

Burgundy Book

A report on economic conditions in the St. Louis zone

Fourth Quarter 2016

The St. Louis zone of the Federal Reserve comprises central and eastern Missouri and southern Illinois and a total population of approximately 5.6 million people, including the almost 3 million who live in the St. Louis MSA.

Business Outlook Still Optimistic Despite Signs of Slightly Slower Growth

By Charles S. Gascon, Regional Economist

The outlook of business contacts in the St. Louis zone weakened somewhat since the previous quarter but remains unchanged relative to one year ago. Fifty-one percent of contacts expect local economic conditions to be better or somewhat better in 2017 relative to 2016. However, a quarter of contacts expect conditions to be worse or somewhat worse. On net, business sentiment remains consistent with modest growth.

Labor market conditions in the zone remain fairly strong and continued to tighten. The unemployment rate in the zone remains around 5 percent, and the number of unemployed workers per job vacancy continues to decline. While preliminary estimates indicate that payroll employment growth remains strong, new information suggests considerable downward revisions to the data earlier this year.

Housing market conditions remain fairly strong, as home sales growth in St. Louis continues to outpace the nation through the third quarter. However, a majority of contacts indicated that sales during the fourth quarter have fallen short of expectations.

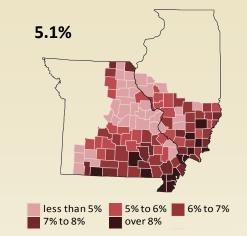
Households shed mortgage debt during the third quarter, while growth in both credit cards and auto loans stabilized. Banking contacts indicated that overall loan demand remained unchanged relative to last year. While the demand for mortgages and credit cards has been robust throughout 2016, contacts expect growth to taper off in the first quarter of 2017.

Rain during the early harvest season dampened the expected increase in Missouri corn and cotton production. Low crop prices are putting downward pressure on agricultural land values in Missouri and Illinois.

Note to readers: This will be the final Burgundy Book. Starting in 2017, zone-specific anecdotal information will be included in a supplement to the redesigned Beige Book. The Beige Book is released eight times per year, and the next release will be January 18. The regional economic data contained in the report is available in the St. Louis Fed's FRED database and may be accessed through the Eighth District Economy webpage: research.stlouisfed.org/regecon.

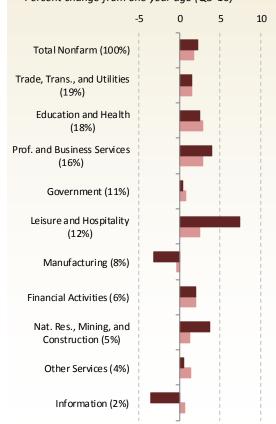
Data Snapshot





Nonfarm payroll employment by industry

Percent change from one year ago (Q3-16)



How to read this report

Unless otherwise noted, **city names** refer to the metropolitan statistical areas (MSAs), which are geographic areas that include cities and their surrounding suburbs, as defined by the Census Bureau.

Statistics for the St. Louis zone are based on data availability and are calculated as weighted averages of either the 116 counties in the zone or the five MSAs. As of 2012, approximately two-thirds of the zone's labor force was located in an MSA. Specifically: 52 percent in St. Louis, 8 percent in Springfield, 3 percent in Jefferson City, 3 percent in Columbia, and 2 percent in Cape Girardeau; one-third of the zone's labor force was located in non-metropolitan areas.

Arrows in the tables are used to identify significant trends in the data. The direction of the arrow indicates the sign (up/down) and the color indicates the economic significance (green = good, red = poor). Arrows appear only when the change from the previous quarter is greater than 1 standard deviation. For example, the standard deviation of the change in the US unemployment rate is 0.4 percent. If the US unemployment rate declined from 8.4 percent to 8.2 percent, no arrow would appear; but if it declined from 8.4 percent to 7.9 percent, a green down arrow would appear in the table.

Selected **variable definitions** are located in the appendix.

Selected quotes from business contacts are generally verbatim, but some are lightly edited to improve readability.

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Join Our Panel of Business Contacts

The anecdotal information in this report was provided by our panel of business contacts, who were surveyed between November 8 to November 16.

If you're interested in becoming a member of our panel, follow this link to complete a trial survey:

http://research.stlouisfed.org/outlooksurvey/

or email us at beigebook@stls.frb.org.

Views expressed do not necessarily reflect official positions of the Federal Reserve System.

Census of Employers Shows Lower Growth in Missouri and St. Louis

By Paul Morris, Research Associate

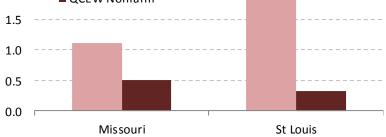
"We may start seeing labor shortages and wage increases."

—St. Louis area construction contact

QCEW data shows lower growth in Missouri and St. Louis *Year to date growth (January to June 2016), Percent (SA)*

2.5 CES Nonfarm

2.0 QCEW Nonfarm



Source: BLS and author's calculations.

- Labor market conditions across the zone were strong. Despite significant increases in Jefferson City, Columbia, and Cape Girardeau, the unemployment rates remained at healthy levels in each MSA.
- Current Employment Statistics (CES) survey data from the labor department estimates year to date growth through June of nearly 2 percent in St.
 Louis, but the more accurate Quarterly Census of Employment and Wages (QCEW) data, also from the labor department, reports growth of only 0.3 percent. This is a difference of over 20,000 jobs.
- While the CES reported strong job growth in the private service-providing sector in the second quarter, with higher growth relative to a year ago in every MSA but Jefferson City, QCEW data indicates only moderate growth throughout the zone. In contrast, QCEW data reports higher growth than the CES in the goods-producing sector in St. Louis, Springfield, and Jefferson City.
- Demand for labor is increasing in St. Louis, as the number of unemployed per advertised vacancy continued to fall in the third quarter to 1.5. This is only the second quarter it has been below the national average since 2012.
- Anecdotal evidence suggests a lack of skilled labor will continue to put upward pressure on wages.

 Nearly half of contacts reported that wages were higher or slightly higher in the fourth quarter than a year ago, and half expect wages to increase in the first quarter as well.

			Jefferson		Cape	
	St. Louis	Springfield	City	Columbia	Girardeau	US
Unemployment rate (Q3-16) (%)	4.8	4.2	4.3	3.5	5.2	4.9
Nonfarm employment (Q3-16)	1.9	2.1	0.9	2.3	-0.4	1.7
Goods-producing sector	-0.7	0.1	1.1	6.8	4.8	0.2
Private service-providing sector	3.0	2.7	1.9	3.7	1.8	2.2
Government sector	0.4	0.4	-0.6	-1.9	-19.1 ▼	0.7

Note: Unless otherwise noted, values are percent change from one year ago. Arrows indicate a significant (± 1 standard deviation) change from the previous quarter. See appendix for notes and sources.

Manufacturing Conditions Weak in St. Louis Zone

By Daniel Eubanks, Senior Research Associate

"Raw material prices have stayed lower for longer than expected."

- St. Louis area manufacturer

Manufacturing employment in St. Louis is nearly unchanged from five years ago



- Manufacturing employment decreased across the St. Louis zone in the third quarter. In the St. Louis MSA, manufacturing employment decreased at a year-over-year rate not seen since 2010 and has fallen back to the level of five years ago (see figure). In Missouri and the U.S. overall, manufacturing employment decreased slightly.
- Manufacturing exports from Missouri slowed sharply to just under 1 percent growth year over year. Exports of transportation equipment remained strong, but declining exports of industrial machinery and metal products pulled down the overall rate. Total manufacturing exports from the U.S. decreased for the seventh consecutive quarter.
- Employment decreased in both the durable and nondurable goods sectors, although the sharpest declines occurred in the durable goods sector. In the St. Louis MSA, job losses in the durable goods sector have accelerated for four consecutive quarters. Employment in the sector decreased by nearly 5 percent in the third quarter, compared with 3.7 percent last quarter and 2.9 percent two quarters ago.
 - In contrast, employment in the transportation sector increased across the zone. In the St. Louis MSA, transportation employment recovered from a slight year-over-year decrease last quarter to relatively strong growth this quarter. Transportation employment growth also ticked up in Missouri, despite a nationwide slowdown in the sector.

	St. Louis	Misso	uri	Illinoi	s	US
Transportation employment (Q3-16)	1.8	1.5		0.1		0.9
Manufacturing employment (Q3-16)	-3.1	-0.6		-2.0		-0.4
Durable goods	-4.9	-0.7		-3.1		-1.1
Nondurable goods	-0.4	-0.5		-0.5	•	0.8
Manufacturing exports (Q3-16)		0.9	•	-5.9		-3.7

Note: Values are percent change from one year ago. Arrows indicate a significant (± 1 standard deviation) change from the previous quarter; see appendix for notes and sources.

St. Louis Home Sales Remain Strong; Office Construction Increases

By Joseph McGillicuddy, Senior Research Associate

"Home inventory levels are at a record low."

-St. Louis real estate contact

"There have been a number of announcements for new office speculative construction in the St. Louis market."

—St. Louis real estate contact

St. Louis home sales through September are best since recession

Year-to-date sales

15,000

12,000

9,000

6,000

2009 2010 2011 2012 2013 2014 2015 2016

Source: St. Louis Association of Realtors.

- Home sales in St. Louis remained strong in the third quarter, growing slightly faster than the national average. Year-to-date home sales are at their highest levels since before the end of the past recession (see figure). However, a majority of survey respondents indicated sales fell short of expectations in the first half of the fourth quarter. Low levels of inventory remained an issue.
- Home prices accelerated slightly in all four major MSAs. While growth rates were below the national average, growth in St. Louis, Springfield, and Jefferson City was still relatively strong.
- Growth in single-family permits remained relatively weak in St. Louis and slowed in Springfield to a rate close to the national average. On the other hand, Columbia continued to see a robust increase in building permits.
- Industrial, multifamily, and retail property markets all tightened slightly in the third quarter, with rising asking rents and declining vacancy rates.
- Commercial construction activity has strengthened since the previous quarter. The amount of office construction under way in St. Louis was nearly five times that of a year ago. Multiple contacts reported several announcements for new speculative office construction in the St. Louis area.

Non-residential market (St. Louis, Q3-16)	Apartment	Office	Retail	Industrial
Vacancy rate (%)	4.1	16.4	11.6	6.4
Asking rent Percent change from one year ago	2.8	0.8	0.9	0.2

Note: Apartment, office, and retail values are from Reis.com. Industrial values are estimates from Cushman & Wakefield.

Residential market (Q3-16)	St. Louis	Springfield	Jefferson City	Columbia	US
CoreLogic Home Price Index	3.8	4.8	4.2	1.9	5.8
Single-family building permits	4.9	8.8		21.7	8.3
New and existing home sales	5.9				4.1

Note: Sales and permits data are year-to-date percent change. Prices are percent change from one year ago. Arrows indicate a significant (±1 standard deviation) change from the previous quarter. See appendix for notes and sources.

Zone Households Unwind Their Mortgage Debt; Auto Debt Decelerates

By Rodrigo Guerrero, Research Associate

"Continued fuel prices at record lows are a driver for truck/SUV sales."

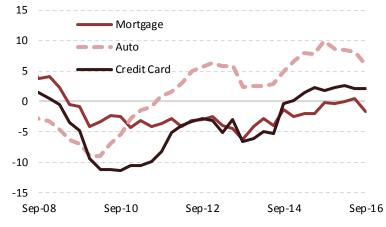
-Ballwin, Missouri, auto dealer

"The election slowed business, and we still haven't recovered."

—Bridgeton, Missouri, auto dealer

Zone mortgage debt declines and auto debt decelerates

Percent change in debt balances from one year ago



 $Source: FRBNY Consumer Credit\ Panel\ and\ Equifax.$

- Mortgage delinquency rates continued to decline for the seventh consecutive quarter and remained below the national rate. Households within the zone decreased their mortgage balances in the third quarter, and they did so at a faster rate than households in the U.S. as a whole (see table).
- Reports from general retailers and auto dealers indicated that sales halfway through the fourth quarter met expectations. Though still elevated and on par with the national rate, the zone's auto debt growth rate continued to decline for the fourth consecutive quarter (see figure).
- Growth of credit card balances remained largely unchanged and continued to be slightly higher than in the nation. The zone's credit card delinquency rate kept falling and is about 1 percentage point lower than the national rate.
- Year-over-year growth in real per capita income in Missouri and Illinois decelerated to 2.0 and 2.6 percent, respectively. Yet, both states continued to experience faster growth than the nation.
- Missouri's real taxable sales declined by 0.9% in the third quarter compared to a year earlier.
 Meanwhile, real retail and food services sales in the nation grew at 1.5% over the same period.

	St. Louis Zone	Missouri	Illinois	US
Per capita personal income (Q2-16)		2.0	2.6	1.4
Per capita debt balances (Q3-16)				
Mortgage	-1.7 ▼	-1.9	-2.0	-1.5 ▼
Credit card	2.0	2.1	2.6	1.7
Auto Ioan	6.2	6.6	6.1	6.2
90+ day delinquency rates (Q3-16) (%)				
Mortgage	1.1	0.9	1.8	1.4
Credit card	6.1	6.6	5.8	7.0
Auto Ioan	2.7	3.1	3.0	3.4

Note: Unless otherwise noted, values are percent change from one year ago. Arrows indicate a significant (±1 standard deviation) change from the previous quarter. See appendix for notes and sources.

Future releases of these data are available in The Quarterly Debt Monitor. See appendix for a link to the report.

Mortgage Lending Growth Continues into 4th Quarter, Expected To Wane in 2017

By Michelle Neely, Economist, and Evan Karson, Research Associate

"We have been surprised by the continued demand for multifamily housing. We believed that the market was approaching saturation."

St. Louis banker

ROA converges towards 1 percent in St. Louis Zone

Return on average assets at commercial banks, percent

1.6

1.2

0.8

0.4

0.0

Missouri

-0.4

So. Illinois

2010 2011 2012 2013

Source: FRED.

-0.8

- Banking contacts indicated that throughout the St. Louis zone, overall loan demand in the fourth quarter remained unchanged relative to last year. Half of surveyed bankers expect aggregate loan demand to strengthen in the first quarter of 2017 on a year-over-year basis.
- The demand for mortgages and credits cards, which has been robust throughout 2016, continued to expand in the fourth quarter, according to contacts. However, surveyed bankers anticipate demand in these two loan categories will taper off in the first quarter of 2017.
- Trends in profitability at banks in the zone were mixed in the third quarter. Return on average assets at Missouri banks increased 7 basis points from its year-ago level, while it declined by 4 basis points at southern Illinois banks.
- The ratio of nonperforming loans to total loans was unchanged between the second and third quarters at Missouri banks but increased 5 basis points at southern Illinois banks. Steady to slightly weakening asset quality led to slight declines in average coverage ratios at banks in the zone. Nevertheless, average coverage ratios at banks in Missouri and southern Illinois remain above 100 percent.

Banking performance (Q3-16)	Missouri	Illinois	So. Illinois	8th District	US Peer Banks
Return on average assets	1.06	0.87	1.00	1.12	1.09
Net interest margin	3.36	2.63	3.47	3.70	3.80
Nonperforming loans / total loans	0.71	1.04	1.09	0.94	1.01
Loan loss reserve coverage ratio	177.46	100.96	107.34	121.28	123.76

2015 2016

Note: Values are percentage points. Arrows indicate a significant (± 1 standard deviation) change from the previous quarter. See appendix for notes and sources.

Low Crop Prices Driving Down Agricultural Land Values

By Jonas C. Crews, Research Associate

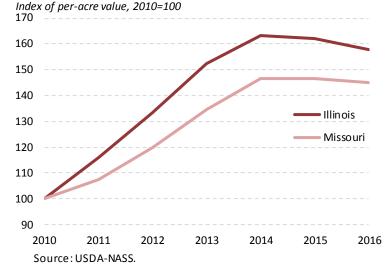
"The fear among agricultural lenders is that we are going to have record [production] this year. Demand is pretty stable, so the near-term crop price outlook is bleak."

-Missouri farmer

"The farmers that have kept a clean balance sheet are the ones that could buy up land, but how many of those will be left in a few years?"

-Missouri farmer

Zone agricultural land values beginning to fall



- Rain during the early harvest season dampened the expected increase in Missouri corn and cotton production reported in our previous report. Meanwhile, Illinois corn and soybeans and Missouri rice and soybeans are all estimated to have even larger increases over 2015 than previously expected (see table). The strong overall production estimates align with concerns that the 2016 U.S. crop supply will keep prices low into next year.
- With crop prices being consistently low over the past few years, Illinois and Missouri agricultural land values have fallen slightly (see figure). The average per-acre value in Illinois has fallen 3 percent from last year, while in Missouri there has been a 1 percent drop. Contacts believe there could be a much further decline if the crop price decline continues, as this could severely reduce the number of farmers with balance sheets strong enough to purchase land.
- While crop production has been strong, coal production has continued to decline. Illinois and Missouri both experienced larger year-over-year coal production declines than the nation (see table).

	Illinois	Missouri	US
Natural resources (Q3-16)			
Mining and logging employment	-3.2	-2.5	-14.9
Coal production	-15.4	-39.5 ▼	-13.8 ▲
Estimated production (2016)			
Corn	15.4	33.9	11.9
Cotton		50.0	25.4
Rice		28.6	22.1
Sorghum		-60.4	-22.6
Soybean	14.5	52.9	11.0

Note: Values are percent change from one year ago. Arrows indicate a significant (± 1 standard deviation) change from the previous quarter or year. See appendix for notes and sources.

Cover Page

Sources

Bureau of Labor Statistics

Unemployment rate, nonfarm payroll employment.

Labor Markets

Sources

Bureau of Labor Statistics

Unemployment rate, nonfarm employment, employment contributions by sector, average hourly earnings of private sector employees.

Notes

Goods-producing sector comprises the manufacturing and natural resources, mining, and construction sectors.

Private service-providing sector includes the following: Trade, Transportation, and Utilities industry, Information, Financial Activities, Professional and Business Services, Education and Health Services, Leisure and Hospitality, and Other Services.

Unemployment rate data are seasonally adjusted.

Average hourly earnings are in current dollars.

Manufacturing and Transportation

Table Sources

Bureau of Labor Statistics

Transportation employment: includes transportation and warehousing industries.

Manufacturing employment: total, durable, and nondurable goods.

World Institute for Strategic Economic Research

Manufacturing exports: dollar value.

Notes

Transportation employment in St. Louis covers transportation, warehousing, and utility industries. About 90 percent of the reported jobs are contributed by transportation and warehousing industries.

Manufacturing exports is defined as total dollar amount of exports by the manufacturing industries.

Durable goods manufacturing sector is defined by the Bureau of Labor Statistics as industries with a NAICS classification code of 321 (Wood Product Manufacturing); 327 (Nonmetallic Mineral Product Manufacturing); 331 (Primary Metal Manufacturing); 332 (Fabricated Metal Product Manufacturing); 333 (Machinery Manufacturing); 334 (Computer and Electronic Product Manufacturing); 335 (Electrical Equipment, Appliance, and Component Manufacturing); 336 (Transportation Equipment Manufacturing); 337 (Furniture and Related Product Manufacturing); and 339 (Misc. Manufacturing).

Nondurable goods manufacturing sector is defined by the Bureau of Labor Statistics as industries with a NAICS classification code of 311

(Food Manufacturing); 312 (Beverage and Tobacco Product Manufacturing); 313 (Textile Mills); 314 (Textile Product Mills); 315 (Apparel Manufacturing); 316 (Leather and Allied Product Manufacturing); 322 (Paper Manufacturing); 323 (Printing and Related Support Activities); 324 (Petroleum and Coal Products Manufacturing); 325 (Chemical Manufacturing); and 326 (Plastics and Rubber Products Manufacturing).

Real Estate and Construction

Table Sources

CoreLogic

Home price index, including distressed sales.

Census Bureau

Year-to-date single-family building permits.

Bureau of Economic Analysis

Year-to-date new and existing home sales, US.

St. Louis Association of Realtors

Year-to-date new and existing home sales, St. Louis.

Notes

Asking rent is the publicized asking rent price. Data are in current dollars.

Vacancy rate is the percentage of total inventory physically vacant as of the survey date, including direct vacant and sublease space.

New and existing home sales consist of single-family home sales.

Household Sector

Table Sources

Equifax based on authors' calculations

All figures are based on a 5 percent sample of individual credit reports. Balances are geographical averages of various debt categories. The mortgage category includes first mortgages and home equity installment loans, but home equity lines of credit are omitted. Auto loans include those financed by finance companies or bank loans. Credit cards are revolving accounts at banks, bankcard companies, national credit card companies, credit unions, and savings and loan associations.

See The Quarterly Debt Monitor for future releases

https://www.stlouisfed.org/publications/quarterly-debt-monitor

Haver Analytics

Per capita income.

<u>Notes</u>

Delinquency rates are calculated as the percentage of payments past due by more than 90 days, weighted by the dollar value of the loan.

Missouri taxable sales data are obtained from the Missouri Department of Revenue.

Banking and Finance

Table Sources

Federal Financial Institutions Examination Council

Return on average assets: USL15ROA. Net interest margin: USL15NIM. Nonperforming loans: USL15NPTL. Loan loss reserve/ Total loans: USL15LLRTL. Net loan losses/Average total loans: USL15LSTL.

Note: The data available in the table can be found in the Federal Reserve Bank of St. Louis Economic Database FRED®.

Notes

Loan loss provisions are expenses banks set aside as an allowance for bad loans.

Nonperforming loans are those loans managers classify as 90 days or more past due or nonaccrual, which means they are more likely to default.

Loan loss coverage ratio is loan loss reserves divided by non-performing loans.

So. Illinois refers to the portion of Illinois within the Eighth District.

US peer banks are those commercial banks with assets of less than \$15 billion.

Due to the seasonal nature of bank return on average assets and net interest margin, the **arrows** in the table denote significant changes from one year ago.

Agriculture and Natural Resources

Sources

Energy Information Administration (EIA)

Coal production. Note: Production trends identified in report may be inconsistent with previous reports due to data revisions.

Bureau of Labor Statistics (BLS)

Mining and logging employment.

United States Department of Agriculture (USDA)

Production and land value estimates.