

Integrating Census LED data into the Texas County Narrative Profiles Tool

John Romanek

john.romanek@twc.state.tx.us

Richard Froeschle

richard.froeschle@twc.state.tx.us

Texas Workforce Commission



**Texas is
a large
and
diverse
state!**

**El Paso to
Beaumont
827 miles,
11 hrs. and
46 min!**

What is the Goal of County Narrative Profiles?

- 1) Create a **comprehensive profile** of a region; Demographics, geography, employment, income, education, finances, voting record.....LED??
- 2) Use **county as a building block**, but must be able to customize a region (Texas has 254 counties, 28 LWDAAs)
- 3) Move beyond data; **inject analysis into the end product**. Comparisons with State, change over time, per 100,000 population, etc.
- 4) Provide **links to original source data**

Major data categories in CNP

- **Geography**
- **Population**
- **Special age groups and Gender**
- **Population projections**
- **County to county migration**
- **Vital statistics**
- **Employment by industry**
- **Help Wanted Online job postings**
- **Employment by Occupation**
- **Labor force statistics**
- **Commuting to work**
- **Top 10 manufacturers**
- **Income and poverty**
- **Retail sales & sales taxes**
- **Housing**
- **Education enrollments and attainment**
- **Health statistics**
- **Quality of life indicators**
- **Voting activity**

Welcome to County Narrative Profiles

Report Title
Travis County

View Report

Filter

Reset

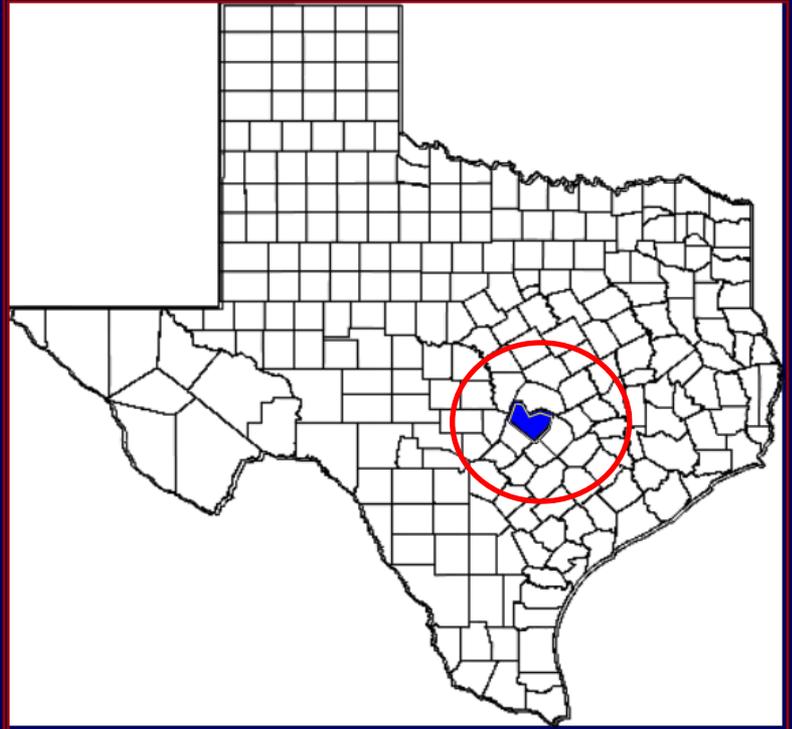
Regions
Counties

Select (Dbl-Click)

- Anderson
- Andrews
- Angelina
- Aransas
- Archer
- Armstrong
- Atascosa
- Austin
- Bailey

Compare

Travis



Sections to be included in the CNP Narrative:

- All Sections
- Geography
- Population
- Employment
- Income
- Housing
- Education
- Health
- Info. On the Web
- Other Facts



CNP includes filter and compare reports

TEXAS WORKFORCE SOLUTIONS

www.TexasIndustryProfiles.com
Home About

Report Title
Unemployment Rate >6.5%

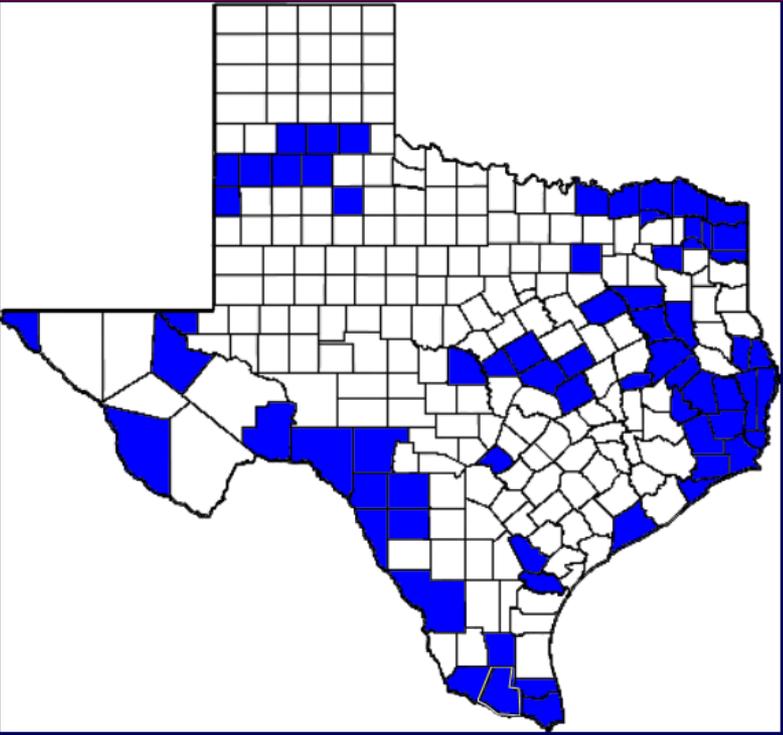
Regions
Counties ▾

Select (Dbl-Click)

- Anderson
- Andrews
- Angelina
- Aransas
- Archer
- Armstrong
- Atascosa
- Austin
- Bailey

Compare

- Anderson
- Bailey
- Bee
- Bell
- Bowie
- Briscoe
- Brooks
- Cameron
- Camp



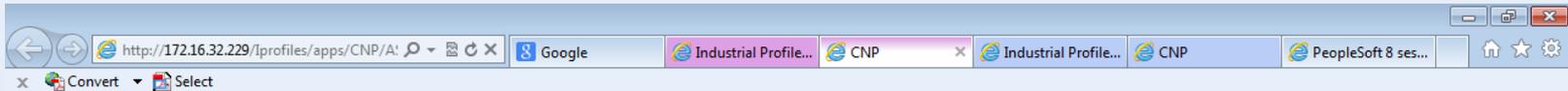
Sections to be included in the CNP Narrative:

<input checked="" type="checkbox"/> All Sections	<input type="checkbox"/> Geography	<input type="checkbox"/> Population	<input type="checkbox"/> Employment	<input type="checkbox"/> Income
<input type="checkbox"/> Housing	<input type="checkbox"/> Education	<input type="checkbox"/> Health	<input type="checkbox"/> Info. On the Web	<input type="checkbox"/> Other Facts

Filtered By:

Percent Unemployment	Greater Than or Equal to 6.5	Less Than or Equal to 20
----------------------	------------------------------	--------------------------

County Narrative Profiles Report



County Narrative Profile

Travis County Report

What are County Narrative Profiles?

The Labor Market and Career Information (LMCI) department of the Texas Workforce Commission (TWC) has developed the County Narrative Profile (CNP) as a tool for presenting Texas county based statistical data in an easy-to-read narrative format. This CNP module is one of many analytical tools available from the Industrial Profiles system. The narrative approach is an alternative to looking through stacks of tables and charts which can be confusing and difficult to understand or interpret. It allows the user to easily request an easy to understand report on one or more of the 254 counties in Texas. To review all the current TWC's initiatives and services, link to: <http://www.twc.state.tx.us>

Embedded source links

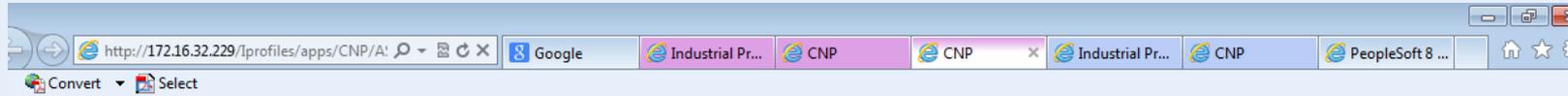
Geography

Regional Information: The Travis County region (FIPS code:48453) had an estimated population of 1,024,266 in 2010. The region consists of 1,022 square miles with a **population density** of 1,002.22 residents per square mile compared to a statewide density of 95.92. This county ranked 5th in 2010 population compared to all 254 counties in Texas. Travis County is a member of TWC's Capital Area Local Workforce Development region. This area is a **metropolitan** county. This county also ranked 75th in size by square miles when compared to all counties in Texas. The Travis County area is assigned to the following district(s): Texas Representative District(s) of 46-51 and State Senatorial District(s) of 14,25. The area is in the U.S. Congressional District(s) of: 10,21. The county seat is Austin and the county's **major city, town or place** is Austin. See Texas Online at <http://www.state.tx.us/portal/tol/en/gov/11/1> for State and local updates. Travis County is classified as a metropolitan county by virtue of either its close relationship with a significant central city or lack thereof. Using 2000 Census population data, roughly 86.05 percent of all Texas population could be found in the 76 metropolitan counties defined by the federal Office of Management and Budget (OMB) for 2003. In 1993 the county was classified as a metropolitan county. Texas has established a network of 24 **Councils of Government** (COGs) to assist local governments in planning for common needs and to coordinate regional economic development activity. Travis County falls within the Capitol Area Planning Council region. For additional information and links to the COG regions see www.txregionalcouncil.org/.

The Office of the State Climatologist in College Station, under the guidance of the National Oceanic and Atmospheric Administration, maintains 10-year intervals of weather compilations. For most recent interval as of January 1, 1993, the **rainfall** in the region averages 31.9 inches per year compared to the Texas average of 30.1 inches per year. The average **growing season** in the Travis County region is 270 days. Texas is so climatically diverse that statewide averages are generally irrelevant as a means of comparison. The **average temperature** in January gathered by the Office of the State Climatologist ranges from 39 degrees to an average for July of 95 degrees. The Texas Department of Agriculture estimates the **freeze dates** range from Nov 28 to Mar 3. Current and past climate information can be found at <http://www.farmersalmanac.com/weather/uszone5.html> and <http://lwf.ncdc.noaa.gov/oa/ncdc.html>.

Natural amenities of the area, according to the U.S. Department of Interior, reflect an overall percent of **surface water** of 3.2 percent compared to 2.5

Includes hundreds of data variables from multiple sources



County to County Migration

Out-Migration: Using Internal Revenue Service (IRS) information regarding changes in residences between two filing years 2009 and 2010, statistics regarding moving in and out of counties can reveal patterns of migration as well as patterns of out-of-state and foreign migration to and from selected counties. During this time Travis County reported 355,339 total tax returns were matched to tabulate outflow migration. Of these returns approximately 8.5 percent showed a change in residences by moving out from their originating county in 2009 to another county in 2010. Of these who moved out of their original county, 70.2 percent moved to another county within Texas, while 28.7 percent moved to a different state but within the U.S. Those who moved from their originating county in the year 2009 to a foreign country in 2010 was approximately 1.1 percent.

The IRS county migration data reports income by the number of returns and the number of exemptions. The number of returns - as a unit of analysis may be used as a proxy for household income and the number of exemptions may be used as a proxy for the number of individuals in a family. Using the number of returns for household income, the Travis County overall has an average household earnings of \$61,228. Of those households which remained in the same area, an average reported non-migrating household income of \$62,973 during the period 2008 to 2009. Total income earned by 30,081 households leaving the region was \$1,274,098,000 which represents an average income of \$42,356.

The top 5 counties showing the most households and their average income leaving Travis County to other counties during 2009 to 2010 were:

County and State	Households Moving Out	Average Income Moving Out
Williamson County	7,951	\$45,829
Hays County	2,286	\$45,894
Harris County	1,766	\$39,017
Bexar County	1,162	\$34,600
Dallas County	953	\$42,240

In-Migration: During the period 2009 to 2010, there were approximately 359,289 total tax returns were matched to calculate inflow migration. Of these returns approximately 9.5 percent showed a change in residences by moving in from their originating county in 2009 to a county in the study area in 2010. Of these who moved into the study area from another county, 61.1 percent moved from other counties in Texas, while 38.2 percent moved from a county in a different state but within the U.S. Those who moved into the study area during the 2009-2010 period from a foreign country was approximately 0.7 percent.

Using the number of returns as a proxy for household income, the Travis County overall has an average household earnings of \$61,272. Of those households which remained in the same area, had an average reported non-migrating household income of \$62,973 during the period 2009 to 2010. Total income earned by 34,031 households entering the region was \$1,531,689,000 which represents an average income of \$45,009.

The top 5 counties showing the most households and their average income migrating into Travis County from other counties during 2009 to 2010 were:

Includes BLS QCEW and Census ACS data

Employment By Major Industry Sector: The most recent employment data from TWC by major industrial sector for Travis County compared to Texas are shown below in a table for two years. The Department of Labor calls these major categories "Super Sectors". One advantage in reviewing employment changes at broad industrial levels is that it allows for a unique snapshot of major differences in the total employment for a selected study area when compared to any larger statewide trend. When employment changes at a higher rate than the state, there may be comparative advantages in the local economy which are driving these changes. Conversely, when change is at a lower rate, then the Super Sector is showing less change in comparison to the state and may consequently have a smaller comparative **change impact**.

Travis County Industry Sector	AREA EMPLOYMENT				STATEWIDE EMPLOYMENT				US EMPLOYMENT			
	2011	2012	Emp	Pct	2011	2012	Emp	Pct	2011	2012	Emp	Pct
	3rd Qtr	3rd Qtr	Chg	Chg	3rd Qtr	3rd Qtr	Chg	Chg	3rd Qtr	3rd Qtr	Chg	Chg
Total, All Industries	581,575	604,556	22,981	3.95	10,432,771	10,723,428	290,657	2.79	129,386,158	131,584,506	2,198,348	1.70
Natural Resources & Mining	1,820	2,072	252	13.85	298,359	332,579	34,220	11.47	2,038,712	2,134,391	95,679	4.69
Construction	28,169	31,046	2,877	10.21	606,695	622,439	15,744	2.60	5,914,110	5,975,717	61,607	1.04
Manufacturing	38,309	38,921	612	1.60	847,780	873,957	26,177	3.09	11,852,448	12,054,685	202,237	1.71
Trade, Transport. & Utilities	92,734	95,681	2,947	3.18	2,203,380	2,262,358	58,978	2.68	26,105,630	26,438,568	332,938	1.28
Information	19,193	20,563	1,370	7.14	203,217	203,640	423	0.21	2,819,004	2,821,871	2,867	0.10
Financial Activities Group	36,600	38,378	1,778	4.86	637,351	656,530	19,179	3.01	7,540,122	7,630,494	90,372	1.20
Prof., Business & Other Svcs	100,391	106,851	6,460	6.43	1,366,119	1,432,476	66,357	4.86	17,654,216	18,215,466	561,250	3.18
Education & Health Svcs.	127,338	129,954	2,616	2.05	2,431,393	2,452,440	21,047	0.87	29,056,521	29,369,939	313,418	1.08
Leisure & Hospitality Group	68,109	69,778	1,669	2.45	1,086,722	1,129,538	42,816	3.94	14,300,161	14,743,852	443,691	3.10
Other Services	21,114	22,044	930	4.40	305,384	312,150	6,766	2.22	4,495,171	4,614,133	118,962	2.65
Public Administration	47,698	48,970	1,272	2.67	442,696	440,376	-2,320	-0.52	7,417,090	7,364,943	-52,147	-0.70

Compared to Texas, the table above shows employment sectors in Travis County changed at a higher rate for *Natural Resources & Mining*, *Construction*, *Trade, Transport. & Utilities*, *Information*, *Financial Activities Group*, *Prof., Business & Other Svcs*, *Education & Health Svcs.*, *Other Services* and *Public Administration* between 3rd quarter 2011 and 3rd quarter 2012. During that same time period, area employment for *Manufacturing* and *Leisure & Hospitality Group* changed at a lower rate when compared to Texas.

Occupations: The best source of occupational information at the county level is from the 2010 Bureau of Census/American Community Survey (ACS) estimates. The total number of persons 16 years of age or older who were employed in Travis County during the 2010 Census was 522,182. The following presents a table of those employed by occupational categories for this region compared to statewide percentages:

<u>Occupational Categories</u>	<u>Count</u>	<u>Area Percent</u>	<u>Statewide Percent</u>
Mgmt., Professional Occs.	228,496	43.8	33.7
Service Occupations	83,921	16.1	16.9
Sales and Office Occupations	124,860	23.9	25.7
Constr., Extraction Occs.	50,569	9.7	11.6

Why not add LED QWI data to the CNP report?



But how would we do that?

What Does LED QWI Offer?

A Different Perspective on Labor Market Dynamics!

- A different perspective on labor market activity: i.e. actual hiring vs. net change
- County level statistics on hiring activity that can be aggregated to larger regions
- Identify patterns in new hire and total earnings to assess strength of labor market
- Assess patterns of volatility over time and across demographic groups to help target education and training priorities

Processing LED Data for CNP from the Census DVD

Every Quarter LMCI staff:

- Open Fed Express package (!!)
- Extract LED Table from DVD #2: *TX QWI Version 3.4 (Year/Qtr)*
- Un-compress file **QWI_TX_WIA_County_NAICSSEC_ALL.CSV** using 7-ZIP File Manager (407MB1- compressed to 2.5G uncompressed)
- Create separate sequel server table and pull in uncompressed data
- Append into a SQL server table stripping common key fields: [1] County Names, [2] NAICS 2-D Sector Titles, [3] Ownership Titles, [4] Sex Titles, [5] Age Titles
- Migrate sequel table into FoxPro for integration into CNP, deleting all records for: [1] Gender detail, [2] Age detail , [3] Ownership detail
- Creates 4 CNP worktables: 1MB 1) **QWI New Hires**, 2) **Turnover**, 3) **Top Industries**, 4) **QWI Quick Facts**

Time series of QWI “Quick Facts”

Quarterly Workforce Indicators: The Quarterly Workforce Indicators (QWI) are derived from state administrative records and basic demographic information from the Census Bureau through a program called Local Employment Dynamics. Employment totals from the QWI are not exactly comparable with those from other sources. Generally, coverage and definitions differ between the QWI and data about establishments from administrative records (e.g., the Quarterly Census of Employment and Wages or QCEW), and about workers from surveys (e.g., the decennial census, the American Community Survey, and the Current Population Survey or CPS.) More specifically, the QWI capture the complexity of workforce dynamics. Because the LED data from which the QWI are derived include all the jobs a worker holds in each quarter, multiple definitions of employment are possible (just as there are multiple definitions of unemployment). The definitions include: (1) All jobs held in a quarter, regardless of length of time the job is held (2) Jobs held at the beginning of a quarter (3) Jobs held at the end of a quarter and (4) Jobs held for a full quarter (the most stable measure of employment).

<u>QWI Quick Facts</u>	<u>Travis County</u>				
	<u>1st Qtr 2011</u>	<u>2nd Qtr 2011</u>	<u>3rd Qtr 2011</u>	<u>4th Qtr 2011</u>	<u>1st Qtr 2012</u>
Total Employment	586,560	598,991	602,393	607,437	607,150
Net Job Flow	7,530	1,584	400	-3,752	6,342
Job Creation	25,421	28,032	25,230	24,877	27,199
New Hires	70,359	83,427	91,730	78,200	78,891
Separations	70,532	93,312	100,286	93,576	81,523
Turnover	7.7%	8.5%	8.7%	9.0%	8.0%
Avg Monthly Earning	\$4,442.00	\$4,432.00	\$4,647.00	\$4,899.00	\$4,780.00
Avg New Hire Earning	\$2,580.00	\$2,936.00	\$2,954.00	\$2,908.00	\$2,927.00

<u>QWI Quick Facts</u>	<u>Texas</u>				
	<u>1st Qtr 2011</u>	<u>2nd Qtr 2011</u>	<u>3rd Qtr 2011</u>	<u>4th Qtr 2011</u>	<u>1st Qtr 2012</u>
Total Employment	10,017,410	10,245,509	10,212,524	10,338,472	10,265,728
Net Job Flow	86,964	68,605	2,457	-86,415	133,395
Job Creation	464,702	530,877	468,916	470,768	500,039
New Hires	1,400,439	1,691,801	1,816,156	1,561,777	1,572,927
Separations	1,481,506	1,835,868	1,978,890	1,889,695	1,616,824
Turnover	8.6%	9.4%	9.7%	10.1%	8.8%
Avg Monthly Earning	\$4,268.00	\$4,085.00	\$4,248.00	\$4,362.00	\$4,582.00
Avg New Hire Earning	\$2,421.00	\$2,840.00	\$2,832.00	\$2,777.00	\$2,674.00

New Hires: New hires represent workers at a business who were not working at that same business in the previous quarter. These data answer the question of which industries are doing the most hiring. It does not say anything about job quality, simply hiring activity. New hires as a percent of total

Tables showing Top 10 industries based on turnover, hires and separations & earnings

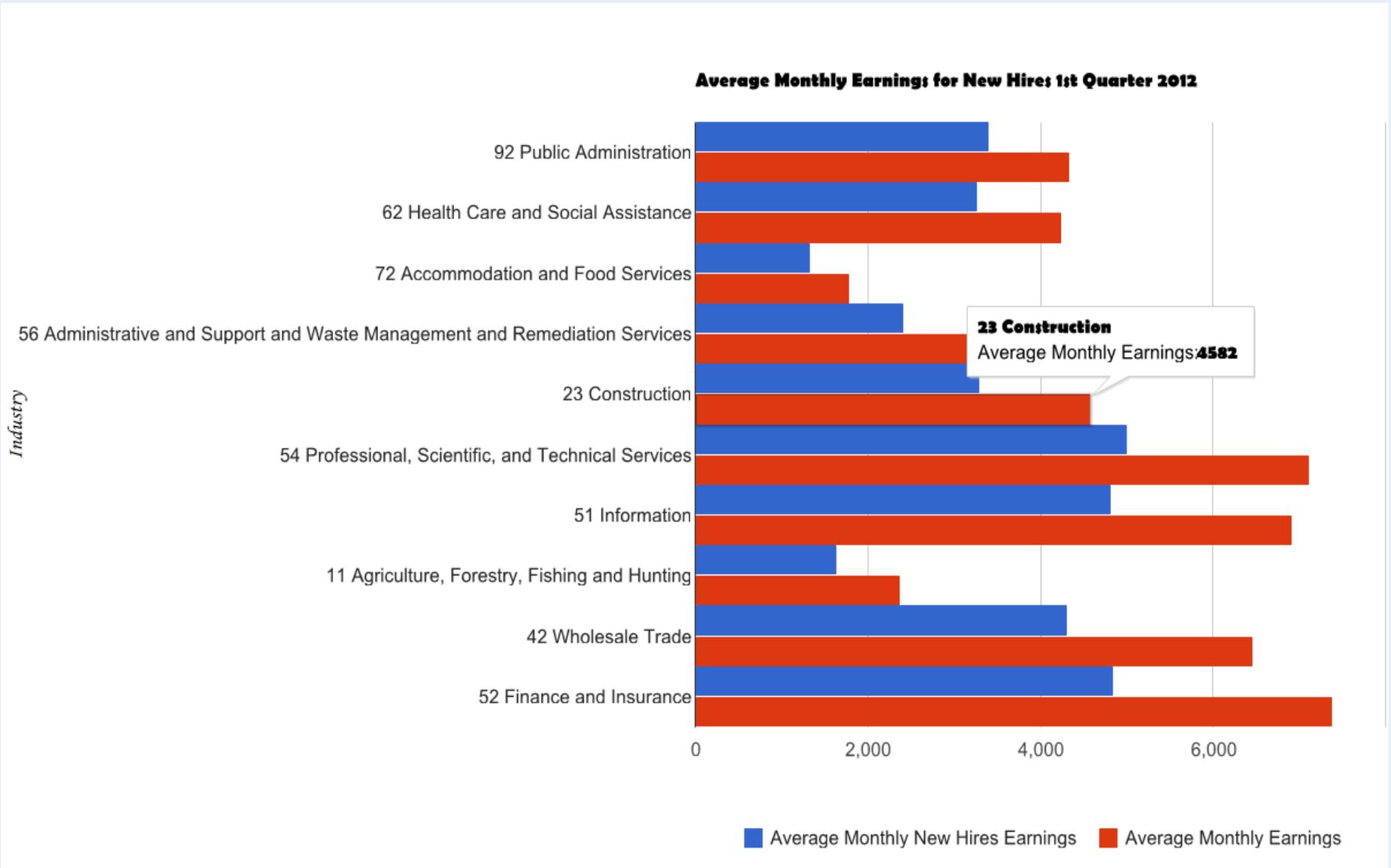
Stable New Hires: Stable new hires are those workers that were employed for a full quarter at the same business. This means they were also employed for at least part of the quarter before and part of the following quarter. Stable separations are workers who had a job for at least one full quarter before the job ended. The data does not distinguish between voluntary and involuntary separations. Stable hires and separations demonstrate labor market churn even among steady workforce participants.

Top 10 Industries With Highest Turnover 1 st Quarter 2012	Percent of Total Employment In Each Industry	Stable New Hires	Stable Separations
56 Administrative and Support and Waste Management and Remediation Services	15%	4,561	5,399
72 Accommodation and Food Services	14%	5,981	6,240
11 Agriculture, Forestry, Fishing and Hunting	11%	18	29
21 Mining, Quarrying, and Oil and Gas Extraction	11%	140	136
44-45 Retail Trade	10%	4,776	4,260
71 Arts, Entertainment, and Recreation	10%	631	687
81 Other Services (except Public Administration)	9%	1,684	1,691
48-49 Transportation and Warehousing	9%	638	695
23 Construction	9%	2,168	2,165
54 Professional, Scientific, and Technical Services	9%	4,422	4,486

Average Monthly Earnings: The QWI also show average monthly earnings for all workers and for new hires only. Industries where new hires earn a lower percentage relative to all workers generally have more jobs in which seniority or industry specific knowledge command a wage premium. The more new hires earn relative to all workers is an indication that the required skills can be more readily learned or more transferable from another workplace.

Top 10 Industries With Highest Monthly Earnings Percent for New Hires 1 st Quarter 2012	Earnings %	Average Earnings for New Hires	Total Monthly Average Earnings
92 Public Administration	79%	\$ 3,410	\$ 4,334
62 Health Care and Social Assistance	77%	\$ 3,266	\$ 4,246
72 Accommodation and Food Services	75%	\$ 1,341	\$ 1,792
56 Administrative and Support and Waste Management and Remediation Services	73%	\$ 2,424	\$ 3,307
23 Construction	72%	\$ 3,298	\$ 4,582
54 Professional, Scientific, and Technical Services	70%	\$ 5,011	\$ 7,118
51 Information	70%	\$ 4,820	\$ 6,921
11 Agriculture, Forestry, Fishing and Hunting	69%	\$ 1,645	\$ 2,381
42 Wholesale Trade	67%	\$ 4,312	\$ 6,464
52 Finance and Insurance	66%	\$ 4,852	\$ 7,392

Embedded Charts & graphs using Google Graphics

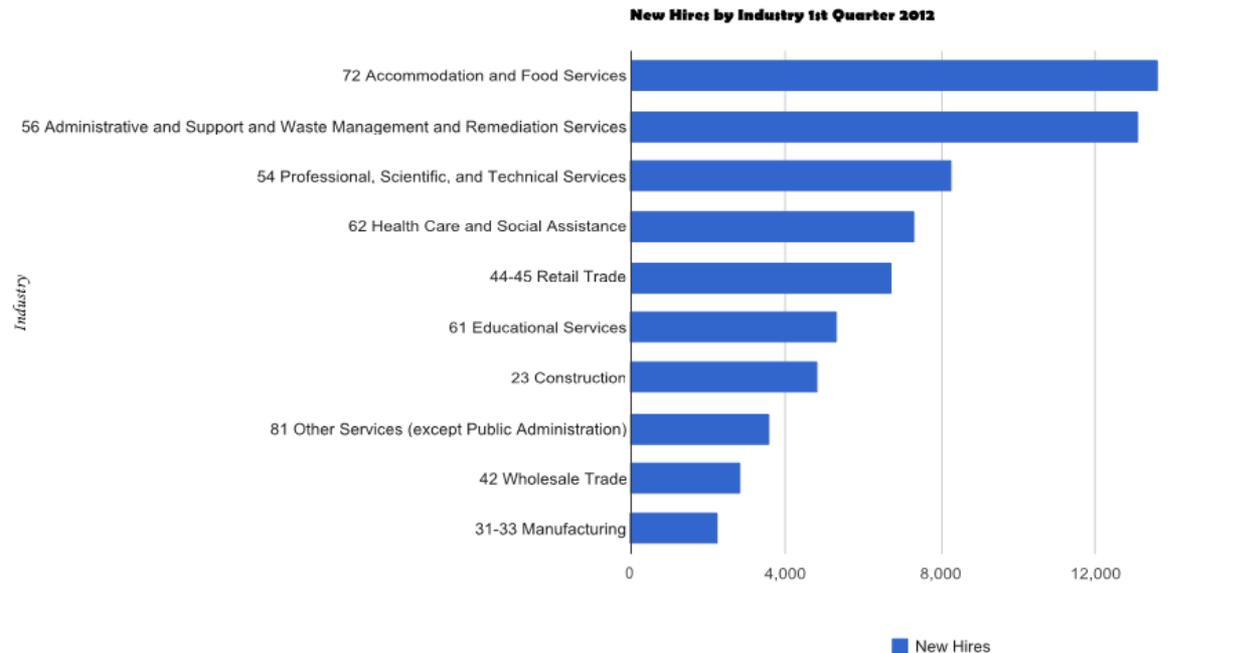


CNP combines data, charts and narrative interpretation

New Hires: New hires represent workers at a business who were not working at that same business in the previous quarter. These data answer the question of which industries are doing the most hiring. It does not say anything about job quality, simply hiring activity. New hires as a percent of total employment points to the employment volatility of an industry. Although a high percentage of new hires could indicate rapid hiring activity typically higher numbers represent more volatile, high turnover industries.

Top 10 Industries Hiring 1st Quarter 2012

	New Hires as a Percentage of Total Employment	New Hires
72 Accommodation and Food Services	21%	13,628
56 Administrative and Support and Waste Management and Remediation Services	24%	13,121
54 Professional, Scientific, and Technical Services	12%	8,341
62 Health Care and Social Assistance	9%	7,385
44-45 Retail Trade	11%	6,769
61 Educational Services	5%	5,368
23 Construction	15%	4,867
81 Other Services (except Public Administration)	15%	3,601
42 Wholesale Trade	10%	2,854
31-33 Manufacturing	6%	2,285



**Thank you for your time.
All nerdy data questions will
now be entertained**

Thank you!

john.romanek@twc.state.tx.us

richard.froeschle@twc.state.tx.us