



# Using Labor Market Information for Workforce Planning & Alignment

By William Lutz and David Munoz

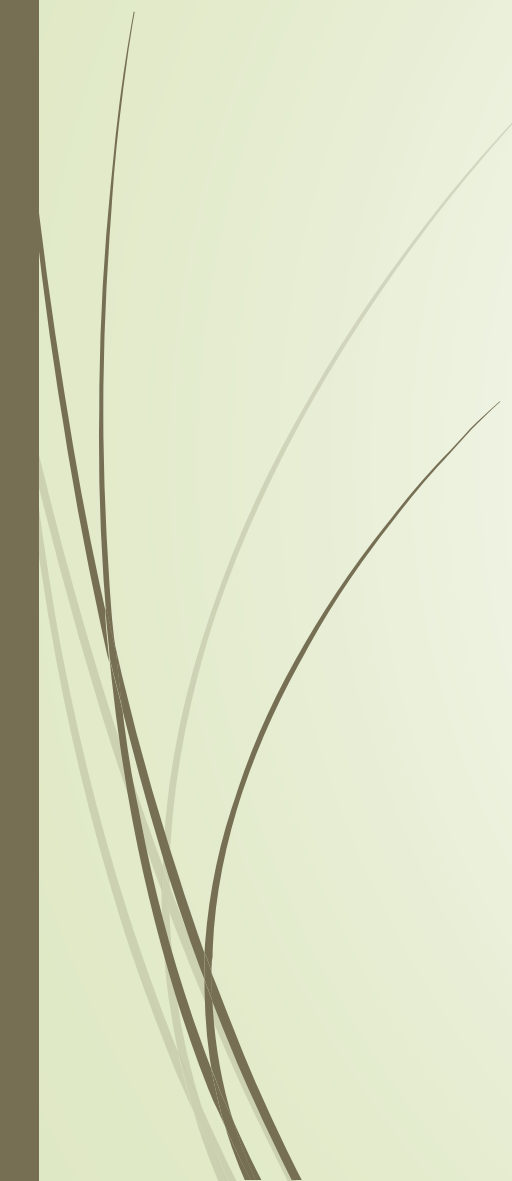
Labor Market Information, I | 3 Division

Texas Workforce Commission

May 14, 2024



# Disclaimers

- ▶ Every region of Texas is different. We tried to draw examples from a few boards and present ideas. But everything should be adapted to your local market.
  - ▶ TWC's board planning procedures incorporate lots of local discretion. This presentation is about suggesting and highlighting good data tools and should not be viewed as a mandate.
  - ▶ This presentation is designed to highlight LMI data resources that can be used in board plans, but it is always important to review and understand *current* TWC policy and applicable WD letters before starting a plan, which were not published at the time this presentation was prepared.
- 



# Telling your story

Using data to describe your local labor market



# Gathering data insights on the local economy

- Data can confirm what you already know about the region
- It can also show how things have changed over time
- Most board plans contain a description of the local economy and labor market
- There are multiple ways to accomplish this task
- LMI profile is a good start

# WDA profiles on TexasLMI.com

- Provides commonly requested statistics for a region
- Can select additional detail
- All provided data can be exported to Excel
- Access from first link in second column of TexasLMI.com front page or from drop-down menu

## Economic Profile for Workforce Development Area for the Month of July 2023

Brazos Valley Workforce Development Area					July 2023				
					WDA Labor Force Statistics				
					Jul-23	Jun-23	Jul-22	Yearly Change	
Civilian Labor Force	185,508	184,858	178,918	6,590					
Employed	177,825	177,617	172,344	5,481					
Unemployed	7,683	7,241	6,574	1,109					
Unemployment Rate	4.1%	3.9%	3.7%	0.4%					
Texas Labor Force Statistics									
	Jul-23	Jun-23	Jul-22	Yearly Change					
Civilian Labor Force	15,180,378	15,047,054	14,678,367	502,011					
Employed	14,496,912	14,418,818	14,088,346	408,566					
Unemployed	683,466	628,236	590,021	93,445					
Unemployment Rate	4.5%	4.2%	4.0%	0.5%					
US Labor Force Statistics									
	Jul-23	Jun-23	Jul-22	Yearly Change					
Civilian Labor Force	168,354,000	167,910,000	165,321,000	3,033,000					
Employed	161,982,000	161,559,000	159,067,000	2,915,000					
Unemployed	6,372,000	6,351,000	6,255,000	117,000					
Unemployment Rate	3.8%	3.8%	3.8%	0.0%					
Continued Claims for the Week of the 12th									
	Jul-23	Jun-23	Jul-22	Yearly Change					
WDA	926	1,116	713	213					
Texas	119,561	120,579	86,132	33,429					
Historical Unemployment Rates									

# Use QCEW industry data from TexasLMI.com

- Go to LMI By Category: QCEW.
- Select reference quarter and possible past quarter (compare same qtrs., Q1'20:Q1'22 etc.).
- Select total ownership.
- Drop-down menu selects NAICS codes of same digits (industry levels).
- To compare industries, must be same number of NAICS digits.

Select Ownership

Private  Local Govt.  State Govt.  Federal Govt.  Total

Get Industries Reset

Table Customizations/Keyboard Shortcuts

Select Industries

Search [input type="text"] Search Clear

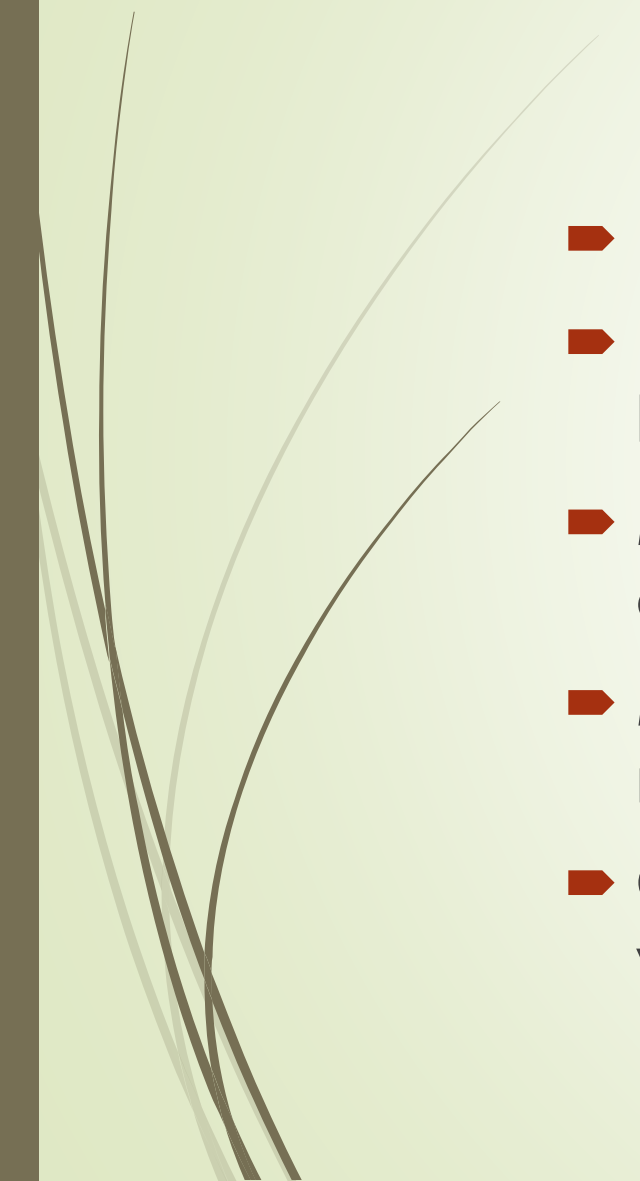
Select all Level 2 industries

Selected 21 of 21 industries.

Selections	Level	Industry Code	Industry Title
<input checked="" type="checkbox"/>	2	11	Agriculture, F
<input checked="" type="checkbox"/>	2	21	Mining, Quar

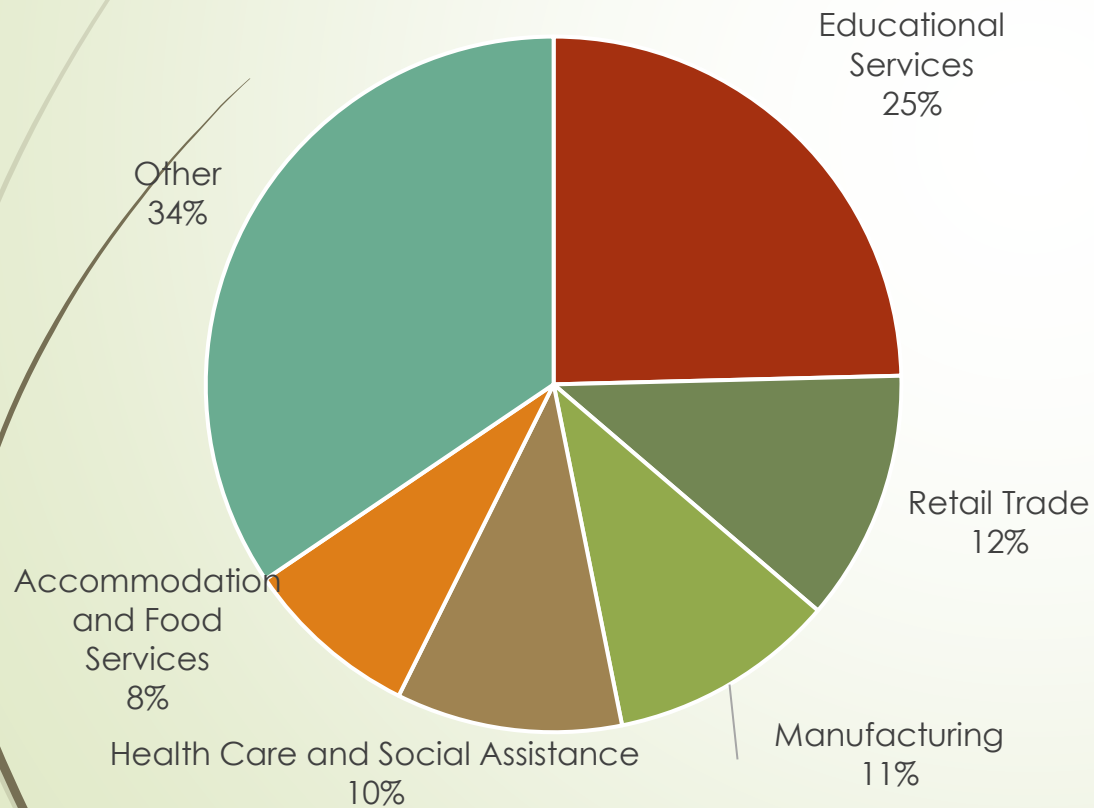


# Pie-charts can tell a lot

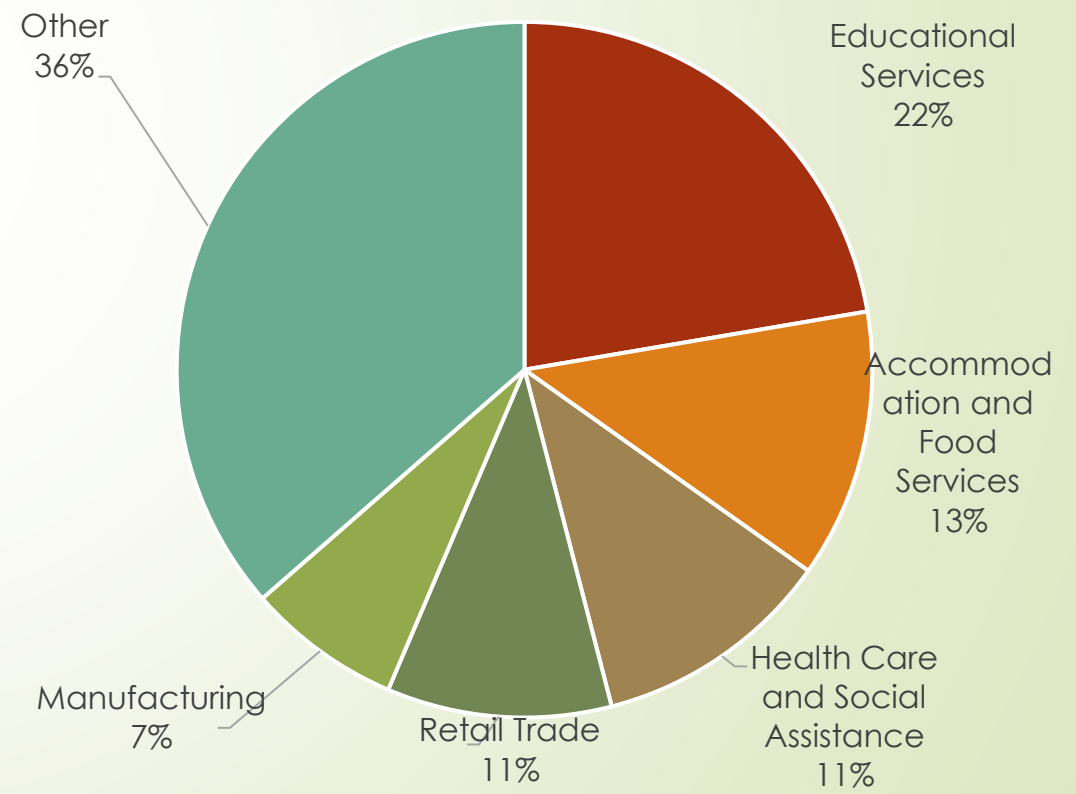
- Download spreadsheet of two-digit codes from QCEW
  - Use QCEW because of how it reflects education and health care
  - Make a pie-chart of two-digit industry sector employment
  - May need to aggregate the smaller sectors to make a meaningful pie chart
  - Compare with same result 20-25 years ago to see how your region's employment has changed
- 

# Brazos Valley Industry Concentration

3<sup>rd</sup> Quarter 1998



3<sup>rd</sup> Quarter 2023

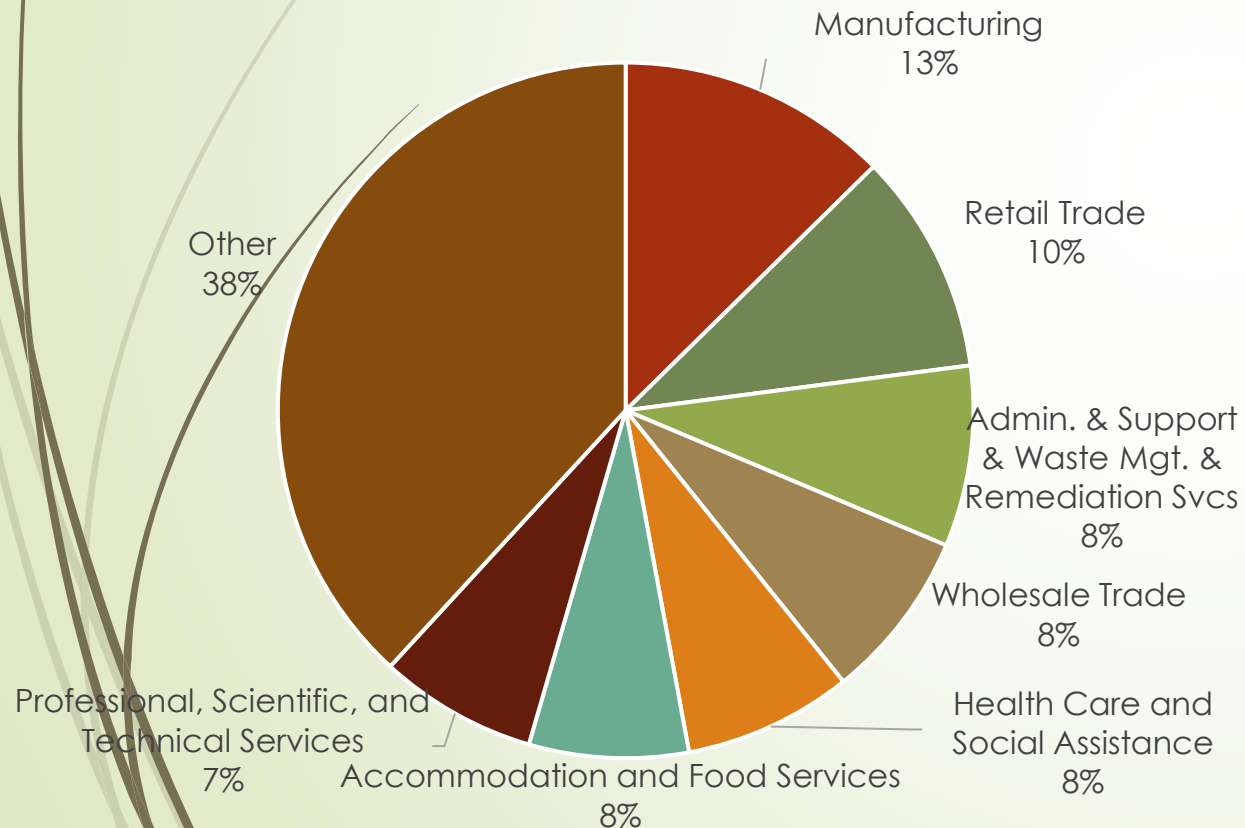


Source: Texas Workforce Commission. Quarterly Census of Employment and Wages.

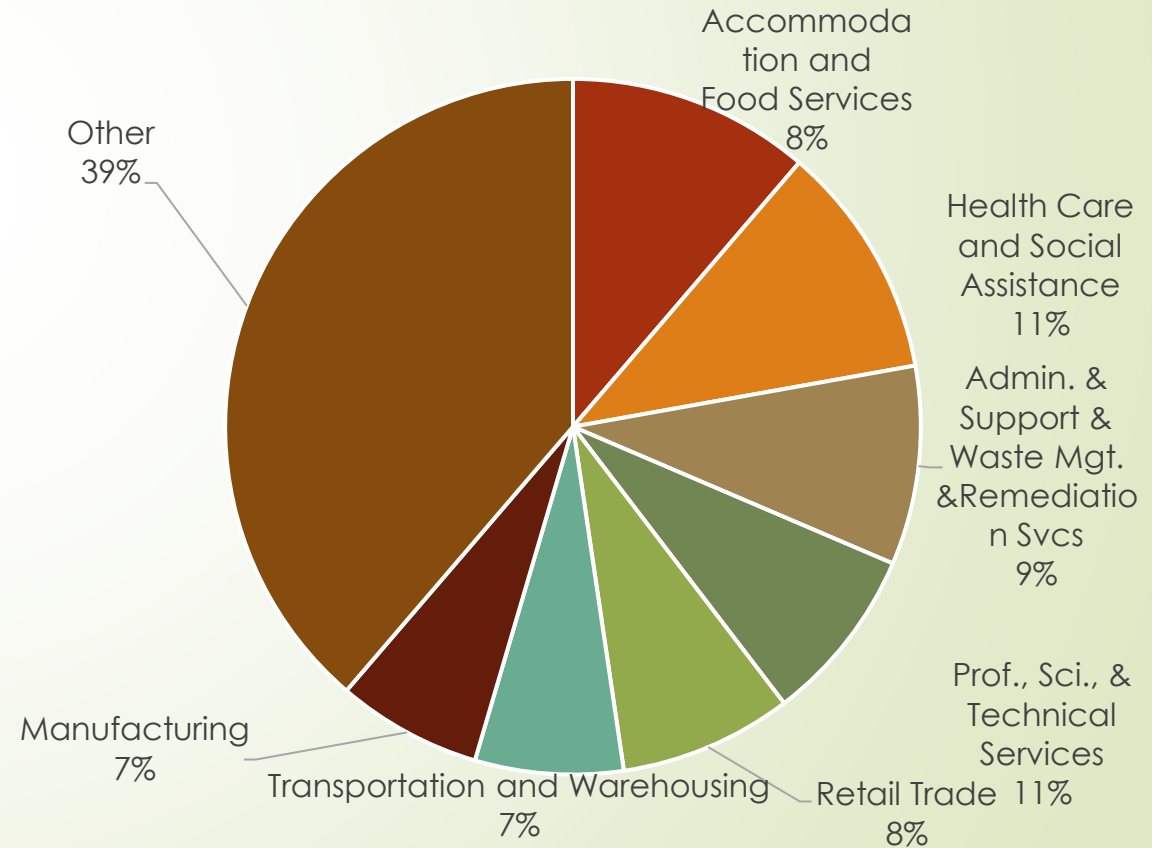


# Dallas County Industry Concentration


## 3<sup>rd</sup> Quarter 1998



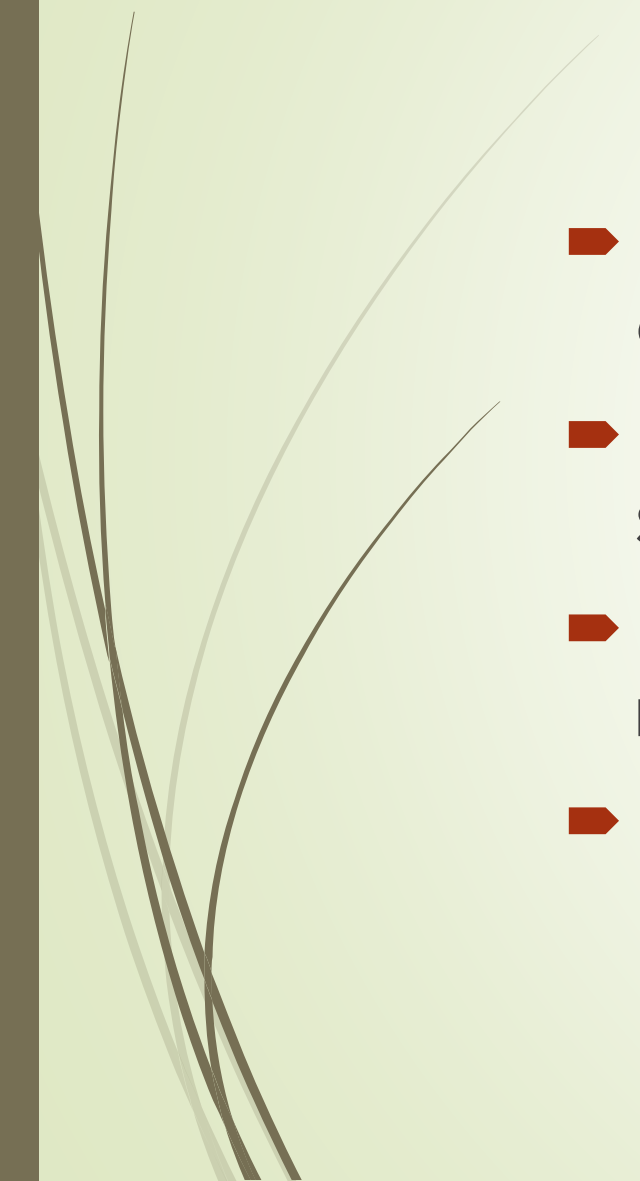
## 3<sup>rd</sup> Quarter 2023



Source: Texas Workforce Commission. Quarterly Census of Employment and Wages.



# Look at largest 3-digit industries

- Now repeat the same exercise but with 3-digit codes.
  - Instead of making a pie-chart, sort from largest to smallest NAICS.
  - Note the 10-15 largest 3-digit industries in your region.
  - Use local insight to supplement.
- 

# Largest industries by employment in Gulf Coast WDA

Industry Name	Employment	Average Weekly Wage
Educational Services	318,281	\$1,182
Food Services and Drinking Places	294,478	\$491
Prof., Scientific, & Technical Services	255,678	\$2,201
Administrative and Support Services	210,551	\$1,104
Ambulatory Health Care Services	194,384	\$1,254
Hospitals	138,844	\$1,867
Specialty Trade Contractors	116,378	\$1,368
Merchant Wholesalers, Durable Goods	104,305	\$1,820

Source: Texas Workforce Commission. Quarterly Census of Employment and Wages. 3<sup>rd</sup> Quarter 2023.

# Largest industries by employment in Panhandle WDA

Industry Name	Employment	Average Weekly Wage
Educational Services	18,074	\$916
Food Services and Drinking Places	16,577	\$404
Food Manufacturing	14,684	\$1,144
Animal Production and Aquaculture	9,199	\$949
Ambulatory Health Care Services	8,884	\$1,356
Hospitals	8,416	\$1,343
Specialty Trade Contractors	6,038	\$1,161
Prof., Scientific, & Technical Services	5,964	\$1,363

Source: Texas Workforce Commission. Quarterly Census of Employment and Wages. 3<sup>rd</sup> Quarter, 2023.

# Introducing Texas Labor Analysis

- [www.texaslaboranalysis.com](http://www.texaslaboranalysis.com)
- TWC website designed to assist in board planning.
- The “Top Statistics” field can be particularly helpful in understanding large occupations.

The screenshot displays the Texas Labor Analysis website. At the top left is a logo with two interlocking gears, one green and one blue, with a magnifying glass over the green one. To the right of the logo, the text "TEXAS" is in a large, bold, blue font, and "Labor Analysis" is in a smaller, blue font below it. A dark blue sidebar on the left contains a vertical menu with the following items: "Home", "Reports", "Location Quotients", "FAQs", and "Glossary". The main content area has a dark blue header with the title "Regional Occupational Analysis Tool" in white. Below the title is a white text box that reads: "The Regional Occupational Analysis tool will help you in finding what kind of field you want to work in or the job you want and we can tell you what kind of training you'll need to land it." The main content area is divided into two columns. The left column has a green header "Create a Report" with a document icon. Below this header are three sections: "Gap Analysis" (describing the tool's ability to compare labor supply and demand), "Demand" (describing real-time demand based on Help Wanted Online postings), and "Supply" (describing the formal supply of skilled workforce). The right column has a green header "Quick Reports" with a folder icon. Below this header are two sections: "Regional Occupational Profile" (describing how different workforce regions compare) and "Top Statistics" (describing the top 25 occupations for a region).

**TEXAS**  
Labor Analysis

Home  
Reports  
Location Quotients  
FAQs  
Glossary

## Regional Occupational Analysis Tool

The Regional Occupational Analysis tool will help you in finding what kind of field you want to work in or the job you want and we can tell you what kind of training you'll need to land it.

### Create a Report

#### Gap Analysis

Gap Analysis enables users to compare the various sources of potential labor market supply (such as graduates from educational programs and registered job seekers) and labor market demand (such as job openings and projected employment). Users can customize the report by region or by occupations and users can view the statistics on a map that indicates the spread of the supply-demand relationship by workforce regions in Texas

#### Demand

Discover real-time demand for occupations based on current Help Wanted Online postings. Perform a regional demand analysis using projected and latest employment numbers, and salaries. Generate reports on Industry, Occupation, and the relationship between the two. Sort, filter, and group your findings. All exportable to Excel.

#### Supply

Education and workforce training programs offer an estimate of the formal supply of skilled workforce. Users can view the number of enrollments and graduates for different programs of study offered by various schools across Texas. Contact information for schools is also

### Quick Reports

#### Regional Occupational Profile

Find out how different workforce regions of Texas compare with each other on some key employment indicators like wages, employment projections and trend of online job postings. The report is a set of charts that compares up to 10 workforce regions and/or Texas. All charts can be viewed at the same time, or individually studied/downloaded.

#### Top Statistics

Curious to find out the Top 25 occupations for your region? You can view them with the highest employment, job openings, occupations with the highest wage, or occupations projected to have the highest employment in the next 10 years. You can also filter the list to include occupations by various education levels or just include high paying occupations.

# Top Statistics page generates customized top occupations list

## Top Statistics

Generate Top 25 statistical reports for an occupation.

### Region

Select a region to view the Top 25 occupations. To change your selection, you must delete the previously selected region.

Select from List

Select from Map

Brazos Valley 

### Choose a Report to view:

Current Employment

Current Job Postings

Wages

Projections

Current Supply (WIT)

### Select an Education Level

No Education Requirement

High School Diploma

Postsecondary Non-Degree

Associates

Bachelors


Masters or Above

## Top 25 Occupations by Current Employment for Brazos Valley

Choose occupations above the Texas Median Wage (\$43,463)

Export to Excel

Print to PDF



# Create several lists of important occupations

- ▶ Texas Labor Analysis allows for sorting by several variables
- ▶ Categorize by employment, job postings, wages, projections, and Work In Texas postings
- ▶ Can screen for greater than median wage
- ▶ Can screen by education level
- ▶ All lists are exportable to Excel

# Top Occupations by Job Postings requiring bachelors: Cameron County

SOC Code	SOC Title	Current Employment (2022)	Job Postings (Mar 2024)	Wage (2022)
29-1141	Registered Nurses	2,660	514	\$72,948
	Medical and Health Services			
11-9111	Managers	560	87	\$105,948
11-9198	Personal Svc Mgrs, AO; Entertainment & Rec Mgrs, Ex Gambling; & Mgrs, AO	N/A	72	\$105,143
11-1021	General and Operations Managers	3,550	44	\$86,597
41-3031	Securities, Commodities, and Financial Services Sales Agents	290	35	\$75,727
11-2022	Sales Managers	360	28	\$101,937
13-1198	Project Management Specs & Business Operations Specs, AO	N/A	28	\$69,495
13-1071	Human Resources Specialists	550	27	\$51,514




## Top Occupations by Wages requiring Post-secondary or Associate, : Borderplex (>50 employment)

SOC Code	SOC Title	Current Employment (2022)	Wage (2022)
33-1021	First-Line Supervisors of Firefighting and Prevention Workers	300	\$81,935
29-1292	Dental Hygienists	300	\$71,179
29-2035	Magnetic Resonance Imaging Technologists	70	\$70,156
17-3023	Electrical and Electronic Engineering Technologists and Technicians	80	\$68,824
29-2032	Diagnostic Medical Sonographers	160	\$68,608
31-2021	Physical Therapist Assistants	240	\$64,747
29-1126	Respiratory Therapists	310	\$64,407
29-2034	Radiologic Technologists and Technicians	920	\$63,539



# Telling your wage story: Datapoints

- Mean Wage: Average Wage rate people are paid
- Median Wage: Mid-point of wage rate
- Average Weekly Wage: Average earnings (includes bonuses and overtime)
- Occupational has wage rates. Industry has earnings
- Cost of Living variables such as housing prices
- Entry wage: average of lower-third of wage rates
- Hourly and annual available



# Workforce Solutions Heart of Texas wages

- Mean: \$23.93 per hour
- Median: \$18.50 per hour
- Entry Wage: \$11.87 per hour
- Average Weekly Wage (Q2:2022): \$1,048



# In Demand Industries

Using projections to find growing industries

“

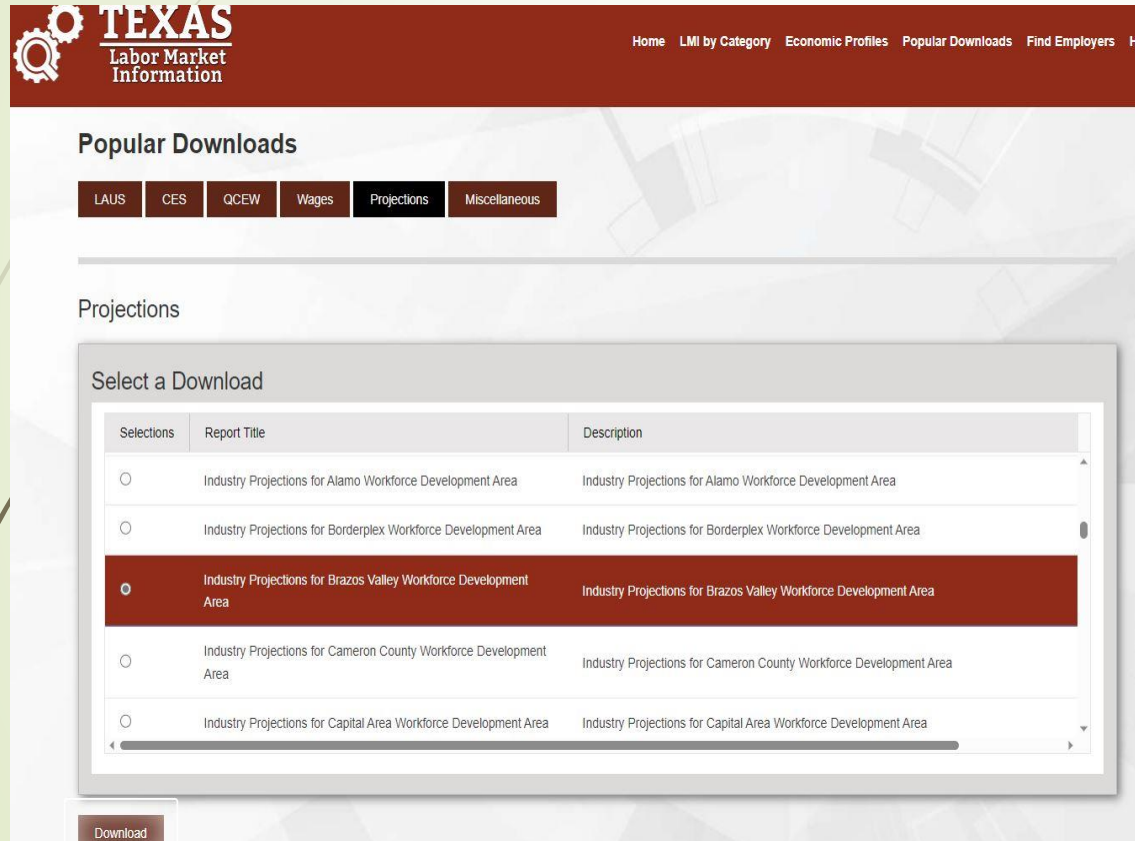
an industry sector that has a substantial current or potential impact (including through jobs that lead to economic self-sufficiency and opportunities for advancement) on the State, regional, or local economy, as appropriate, and that contributes to the growth or stability of other supporting businesses, or the growth of other industry sectors;

”

WIOA Sec. 3(23). 29 USC 3102(23)(A)(i)

WIOA In-Demand Industry Definition

# Use TexasLMI.com Industry Projections



The screenshot shows the TexasLMI.com website interface. At the top, there is a navigation bar with the TexasLMI logo and links for Home, LMI by Category, Economic Profiles, Popular Downloads, Find Employers, and Help. Below the navigation bar, the 'Popular Downloads' section is active, with a sub-menu containing tabs for LAUS, CES, QCEW, Wages, Projections, and Miscellaneous. The 'Projections' tab is selected. A 'Select a Download' dropdown menu is open, displaying a table of available reports. The table has three columns: 'Selections', 'Report Title', and 'Description'. The report for 'Brazos Valley Workforce Development Area' is highlighted in red.

Selections	Report Title	Description
<input type="radio"/>	Industry Projections for Alamo Workforce Development Area	Industry Projections for Alamo Workforce Development Area
<input type="radio"/>	Industry Projections for Borderplex Workforce Development Area	Industry Projections for Borderplex Workforce Development Area
<input checked="" type="radio"/>	Industry Projections for Brazos Valley Workforce Development Area	Industry Projections for Brazos Valley Workforce Development Area
<input type="radio"/>	Industry Projections for Cameron County Workforce Development Area	Industry Projections for Cameron County Workforce Development Area
<input type="radio"/>	Industry Projections for Capital Area Workforce Development Area	Industry Projections for Capital Area Workforce Development Area

Download

➔ Go to [www.TexasLMI.com](http://www.TexasLMI.com).

➔ Click on “Popular Downloads” then “Projections.”

➔ Go to “Industry Projections for [Board name]”



# Using industry projections data


- Step one is making local policy decisions about qualifying level of number and percentage growth
- Another local policy decision: do you want to set targets for Average Weekly Wage?
- Filter for 4-digit NAICS codes
- Sort or filter by number and percentage growth per local criteria
- Regional averages and the “fastest” or “adding” tabs may be helpful for making local policies
- Apply local wisdom
- Popular downloads spreadsheet contains needed variables



# In Demand and Target Occupations

How projections can help





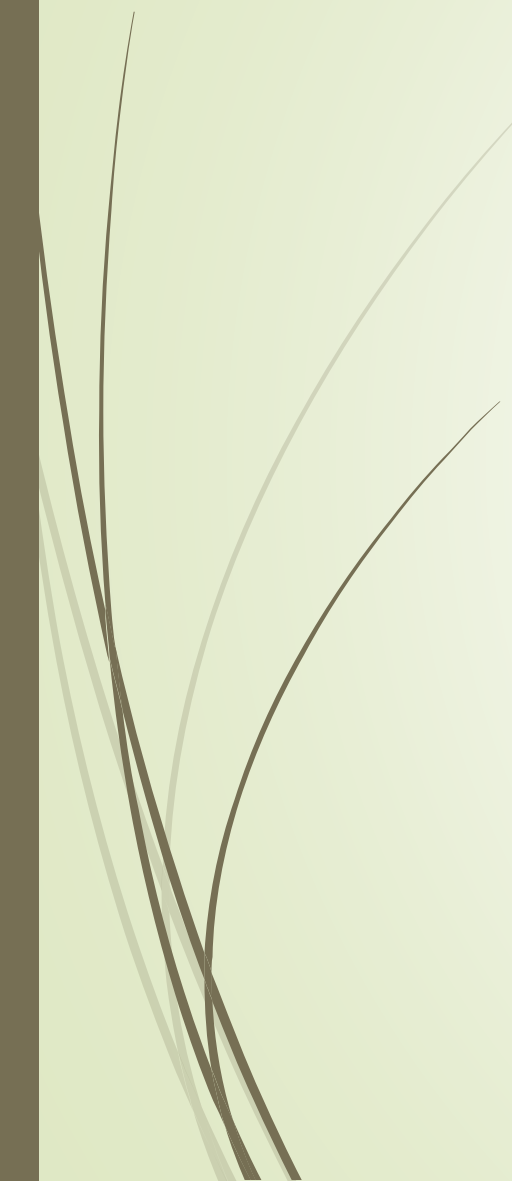
“ an occupation that currently has or is projected to have a number of positions (including positions that lead to economic self-sufficiency and opportunities for advancement) in an industry sector so as to have a significant impact on the State, regional, or local economy, as appropriate. ”

WIOA Sect. 3(23). 29 USC 3102(23)(A)(ii)

WIOA In-Demand Occupation Definition




# Steps to in-demand occupations list

- Make local policy decisions about number and percent growth targets or number of open positions
  - Make local policy decisions about wages
  - Download projections (with wages) spreadsheet
  - Apply local policy decisions
  - Use local wisdom to round out list
- 



# Download occupational projections sheet from TexasLMI.com

- Filter for detail occupations (or detail-broad in SOC transition years)
- Filter for appropriate occupation size (>500?)
- Filter based on local criteria
- Filter for wage
- Sort as desired



“Target Occupations--As determined by LWDA, include: (A) occupations that: (i) are in-demand, as defined by WIOA §3(23); (ii) have a dedicated training component; and (iii) provide wages that meet self-sufficiency requirements in the LWDA; or (B) occupations that are included in career pathway leading to an occupation described in subparagraph (A) of this paragraph.”

40 TAC 840.2(12)

TWC Definition of Target Occupation



# Notes on target occupations

- An occupation *MUST* be in-demand to be target; the target occupation list is a subset of in-demand list
- Board must adopt and apply a self-sufficient wage criteria
- Wage is a LOCAL decision, not a TWC one
- An occupation *MUST* have one or more eligible training providers to be a target occupation
- Many boards emphasize “middle skills” occupations on the target list



# Local wisdom

- The Texas Workforce System is a locally-driven system, reflecting local priorities
- In addition to published statistical criteria, boards can use local wisdom to add occupations to the list
- Good example: we know a plant is going to open in a year, and we've been told 500 of these occupations will be hired
- Declare local wisdom additions on spreadsheet



# How to cite local wisdom (Examples from WD letter 24-20)

- ▶ “The Lubbock Chamber of Commerce (Chamber) has commitments for three new data centers within the next two years. The Chamber expects these centers to need 75 customer service representatives at prevailing wages of greater than \$15 per hour. Half of the new positions will require Spanish-language skills.
- ▶ “The Exxon/Mobil Baytown refinery will double its capacity over the next five years. It is badly in need of American Welding Society–certified welders and braziers. Additional training slots have been added at San Jacinto Community College, and the mayor’s office is starting a high school recruiting program.”
- ▶ “A survey conducted by the university’s Business Research department indicated that there is an extensive demand for medical secretaries. Vocational training will emphasize computer skills, transcription skills, and medical vocabulary, all of which were reported in the survey as critical skills.”

# Staffing patterns

LAUS CES QCEW Wages Projections Miscellaneous

Projections

Select a Download

Selections	Report Title	Description
<input type="radio"/>	Alamo WDA Projections Overview	Alamo WDA Occupational Projections One Page Overview
<input type="radio"/>	Borderplex WDA Industry-Occupation Matrix (Staffing Patterns)	Borderplex WDA Industry-Occupation Matrix (Staffing Patterns)
<input type="radio"/>	Borderplex WDA Projections Overview	Borderplex WDA Occupational Projections One Page Overview
<input checked="" type="radio"/>	Brazos Valley WDA Industry-Occupation Matrix (Staffing Patterns)	Brazos Valley WDA Industry-Occupation Matrix (Staffing Patterns)
<input type="radio"/>	Brazos Valley WDA Projections Overview	Brazos Valley WDA Occupational Projections One Page Overview
<input type="radio"/>	Cameron County WDA Industry-Occupation Matrix (Staffing	

Download

- Shows what occupations are hired by a given industry and what industries hire a given occupation
- Like a translator
- Can be useful in determining occupations for critical local industry
- Posted to TexasLMI for each board area under popular downloads: projections. “[Name] WDA Input/Output Matrix”





# Navigating the staffing pattern spreadsheet

- Filter column B or C for desired industry
- Column G can be filtered for detailed occupations
- Sort by Column M (or O for projected) to get a list of most-hired occupations in an industry
- To look at what industries hired an occupation, filter column E or F for the occupation
- Use column D to filter for Industry level (4-digit, etc)
- Sort by columns N or O for most-hired list

# Staffing Pattern sample: key SE Texas industries

## Construction

Occupation	Industry Emp. 2020	Median Wage
First-Line Supervisors of Const. Trades & Extraction Wkrs.	1,347	\$70,345
Plumbers, Pipefitters, and Steamfitters	1,063	\$63,541
Electricians	981	\$58,420
Carpenters	901	\$50,573
Sales Rep's, Wholesale & Manufact.	420	\$66,189

## Manufacturing

Occupation	Industry Emp. 2020	Median Wage
Petroleum Pump Sys. Op., Refinery Op., & Gaugers	1,453	\$88,132
Chemical Plant & System Operators	1,086	N/A
1st-Line Supervisors: Production & Opr. Workers	1,081	\$79,616
Chemical Equipment Operators & Tenders	1,028	N/A
Welders, Cutters, Solderers, & Brazers	728	\$60,152



# SHOW YOUR WORK

- Just like high school algebra, how the board got from point A to point B needs to be clear
- Specify your methodology for determining in-demand occupations and industries and target occupations
- Clearly state on the spreadsheet exceptions to statistical criteria based on local wisdom
- If a different data source is used in one or two columns or rows, clearly label
- Use standard, DOL-approved SOC codes. Some third-party data sources invent or use non-standard SOC codes.



# Coming attractions

- Early Summer 2024 (possibly June): OEWS Occupational Wage Estimates
- July 2024: 2022-2032 TWC Long-term projections
- LMI webinars on board plans + projections
  - Will happen after WD letter and projection release
  - Probably sometime in the fall 2024

William Lutz and David Munoz  
TWC Labor Market Information  
I | 3 Division

[william.lutz@twc.Texas.gov](mailto:william.lutz@twc.Texas.gov)

[david.munoz@twc.Texas.gov](mailto:david.munoz@twc.Texas.gov)

<http://www.texaslmi.com>

<http://www.texaslaboranalysis.com>

THANK YOU!!