

## Meeting Purpose

- Learn about the Los Angeles County Transportation and Logistics Sector Strategy being launched and other transportation and logistics workforce development initiatives underway throughout southern California counties
- Identify areas of strength/capacity in existing training and education programs, planned programmatic enhancements and expansion, and gaps as we launch/implement a regional strategy
- Refine a regional strategy and action framework for education and workforce development
- Develop new and strengthen existing regional partnerships among training and education providers in the transportation and warehousing sector

# Meeting Agenda

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|--|--|
| • Opening Remarks and Introductions  | Leticia Barajas – Vice President, LATTC  |
| • Transportation Workforce Institute Overview                                  | Jess Guerra - Director, Transportation Workforce Institute   |
| • Los Angeles County Sector Strategist – Logistics/Trade – Overview            | Carrie Scoville, Community Career Development, Inc.<br>Rhonda Rose, , Community Career Development, Inc.<br>Lennie Ciufo, Los Angeles Valley College |
| • Regional Framework for Action – Draft  | Jess Guerra - Director, Transportation Workforce Institute   |
| • Regional Landscape of Transportation & Warehousing Sector Education/Training | Marcy Drummond - Senior Fellow, Transportation Workforce Institute   |
| • Next Steps   | Marcy Drummond - Senior Fellow, Transportation Workforce Institute   |
| • Closing Remarks  | Jess Guerra - Director, Transportation Workforce Institute   |
| • Lunch and Networking   |  |

# Transportation Workforce Institute

Jess Guerra, Director



# Transportation Workforce Institute

## Mission:

Ensure the Transportation industry has the requisite, skilled workforce to keep America's people and goods moving.

- **TWI's reach is national** - constructing and disseminating model, sharable curriculum and workforce development resources based on national industry standards and certifications.
- **TWI's impact is regional** - leading industry, education, and workforce development partners in creating programs and services that meet immediate and long-term employer needs while connecting diverse communities and citizens through transportation projects and workforce development efforts.

# Immediate Priorities

## CONVENE PARTNERS

**Convene regional partners** and lead the development and execution of a collective transit and railway workforce development action plan

## CREATE MODEL PROGRAMS IN RAIL SYSTEMS TECHNOLOGY

**Create model, rail systems technology curriculum and certificate and degree programs** including the integration of technology-enabled learning and support services, work-based learning, and credit for prior learning and experiences

## BUILD SCALABLE PROGRAMS TO CONNECT COMMUNITIES AND INDIVIDUALS TO TRANSPORTATION

**Build scalable outreach, pre-education and, pre-employment programs**

# Los Angeles County Sector Strategist - Logistics/Trade Trade

Community Career Development, Inc.



# Regional Framework for Action - Draft






# Transportation & Warehousing Workforce Development Goals

- a) Develop Partnerships between Transportation & Warehousing Employers and Postsecondary Education Providers (1 - 35)
- b) Increase Preparation for Transportation & Warehousing Occupations to Meet Industry Needs (2 - 32)
- c) Expand Access to Postsecondary Transportation & Warehousing Education (3 - 29)
- d) Raise Interest in Transportation & Warehousing Occupations (4 - 25)

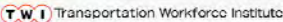
## Goal: **Raise Interest in Transportation & Warehousing Occupations** [Priority - 4]

Challenge	Strategy	Priority	Action Item	Priority/Interest
<ul style="list-style-type: none"> <li>Lack of awareness of transportation and warehousing career options; most prevalently with youth/young adults (millennials and Generation Zs)</li> </ul>	<ul style="list-style-type: none"> <li>Raise awareness of transportation and warehousing industry and career potential; particularly with those individuals who advise students</li> </ul>	1-40	<ul style="list-style-type: none"> <li>Provide hands-on career exploration activities; year-round</li> </ul>	1
<ul style="list-style-type: none"> <li>Perception of transportation and warehousing career options as antiquated and limited; particularly among counselors and parents of youth/young adults</li> </ul>	<ul style="list-style-type: none"> <li>Increase online, social media, and other communication methods and channels to reach all audiences including youth/young adults</li> </ul>	2-33	<ul style="list-style-type: none"> <li>Develop engaging branding and communication methods/materials; partner with industry creative services departments to assist</li> </ul>	2
<ul style="list-style-type: none"> <li>Outdated communication methods and channels do not reach or resonate with audiences</li> </ul>	<ul style="list-style-type: none"> <li>Communicate how transportation and warehousing industries address sustainability and livability to attract youth/young adults</li> </ul>	3-27	<ul style="list-style-type: none"> <li>Provide career exposure opportunities such as field trips, virtual experiences, and internships to increase youth/young adult awareness of transportation and warehousing careers</li> </ul>	3
	<ul style="list-style-type: none"> <li>Build a positive, accurate brand for transportation and warehousing industry</li> </ul>	4-24	<ul style="list-style-type: none"> <li>Connect "interest-raising" efforts with secondary career pathway programs and activities</li> </ul>	4
			<ul style="list-style-type: none"> <li>Distribute communication materials and engage regional secondary and postsecondary counselors and career center</li> </ul>	5
				10

**Goal: Raise Interest in Transportation & Warehousing Occupations [Priority - 4]**

Challenge	Strategy	Priority	Action Item	Priority/Interest
<ul style="list-style-type: none"> <li>Lack of awareness of transportation and warehousing career options; most prevalent with youth/young adults (millennials and Generation Zs)</li> </ul>	<ul style="list-style-type: none"> <li>Build a positive, accurate brand for transportation and warehousing industry</li> </ul>	4-24	<ul style="list-style-type: none"> <li>Develop engaging branding and communication methods/materials; partner with industry creative services departments to assist</li> </ul>	2
<ul style="list-style-type: none"> <li>Perception of transportation and warehousing career options as antiquated and limited; particularly among counselors and parents of youth/young adults</li> </ul>	<ul style="list-style-type: none"> <li>Communicate how transportation and warehousing industries address sustainability and livability to attract youth/young adults</li> </ul>	3-27	<ul style="list-style-type: none"> <li>Distribute communication materials and engage regional secondary and postsecondary counselors and career center</li> </ul>	5
<ul style="list-style-type: none"> <li>Outdated communication methods and channels do not reach or resonate with audiences</li> </ul>	<ul style="list-style-type: none"> <li>Increase online, social media, and other communication methods and channels to reach all audiences including youth/young adults</li> </ul>	2-33	<ul style="list-style-type: none"> <li>Provide career exposure opportunities such as field trips, virtual experiences, and internships to increase youth/young adult awareness of transportation and warehousing careers</li> </ul>	3
	<ul style="list-style-type: none"> <li>Raise awareness of transportation and warehousing industry and career potential; particularly with those individuals who advise students</li> </ul>	1-40	<ul style="list-style-type: none"> <li>Provide hands-on career exploration activities; year-round</li> </ul>	1
			<ul style="list-style-type: none"> <li>Connect "interest-raising" efforts with secondary career pathway programs and activities</li> </ul>	4
				11

**Goal: Expand Access to Postsecondary Transportation & Warehousing Education [Priority -3]**

Challenge	Strategy	Priority	Action Item	Priority/Interest
<ul style="list-style-type: none"> <li>Limited, direct funding and resources for low-income students</li> </ul>	<ul style="list-style-type: none"> <li>Increase direct funding opportunities for students</li> </ul>	4-42	<ul style="list-style-type: none"> <li>Expand scholarships and other funding/resources through industry partners, workforce investment boards, state/federal grants, etc.</li> </ul>	3
<ul style="list-style-type: none"> <li>Insufficient postsecondary programs to adequately address projected growth and replacement occupations</li> </ul>	<ul style="list-style-type: none"> <li>Expand postsecondary programs</li> </ul>	5-31	<ul style="list-style-type: none"> <li>Create funding map of available scholarships and aid programs</li> </ul>	6
<ul style="list-style-type: none"> <li>Lack of skill/credit portability across postsecondary providers</li> </ul>	<ul style="list-style-type: none"> <li>Standardize skill/competency definitions for postsecondary credentials (badges, certificates, degrees, transfer requirements) and industry certifications (where applicable)</li> </ul>	3-43	<ul style="list-style-type: none"> <li>Develop new and expand existing education and training programs including new entrant and mid-career programs</li> </ul>	3
<ul style="list-style-type: none"> <li>Large percentage of individuals work while participating in postsecondary education; limiting participation (credits taken, sustained enrollment, persistence)</li> </ul>	<ul style="list-style-type: none"> <li>Streamline methods and processes for skill/credit portability between education and workforce development providers</li> </ul>	2-47	<ul style="list-style-type: none"> <li>Develop standard skill/competency definitions; collectively working with certifying groups and employers</li> </ul>	5
				12

**Goal: Expand Access to Postsecondary Transportation & Warehousing Education Cont...**  
**[Priority - 3]**

Challenge	Strategy	Priority	Action Item	Priority/ Interest
	<ul style="list-style-type: none"> <li>Increase credit for prior/other opportunities</li> </ul>	6-24	<ul style="list-style-type: none"> <li>Create regional career pathway maps including education options and the direct connections between them; ensure connections are supported by streamlined transfer/articulation processes</li> </ul>	1
	<ul style="list-style-type: none"> <li>Develop, expand flexible course/program delivery models to accommodate working students</li> </ul>	1-49	<ul style="list-style-type: none"> <li>Create shared prior/other learning assessments and processes</li> </ul>	7
			<ul style="list-style-type: none"> <li>Develop, expand delivery models that accommodate working learners – online learning options; flipped classrooms; cooperative education; etc.</li> </ul>	2

**Goal: Increase Preparation for Transportation & Warehousing Occupations to Meet Industry Needs [Priority - 2]**

Challenge	Strategy	Priority	Action Item	Priority/ Interest
<ul style="list-style-type: none"> <li>Misperceptions of qualifications needed for employment in transportation and warehousing industries/occupations</li> </ul>	<ul style="list-style-type: none"> <li>Clearly communicate occupation qualifications</li> </ul>	4-24	<ul style="list-style-type: none"> <li>Develop list of core competencies for high demand/high need transportation and warehousing careers</li> </ul>	2
<ul style="list-style-type: none"> <li>Lack of resources (information, funding, access to technologies) to respond to industry workforce needs and constantly changing technology and skills needs</li> </ul>	<ul style="list-style-type: none"> <li>Develop shared postsecondary curriculum and credentials</li> </ul>	2-29	<ul style="list-style-type: none"> <li>Gather and apply feedback from industry to recalibrate certificate and degree programs as needed</li> </ul>	5
<ul style="list-style-type: none"> <li>Gaps in graduates' technical skills and abilities</li> </ul>	<ul style="list-style-type: none"> <li>Streamline methods and processes for skill/credit portability between education and workforce development providers</li> </ul>	2-29	<ul style="list-style-type: none"> <li>Align curriculum between educational providers across the region</li> </ul>	3
<ul style="list-style-type: none"> <li>Inadequate non-technical, 21<sup>st</sup> century, and "soft skills" abilities</li> </ul>	<ul style="list-style-type: none"> <li>Define performance measures to assess student knowledge, skills, and abilities</li> </ul>	3-25	<ul style="list-style-type: none"> <li>Create standardized, sharable curriculum and learning modules</li> </ul>	4



**Goal: Increase Preparation for Transportation & Warehousing Occupations to Meet Industry Needs Cont... [Priority - 2]**

Challenge	Strategy	Priority	Action Item	Priority/Interest
<ul style="list-style-type: none"> <li>New workforce entrants lack practical or work experience in transportation and warehousing industry</li> </ul>	<ul style="list-style-type: none"> <li>Expand work-connected, experiential learning options and opportunities</li> </ul>	1-36	<ul style="list-style-type: none"> <li>Establish a clearinghouse of materials and resources</li> </ul>	8
			<ul style="list-style-type: none"> <li>Create a regional, shared idea lab; makerspace incorporating virtual access and utilization options</li> </ul>	6
			<ul style="list-style-type: none"> <li>Establish "platform" to create project-, work- and community-based learning resources</li> </ul>	6
			<ul style="list-style-type: none"> <li>Develop, expand internship programs that utilize flexible state and federal funding</li> </ul>	1

**Goal: Develop Partnerships between Transportation & Warehousing Employers and Postsecondary Education Providers Cont... [Priority - 1]**


Challenge	Strategy	Priority	Action Item	Priority/Interest
<ul style="list-style-type: none"> <li>Lack of specificity in transportation and warehousing workforce/labor market demand on a local, regional level</li> </ul>	<ul style="list-style-type: none"> <li>Increase communication and collaboration between industry, post-secondary institutions, local governments, and community agencies</li> </ul>	2-48	<ul style="list-style-type: none"> <li>Create an industry-educator forum to consistently address workforce needs</li> </ul>	2
			<ul style="list-style-type: none"> <li>Conduct regular transportation and warehousing needs analysis and technology scans to inform curricular and program priorities at the regional level</li> </ul>	5
<ul style="list-style-type: none"> <li>Pace of technological advancements – lack of awareness and access to new technologies by workforce development providers</li> </ul>	<ul style="list-style-type: none"> <li>Increase transportation and warehousing industry data accessibility and reliability</li> </ul>	3-31	<ul style="list-style-type: none"> <li>Promote creation of paid, industry internships, apprenticeship programs, and incumbent worker training opportunities</li> </ul>	2
			<ul style="list-style-type: none"> <li>Share technology training materials across industry and workforce education providers</li> </ul>	5-31




**Goal: Develop Partnerships between Transportation & Warehousing Employers and Postsecondary Education Providers [Priority – 1]**

Challenge	Strategy	Priority	Action Item	Priority/Interest
	<ul style="list-style-type: none"> <li>Promote and create learning- labor exchanges</li> </ul>	5-31	<ul style="list-style-type: none"> <li>Identify champions to lead development of an online platform; identify resources for maintaining the database; populate platform with “consumable” career information, scholarships; resources; job opportunities, internships, and work-based training opportunities; incorporate project-, work-, and community-based learning platform/features</li> </ul>	6
	<ul style="list-style-type: none"> <li>Increase employer-sponsored, work-based learning opportunities and incumbent worker training</li> </ul>	1-56	<ul style="list-style-type: none"> <li>Through the platform, create centralized response system/process for responding to employer inquiries and requests for education and training assistance</li> </ul>	4
			<ul style="list-style-type: none"> <li>Promote platform to employers, workforce development providers, counselors, career centers, community-based organizations</li> </ul>	1

THOUGHTS?



**Transportation Workforce Institute**



**LATIC**  
A Community College



## Top Occupations and Change Projected to 2022

- Labors, Freight Stock, and Materials Movers; Heavy and Tractor-Trailer Truck Drivers; and Cargo and Freight Agents are the Top 3 Occupations and are projected to grow in LA County but two are projected to decline in Orange County
- Overall, there will be a decline jobs in the top occupations in Orange County
- **Question – do any colleges offer (or plan to offer) education or training for these top occupations?**

SOC Code	Description	Los Angeles County, CA	Orange County, CA	LA and Orange Counties, CA	California
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	22,558	3,866	26,424	86,775
53-3032	Heavy and Tractor-Trailer Truck Drivers	18,582	2,661	21,243	87,486
53-3033	Light Truck or Delivery Services Drivers	8,178	1,728	9,906	30,774
43-5011	Cargo and Freight Agents	7,912	898	8,809	12,912
53-2031	Flight Attendants	6,699	34	6,733	13,537
	<b>Total</b>	<b>63,928</b>	<b>9,187</b>	<b>73,115</b>	<b>231,484</b>

**Top Occupations - Change**

SOC Code	Description	Los Angeles County, CA	Orange County, CA	LA and Orange Counties, CA	California
53-3032	Heavy and Tractor-Trailer Truck Drivers	886	(63)	823	6,567
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	365	(167)	198	3,831
43-5011	Cargo and Freight Agents	362	55	416	708
53-3033	Light Truck or Delivery Services Drivers	103	(91)	12	1,446
53-2031	Flight Attendants	48	10	59	211
	<b>Total</b>	<b>1,762</b>	<b>(255)</b>	<b>1,508</b>	<b>12,763</b>

Source: QCEW Employees & Non-QCEW Employees - Emsi 2016.3 Class of Worker

# National Location Quotient LAOC Occupations

- 11 occupations have a location of 1.0 or higher in LA and Orange Counties combined; 10 of these 11 of a LQ of 1.0 or higher in LA County alone
- **Question – do any colleges offer (or plan to offer) education or training for these occupations?**

Description	Los Angeles County, CA	Orange County, CA	LA and Orange Counties, CA	California
Support Activities for Water Transportation	5.12	0.03	3.79	1.62
Deep Sea, Coastal, and Great Lakes Water Transportation	3.15	0.83	2.54	1.23
Freight Transportation Arrangement	2.70	0.94	2.24	1.24
Support Activities for Rail Transportation	2.05	0.00	1.52	0.84
Support Activities for Air Transportation	1.88	0.46	1.51	1.10
Other Transit and Ground Passenger Transportation	1.68	0.49	1.37	1.14
Nonscheduled Air Transportation	1.66	0.56	1.37	0.84
Scheduled Air Transportation	1.64	0.10	1.24	0.91
Urban Transit Systems	1.13	1.58	1.24	1.17
Local Messengers and Local Delivery	1.42	0.35	1.14	1.40
Support Activities for Road Transportation	1.15	0.93	1.10	1.22
Other Pipeline Transportation	0.93	1.51	1.08	0.73

# High Demand Occupations Requiring Postsecondary Education and Training

- The following high demand occupations require postsecondary education and/or moderate- to long-term on the job training
- **Question – do any colleges offer (or plan to offer) education or training for these occupations? Are there sufficient numbers of students completing education and training to keep up with projected demand?**

Description	Employed in Industry Group (2016)	Employed in Industry Group (2017)	Employed in Industry Group (2022)	Change (2017 - 2022)	% Change (2017 - 2022)	% of Total Jobs in Industry Group	Median Hourly Earnings	Typical Entry Level Education	Work Experience Required	Typical On-The-Job Training
Heavy and Tractor-Trailer Truck Drivers	19,895	19,798	20,633	835	4%	11.0%	\$19.16	Postsecondary nondegree award	None	Short-term on-the-job training
Bus Drivers, Transit and Intercity	3,430	3,543	3,882	339	10%	1.9%	\$18.36	High school diploma or equivalent	None	Moderate-term on-the-job training
Aircraft Mechanics and Service Technicians	3,120	3,191	3,454	263	8%	1.7%	\$31.32	Postsecondary nondegree award	None	None
Sailors and Marine Oilers	967	1,006	1,150	144	14%	0.5%	\$14.55	No formal educational credential	None	Moderate-term on-the-job training
Captains, Mates, and Pilots of Water Vessels	723	751	876	125	17%	0.4%	\$27.27	Postsecondary nondegree award	Less than 5 years	None
Dispatchers, Except Police, Fire, and Ambulance	4,202	4,233	4,339	106	3%	2.3%	\$17.12	High school diploma or equivalent	None	Moderate-term on-the-job training
Sales Representatives, Services, All Other	2,575	2,603	2,709	106	4%	1.4%	\$25.67	High school diploma or equivalent	None	Moderate-term on-the-job training
Flight Attendants	6,421	6,407	6,488	81	1%	3.6%	\$21.59	High school diploma or equivalent	Less than 5 years	Moderate-term on-the-job training
Rail Car Repairers	327	348	429	81	23%	0.2%	\$17.10	High school diploma or equivalent	None	Long-term on-the-job training
Bus and Truck Mechanics and Diesel Engine Specialists	1,787	1,799	1,873	74	4%	1.0%	\$25.99	High school diploma or equivalent	None	Long-term on-the-job training
Maintenance and Repair Workers, General	1,045	1,057	1,120	63	6%	0.6%	\$19.47	High school diploma or equivalent	None	Long-term on-the-job training
Ship Engineers	458	478	540	62	13%	0.3%	\$28.89	Postsecondary nondegree award	Less than 5 years	None

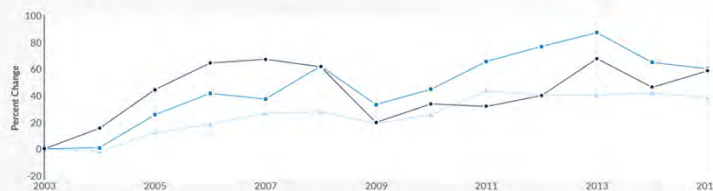
# Regional Education and Training Providers, Completions

<b>40</b>	<b>2,583</b>	<b>11,104</b>
Regional Institutions had Completions in the last 13 years	Regional Program Completions (2015)	Annual Openings (2015)

- There are 40 regional education and training institutions serving the transportation and warehousing sector in Los Angeles and Orange Counties.
- Last year alone, there were 2,583 completions of these programs (note: an individual could complete more than 1 program)

# Regional Education and Training Providers, Completions

Regional Trends



- The annual trend in the number of education and training providers and completers has generally mirrored state and national trends.

Region	2003 Completions	2015 Completions	% Change
● Region	1,630	2,583	58.5%
● State	5,505	8,813	60.1%
○ Nation	76,242	105,540	38.4%



# Regional Education and Training Program Award Types - 2015

Regional Completions by Award Level

- More than 3/4 of the education and training program completions are certificates
- Only 1/4 are degree level awards



Award Level	Completions (2015)	Percent
Award of less than 1 academic year	1,405	54.4%
Award of at least 1 but less than 2 academic years	630	24.4%
Associates degree	290	11.2%
Award of at least 2 but less than 4 academic years	258	10.0%

# Completions by Institution - 2015

Institution	Certificates (2015)	Degrees (2015)	Total Completions (2015)	Institution	Certificates (2015)	Degrees (2015)	Total Completions (2015)
Los Angeles Trade Technical College	330	17	347	Orange Coast College	40	19	59
Cypress College	284	19	303	Hacienda La Puente Adult Education	40	0	40
Santa Ana College	282	9	291	Cerritos College	36	13	49
Spartan College of Aeronautics & Technology	225	0	225	Saddleback College	34	9	43
California Career School	204	0	204	Rio Hondo College	33	8	41
Citrus College	120	8	128	El Camino Community College District	30	6	36
Mt San Antonio College	58	103	161	Golden West College	25	2	27
Los Angeles Pierce College	103	12	115	Glendale Community College	18	4	22
Antelope Valley College	100	30	130	East Los Angeles College	15	5	20
UEI College-Gardena	84	0	84	Long Beach City College	15	10	25
Pasadena City College	82	3	85	Baldwin Park Adult & Community Education	11	0	11
West Los Angeles College	51	4	55	GDS Institute	10	0	10
Santiago Canyon College	45	0	45	El Camino College-Compton Center	8	2	10

## Completions by Institution - 2015

Institution	Certificates (2015)	Degrees (2015)	Total Completions (2015)
College of the Canyons	6	1	7
Fullerton College	4	6	10
American Pacific College	0	0	0
Wyotech-Long Beach	0	0	0
Escuelas Leicester	0	0	0
Liberty Training Institute	0	0	0
Pomona Unified School District Adult and Career Education	0	0	0
Maxine Waters Employment Preparation Center	0	0	0
Travel and Trade Career Institute	0	0	0
Santa Monica College	0	0	0
Abram Friedman Occupational Center	0	0	0
National Polytechnic College of Science	0	0	0
Brownson Technical School	0	0	0
Academy Pacific Travel College	0	0	0

## Regional Education and Training Programs – Targeted Occupations

<b>232,053</b>	<b>4.4%</b>	<b>\$22.01/hr</b>
<b>Jobs (2016)</b>	<b>% Change (2017-2022)</b>	<b>Median Hourly Earnings</b>
27% below National average	Nation: 4.4%	Nation: \$20.51/hr

- In 2016, there are 232,053 occupations related to existing training and education programs. Employment is projected to remain relatively stable with only 4.4% growth in the next 5 years, or 10,385 projected openings.
- Average median hourly earnings are slightly higher than the national average. The top occupations, accounting for nearly 25% of all program-related occupations, have a median hourly wage of less than \$20.51/hr (the national average).

# Education and Training Provider Survey Results

## Transportation and Warehousing Subsector

	Currently Offer Programs/Services	Developing, Planning to Offer Programs/Services	Not Offering Nor Plan To
Rail Transportation	28.6%	14.3%	57.1%
Air Transportation	28.6%	14.3%	57.1%
Support Activities for Air Transportation	28.6%	28.6%	42.9%
Support Activities for Rail Transportation	28.6%	28.6%	42.9%
Water Transportation	14.3%	14.3%	71.4%
Support Activities for Water Transportation	14.3%	28.6%	57.1%
Freight Transportation Arrangement	28.6%	14.3%	57.1%
Freight Trucking	42.9%	0%	57.1%
Transit Systems and Ground Passenger Transportation (urban, interurban, rural)	42.9%	42.9%	14.3%
Support Activities for Road Transportation	28.6%	28.6%	42.9%
Pipeline Transportation	42.9%	0%	57.1%
Taxi and Limousine Service	28.6%	28.6%	42.9%
Scenic and Sightseeing Transportation	28.6%	42.9%	28.6%
Postal Service, Couriers, Express Delivery Services, Local Messenger, and Local Delivery	14.3%	42.9%	42.9%
Warehousing and Storage	28.6%	28.6%	42.9%
Other Support Activities for Transportation	37.5%	25%	37.5%

### Current Education & Training Programs Offered

	AA/AS Degree	Certificate	Credit Course	Noncredit Award or Course	Sponsored training	Apprenticeship (registered)	Pre-Apprenticeship	Other
Aeronautical and Aviation Technology	100%	100%	100%	33.3%	33.3%	0%	33.3%	0%
Alternative Fuels and Advanced Transportation Technology	75%	75%	50%	0%	0%	0%	0%	25%
Air Traffic Control	0%	0%	0%	0%	0%	0%	0%	100%
Aircraft Electronics (Avionics)	33.3%	66.7%	66.7%	0%	0%	0%	0%	33.3%
Aircraft Fabrication	0%	0%	0%	0%	50%	0%	0%	50%

### Current Education & Training Programs Offered

	AA/AS Degree	Certificate	Credit Course	Noncredit Award or Course	Sponsored training	Apprenticeship (registered)	Pre-Apprenticeship	Other
Automotive Collision Repair	0%	0%	0%	0%	0%	0%	0%	100%
Automotive Technology	50%	50%	50%	0%	50%	0%	50%	50%
Aviation Airframe Mechanics	100%	100%	100%	0%	0%	0%	0%	0%
Aviation and Airport Management and Services	0%	0%	0%	0%	0%	0%	0%	100%
Aviation Powerplant Mechanics	100%	100%	100%	0%	0%	0%	0%	0%



### Current Education & Training Programs Offered

	AA/AS Degree	Certificate	Credit Course	Noncredit Award or Course	Sponsored training	Apprenticeship (registered)	Pre-Apprenticeship	Other
Diesel Technology	50%	50%	50%	0%	50%	0%	50%	50%
Industrial and Transportation Security	0%	0%	0%	50%	0%	0%	0%	50%
Logistics and Materials Transportation	0%	0%	0%	0%	0%	0%	0%	100%
Motorcycle, Outboard and Small Engine Repair	50%	50%	50%	0%	50%	0%	50%	50%
Truck and Bus Driving	0%	0%	0%	66.7%	0%	0%	0%	33.3%

### Current Education & Training Programs Offered

	AA/AS Degree	Certificate	Credit Course	Noncredit Award or Course	Sponsored training	Apprenticeship (registered)	Pre-Apprenticeship	Other
Metro Bridge Program	0%	0%	0%	100%	0%	0%	0%	0%
OSHA 10/30 Safetywatch	0%	0%	0%	100%	0%	0%	0%	0%
Truck Driving	0%	0%	0%	100%	0%	0%	0%	0%

### Planned/Future Education & Training Programs

	AA/AS Degree	Certificate	Credit Course	Noncredit Award or Course	Sponsored training	Apprenticeship (registered)	Pre-Apprenticeship	Other
Alternative Fuels and Advanced Transportation Technology	0%	100%	100%	100%	0%	0%	0%	0%
Air Traffic Control	0%	0%	0%	100%	0%	0%	0%	0%
Aircraft Fabrication	0%	100%	100%	100%	0%	0%	0%	0%

### Planned/Future Education & Training Programs

	AA/AS Degree	Certificate	Credit Course	Noncredit Award or Course	Sponsored training	Apprenticeship (registered)	Pre-Apprenticeship	Other
Aviation and Airport Management and Services	100%	0%	100%	0%	0%	0%	0%	0%

### Planned/Future Education & Training Programs

	AA/AS Degree	Certificate	Credit Course	Noncredit Award or Course	Sponsored training	Apprenticeship (registered)	Pre-Apprenticeship	Other
Industrial and Transportation Security	0%	100%	0%	0%	0%	0%	0%	0%
Logistics and Materials Transportation	100%	100%	50%	0%	0%	0%	0%	0%
Truck and Bus Driving	0%	0%	0%	100%	0%	0%	0%	0%

### Planned/Future Education & Training Programs

	AA/AS Degree	Certificate	Credit Course	Noncredit Award or Course	Sponsored training	Apprenticeship (registered)	Pre-Apprenticeship	Other
Drone Operator	0%	0%	0%	100%	0%	0%	0%	0%

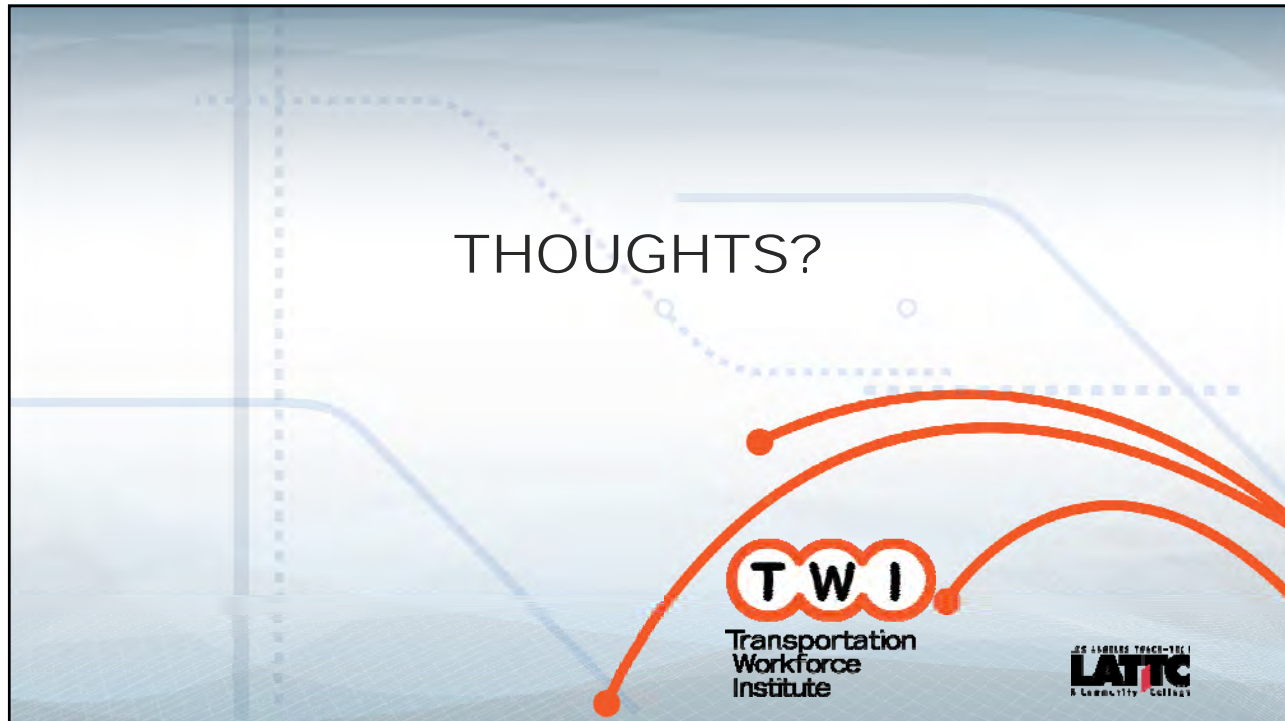
## High-Need, Entry to Middle-skill Occupations

	Currently Offer	Developing, Planning to Offer	Do Not Offer or Plan to
Laborers and Freight, Stock, and Material Movers, Hand	20%	20%	60%
Heavy and Tractor-Trailer Truck Drivers	50%	0%	50%
Cargo and Freight Agents	20%	20%	60%
Flight Attendants	20%	0%	80%
Reservation and Transportation Ticket Agents and Travel Clerks	40%	0%	60%
Dispatchers, Except Police, Fire, and Ambulance	25%	25%	50%
Bus Drivers, Transit and Intercity	50%	16.7%	33.3%
Aircraft Mechanics and Service Technicians	40%	0%	60%
Customer Service Representatives	50%	16.7%	33.3%
Bus Drivers, School or Special Client	50%	16.7%	33.3%
Sales Representatives, Services, All Other	40%	0%	60%
Taxi Drivers and Chauffeurs	20%	20%	60%
Transportation, Storage, and Distribution Managers	40%	40%	20%
Bus and Truck Mechanics and Diesel Engine Specialists	20%	0%	80%
Cleaners of Vehicles and Equipment	0%	0%	100%
Sailors and Marine Oilers	0%	0%	100%
Transportation Attendants, Except Flight Attendants	0%	40%	60%
First-Line Supervisors of Mechanics, Installers, and Repairers	0%	0%	100%
Captains, Mates, and Pilots of Water Vessels	0%	0%	100%
Baggage Porters and Bellhops	0%	20%	80%
Ship Engineers	0%	0%	100%
Tank Car, Truck, and Ship Loaders	0%	0%	100%
Rail Car Repairers	20%	0%	80%
Transportation Workers, All Other	20%	20%	60%

## Regional Transportation &amp; Warehousing Workforce Development Consortia

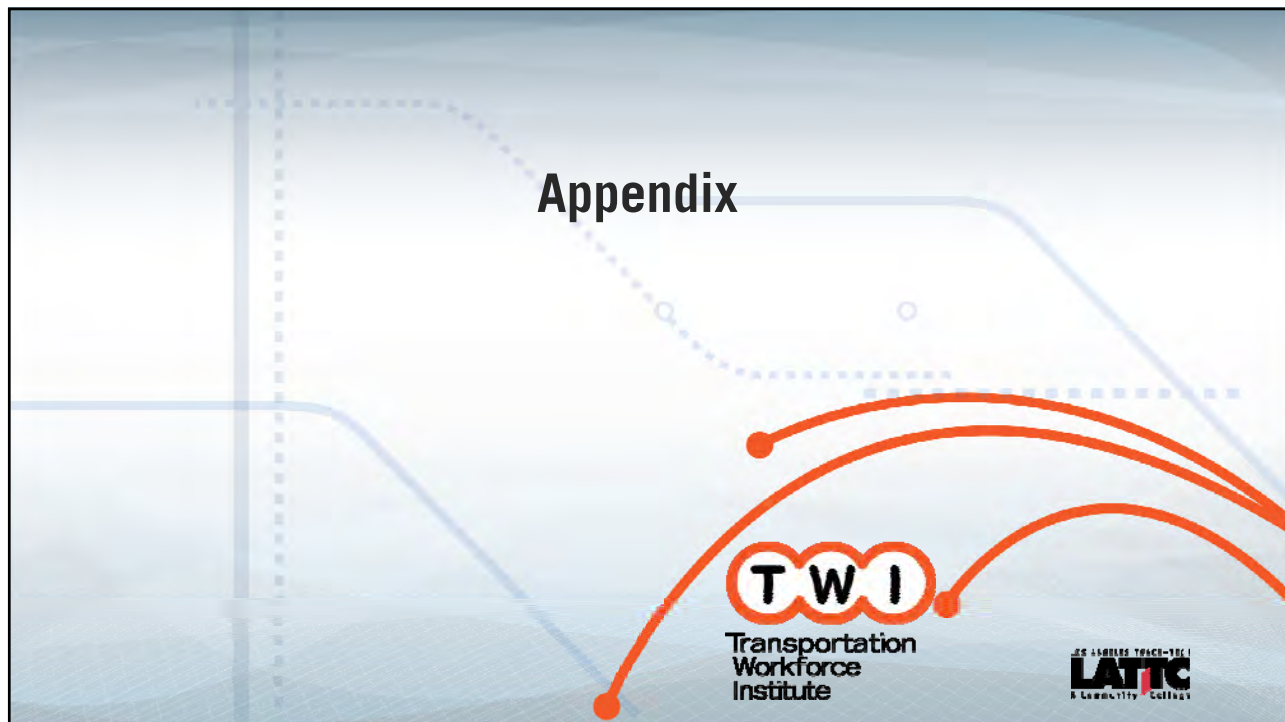
	Currently Participate In	Plans To Participate In	Does Not Participate In Nor Plans To
PRO GTL (Global Trade & Logistics) Consortia	80%	0%	20%
LAEDC e4Mobility Alliance	20%	40%	40%
LAEDC Southern California Alt Fuel & Advanced Vehicle Technology Center	0%	50%	50%
Southern California Regional Transit Training Consortium (SCRTTC)	20%	40%	40%
WIN-LA (in development)	25%	25%	50%



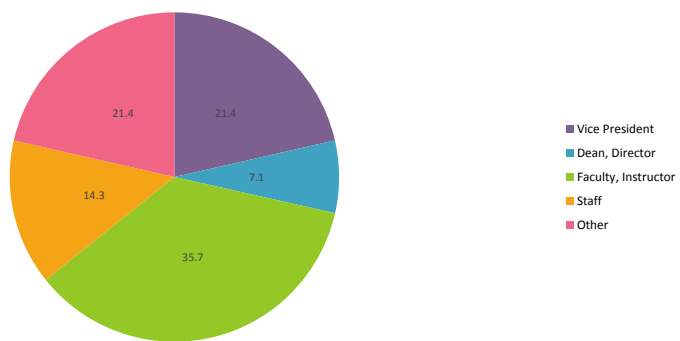


## Next Steps

- Finalize Action Plan
  - Engage Employers
  - Engage Other Institutions/Organizations
  - Finalize and Prioritize - goals, strategies, action items
- Finalize and Disseminate Sector Landscape
  - Gather Missing Information - from colleges, other organizations
- Implement Action Plan
  - Working Groups – how do we organize ourselves (by sector, by strategy, combination, other)
  - Lead Institutions
- Regular Meetings and Convenings – workgroups, full group, etc.

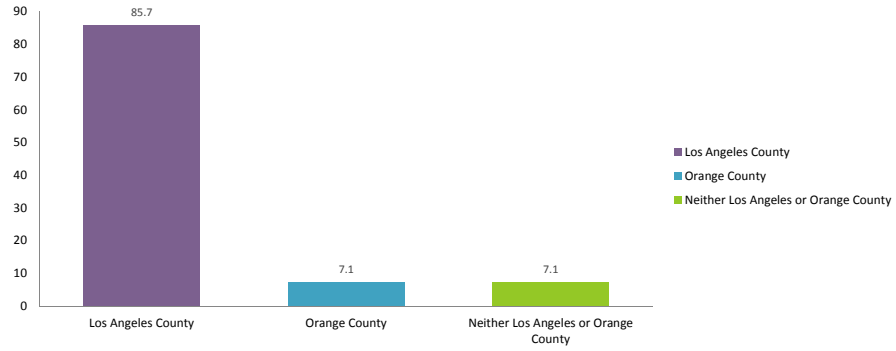


Of the following, which one best describes your role at the college/organization?



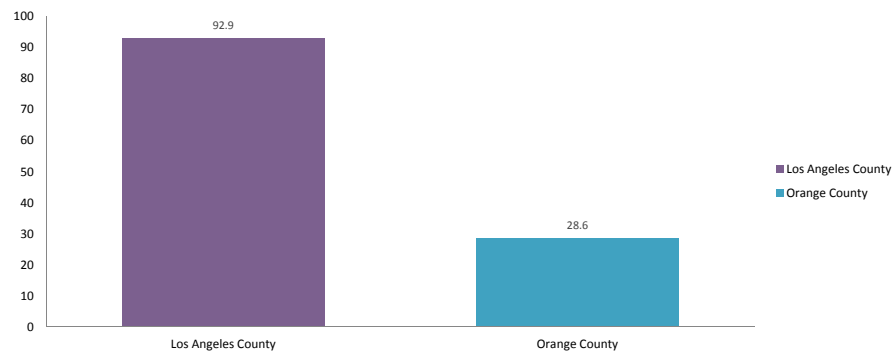
Value	Percent
Vice President	21.4%
Dean, Director	7.1%
Faculty, Instructor	35.7%
Staff	14.3%
Other	21.4%

### Which county is your college/organization located in?



Value	Percent
Los Angeles County	85.7%
Orange County	7.1%
Neither Los Angeles or Orange County	7.1%

### Which county does your college/organization primarily serve?



Value	Percent
Los Angeles County	92.9%
Orange County	28.6%

Four overarching goals have been identified to focus workforce development efforts in the transportation and industry sector for the next 3 years. Please rank the priority of the goals from 1 (highest priority) to 4 (lowest priority) based on your assessment/understanding of the most pressing workforce development challenges/needs.

Overall Rank	Item	Score	Total Respondents
1	Develop Partnerships between Transportation and Warehousing Employers and Postsecondary Education Providers	35	13
2	Increase Preparation for Transportation and Warehousing Occupations to Meet Industry Needs	32	11
3	Expand Access to Postsecondary Transportation and Warehousing Education	29	12
4	Raise Interest in Transportation and Warehousing Occupations	25	11

**Goal: Raise Interest in Transportation and Warehousing Occupations** Rank the potential strategies, for this goal, in priority order from highest (1) to lowest (4).

Overall Rank	Item	Score	Total Respondents
1	Raise awareness of transportation and warehousing industry and career potential; particularly with those individuals who advise students	40	12
2	Increase online, social media, and other communication methods and channels to reach all audiences including youth/young adults	33	13
3	Communicate how transportation and warehousing industries address sustainability and livability to attract youth/young adults	27	12
4	Build a positive, accurate brand for transportation and warehousing industry	24	12

**Goal: Expand Access to Postsecondary Transportation and Warehousing Education** Rank the potential strategies, for this goal, in priority order from highest (1) to lowest (6).

Overall Rank	Item	Score	Total Respondents
1	Develop, expand flexible course/program delivery models to accommodate working students	49	11
2	Streamline methods and processes for skill/credit portability between education and workforce development providers	47	11
3	Standardize skill/competency definitions for postsecondary credentials (badges, certificates, degrees, transfer requirements) and industry certifications (where applicable)	43	11
4	Increase direct funding opportunities for students	42	12
5	Increase credit for prior/other opportunities	31	11
6	Expand postsecondary programs	24	10

**Goal: Increase Preparation for Transportation and Warehousing Occupations to Meet Industry Needs** Rank the potential strategies, for this goal, in priority order from highest (1) to lowest (5).

Overall Rank	Item	Score	Total Respondents
1	Expand work-connected, experiential learning options and opportunities	36	12
2	Develop shared postsecondary curriculum and credentials to industry standards and requirements	29	11
3	Define performance measures to assess student knowledge, skills, and abilities	25	11
4	Clearly communicate occupation qualifications	24	11

**Goal: Develop Partnerships between Transportation and Warehousing Employers and Postsecondary Education Providers** Rank the potential strategies, for this goal, in priority order from highest (1) to lowest (6).

Overall Rank	Item	Score	Total Respondents
1	Increase employer-sponsored, work-based learning opportunities and incumbent worker training	56	11
2	Increase communication and collaboration between industry, post-secondary institutions, local governments, and community agencies	48	12
3	Promote and create learning-labor exchanges	37	11
4	Identify strategic technology advances on the horizon and prioritize industry requirements	34	11
5	Increase transportation and warehousing industry data accessibility and reliability	31	11
6	Share technology training materials across industry and workforce education providers	31	11

**Goal: Raise Interest in Transportation and Warehousing Occupations**

	Activity Priority	Willingness to Partner to Develop/Implement
Develop engaging branding and communication methods/materials; partner with industry creative services departments to assist	3.5	3.4
Distribute communication materials and engage regional secondary and postsecondary counselors and career centers	2.8	3.3
Provide career exposure opportunities such as field trips, virtual experiences, and internships to increase youth/young adult awareness of transportation and warehousing careers	3.8	3.0
Provide hands-on career exploration activities; year-round	3.8	3.4
Connect "interest-raising" efforts with secondary career pathway programs and activities	3.6	2.8



### Goal: Expand Access to Postsecondary Transportation and Warehousing Education

	Activity Priority	Willingness to Partner to Develop/Implement
Expand scholarships and other funding/resources through industry partners, workforce investment boards, state/federal grants, etc.	3.3	3.9
Create funding map of available scholarships and aid programs	3.5	3.1
Develop new and expand existing education and training programs including new entrant and mid-career programs	3.8	3.4
Develop standard skill/competency definitions; collectively working with certifying groups and employers	3.7	3.4
Create regional career pathway maps including education options and the direct connections between them; ensure connections are supported by streamlined transfer/articulation processes	4.1	3.6
Create shared prior/other learning assessments and processes	3.4	3.0
Develop, expand delivery models that accommodate working learners – online learning options; flipped; classrooms; cooperative education; etc.	3.8	3.8

### Goal: Increase Preparation for Transportation and Warehousing Occupations to Meet Industry Needs

	Activity Priority	Willingness to Partner to Develop/Implement
Develop list of core competencies for high demand/high need transportation and warehousing careers	3.4	3.1
Gather and apply feedback from industry to recalibrate certificate and degree programs as needed	3.2	3.0
Align curriculum between educational providers across the region	3.4	3.0
Create standardized, sharable learning modules	3.3	3.0
Establish a clearinghouse of materials and resources	2.7	2.4
Create a regional, shared idea lab; makerspace incorporating virtual access and utilization options	2.8	2.9
Establish "platform" to create project-, work-, and community-based learning resources	2.7	3.0
Develop, expand internship programs that utilize flexible state and federal funding	3.5	3.4

## Goal: Develop Partnerships between Transportation and

	Activity Priority	Willingness to Partner to Develop/Implement
Create an industry-educator forum to consistently address workforce needs	3.4	3.2
Conduct regular transportation and warehousing needs analysis and technology scans to inform curricular and program priorities at the regional level	3.0	2.8
Promote creation of paid, industry internships, apprenticeship programs, and incumbent worker training opportunities	3.5	3.1
Work with municipal governments and employers to create projects that address real-world transportation and warehousing problems	3.2	2.8
Identify champions to lead development of an online platform; populate platform with "consumable" career information, scholarships; resources; job opportunities, internships, and work-based training opportunities; incorporate project-, work-, and community-based learning features; identify resources for maintaining the platform	2.8	3.0
Through the platform, create centralized response system/process for responding to employer inquiries and requests for education and training assistance	3.1	3.3
Promote platform to employers, workforce development providers, counselors, career centers, community-based organizations	3.5	3.3

