Northern San Joaquin

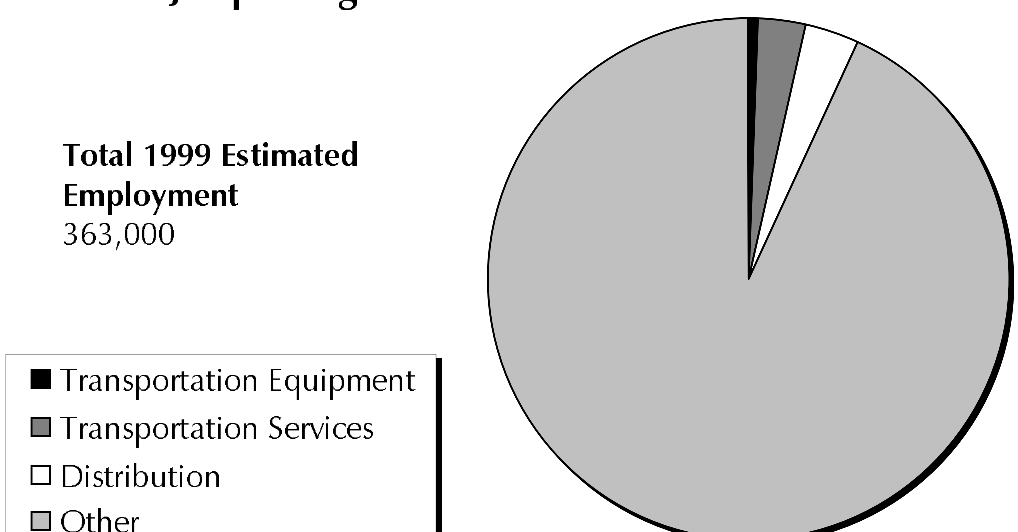
Transportation Industries: Economics and Impact

2,380 businesses
24,700 jobs
$903 mil in wages
1,450 support jobs

The industries comprising the transportation industry cluster in the northern San Joaquin region directly account for about 25,000 jobs. These jobs are in transportation equipment, transportation services, and distribution.

Employment in transportation industries in the northern San Joaquin region

Total 1999 Estimated Employment
363,000



Airlines
The airline industry is continuing its growth period commenced with deregulation twenty years ago. This period has seen a drop in prices, greater flexibility for both airlines and consumers, and an increase in both demand and supply. Even with all the changing competition airline profits continue to increase.

Current and future worries cover many areas. Labor costs are rising after concessionary labor agreements expired in 1993 and 1994. Some travelers are calling for some regulation because of dissatisfaction with fare structures. The volatility of fuel prices is another concern.

Wholesale
Consolidation in the wholesale industry is changing the nature of the market. This consolidation has been led by the consolidation of customers: as smaller shops are replaced by large national retailers, the wholesalers can add efficiencies by targeting their business. At the same time, however, these high-volume retailers are able to command distribution services directly from manufacturers.

The rise of export sales is also changing the industry. Firms in the United States are consolidating with foreign partners through purchases and partnerships.

Transportation industries trends

Trucking
Growth in trucking in the northern San Joaquin region is projected to grow over the next several years. Nationally, however, trends are evident that may affect longer term growth in this sector. The increased efficiency in airlines is expected to carry over to freight, especially in high-value shipments. Also, new systems of intermodal delivery using railroad freight will compete better for low-value shipments.

Firms involved in logistics for shipping have been growing over the last ten years. Manufacturing companies have started to outsource their shipping, relying on new efficiencies to cut cots.

Motor vehicles
The world market has been changing drastically for light vehicles. The drop of trade barriers has led many manufacturers to move production to low-wage countries. In addition, cross-border mergers have helped to increase efficiency through sharing technology and production techniques. Common platforms can be used to suit the tastes and needs of consumers in several countries.

The growth of the transportation industry cluster should exceed that of overall employment in the region. Of the industries in this cluster, trucking and courier services should continue to lead the growth in the number of jobs, with over 2,200 new jobs by 2006.

What are **industry clusters?**

Industry clusters represent industry groups that share similar technologies, labor skills, distribution channels, and related markets. There is substantial evidence that collaboration among businesses with such shared interests, supported by research and educational institutions as well as governmental agencies, can provide a useful understanding of local economies. Cluster analysis can identify industry groupings that competitively export goods and services from the region; encourage further development of the robust parts of each cluster; and supplement those parts that are currently weak.

Local transportation cluster

Industry	SIC	Firms (1996)	Employment (1996)	Employment (Est. 1999)	Projected Growth 1999 to 2006	Yearly Growth Rate
Transportation equipment		**44**	**1,577**	**1,746**	**472**	**3.5%**
Motor vehicles and equipment	371	26	1,248	1,396	418	3.8%
Aircraft and parts	372	4	38	40	5	1.8%
Ship/boat building and repairing	373	13	288	307	49	2.1%
Railroad equipment	374	0	0	0	0	N/A
Motorcycles, bicycles, and parts	375	1	3	3	0	N/A
Transportation services		**909**	**10,561**	**11,590**	**2,843**	**3.2%**
Trucking & courier svcs, exc. air	421	727	8,191	9,004	2,225	3.2%
Public warehousing and storage	422	88	981	1,060	211	2.6%
Trucking terminal facilities	423	1	1	1	0	N/A
Deep sea foreign transport, freight	441	1	4	4	0	N/A
Deep sea domestic transport, freight	442	0	0	0	0	N/A
Misc. water transportation, freight	444	0	0	0	0	N/A
Water transportation services	449	19	278	274	-8	-0.4%
Air transportation, scheduled	451	12	456	497	109	2.9%
Air transportation, nonscheduled	452	2	13	14	3	2.9%
Airports, flying fields, & services	458	15	105	121	49	4.9%
Freight transportation arrangement	473	29	228	245	46	2.5%
Rental of railroad cars	474	0	0	0	0	N/A
Misc. transportation services	478	15	306	370	208	6.6%
Distribution		**1,427**	**10,410**	**11,400**	**2,077**	**2.4%**
Wholesale trade—durable goods	50	778	7,171	7,498	822	1.5%
Wholesale trade—nondurable goods	51	649	3,239	3,902	1,256	1.5%

Current job locations and concentration

By far the highest number of transportation cluster employment is in San Joaquin County. This is also the only county that has a greater concentration of employment than the state.

JOBS IN THE TRANSPORTATION CLUSTER

County	Percentage of Total
Alpine	0.0%
Amador	1.2%
Calaveras	0.9%
Mariposa	0.2%
Merced	9.6%
San Joaquin	57.2%
Stanislaus	29.9%
Tuolumne	1.1%

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Future job growth

Occupation demand 1999 to 2006

Truck drivers–heavy	1,37(
Sales reps, non technical	23(
Forklift/indust. truck operators	21(
General office clerks	19(
Other helpers, laborers, movers	18(
Truck drivers–light delivery	15(
Misc. assemblers & fabricators	15(
Bus & truck mechanics	13(
General managers/executives	13(
Other hand material movers	12(
Bookkeeping/accounting clerks	10(
First line supv: sales/related	8(
Shipping/receiving clerks	8(

Clusters and **workforce development**

The cluster approach is important to workforce development agencies because it shows where employment growth is likely to occur, and shows the variety of related businesses that share common attributes. Training providers can coordinate their training programs for groups of occupations and skills within a cluster. Cost-effective programs can be tailored directly to the needs of the businesses in that cluster.

Valley employers tend to have more regular relationships for recruitment and training with community colleges, EDD and other agencies. Foothill employers are much less likely to. This may be primarily a function of size and proximity. Employment and training agencies should make an extra effort to make more frequent contact with foothill employers.

Training and policy issues

- A good work ethic is the most important skill. This includes an awareness of the employee's responsibilities (i.e. that the employer has a need, is paying the employee to fill the need, and has a right to expect the employee to perform adequately). "The best thing training agencies can teach is that there is no free ride."
- Reference checks are universally considered to be unreliable, unless they come from a trusted employee. A bad reference usually causes a rejection.
- Truck drivers are universally pre-screened for drugs. Few others in this cluster are, unless there is a reason to suspect substance abuse.
- Truck drivers in the wholesale industry must often learn to stock shelves, learn merchandising skills, and must have good interpersonal skills to work with the customer directly. They should project a clean professional appearance free of body piercings. They must also learn basic computer skills so they can use hand-held inventory tracking devices. Fear of computers can be a significant training issue along with defensive driving and record keeping skills. College is not necessary.
- All employers know employment and training agencies exist, but awareness of specific services is irregular. Employers are skeptical of their value and do not think to contact them. Therefore these agencies should make the effort to collaborate to cooperatively promote their services region-wide.
- Employment services and training agencies should acknowledge seasonal employment as
- There is a need for remedial work-readiness training. Work-readiness skills should become part of training curricula, if not already.

The transportation cluster features average wages but a large base of established firms. Jobs in wholesale industries and freight arrangement pay the most. Manufacturing jobs in transportation equipment are also fairly lucrative.

In contrast, those industries that deal more directly with final consumers pay fairly low wages. These include passenger arrangements; personnel suppliers; and miscellaneous services such as packing, weighing, and toll roads.

Wages and local employers

The 2,400 firms of the transportation cluster are a diverse range. Some of the larger firms are listed in the following table.

AVERAGE ANNUAL WAGES, 1996

Industry	SIC	Avg Wage ($)
Transportation equipment		**27,800**
Motor vehicles and equipment	371	27,300
Aircraft and parts	372	25,100
Ship/boat building/repairing	373	30,500
Transportation services		**29,000**
Trucking/courier svcs, exc. air	421	29,400
Public warehousing and storage	422	26,800
Water transportation services	449	36,300
Air transportation, scheduled	451	29,500
Airports, flying fields, services	458	23,900
Freight transport arrangement	473	34,000
Misc. transportation services	478	15,900
Distribution		**30,500**
Wholes. trade—durable goods	50	30,200
Wholes. trade—nondurable goods	51	30,800
Supplier industries		**22,800**
Semiconductors/related devices	3674	25,400
Passenger transport arrangement	472	15,300
Personnel supply services	736	13,400
Data processing and preparation	7374	22,600
Automotive repair shops	753	22,800
Accounting/auditing	872	25,700
Research and testing services	873	30,300
Management and public relations	874	27,800

SELECTED MAJOR CLUSTER EMPLOYERS

Establishment	Product or Service	City
Core industries		
Foster Farms	Local trucking	Livingston
Summit Logistics	General warehousing	Tracy
Craig & Hamilton	Grocery wholesale	Stockton
Applied Aerospace Structures	Aircraft parts, equipment	Stockton
Calcedar Export, Inc.	Pens, pencils wholesale	Stockton
Costco Wholesale Corp.	General merchandise, whlse	Merced
Dana Corp.	Motor vehicle parts, access.	Stockton
KRC Aggregates	Construction sand	Clements
Major-Sysco Food Service	Grocery wholesale	Modesto
McLane Pacific	Grocery wholesale	Merced
Supplier industries		
Libby Owens-Ford Co.	Flat glass	Lathrop
Sierra Hills Marketing	Business consulting	Stockton
APDS	Temporary help services	Lathrop
Arteaga AG Services	Employment agency	Modesto

This fact sheet provides detailed information on where employment growth will occur in the eight-county region and highlights the skill requirements of the transportation industries. These data can be used by the Northern San Joaquin Regional Collaborative the basis for aggregation of market demand by skill and category. This will permit the development of efficient training and education programs that cut across county boundaries and serve all transportation firms in the region. Establishing a system for continued reassessment of the needs of these businesses would lead to the creation of a regional labor market that can effectively match the supply and demand for labor without public sector intervention.

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