

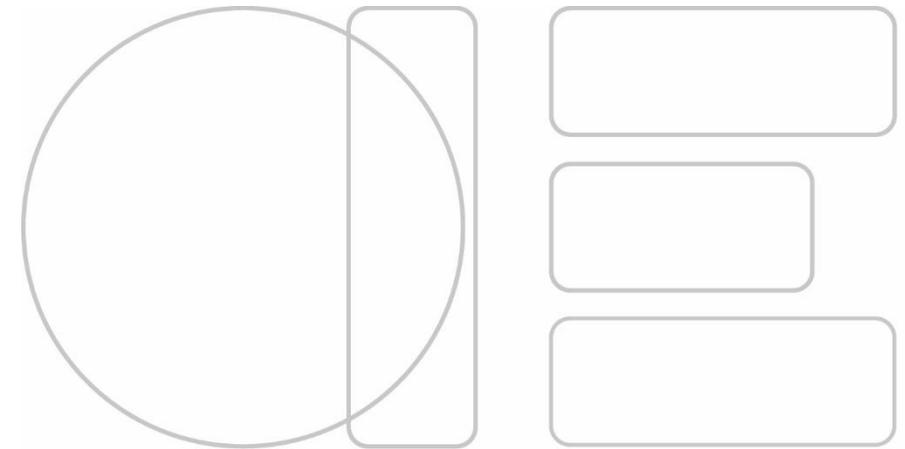


# Austin's Evolving Economy



**THE BEST WAY TO PREDICT  
THE FUTURE ....**

**IS TO CREATE IT!**



angelou**economics**



# Program

- U.S., Texas, & Austin Economies
- Austin's Economic Drivers
- Growth Challenges to Overcome
- Austin Tomorrow
- Impact on Mobility
- Innovative PPP



# U.S. At-A-Glance

	U.S.	Growth
Population Net Gain	2,213,000	0.7%
Employment Net Gain	2,323,000	1.7%
Retail Sales Net Gain	\$170.2 Billion	3.8%
Venture Capital	\$41.7 Billion	47.4%
Net Business Formation, 2012	78,000	4.2%
Median Household Income, 2013	\$52,000	0.3%
Housing Starts	1.0 Million	-7.0%



# Texas At-A-Glance

	Texas	Growth
Population Net Gain	397,000	1.5%
Employment Net Gain	344,000	3.1%
Retail Sales Net Gain	\$29.1 Billion	6.7%
Venture Capital	\$1.3 Billion	12.0%
Net Business Formation, 2012	12,400	3.8%
Median Household Income, 2013	\$51,700	0.4%
Housing Starts	97,000	0.6%



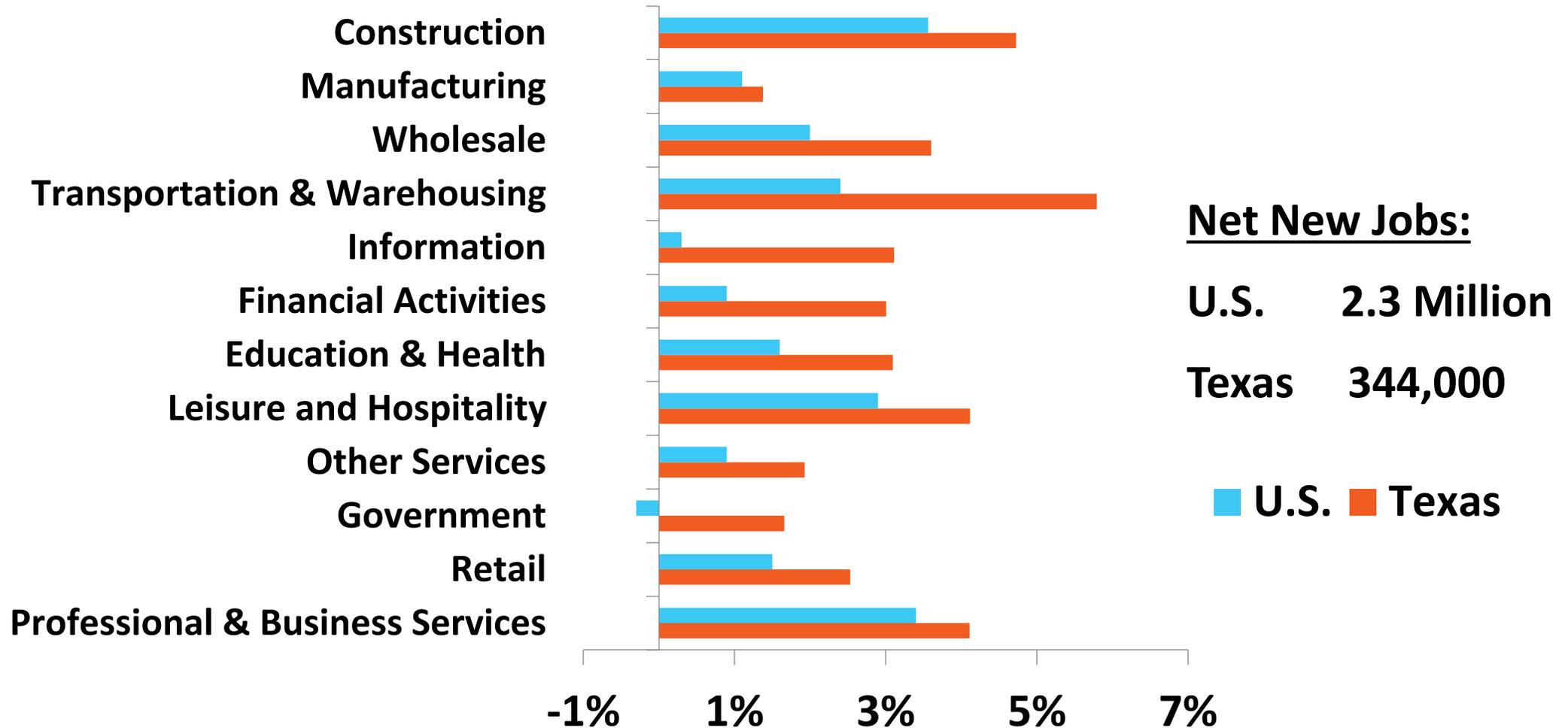
# Austin At-A-Glance

	<b>Austin</b>	<b>Growth</b>
<b>Population Net Gain</b>	<b>66,000</b>	<b>3.5%</b>
<b>Employment Net Gain</b>	<b>39,100</b>	<b>4.5%</b>
<b>Retail Sales Net Gain</b>	<b>\$2.1 Billion</b>	<b>6.7%</b>
<b>Venture Capital</b>	<b>\$557 Million</b>	<b>22.6%</b>
<b>Net Business Formation, 2012</b>	<b>1,800</b>	<b>4.3%</b>
<b>Median Household Income, 2013</b>	<b>\$61,800</b>	<b>2.4%</b>
<b>Housing Starts</b>	<b>11,200</b>	<b>17.9%</b>



# New Jobs Growth by Sector

## Texas and U.S. 2013-2014





# Employment Growth by Sector

## 1990 – 2013 Employment Growth by Sector

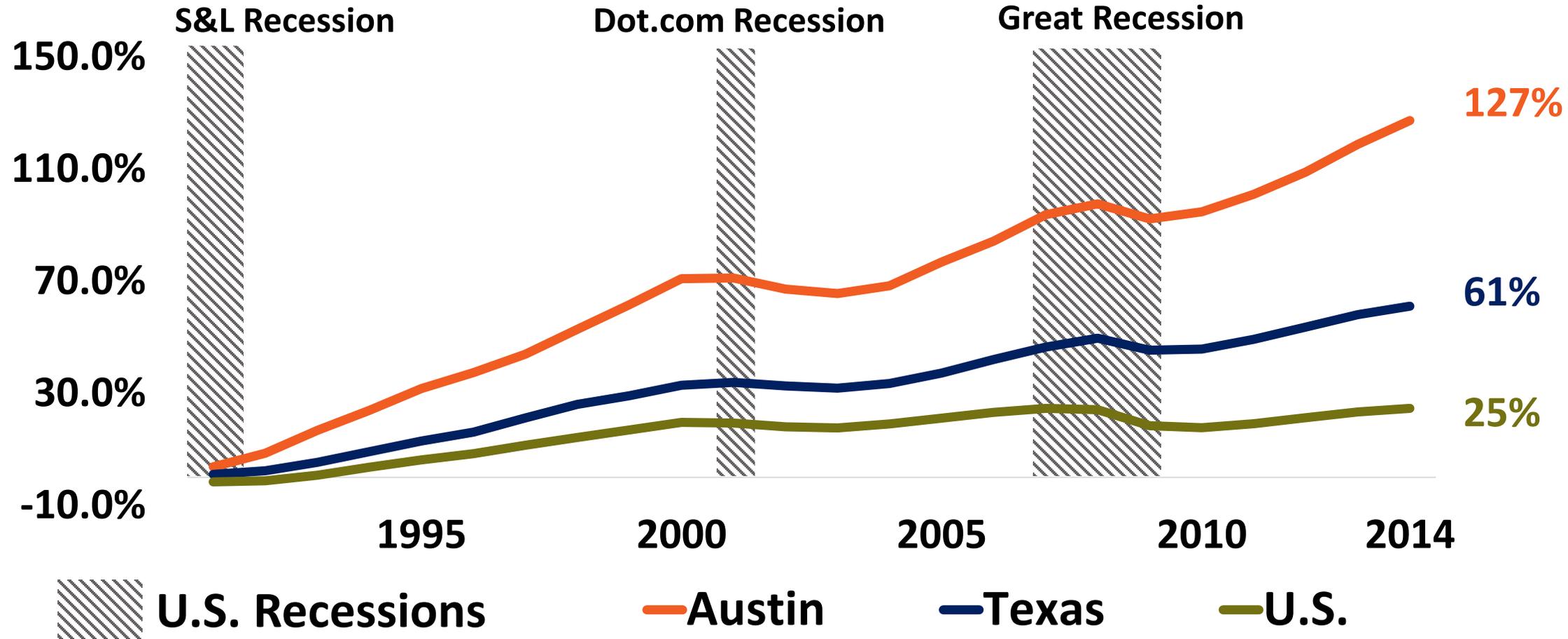
Sectors	Austin	Texas	U.S.
Construction	234%	67.5%	11.3%
Manufacturing	11%	-9.9%	-32.8%
Wholesale Trade	253%	50.8%	10.8%
Retail Trade	110%	34.6%	12.3%
Information	124%	14.3%	-1.9%
Finance and Insurance	91%	53.7%	10.8%
Real Estate	132%	42.0%	13.7%
Business Services	257%	126.8%	64.8%
Educational Services	182%	70.1%	42.8%
Health Care	184%	114.2%	76.3%
Arts and Entertainment	78%	22.1%	39.9%
Travel and Food Services	191%	105.9%	54.2%
Public Administration	31%	36.2%	13.5%

Source: Bureau of Labor Statistics



# New Jobs Momentum

## Employment Growth





# Program

- **Austin's Economic Drivers**



# Austin's Economic Drivers

## Austin 30 Years Ago

Population Growth

Government

High Tech: Emerging

Education

## Austin Today

Population Growth

Technology & Entrepreneurship

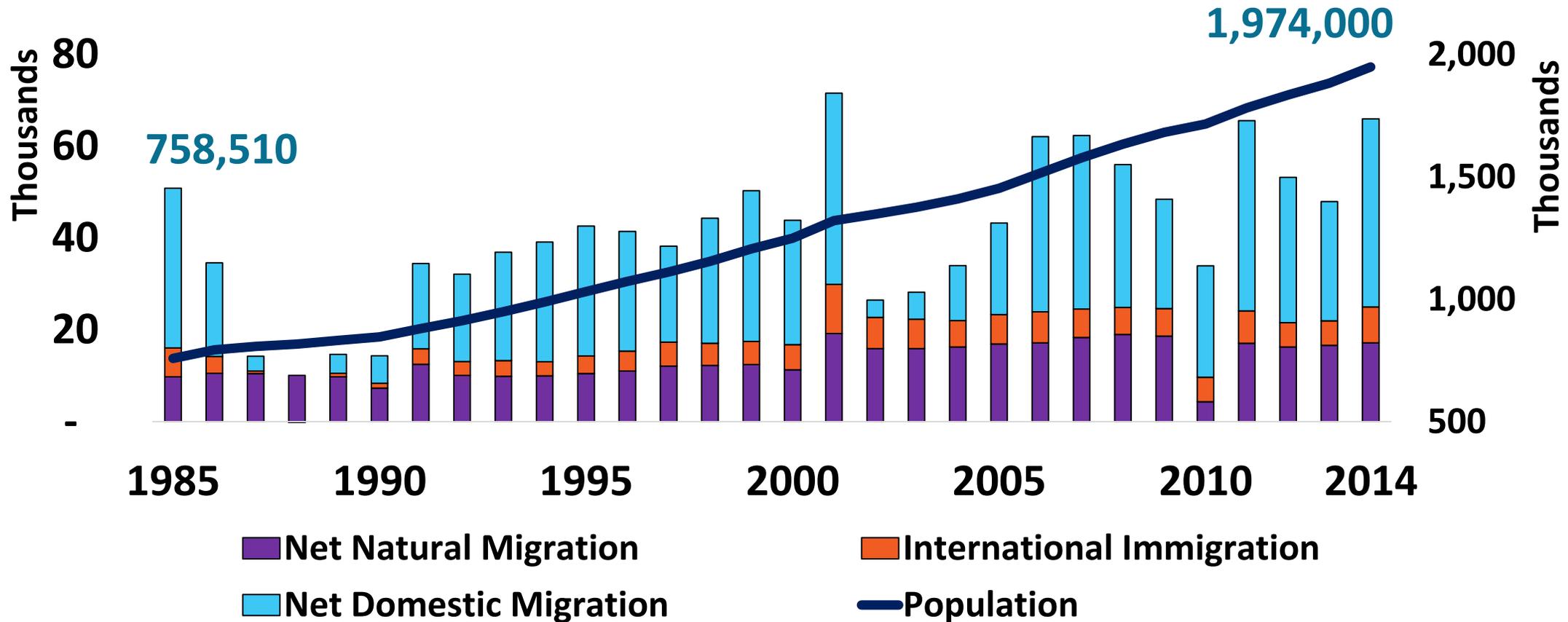
Education & Healthcare

The Festival Economy



# Austin's Rapid Population Growth

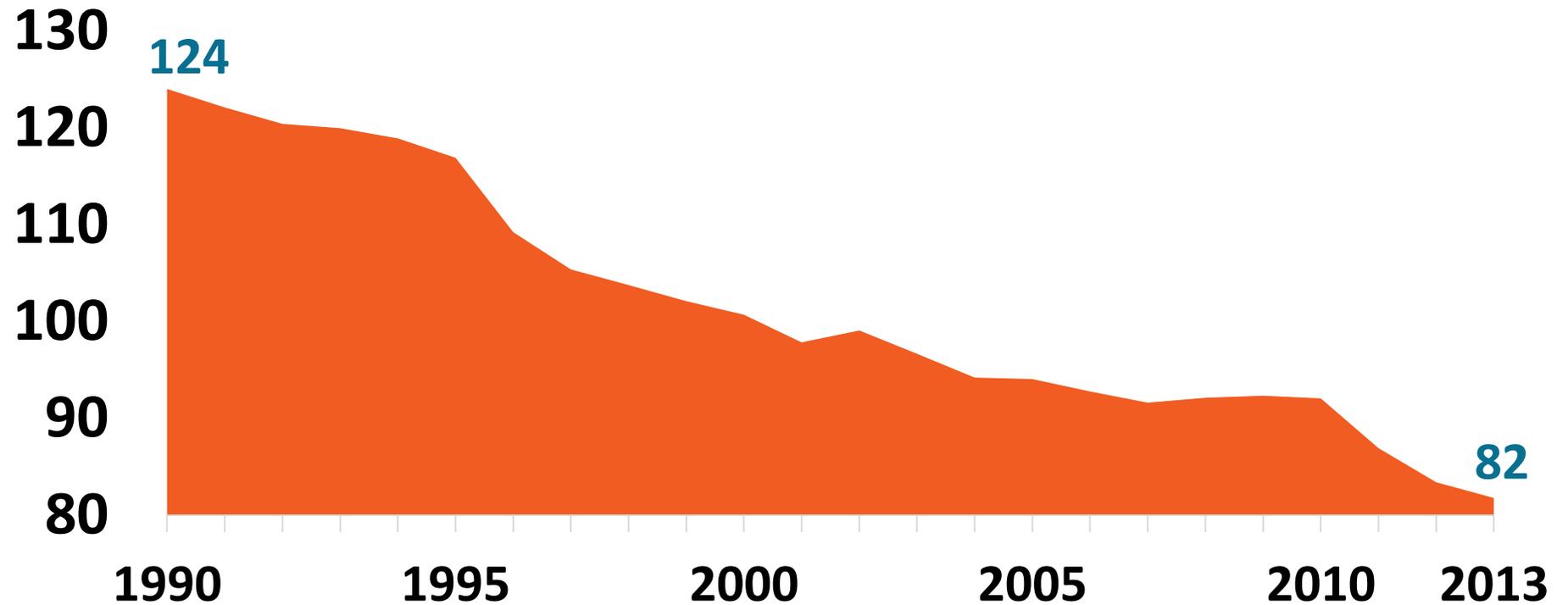
## Population Change by Year 1985 - 2013





# Declining Dependence on Government

## Gov. Employment per 1,000 Citizens, Austin MSA



Year	Gov. as a % of Total Employment
1990	27%
1995	24%
2000	19%
2005	20%
2010	21%



# Austin's Technology & Entrepreneurship

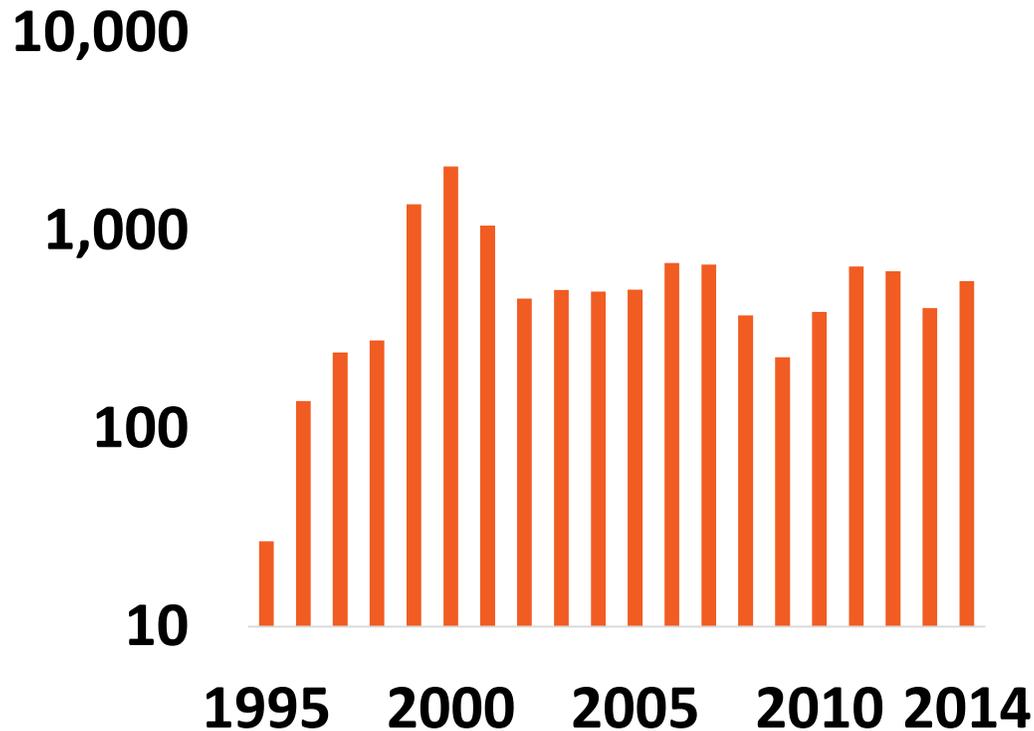
	High Tech in 1990	High Tech Today	Growth
<b>High Tech Manufacturing</b>			
Employment	• 27,600	• 28,000	• 2%
Wages	• \$37,500	• \$119,700	• 219%
<b>High Tech Supply Chain</b>			
Employment	• 4,300	• 21,900	• 406%
Wages	• \$46,200	• \$91,300	• 98%
<b>High Tech Info and IT</b>			
Employment	• 5,800	• 16,300	• 179%
Wages	• \$33,800	• \$66,400	• 97%
<b>Professional Business Services</b>			
Employment	• 15,500	• 55,500	• 257%
Wages	• \$33,300	• \$85,500	• 156%
<b>Total High Tech</b>			
Employment	• 53,300	• 121,700	• 128%
Wages	• \$36,600	• \$91,100	• 151%



# Austin's Technology & Entrepreneurship

## Venture Capital

Millions of Dollars 1995 - 2014



- Austin startups have received over **\$12 billion** in venture capital funding from 1995 to 2014

## Tech. Companies of the '80s & '90s



## Tech. Companies Today



HomeAway®



# Austin Based Public Companies

	2013 Revenue	Growth
Whole Foods Market Inc.	\$12,920	10%
Freescale Semiconductor Inc.	\$4,190	6%
National Instruments Corp.	\$1,170	3%
Hanger Inc.	\$1,050	8%
EZCORP Inc.	\$1,010	2%
All Other (20)	\$6,416	28%
Total	\$26,756	12%



# The Austin Festival Economy

1970 1980 1990 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014



- Began in: 1987
- 2014 Attendance: 376,600
- 2014 Economic Impact: \$315.8M



- Began in: 2002
- 2013 Attendance: 75,000 a day
- 2013 Economic Impact: \$182M



- Began in: 2006
- 2012 Attendance: 55,000
- 2012 Economic Impact: \$27M



- Began in: 2012
- 2012 Attendance: 1.1 million
- 2014 Economic Impact: \$847M

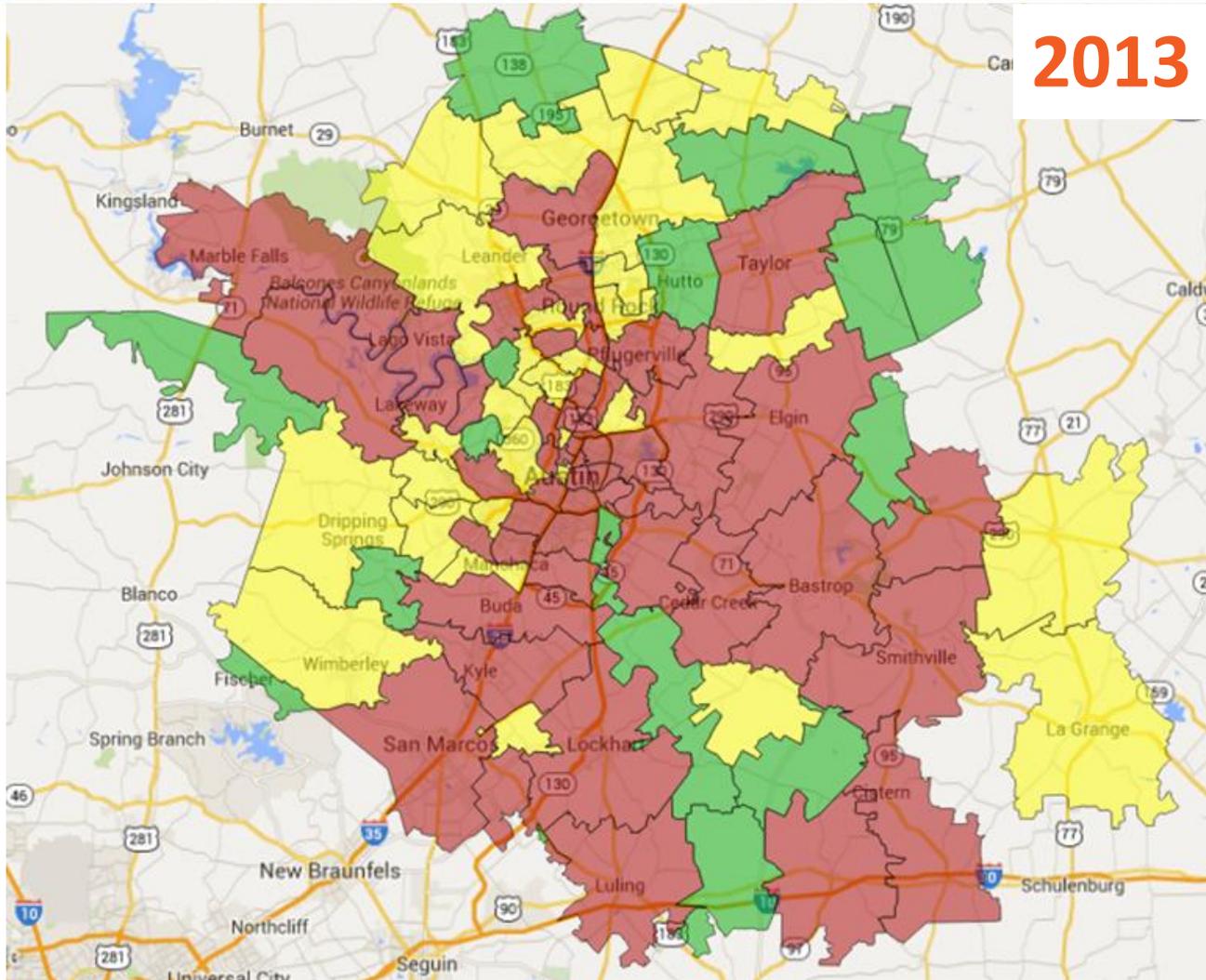


# Program

- **Growth Challenges to Overcome**



# Rent Affordability Challenges



Households Paying Rent > 35% of Income		
	2013	2000
Raleigh MSA	38.1%	29.9%
Charlotte MSA	38.1%	25.5%
Boston MSA	39.7%	28.3%
Seattle MSA	40.2%	29.8%
San Jose MSA	40.6%	31.0%
Denver MSA	41.0%	30.5%
<b>Austin MSA</b>	<b>41.3%</b>	<b>32.2%</b>
Atlanta MSA	42.6%	28.5%
New York MSA	45.4%	32.5%

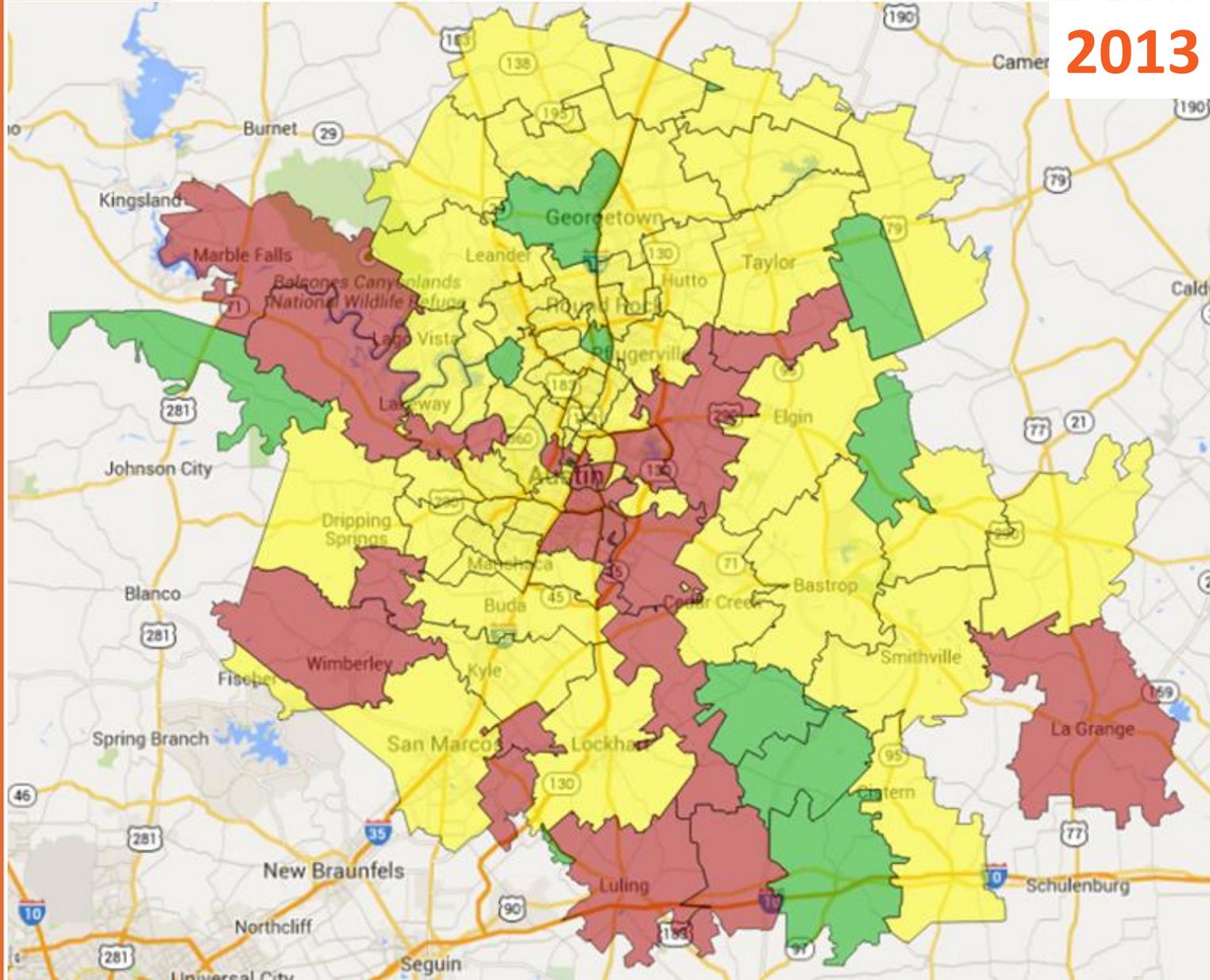


Source: US Census



# Mortgage Affordability Challenges

2013



## Mortgage Expenses > 35% of Income

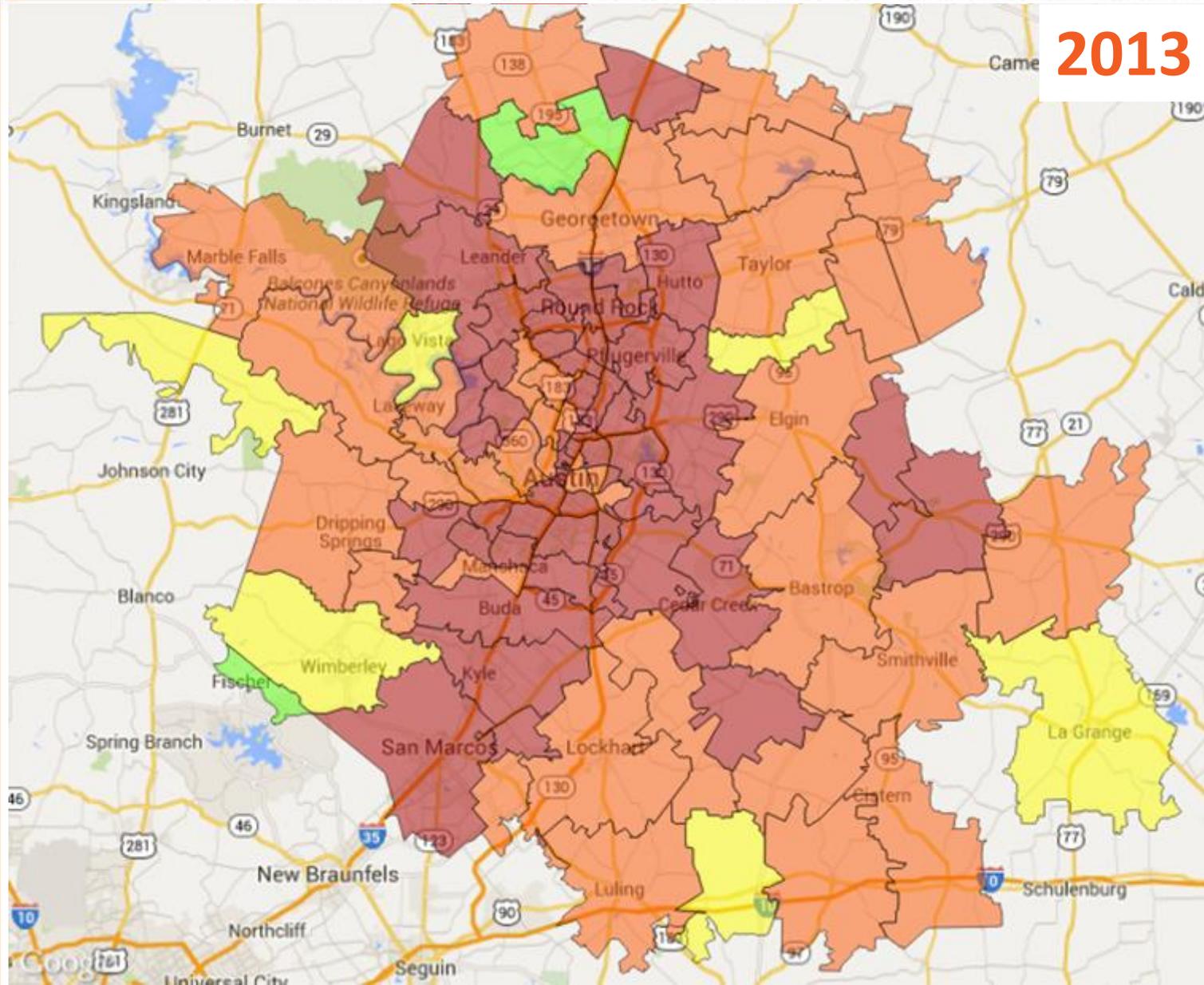
	2013	2000
Raleigh MSA	18.0%	14.4%
Charlotte MSA	20.1%	14.7%
Austin MSA	20.9%	13.7%
Denver MSA	21.9%	16.6%
Atlanta MSA	23.0%	15.4%
Boston MSA	24.9%	16.2%
Seattle MSA	26.0%	19.0%
San Jose MSA	28.6%	22.2%
New York MSA	35.5%	22.3%

Source: US Census

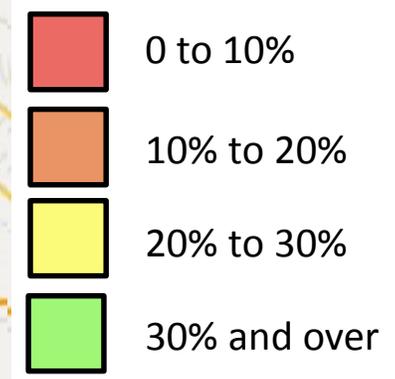
-  0 to 15%
-  15% to 30%
-  30% or more



# Healthcare – > 65



Percent of Population over 65 years of age		
	2013	2000
Boston MSA	14.0%	12.6%
New York MSA	13.9%	12.7%
Seattle MSA	12.0%	10.3%
San Jose	12.0%	11.1%
Charlotte MSA	12.0%	10.2%
Denver MSA	11.2%	8.8%
Atlanta MSA	10.3%	7.5%
Raleigh MSA	10.2%	8.7%
Austin MSA	9.2%	7.3%

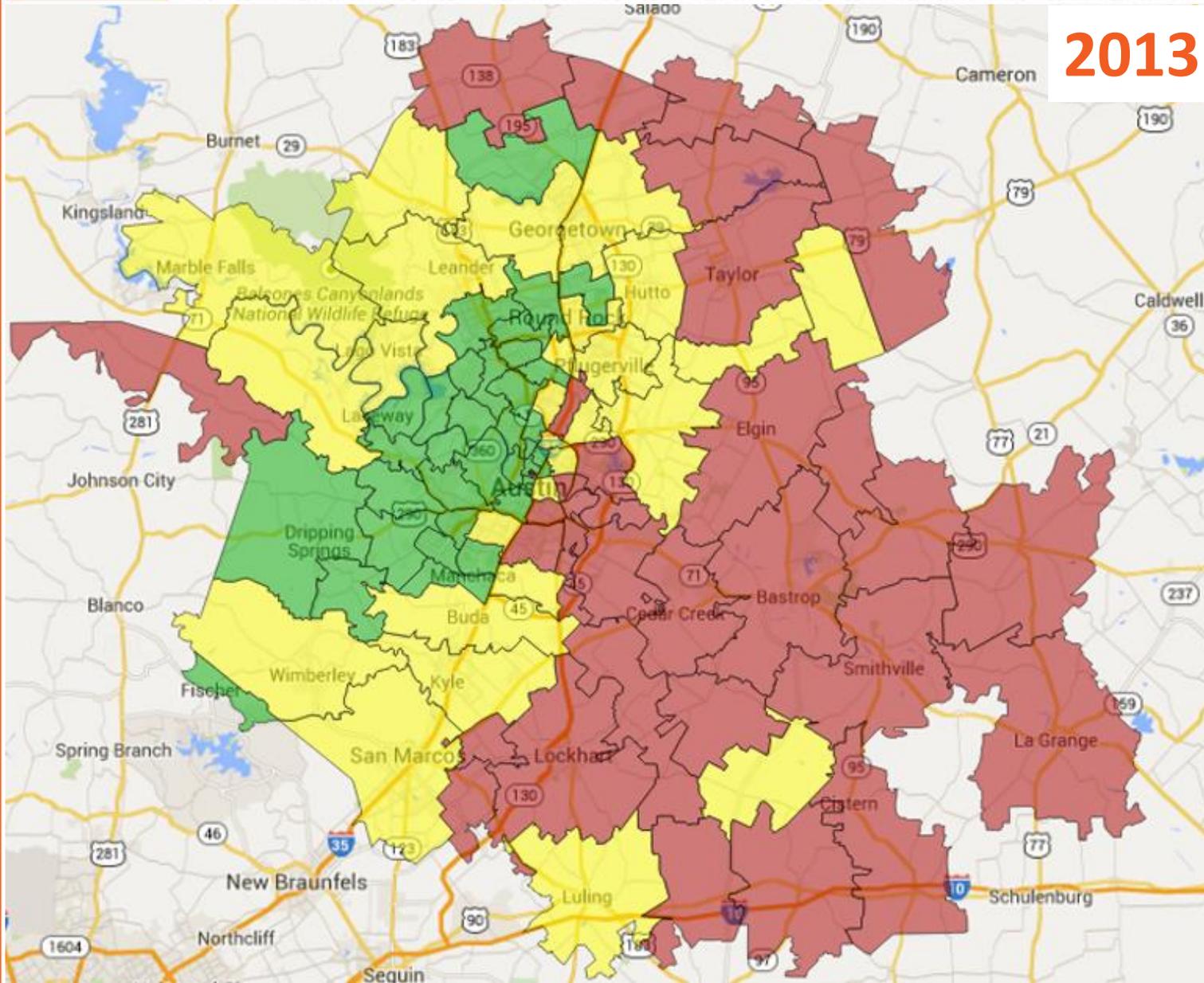


Source: US Census





# Education: Higher Education



Percent of Population 25 Years or Older with a Bachelors Degree

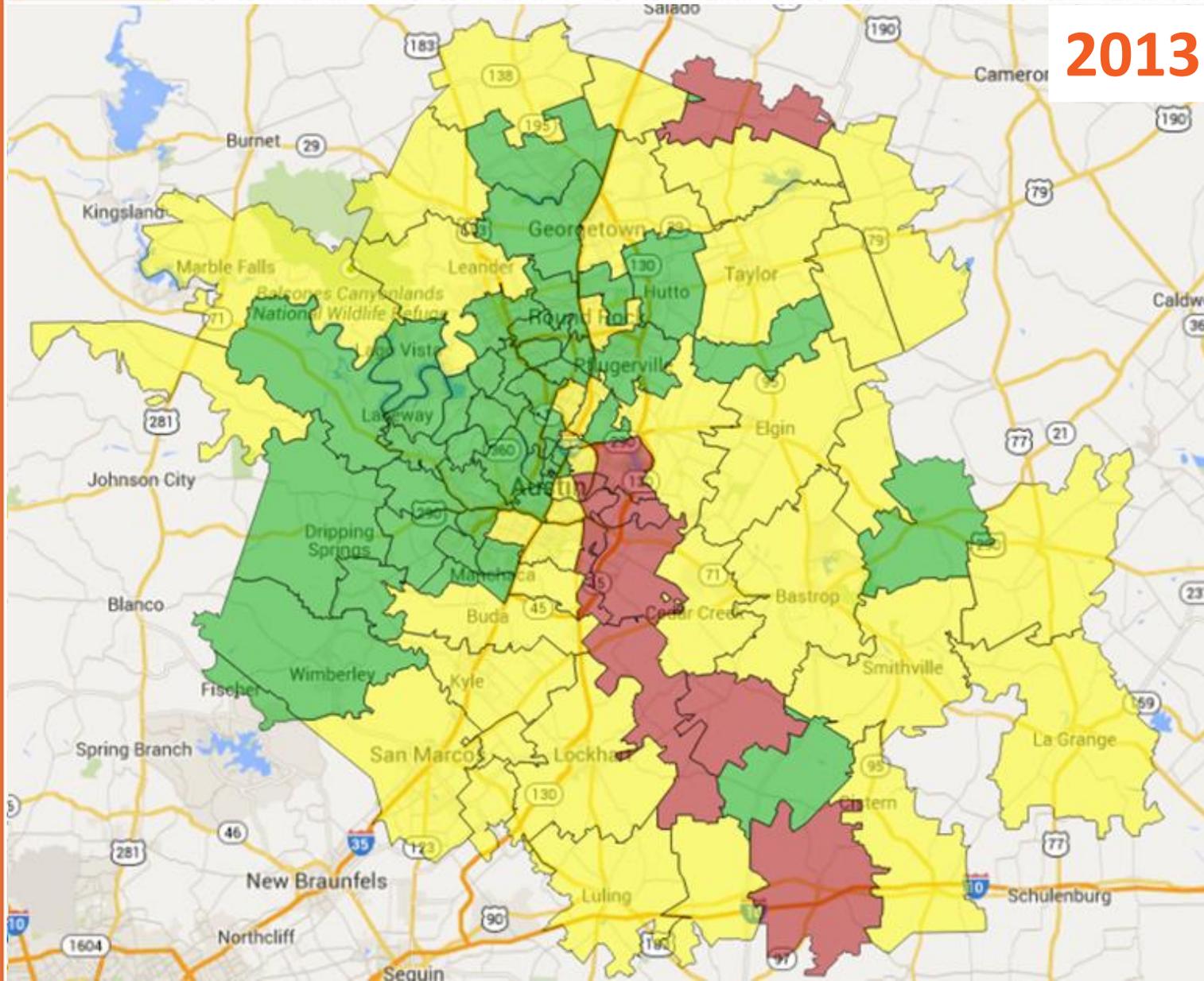
	2013	2000
Raleigh MSA	38.1%	24.6%
Charlotte MSA	38.1%	19.0%
Boston MSA	39.7%	20.5%
Seattle MSA	40.2%	21.5%
San Jose MSA	40.6%	23.2%
Denver MSA	41.0%	23.4%
Austin MSA	41.3%	24.3%
Atlanta MSA	42.6%	21.6%
New York MSA	45.4%	17.9%



Source: US Census



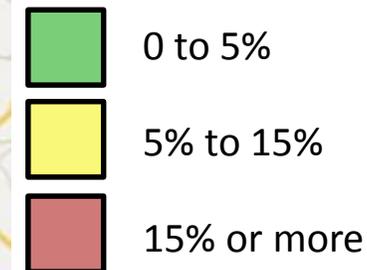
# Education: No School Diploma



2013

## Percent of Population Without a High School Diploma

	2013	2000
Boston MSA	4.4%	8.9%
Seattle MSA	5.1%	7.4%
Raleigh MSA	5.4%	9.2%
Denver MSA	5.8%	8.3%
Austin MSA	5.8%	8.0%
San Jose MSA	6.2%	8.5%
Atlanta MSA	6.9%	10.6%
New York MSA	7.1%	12.2%
Charlotte MSA	8.0%	13.0%

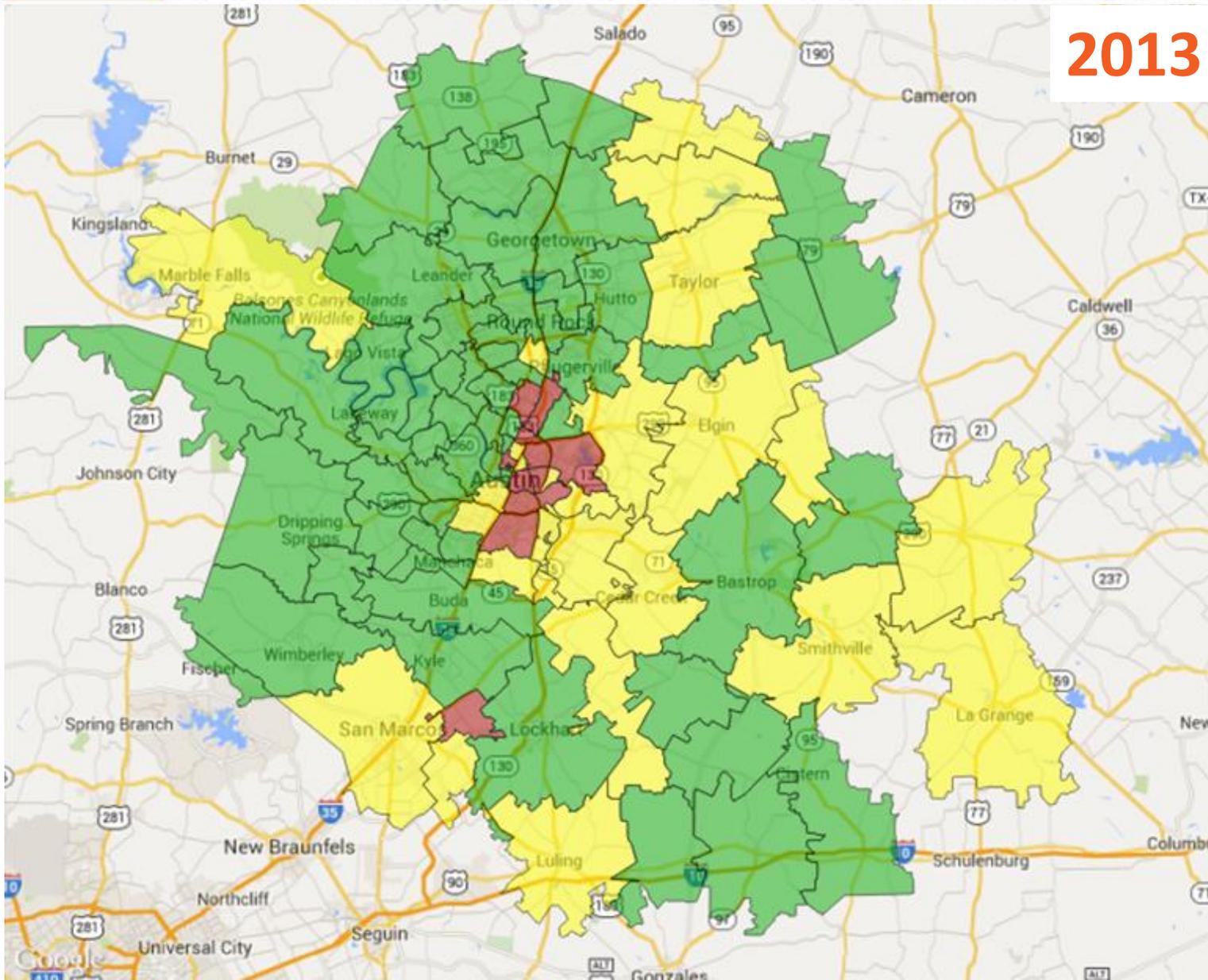


Source: US Census



# Poverty Levels

2013



## Percentage of Families Below Poverty

	2013	2000
San Jose MSA	7.2%	5.7%
Boston MSA	7.2%	6.0%
Seattle MSA	8.4%	5.8%
Denver MSA	8.6%	5.6%
Raleigh MSA	8.7%	6.7%
<b>Austin MSA</b>	<b>9.2%</b>	<b>6.7%</b>
Charlotte MSA	11.1%	6.8%
New York MSA	11.3%	10.2%
Atlanta MSA	12.0%	6.9%



Source: US Census



# Affordability Challenges

Austin MSA	Average Home Price	Average Wage
1990	\$88k	\$22k
2013	\$287k	\$52k
Growth	227%	137%

## Median Home Prices (Nov. 2014)

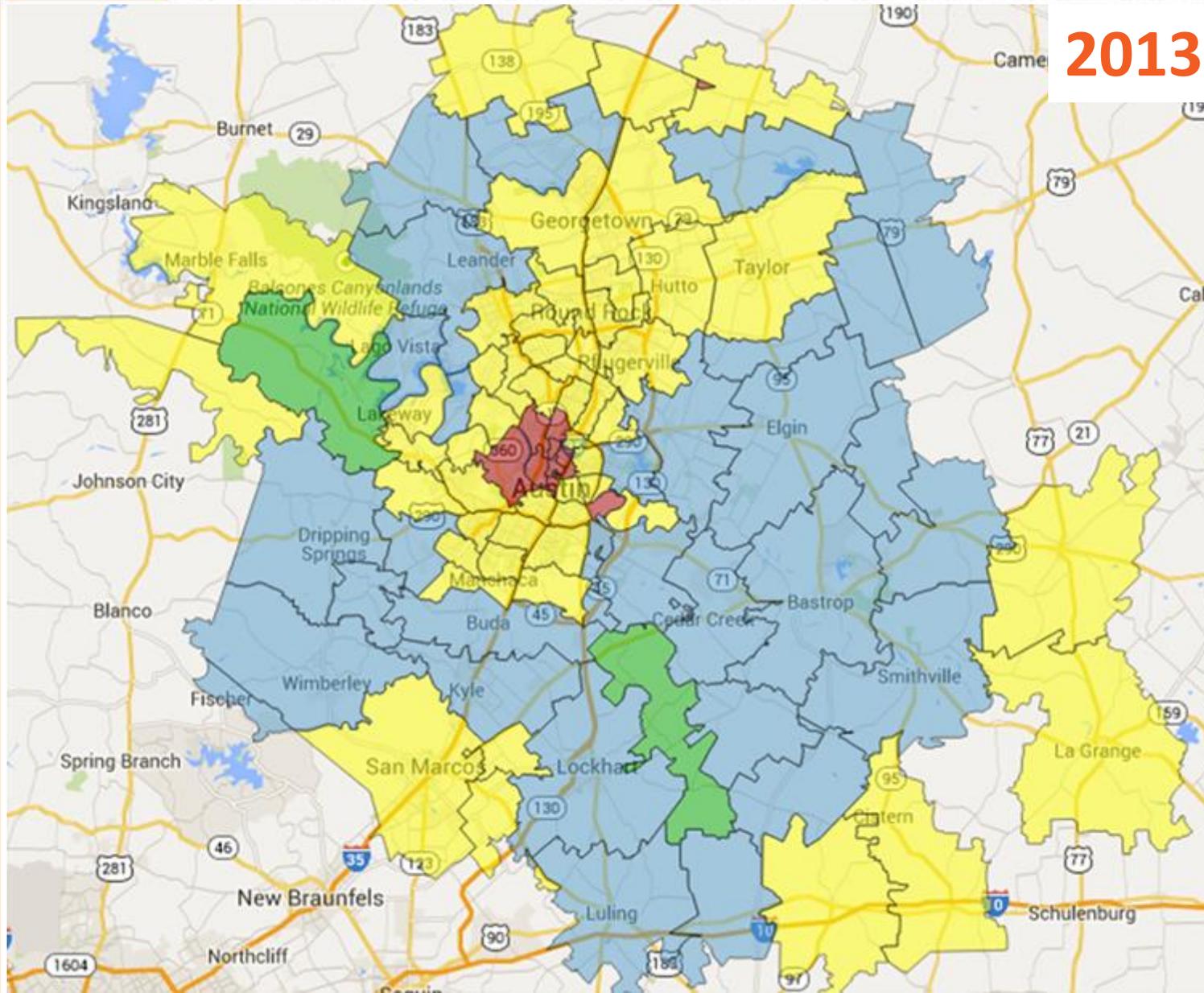
San Jose	<b>\$735k</b>
New York	<b>\$549k</b>
Seattle	<b>\$469k</b>
Boston	<b>\$441k</b>
Denver	<b>\$285k</b>
Raleigh	<b>\$191k</b>
Atlanta	<b>\$163k</b>

### Home Value and Household Income 2013 for MSAs over 1M

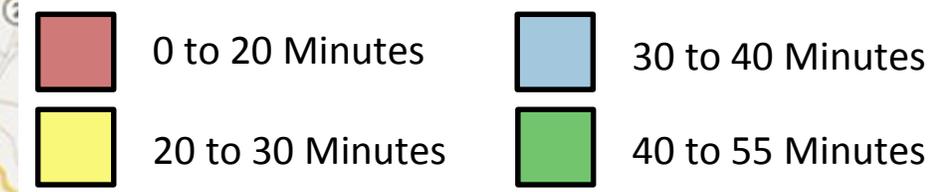




# Challenges of Growth: Traffic



Average Commute Time in Minutes		
	2013	2000
Raleigh MSA	25.6	24.9
Charlotte MSA	26.0	26.1
Austin MSA	26.4	25.5
San Jose MSA	26.5	29.3
Denver MSA	27.1	25.9
Seattle MSA	28.6	27.7
Boston MSA	30.0	27.8
Atlanta MSA	30.0	31.2
New York MSA	35.5	34.0



Source: US Census



# Program

- **Austin Tomorrow**



# Economic Driver: Austin Tomorrow

## Austin Tomorrow

Shared Economy

Medical /Life Science

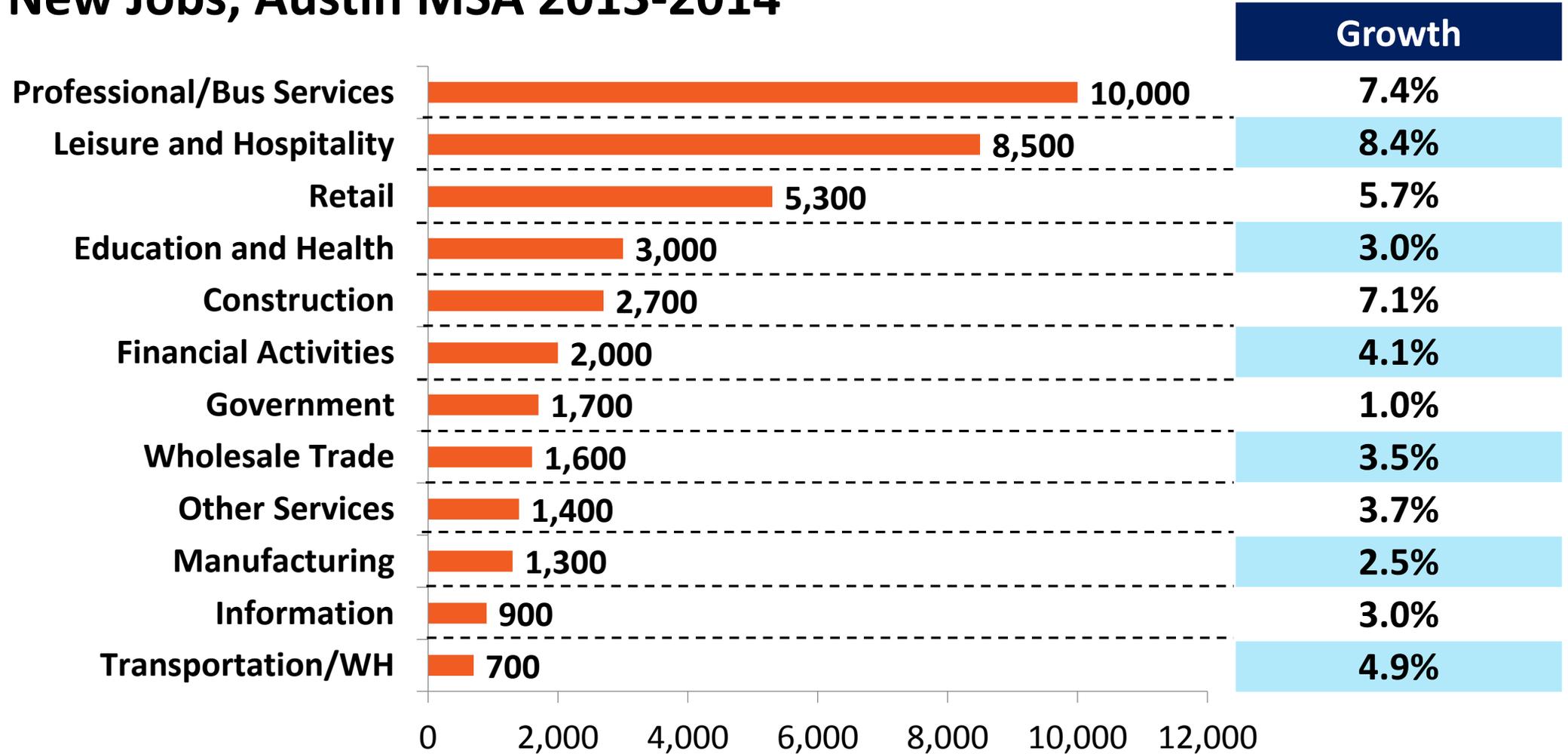
The Internet of Things

Entrepreneurially Driven



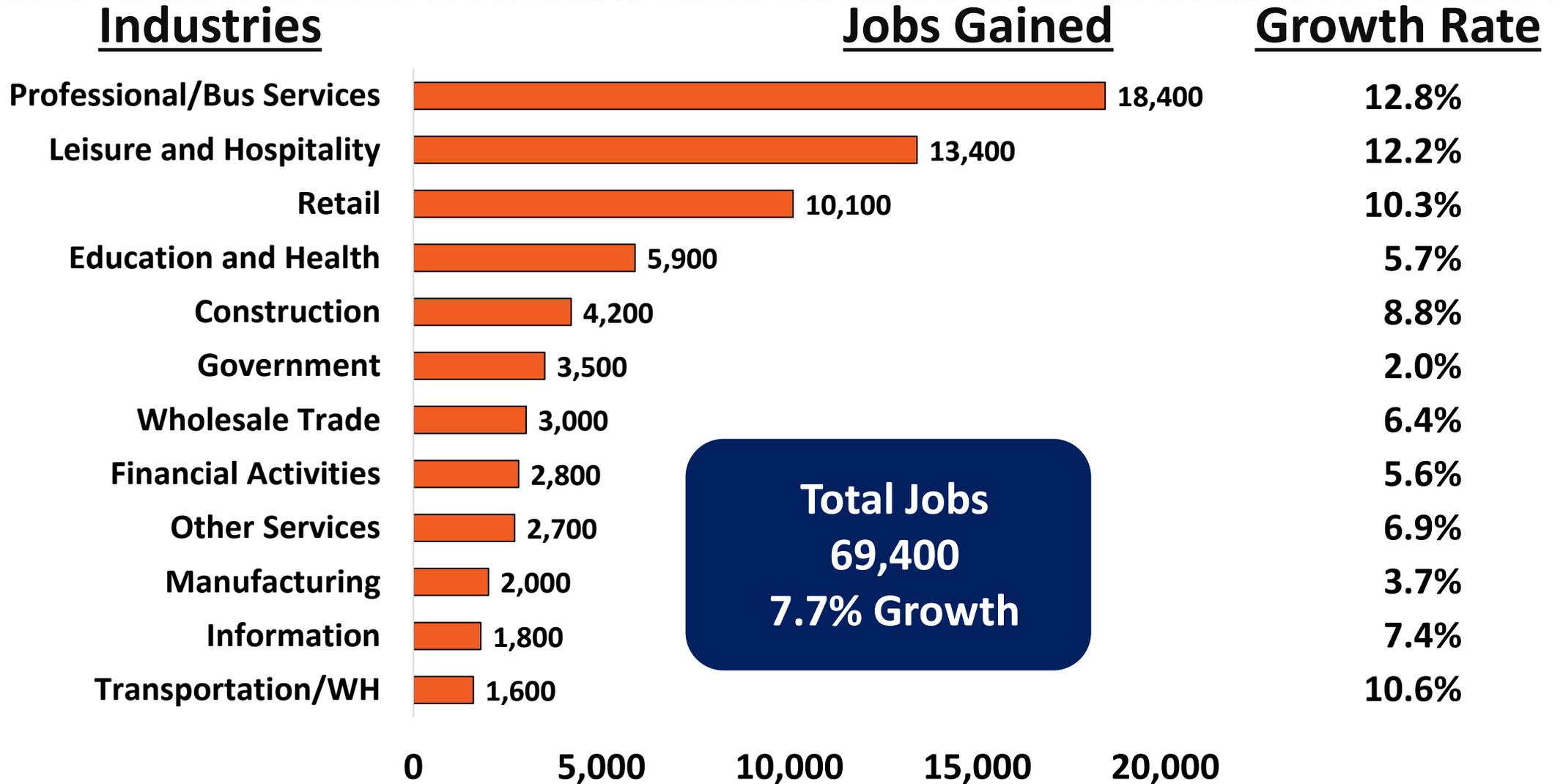
# New Jobs by Sector

## New Jobs, Austin MSA 2013-2014





# Austin Job Growth Forecast 2015 - 2016





# Rapid Population Growth: If 100 People...

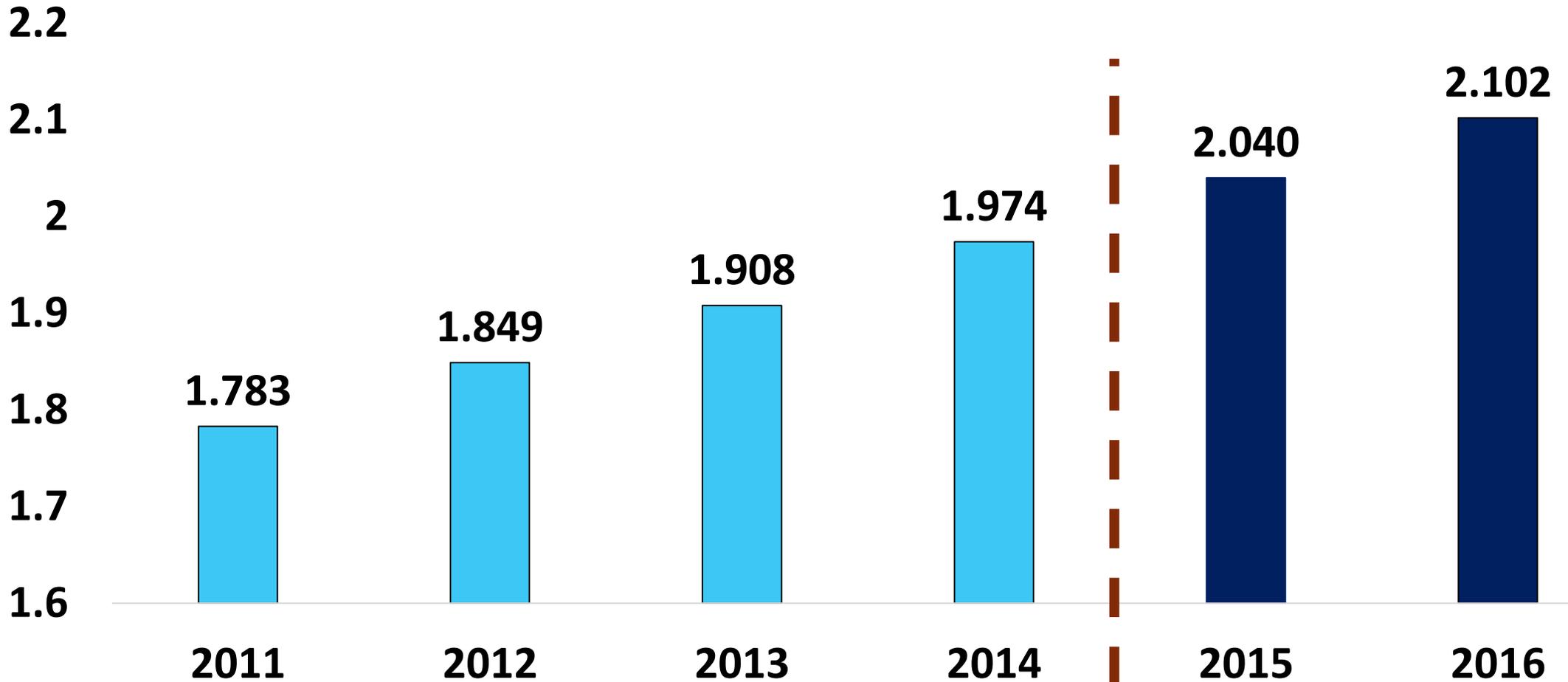
## If 100 workers moved to Austin...

	2013	1993	Average Pay in 2013	Average Pay in 1993	Pay Growth
Professional and Business Services	27	18	\$ 64,500	\$27,500	135%
Leisure and Hospitality	16	11	\$ 19,700	\$10,400	90%
Trade, Transportation, and Utilities	15	18	\$ 47,900	\$22,100	117%
Education and Health Services	14	14	\$ 44,100	\$23,000	92%
Construction	7	10	\$ 50,600	\$25,800	96%
Financial Activities	6	7	\$ 73,400	\$28,500	157%
Manufacturing	4	11	\$ 89,900	\$36,300	147%
Information	4	2	\$ 77,900	\$37,600	107%
Other Services	7	9	N/A	N/A	



# Austin Population Forecast

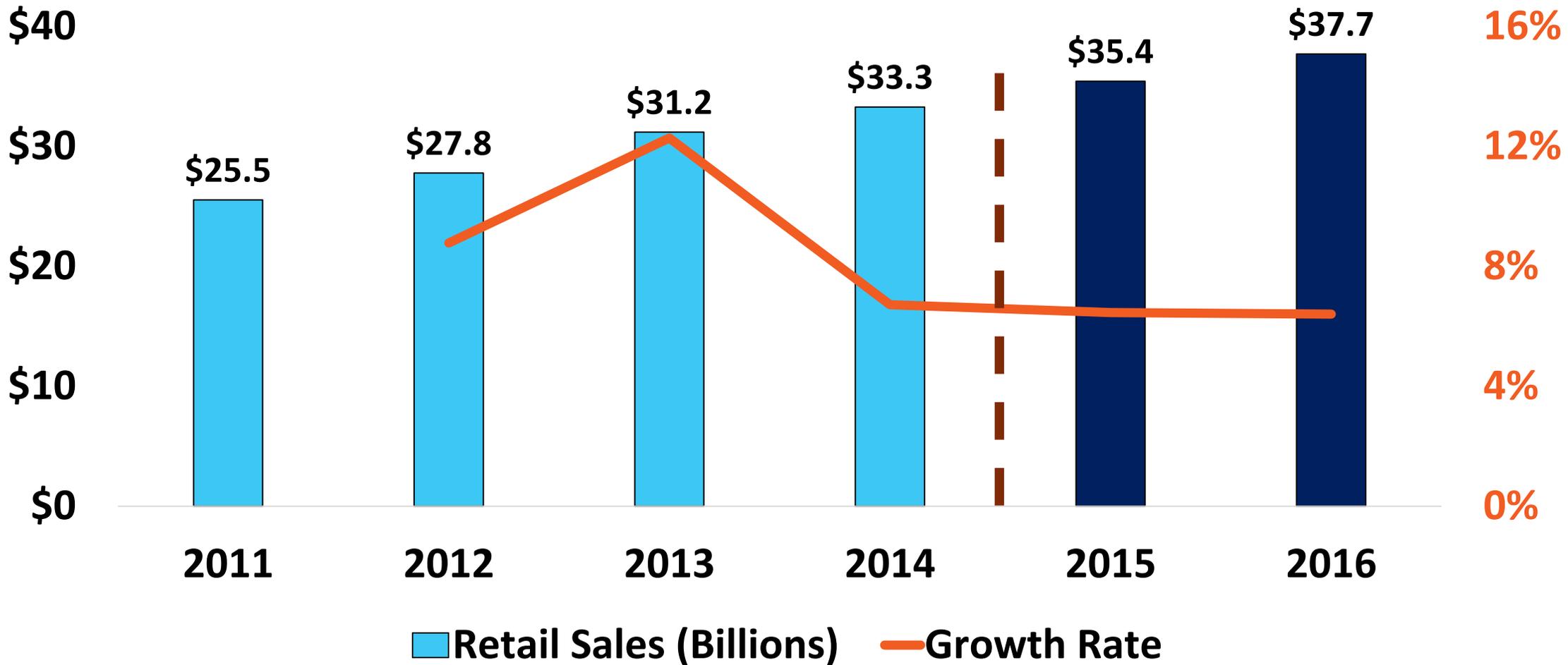
Population (in millions)





# Austin Retail Sales Forecast

Retail Sales (in billions)





# Austin Real Estate Forecast

<b>Market</b>	<b>Expected Absorption</b>
<b>Office</b>	<b>3,600,000 sq. ft.</b>
<b>Industrial</b>	<b>700,000 sq. ft.</b>
<b>Retail</b>	<b>1,600,000 sq. ft.</b>
<b>Single Family</b>	<b>18,500 units</b>
<b>Multi-Family</b>	<b>16,500 units</b>



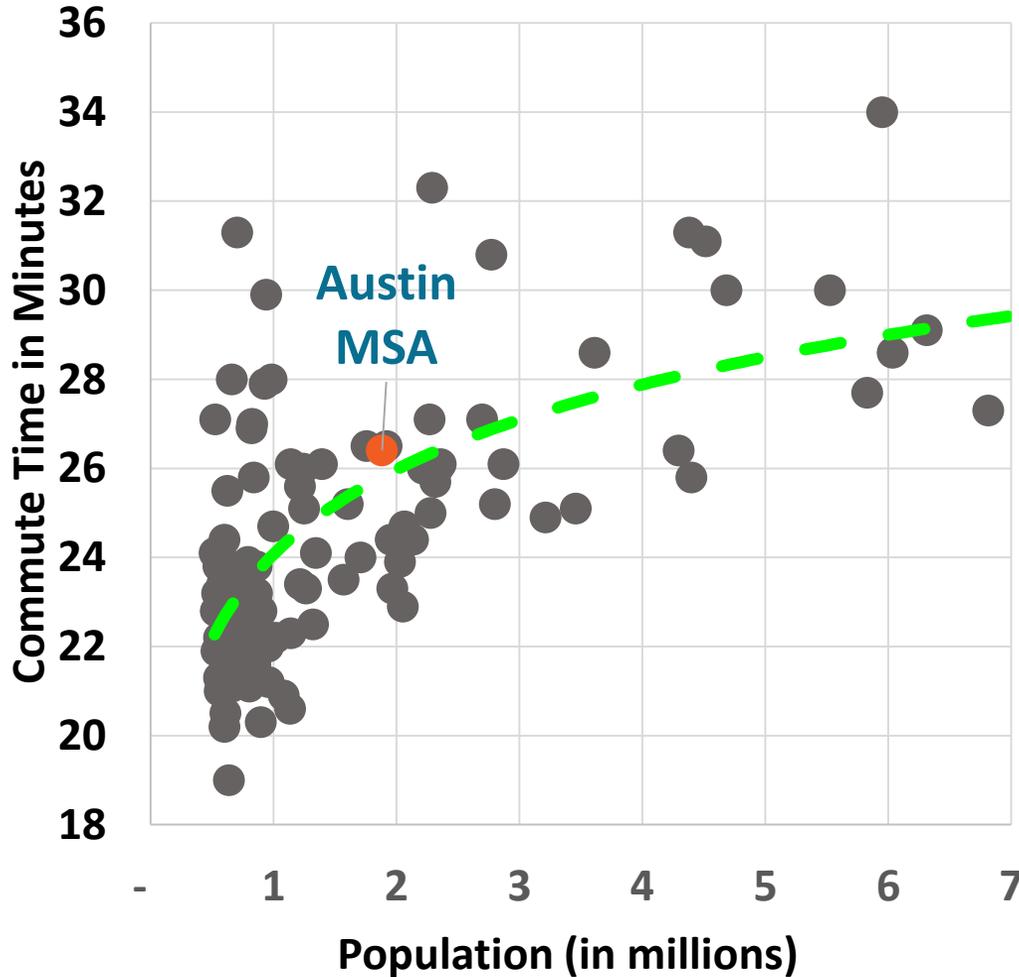
# Program

- **Impact on Mobility**

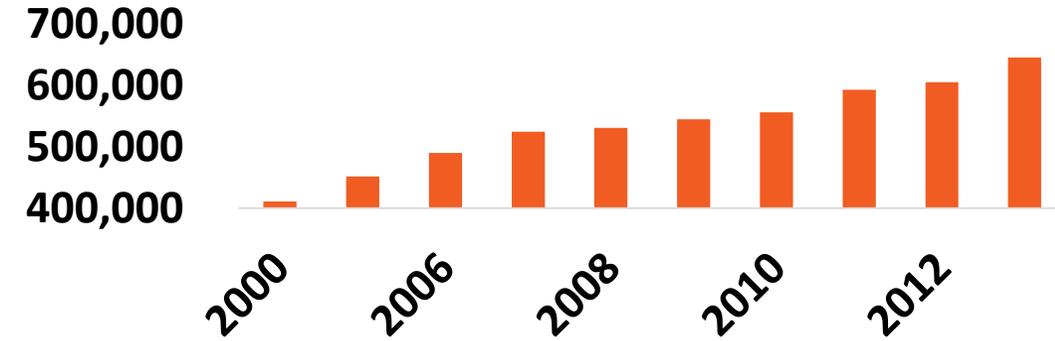


# Traffic Challenges

## Population vs Commute Time For MSAs Over 1 Million



## Total Daily Commute in the Austin MSA in Hours



- Commute time in the Austin MSA grew by **57%** from 2000 to 2013
- 1980-2010:
  - Vehicle miles traveled has increased by **283%**
  - Annual hours of delay has increased by **1,037%**
  - Annual cost of congestion has increased by **2,356%**
- In the past 30 years, traffic has grown more than **30%** faster than capacity.



# Rapid Population Growth: Traffic

## The costs of Austin Congestion

	Total Hours in Annual Delay	Cost of Congestion	Texas Congestion Index
I-35 (between 290 & 71)	950,795	\$196,144,609	2.54
MoPac (between 183 & 360)	343,996	\$74,725,885	2.04
I-35 (between 290 & Slaughter)	273,889	\$35,624,999	1.58
S. Lamar (between Cesar Chavez & 290/71)	218,930	\$16,890,011	1.54
N. Lamar (between 45 <sup>th</sup> & Cesar Chavez)	207,873	\$16,918,416	1.68
Congress Ave. (between 11 <sup>th</sup> & 290/71)	200,869	\$15,970,234	1.53



# Sales Tax Rebates

## Rebates by City and County, 2014 (through Dec.)

	Payments	% Change
<b>Bastrop County</b>	<b>\$7.4 M</b>	<b>8.7%</b>
Bastrop	\$5.3 M	6.9%
<b>Caldwell County</b>	<b>\$4.0 M</b>	<b>12.1%</b>
Lockhart	\$2.1 M	7.3%
<b>Hays County</b>	<b>\$36.7 M</b>	<b>9.3%</b>
San Marcos	\$24.4 M	5.5%
<b>Travis County</b>	<b>\$214.1 M</b>	<b>9.2%</b>
Austin	\$182.3 M	8.7%
Pflugerville	\$8.6 M	17.7%
<b>Williamson County</b>	<b>\$120.2 M</b>	<b>5.7%</b>
Cedar Park	\$20.5 M	17.9%
Georgetown	\$19.7 M	9.7%
Round Rock	\$68.0 M	0.8%



# Program

- **Innovative PPP**



# Innovative PPP

- **VC > \$1 Billion in 2014**
- **Corporate Equity > \$1 Billion in 2014**
- **Angel Investment > \$ 30 Million in 2014**
- **Micro Electronics & Comp. Technology (MCC)**
- **SEMATECH**
- **Texas Enterprise Fund**
- **Google Fiber**



# Innovative PPP

- **UT– attracts > \$1 Billion in Research Annually**
- **Incubators in Clean Energy**
- **Austin Technology Incubator**
- **Numerous Private Accelerators / Incubators**
- **Leading Activities in Clean Tech**
- **Austin 55% Renewable Energy Goals by 2025**
- **Pickle Research Center**

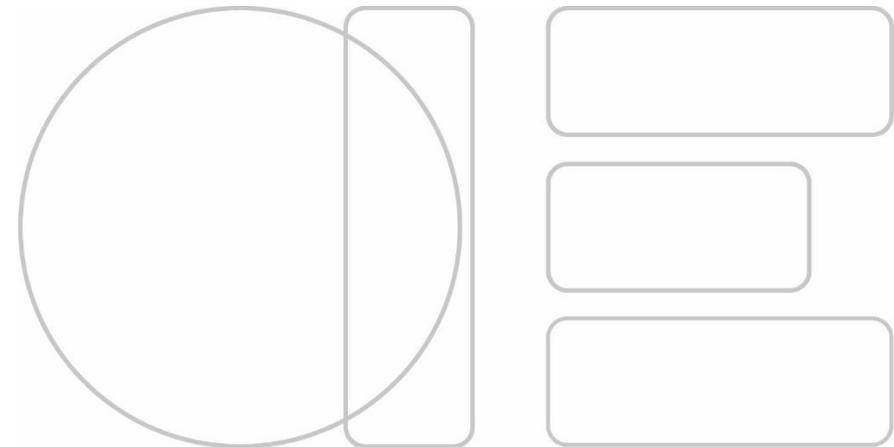


The End



**THANK YOU!**

**Questions?**



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