

# TULSA

## EMPLOYMENT GROWTH RANK

2010-2012

**78**

1st quintile

2010-2015

**163**

3rd quintile

Best=1, Worst=392

## VITALITY

RELATIVE

**97%**

U.S.=100%

RANK

**198**

Best=1 Worst=384

## RELATIVE COSTS

LIVING

**93%**

U.S.=100%

BUSINESS

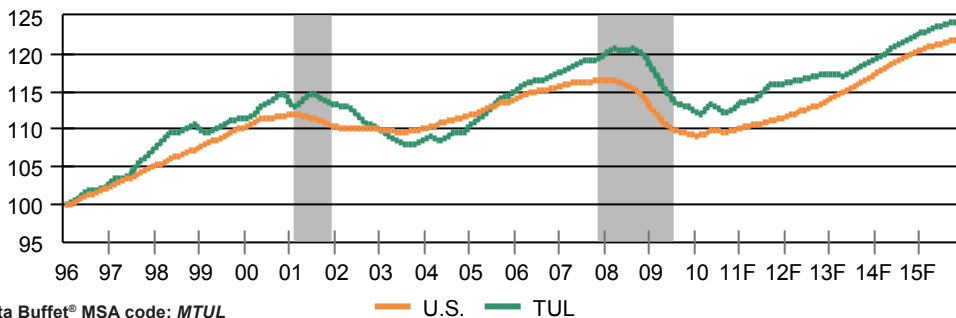
**85%**

## LIFE CYCLE PHASE

Growth/Mature

Data Buffet® MSA code: MTUL

## RELATIVE EMPLOYMENT PERFORMANCE (1996=100)



2004	2005	2006	2007	2008	2009	2010	INDICATORS	2011	2012	2013	2014	2015
31.8	32.4	34.6	35.7	37.1	35.6	35.7	<b>Gross metro product (C\$B)</b>	36.5	37.5	38.5	39.3	39.8
2.7	1.9	6.9	3.0	3.8	-3.9	0.3	% change	2.3	2.8	2.6	2.0	1.3
393.0	406.3	419.2	427.5	433.1	413.0	405.5	<b>Total employment (000)</b>	413.3	420.4	424.2	435.9	445.4
0.5	3.4	3.2	2.0	1.3	-4.7	-1.8	% change	1.9	1.7	0.9	2.7	2.2
5.1	4.4	4.0	3.9	3.7	7.1	7.9	<b>Unemployment rate</b>	6.1	5.5	6.3	6.1	5.8
7.8	7.4	11.9	4.0	7.9	-2.7	2.3	<b>Personal income growth</b>	7.7	5.7	4.6	6.0	4.9
877.6	882.0	892.9	905.6	915.8	929.2	939.4	<b>Population (000)</b>	947.9	956.9	966.7	975.5	983.5
4,432	5,058	4,830	4,449	2,868	2,680	2,269	<b>Single-family permits</b>	2,263	3,581	4,971	5,801	5,629
254	650	351	761	1,120	660	347	<b>Multifamily permits</b>	328	469	439	426	394
113.1	119.9	128.7	128.3	131.4	130.1	131.6	<b>Existing-home price (\$ths)</b>	126.0	125.7	127.7	135.1	141.5
3,935	4,286	4,271	4,282	3,390	4,174	3,368	<b>Mortgage originations (\$mil)</b>	2,866	2,627	2,815	3,062	3,410
-4.0	0.5	6.5	7.2	5.1	8.1	4.9	<b>Net migration (000)</b>	3.3	3.9	4.8	3.8	3.3
6,929	10,165	1,888	2,409	2,805	3,651	3,951	<b>Personal bankruptcies</b>	4,300	4,551	5,243	5,438	5,056

## STRENGTHS & WEAKNESSES

### STRENGTHS

- Below-average business costs.
- Good transportation links.
- High per capita income.
- High standard of living; better than average quality of life.
- Strengthening demographics.

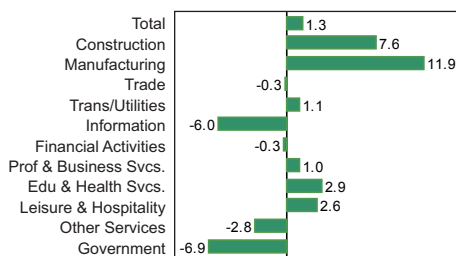
### WEAKNESSES

- Elevated number of foreclosures.
- High employment volatility increases peaks and troughs.
- Short workweek.

## CURRENT EMPLOYMENT TRENDS

JUNE 2011

% change yr ago, 3-mo MA



## FORECAST RISKS

SHORT TERM ▲ LONG TERM ▲ RISK-ADJUSTED RETURN, '10-15 **-0.04%**

### UPSIDE

- Energy and agriculture provide bigger boost.
- Exports have a bigger positive impact.
- Manufacturing hiring sustains fast pace.
- Population grows faster than expected.

### DOWNSIDE

- Foreclosure problem delays housing recovery.
- Smaller base of management jobs leads to fewer corporate relocations and expansions.

## ANALYSIS

**Recent Performance.** Tulsa's recovery is gaining momentum, despite several obstacles. High-wage manufacturing jobs are returning at a startling rate, offsetting more tempered hiring in services. Government layoffs have been a drag on employment at the federal and state levels, but the worst is likely over. Still, TUL is not in full recovery mode; sharp labor force declines and dull household employment data suggest that labor market fundamentals are weaker than they appear in the payroll data.

House prices navigated the U.S. bubble and bust with relative stability, but foreclosures have been more prevalent than in other areas of Oklahoma. On the upside, distress sales have erupted, paving the way for a swifter price rebound once foreclosure properties clear the market.

**Manufacturing.** Keynote manufacturing presence will bolster the economic recovery, despite playing a diminishing role over the long run. Payrolls are growing at nine times the national rate, and hiring is accelerating despite the soft patch weighing on U.S. manufacturers. The most recent Kansas City Fed manufacturing survey indicates that regional factory outputs and orders took a step back in July, but reflects a brighter outlook for the rest of 2011. TUL's relative isolation from typical headwinds owes to its industrial composition, heavily skewed toward machinery and fabricated metals. The statewide energy boom ensures demand for these products, and comparative advantages in labor quality and business costs make TUL an attractive location for factories. For example, Word Industries Fabrication recently announced a new facility in TUL that will produce metering and pipeline systems for oil and gas companies. Although the energy surge will calm over the next few years, steady global economic recovery will sustain export levels and hence the industry viability.

**Aerospace.** TUL's established foothold in aerospace transportation provides upside long-term growth po-

tential. The metro area is home to more than 70 aerospace companies, including SpiritAerosystems and American Airlines' central maintenance and repair center, TUL's largest private sector employer. American Airlines recently invested in a fleet of Boeing 787 Dreamliners, which will ultimately replace the older fleet, but their adoption is to be phased in and unlikely to boost payrolls at the TUL maintenance center. Still, major investments such as these are good sign for aerospace. Cost advantages should also attract government contracts in the wake of fiscal cuts. Boeing has cited Pentagon cuts as its reason to relocate hundreds of workers to neighboring Oklahoma City, and TUL's aerospace companies should benefit from having the aircraft giant in proximity.

**Services.** The biggest risk to TUL's recovery is weak job growth outside of manufacturing. While government employees make up a much smaller proportion of total jobs than in Oklahoma, state level payrolls have been slashed by 14% on a year-ago basis, compared with a 0.5% decline in the state capital. With government jobs not expected to rebound soon, displaced workers may have a difficult time finding employment because of the soft services recovery. Finance is one area that may fill the void. Oklahoma consumers are in better financial shape and regional banks did not suffer severe profit losses during the recession.

**Tulsa is expected to outperform the nation in the second half of 2011, driven by expansion in goods production. Housing is primed to recover more swiftly once prices bottom later this year. TUL's competitive advantages in business costs and quality of life will attract firms and workers. Good demographics will drive the economy in the long run, ensuring it performs on par with the state and nation.**

James Bohmaker  
July 2011

## EMPLOYMENT & INDUSTRY

### TOP EMPLOYERS

American Airlines	6,850
AT&T	>1,000
Bank of Oklahoma	>1,000
Blue Cross & Blue Shield	>1,000
Cherokee Casino Resort	>1,000
DirectTV	>1,000
Hillcrest Healthcare System	>1,000
Nordam Group	>1,000
Oklahoma State Univ. Medical Center	>1,000
Saint Francis Health System	>1,000
Reasor's Foods	>1,000
Spirit Aerosystems, Inc.	>1,000
St. John Medical Center	>1,000
State Farm Insurance Company	>1,000
Tulsa Community College	>1,000
University of Tulsa	>1,000
Verizon Communications	>1,000
Wal-Mart Stores, Inc.	>1,000
Whirlpool Corporation	>1,000
Williams Companies, Inc.	>1,000

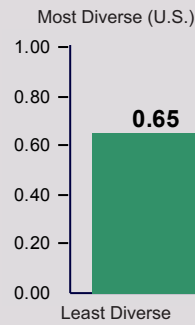
Source: Tulsa Metro Chamber of Commerce, 2011

### PUBLIC

Federal	5,118
State	8,411
Local	41,849

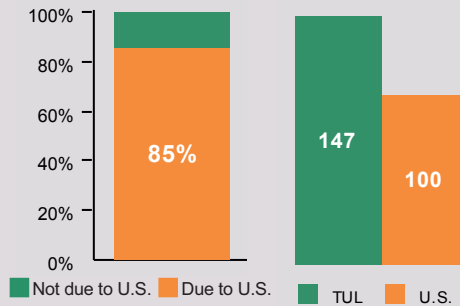
2010

### INDUSTRIAL DIVERSITY



### EMPLOYMENT VOLATILITY

Due to U.S. fluctuations      Relative to U.S.



## MIGRATION FLOWS

### INTO TULSA, OK

### NUMBER OF MIGRANTS

Oklahoma City, OK	2,251
Dallas, TX	694
Houston, TX	588
Fayetteville, AR	486
Fort Worth, TX	386
Los Angeles, CA	337
Fort Smith, AR	326
Phoenix, AZ	305
Kansas City, MO	249
Riverside, CA	207
<b>Total In-migration</b>	<b>30,779</b>

### FROM TULSA, OK

Oklahoma City, OK	2,315
Houston, TX	995
Dallas, TX	977
Fort Worth, TX	593
Little Rock, AR	414
Fayetteville, AR	369
Kansas City, MO	332
Phoenix, AZ	270
Denver, CO	268
Los Angeles, CA	218
<b>Total Out-migration</b>	<b>27,125</b>

### Net Migration

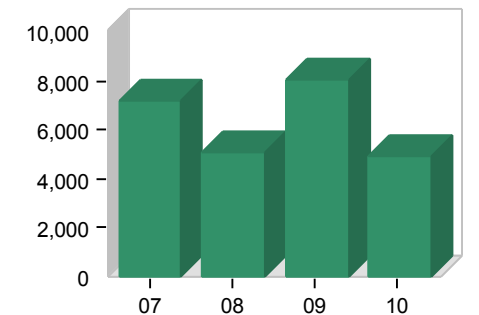
**3,654**

## COMPARATIVE EMPLOYMENT AND INCOME

Sector	% of Total Employment			Average Annual Earnings		
	TUL	OK	U.S.	TUL	OK	U.S.
Mining	1.7%	2.8%	0.5%	\$92,537	\$72,486	\$91,842
Construction	4.8%	4.4%	4.3%	\$43,381	\$36,169	\$50,268
Manufacturing	10.7%	8.1%	8.9%	\$91,310	\$78,436	\$72,640
Durable	80.8%	66.5%	61.3%	nd	\$58,551	\$73,745
Nondurable	19.2%	33.5%	38.7%	nd	\$117,572	\$70,876
Transportation/Utilities	5.1%	3.5%	3.6%	\$89,857	\$73,167	\$60,284
Wholesale Trade	3.8%	3.6%	4.2%	\$73,530	\$59,932	\$72,785
Retail Trade	11.1%	11.0%	11.1%	\$28,715	\$27,363	\$29,664
Information	2.1%	1.6%	2.1%	\$73,034	\$60,293	\$89,270
Financial Activities	5.7%	5.2%	5.9%	\$31,246	\$29,789	\$44,809
Prof. and Bus. Services	13.6%	11.1%	12.8%	\$48,963	\$42,046	\$59,659
Educ. and Health Services	14.7%	13.3%	15.1%	\$48,195	\$42,999	\$49,003
Leisure and Hosp. Services	9.0%	9.1%	10.0%	\$17,726	\$17,703	\$22,683
Other Services	4.2%	4.0%	4.1%	\$29,593	\$27,986	\$32,385
Government	13.7%	22.3%	17.3%	\$51,295	\$56,590	\$65,178

Sources: Percent of total employment — Moody's Analytics & BLS, 2010; Average annual earnings — BEA, 2009

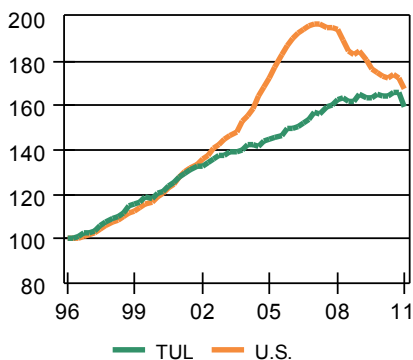
### Net Migration, TUL



	2007	2008	2009	2010
Domestic	5,550	3,448	6,641	3,680
Foreign	1,664	1,648	1,433	1,243
<b>Total</b>	<b>7,214</b>	<b>5,096</b>	<b>8,074</b>	<b>4,923</b>

Sources: IRS (top), 2008; Census Bureau, 2010

## HOUSE PRICES



Source: FHFA, 1996Q1=100, NSA

## LEADING INDUSTRIES

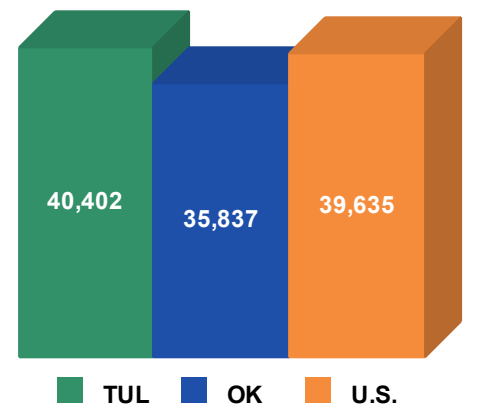
### NAICS INDUSTRY      EMPLOYEES (000)

<b>GVSL</b> State & Local Government	50.3
<b>6221</b> General Medical and Surgical Hospitals	18.1
<b>7221</b> Full-Service Restaurants	14.3
<b>7222</b> Limited-Service Eating Places	13.3
<b>5613</b> Employment Services	12.2
<b>FR</b> Farms	9.9
<b>5614</b> Business Support Services	7.6
<b>6211</b> Offices of Physicians	7.4
<b>5221</b> Depository Credit Intermediation	7.3
<b>4529</b> Other General Merchandise Stores	7.0
<b>4811</b> Scheduled Air Transportation	6.6
<b>5511</b> Management of Companies and Enterprises	6.0
<b>2382</b> Building Equipment Contractors	6.0
<b>GVF</b> Federal Government	5.1
<b>4451</b> Grocery Stores	5.0

High-tech employment	11.1
As % of total employment	2.6

Sources: BLS, Moody's Analytics, 2010

## PER CAPITA INCOME



Source: Bureau of Economic Analysis, 2009

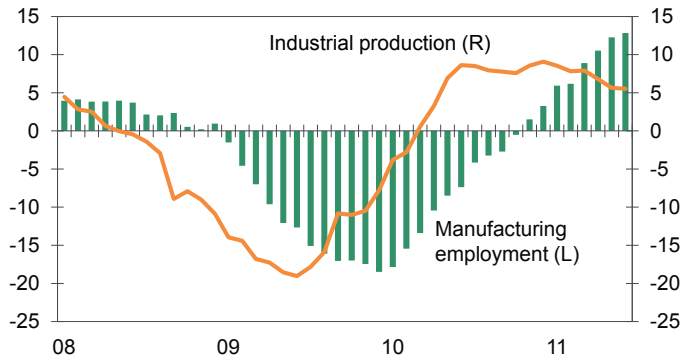
### MOODY'S RATING

**Aa1**

CITY  
DEC 17, 2010

## Manufacturing Payrolls Are Booming...

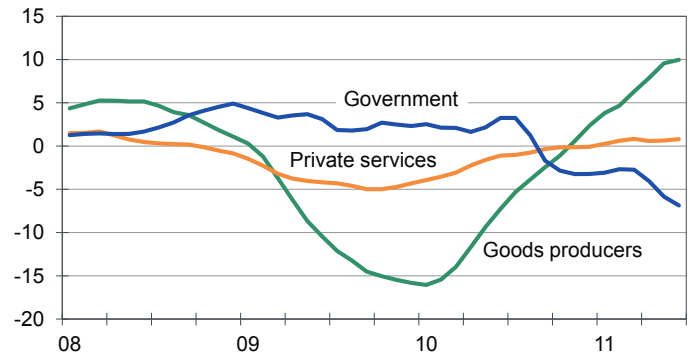
% change yr ago



Sources: BLS, Moody's Analytics

## ...But Moderate Service Gains Are a Concern

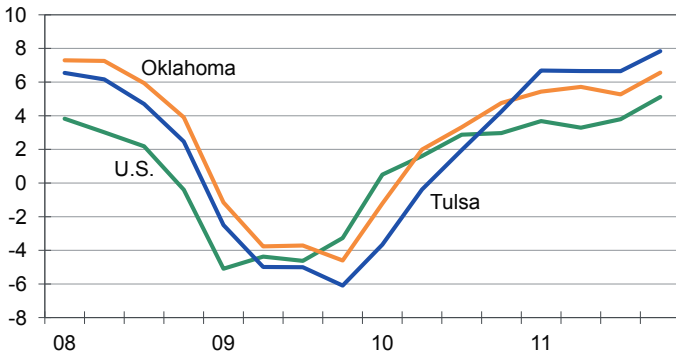
Employment, % change yr ago, 3-mo MA



Source: BLS

## Earnings Growth Coming On Strong

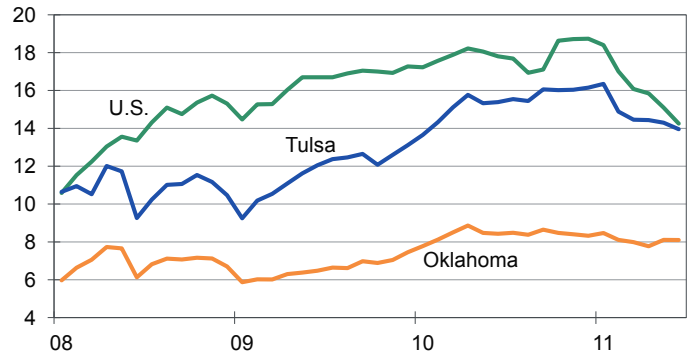
Wage and salary income, % change yr ago



Sources: BEA, Moody's Analytics

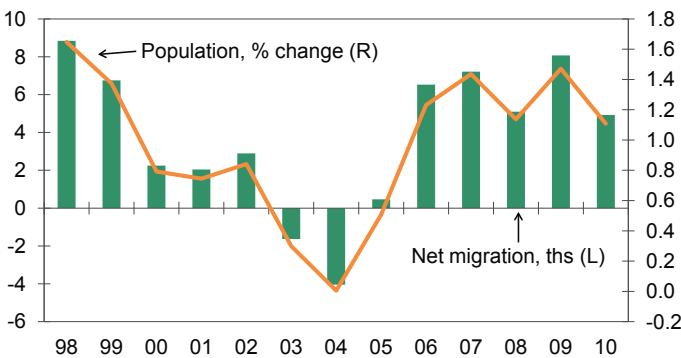
## Foreclosures Remain an Obstacle

Foreclosure inventory per 1,000 households



Sources: RealtyTrac, Moody's Analytics

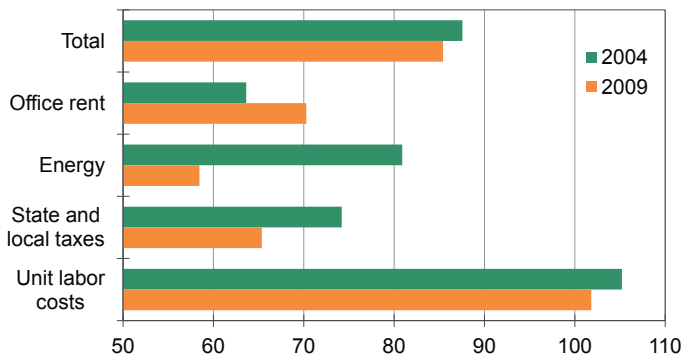
## In-Migration Feeds Strong Demographics



Sources: Census Bureau, Moody's Analytics

## Low Costs Will Attract New Business

Cost of doing business, U.S.=100



Source: Moody's Analytics

# About Moody's Analytics

## Economic & Consumer Credit Analytics

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Moody's Analytics tracks and analyzes trends in consumer credit and spending, output and income, mortgage activity, population, central bank behavior, and prices. Our customized models, concise and timely reports, and one of the largest assembled financial, economic and demographic databases support firms and policymakers in strategic planning, product and sales forecasting, credit risk and sensitivity management, and investment research. Our customers include multinational corporations, governments at all levels, central banks and financial regulators, retailers, mutual funds, financial institutions, utilities, residential and commercial real estate firms, insurance companies, and professional investors.

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