



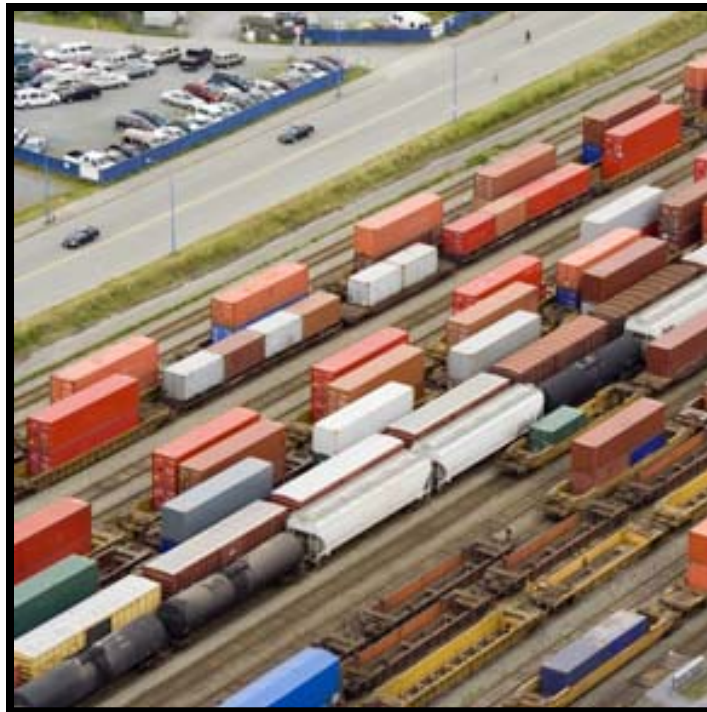
**ECONOMIC &
WORKFORCE
DEVELOPMENT**
through the
CALIFORNIA
COMMUNITY
COLLEGES

**BUSINESS AND WORKFORCE
PERFORMANCE IMPROVEMENT INITIATIVE**



Strategic Possibilities Report Los Angeles/Orange Counties

Railroad Occupations At-a-Glance



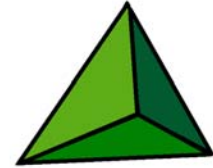
**Center of Excellence
Mt. San Antonio College**

June 2007



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Strategic Possibility Summary for Los Angeles/Orange County Community Colleges

Railroad Occupations

June 2007

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OUR MISSION IS TO STRENGTHEN CALIFORNIA'S WORKFORCE AND ADVANCE ECONOMIC GROWTH THROUGH EDUCATION, TRAINING AND JOB DEVELOPMENT.

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THERE WERE 4,119 RAILROAD SPECIFIC JOBS IN LOS ANGELES AND ORANGE COUNTIES IN 2004. EMPLOYERS EXPECT A LARGE PART OF THEIR WORKFORCE TO RETIRE IN THE NEXT 5 TO 10 YEARS AND NEED HELP ATTRACTING YOUNGER WORKERS TO THEIR SECTOR. – Sources: Employment Development Department and Bureau of Labor Statistics

Executive Summary

The railroad sector is crucial to Southern California's economy because of the importance of goods movement in the region. In addition, the sector offers relatively high wages and has a positive impact on the economy. The demand for railroad transportation is expected to continue to increase because of the growth of international trade, logistics and distribution, and the growth of the population. However, the railroads are close to saturation, so new infrastructure will be needed to accommodate the rising demand.

Only about 182 railroad specific jobs are expected to be created in Los Angeles and Orange Counties between 2004 and 2014. However, upcoming retirements will create many new job opportunities. Employers already have difficulty recruiting new workers because of a lack of public awareness of the career opportunities offered, and some negative perceptions of the sector (e.g., poor working conditions and non-traditional work schedules). As a large part of the railroad workforce is getting ready to retire, employers have to focus on attracting new workers.

The sector does not satisfy the criteria established to qualify as a strategic opportunity warranting a regional response from the community colleges, because of its slow growth (4.42% between 2004 and 2014) and the level of training requirements. Indeed, employers provide railroad specific training in-house and only require education for high-level jobs (e.g., engineers).

Nonetheless, the railroad sector faces a pipeline issue, and employers need assistance with attracting new workers. Some community colleges may choose to help employers recruit some of their current students; partner with high-schools; help promote careers in the railroad sector; or provide training as needed (e.g., soft skills and basic skills or a pre-employment "boot camp"). In particular, members of the Logistics Training Consortium (LTC) of Southern California and the California Transportation and Logistics Institute (CATLI) should consider meeting with the three largest employers: Union Pacific, Burlington Northern Santa Fe (BNSF) and Amtrak to discuss how they may be able to partner.

What is a Strategic Possibility?

The purpose of a Strategic Possibility Report is to determine if the workforce needs of a particular industry or occupation warrant an organized response from local community colleges. Five main criteria are used to establish the value of a Strategic Possibility: size, relevance, economic impact, high growth, and leveraging.

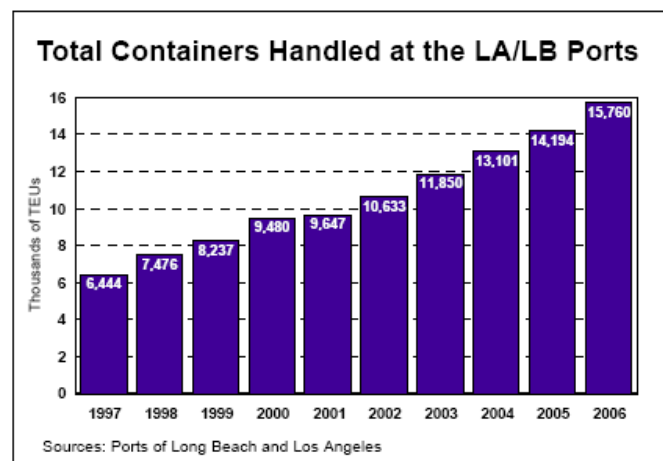
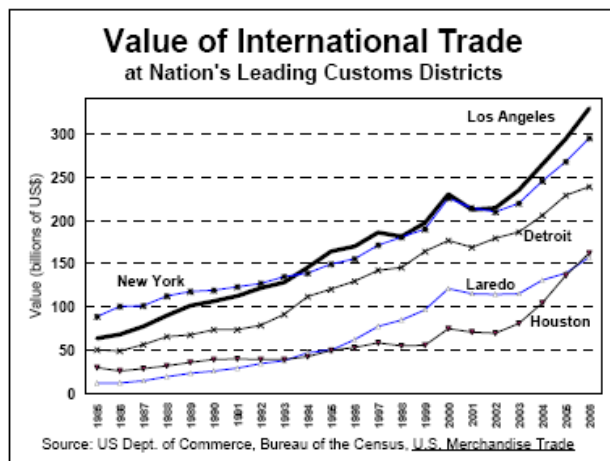
Railroad occupations offer attractive wages and the sector is very important to the local economy. However, it does not satisfy the criteria established to qualify as a regional strategic opportunity because of its slow growth (4.42% from 2004 to 2014) and the level of training requirements. Indeed, most jobs do not require formal education and employers provide training on the job. The main workforce challenge is a pipeline issue, and efforts should be focused on marketing rather than education.

Overview of the Strategic Possibility

State of the Region

The population is expected to continue to increase, from 10,245,572 in Los Angeles County and 3,072,336¹ in Orange County in 2006, to 10,885,092 (+6.24%) in Los Angeles County and 3,526,144 (+14.77%) in Orange County in 2020². Increasing road and highway traffic, increasing commute time, high cost of gas, and growing environmental issues may encourage more individuals to use public transportation, such as the Metrolink (Amtrak).

One of the largest industries in Southern California is logistics and distribution. It comprises a group of sectors which handles the transportation, storage, and distribution of domestic and international goods as they move into and throughout Southern California. The number of containers handled at the ports of Los Angeles/Long Beach (LA/LB) more than doubled in the last ten years. Almost half of all U.S imports enter the country through Southern California.



¹ California Employment Development Department

² State of California, Department of Finance

The value of international trade and the volume of goods handled are expected to continue to increase in Southern California. The containers arriving at the ports are then transported by trucks, trains, or both (intermodal transportation) to warehouses or to final destinations. This trend leads to a significant increase of the demand for railroad transportation.

Sector Overview

According to the US Census, the railroad sector (NAICS 482) provides rail transportation of passengers and/or cargo using railroad rolling stock. The railroads primarily either operate on networks, with physical facilities, labor force, and equipment spread over an extensive geographic area, or operate over a short distance on a local rail line³. The cluster studied in this report also includes support activities for rail transportation (NAICS 4882).

The demand for railroad freight service continues to grow, due to numerous factors including: the increasing volume of goods transported, more concerns about pollution and the environment, traffic and congestion, increase in driving time, high cost of gasoline, and, therefore, high transportation costs and delays. The three largest railroad employers in the region are Union Pacific Railroad Company, Amtrak (with Metrolink) and Burlington Northern Santa Fe (BNSF). Freight railroads are saturated and need new infrastructure to accommodate the demand.

The U.S. Department of Transportation projected that freight movement in California and other Western states will double between 2000 and 2020. In response, the Legislature has approved a statewide Strategic Growth Plan for transportation. The plan includes \$19.9 billion financed by general obligation bonds to expand trade corridors and regional priorities; \$4.5 billion of this amount will expand existing transit rail, commuter rail, and intercity passenger rail systems.⁴

In addition, Union Pacific plans to invest over \$15 million in 2007 into their California commercial facilities and over \$200 million into capacity and infrastructure renewals throughout the state.⁵ The company also plans to do a major reconfiguration of its Intermodal Container Transfer Facility (ICTF), which will double its capacity.⁶ BNSF is developing a near-dock facility, in cooperation with the Port of Los Angeles, named Southern California International Gateway (SCIG), and is also planning to add a third track over the Cajon pass.⁷

The demand for railroad transportation is expected to continue increasing for many years, and companies are in the process of increasing their capacity to meet the demand. The expansion will require the creation of new jobs that are not represented in most economic forecasts. Moreover, a large part of the workforce will be eligible to retire in the next 5 to 10 years⁸, which will open hundreds of positions each year. It is, therefore, very important to attract younger workers to the railroad sector.

³ US Census at <http://www.census.gov/epcd/naics02/def/NDEF482.HTM>

⁴ Governor's Strategic Growth Plan. Transportation Investments for Mobility: GoCalifornia.

⁵ Jim Young, President and CEO, Spoken at LAEDC Board of Governors Meeting. Jan 17, 2007.

⁶ International Trade Trends & Impacts, 2007, the Southern California Region, LAEDC

⁷ International Trade Trends & Impacts, 2007, the Southern California Region, LAEDC

⁸ Railway Occupations, 2007, Inland Empire Center of Excellence

Qualifying the Strategic Possibility

According to the Bureau of Labor Statistics, employment opportunities in the railroad sector nationwide are expected to be good for qualified job applicants, because of a large number of workers expected to retire in the next decade. However, overall employment size is expected to decline due to productivity increases. Eight out of ten workers are members of unions, and earnings are relatively high⁹. For those reasons, the Center of Excellence looked at the workforce development needs specific to the Los Angeles / Orange region. To determine the extent of this opportunity, the following five factors were evaluated: size, growth, relevance to community colleges' focus, economic impact, and opportunities for leverage with community partners.

Size and Growth

According to the California Employment Development Department (EDD), the railroad transportation sector employed 5,700 workers (including all occupations i.e., office workers, payroll, purchasing, accounting, or marketing) in May 2007 in Los Angeles County.¹⁰

There were 4,119 railroad-specific jobs (such as railroad conductors or rail car repairers) in Los Angeles and Orange Counties in 2004. About 182 (+4.42%) new railroad-specific jobs are expected to be created between 2004 and 2014. (Detailed labor market information and methodology are presented in Appendix B.)

EDD's labor projections do not indicate high growth; however, the railroad's expansion should lead to job creations and employers will soon need to hire hundreds of new workers to replace baby boomers upon their retirement.

Economic Impact

The railroad sector is a vital component of the logistics and distribution industry and, therefore, is crucial to Southern California's economy. The demand for railroad transportation is expected to increase, and the supply/availability will impact numerous businesses across industries (wholesale, retail, manufacturing, etc.).

In addition, the workforce is highly unionized and the sector offers relatively attractive wages (see occupations and wages in Appendix C), as well as opportunities for career advancement. Trained workers with no education can earn about \$15/hr as track or locomotive laborers; and between \$18/hr and \$22/hr as electricians, rail car repair persons or assistant signal persons. Conductors earn approximately \$67,000 annually. The starting salary for train dispatchers is \$65,000 to \$70,000 per year.

⁹ <http://www.bls.gov/oco/ocos244.htm>

¹⁰ [http://www.calmis.ca.gov/file/lfmonth/la\\$pds.pdf](http://www.calmis.ca.gov/file/lfmonth/la$pds.pdf)

Leveraging and Relevance

Numerous colleges are currently developing new programs to serve the logistics industry (including East Los Angeles College, Long Beach City College, Mt. San Antonio College and Rio Hondo College) and some of them may be able to respond to the railroad's specific needs. For example, the members of the Logistics Training Consortium (LTC) of Southern California¹¹, or the California Transportation and Logistics Institute (CATLI)¹² should meet with Union Pacific, Amtrak and BNSF to define opportunities to partner.

The Advanced Transportation Technology & Energy (ATT&E) Centers may also be valuable partners in responding to employers' needs. These Centers were established by the California Community College's Economic and Workforce Development Program. Their goal is to help businesses remain competitive in advanced transportation technologies and to transform the workforce in the rapidly developing, technology-driven transportation industry. The Centers provide an array of transportation technology and related technical education, assistance and outreach programs throughout California. The results are consistent, replicable curriculum, services and programs tailored to the needs of each region¹³.

A list of Centers is available at: <http://www.attcolleges.org/>

In addition, other existing programs such as welding or electricity already teach some of the skills required by employers for various railroad occupations. Colleges should work with the railroad sector and help employers find qualified job applicants among their students.

Colleges interested in developing railroad-specific programs may take a look at existing programs such as:

- San Bernardino Valley College offers a 12-unit General Railway Operations Career Certificate. For more information, visit: <http://sbvc.sbccd.cc.ca.us/Transportation/index.php?page=generalrailway.htm>
- Sacramento City College offers an 18-unit Certificate Program and a 60-unit Associate Degree in Railway Operations. For more information, visit: <http://www.scc.losrios.edu/programs/railroad.html>

Training for the railroad sector is relevant to the community colleges, especially those that already offer trade-related or logistics and transportation vocational education programs. Addressing employers' needs and workforce development needs is part of the mission of the community colleges. Moreover, many occupations within the sector do not require a degree, but only skills which can be obtained through training.

Validation of the Strategic Possibility

This report is based on secondary research and includes data from a variety of sources including the California Employment Development Department (EDD), the Bureau of Labor Statistics (BLS) and the Los Angeles Economic Development Corporation (LAEDC).

¹¹ Logistics Training Consortium of Southern California: www.ltcocal.com

¹² California Transportation and Logistics Institute: <http://72.3.167.88/catli/index.html>

¹³ Advanced Transportation Technology & Energy (ATT&E) Centers: <http://www.attcolleges.org/>

Earlier this year, the Inland Empire Center of Excellence (COE) conducted meetings and interviews with BNSF, Amtrak and Union Pacific, and participated in industry events which validated the sector's workforce development needs. No additional industry validation was conducted for Los Angeles and Orange Counties because the two regions (Inland Empire and LA/OC) serve the same employers, and because the data for Los Angeles and Orange Counties does not justify a region-wide effort to focus on the railroad sector's training and education needs.

Highlights from the Inland Empire COE's validation findings:

- Employers validated the need for assistance in recruiting new workers, as growth (to a lesser extent) and retirement (to a greater extent) are factors that will significantly affect the local workforce within the next five to ten years.
- In one-on-one meetings, both BNSF and Amtrak projected the retirement rate among their Southern California-based workforce to be as high as fifty percent within this 5-10 year period.
- Information regarding specific occupational titles, duties, and wages was obtained directly from railway businesses (see Appendix C).
- Employers confirmed that training for new workers is highly desirable and that many workers need pre-employment and basic skills training (a combination of life skills and remedial math and English) in addition to occupational skills, such as training for welders, electricians, mechanics, and engineers.
- Amtrak employs about 300 Lead Service Attendants (LSA) in Los Angeles and Orange Counties and needs assistance recruiting more LSAs. Students with experience and/or training in culinary, food services, customer service and cash handling could qualify for these positions. A pre-employment boot camp focused on basic and soft skills may also be appropriate to help Amtrak find workers.

Industry Training Needs & Challenges

Most railroad transportation workers begin as yard laborers; later they may have the opportunity to train for engineer or conductor jobs. Railroads require that applicants have a minimum of a high school diploma or its equivalent. Applicants must have good hearing, eyesight, and color vision, as well as good hand-eye coordination, manual dexterity, and mechanical aptitude. Physical stamina is required for entry-level jobs. Employers require railroad transportation job applicants to pass a physical examination, drug and alcohol screening, and a criminal background check. Conductor jobs generally are filled from the ranks of experienced rail transportation workers who have passed tests covering signals, timetables, operating rules, and related subjects.¹⁴

The sector is facing a labor shortage and a pipeline issue, because close to half of the incumbent workers are preparing to retire in the next decade. The sector's working conditions present some barriers to attracting new workers such as:

- work schedules (nights, weekends, holidays, overtime, irregular hours),
- short notice for schedule changes,

¹⁴ Bureau of Labor Statistics at <http://www.bls.gov/oco/ocos244.htm#training>

- obligation to be away for days when traveling long distances,
- outdoor work in often physically demanding jobs.

Colleges interested in developing new programs for the railroad sector should expect to encounter the following barriers:

- Enrollment: students are not familiar with the sector and the career opportunities, and, therefore, colleges would have to heavily and effectively market the programs to attract students;
- Availability of space, equipment, and tools needed for instruction;
- Availability of qualified instructors.

Opportunities/Implications for Community Colleges

The training requirements and the forecasted job growth do not demonstrate a need for a region-wide response. The community colleges in Los Angeles and Orange Counties do not currently have railroad programs; however, they offer other programs which teach some of the skills required for many railroad occupations (e.g., welding, electricity).

The railroad sector is clearly facing a workforce crisis because of the upcoming massive retirement of baby boomers. However, employers do not require degrees for entry-level and mid-level positions, and usually train their employees in-house. Employers seem to need the colleges to help them promote job opportunities, rather than to create new railroad programs.

It is recommended that only a few colleges (probably among those that are already focused on logistics and/or transportation), reach out to railroad employers and help meet their workforce needs. Those colleges could partner with high-schools and WorkSource Centers to recruit new students, and partner with employers to promote the sector. The industry may benefit from the creation of a pre-employment short-term program which would focus on basic skills and employability issues, rather than technical skills. Such a program with appropriate marketing would also increase students' awareness of the career opportunities offered in the sector.

Data Limitations

Different data sources showed significant discrepancies in both current data and projections.

According to EDD, the railroad sector employed 5,700 workers in May 2007 in Los Angeles County; however, details on occupations within the sector were not readily available. Labor market information for the railroad sector in Orange County was not available from EDD.

Appendix B presents estimated numbers of railroad-specific jobs. To evaluate the number of workers actually employed in the railroad sector (as opposed to other industries employing the same occupations), national staffing ratios were used. The percentages were applied to each relevant occupation, but some data for Orange County was suppressed by EDD, resulting in the following:

Rail transportation (NAICS 482)	Jobs in 2004	Jobs in 2014	Absolute change	% change
Los Angeles County	3,726	3,833	+107	+2.87%
Orange County	393	468	+75	+19.08%
Total	4,119	4,301	+182	+4.42%

Interestingly, the data available from CC Benefits¹⁵ suggested a significant employment loss in the next five years as shown below:

Rail transportation (NAICS 482)	Jobs in 2007	Jobs in 2012	Absolute change	% change
Los Angeles County	6,477	2,193	-4,284	-66.14%
Orange County	100	92	-8	-7.97%
Total	6,577	2,285	-4,292	-65.26%

Based on the sources reviewed for the preparation of this report and input from employers, the total number of railroad jobs is not expected to increase in Los Angeles and Orange Counties. In addition, the Bureau of Labor Statistics predicted that productivity gains should reduce the number of railroad jobs. Overall, job opportunities should remain satisfactory in the next 5 to 15 years because of the massive retirements expected and some job creation due to expansion.

Conclusion

In conclusion, while the workforce issues faced by the railroad sector appear significant, the cause is not a lack of training and education from the community colleges. However, the colleges can help employers hire new workers by referring current students, helping employers promote the career opportunities they offer and partnering with high schools to recruit students. The sector provides the opportunity for individuals with limited education to earn attractive wages and move up the career ladder. Therefore, WorkSource Centers would be valuable partners in an effort to place workers into this sector. Moreover, railroad transportation is an important part of goods movement and should, therefore, get the attention of organizations involved in economic development.

¹⁵ CC Benefits: www.ccbenefits.com

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APPENDIX A: How to Utilize this Report

About Us - Description of BWPI

The Business and Workforce Performance Improvement (BWPI) initiative is focused on building the capacity of the colleges in the area of economic and workforce development to enhance their ability to deliver education and training services to businesses and workers in high growth industries, new technologies, and other clusters of opportunities.

The Centers of Excellence (COE) within BWPI provide information regarding workforce trends, increasing awareness and visibility about the colleges economic and workforce development programs and services, and building partnerships with business and industry.

The difference this will make to the colleges is that it will position them as THE workforce partners of choice to business and industry and ensure that college programs are current and responsive. This will contribute to the overall economic vitality of the communities in which they serve.

How to Use This Strategic Possibility Report

The Centers of Excellence within the Business and Workforce Performance Improvement Initiative of the California Community College Economic and Workforce Development Program have undertaken Industry Scanning to provide targeted and valuable information to community colleges on high growth industries and occupations.

This report, while not a full industry scan, is intended to assist the decision-making process of California community college administrators and planners in addressing local and regional workforce needs and emerging job opportunities in the workplace as they relate to college programs. The information contained in this report can be used to guide program offerings, strengthen grant applications, and support other economic and workforce development efforts.

This report is designed to provide current industry data that will:

- Define potential strategic opportunities relative to an industry's emerging trends and workforce needs;
- Influence and inform local college program planning and resource development; and
- Promote a future-oriented and market responsive way of thinking among stakeholders.

This Industry Scan included a review of the California Regional Economies Project reports and Employment Development Department (EDD) Labor Market Information (LMID) projections that cover the communities in this region, as well as many other sources as listed.

Important Disclaimer:

All representations included in this Environmental Scan product/study have been produced from a secondary review of publicly and/or privately available data and/or research reports. Efforts have been made to qualify and validate the accuracy of the data and the reported findings. The purpose of the Environmental Scan is to assist the California Community Colleges to respond to emerging market needs for workforce performance improvement. However, neither the Business and Workforce Performance Improvement Centers of Excellence, COE host college or California Community Colleges Chancellor's Office are responsible for applications or decisions made by recipient community colleges or their representatives based upon this study including components or recommendations.

APPENDIX B: Labor Market Information

SOC Code	Occupational Title	Actual Values for all Industries				% in the railroad	Modified Values for the Railroad			
		Los Angeles County		Orange County			Los Angeles County		Orange County	
		2004	2014	2004	2014		2004	2014	2004	2014
53-4011	Locomotive Engineers	550	610	-	-	95.32%	524	581	-	-
53-4031	Railroad Conductors and Yardmasters	550	680	-	-	93.24%	513	634	-	-
53-4021	Railroad Brake, Signal, and Switch Operators	690	530	-	-	94.44%	652	501	-	-
53-4099	Rail Transportation Workers, All Other *	140	170	-	-	89.33%	125	152	-	-
53-4013	Rail Yard Engineers, Dinkey Operators, and Hostlers	140	100	-	-	70.44%	99	70	-	-
49-3043	Rail Car Repairers	700	730	-	-	71.65%	502	523	-	-
49-2093	Electrical and Electronics Installers and Repairers, Transportation Equipment *	650	670	-	-	24.61%	160	165	-	-
53-6051	Transportation Inspectors	960	1,050	-	-	11.46%	110	120	-	-
43-5011	Cargo and Freight Agents	7,190	6,910	270	270	3.53%	254	244	10	10
53-1031	First-line supervisors/managers of transportation and material-moving machine and vehicle operators	6,810	7,990	1,470	1,780	1.58%	107	126	23	28
51-4041	Machinists	9,550	9,090	3,920	4,460	1.22%	116	111	48	54
53-7061	Cleaners of vehicles and equipment	13,570	14,030	5,850	6,790	0.51%	69	71	30	34
47-0000	Construction and Extraction Occupations	160,350	173,240	98,530	119,050	0.28%	444	480	273	330
53-6099	Transportation Workers, All Other	3,270	3,330	200	250	0.70%	23	23	1	2
53-1021	First-line supervisors/managers of helpers, laborers, and material movers, hand	6,600	7,230	1,950	2,240	0.42%	28	30	8	9
53-7032	Excavating and Loading Machine and Dragline Operators	230	260	320	380	0.20%	0	1	1	1
Total		211,950	226,620	112,510	135,220		3,726	3,833	393	468

Data source: California Employment Development Department Labor Market Information Division.

Notes: Data for Orange County is not available for the first seven occupations.

Actual values represent the total number of jobs for each occupation, employed in any industry.

% represents the percentage of jobs within the railroad industry (excluding other industries).

Modified values are an estimate of the number of occupations within the railroad industry, based on percentages.

* 2002-2012 data is presented, as 2004-2014 is not available for this occupation.

APPENDIX C: Occupations and Wages¹⁶

Major Occupational Categories

Typically, employers categorize rail-related occupations within the following four categories: mechanical, engineering, operations, and on-board services. Businesses indicate that positions, hours, and pay scales are typically seniority-based.

Standard positions and, in some cases, career ladders within each occupational category are described below. The wages cited have been provided by BNSF (for mechanical, engineering, and operations occupations) and Amtrak (for on-board services occupations) but they are representative of the sector's wage levels.

Mechanical Occupations

Locomotive Laborer: This is an entry-level position, earning approximately \$15.00 per hour. Employees in this position operate various types of industrial maintenance equipment and typically work within the mechanical shop for one year before being eligible for promotion.

Diesel Mechanic/Machinist: Some experience with overhauling and auto maintenance is required to qualify for these positions, which pay from \$18 to \$21.43 per hour. Union Pacific in particular focuses on environmental improvements and works with Gen-Set Yard Locomotives, Diesel particulate filters, Oxidation Catalyst Devices, Smart Start, and Green Goats Hybrid Yard Locomotives.

Electrician: Employment in this position requires a technical background (often including formal training and certification as an Electrician) and workers can earn from \$17.97 (at the Apprentice level) to \$21.41 per hour.

Rail Car Repair Person: This position requires some welding experience, but is mostly internally-trained. Workers inspect, build, and repair freight cars for compliance with federal and company standards. Employees can earn up to \$21.65, with entry wages starting at \$18.19 per hour.

Traveling Mechanic: These skilled workers repair small engines and troubleshoot a variety of other problems, from electrical systems to hydraulics. Typically, a minimum of two years of mechanical work experience is required. The average hourly rate for experienced workers is near \$27.

Engineering Occupations

Employees in these positions normally work outdoors and jobs are, generally, project-based. Work in railway engineering occupations requires extensive travel.

¹⁶ Railway Occupations, 2007, Inland Empire Center of Excellence

Track Laborers: This is an entry-level position earning about \$15.00 per hour. Workers repair and construct plates, spikes, rails; and clear debris using various power and other hand tools.

Welders (metal to metal): Workers perform tasks associated with welding, grinding, and cutting of rail. They earn \$17.00 to \$19.00 per hour working, typically, in two-person teams. The position requires experience in construction and welding, including FCAW (flux core arc welding) and SMAW (shielded metal arc welding).

Track Maintenance Truck Driver: This position is responsible for removing and replacing track components (e.g., ties, rails, bars). A Class A commercial driver's license with HAZMAT and air brake endorsements is required. The entry-level pay rate is \$18.16 per hour, with experienced workers earning up to \$19.05.

Assistant Signal Person: This position works outdoors, digs trenches, climbs and paints poles, and generally maintains signals. This physically demanding position pays an entry wage of \$18.84 per hour.

Electronic Technicians: These employees repair motherboards, soldering, electrical connections, and telecommunications equipment. Employees can earn more than \$28 per hour, and those with an FCC license qualify for additional proficiency pay.

Building & Bridges Helper/Driver: Workers repair wooden railroad bridges, trestles, and tunnel supports and repair/replace structural steel components of bridges. Prior carpentry, construction, and/or welding experience is highly desirable, as is trade-related training. The average entry pay rate is \$17.94 per hour.

Operational Occupations

Conductors: These employees are "on-call" and "on the road." The job is physically demanding and workers are away from home for an average of 3 days at a time. They earn approximately \$67,000 annually. The position requires one year of outdoor/warehouse/mechanical experience. BNSF has experienced 99.9% retention of trainees that become full-time Conductors.

Train Dispatcher: These employees, who schedule the movements of trains, work 12 hour shifts (a weekly schedule is, generally, 3 days on/3 days off or 4 days on/4 days off). Requirements include computer literacy, ability to multi-task, along with strong communication and inter-personal skills. Starting salary is \$65,000 to \$70,000.

First-Line Supervisors: These employees must often have a degree or many years of direct work experience. BNSF, for example, employs specialized mechanical, engineering, and transportation supervisors, all of whom earn more than \$60,000 per year. These individuals function as members of a management team and are responsible for making assignments and coordinating work flow.

On-Board Service Occupations

These positions are exclusive to Amtrak and Metrolink. BNSF and Union Pacific Railroad currently do not focus on passenger rail services.

Lead Service Attendants (LSAs): These workers create a welcoming atmosphere of hospitality for passengers. They coordinate work and supervise teams of food and wait staff. LSAs are also responsible for the security, sale, safe handling and accounting of food and beverage products, and they handle cash and credit transactions. With Amtrak, the starting wage is \$16.46.

Assistant Conductor: This position assists the Conductor in the safe movement of trains by adhering to applicable operating rules/practices; ensures all revenue documents; maintains safety rules, and operating/physical characteristics including air brake rules, electrical instructions, emergency procedures, etc. They also help with the loading and unloading of passengers. New Amtrak employees in this position must attend seven weeks of training at the company's facility in Delaware. The starting wage is \$15.44 per hour.

Concession Worker: These workers have responsibility for the sale, safe handling and accounting of food and beverage products. A Food Worker's Certification card is preferred. \$14.81 is the entry wage for this position.

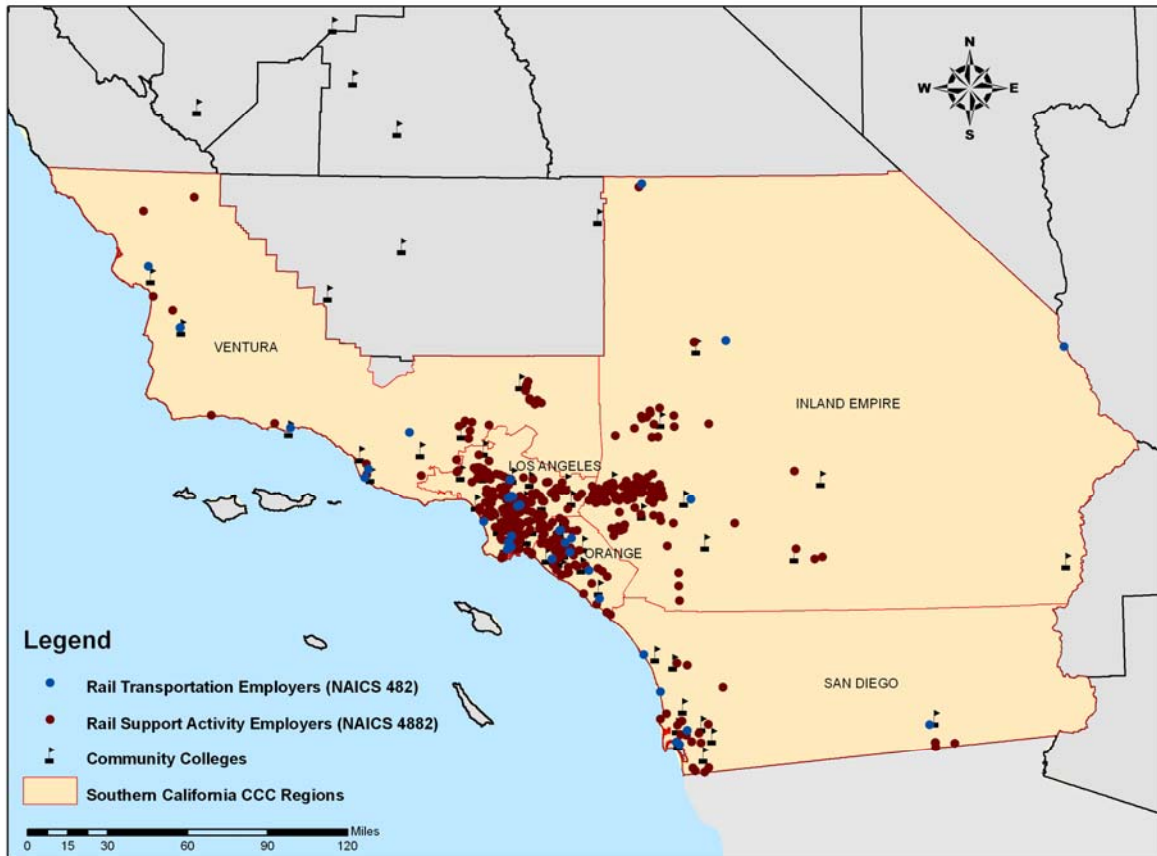
Utility Worker (Service Attendant): This position provides food service to passengers; assists in checking, loading and stowing supplies; sets tables in a uniform manner; and cleans and sanitizes food service supplies and equipment. The starting wage: \$12.00 per hour.

Utility Worker (Train Attendant): Provides quality service to coach and sleeping car passengers on long distance trains. Ensures cars are clean and fully stocked; assists passengers while boarding, en route, and when de-training. They also assist with luggage handling. The starting wage is \$12.00

Other on-board positions include:

- Chefs: Starting Wages: \$16.00 to \$20.00 per hour (based on experience)
- Food Specialists: Assist Chefs. Starting Wage: \$16.00
- Coach Cleaners: Entry-level janitorial positions. Starting wage is \$11.98

APPENDIX D: Southern California Railway Employers



Number of Employers by NAICS and Geography:

	Rail Transportation Employers (NAICS 482)	Support Activity for Rail Transportation Employers (NAICS 4882)	Totals
Orange	8	54	62
Inland Empire	4	121	125
Los Angeles	13	179	192
San Diego	6	26	32
Ventura	7	26	33
Totals	38	406	444