

# 2017 South Dakota Demography Conference

## Measuring the South Dakota Economy

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# Overview

- (1) Importance of monitoring the economy
- (2) Key indicators and data sources
- (3) Current economic snapshot

# Why monitor the economy?

## Political sector

- Tax revenues are correlated with economic performance
- Spending on social programs closely tied to business cycle
- Forecasting revenues and spending are critical for planning

## Private sector

- Long-term investment strategies depend on economic trends
- Some industries are pro-cyclical and others are counter-cyclical

## Non-profit sector

- Majority of activities aimed at serving economically disadvantaged
- Economic growth is key to alleviating these many core causes of poverty

# Key indicators

## **Economic output and activity**

- GDP and personal income are the primary measures
- Gross and taxable sales
- Building Permits

## **Labor market performance**

- Employment and unemployment
- Labor force participation rates
- Jobs and wage growth

# Key indicators – Economic Output

**Regional Economic Accounts** by the Bureau of Economic Analysis

**Reported variables:**

- Total and per capita output by geography and by industry (NAICS)
- Total and per capita personal income by geography, industry, and source

**Issues to consider:**

- 6 month lag for state GDP
- 1 year lag for MSA GDP
- No coverage for rural areas or even counties
- Data are often significantly revised after reporting
- GDP data are available on the South Dakota Dashboard

# Key indicators – Economic Output

**Gross and Taxable Sales** by SD Dept. of Revenue

**Reported variables:**

- Gross and Taxable sales statewide and at city level

**Issues to consider:**

- 1 month lag – practically real-time
- Gross sales is best local measure of economic performance
- Taxable sales is correlated with gross sales and total economic activity but more limited
- DOR does not have authority to audit gross sales numbers so can contain significant errors
- Gross sales are available on the South Dakota Dashboard

## Key indicators – Labor market performance

**Local Areas Unemployment Statistics (LAUS)** by the Bureau of Labor Statistics

### **Reported variables:**

- Size of the labor force (employed and unemployed workers)
- Unemployment rate
- Monthly and annual estimates for US, states, counties, and MSAs

### **Issues to consider:**

- 1 month lag
- Data from Current Population Survey (CPS) and state payroll fillings
- Data are subject to revision after reporting
- LAUS data are available through SD DLR Labor Market Information Center (LMIC)

## Key indicators – Labor market performance

### **Quarterly Census of Employment and Wages (QCEW) by BLS**

#### **Reported variables:**

- Monthly data on employment by industry
- Quarterly data wages and number of establishments
- Number of establishments by size (statewide only)

#### **Issues to consider:**

- 5 month lag
- State UI filings; 98% of all jobs covered
- Most industries at national, state, county, and MSA levels
- QCEW data are available through LMIC



## Key indicators – Labor market performance

**County Business Patterns** by the Census Bureau

**Reported variables:**

- Annual counts of employment, wages, number of establishments by industry
- Number of establishments by size available at county level

**Issues to consider:**

- 18 month lag
- Same coverage as QCEW but also available at the ZIP code level
- Only available via the Census Bureau at this time

# Key indicators – Labor market performance

## **Occupational Employment Statistics (OES) by BLS**

### **Reported variables:**

- Employment levels, and wages by occupation
- 800 occupations at national, state, county, and MSA levels

### **Issues to consider:**

- 1 year lag
- Survey of businesses; 1.2 million establishments over 3 years
- Only source of data on occupations rather than industries
- OES data are available through LMIC

## Economic Output (REA)

- GDP measures total economic output of goods and services
- South Dakota ranked 47th out of 50 states
- Only Montana, Wyoming, and Vermont had smaller GDPs than South Dakota in 2016

### 2016 GDP in Millions of USD \*

United States	16,342,925
Colorado	292,512
Nebraska	101,294
North Dakota	47,628
South Dakota	41,607
Montana	41,030
Wyoming	34,439

\* Chained 2009 dollars

## GDP per Capita (REA)

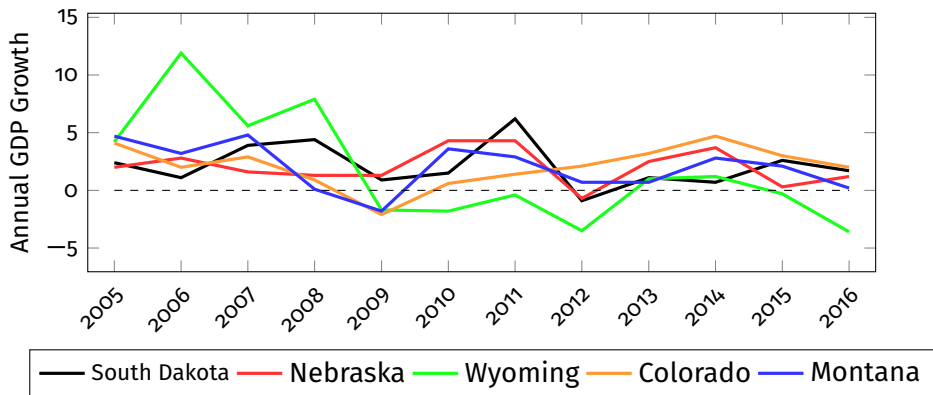
- GDP per capita is better measure than simple GDP
- South Dakota ranked 23rd in terms of GDP per capita!
- South Dakota ranked ahead of Utah, Florida, Arizona, Wisconsin and many more

Year	US	SD	Nebraska	Wyoming	Colorado	Montana
2005	48,062	42,762	46,062	57,642	51,473	36,120
2010	47,287	45,605	49,569	64,603	49,254	37,733
2015	50,155	47,706	52,878	60,908	52,622	39,686
2016	50,577	48,076	53,114	58,821	52,795	39,356

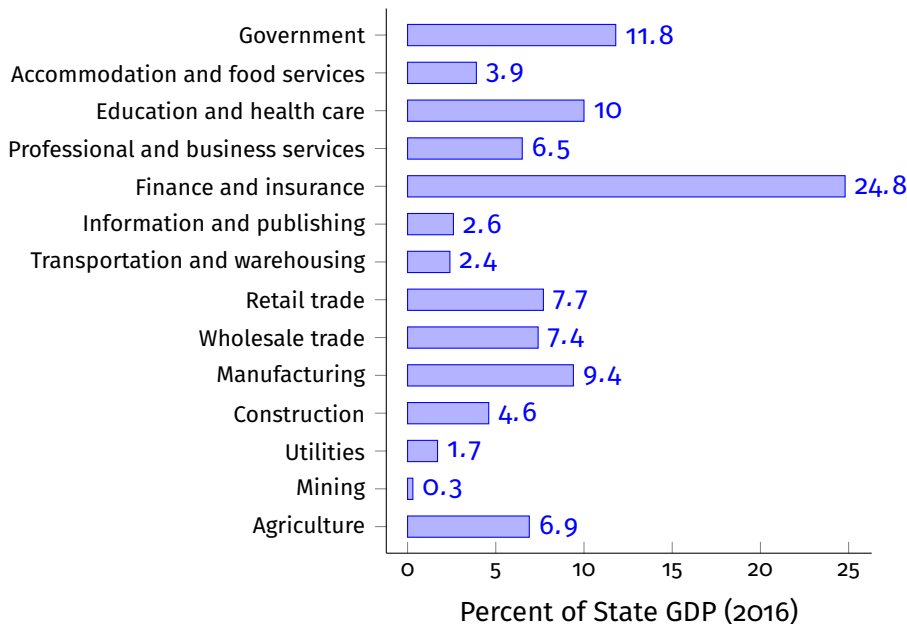
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## Economic growth <sup>(REA)</sup>

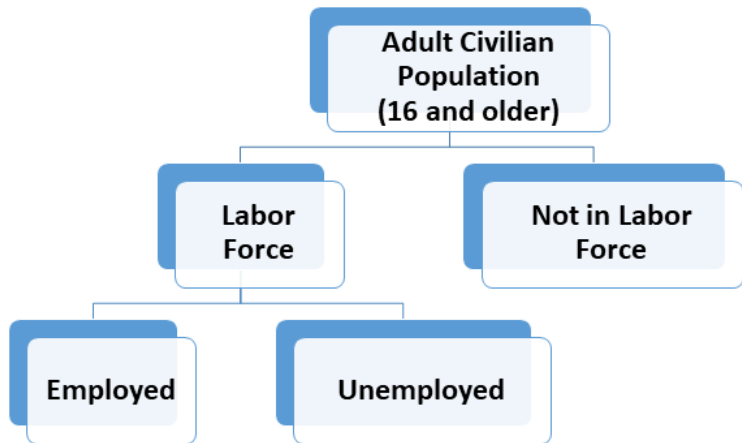
- Economic growth in SD has been strong relative to neighbors
- The entire region slightly lags the nation
- Regional GDP less volatile than national GDP



## South Dakota GDP by Industry (REA)

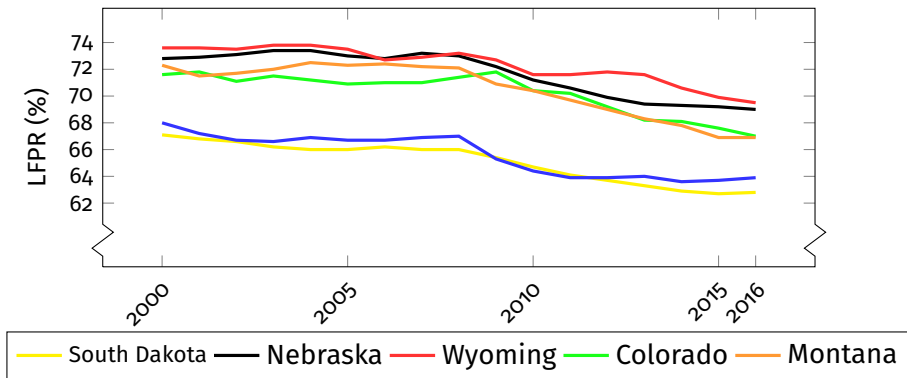


# Labor Force Overview



## Labor Force Participation Rate (LFPR) (LAUS)

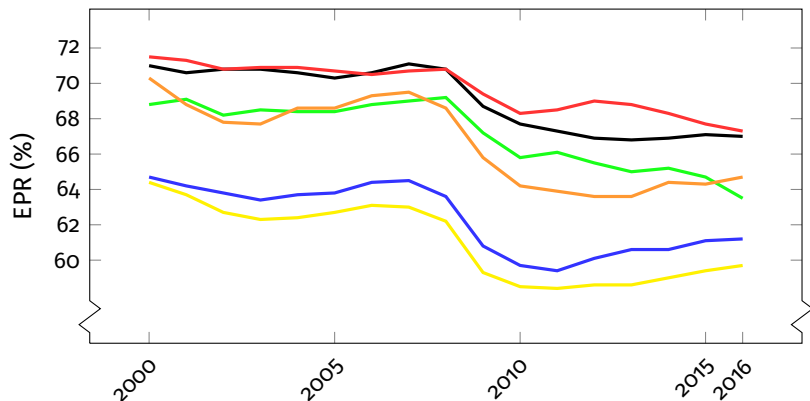
- Fraction of adult civilian population in the labor force
- Strong economy needs high percentage of persons in the labor force





## Employment to Population Ratio (EPR) (LAUS)

- Fraction of adult civilian population that are working
- All economic activity stems from this group



— South Dakota — Nebraska — Wyoming — Colorado — Montana

# Unemployment Concepts

UNEMPLOYMENT  
RATE

UNEMPLOYED

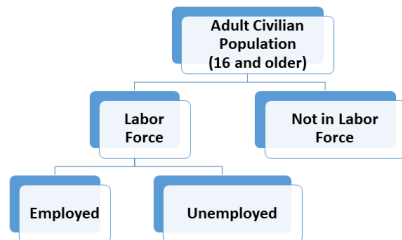


ERIC ALLIE  
ILLINOIS POLICY

# Unemployment Definition

Who counts as unemployed?

- (1) Adult civilian population
- (2) Not worked in the last 4 weeks
- (3) Currently looking for work



## Unemployment Rate

$$UR = \frac{\text{Unemployed}}{\text{Unemployed} + \text{Employed}} = \frac{\text{Unemployed}}{\text{Labor Force}}$$

# Types of Unemployment

We recognize three types of unemployment

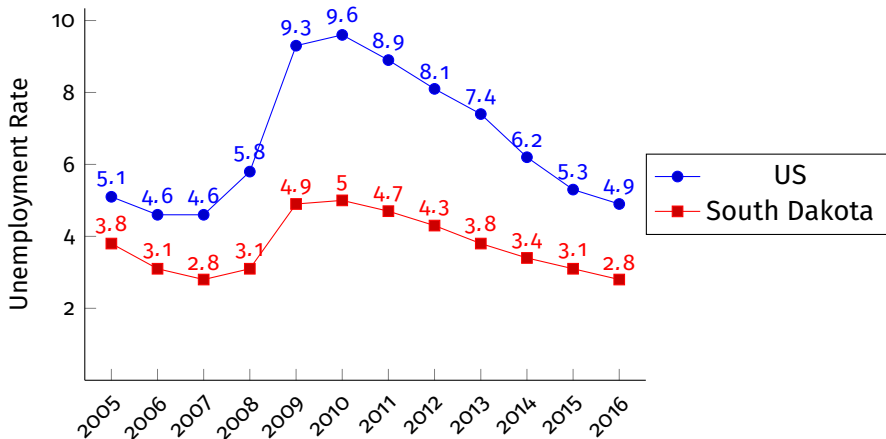
- (1) **Frictional:** short-term and related to job search
- (2) **Structural:** longer-term and related to “creative destruction”
- (3) **Cyclical:** caused by business cycle and seasonal fluctuations

Frictional Unemployment is Good!!!



## Unemployment Rate: SD and the Nation (CPS & LAUS)

- The unemployment rate in SD is typically half the national rate
- South Dakota usually ranks in the “top five” low unemployment states
- Currently ranked 8th in nation (3.3% in August 2017)



# Additional Unemployment Considerations

The official unemployment rate (called  $U_3$ ) **does not** count:

- (1) Discouraged workers (no job and gave up searching)
- (2) Marginally attached workers (no job and want one, but not currently searching)
- (3) Underemployed workers (have a job but can't get full time hours)



# Sources

## GDP

- Regional Economic Accounts
- <http://www.southdakotadashboard.org/economic-output-gdp>
- <https://www.bea.gov/regional/downloadzip.cfm>

## Labor Force Statistics

- Current Population Survey and Local Area Unemployment Statistics
- National: <https://data.bls.gov/cgi-bin/surveymost?ln>
- State: <https://www.bls.gov/lau/staadata.txt>

## Unemployment Rates

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