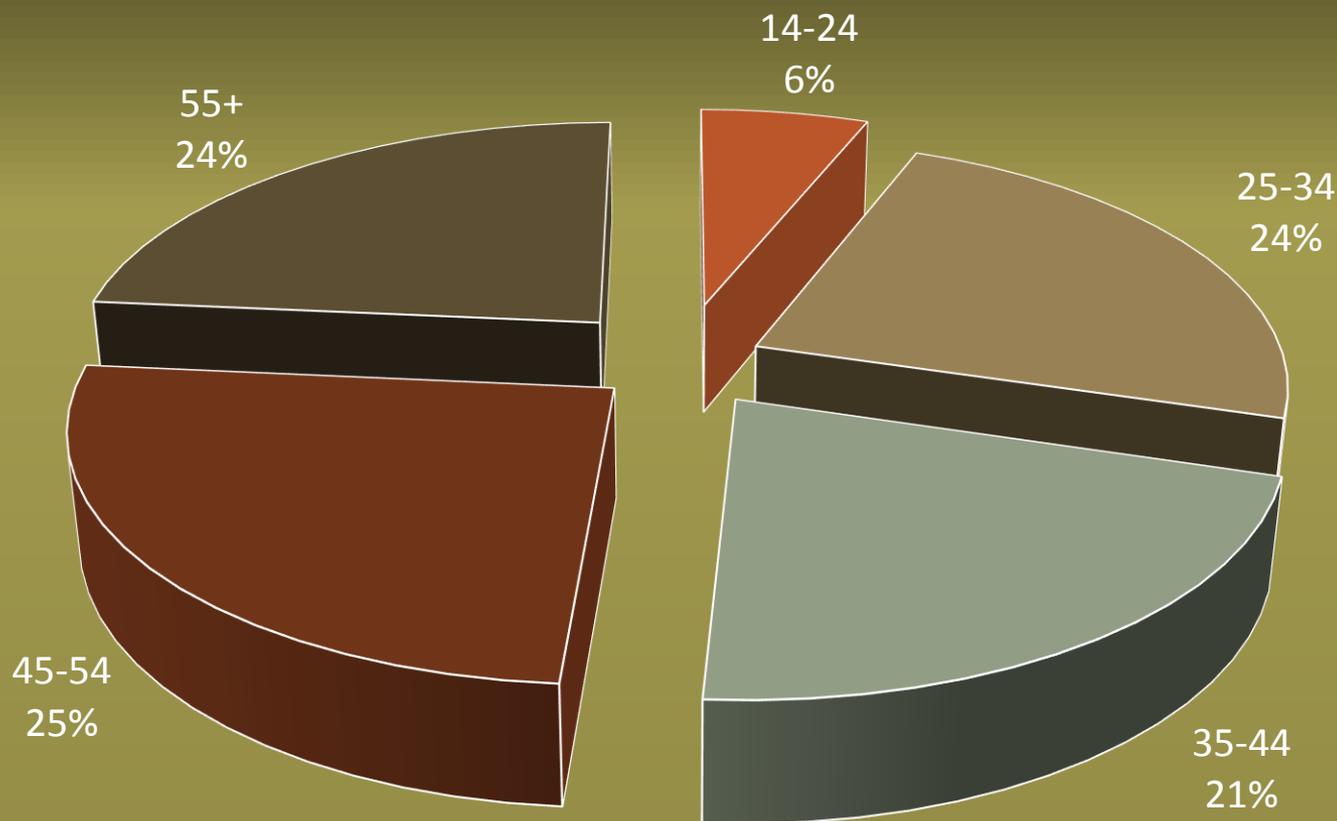
## 2013 Average Annual Employment by Age Group





# 3259 Other Chemical Product and Preparation Manufacturing

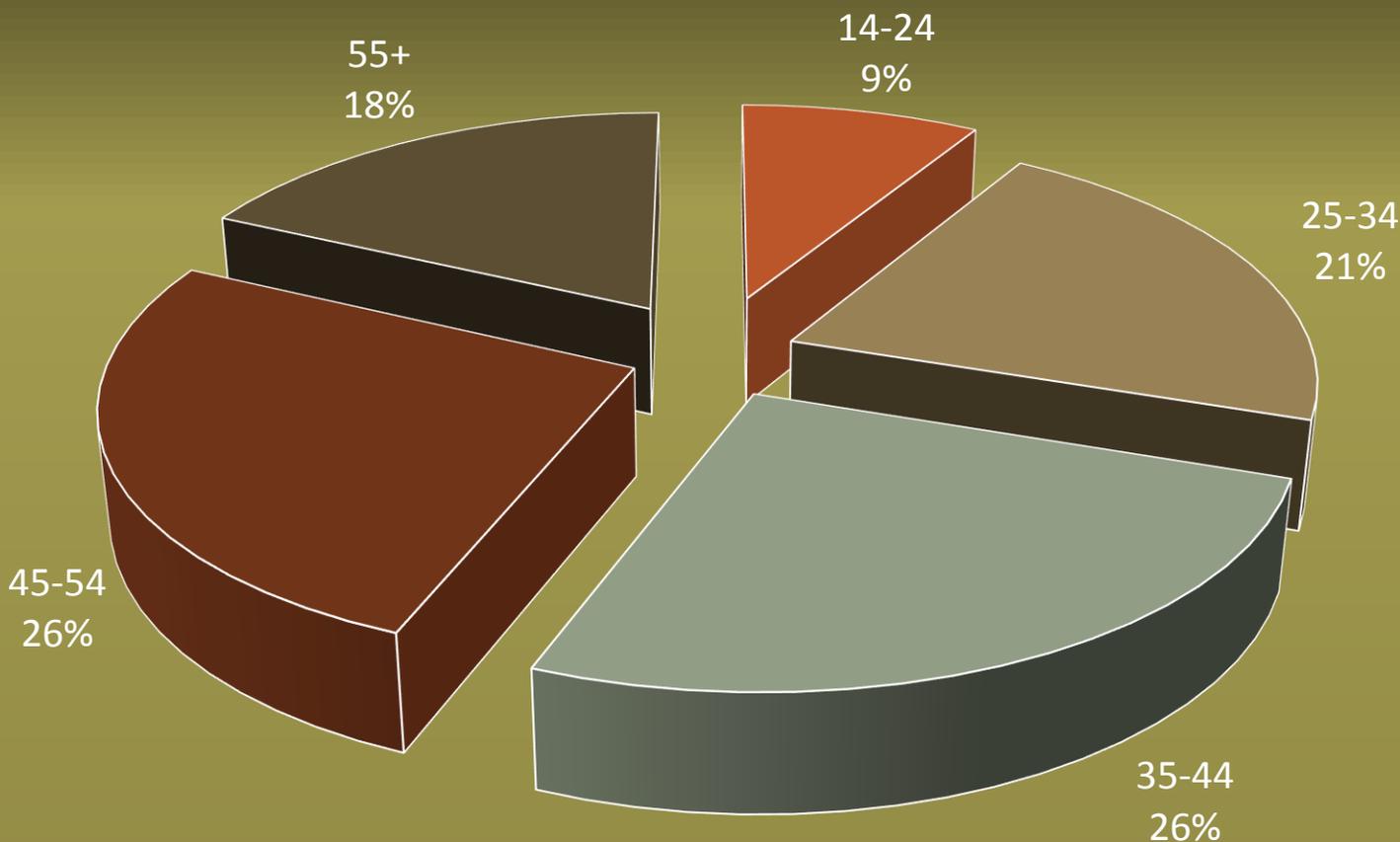
## 2013 Average Annual Employment by Age Group





# 3261 Plastics Product Manufacturing

## 2013 Average Annual Employment by Age Group





# Projections Information

## 2012 – 2022 Industry Projections by NAICS Code

| NAICS | Industry   | 2012  | 2022   | Net Change | Percent Change | Average Annual Growth | U.S. Average Annual Growth | Location Quotient |
|-------|--|-------|--------|------------|----------------|-----------------------|----------------------------|-------------------|
| 3251  | Basic Chemical Manufacturing   | 2,980 | 2,870  | -110       | -3.69          | -0.38                 | -1.24                      | 1.47              |
| 3252  | Resin, Synthetic Rubber, and Artificial Synthetic Fibers and Filaments Manufacturing | 2,850 | 2,830  | -20        | -0.70          | -0.07                 | -1.02                      | 2.18              |
| 3255  | Painting, Coating, and Adhesive Manufacturing  | 750   | 720    | -30        | -4.00          | -0.41                 | -0.83                      | 0.93              |
| 3259  | Other Chemical Product and Preparation Manufacturing                                 | 550   | 480    | -70        | -12.73         | -1.35                 | -1.72                      | 0.48              |
| 3261  | Plastics Product Manufacturing   | 9,310 | 10,090 | 780        | 8.38           | 0.81                  | -0.79                      | 1.27              |



# Major Chemical Regions

## Chemical Industry Maps:

### Statewide

Workforce Development Region 1

Workforce Development Region 2

Workforce Development Region 3

Workforce Development Region 4

Workforce Development Region 5

Workforce Development Region 6

Workforce Development Region 7

Workforce Development Region 8

Workforce Development Region 9

Workforce Development Region 10