## **Del Mar College**

## **Instructional Program Review Data Resources**

**Transportation Training Services** 

## **March 2012**

## **Transportation Training Services**

## Instructional Program Review Data Resources 2011-2012

## **Table of Contents**

Executive Summary	1
Enrollment Data	4
Enrollment History	5
Student Data	6
Student Survey Results	7
Program Demand	11
Contact Hour Projections	12
Career Development Resources	14
Departmental Information	28

## **Transportation Training Services**

This program review data summary includes detailed information on various aspects of the Del Mar College transportation training services program. The following is a brief summary of the highlights from the tables and statistical data prepared by the Office of Strategic Planning and Institutional Research as part of the instructional program review process.

### **Enrollment**

Annual enrollment in transportation training services courses has fluctuated over the past five years. From a low annual enrollment of 128 in 2008-2009, the number enrolled increased to 288 last year, representing an increase of 18 percent from 244 in 2006-07.

Annual contact hour totals in transportation training services increased 21.8 percent from 2006-2007 to 2010-2011. First-quarter contact hours have fluctuated between 2006 and 2011, starting at 9,456 and ending with 9,324, which represents a 1.4 percent decline over the past five years.

The number of classes offered per quarter has ranged from a high of 20 in the third quarter of 2006 -2007 to a low of 7 classes in the first quarter of 2009 -2010. Class size has fluctuated, from an annual average of 5.6 students per class in 2010 -2011 to 3 per class in 2008 -2009, with a five-year average of 3.7 students per class.

Over the past five years, all of the contact hours taught in transportation training services courses have been state-reimbursable. However, in the first quarter of 2011-2012, there were 24 contact hours taught that are not state-reimbursable.

## Student Satisfaction with the Program and Services

Students were enrolled in transportation services courses through their employer. Classes were surveyed to determine students' satisfaction with the 2011-2012 courses. Survey respondents were very well satisfied with all components measured. Regarding items addressing topic and content, 91 percent of the respondents indicated that they met their personal objectives, and 89 percent were satisfied with the amount they learned. For areas concerning course activities, students responded that they were satisfied with the following: books and handouts (94%), materials (97%) and audiovisuals (95%). When the students were asked about the instructor, 95 percent of students responded that the instructor was well prepared, 97 percent of the students said that the instructor was knowledgeable, and 94 percent indicated that the instructor was able to answer questions confidently and completely. A majority of the students (92%) were satisfied with the facilities and personnel available.

The overall impression of the quality of education at Del Mar College was high, with 90 percent expressing satisfaction.

## **Program Demand**

While the College credit programs experienced an increase of 8.7 percent in fall contact hours over the past 10 years, contact hours for all continuing education programs increased by 12.4 percent from the first quarter of 2001-2002 to the first quarter of 2011-2012, and contact hours in transportation training services decreased by 25 percent during the same time period. Transportation training services contact hours have increased and decreased unevenly over the past 10 years.

The accompanying charts illustrate two statistical methods (linear and polynomial trend analysis) that, when considered together, indicate a potential for changes in transportation training services contact hours over the next several years.

Statistics compiled utilizing America's Career InfoNet and Economic Modeling Specialists, Inc. (EMSI) are included in this report that illustrate the potential changes in the demand and wage growth for occupations that might employ students who took transportation training services classes.

# Transportation Training Services Del Mar College Program Review - Summary Sheet

						5-year	4-Year %
Annual Statistics	2006-07	2007-08	2008-09	2009-10	2010-11	Average	Change
Sections	72	54	43	43	51	53	-29.2%
					288		
Enrollments	244	165	128	141		170	-100.0%
Avg. Class Size	3.4	3.1	3.0	3.3	0.0	2.6	-100.0%
Reimbursable Contact Hours	30,222	22,690	17,930	20,500	36,808	25,630	21.8%
Non-Reimbursable Contact Hours	0	0	0	0	0	0	0.0%
Total Contact Hours	30,222	22,690	17,930	20,500	36,808	25,630	21.8%

1st Quarter	1st Quarter	1st Quarter	1st Quarter	1st Quarter	1st Quarter	1st Quarter	6-year	5-Year %
Statistics	2006	2007	2008	2009	2010	2011	Average	Change
Sections	18	14	13	7	14	18	14	0.0%
Enrollments	78	44	40	23	88	92	61	17.9%
Avg. Class Size	4.3	3.1	3.1	3.3	6.3	5.1	4.3	17.9%
Contact Hours	9,456	5,960	5,530	3,540	10,696	9,324	7,418	-1.4%

**Enrollment Data** 

## **Enrollment History for Transportation Training Services**

		Number of	Number	Average Class	Contact I	Hours Non-	Total Contact
		Classes	Enrolled	Size	Reimbursable	Reimbursable	Hours
2006-200	)7						
1st	Quarter	18	78	4.3	9,456	0	9,456
2nd	Quarter	15	53	3.5	6,568	Ō	6,568
3rd	Quarter	20	54	2.7	6,926	Ö	6,926
4th	Quarter	19	59	3.1	7,272	Ő	7,272
Total	Quarter	72	244	3.4	30,222	0	30,222
Total		12	244	5.4	30,222	O	30,222
2007-200	8						
1st	Quarter	14	44	3.1	5,960	0	5,960
2nd	Quarter	13	36	2.8	4,880	0	4,880
3rd	Quarter	13	43	3.3	6,070	0	6,070
4th	Quarter	14	42	3.0	5,780	0	5,780
Total		54	165	3.1	22,690	0	22,690
2008-200	10						
		10	40	2.4	E E20	0	E E20
1st	Quarter	13	40	3.1	5,530	0	5,530
2nd	Quarter	14	35	2.5	4,420	0	4,420
3rd	Quarter	8	26	3.3	3,880	0	3,880
4th	Quarter	8	27	3.4	4,100	0	4,100
Total		43	128	3.0	17,930	0	17,930
2009-201	0						
1st	Quarter	7	23	3.3	3,540	0	3,540
2nd	Quarter	9	25	2.8	4,000	0	4,000
3rd	Quarter	12	36	3.0	5,440	Ö	5,440
4th	Quarter	15	57	3.8	7,520	Ő	7,520
Total		43	141	3.3	20,500	0	20,500
2010-201	1						
1st	Quarter	14	88	6.3	10,696	0	10,696
2nd	Quarter	9	79	8.8	9,920	Ő	9,920
3rd	Quarter	15	68	4.5	8,792	0	8,792
4th	Quarter	13	53	4.5 4.1	7,400	0	7,400
401	Qualter	13	აა	4.1	7,400	U	7,400
Total		51	288	5.6	36,808	0	36,808
2011-201	2						
1st	Quarter	18	92	5.1	9,300	24	9,324
Total		18	92	5.1	9,300	24	9,324

**Student Data** 

## Please indicate the number that best represents your opinion of the following area: Topic and Content

	1 (Lowest)		:	2	3		4		5 (Highest)	
	Count	%	Count	%	Count	%	Count	%	Count	%
Met my personal objectives					6	9.4%	16	25.0%	42	65.6%
Clear and understandable			3	4.8%	5	7.9%	15	23.8%	40	63.5%
I was able to master the course objectives			3	4.8%	5	8.1%	19	30.6%	35	56.5%
Satisfied with the amount I learned	1	1.6%			6	9.5%	15	23.8%	41	65.1%
Class followed course outline			2	3.3%	4	6.6%	13	21.3%	42	68.9%

## Please indicate the number that best represents your opinion of the following area: Course Activities

	1 (Lowest)		:	2		3		4	5 (Highest)	
	Count	%	Count	%	Count	%	Count	%	Count	%
I was actively involved in the sessions					2	3.2%	10	15.9%	51	81.0%
I was satisfied with kind and number of examples used					2	3.2%	18	28.6%	43	68.3%
Practice time was sufficient	1	1.6%	1	1.6%	7	11.1%	21	33.3%	33	52.4%
Length of course was appropriate	2	3.2%	4	6.3%	7	11.1%	17	27.0%	33	52.4%
Books Handouts			2	3.2%	2	3.2%	11	17.5%	48	76.2%
Materials			1	1.6%	1	1.6%	13	21.3%	46	75.4%
Audio Visuals			1	1.7%	2	3.4%	12	20.3%	44	74.6%

## Please indicate the number that best represents your opinion of the following area: Instructor

	1 (Lo	west)		2	3	3		4	5 (Hi	ghest)
	Count	%	Count	%	Count	%	Count	%	Count	%
Well prepared					3	4.8%	8	12.7%	52	82.5%
Knowledgeable about subject matter					2	3.2%	6	9.7%	54	87.1%
Good presentation, style, and manner			1	1.6%	2	3.2%	7	11.3%	52	83.9%
Able to answer questions confidently and completely					4	6.5%	7	11.3%	51	82.3%
Encourages class interaction					2	3.2%	13	21.0%	47	75.8%
Provides timely feedback on my performance	1	1.6%			2	3.2%	7	11.3%	52	83.9%
Uses class time effectively for learning					1	1.6%	8	12.9%	53	85.5%
Uses teaching methods other than lecture					2	3.3%	7	11.5%	52	85.2%

## Please indicate the number that best represents your opinion of the following area: Facility

	1 (Lowest)		2		3		4		5 (Highest)	
	Count	%	Count	%	Count	%	Count	%	Count	%
Convenient, well arranged, and comfortable			1	1.6%	4	6.3%	13	20.6%	45	71.4%

## Please indicate the number that best represents your opinion of the following area: Registration

	1 (Lowest)			2		3		4	5 (Highest)	
	Count	%	Count	%	Count	%	Count	%	Count	%
Times to register are convenient			1	1.8%	3	5.5%	16	29.1%	35	63.6%
Personnel are helpful and friendly	1	1.7%			5	8.5%	12	20.3%	41	69.5%
Information provided in a prompt manner	2	3.4%	2	3.4%	2	3.4%	14	24.1%	38	65.5%

## Please indicate the number that best represents your opinion of the following area: Quality of Education

	1 (Lowest)		1 (Lowest) 2		3		4		5 (Highest)	
	Count	%	Count	%	Count	%	Count	%	Count	%
Overall impression of the quality of education at Del Mar College			1	1.7%	5	8.5%	9	15.3%	44	74.6%

	Sche	dule	News	paper	Fly	er	T	v	Friends Family		Professiona Organization	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
How did you learn about this course?	8	15.1%	9	17.0%	4	7.5%	2	3.8%	16	30.2%	14	26.4%

	Telep	hone	Wal	k-in	On-line		
	Count	%	Count	%	Count	%	
How did you register for this course?	13	24.1%	38	70.4%	3	5.6%	

## **Student Satisfaction**

## **Course Topic and Contents**

	N	Mean
Met my personal objectives	64	4.56
Clear and understandable	63	4.46
I was able to master the course objectives	62	4.39
Satisfied with the amount I learned	63	4.51
Class followed course outline	61	4.56
Course Topic and Content Aggregate Average		4.50

## **Course Activities**

	N	Mean
I was actively involved in the sessions	63	4.78
I was satisfied with kind and number of examples used	63	4.65
Practice time was sufficient	63	4.33
Length of course was appropriate	63	4.19
Books Handouts	63	4.67
Materials	61	4.7
Audio Visuals	59	4.68
Course Activities Aggregate Average		4.57

#### Instructor

	N	Mean
Well prepared	63	4.78
Knowledgeable about subject matter	62	4.84
Good presentation, style, and manner	62	4.77
Able to answer questions confidently and completely	62	4.76
Encourages class interaction	62	4.73
Provides timely feedback on my performance	62	4.76
Uses class time effectively for learning	62	4.84
Uses teaching methods other than lecture	61	4.82
Instructor Aggregate Average		4.79

### **Student Satisfaction**

## Facility

	N	Mean
Convenient, well arranged, and comfortable	63	4.62

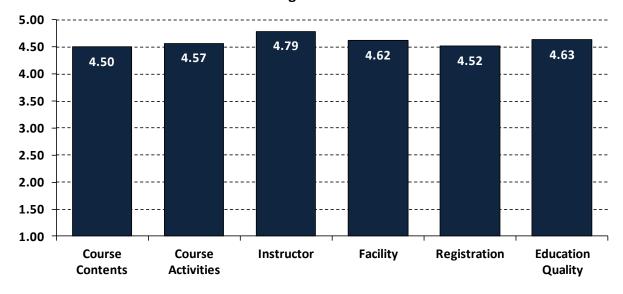
## Registration

	N	Mean
Times to register are convenient	55	4.55
Personnel are helpful and friendly	59	4.56
Information provided in a prompt manner	58	4.45
Registration Aggregate Average		4.52

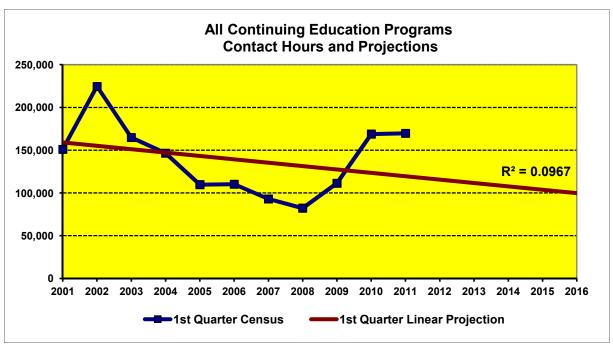
## **Quality of Education**

	N	Mean
Overall impression of the quality of education at Del Mar College	123	4.63

## **Average Satisfaction**

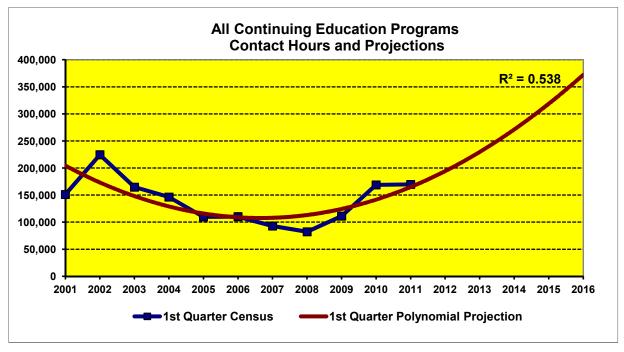


**Program Demand** 

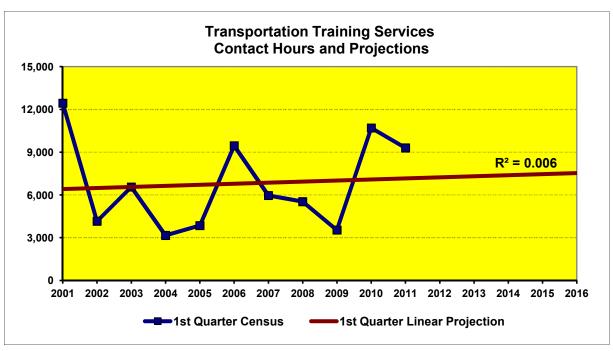


## **Linear Projection**

Term	<b>Contact Hours</b>	Percent Change	10-year Change
1st Quarter 2001	151,041		
1st Quarter 2002	224,558	48.7%	
1st Quarter 2003	164,813	-26.6%	
1st Quarter 2004	146,475	-11.1%	
1st Quarter 2005	109,724	-25.1%	
1st Quarter 2006	110,173	0.4%	
1st Quarter 2007	92,942	-15.6%	
1st Quarter 2008	82,241	-11.5%	
1st Quarter 2009	111,308	35.3%	
1st Quarter 2010	168,842	51.7%	
1st Quarter 2011	169,715	0.5%	12.4%

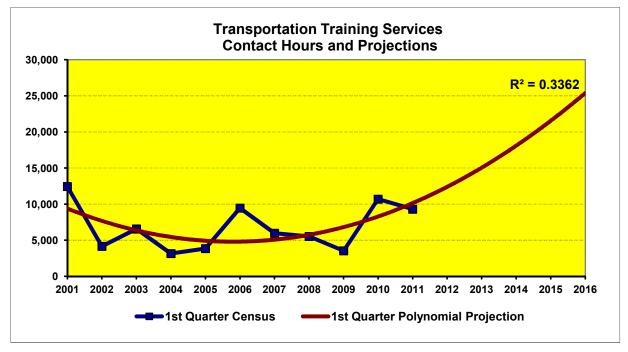


### **Polynomial Projection**



## **Linear Projection**

Term	<b>Contact Hours</b>	Percent Change	10-year Change
1st Quarter 2001	12,440		
1st Quarter 2002	4,160	-66.6%	
1st Quarter 2003	6,560	57.7%	
1st Quarter 2004	3,160	-51.8%	
1st Quarter 2005	3,848	21.8%	
1st Quarter 2006	9,456	145.7%	
1st Quarter 2007	5,960	-37.0%	
1st Quarter 2008	5,530	-7.2%	
1st Quarter 2009	3,540	-36.0%	
1st Quarter 2010	10,696	202.1%	
1st Quarter 2011	9,300	-13.1%	-25.2%



### **Polynomial Projection**

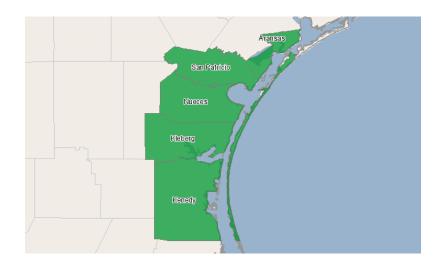
## **Del Mar College**



101 Baldwin Blvd Corpus Christi, Texas 78404

## **Occupation Report**

Service Area



## **Region Info**

Name: Service Area

County Areas: Aransas, Texas (48007), Kenedy, Texas (48261), Kleberg, Texas (48273), Nueces, Texas (48355), San

Patricio, Texas (48409)

## **Selected Occupations**

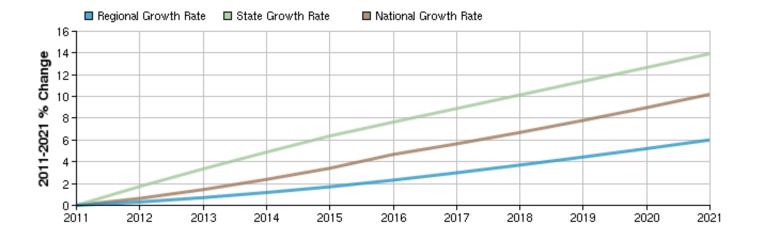
Occupation	Education Level
First-line supervisors/managers of transportation and material-moving machine and vehicle operators (SOC 53-1031)	Work experience in a related field
Truck drivers, heavy and tractor-trailer (SOC 53-3032)	Short-term on-the-job training
Industrial truck and tractor operators (SOC 53-7051)	Short-term on-the-job training

## **Executive Summary**

Basic Information	
2011 Occupational Jobs	3,589
2021 Occupational Jobs	3,804
Total Change	215
Total % Change	5.99%
Openings	915
2011 Median Hourly Earnings	\$14.86

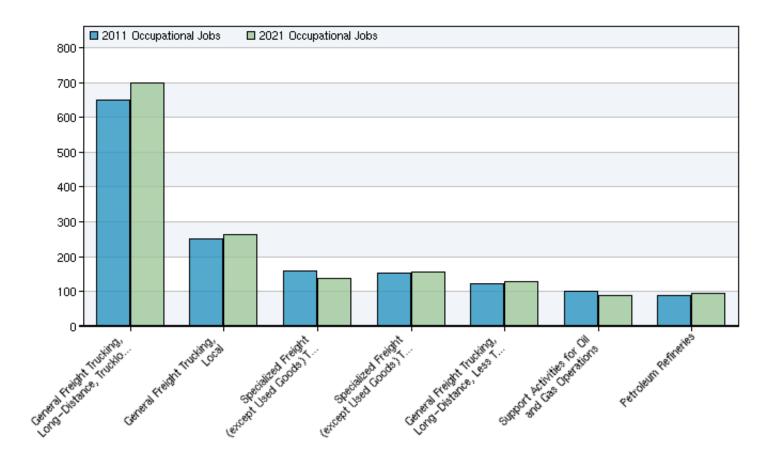
Economic Indicators	
2011 Location Quotient	0.85
2021 Location Quotient	0.78

## **Occupational Change Summary**



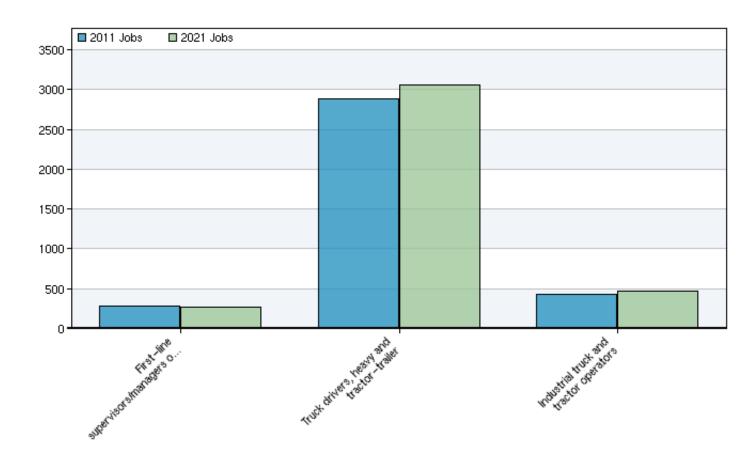
Region	2011 Jobs	2021 Jobs	Change	% Change	Openings	2011 Median Hourly Earnings
Regional Total	3,589	3,804	215	6%	915	\$14.86
State Total	256,193	291,896	35,703	14%	88,129	\$16.60
National Total	2,801,710	3,087,710	286,000	10%	906,674	\$17.70

## **Top Industries for Selected Occupations**



NAICS Code	Name	2011 Jobs	2021 Jobs	Change	% Change
484121	General Freight Trucking, Long-Distance, Truckload	651	700	49	8%
484110	General Freight Trucking, Local	253	264	11	4%
484220	Specialized Freight (except Used Goods) Trucking, Local	158	138	-20	-13%
484230	Specialized Freight (except Used Goods) Trucking, Long-Distance	153	156	3	2%
484122	General Freight Trucking, Long-Distance, Less Than Truckload	123	128	5	4%
213112	Support Activities for Oil and Gas Operations	100	89	-11	-11%
324110	Petroleum Refineries	89	95	6	7%

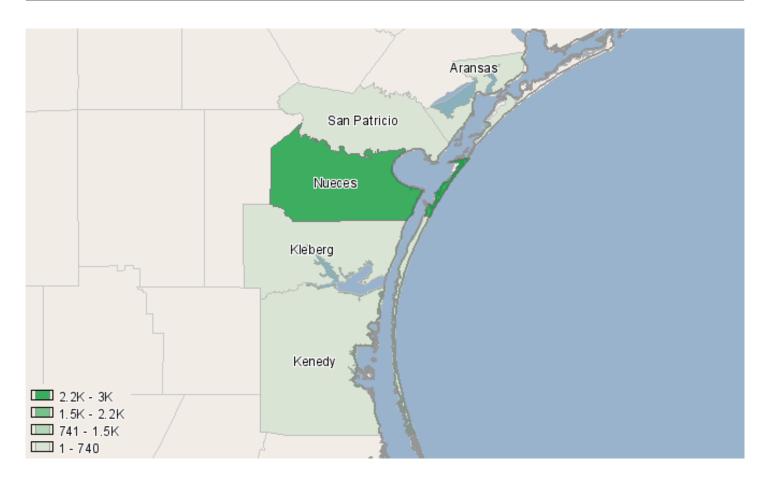
## **Occupational Breakdown**



SOC Code	Description	2011 Jobs	2021 Jobs	Openings	2011 Median Hourly Earnings	
53-1031	First-line supervisors/managers of transportation and material-moving machine and vehicle operators	277	273	51	\$21.41	
53-3032	Truck drivers, heavy and tractor-trailer	2,877	3,059	697	\$14.82	
53-7051	Industrial truck and tractor operators	435	472	167	\$11.00	
	Total	3,589	3,804	915	\$14.86	

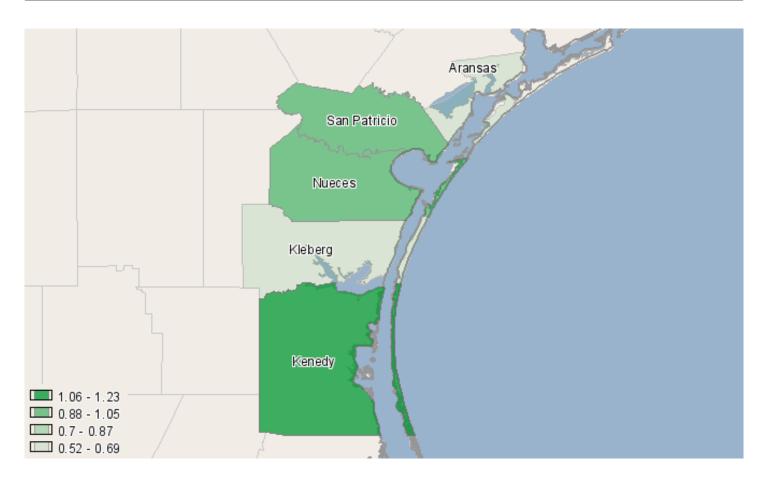
Source: EMSI Complete Employment - 2011.4

## **Occupation Distribution**

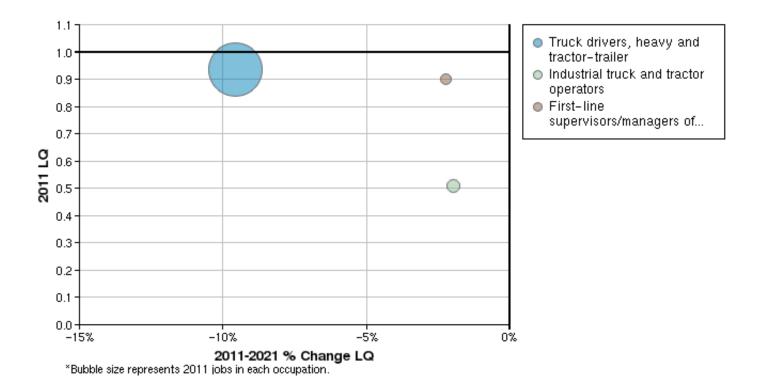


County	2011 Jobs
Nueces, TX (48355)	2,963
San Patricio, TX (48409)	376
Kleberg, TX (48273)	150
Aransas, TX (48007)	88
Kenedy, TX (48261)	11

## **Occupation Concentration**



County	2011 Location Quotient
Kenedy, TX (48261)	1.18
Nueces, TX (48355)	0.88
San Patricio, TX (48409)	0.88
Kleberg, TX (48273)	0.57
Aransas, TX (48007)	0.52



SOC Code	Description	2011 Jobs	2011 LQ	2021 LQ
53-3032	Truck drivers, heavy and tractor-trailer	2,877	0.94	0.85
53-7051	Industrial truck and tractor operators	435	0.51	0.50
53-1031	First-line supervisors/managers of transportation and material-moving machine and vehicle operators	277	0.90	0.88
	Total	3,589	0.85	0.78

Source: EMSI Complete Employment - 2011.4

## **Data Sources and Calculations**

## **Industry Data**

In order to capture a complete picture of industry employment, EMSI basically combines covered employment data from Quarterly Census of Employment and Wages (QCEW) produced by the Department of Labor with total employment data in Regional Economic Information System (REIS) published by the Bureau of Economic Analysis (BEA), augmented with County Business Patterns (CBP) and Nonemployer Statistics (NES) published by the U.S. Census Bureau. Projections are based on the latest available EMSI industry data, 15-year past local trends in each industry, growth rates in statewide and (where available) sub-state area industry projections published by individual state agencies, and (in part) growth rates in national projections from the Bureau of Labor Statistics.

### **Occupation Data**

Organizing regional employment information by occupation provides a workforce-oriented view of the regional economy. EMSI's occupation data are based on EMSI's industry data and regional staffing patterns taken from the Occupational Employment Statistics program (U.S. Bureau of Labor Statistics). Wage information is partially derived from the American Community Survey. The occupation-to-program (SOC-to-CIP) crosswalk is based on one from the U.S. Department of Education, with customizations by EMSI.

#### **Location Quotient**

Location quotient (LQ) is a way of quantifying how concentrated a particular industry, cluster, occupation, or demographic group is in a region as compared to the nation. It can reveal what makes a particular region unique in comparison to the national average.

## **State Data Sources**

This report uses state data from the following agencies: Texas Workforce Commission.

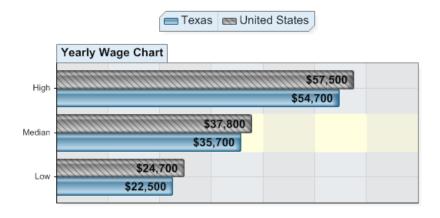
## **Occupation Profile**

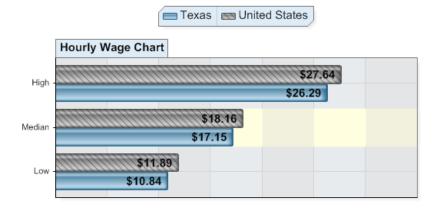
#### **HEAVY AND TRACTOR-TRAILER TRUCK DRIVERS: TEXAS**

#### **Occupation Description**

Drive a tractor-trailer combination or a truck with a capacity of at least 26,000 pounds Gross Vehicle Weight (GVW). May be required to unload truck. Requires commercial drivers' license

## **State and National Wages**





- $\bullet\,$  High is the wage at which 90% of workers earn less and 10% earn more.
- Middle is the wage at which 50% of workers earn less and 50% earn more.
- Low is the wage at which 10% of workers earn less and 90% earn more.

Location	Pay	2010						
Location	Period	10%	25%	Median	75%	90%		
United States	Hourly	\$11.89	\$14.55	\$18.16	\$22.56	\$27.64		
Officed States	Yearly	\$24,700	\$30,300	\$37,800	\$46,900	\$57,500		
Texas	Hourly	\$10.84	\$13.41	\$17.15	\$21.60	\$26.29		
Texas	Yearly	\$22,500	\$27,900	\$35,700	\$44,900	\$54,700		

Median Wage by Occupation Across States
Compare Wages by Occupation and Local Area
Compare Wages by Metropolitan Areas

National Data Source: Bureau of Labor Statistics, Occupational Employment Statistics Survey

State Data Source: <u>Texas Wage Information</u>

#### State and National Trends

United States	Emplo	yment	Percent	Job Openings 1	
Officed States	2008	2018	Change		
Truck drivers, heavy and tractor-trailer	1,798,400	2,031,300	+13%	55,460	
Texas	Employment		Percent	Job Openings	
Texas	2008	2018	Change	1	
				4,830	

<sup>&</sup>lt;sup>1</sup> Job Openings refers to the average annual job openings due to growth and net replacement.

#### Occupation Trends FAQs

Employment Trends by Occupation Across States
Compare Employment Trends by Occupation
Employment Trends by Industry and Occupation

National Data Source: Bureau of Labor Statistics, Office of Occupational Statistics and Employment Projections

State Data Source: Texas Workforce Commission, Labor Market & Career Information Department

#### Knowledge, Skills, and Abilities

The most important knowledge, skills, and abilities (KSAs) are listed for Heavy and Tractor-Trailer Truck Drivers.

#### Knowledge:

- *Transportation* Knowledge of principles and methods for moving people or goods by air, rail, sea, or road, including the relative costs and benefits.
- Public Safety and Security Knowledge of relevant equipment, policies, procedures, and strategies to promote
  effective local, state, or national security operations for the protection of people, data, property, and institutions.
- Mechanical Knowledge of machines and tools, including their designs, uses, repair, and maintenance.
- Customer and Personal Service Knowledge of principles and processes for providing customer and personal services. This includes customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction.
- Administration and Management Knowledge of business and management principles involved in strategic
  planning, resource allocation, human resources modeling, leadership technique, production methods, and
  coordination of people and resources.

#### Skills:

- Operation and Control Controlling operations of equipment or systems.
- Operation Monitoring Watching gauges, dials, or other indicators to make sure a machine is working properly.
- Judgment and Decision Making Considering the relative costs and benefits of potential actions to choose the
  most appropriate one.
- Monitoring Monitoring/Assessing performance of yourself, other individuals, or organizations to make improvements or take corrective action.
- Time Management Managing one's own time and the time of others.
- Troubleshooting Determining causes of operating errors and deciding what to do about it.

#### Abilities:

- Control Precision The ability to quickly and repeatedly adjust the controls of a machine or a vehicle to exact positions.
- Far Vision The ability to see details at a distance.
- **Multilimb Coordination** The ability to coordinate two or more limbs (for example, two arms, two legs, or one leg and one arm) while sitting, standing, or lying down. It does not involve performing the activities while the whole body is in motion
- Depth Perception The ability to judge which of several objects is closer or farther away from you, or to judge the
  distance between you and an object.
- Near Vision The ability to see details at close range (within a few feet of the observer).
- Response Orientation The ability to choose quickly between two or more movements in response to two or
  more different signals (lights, sounds, pictures). It includes the speed with which the correct response is started
  with the hand, foot, or other body part.

Source: Occupational Information Network: Heavy and Tractor-Trailer Truck Drivers.

#### **Tasks and Activities**

Occupation specific tasks and the most important generalized work activities are listed for **Heavy and Tractor-Trailer Truck Drivers**.

#### Occupation Specific Tasks:

- Check all load-related documentation to ensure that it is complete and accurate.
- · Check conditions of trailers after contents have been unloaded to ensure that there has been no damage.
- · Check vehicles to ensure that mechanical, safety, and emergency equipment is in good working order.
- · Climb ladders to inspect loads, ensuring that cargo is secure.
- Collaborate with other drivers as part of a driving team on some trips.
- Collect delivery instructions from appropriate sources, verifying instructions and routes.
- Couple or uncouple trailers by changing trailer jack positions, connecting or disconnecting air or electrical lines, or manipulating fifth-wheel locks.
- Crank trailer landing gear up or down to safely secure vehicles.
- Drive trucks to weigh stations before and after loading and along routes to document weights and to comply with state regulations.
- Drive trucks with capacities greater than 3 tons, including tractor-trailer combinations, to transport and deliver products, livestock, or other materials.
- Follow appropriate safety procedures for transporting dangerous goods.
- Follow special cargo-related procedures, such as checking refrigeration systems for frozen foods or providing food or water for livestock.
- Give directions to laborers who are packing goods and moving them onto trailers.
- Install or remove special equipment, such as tire chains, grader blades, plow blades, or sanders.
- Inventory and inspect goods to be moved to determine quantities and conditions.
- Load and unload trucks, or help others with loading and unloading, operating any special loading-related
  equipment on vehicles and using other equipment as necessary.
- Maintain logs of working hours or of vehicle service or repair status, following applicable state and federal
  regulations.
- Maneuver trucks into loading or unloading positions, following signals from loading crew and checking that vehicle
  and loading equipment are properly positioned.
- · Obtain receipts or signatures for delivered goods and collect payment for services when required.
- Operate equipment, such as truck cab computers, CB radios, and telephones, to exchange necessary information with bases, supervisors, or other drivers.
- Operate trucks equipped with snowplows or sander attachments to maintain roads in winter weather.
- · Perform basic vehicle maintenance tasks, such as adding oil, fuel, or radiator fluid or performing minor repairs.
- Perform emergency roadside repairs, such as changing tires or installing light bulbs, tire chains, or spark plugs.
- · Place empty carts and pallets in trailers so they will be available to facilitate placement and movement of goods.
- Read and interpret maps to determine vehicle routes.
- Read bills of lading to determine assignment details.
- · Remove debris from loaded trailers.
- Report vehicle defects, accidents, traffic violations, or damage to the vehicles.
- Secure cargo for transport, using ropes, blocks, chain, binders, or covers.
- Wrap goods using pads, packing paper, and containers, and secure loads to trailer walls, using straps.

#### **Generalized Work Activities:**

- Operating Vehicles, Mechanized Devices, or Equipment Running, maneuvering, navigating, or driving vehicles or mechanized equipment, such as forklifts, passenger vehicles, aircraft, or water craft.
- Inspecting Equipment, Structures, or Material Inspecting equipment, structures, or materials to identify the cause of errors or other problems or defects.
- Getting Information Observing, receiving, and otherwise obtaining information from all relevant sources.
- Performing General Physical Activities Performing physical activities that require considerable use of your
  arms and legs and moving your whole body, such as climbing, lifting, balancing, walking, stooping, and handling
  of materials.
- Communicating with Supervisors, Peers, or Subordinates Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person.

#### **Detailed Work Activities:**

- · collect payment
- · direct and coordinate activities of workers or staff
- drive tractor-trailer truck
- · drive truck with capacity greater than 3 tons
- examine vehicle to detect malfunctions, damage, or maintenance needed
- · follow traffic laws
- · load, unload, or stack containers, materials, or products
- · maintain driver log according to I.C.C. regulations
- maintain or repair cargo or passenger vehicle
- maintain records, reports, or files
- · move or fit heavy objects
- · operate cleaning equipment
- perform safety inspections in transportation setting
- · prepare reports
- · prepare safety reports
- · read maps
- service vehicle with water, fuel, or oil

- transport passengers or cargo
- · use established traffic or transportation procedures
- use geographic positioning system (GPS)
- · use local or regional geographical knowledge to transportation
- use truck-mounted hydraulic lifts or other accessories
- use two-way radio or mobile phone
- · use vehicle repair tools or safety equipment
- use weighing or measuring devices in transportation
- verify cargo against shipping papers
- · work as a team member
- · wrap products

Source: Occupational Information Network: Heavy and Tractor-Trailer Truck Drivers.

#### **Tools and Technology**

#### Heavy and Tractor-Trailer Truck Drivers View Detailed Report

#### Tools:

- Air compressors Air compressors
- Blocks or pulleys Blocks and tackle
- Flatbed trailers Lowboy trailers, Tilt trailers
- . Lifts Handlifts, Hydraulic lifts, Johnson bars
- Trailer hitches Sliding fifth wheels, Sliding tandem axles

#### Technology:

- Data base user interface and query software Easy Trucker software, Fog Line Software Truckn2004, Truckers
  Helper software
- Inventory management software Computerized inventory tracking software
- Materials requirements planning logistics and supply chain software PeopleNet
- Route navigation software ALK Technologies PC\*Miler, MarcoSoft Quo Vadis

Source: Occupational Information Network: Heavy and Tractor-Trailer Truck Drivers.

#### **Education and Training**

Occupation: Heavy and Tractor-Trailer Truck Drivers

Most Common Educational/Training Level: Short-term on-the-job training

Related Instructional Programs: Truck and Bus Driver/Commercial Vehicle Operator and Instructor

#### **Distribution of Educational Attainment**

	Percent of employees aged 25 to 44 in the occupation whose highest level of educational attainment is							
Occupation	Less than high school diploma	High school diploma or equivalent	Some college, no degree	Associate's degree	Bachelor's degree	Master's degree	Doctoral or professional degree	
Truck drivers, heavy and tractor-trailer	19.9%	49.4%	20.7%	4.8%	4.3%	0.6%	0.2%	
Motor Vehicle Operators	16.7%	45.6%	23.4%	5.7%	7.1%	1.1%	0.4%	
Transportation and Material Moving	15%	42.4%	23.5%	6.4%	10.5%	1.7%	0.4%	
Total, All Occupations	10.7%	27.6%	20.6%	8.9%	19.4%	8.3%	4.5%	

Find colleges, training schools and instructional programs for this occupation.

Find education and training programs where you can earn a certificate, diploma, or award in less than 2 years with the Short-Term Training Finder.

Access additional Education Resources in the Career Resource Library.

Use the Financial Aid Advisor to help find funds for financing education.

WIA Eligible Training Provider List: <a href="https://services.twc.state.tx.us/PROVIDERCERT/dispatcher?">https://services.twc.state.tx.us/PROVIDERCERT/dispatcher?</a> <a href="link=HREF&pageid=PUBLIC\_SWL\_SEARCH">link=HREF&pageid=PUBLIC\_SWL\_SEARCH</a>

Source: Bureau of Labor Statistics, Office of Occupational Statistics and Employment Projections (Education/Training Level, Educational

Attainment); National Center for Education Statistics (Typical Instructional Programs)

## **Related Occupation Profiles**

Occupations with similar skill requirements

- Bridge and Lock Tenders
- Bus Drivers, School or Special Client
- Bus Drivers, Transit and Intercity
- Industrial Truck and Tractor Operators
- Light Truck or Delivery Services Drivers
- Locomotive Engineers
- Motorboat Operators
- Rail Yard Engineers, Dinkey Operators, and Hostlers
- Railroad Brake, Signal, and Switch Operators

## **Departmental Information**

Staff Development Equipment Related Programs Advisory Committee Accreditation

(Not submitted)