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# Logistics in the Inland Empire

Zeynep Selen Sarper

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# LOGISTICS IN THE INLAND EMPIRE

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A Project

Presented to the

Faculty of

California State University,

San Bernardino

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In Partial Fulfillment

of the Requirements for the Degree

Master of Business Administration

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by

Zeynep Selen Sarper

June 2003

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Approved by:

[redacted]

Dr. Norton Marks, Chair, Marketing — May 28-03 Date

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ABSTRACT

Being located just inland from the Los Angeles, Orange and the San Diego areas, the Inland Empire region has grown continuously. The Inland Empire is one of the fastest-growing metropolitan areas in the U.S., and attracts more and more business to the area every year. Companies that choose to locate here benefit from the various advantages of the region. The advantages offered by the Inland Empire are lower labor rates, lower land and lease prices, educated labor force, and easy airport, port, freeway and railway accessibility. There are many airports in the region that help companies with air cargo handling. These airports are Ontario International Airport, Los Angeles International Airport, John Wayne Airport, and Southern California Logistics Airport at Victorvalley. Port of Long Beach and Port of Los Angeles play a strategic role in companies' exports, imports and distributions to Pacific Rim. In addition to airports and ports, railroads and freeways are the vessels that carry life to the region. Ontario plays the as the heart of the Inland Empire since it is well-located to serve the Western states, and that it offers efficient, state-of-the-art industrial buildings.

ACKNOWLEDGMENTS

This project is the final result of two years of mental and physical work in the process of obtaining my Master in MBA program. It has been a really tough two years, but I could not have done it by myself. I had the help and support of family, friends, instructors and many others who constantly reminded me not to ever give up. I thank and acknowledge the following individuals for their gifts of love, financial and emotional support, education, wisdom, and understanding: Dr. Norton Marks, who guided and advised me through this project study, Dr. Eric Newman, who was the second reader of the project, and Dr. Vic Johar, who is the Chair of Marketing Department and always giving me some good ideas to do a better job, Dr. Sue Greenfield, who has been constantly helping me in all aspects of my academic study for the past two years, Professor Beth A. Flynn, who always help me out if I have any problems in school, who and all the administrative staff, instructors, professors and clerical staff in the Marketing department at Cal State, San Bernardino, and my parents, my sister, my soul sister, Cristina Paiva, my boyfriend, H. Murat Duvenci and many more, too numerous to name. To my fellow classmates, I say: Good luck and much success in the future.

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# CHAPTER ONE

# INTRODUCTION

## Overview

Inland Empire is a region with 28,000 square mile. It is comprised of San Bernardino County, Riverside County, and the eastern tip of Los Angeles County. The Inland Empire is considered to be one of the fastest-growing metropolitan areas the U.S. Especially in the recent years, the area has attracted many companies because of the area's strategic position. Companies choose this area because of lower labor rates, lower land and lease prices, and easy airport, port, freeway and railway accessibility. The Inland Empire is the transportation hub of the southwest United States and has a significant impact on the U.S. economy with its logistics and distribution.

## History

The Inland Empire was Southern California's growth leader during the 1990s. Since January, 1994, some 811 major "basic" firms with 65,819 jobs have expanded within the region (138 in 2000). Two-thirds of these companies have located near Los Angeles and Orange counties, and a growing number are just north of San Diego County. The largest share (58.6 percent) are small manufacturers

spread over 37 sectors. Distributors have been the fastest growing single sector (269 firms, 22,435 jobs). In 2000, distributors averaged 113 workers per new firm, above the 74 in manufacturing. Both sectors are expanding due to the Inland Empire's available and lower land costs, its less expensive labor and housing, and its multi-modal infrastructure. www.ieep.com

Located just inland from the Los Angeles, Orange and the San Diego areas, this region has grown continuously. From 1990 to 2001, the inland region's job base went from 731,025 to 1,038,363 a gain of 307,338 positions or 42 percent. By 2020, this is expected to rise by 80 percent to 1.8 million. The latest data from the U.S. Department of Commerce show the Inland Empire's economic expansion led personal income to more than quadruple from 1980 to 1999, rising from $16 billion to $71 billion.

The Inland Empire's economic expansion has been accompanied by strong population growth. In 1980, the area had 1.6 million people. In 1990, it was up to 2.6 million, a gain of 1 million. In 2000, the population reached 3.3 million, an increase of another 700,000. This puts the Inland Empire's population a little behind Oregon and Connecticut [3.4 million] (www.ieep.com).

The Inland Empire has also grown continuously since 1990 with its job base rising 42 percent to over 1 million. By 2020, it is expected to rise by 80 percent to 1.8 million. The inland area's population reached 3.3 million in 2001, roughly equal to Oregon. The population is expected to be 5.1 million by 2020. International trade increased by $1 billion from 1991 to 1999 (www.ieep.com).

## Historical Assets

Throughout its history, San Bernardino, a significant part of the Inland Empire, has benefited from two extraordinary assets. First, it has a 1,000-foot deep underground lake the size of Lake Shasta. It is formed by a geological oddity that gathers all of the water draining from the San Bernardino and eastern San Gabriel mountains. Thus San Bernardino has access to more water than it will ever use while Southern California is searching for new sources.

Second, San Bernardino is located close to both the Cajon (I-15 freeway, BNSF Railway) and Banning (I-10 freeway, UPSP Railroad) passes, the two land access routes into Southern California. Since the 19th Century this has made the City a transportation, retail, governmental and office center (www.sanbernardino-eda.org/pdf/section1.pdf).

## Statement of Situation

This study will examine warehousing, physical distribution, and logistics in Inland Empire. Airports, freeways, railroads, and ports are contributing very much to the development of the area, especially the retail sector. The study will include statistical information about the ports, freeways, airports, and railroads, and their cargo volumes, space and cost information of land, factors affecting the area and its cities and their impact on logistics and distribution.

## The Purpose of this Project

The purpose of this project is to document an extensive analysis of Logistics and Distribution in Inland Empire, California, and also look at the logistics and physical distribution of some companies in the same area. The Inland Empire is a very fast-growing metropolitan area and it has a very important place at logistics with its cities that are strategically located, its warehouses, and its transportation capabilities. The Inland Empire has many benefits that attract many industries each year.

## Organization of the Thesis

The thesis is divided into five chapters. Chapter One provides an introduction, overview of the situation,

history of Inland Empire, and purpose of the project. Chapter Two consists of a review of relevant literature. Chapter Three documents the secondary research and findings. Chapter Four presents company analyses, their present situation and their projected future plans. Chapter Five presents conclusions drawn from the development of the project.

# CHAPTER TWO

## REVIEW OF THE LITERATURE

There are many articles written about the Inland Empire and this chapter will review nine articles.

When the principals of any newly arriving companies were asked why they chose to locate in the Inland Empire, the answer would always be the same: lower labor rates, lower land and lease prices, and easy freeway and railway accessibility.

In his article, *Region Occupies Pivotal Position on Commercial Lanes, published in 1996,* Paul McAfee says that the importance of these attributes cannot be underestimated. The Inland Empire is the transportation hub of the southwest United States. The region's freeways and rail lines stretch out in all directions, linking Tucson with Thousand Oaks, El Paso with Eureka, Phoenix with Portland. Many of the nation's most important interstate freeways cross the area, including Interstate 10, which stretches from Santa Monica to Jacksonville, Florida. And Interstate 15, which connects San Diego with Alberta, Canada. With the Inland Empire occupying such a key position on the nation's commercial lanes, it is not surprising that 6,000 manufacturers and retailers have set

up manufacturing or distribution operations in San Bernardino and Riverside Counties. It is only a short haul from Ontario or Riverside or even Victorville to any Southern California city. He also mentions that the railroads play a major role in the Inland Empire. Burlington Northern Santa Fe Co., Union Pacific Co. and Southern Pacific Rail Co. run through the heart of the area (McAfee, 1996).

Mike Sheridan says in his article, Inland Empire, published in *National Real Estate Investor* in 1998, that an unmatched combination of abundant, reasonably priced land, an excellent transportation system and an inexpensive and educated labor force contribute to an impressive real estate recovery in Southern California's Inland Empire. The analyst also says that the commercial real estate market continues to improve, with rents rising for warehouse, office and multifamily space. The Inland Empire also ranks ninth in employment growth, making it ideal for continued development. The Inland Empire also has benefited from the formation of the Coachella Valley Enterprise Zone, the North American Free Trade Agreement (NAFTA) and economic development campaign "Sunrise Inland Empire," which is dedicated to encouraging business growth and creating 50,000 new jobs (Sheridan, 1998).

According to the *San Bernardino Sun*, March 11, 2003, throughout Southern California's history, there has always been a place with such powerful competitive advantages that its economy has expanded through good times and bad. Today, that area is the Inland Empire of San Bernardino and Riverside Counties. The City of Ontario emerged as the Inland Empire's powerhouse in retail sales according to the 2001 State Board of Equalization Report on Taxable Sales in California. Ontario had an overwhelming $3.62 billion in taxable sales. Jack Kyser, the chief economist with the Los Angeles County Economic Development Corporation, compared Ontario to retail powerhouses such as Costa Mesa and Beverly Hills. Costa Mesa's numbers in particular ($2.473 billion from retail stores, $3.16 billion overall) are very similar to Ontario's (The San Bernardino Sun, 2003).

The California Department of Finance has predicted that the Inland Empire in the next decade will be the fastest growing urban area of California. The two county region is projected to add 1.1 million more people by 2010, a 34.2 percent growth rate. That will represent an average gain of 110,121 per year. As a result, the 2010 population will reach 4,310,000. Since government projections are typically on the low side, we believe that

the Inland Empire could far outpace these numbers (Husing, 2002).

There have been many of new warehouse projects in recent years. In an article published in *Los Angeles Times*, April 10, 2001, Gary Edwards, a Western Realco vice president, said that they were planning to build a series of huge warehouse buildings in and around Ontario. The project would include buildings of 857,000, 168,000 and 102,000 square feet.

Developers have been building increasingly larger warehouses in the Inland Empire for ten years, Edwards noted. New projects typically range from 500,000 to 800,000 square feet, compared with 200,000 square feet ten years ago. The bigger buildings are a response to the changing needs of warehouse operators, many of whom are consolidating operations and seeking larger facilities with such features as higher ceilings, better accommodations for loading and unloading and easier access for trucks.

Ontario has one of the region's largest concentrations of new warehouses. The industrial real estate market remains relatively tight in Ontario and the surrounding area despite the building boom (Edwards, 2001).

At John Husing's article, "Conditions set to add high-end sectors to the Inland Empire economy," it is mentioned that in the third quarter of 2002, the Inland Empire was ranked the lowest national office vacancies by eight percent. The expansion of the Inland Empire's population and economy has caused the area's vacancy rate to plunge while rates are rising nationally (Husing, 2002).

Scott Gold's article, "Inland Empire activists seek to curb warehouse boom," published in 2001, presents a different perspective to warehousing in the Inland Empire. The writer notes that since the 1880s, Riverside and San Bernardino Counties have offered plenty of cheap land and handy access to truck, rail and air routes that stretch through the Southwest. Those elements have made the region a natural for warehousing and goods distribution. However, many area residents and environmental activists are beginning to see the dark side of the trend. The warehouses, many of which contain more than a million square feet, have begun to dominate the rugged landscape. They are stops for thousands of trucks each day, which are beginning to jam already busy highways and take over residential neighborhoods. Moreover the most urgent thing is that they add to an air pollution problem that is

already among the worst in the nation. There is a movement against condense warehousing in Mira Loma. Leaders of the movement to reject the warehouses, calling themselves HOME--for Help Our Mira Loma Environment--have enlisted block leaders to walk door to door each evening, collecting petition signatures. The petitions will be presented to county supervisors to urge more aggressive review of projects' environmental baggage before approval. Perhaps more than any other portion of the Inland Empire, Mira Loma has been altered forever by warehousing operations (Gold, 2001).

Like railroads, airports, and freeways, ports also play a major role in the Inland Empire's logistics and distribution. In 2003, new security measures are set for ports regarding shipping and manufacturing. United States Customs has not imposed similar regulations on trains, trucks and air cargo. Adam Eventov notes in his article, "New Import Rules for U.S. Ports Threaten to Stall Cargo," that since the beginning of the February, shippers have been ordered to provide the United States Customs Service with a detailed list of items in each cargo container 24 hours before the ship leaves port for the United States. If the list is not provided, the container stays on the

dock. Ships already bound for the country's 361 ports must get their paperwork approved by the Customs Service.

Everything happening at the ports directly affects manufacturing and distribution industries in the Inland Empire. Roughly $200 billion a year in goods travel through the ports of Los Angeles and Long Beach. The ports handle 35 percent of the nation's international trade. Half of the cargo arriving at the Port of Los Angeles and the Port of Long Beach passes through the Inland Empire to the rest of the country on Union Pacific and Burlington Northern Santa Fe railroads. The rest stays in Southern California, where much of the goods are distributed from 300 million square feet of warehouses in the Inland Empire. Distribution and warehousing employs more than 88,300 people throughout the two-county region, according to economist John Husing.

A delay of shipment of materials would be painful for companies especially like Toyota of North America. The company employs nearly 6,000 people at a manufacturing plant in Fremont and a distribution center in Ontario. Toyota and other companies like it will probably have to stock more inventory or build more time into their scheduling when ordering goods. Economists at the Los Angeles Economic Development Corporation believe that it

will take weeks for shippers to integrate the new system into their paperwork habits. In the meantime, some delays are expected to occur (Eventov, 2003).

Teri Ooms, President and CEO of the Inland Empire Economic Partnership (IEEP), says in her article, "In Difficult Times, California Hurt by High Costs," that 2001 was a very tough year. A national recession, the state's energy crisis, and the 9-11 attacks helped create the worst economic environment since the severe Post-Cold War restructuring of 1991 to 1994. IEEP has tried to convince firms to stay, relocate, and expand in the Inland Empire but companies were not happy with some issues: sky high energy prices, expanding prevailing wage laws, expanding overtime coverage, the snail pace of environmental decisions, and the reemergence of rising worker's compensation costs. Nevertheless the inland area is the state's least costly place to conduct business (Ooms, 2003).

John E. Husing, economist, notes in his article, United States and the Inland Empire, published in January, 2002, that as of 2001, the Inland Empire has 258 million square feet of industrial space or 29 percent of the amount in Los Angeles County. Some 55.3 percent of this space is ten-years old or less, showing the speed with

which the inventory is being developed and the rising importance of the inland region's industrial economy. These facts, and the truck traffic they imply, underscore the importance of bringing air cargo to the Inland Empire's airports.

In his article, "Conditions Set to Add High-End Sectors to Inland Empire Economy," published in January, 2003, John E. Husing also mentions the advantages of locating in the inland area that are skilled workers, skilled workers at less cost, lower cost office space, Ontario International Airport (ONT), and extraordinary college resources.

Southern California's housing prices are showing that many younger technicians, professionals, and executives must move to the Inland Empire to afford upscale housing. This skilled labor force will work for less to avoid commuting. They are giving the region the most essential asset needed to add a high-end to its economy that is competitively priced skilled labor.

In September 2002, the annual lease rate for the area's Class A office was $1.70 per square foot per month or $202,800 per year for 10,000 square feet. This cost is $223,200 in northern Orange County, and $242,400 in the San Gabriel Valley, Los Angeles County. Grubb & Ellis

indicates that the Inland Empire's office vacancy rate has dropped from 24 percent in 1997 to eight percent in 2002. According to John E. Husing, the growing importance of ONT and the region's numerous high quality colleges can convince technology, professional, and corporate offices operations to expand in the Inland Empire (Husing, 2002).

# CHAPTER THREE

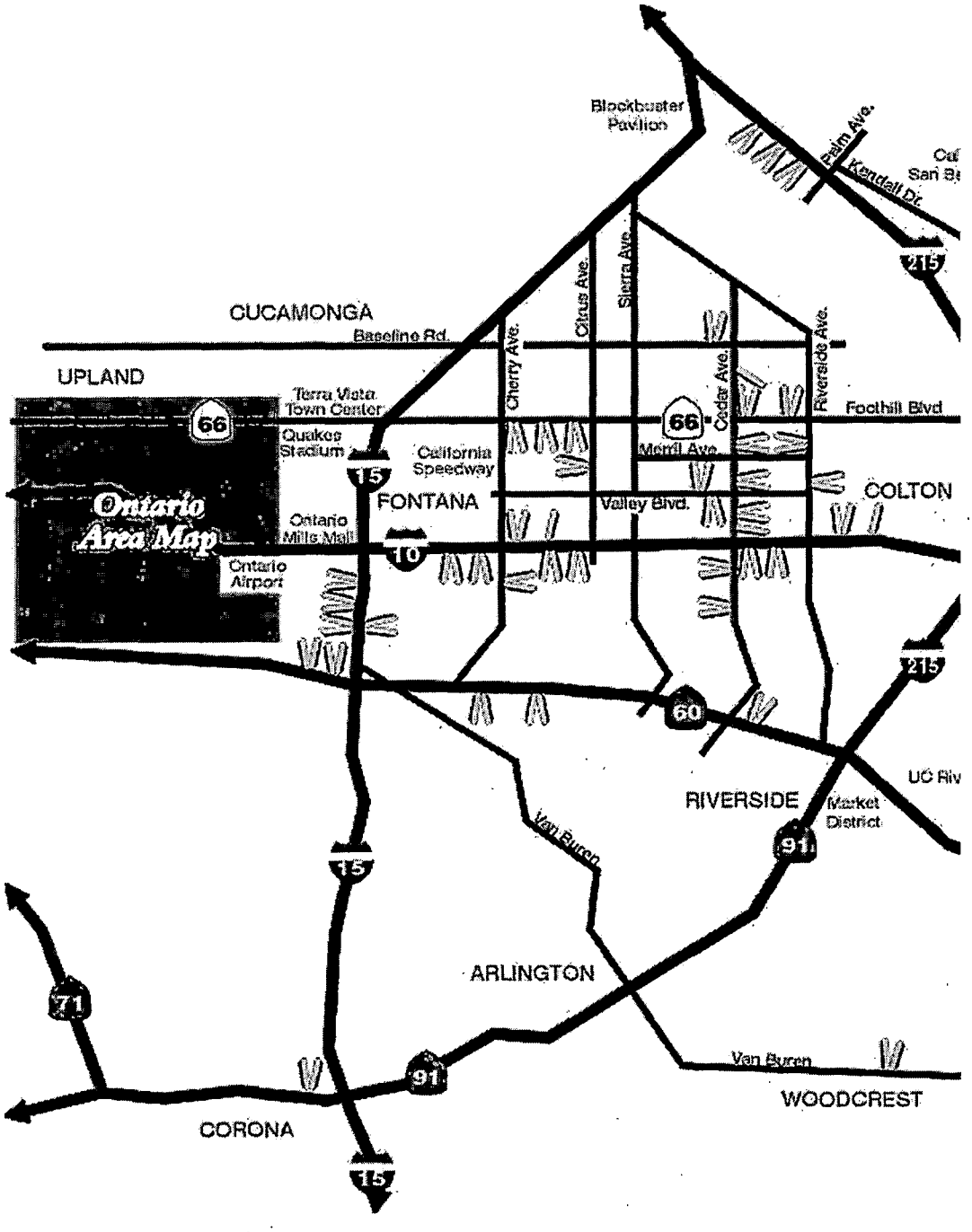
# SECONDARY RESEARCH AND FINDINGS

## Inland Empire Facts

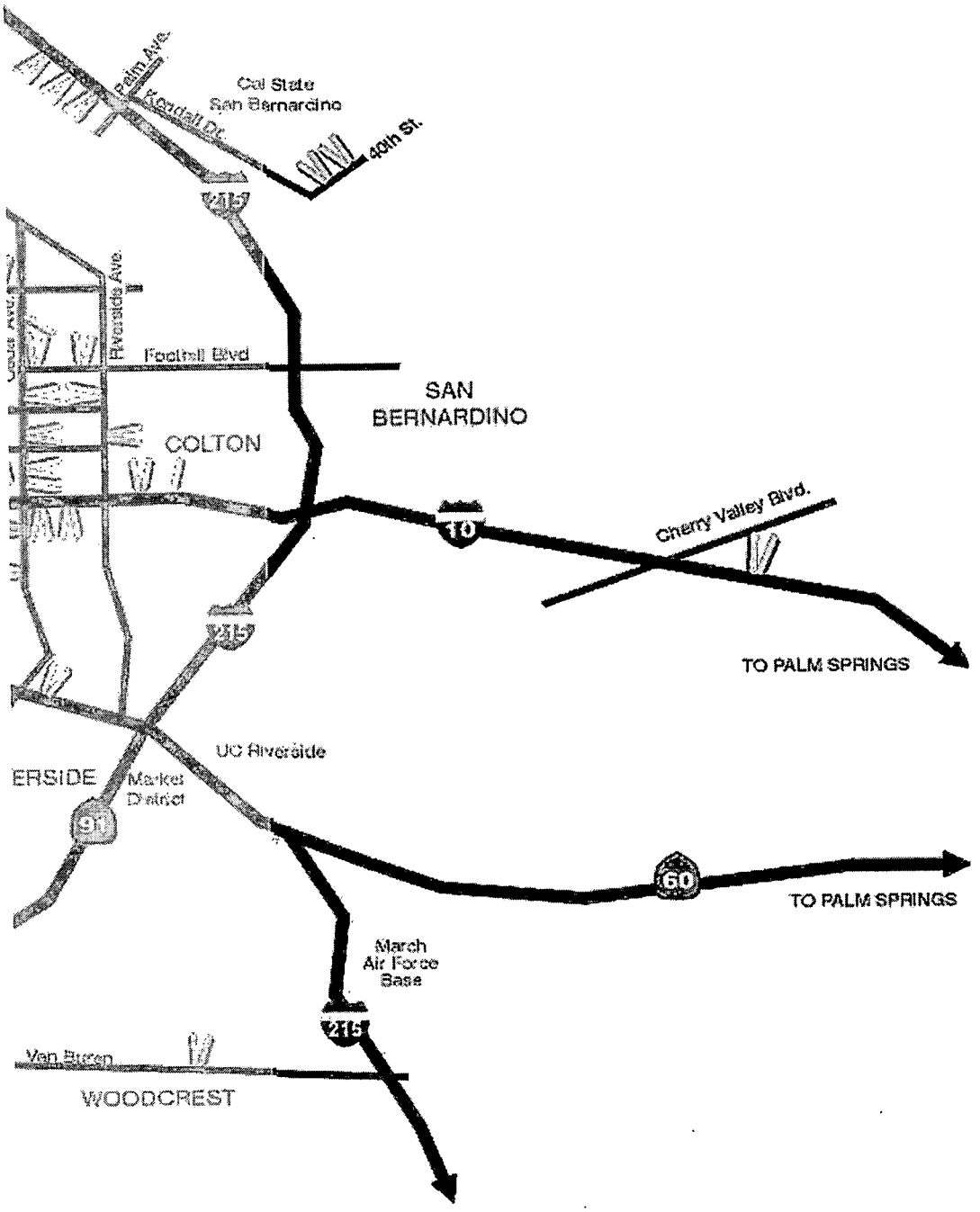
### Introduction

The Inland Empire consists of San Bernardino County, the largest county in the lower 48 states (20,121 square miles); and Riverside County, the third largest county in California, (7,177 square miles). Combined, these two counties represent one-fifth of California's total land area; they lie inland and adjacent to the coastal counties of Los Angeles, Orange and San Diego. (Oltmans, 2002) Over 200 miles to the east, they are bordered by the Colorado River, separating California from Arizona and Nevada. (Please see Figures 1 and 2)

The Inland Empire has a population of over 3.8 million people. It is the fastest growing area with a population increase of nearly 52 percent between 1986 and 1996 state. If the Inland Empire were a state, it would rank 30th in population and 32nd in terms of total income.




Source: www.ocair.com
Figure 1. Map of the West Inland Empire




Source: www.ocair.com
Figure 2. Map of the East Inland Empire

Population, Personal Income, and Economy

The Inland Empire is one of the fastest growing regions in the Western United States. It is estimated that between 2000 and 2010 the population growth rate will exceed 32 percent (Oltmans, 2002). California's population of 34.4 million in 2002 is expected to climb as high as 48.6 million in 2025, according to the State Department of Finance. That would represent a gain of 14.3 million people or 42 percent. During the same period, the United States population is expected to add 62.1 million people, with California accounting for 23 percent of the total growth. California is expected to remain the primary lure for residents from other states, as well as new immigrants from all parts of the world (Inland Empire Economic Partnership, 2002).

The state's entrepreneurial economy will continue to give it a big ability to provide employment to a rising population. In 2001, the California Employment Development Department shows that the Inland Empire has an economy with over 1 million jobs and that number should reach 1.8 million by 2020. Currently there are 3.2 million people living in the Inland Empire, with a total personal income of $66 billion. Some 47 percent of area residents earn incomes between $30,000 and $75,000 annually. Nearly

one-fourth, 23 percent, earns over $75,000 per year, while 20 percent make less than $30,000 a year. The median income of the Inland Empire family was over $47,400, just slightly below the U.S. median of $50,200 per year (Inland Empire Economic Partnership, 2002).

California's economy is greater than all but six countries in the world with a $1,119 billion Gross State Product.

> Entrepreneurship is fueling the transition to the high technology information-based economy, and California's colleges and universities remain at the forefront of this revolution. The film industry is spawning a new multimedia sector, and international trade with Asia, Latin America and other parts of the world are reaching unprecedented levels, says the Inland Empire Economic Partnership. (Inland Empire Economic Partnership, 2002)

Land and Building Costs

The Inland Empire is one of the largest Industrial Real Estate markets in the United States with its approximately 270 million square feet of industrial space. The Inland Empire has two regions: The East Valley and the West Valley. The East Valley includes Colton, Corona, Moreno Valley, Redlands, Rialto, Riverside, San Bernardino, and the Pass. The West Valley includes Chino, Fontana, Mira Loma, Ontario, and Rancho Cucamonga. The East Valley, excluding Corona, has 51,460,948 square feet

total space and eight percent (4,161,869 square feet) of this area is available. The vacancy rate is 3.18 percent that is equal to 1,637,873 square feet.

In Corona, the base is 26,029,777 with a vacancy rate of 4.24 percent (1,103,843 square feet) and availability rate of 11.8 percent (3,075,841 square feet). In the West Valley the total space is 192,339,991. The vacancy rate is 4.7 percent (9,060,487) and the availability rate is 11.5 percent (22,174,432 square feet). The total industrial space is 269,830,716 square feet and the total available space is 29,412,142 square feet. Total number of buildings at the East Valley is 1,461 while it is 2,208 in the West Valley (Lee & Associates, 2003).

The Inland Empire is considered by many to be the premier location for West Coast Distribution and Manufacturing and is home to many *Fortune* 500 companies. Average rates for industrial space was 29 cents per square foot and $6.93 for industrial land in 2002 (Fisher, 2002).

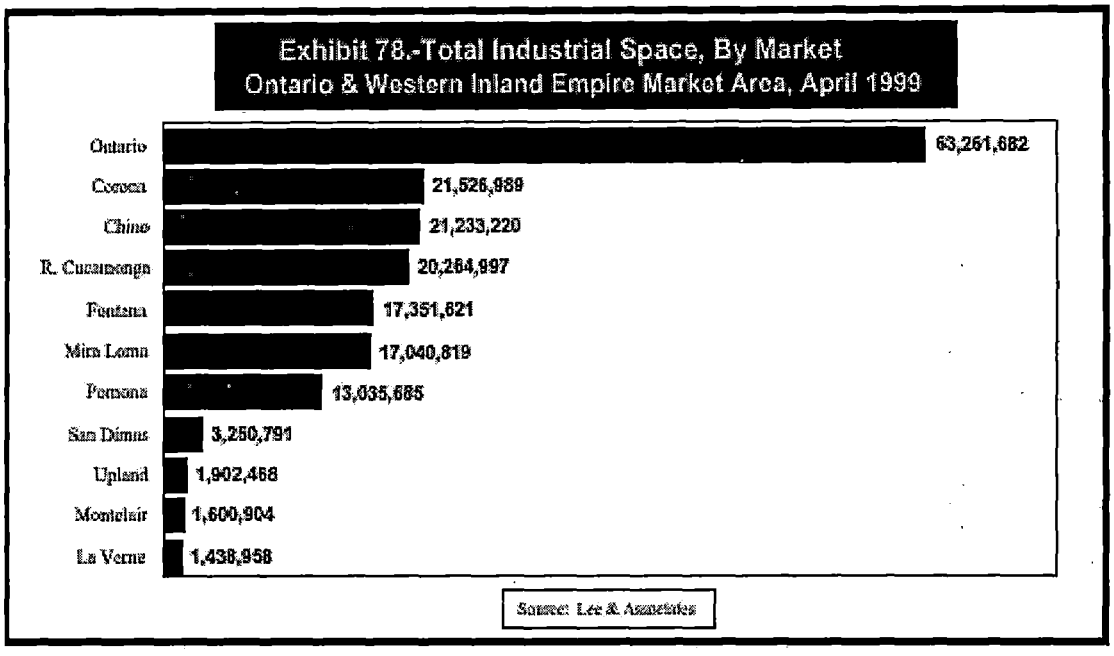
Office Market Overview

With the Southern California economy growing, office vacancy rates are falling throughout the coastal counties, and lease rates are rising. The Inland Empire office lease rates are now less expensive than those rates in Los Angeles and Orange Counties. As of 1998, the Inland Empire

office market was made up of 368 buildings and 10.9 million feet in four cities. Of this, Ontario had 26 buildings (seven percent) and 1.4 million feet of space (13 percent). Within Ontario, the vacancy rate was 19 percent. Among the steel-framed, technologically advanced, newer Class "A" buildings, the vacancy rate was just 12 percent in Ontario. From these data, it would appear that the Class "A" portion of the market in Ontario has vacancy rates that will soon justify increased construction (Lee & Associates, 2003).

Industrial Market Overview

From 1994 to April 1999, the Inland Empire industrial real estate market has been booming. Altogether, the Inland Empire Economic Partnership reports that 560 firms have either opened new operations or changed locations to expand. Of these, Ontario's location advantages allowed it to account for 165 companies or 30 percent of the total (www.ieep.com). Grubb and Ellis reports that the average asking rate for Ontario's industrial space was 32 cents per square foot in 1998. This compared to the lowest asking prices of 42 cents for older space in Los Angeles County's San Gabriel Valley and 39 cents for older space in northern Orange County (Lee & Associates, 2003).




Source: Lee & Associates

Figure 3. Total Industrial Space in 1999

In 2000 the median price of a home was $160,000 compared to $224,000 in Los Angeles and $328,000 in Orange County (Lee & Associates, 2000).

There are three tables below. Table 1 gives an absorption Overview for 2001. Table 2 gives data about existing industrial building inventory in the Inland Empire for 2002. Table 3 gives data about Industrial Building Lease and Sale Activity for 2002.

Table 1. 100,000 Square Foot + Absorption Review

| # | Tenant | Trans. Size Sq. Ft. | Space Vacated in Market Sq. Ft. | Net Sq. Ft. Absorption | Transaction Type | Date |
|---|---|---|---|---|---|---|
| 1. | Alto Systems | 100,000 | -0- LA Area | 100,000 | Lease | 1/01 |
| 2. | New Breed | 107,511 | -0- Ontario | 107,511 | Lease | 1/01 |
| 3. | Excel | 155,000 | -0- Ontario | 155,000 | Lease | 1/01 |
| 4. | Beauliu of America | 160,000 | -0- La Mirada | 160,000 | Lease | 1/01 |
| 5. | USF Logistics | 187,719 | -0- Ontario | 187,719 | Lease | 1/01 |
| 6. | Supreme | 201,035 | -0- Ontario | 201,035 | Lease | 1/01 |
| 7. | Cooper Tire | 401,304 | -0- LA Area | 401,304 | Lease | 1/01 |
| 8. | SMC | 405,864 | -0- Out of Area | 405,864 | Lease | 1/01 |
| 9. | Discopy Labs | 100,000 | -0- Industry | 100,000 | Lease | 2/01 |
| 10. | Progress Lighting | 155,754 | -0- Industry | 155,754 | Lease | 2/01 |
| 11. | Kawasaki | 175,600 | -0- LA Area | 175,600 | Lease | 2/01 |
| 12. | Competition Parts | 143,468 | -0- Rancho Cucamonga | 143,468 | Lease | 2/01 |
| 13. | Hankook Tire | 217,528 | (77,000) Rancho Cucamonga | 140,528 | Lease | 3/01 |
| 14. | SMC | 680,000 | (405,864) Ventura | 274,136 | Lease (BTS) | 3/01 |
| 15. | Distribution Alternatives | 230,000 | (167,000) Fontana | 63,000 | Lease | 4/01 |
| 16. | BP Industries | 140,135 | (30,000) Fontana | 110,135 | Sale | 4/01 |
| 17. | MC Distribution | 231,600 | (108,865) Fontana | 122,735 | Lease | 4/01 |
| 18. | Menlo Logistics | 311,040 | -0- Ontario | 311,040 | Lease | 4/01 |
| 19. | Sketchers | 761,585 | (285,000) Ontario | 476,585 | Lease | 4/01 |
| 20. | Homedics | 152,300 | -0- Orange County | 152,300 | Lease | 4/01 |
| 21 | Warehouse Technology's | 129,549 | -0- Chino | 129,549 | Lease | 4/01 |
| 22. | Volvo | 208,000 | -0- LA Area | 208,000 | Lease | 5/01 |
| 23. | Allied Paper | 255,689 | -0- LA Area | 255,689 | Sale | 5/01 |
| 24. | Royal Appliance | 140,400 | -0- Industry | 140,400 | Lease | 5/01 |

| # | Tenant | Trans. Size Sq. Ft. | Space Vacated in Market Sq. Ft. | Net Sq. Ft. Absorption | Transaction Type | Date |
|---|---|---|---|---|---|---|
| 25. | Doral USA | 623,630 | -0- LA Area | 623,630 | Lease | 5/01 |
| 26. | Excel | 830,000 | -0- Ontario | 830,000 | Lease (BTS) | 5/01 |
| 27. | Ashland | 142,820 | -0- LA Area | 142,820 | Lease | 6/01 |
| 28. | Volkswagen | 332,095 | -0- Out of State | 332,095 | Lease | 6/01 |
| 29. | M Bloch & Sons | 285,600 | (128,000) - Ontario | 157,600 | Lease | 6/01 |
| 30. | Jacuzzi | 306,700 | -0- Corona | 306,700 | Lease | 6/01 |
| 31. | MRT Tech | 221,886 | -0- Ontario | 221,886 | Sale | 6/01 |
| 32. | Proctor & Gamble | 458,262 | -0- Out of State | 458,262 | Lease | 7/01 |
| 33. | CTDI | 103,524 | -0- Out of State | 103,524 | Lease | 7/01 |
| 34. | United Foods | 198,470 | -0- Out of State | 198,470 | Lease | 8/01 |
| 35. | Southwire | 171,000 | -0- Anaheim | 171,000 | Lease | 9/01 |
| 36. | Lifestyles | 161,311 | -0- Irvine | 161,311 | Lease | 9/01 |
| 37. | K-Mart | 754,622 | -0- Ontario | 754,622 | Lease | 9/01 |
| 38. | Best Buy | 349,694 | -0- Northern California | 349,694 | Lease | 9/01 |
| 39. | Charlotte Russe | 218,000 | -0- San Diego | 218,000 | Lease | 9/01 |
| 40. | Taylor Packaging | 206,912 | -0- Chino | 206,912 | Lease | 9/01 |
| 41. | Georgia Pacific | 420,000 | -0- Industry | 420,000 | Lease | 10/01 |
| 42. | Sports Chalet | 326,543 | -0- Montclair | 326,543 | Lease | 10/01 |
| 43. | Converse Shoes | 317,070 | -0- Out of State | 317,070 | Lease | 10/01 |
| 44. | Trend Setting Design | 150,000 | (93,513) - Chino | 56,487 | Lease | 10/01 |
| 45. | Harwell/Broy hill | 165,050 | -0- Chino/Out of State | 165,050 | Lease | 10/01 |
| 46. | Dial | 320,430 | -0- Corona | 320,430 | Lease | 11/01 |
| 47. | Danone | 348,211 | -0- Orange County | 348,211 | Lease | 11/01 |
| 48. | Ford | 449,370 | -0- LA Area | 449,370 | Lease | 12/01 |
| 49. | Exel | 102,878 | -0- Ontario | 102,878 | Lease | 12/01 |
| 50. | General | 165,000 | -0- Orange | 165,000 | Lease | 12/01 |

Table 2. Existing Industrial Building Inventory

| Size Range Square Feet | Number of Buildings | Sq. Ft. | Percentage of Inventory |
|---|---|---|---|
| 3,000 - 9,999 | 91 | 553,877 | 2.71% |
| 10,000 - 19,999 | 60 | 870,857 | 4.26% |
| 20,000 - 49,999 | 93 | 3,059,427 | 14.97% |
| 50,000 - 79,999 | 31 | 2,020,603 | 9.89% |
| 80,000 - 99,999 | 8 | 713,746 | 3.49% |
| 100,000 + | 52 | 13,222,561 | 64.68% |
| TOTAL | 335 | 20,441,071 | 100% |

2002 Inland Empire Report:
Ontario, Fontana, Mira Loma, Rancho Cucamonga
(Includes Buildings Under Construction) As of December 31, 2002
Source: www.warehouseguy.com

Table 3. Industrial Building Lease and Sale Activity

Gross Absorption

| Size Range Square Feet | Number of Transactions | Sq. Ft. | Absorption Percentage |
|---|---|---|---|
| 3,000 - 9,999 | 101 | 637,852 | 4.30% |
| 10,000 - 19,999 | 39 | 532,334 | 3.59% |
| 20,000 - 49,999 | 75 | 2,478,021 | 16.71% |
| 50,000 - 79,999 | 27 | 1,603,189 | 10.81% |
| 80,000 - 99,999 | 5 | 424,404 | 2.86% |
| 100,000 + | 45 | 9,152,542 | 61.73% |
| TOTAL | 292 | 14,828,342 | 100% |

Gross Absorption
2002 Inland Empire Report
(January 1, 2002 through December 31, 2002)
Ontario, Fontana, Mira Loma, Rancho Cucamonga
The above numbers include build-to-suits with leases that have been completely executed on or before December 31, 2002. Chino is not included.
*Source:* www.warehouseguy.com

## Companies Distributing from the Inland Empire

Table 4 gives lists the companies distributing from the Inland Empire

Table 4. Lists the Companies Distributing from the Inland Empire

| | | | |
|---|---|---|---|
| Honda | Ford | Chrysler | BMW |
| Volkswagen | Kawasaki | GT Bicycles | Mattel Toys |
| Mercedes | KIA | Home Base | K-Mart |
| Wal-Mart | Costco | Pic N Save | Kraft Foods |
| Duracell | Caterpillar | M&M Mars | Petco |
| Bridgestone | Toyo Tires | Kendall | Dunlop |
| Black & Decker | Frito Lay | Johnson Wax | Skechers |
| Sanyo | Borders Books | GATX | Biagi Bros. |
| Nordstrom | Avery label | Ashley Furniture | Big 5 |
| Hankook Tire | USF Logistics | Menlo Distribution | Distribution Alternatives |
| Cooper Tire | Exel Logistics | New Breed | Mervyns |
| Nestle Foods | Syratech | Boyd Floatation | Legget & Platt |
| Porsche | Brother | W.W. Grainger | International Paper |
| Supreme Distribution | Progress Lighting | Competition Parts | Volvo |
| Doral USA | Allied Paper | Royal Appliance | Specialty Merchandise Corporation |
| Bullet Transportation | GE Lighting | Oakley | Appleton Paper |
| Scripto -Tokai | Saks Fifth Avenue | Oneida Inc. | Competition Parts |
| Radius Transportation | Sweetheart Cup | Pulaski Furniture | Caliber Logistics |
| MRT Tech | Homedics | Colgate | New Balance |

Source: www.warehouseguy.com

Imports and Exports in The Inland Empire

Imports are an integral part of the Inland Empire's regional economy. The region supports more than 3,000 manufacturers, many of which outsource internationally for raw materials and component parts. Key industries of this sector include automotive and related equipment, housing, recreational vehicles, medical devices, and waste water treatment. In 2001, the value of imported goods being shipped to the Inland Empire rose to $2.08 billion. The increase in customs activity in the Inland Empire is partly due to the fact that it is home to six of the state's finest foreign-trade zones (Morgan, 2002).

Exports out of the Inland Empire account for $1.865 billion and rank 56th in the nation in total export sales out of 253 Metropolitan areas, and 9th in the Pacific states. As the third fastest growing exporter in the Pacific states, with a growth rate of 70 percent from 1993 to 1995, the Inland Empire has achieved a $397 million Dollar Value Increase from 1994 to 1995. Some of the leading exports produced by this region are industrial chemicals, consumer goods, medical equipment/services, computer peripheral equipment/services, and architectural/engineering services. A majority of its exports go to Canada and Mexico; in addition 39 percent of

Inland Empire exports go to the Pacific Rim, which totaled $714 million in 1995 (Morgan, 2002).

Institutions Offering Logistics Certificate

In the area there are some institutions and schools that offer logistics certificates. The schools that have Logistics programs are California State University, San Bernardino; Riverside Community College; University of California, Riverside; University of California, Riverside Extension; California State University, Long Beach; California State University, Dominguez Hills; California State Polytechnic University in Pomona; Valley College in Redlands; and California State University, San Marcos has some online programs.

The institutions that offer Logistics certificate are American Council of Education, Economic Development Department, Riverside, and The Department of Financial Institutions (DFI).

## Logistics and Logistics Advantages of The Inland Empire

Many Inland Empire businesses find that they can save as much as an entire day of shipping time over their competitors by being located here. They believe that by stationing their business in the Inland Empire, they will be able to take advantage of one of the best logistics

scenarios anywhere in the United States. The areas truck, train, air and sea cargo handling capabilities are unparalleled. Several LTL (Less Than Load) shipping firms are located in the Inland Empire including; Consolidated Freight, Roadway Express, United Postal Services (UPS), Yellow Freight Systems, ABF Freight Systems and Watson Freight Lines Package Delivery (Caltrans, 2002).

Nearly all cargo flowing into and out of Southern California passes through the Inland Empire. This is the case as the Cajon Pass on the I-15 and the Banning Pass on the I-10 are the principal rail and trucking routes to the balance of the United States. Even cargo leaving San Diego County must move up the I-15. This location advantage, combined with available inexpensive land, has made the region the logistics capital of the Southland. Firms save time in getting their products to market by locating in the region (Caltrans, 2002).

Thus, BN-Santa Fe Railroad built a major intermodal railroad yard in San Bernardino with the capacity of 400,000 container lifts per year. Union Pacific Railroad has its main switching yard in Colton and is picking a location for an intermodal facility. Meanwhile, nearly every Southern California "Less Than Load" (LTL) trucking firm has its cargo sorting facility in the Inland Empire.

And, UPS (Ontario International Airport) and Roadway Package Delivery (Rialto) process all their Southern California cargo in the area. Finally, Ontario International Airport is the second largest air cargo handling airport in the Southland behind Los Angeles International Airport. It is also the second busiest air passenger facility, handling over 6.7 million people per year. Its new 24-gate terminal facility opened in September 1998 (Caltrans, 2002).

Inland Empire Space Cost Advantage

Inland Empire job creation has exceeded Southern California averages because people and firms have moved to the area in response to its cost advantages. These start with space costs. The heavy urbanization of Los Angeles, Orange and San Diego Counties has left them with little undeveloped land. As a result, space in Temecula and the Inland Empire is significantly less expensive. For example, the median priced home in the Inland Empire, $140,000, is thus selling for $57,000 to $153,000 less than homes in coastal California counties.

Manufacturing and distribution firms find that the Inland Empire is the only place where large new facilities can be constructed. At 33 cents per square foot/month, these facilities are leasing for substantially less cost

per square foot than space in older coastal county sub-markets (40-60 cents). The Inland Empire offers similar office space cost savings, except compared to the North San Diego County area (Fisher, 2002).

Inland Empire Labor Cost Advantage

People living in the Inland Empire prefer to work in the Inland Empire. They dislike the long commutes to Orange, Los Angeles or San Diego Counties. They do not like the long hours away from their families. Economically, they realize that their average workweek is much more than 40 hours if their driving time is included.

For this reason, Inland Empire workers are willing to work for a little less to avoid long drives. Employers locating in Inland Empire cities like Temecula thus find that their labor costs are from eight percent to nine percent lower than in Orange and Los Angeles counties, and three percent below San Diego County.

The latest data available on Inland Empire's weekly wages and salaries (1998) are from the U.S. Bureau of Labor Statistics. Data on 478 occupations were the basis for comparisons to other Southland areas (Fisher, 2002).

Inland Empire's Sophisticated Logistics Infrastructure

Firms locating in Temecula have uncongested access to the Inland Empire's sophisticated and expanding logistics infrastructure. This is crucial to goods producers and distributors in the era of Just-In-Time inventory control.

Burlington Northern Santa Fe Railroad opened its 400,000-container capacity intermodal rail facility in San Bernardino in 1996. It has allowed the railroad's container handling to soar to 326,166 lifts in 1999. Inland Empire firms can use this facility and avoid the congested intermodal rail yards in Los Angeles County's harbor area.

Southern California's trucking firms are increasingly locating their major cargo handling facilities in the Inland Empire. Most of Southern California's large "Less Than Load" firms bring their Southern California shipments to cross-docks in the area for processing. The regional facilities for UPS (Ontario International Airport) and Roadway Package (Rialto) are also located here.

Firms locating in Temecula and the Inland Empire generally save time, as their cargo does not have to move across the congested Los Angeles basin before being processed and shipped across the country (Fisher, 2002).

## City and County Profiles

Executives and entrepreneurs considering where they should locate their firms have an amazing number of choices in the Inland Empire. Today, the hot zone for Southern California economic development is along the edge of San Bernardino and Riverside Counties, where they interface with Los Angeles, Orange and San Diego Counties. However, as the pace of the region's economic development has accelerated, companies are beginning to understand the enormous range of environments that the region has to offer (Fisher, 2002).

Westend: Firms concerned about distance to Los Angeles and Orange county markets are congregating along the I-15 in both San Bernardino and Riverside Counties. This region has the second hottest commercial real estate market in the United States, behind Chicago. Millions of feet of new industrial, distribution and office space are available at competitive prices. Ontario International Airport is located here. All of the key infrastructure necessities are in place such as advanced fiber optics, expanding freeway connections, rail lines, a brine line, LTL cross-dock trucking facilities, and the regional courier centers for UPS and Federal Express. So also are

California State Polytechnic University in Pomona, the Claremont Colleges and Chaffey Community College.

Metro Inland Empire: Those wishing to save a little more money, or be closer to the county seats, are penetrating further inland along the I-10, Route 60 or I-215 freeways and locating in the Riverside-Moreno Valley area of Riverside County and in East San Bernardino Valley cities. This puts them in close proximity to county decision makers and the court systems. They are also in the midst of numerous campuses such as the University of California Riverside; Loma Linda University Medical Center; California State University, San Bernardino; and the San Bernardino and Riverside Community Colleges. High tech firms like ESRI (GIS), Optivus Technology (proton therapy), Kelly Space and Technology (aerospace) and I/O Software (internet) are located here, as are manufacturing and distribution firms needing to be near Burlington Northern Santa Fe intermodal, the cargo port at March Air Force Base or the large labor force living in these communities.

Southwest Riverside County: Companies that need ties to San Diego County are locating along the I-15 freeway in Temecula and Murrieta. This beautiful area is also the home to some of California's finest wineries. It has

become the location of choice for a host of technology companies including International Rectifier (computer chips), Guidant (medical devices), Chemicon (biotechnology), Channel Commercial (telecommunications), and Professional Hospital Supply (medical). They are finding a wonderful environment and a rapidly expanding base of highly educated workers. University of California Riverside, California State University, San Marcos and San Jacinto Community College are providing educational services to workers and firms in this region.

Victor Valley-Barstow Inland Empire North: Distribution firms needing lots of elbow room and a central location for serving Northern California, Southern California and the Southwest are finding the Victor Valley-Barstow area offers them both cost and distance advantages. The area is the location of the Southern California Logistics Airport, a facility that will soon be served by Swiss Global Cargo air cargo and BNSF railroad. The I-15 passes through the area, providing direct access to Southern California and Las Vegas. The I-40 provides a direct route to the Southwest. Route 58 will soon provide 4-lane access to the I-5 and Route 99 in California's central valley, without requiring cargo to pass through congested Los Angeles County. Land in the High Desert is

plentiful, and a large labor force has moved to the region for its affordable housing. California State University, San Bernardino and Victor Valley Community College are filling the area's higher education needs.

Coachella Valley: Entrepreneurs who want to be around the action of a desert resort community are locating in places like Palm Springs and La Quinta in the Coachella Valley. Most senior executives of top U.S. companies either visit this area or buy estates here. Some are now choosing to bring their companies with them. The result is a rise of manufacturing, distribution and technology employment unrelated to the region's traditional retirement, recreation and tourist base. The passage of NAFTA and the expansion of Route 86 south to the Mexican border have opened up real potential for the Coachella Valley as a location for firms providing product design, management systems and other high end services that are needed by companies operating south of the border in the Maquiladoras[1]. Logistics firms located in the area will also benefit. California State University, San Bernardino

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[1] US-owned maquiladoras are assembly plants in Mexico that employ Mexican labor to make products mostly for export back to the United States. In 1965 the Mexican government set up the Border Industrialization Programme that created export platforms for US companies on favorable terms. Many of the largest US corporations have maquiladora plants. Maquiladoras receive government subsidies like preferential tariffs and taxation. Maquilas pay no tariffs on materials and semi-finished products imported into Mexico. When maquilas ship finished products back to the US, they pay tariffs only on the value added in Mexico, not the value of the entire product.

and College of the Desert provide higher education to the region. It is served by regularly scheduled flights at Palm Springs International Airport.

Morongo Basin: Entrepreneurs seeking a more rural desert setting can opt for Yucca Valley and Twenty-nine Palms. With elevations as high as 3,000 feet, these communities offer a combination of cooler temperatures, cleaner skies, reasonable distances to urban areas, and a more laid back life style than in the Inland Empire's other desert zones. The region is well suited to business executives whose firms do not consider distance to be an issue (e.g., call centers or .coms). The area is also a perfect location for companies supplying products and services to the U.S. Marine Corps or to the tourists and rock climbers at Joshua Tree National Park. Copper Mountain College and California

State University, San Bernardino offer training and college classes within the region.

Mountains: Executives or entrepreneurs who want to live in the forest or on the shores of mountain lakes can live in a host of Inland Empire locations: Lake Arrowhead, Big Bear Lake, Idyllwild, Crestline, Running Springs. From these locations it is an easy commute to production facilities within the urban valleys. Or, if firms can be

run on the Internet, the owners can remain in the clouds (Inland Empire Economic Partnership, 2002).

County and City Profiles

Riverside County: In addition to Riverside County's exceptional quality of life - the mountains, valleys, lakes, desert, sun and fun - Riverside County does well at blending business and pleasure which make it the ideal location for business relocation or expansion. Riverside County's economic base is diverse: logistics, small to large manufacturing, agriculture and technology companies call it home. Riverside County offers many programs to assist business relocation or expansion into the county, with financing referral, site location, fast track permit processing, infrastructure assistance, tax credits and rebates and employee training programs.

San Bernardino County: San Bernardino County is the largest county in the contiguous United States (20,121 square miles) and most geographically diverse encompassing mountains, desert, rural and urban regions. Affordable housing, wide open spaces, and an experienced and educated workforce have attracted new residents and businesses - continuing its ranking as one of the fastest growing areas in the United States. During the past decade more than 400 major firms moved into the County - technology firms like

ESRI (GIS systems), Garner Holt Products (animatronics), Inacom Computers, and Optivus Technology (proton therapy). They are attracted in part due to the proximity to a wide array of major colleges: California State University, San Bernardino, Loma Linda University Medical Center, University of Redlands, Claremont Colleges, California State Polytechnic University in Pomona, and University of California, Riverside.

Banning: Since its earliest days as a Stagecoach depot, Banning has been a strategic point of transport on the primary route between Los Angeles and Phoenix. Today Interstate 10 and the Union Pacific rail line utilize this natural corridor for efficient transport of people and goods between the primary metro economies of Southern California and major markets throughout the southern United States and Mexico. The 5,193-foot runway and facilities at the Banning Municipal Airport support corporate aircraft and general aviation operations.

Strategic location, available workforce, school facilities dedicated to providing quality education, an abundance of low cost land, and some of the most favorable lease rates available confirms that Banning is the place to locate.

Barstow: Barstow is located exactly halfway between Los Angeles, California, and Las Vegas, Nevada. Interstates 15 and 40, and Highways 58 and 247 all meet in Barstow with over 19 million vehicles traveling through the City each year. This Crossroads of Opportunity, consisting of major transportation corridors and the Burlington Northern Santa Fe Railroad classification yard, offers outstanding opportunities for transporting products throughout the western United States. Barstow, incorporated in 1947, continues to meet the infrastructure needs of its businesses and residents by following a tradition of insightful long-range planning to serve our steady population and business growth. The City offers a large labor pool and an abundance of land at reasonable prices.

Chino: Today, Chino has more than 2 million square feet of retail space. Vestal Development recently broke ground on an 800,000 square foot shopping center that will be anchored by Sam's Club, Wal-Mart and Kohl's Stores. The City has 28 million square feet of industrial base. More than 2,300 companies are located in Chino, including 350 manufacturers and an equal number of distribution companies. The business advantages for Chino are:

- Well-planned developments that provide clean, safe locations for businesses.
- Lower land and building costs.
- The labor pool is large and diverse, with more than 500,000 people living within ten miles of the City.
- Completion of the Route 71 freeway in 1998 significantly enhanced transportation between Chino and Orange County.

Chino's major advantage is its location at the western edge of California's Inland Empire. Located at a point where Los Angeles, Orange, Riverside, and San Bernardino Counties meet, Chino offers excellent access to all parts of the Southern California metropolitan region.

Colton: Colton, strategically located at the juncture of the I-10 and I-215 freeways, is located in the heart of the Inland Empire and is suited to serve the larger Southern California marketplace. Colton offers tremendous freeway access, rail service from both the Burlington Northern/Santa Fe and Union Pacific railroads, as well as service from nine major nearby truck terminals and over 80 independent trucking firms. Colton has a well balanced and diversified economy and is home to a variety of

manufacturing, service, retail and distribution companies including Con-Agra Milling, Cal Portland Cement, McNeilus Truck, Williams Furnace, Telco Food Products, Al's Garden Art and U.S. Xpress. Colton is also the corporate headquarters of Stater Brothers Markets, the largest private employer in the Inland Empire.

Ontario: Ontario has emerged as a leading city in not only the Inland Empire but also in all of Southern California. More than $1 billion worth of construction activity has bolstered Ontario over the past few years. Ontario's strategic location and transportation network are incomparable. Ontario International Airport - second only to Los Angeles International Airport in volume of passengers and freight - two major interstate highways and two major rail lines make the City a vigorous and dynamic center of growth and prosperity. The City also boasts new broadband fiber links further connecting Ontario to local, national and international markets.

Rancho Cucamonga: Rancho Cucamonga possesses three significant assets that make it an attractive location for business: 1) Location, 2) Transportation, and 3) Skilled Labor. The City is just 40 miles from downtown Los Angeles, one of the world's largest economies. It is immediately accessible to all of Southern California's

major metropolitan areas and is served by three major freeways, the Ontario International Airport, and the BNSF Railroad.

San Bernardino: San Bernardino's central location in major freeway and railway networks includes a large intermodal facility near Santa Fe Depot; San Bernardino International Airport with U.S. Customs Office and Foreign Trade Zone/ LAMBRA designation makes it a natural logistics and transportation center.

Victorville: Strategically situated along the Corridor, with global access provided by the all-cargo Southern California Logistics Airport, Victorville has become one of the key links in the international supply chain with daily cargo flights from Asia. Recent business expansions include the Goodyear Tire & Rubber Company's 830,000 sq. ft. Logistics Center and the 450,000 sq. ft. Logistics Center serving the M&M/Mars Corporation (Inland Empire Economic Partnership, 2002).

Heart of The Inland Empire: Ontario

Southern California's freeways are the vessels that carry life to the region's cities. The trucks that come from the ports of Los Angeles and Long Beach carry with them the goods that supply our industries and homes.

As Ontario becomes the economic engine of the Inland Empire, it faces the challenge of being the service provider for the region, a challenge some believe is a burden on Ontario taxpayers. Former Mayor Bob Ellingwood said that residents of other cities benefit from Milliken Landfill, Ontario International Airport and the Ontario Convention Center, but only Ontario pays (Cohen, 1998).

City Manager Gregory Devereaux said that being the region's hub of commerce and transportation has its costs, but those services also bring in sales tax and bed tax. Ontario's development has depended on the essential component of transportation. During World War II, the military used airfields as training schools for pilots. Today, the airfields have been converted into commercial airports for travelers and cargo alike, the passes through which wagon trains descended into the valleys are major highways, and the rails carry trains filled with goods.

Holt Avenue became part of the Ocean-to-Ocean Highway in 1912 or 1913, and the U.S. Highway Act of 1926 gave it the designations U.S. 60 and 99. The Ramona Freeway was built in 1951, and later it became Interstate Highway 10 following passage of the Interstate Highway Act. The city's goal for the future is to secure its place as a commercial center for the Inland Empire (Cohen, 1998).

> Ontario is evolving. It's already a center of commerce; it's going to become more so, we're uniquely placed in the region because of our transportation ability, says Otto Kroutil, the city's director of development. (Cohen, 1998)

The transportation bill now being debated in Washington could provide money for a project that would create a rail corridor from the shipping ports to the Inland Valley. The rail corridor would help solve congestion problems on the 60 and the 10 freeways. Transportation plays an integral role in just-in-time manufacturing.

> The whole industry, the retail business and manufacturing has gone toward just-in-time manufacturing. You can order supplies just in time for when you need to assemble those parts. All of the railroads have gone to container cargo. It could result in a whole new generation of industrial development out there, says Kroutil. (Cohen, 1998)

Ontario's foreign free trade zone is another way the city is working toward becoming a transportation gateway. The zone allows manufacturers to bypass certain duty requirements, assemble parts in the free trade zone, then ship them back out (Cohen, 1998).

## Airports

### Ontario International Airport

Ontario International Airport is the center of a rapidly developing freight movement system, which includes

the airport, two rail lines, four major freeways, and an expanding network of freight forwarders. Ontario International Airport is located less than 50 miles from the Los Angeles and Long Beach Harbors, and is ideally situated to be an airfreight center for Pacific Rim and European air cargo. Ontario International Airport has been a magnet for local air cargo for decades and is the second largest cargo handling airport in Southern California behind Los Angeles International Airport. In recent years, the annual volume of freight handled at the Inland Empire's largest commercial airport has kept pace with the explosive growth of warehousing and distribution in the surrounding area.

Firms locating in the Inland Empire have easy freeway access to Ontario International Airport. From 1990 to 1997, the air cargo tonnage handled by Ontario International Airport expanded from 272,638 to 461,747 tons, an increase of 69 percent.

Ontario International Airport's new 24-gate passenger terminal opened in September 1998. The airport is in the process of expanding its cargo handling capability. From 1990 to 2000, Ontario International Airport has seen its air cargo tonnage expand from 272,638 tons to an estimated 591,905 tons, up 117 percent. As Inland Empire shippers

expand their demand for air cargo service at the facility, the number of flights to accommodate them is increasing. From 1990 to 2000, air passenger volume at Ontario International Airport rose from 5,420,335 to an estimated 6,702,987, up 24 percent. Traffic volume is beginning to expand again now that the new 24-gate terminal and associated parking complexes have opened and more flights are being added. In 2002, the airport handled 386,000 tons of cargo that was more than double the 1986 total, according to figures compiled by the Los Angeles Department of Airports, which owns Ontario International Airport (Winfrey, 2002).

United Parcel Service's new West Coast air hub has contributed to that rapid growth in air cargo activity. The $53 million facility opened just south of the airport in 1992.

Today, 16 UPS planes carry parcels and other freight into and out of Ontario International Airport on a typical day. UPS is Ontario International Airport's largest airfreight carrier, handling more than 70 percent of the airport's cargo. In April 2001, UPS began four weekly flights to China, the Pacific Rim's largest and fastest growing market, using Boeing 747 cargo aircraft. Ontario International Airport is the west coast hub for all UPS

airfreight operations (Transportation Services Directory of The Business Press, 2001).

Renovation of an aircraft hangar into a new facility for air cargo tenants is underway. The new air cargo facility - Hangar 20 - will accommodate up to three tenants. The project includes construction of new office spaces, a truck loading dock, and additional modifications such as roll-up doors to replace the existing hangar doors. Ontario International Airport's belly cargo operations currently take place in the Chaffey Hangar, which is no longer suitable for Ontario International Airport's increasing cargo operations. When the Hangar 20 project is completed, tenants in the Chaffey Hangar will be relocated to the new facility (Winfrey, 2002).

Eight major U.S. freight carriers serve Ontario International Airport: Airborne Express, Ameriflight, DHL, BAX Global, Empire Airways, Emery Worldwide, Federal Express, Pacific Valley Airfreight, Union Flights, and United Parcel Service (UPS). In 2001, Ontario International Airport handled 462,006 tons of cargo. Passenger airlines in Ontario International Airport are Alaska Air, Air West, American, Continental, Delta, Northwest, Southwest, United, US Air Express (Winfrey,

2002) according to Southern California Association of Governments:

| | |
|---|---|
| Projected Increase: | 100 percent in the number of passengers by 2020 to 160 million for five-county Southern California region |
| Inland Empire Increase: | 143 percent increase in the number of passengers by 2020 to 15.3 million annual passengers |
| Number of Terminals: | 2 |
| Size: | 265,000 square feet each |
| Capacity: | 10 million annual passengers |
| Passengers: | 6.7 million in 2001 |
| Tons of Freight: | 462,006 tons in 2001 |
| Number of Operations: | 154,715 landings/take-offs (all aircraft) in 2001 |
| Number of Jobs Created: | 60,000 direct and indirect |
| Regional Economic Impact: | $6 billion |

Source: (www.worldairportguide.com/Airports/ont/ont.asp)

Figure 4. Ontario Airport Facts

Victorvalley's Southern California Logistics Airport

The former "George Air Force Base" in Victorville has been converted into an international cargo airport. Southern California Logistics Airport is located in California's Inland Empire North, which is situated approximately 40 miles northeast of Los Angeles County.

Southern California Logistics Airport is strategically positioned in Victorville off Interstate 15. It also has access to rail service by the Burlington Northern & Santa Fe Railway and Union Pacific Railroads.

In 1999, the Southern California Logistics Airport Authority reached an agreement with Sterling Enterprises for a $418 million development plan for this airport. Southern California Logistics Airport was created by Stirling Enterprises. It boasts two, 10,000 foot runways and a 9,000-foot runway. One runway has been extended to 13,000 feet. The Department of Transportation has approved a $2.9 million grant to extend the main runway to 15,500 feet, giving it one of the longest runways in the United States. It is believed that this is just the beginning, and that Southern California Logistics Airport is poised to become the most significant international cargo airport in the nation. (Southern California Associations of Governments, 2003)

Construction of a rail leading directly into the airport, which will provide services for manufacturing and distribution companies located at Southern California Logistics Airport, is currently in progress. The project is expected to be completed by the end of 2003. (Southern California Associations of Governments, 2003)

Southern California Logistics Airport continues to increase capacity in size and cargo to meet the demand. Southern California's international cargo volume is currently 300 million tons and is projected to triple over the next 15 years, according to the Southern California Association of Governments (SCAG). In order to meet this demand, Southern California Logistics Airport is ready to accommodate this future growth and will be able to handle six million tons of cargo a year, nearly doubling the total size of the airport from today's dimensions. (Southern California Associations of Governments, 2003)

Approximately three times each week, as part of their scheduled services, Swiss Global Cargo — a joint venture between Panalpina, a large multinational freight forwarder, and SAir Logistics, a Swissair sister company — flies a Boeing 747-400 owned and operated by Atlas Air from Southern California Logistics Airport to the Asia-Pacific.

Southern California Logistics Airport has strengthened its presence as a logistics provider and worldwide distribution hub. Southern California Logistics Airport started to work with Space Center Inc., a major industrial developer specializing in creating large distribution centers that provide state-of-the-art,

fast-paced delivery systems, to help tenants find solutions to their logistical demands. In addition, another partner, Redwood Systems, a unit of Consolidated Freightways, provides Southern California Logistics Airport users with freight forwarding and third-party logistics. As a developer, Stirling has positioned all aspects of third-party logistics at Southern California Logistics Airport (Southern California Associations of Governments, 2003).

Southern California Logistics Airport has these advantages:

- 5000-acre master planned multi-modal business complex
- Set up for ground, rail and air transportation systems
- 700-acre area for direct access to Burlington Northern-Santa Fe rail lines and the Union Pacific
- Open 24 hours with no curfews
- On site United States Customs Port of entry
- Highly skilled diverse labor force from the Inland Empire and Victor Valley
- Excellent government incentives for business

- 1954-acre foreign trade zone (Southern California Associations of Governments, 2003)

Southern California Logistics Airport's Foreign Trade Zone

On July 28, 2000, Southern California Logistics Airport was granted foreign trade zone designation by the United States Department of Commerce. A foreign trade zone allows goods to be imported without the typical federal excise taxes and custom duties. This is a major edge for international trade. The 1954-acre general-purpose trade zone takes up a significant portion of the airport development plan for manufacturing, storage, repackaging and assembly of imports and exports at Southern California Logistics Airport. Foreign goods can be admitted without dealing with any formal customs entry or duties until the assembled goods leave the foreign trade zone. It is possible for carriers to transport from one foreign trade zone to another or to a foreign country and save a lot of money. There are 230 foreign trade zones in the 50 states with goods valued at $175 billion annually. These zones support over 365,000 jobs throughout the United States (University of California, Riverside, 2002).

Global billion dollar companies have started to locate at Southern California Logistics Airport. These include:

- Catellus Development Corporation, in July of 2002, signed an Agreement with SCLA for a $1.5 billion, 6,000-acre commercial development, calling for the development of 43.5 million square feet at the Southern California Logistics Airport, making it the largest project in all of San Bernardino County. The Agreement will help bring huge warehouses, manufacturing plants, more rail and air cargo traffic, which could create 20,000 more jobs with an estimated $500 million increase in annual payroll over the next 20 years. Catellus is one of the world's largest commercial land developers.
- General Electric announced in July of 2002 that it would build the largest building at Southern California Logistics Airport, according to spokesman Rick Kennedy. The GEAE complex will be constructed on 161,700 square feet, and will include a hanger for a Boeing 747, offices for workers and shops for engine work. The project is scheduled for completion in June of 2003.

- Pasha Group and officials from Southern California Logistics Airport announced plans in June of 2002 for a 700-acre rail complex that will bring 200 more jobs, representing $50 million in salaries in the next ten years. Pasha Group is a transportation company that will develop a facility at Southern California Logistics Airport that will be a hub for the delivery of new cars from overseas. Pasha's future operations would be the shipment of cars by way of ships into the Ports of Long Beach and Los Angeles, and then the cars would be loaded onto trains, and brought to Southern California Logistics Airport. At Southern California Logistics Airport the cars would be painted and accessories like air conditioning added. Thereafter, the cars would be distributed by truck or rail to various locations around the nation.
- Pratt & Whitney plans to buy a 49 percent share in Southern California Aviation, an aircraft-refurbishing firm already located at Southern California Logistics Airport. The Airport Authority members approved an agreement

in March of 2002 that could bring hundreds of jobs to the area and tens of millions of dollars in airport improvements.

> This is huge, the capital improvements are in the tens of millions of dollars, and the jobs created in the hundreds, says Terry Caldwell, Southern California Logistics Airport Authority chairman.

Pratt & Whitney employs 30,000 people worldwide, and had $7.36 billion in sales in 2000. Pratt & Whitney is one of the premier names in the aviation industry.

- Swiss Global Cargo said that they chose Southern California Logistics Airport because it has no curfews, no flight restrictions, and very flexible airport management. As part of its weekly scheduled services, Swiss Global Cargo flies a Boeing 747 from Southern California Logistics Airport to the Asia-Pacific. Swiss Global Cargo is a joint venture between Panalpina, a large multinational freight forwarder, and SAir Logistics, a Swissair sister company.
- Boeing recently leased one hangar at Southern California Logistics Airport to retrofit passenger aircraft into cargo planes for such companies as UPS. The Boeing Company is the

world's leading aerospace company, and the largest manufacturer of satellites, commercial jetliners, and military aircraft. Total company revenues for 2001 were $58 billion.

- Burlington Northern and Santa Fe Railway Company has more than 34,000 route miles of track covering 28 states and two Canadian provinces. The rail easement into Southern California Logistics Airport will enable manufacturers and distributors to easily transport goods into markets throughout the United States. Robert Brendza, regional director of industrial development for BNSF, said: 'Southern California Logistics Airport represents a tremendous opportunity for our Railroad Company.' "By constructing rail infrastructure directly into the facility, Southern California Logistics Airport will insure that the full range of multimodal transportation services are available to its tenants" (Southern California Associations of Governments, 2002).

San Bernardino International Airport

Conveniently located in Southern California, San Bernardino International Airport provides a competitive

business advantage for cargo, airlines and general aviation. The airport represents a public, mixed-use, financially self-sustaining commercial service airport designed to serve the western United States over the entire long-term operational life of the facility. San Bernardino International Airport has the capacity to provide regional air traffic for domestic and international service, both commercial and cargo, along with the necessary support facilities for major and smaller airlines. Its infrastructure is supported with a 10,000-foot runway, a new state-of-the-art Instrument Landing System and an Automated Weather Observation System III. San Bernardino International Airport is conveniently located by Interstate freeway 10, East of Interstate freeway 215, and South of State Route 30 and is in close proximity to Interstate freeway 5 and Highways 60 and 91. Additionally, San Bernardino International Airport is centrally located within two miles of the state-of-the-art Santa Fe Intermodal Rail Facility.

Cargo and Freight Service of San Bernardino International Airport: San Bernardino International Airport currently handles ACMI cargo flights from Custom Air Transport, HeavyLift, and Kitty Hawk. (San Bernardino International Airport, 2002)

John Wayne Airport

John Wayne Airport (SNA) is owned and operated by the County of Orange and is located in Santa Ana, 35 miles south of Los Angeles. John Wayne Airport is the only commercial service airport in Orange County. It is one of only two airports in Orange County to accommodate general aviation. In 2002, 7.9 million passengers were served at John Wayne Airport. John Wayne Airport is served by ten commercial, four commuter and two cargo air carriers offering more than 250 daily arrivals and departures to 22 direct non-stop United States destinations. John Wayne Airport is home base for approximately 575 general aviation aircraft. General aviation activity accounts for approximately 80 percent of the Airport's total number of operations including takeoffs and landings. The Airport's general aviation facilities serve small private aircraft, corporate aircraft, and fixed base operations that provide fuel services, aircraft maintenance, flying lessons and other services (John Wayne Airport, 2002).

Table 5. John Wayne Airport Facts

Facts at a Glance

Passengers

| | 2002 | 2001 | % Change |
|---|---|---|---|
| Total Passengers | 7,903,066 | 7,324,557 | 7.9 |
| Passengers Enplaned | 3,957,565 | 3,672,827 | 7.8 |
| Deplaned | 3,945,501 | 3,651,730 | 8.0 |

Air Cargo

| | 2002 | 2001 | % Change |
|---|---|---|---|
| Tonnage | 15,646 | 16,146 | -3.1 |

Air Carriers

| | |
|---|---|
| Commercial | 10 |
| Commuter | 4 |
| All-Cargo | 2 |
| Aircraft Tie downs | 606 |

Source: www.ocair.com

Airline passenger traffic at John Wayne Airport increased in January 2003, when compared to January 2002. In January 2003, passenger traffic was 617,319, an increase of 12 percent when compared to the January, 2002, passenger traffic count of 552,496 (John Wayne Airport, 2002).

In addition, Commercial Carrier flight operations showed an increase of two percent, while Commuter Carrier (air taxi) operations showed an increase of 99 percent when compared to the same levels recorded in January 2002.

Table 6. John Wayne Statistics for 2003

Monthly Airport Statistics
January 2003

| | Jan 2003 | Jan 2002 | Change | YTD 2003 | YTD 2002 | Change |
|---|---|---|---|---|---|---|
| Total passengers | 617,319 | 552,496 | 11.7% | 617,319 | 552,496 | 11.7% |
| Enplaned passengers | 311,718 | 279,815 | 11.4% | 311,718 | 279,815 | 11.4% |
| Deplaned passengers | 305,601 | 272,681 | 12.1% | 305,601 | 272,681 | 12.1% |
| Air Cargo Tons* | 1,387 | 1,357 | 2.2% | 1,387 | 1,357 | 2.2% |
| Total Operations | 28,230 | 29,597 | -4.6% | 28,230 | 29,597 | -4.6% |
| General Aviation Operations | 20,078 | 22,105 | -9.2% | 20,078 | 22,105 | -9.2% |
| Air Carrier Operations** | 7,105 | 6,959 | 2.1% | 7,105 | 6,959 | 2.1% |
| Air Taxi Operations** | 1,030 | 517 | 99.2% | 1,030 | 517 | 99.2% |
| Military Operations | 17 | 16 | 6.3% | 17 | 16 | 6.3% |

* All-Cargo Carriers: 1,212.60
Passenger Carriers (incidental belly cargo): 173.90
(Current cargo tonnage figures in this report are for December 2002) Source: www.ocair.com

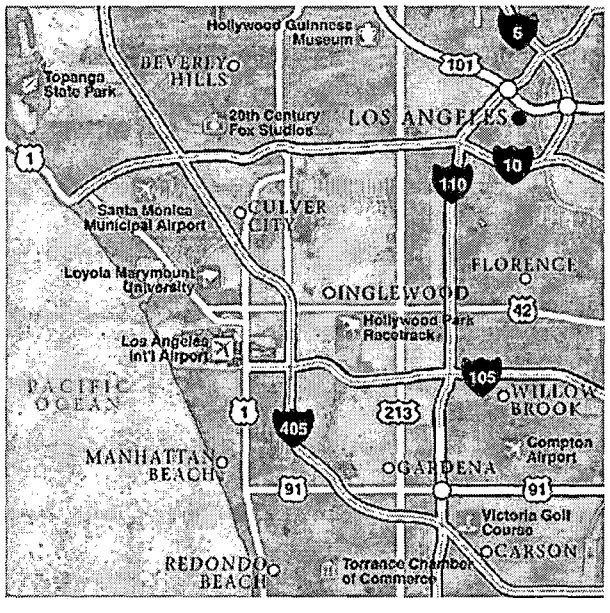
Total aircraft operations decreased in January, 2003, compared to the same month in 2002. In January 2003, the total aircraft operations were 28,230, a decrease of five percent when compared to the January, 2002. Total aircraft operations were 29,597. General aviation activity, which was 71 percent of the total aircraft operations during January, 2003, decreased nine percent when compared to January, 2002 (John Wayne Airport, 2002).

Los Angeles International Airport (LAX)

Los Angeles International Airport (LAX) is the third busiest cargo airport in the world, handling more than 2

million tons of origination and destination air cargo in 2001.

Southern California is the world's eleventh largest economy and Los Angeles International Airport is the major international cargo airport serving this area. Asia-Pacific is Los Angeles' top regional trading partner with 475,000 tons annually valued at $46 billion. Europe is second with 151,000 tons valued at $12.1 billion annually. Los Angeles International Airport is ranked third in the world for number of passengers and tonnage of air cargo handled, and its popularity shows no sign of decreasing. In 2001 more than 61.6 million people traveled through Los Angeles International Airport.




Source: www.los-angeles-lax.com/maps.html

Figure 5. Map of Los Angeles and LAX Area

A commerce leader, its ever-expanding air cargo system handled more than 2 million tons of goods. Nearly 50 percent of Los Angeles International Airport air cargo activity is international in origin or destination. International freight was nearly 50 percent of this total. Convenient location, modern facilities, and superior sea/air/land connections have led to Los Angeles International Airport's designation as a world-class airport. Los Angeles International Airport handled 75 percent of the passengers, 78 percent of the air cargo, 80 percent of the international passengers and nearly 100 percent of international cargo traffic in the five-county Southern California region in 2002 (Winfrey, 2002).

Table 7. Los Angeles International Airport Statistics from 1990 to 2001

| Year* | Air Mail Tons | Air Freight Tons | Total Air Cargo |
|---|---|---|---|
| 1990 | 154,254 | 1,130,119 | 1,284,373 |
| 1991 | 162,840 | 1,095,580 | 1,258,209 |
| 1992 | 162,840 | 1,202,317 | 1,365,157 |
| 1993 | 173,827 | 1,288,503 | 1,462,330 |
| 1994 | 186,878 | 1,516,567 | 1,703,445 |
| 1995 | 193,747 | 1,567,248 | 1,760,995 |
| 1996 | 194,091 | 1,696,663 | 1,895,754 |
| 1997 | 212,410 | 1,852,487 | 2,064,897 |
| 1998 | 264,473 | 1,790,949 | 2,055,422 |
| 1999 | 253,695 | 1,884,526 | 2,138,221 |
| 2000 | 246,538 | 2,001,295 | 2,247,833 |
| 2001 | 178,072 | 1,778,267 | 1,956,340 |

Source: (www.lawa.org/lax/laxframe.htm)

Los Angeles International Airport (LAX) officials have released 2002 year-end statistics showing the airport served 56,223,843 passengers and processed 1,962,354 tons of air cargo.

Total passenger traffic at LAX is at its lowest level since 1996 -- dropping 8.8 percent from 61,606,253 in 2001 for a second straight year of decline. Domestic passenger volume dropped 9.4 percent from 45,656,025 in 2001 to 41,379,168 last year. International passenger volume dropped 6.93 percent from 15,950,228 in 2001 to 14,844,675 last year.

During the fourth quarter 2002, monthly passenger volumes increased over the same months in 2001. Last October's passenger volume was 11.6 percent higher than October 2001 (4,539,003 up from 3,934,560), November 6.35 percent higher (4,296,555 up from 4,039,936), and December 11.6 percent higher (4,856,283 up from 4,352,756).

Total air cargo (mail and freight) processed at LAX during 2002 was 1,962,354 tons -- 0.34 percent higher than 1,955,665 tons in 2001. The freight (commodities) portion of the total cargo volume was up 5 percent from 1,778,151 tons in 2001 to 1,869,932 tons last year. However, the airmail portion of the total cargo volume was 92,422 tons down 48 percent from the 2001 level of 177,513 tons. The

significant decline in airmail is primarily due to the federal government imposing tighter restrictions on mail shipments aboard commercial aircraft.

Monthly air cargo levels began recovering last June and remained higher than monthly levels in 2001 for every month except September.

Aircraft operations (landings and takeoffs) closed last year at 645,424, down 13 percent from the 738,114 operations in 2001. The 2002 level approximates LAX's operational flight volume of 1989. Declines in landings and takeoffs were posted for air carriers as 14 percent and air taxis or commuters as 9.6 percent. Other operations rose, such as military (three percent), and general aviation business and charter aircraft [two percent] (Los Angeles International Airport, 2002).

The most exported air commodity in terms of tonnage from Los Angeles International Airport is vegetables, fruit and nuts with 9.5 percent of the total weight. Other exports in the top ten are clothing; computer equipment; medical instruments; paper and pulp products; chemical products; iron and steel products; electrodes and insulators; office machines; and aircraft products.

Computer equipment is the leading imported air cargo commodity, followed by clothing, office machines, fish,

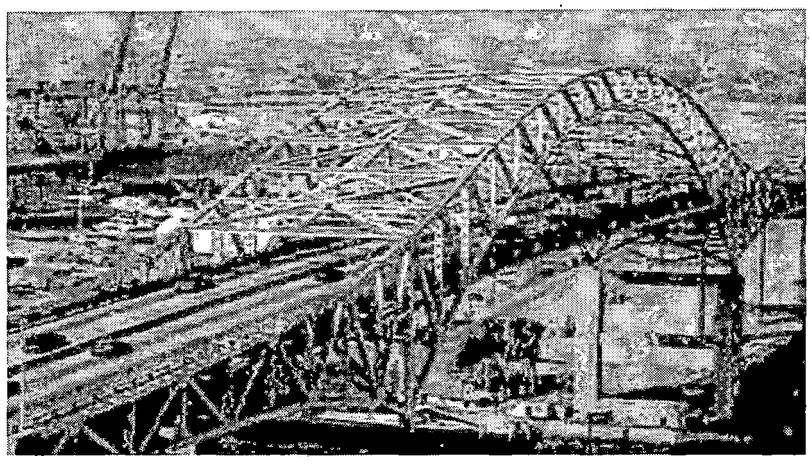
toys, audio and video media, electronic components, footwear, textiles, and semi-conductors. Japan accepts 21.5 percent of Los Angeles International Airport's exports. United Kingdom is next with 8.6 percent. Other leading nations buying U.S. exports shipped through Los Angeles International Airport are Germany, South Korea, Singapore, Taiwan, Canada, Hong Kong, Netherlands, and Australia. China leads all nations in importing through Los Angeles International Airport. Other Pacific Rim nations such as Japan, Taiwan, South Korea, Philippines, Singapore, and Malaysia find Los Angeles International Airport a prime port of entry. The other nations in the top ten are Australia, United Kingdom, and Hong Kong (Los Angeles International Airport, 2002).

## PORTS

### Port of Long Beach

The Port of Long Beach is one of the world's busiest seaports, a leading gateway for Pacific Rim trade. Trade through the port provides insights on the ups and downs of the U.S. and Asian economies. Long Beach's leading imports include consumer goods such as clothing, toys, shoes and home electronics. The port's exports include factory equipment and raw materials such as plastics, chemicals,

cotton, and recycled paper and metal. The port's revenues and expenditures in budget summaries can be tracked for the most recent fiscal years (Port of Long Beach, 2003).



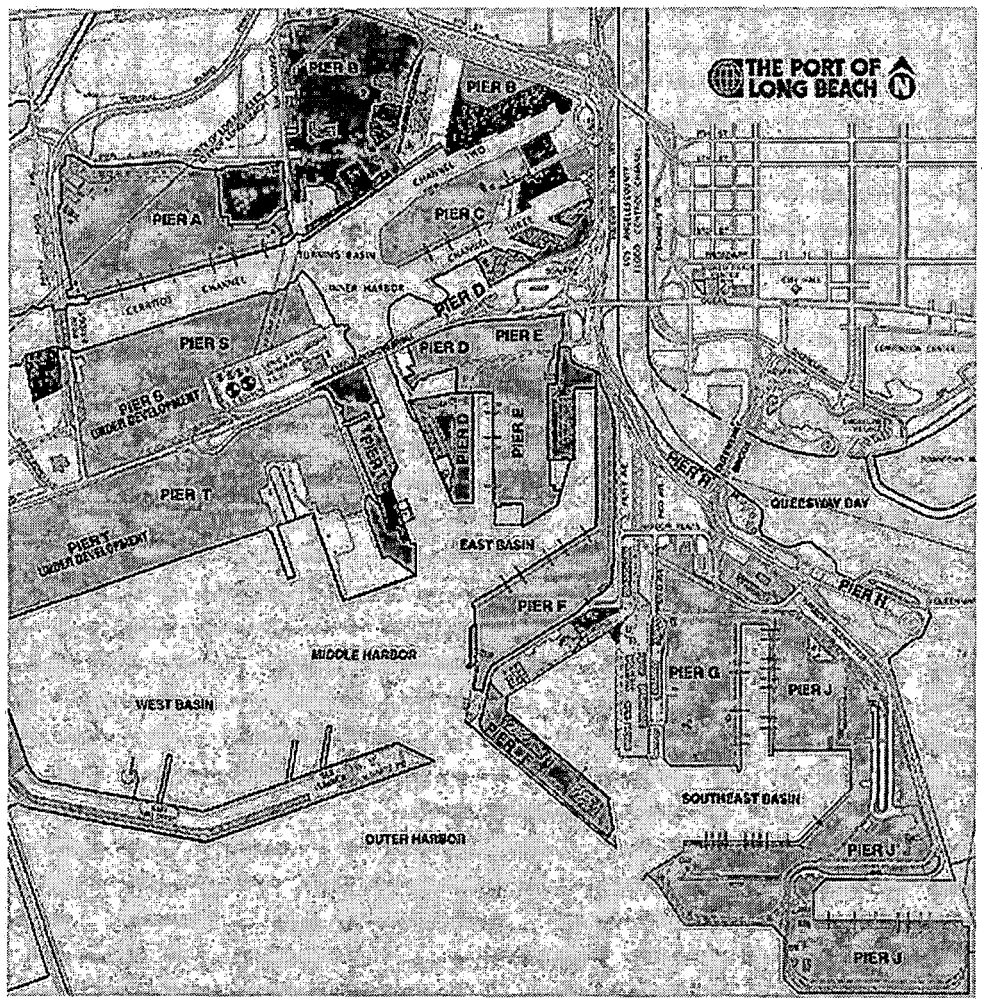
Source: www.polb.com
Figure 6. Port of Long Beach

International Port Ranking

- Long Beach is the world's 10th busiest container cargo port
- Long Beach is the United State's second busiest port
- If combined, the ports of Long Beach and Los Angeles would be the world's third-busiest port complex, after Hong Kong and Singapore (Port of Long Beach, 2003)

Trading Partners

- East Asian trade accounts for more than 90 percent of the shipments through the port
- Top trading partners are China/Hong Kong ($35.5 billion), Japan ($19.8 billion), South Korea ($10.1 billion) and Taiwan ($4.3 billion)

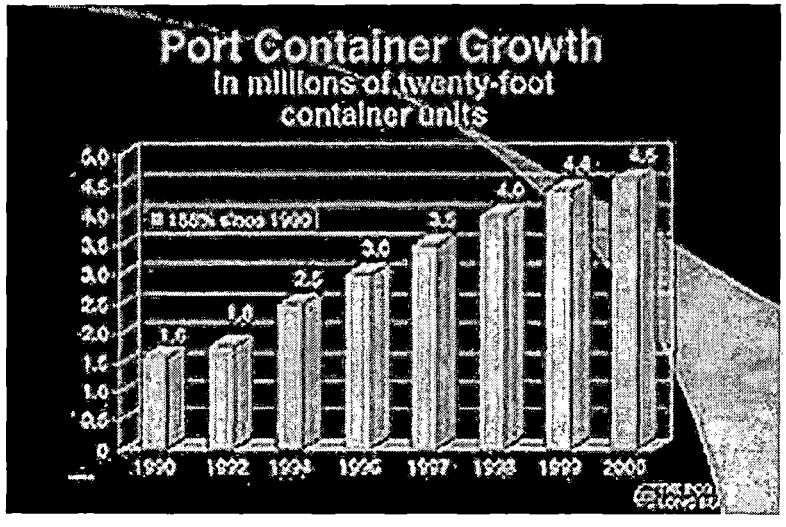



Source: www.polb.com

Figure 7. Map of The Port of Long Beach

Cargo Volumes

- The value of cargo was $95 billion in 2002
- 4,526,365 TEUs (twenty-foot-long cargo container units) moved through the port in 2002
- Container throughput has increased by 175 percent since 1990
- Tonnage through the port was 65.5 million metric tons in 2002 (Port of Long Beach, 2003)




Source: www.polb.com

Figure 8. Port of Long Beach, Port Container Growth

Table 8. Port of Long Beach, Cargo Statistics from 1998 to 2002

| Five Year Cargo Statistics | | | | | |
|---|---|---|---|---|---|
| | 1998 | 1999 | 2000 | 2001 | 2002 |
| Volume in MTs (Metric Tons) | 60.8 million MTs | 64.5 million MTs | 68.0 million MTs | 65.6 million MTs | 65.5 million MTs |
| Value (in billions of US dollars) | $80.4 billion | $89 billion | $98.2 billion | $94.7 billion | $95 billion |
| Containers in TEUs (20-foot-long cargo container units) | 4,097,689 TEUs | 4,408,480 TEUs | 4,600,787 TEUs | 4,462,967 TEUs | 4,526,365 TEUs |

Source: POLB & US Department of Commerce

Port of Los Angeles

The Port of Los Angeles is America's busiest port with record volumes of cargo moving through the 7,500-acre harbor. Its strong performance is attributed to a solid U.S. economy and the recovering Asian economies with a renewed manufacturing demand for American exports.

The Port itself is a major reason for the remarkable cargo volumes. Its world-class facilities and infrastructure maximize the one-stop shopping concept of cargo transportation and delivery favored by most shipping lines. Ocean carriers can send the majority of their West Coast cargo to Los Angeles with full confidence in the

Port's modern cargo terminals and efficient train/truck intermodal network (Pacific Maritime Association, 2003).

The Port of Los Angeles is a department of the City of Los Angeles and is often referred to as the Los Angeles Harbor Department. The Port is operated and managed under a State Tidelands Trust that grants local municipalities jurisdiction over ports and stipulates that activities must be related to commerce, navigation and fisheries. A five-member Board of Harbor Commissioners is appointed by the Mayor and confirmed by the Los Angeles City Council to provide direction and create policy for the Port.

The Port is proud of its 27 major cargo terminals, including facilities to handle automobiles, containers, dry bulk products and liquid bulk products. Combined, these terminals handle more than 120 million metric revenue tons of cargo representing some $102 billion. Eight modern container facilities together handle in excess of five million units of cargo containers annually, making the Port one of the top ten busiest ports in the world (Pacific Maritime Association, 2003).

Table 9. Port of Los Angeles Statistics for 2003

| 2003 Statistics: | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Month | In Loaded | In Empty | In Total | % Empty | OB Loaded | OB Empty | OB Total | % Empty | Total TEUS | Prior Year % Change |
| Jan | 264,680.65 | 11,800.90 | 276,481.55 | 4.27% | 105,485.10 | 136,571.75 | 242,056.85 | 56.42% | 518,538.40 | 27.02% |
| Feb | 270,731.25 | 4,008.25 | 274,739.50 | 1.46% | 100,162.50 | 166,236.80 | 266,399.30 | 62.40% | 541,138.80 | 24.40% |
| | | | | | | | | | | |
| Total CY 2003 | 535,411.90 | 15,809.15 | 551,221.05 | 2.87% | 205,647.60 | 302,808.55 | 508,456.15 | 59.55% | 1,059,677.20 | 25.67% |
| FY 2003 July '02-June '03 | 2,279,884.15 | 86,572.70 | 2,366.456.85 | 3.66% | 748,184.60 | 1,219,114.10 | 1,967,298.70 | 61.97% | 4,333,755.55 | 18.90% |

Source: www.portoflosangeles.org

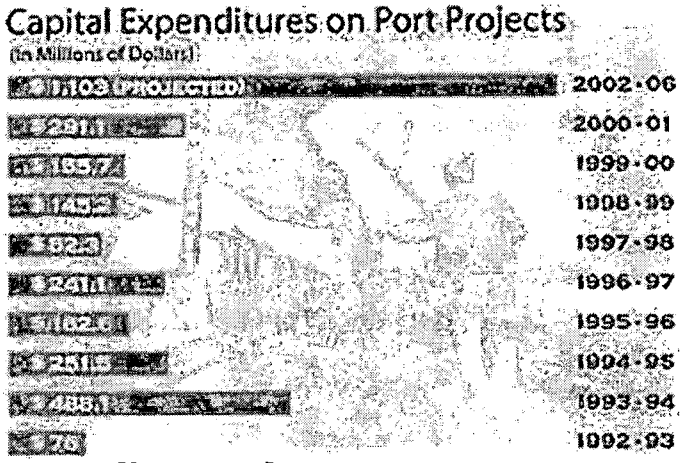
With cargo volume forecasted to dramatically increase, the Port has embarked on extensive modernization of existing facilities and development of new terminals. The Port's Pier 400 project has helped to position the Port to handle the projected growth in international trade, creating nearly 600 acres of new land including a container terminal comprising nearly 500 acres.

The Port's position as a leading seaport in international trade, combined with its dedication to the environment and excellent management structure, are primary reasons for its AA bond rating, the highest assigned to any U.S. seaport operating without taxpayer support.

Table 10. Port of Los Angeles Statistics

| | |
|---|---|
| Annual Container Volume: | 5.6 million TEUs (twenty-foot equivalent units), fiscal year 2002<br>5.0 million TEUs, fiscal year 2001 |
| Cargo Tonnage: | 123.4 million metric revenue tons, fiscal year 2002<br>113.9 million metric revenue tons, fiscal year 2001 |
| Cargo Value: | $104.2 billion, calendar year 2001<br>$101.8 billion, calendar year 2000 |
| Ranking by Container Volume: | 1st busiest port in the United States;<br>8th busiest in the world |
| Top Five Containerized Imports:<br>(Calendar year 2002) | Furniture (331,997)<br>Apparel (214,795)<br>Electronic Products (213,996)<br>Toys (168,846)<br>Computer Equipment (137,232) |
| Top Five Containerized Exports:<br>(Calendar year 2002) | Wastepaper (169,445)<br>Syntheic Resins (73,625)<br>Fabric, including Raw Cotton (51,456)<br>Animal Feed (47,568)<br>Scrap Metal (32,873) |
| Top Trading Partners:<br>(Calendar year 2001) | China ($35.7 billion)<br>Japan ($24.8 billion)<br>Taiwan ($10.1 billion)<br>Thailand ($4.3 billion)<br>South Korea ($3.8 billion) |
| Waterfront: | 43 miles |
| Acreage: | 7500 (3800 water;3700 land) |
| Cargo Terminals: | 27 major facilities<br>Dry bulk - 3<br>Liquid bulk - 9<br>Container - 8 (includes Berth 100 terminal)<br>Automobile - 2<br>Breakbulk - 4<br>Omni - 1 |

Source: www.portoflosangeles.org




Source: www.portoflosangeles.org

Figure 9. Capital Expenditures on Port Projects

## Railroads

### Union Pacific Railroad

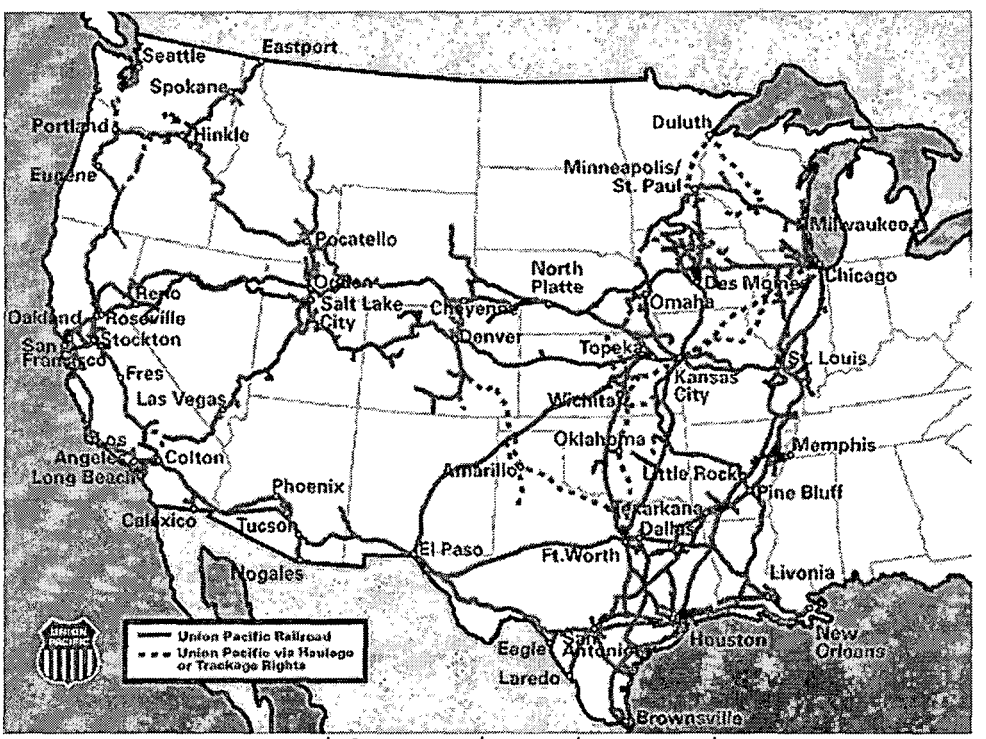
Union Pacific Corporation (UP) is one of America's leading transportation companies. Union Pacific Railroad is the largest railroad in North America and it operates in the western two-thirds of the United States. The

Table 11. Union Pacific Railroad Facts

| Union Pacific Railroad Fast Facts | |
|---|---|
| Route Miles | 33,035 |
| Employees | 47,000 |
| Annual Payroll | $2.7 billion |
| Purchases Made | $2.9 billion |
| Locomotives | 6,886 |
| Freight Cars | 96,776 |

Source: www.up.com

railroad serves 23 states, linking every major West Coast and Gulf Coast port and provides service to the east through its four major gateways in Chicago, St. Louis, Memphis and New Orleans. Additionally, Union Pacific operates key north and south corridors and is the only railroad to serve all six gateways to Mexico. UP also interchanges traffic with the Canadian rail systems. The Corporation's trucking operations include Overnite Corporation which owns its less-than-truckload (LTL) carriers, Overnite Transportation and Motor Cargo (Union Pacific, 2003).



Source: www.uprr.com/aboutup/maps/sysmap/

Figure 10. Service Areas of Union Pacific

In California, Union Pacific serves the rich agricultural central valley, the Port of Oakland and the San Francisco Bay area, and the Los Angeles metropolitan area with its two major ports at Los Angeles and Long Beach.

Along the West Coast, the "I-5 Corridor" offers the most efficient possible north-south transportation service to freight customers in all three Pacific Coast states. This service ties to main east-west corridors at Seattle, Portland, Oakland, and Los Angeles. The railroad has one of the most diversified commodity mixes in the industry, including chemicals, coal, food and food products, forest products, grain and grain products, metals and minerals, and automobiles and parts. In Northern California, Union Pacific handles import-export automobile traffic at Milpitas, Fremont, Benicia, and Oakland. In Southern California, UP serves major automobile distribution centers for Chrysler and Ford at Mira Loma, and Toyota at Long Beach.

Union Pacific trains carry extensive varieties of import-export traffic through its Intermodal Container Transfer Facility (ICTF) near the Los Angeles-Long Beach harbors; and the coal terminal at the harbor transfers large quantities for the international market.


Source: www.uprr.com/aboutup/maps/sysmap/
Figure 11. Union Pacific Railroad in California

Union Pacific played a key role in the Alameda Corridor project, along a 21-mile route connecting the Los Angeles/Long Beach harbor complex to downtown Los Angeles rail yards. Completed in 2002, this $2 billion construction effort eliminated 209 grade-level street/rail crossings and doubled the speed of freight trains using the corridor. Union Pacific operates major intermodal

facilities at Oakland, Stockton, Long Beach and Los Angeles. Other terminal operations are located at Roseville, Stockton, East Los Angeles, West Colton and Yermo.

Daily Amtrak passenger service also runs over UP lines throughout the state. There also are extensive commuter train operations on UP tracks in Northern and Southern California (Union Pacific, 2003).

Having access to the coal-rich Powder River Basin in Wyoming and coal fields in Illinois, Colorado and Utah, the railroad moves more than 238 million tons of coal annually. It is one of Union Pacific's fastest-growing business areas. The company is investing millions of dollars annually to add capacity to handle coal traffic, including new locomotives, and new double and triple track main lines (Union Pacific, 2003).

Table 12. Overnite Corporation Fast Facts

| Overnite Corporation Fast Facts | |
|---|---|
| Shipments* | 7.9 million |
| Tonnage* | 4.0 million |
| Employees | 13,000 |
| Tractors* | 4,900 |
| Trailers* | 19,000 |
| | * Excluding Motor Cargo |

Source: www.uprr.com/aboutup

Burlington Northern Santa Fe Company

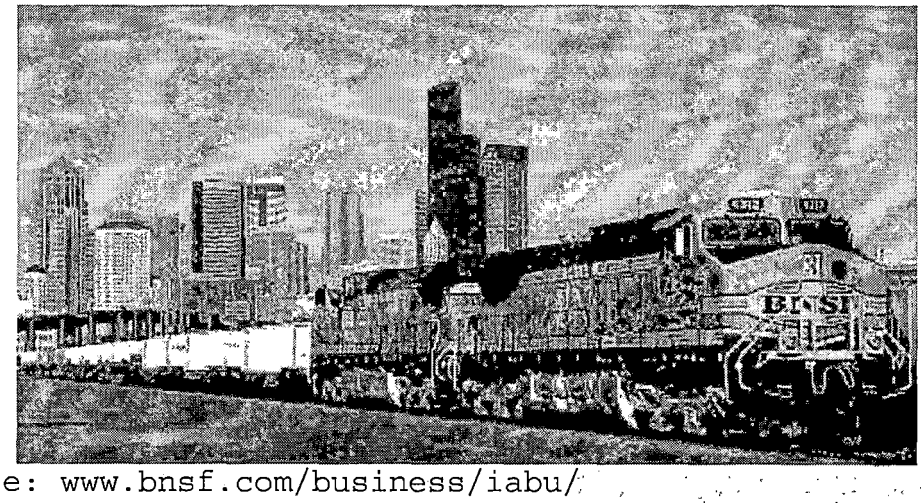
Headquartered in Fort Worth, Texas, Burlington Northern Santa Fe Co. (BNSF), through its subsidiary The Burlington Northern and Santa Fe Railway Company, operates one of the largest railroad networks in North America, with 33,000 route miles covering 28 states and two Canadian provinces. This network covers the western two-thirds of the United States, stretching from major Pacific Northwest and Southern California ports to the Midwest, Southeast and Southwest, and from the Gulf of Mexico to Canada (Burlington Northern Santa Fe Railway, 2003).

The railway moves more intermodal traffic than any other rail system in the world, is America's largest grain-hauling railroad, transports the mineral components of many of the products we depend on daily, and hauls enough coal to generate more than ten percent of the electricity produced in the United States. Revenues are generated primarily from the transportation of coal, grain, intermodal containers and trailers, chemicals, metals and minerals, forest products, automobiles and consumer goods.

BNSF was created on September 22, 1995, from the merger of Burlington Northern Inc. (parent company of

Burlington Northern Railroad) and Santa Fe Pacific Corporation (parent company of the Atchison, Topeka and Santa Fe Railway). The company employs about 38,000 people.

BNSF Railway recently expanded its Southern California headquarters in San Bernardino to 200 executives. Its intermodal yard in San Bernardino's Mt. Vernon area is the backbone of the Inland Empire's logistics industry, moving 410,000 containers a year from trains to trucks. In 2001, Yellow Freight put their Southern California trucking center near this facility and the city is weighing a BNSF proposal to expand its intermodal capability (Burlington Northern Santa Fe Railway, 2003).




Source: www.bnsf.com/business/iabu/

Figure 12. Burlington Northern Santa Fe Locomotive

Nearly 3.5 million intermodal containers were transported by BNSF in 2001, and the volume grows annually. Intermodal shipments are the largest segment of traffic on the Chicago-to-California corridor. The Burlington Northern and Santa Fe merger brought with it a connection between the resource-rich Pacific Northwest and the major consumption markets of the Pacific Southwest, creating an I-5 rail corridor between Vancouver, B.C., and San Diego, CA. BNSF has the shortest, most direct (2,214) mile rail route operating between Chicago and Los Angeles (Burlington Northern Santa Fe Railway, 2003).

Table 13. Burlington Northern Santa Fe Facts

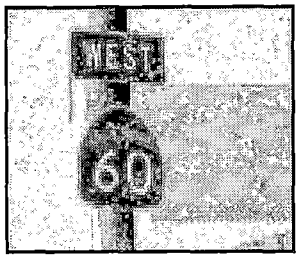
| | |
|---|---|
| Route Miles | 30,000 |
| Number of Employees | 36,000 |
| Locomotives | 5,000 |
| Freight Cars on System | 190,000 |

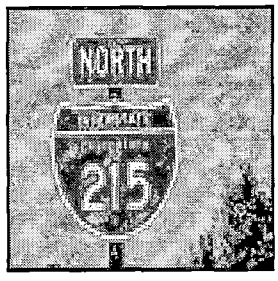
Source: www.bnsf.com/media/html/bnsf_facts.html

Freeways

The Inland Empire's existing road net is one of its prizes and a significant contributor to the economic development. There are many major freeways carrying life to the Inland Empire. The most important two freeways are the I-10 and I-15 freeways. Both Riverside's and San

Bernardino's transportation commissions are committed to meeting the changing needs of the Inland Empire region.




Source: www.rctc.org/projects/highway.asp
Figure 13. Freeway Signs

Within the next five years, Riverside and San Bernardino will feature three changes about freeways

1) Four eight-lane or wider freeways traversing the region's main valleys in an east-west direction (from north to south, Interstates 210 and 10 and California highways 60 and 91)
2) Two freeways of similar status crossing from north to south (Interstates 15 and 215)
3) Greatly improved Corona expressway (CA 71), Elsinore-Palm Desert highway (CA 74/79), and CA 86 to Imperial Valley (Riverside County Transportation Commission, 2003).

Within the next few decades, major multi-lane highways will be constructed over the mountains connecting Victor Valley with the San Joaquin Valley, crossing from I-10 to CA-60 just west of Ontario Airport, and through the Mojave Desert connecting Coachella Valley with the Salton Sea

> and the emerging commercial centers in Mexicali, says Eric Haley, Executive Director of Riverside County Transportation Commission. (Riverside County Transportation Commission, 2003)

Initial construction is already underway in San Bernardino County on the completion of I-210 from San Dimas through to I-15 and then to I-215. This will provide a huge improvement to the region's road net, allowing trucking to proceed from the southwest and southeast United States to Northern California and back without having to pass through central Los Angeles or San Bernardino Counties. Besides shortening transit times for such truck transport, this will also relieve passenger car congestion on the main axis of I-10 between Los Angeles and San Bernardino.

Multi-lane expansion of CA 58 from Barstow to Bakersfield is an extension of the same need. As shipping and warehousing operations continue to expand in the central Inland Empire and up into Victor Valley, the need will increase for direct truck access between these points and Northern California without having to traverse Los Angeles County. A completed I-210 will partially diminish these needs. Such a highway would solidify a place for the Victor Valley as warehouse between Northern and Central California and the rest of the country.

While the I-210 and CA 58 projects can both be justified based on current shipping activity levels, the need for them will be sharp by completion and activation of the Alameda Corridor. This project will provide a high-volume, dedicated-freight, sub-ground rail line from San Pedro to the freight yards in central L.A. (Riverside County Transportation Commission, 2003).

The Alameda Corridor

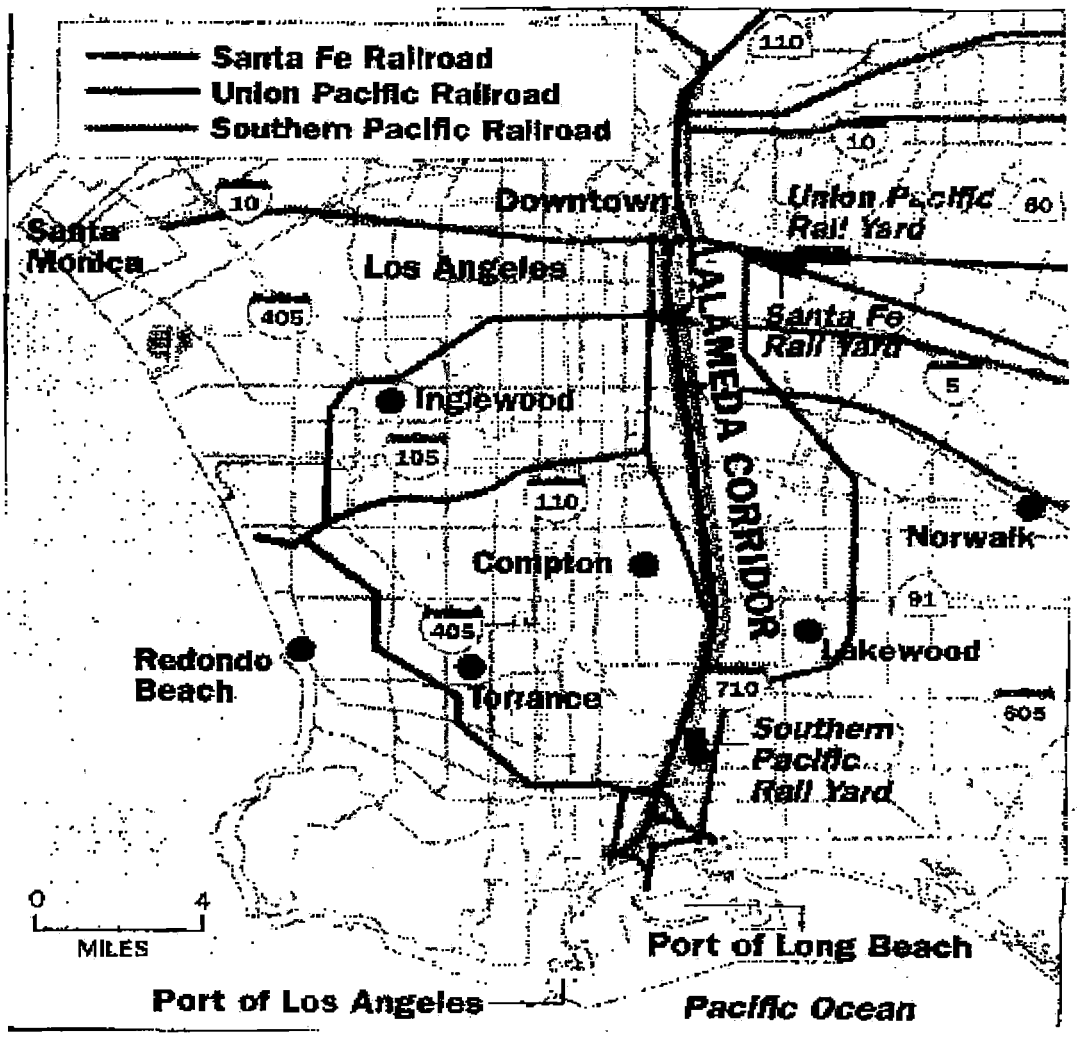
The Alameda Corridor is a 20-mile railroad express line that connects the ports of Los Angeles and Long Beach to the transcontinental rail network east of downtown Los Angeles. It will create a faster, more efficient way to move cargo throughout the United States and to overseas markets. Estimated cost of the project is $2.4 Billion. (Port Of Los Angeles, 2003)

The Alameda Corridor consists of multiple construction projects. At the north end of the Corridor are three principle projects: The new Los Angeles River Bridge, dedicated in 1998, replaced a single-track bridge with a three-track structure. The Washington Boulevard & Sante Fe Avenue Grade Separation will separate rail and street traffic. The Redondo Junction project will elevate Amtrak and Metrolink passenger train lines over the Corridor.

In the mid-corridor section, freight trains will travel through a 10-mile, 33-foot-deep trench between State Route 91 and 25th Street. East-West streets will bridge across this trench.

The south end of the Corridor includes two major projects: The Henry Ford Avenue Grade Separation project will separate automobile and train traffic while reconstructing sections of Henry Ford Avenue. The Compton Creek/Dominguez Channel project will replace the current single track bridge over Compton Creek with a three-track bridge and add a second three-track bridge over Dominguez Channel. (Port of Los Angeles, 2003)

The County and City of Los Angeles are widening Alameda Street south of State Route 91 from four to six lanes. The ports of Los Angeles and Long Beach, also known as the San Pedro Bay ports, represent the third largest port complex in the world. About one-quarter of all U.S. waterborne international trade depends on the ports to reach market. Estimates show the ports will double their current cargo load by 2020. Currently sea cargo is more than $157 billion annually. The Alameda Corridor will help the ports accommodate this increase in trade and help the regional and national economies capitalize on Southern California's standing as a hub of the Pacific Rim.




Source: www.scbbs.com/alameda/la951115.htm

Figure 14. Map of Alameda Corridor

Many major benefits will be realized when the Alameda Corridor is completed:

- Several rail lines will be consolidated into the Corridor, which will expedite and increase the efficiency of cargo distribution throughout the United States and to overseas markets.

- Traffic patterns will be enhanced through the elimination of nearly 200 at-grade rail-highway crossings along currently used rail lines.
- Train emissions will be reduced by 28 percent.
- Automobile and truck emissions will drop by 54 percent.
- Noise pollution from trains will be reduced by 90 percent.
- Corridor will maximize Cost Effectiveness (Flanigan, 1995)

The intermodal train traffic network at the Port of Los Angeles has been carefully planned and designed to merge and funnel onto the Alameda Corridor. The Centralized Traffic Control (CTC) System, which is operated by Pacific Harbor Lines for the ports of Los Angeles and Long Beach, manages all rail dispatching and switching functions to govern inbound and outbound train movements with the highest levels of efficiency and safety. All of the Port's existing on-dock rail yards, as well as the future Pier 400 facility, are linked to the CTC System (Flanigan, 1995).

# CHAPTER FOUR

# COMPANY ANALYSIS

## Skechers

Company name: SKECHERS

Address: 1777 S. Vintage Ave., Ontario, CA 91761

Phone: (909) 390-1600

Fax: (909) 390-1651

Name of the Interviewee: Greg Drivas

Title of the Interviewee: Loss Prevention Manager

Date of the Interview: 05/01/2003

SKECHERS USA, Inc., an award-winning global leader in the lifestyle footwear industry, designs, develops and markets lifestyle footwear that appeals to trend-savvy men, women and children. The Company's success stems from its high quality, diversified product line that meets consumers' various lifestyle needs and an innovative global marketing strategy driven by cutting-edge print and television advertising.

Skechers sells its products to numerous department and specialty stores, including Bloomingdale's, Nordstrom, Macy's, Carson Pirie Scott, Boston Store, Kohl's, Dillard's, Robinson's-May, JC Penney, Footlocker, Lady Footlocker, Famous Footwear, Journeys, Jarman and

FootAction USA. The Company also sells direct to consumers through more than 95 company owned and operated Skechers USA retail stores, from its premier New York Times Square and Los Angeles Universal Citywalk locations to destinations in London, Paris, Frankfurt and Toronto. Skechers' global reach includes Skechers retail stores in Tokyo and Osaka, joint projects with distributor Achilles Corporation. Through more than 30 major global distributors, Skechers sells its products in over 100 countries and territories. It also directly distributes its product to Canada, the United Kingdom, France, Spain, Italy, Switzerland, Austria, Belgium, the Netherlands and Luxemburg. The Company's direct distribution operations in Europe are handled through a new warehouse in Liège, Belgium and Skechers S.á.r.l., a Swiss subsidiary that oversees the Company's international sales, marketing and distribution (Official Website of Skechers).

Skechers's warehouse in Ontario was built in 1998 and its current size of distribution facility is 264,000 square feet. It has 41 truck doors and 40foot or larger container units on chassis. It also has a secure storage area and alarm systems set all around the facility. It has neither on-dock rail facility nor rail spur. Skechers has thousands of different items in their distribution center.

Mr. Drivas could not give me information on total items and the inventory turnover due to confidentiality issues. Skechers' distribution center has the ability to receive 53foot containers. The distribution center participates in the empty container interchange. Both the average dwell time of trucks and the average truck queue time in minutes are 20 to 40 minutes.

The distribution center's busiest day is Monday and the busiest season runs from May to September. The volume of throughput of the containers varies widely. Its system incorporates receipt of electronic delivery order. Beside their via phone scheduling and appointment system, it also has an internet based truck scheduling and appointment system for access by trucking company dispatchers and independent drivers (Greg Drivas, personal communication, May 1, 2003).

Millard Refrigerated Services

Company name: MILLARD REFRIGERATED SERVICES

Address: 3251 De Forest Dr., Mira Loma, CA 91752

Phone: (909) 360-7970

Fax: (909) 360-7975

Name of the Interviewee: Thomas W. Uyak

Title of the Interviewee: Regional Vice President

Date of the Interview: 05/01/2003

Millard is a public storage company that primarily distributes food. The warehouse was built in 1995 and subsequently added onto four times. Recently Millard completed its section for Stater Bros. Its current size of distribution facility is 761,000 square feet with 100 truck doors. Millard has 40 foot or larger container units on chassis. Its whole facility is secure with alarm systems and locks. It has both an on-dock rail facility and a rail spur.

Millard has six rail doors at the east side of the distribution center but Millard's rail usage is not very large because it mainly uses trucks. It has hundreds of different items in its distribution center. Millard's distribution center has the ability to receive 53foot containers and it participates in the empty container interchange. One hundred percent of inbound container shipment is trucking. For the dwell time, Millard have a standard time of two hours for both inbound and outbound. It distributes locally and internationally but mostly to the West Coast. There is no average truck queue time since Millard works with strict appointments. It does not use any internet based scheduling or appointment system. Instead appointment scheduling is done via phone. The

customers have to call for an appointment and then they are given a six-digit confirmation number. Customers are expected to arrive half an hour earlier to the facility so that they can be assigned to a door.

The distribution center's busiest day is Monday and the busiest season is holidays: Thanksgiving, Christmas, Memorial Day, Easter, basically all holidays. The number of cases handled in a week varies from 700,000 to 750,000. Inventory turnover varies according to the customers. For instance, bakery turnover is 40 times a year while Baskin Robins is nine times a year. Millard does not use electronic delivery. Millard's traffic department is responsible for the driver's positive identification. Drivers have to submit the paperwork required before being assigned to any truck. Millard owns its warehouse management system that is called truck log. With the help of this system, it can track the arrival and departure time of the trucks. It also has a RF scanning technology and recall system. All the trucks are given a six-digit code and if needed Millard can figure out in one hour, by the order of the customers, which truck carried which items, where and when they were shipped, so that if there are any problems with the products such as defects, the company knows who to contact to call back the products.

There are 60 full time employees working in the facility. If there is any damage to the goods in the warehouse, Millard compensates it (Thomas W. Uyak, personal communication, May 1, 2003).

ServiceCraft Logistics

Company name: ServiceCraft Logistics

Address: 5600 E. Francis St., Ontario, CA 91761

Phone: (909) 390-3566

Fax: (909) 290-4725

Name of the Interviewee: Russ Tomazezski

Title of the Interviewee: Warehouse manager

Date of the Interview: 05/02/2003

ServiceCraft Logistics is a third party logistics company that primarily distributes grocery products. The warehouse was built in 1996 and its current size is 245,000 square feet. It has 22 truck doors and 40foot and larger container units on chassis. Its storage area is secure with alarm system and they lock all the doors. It has both an on-dock rail facility and a rail spur.

ServiceCraft Logistics carries 300-400 different items in its warehouse. Its inventory turnover is six to eight times per year. The warehouse has the ability to receive 53foot containers. The distribution center

participates in the empty container interchange. Eighty percent of its inbound and outbound container shipments are trucking and the remaining 20 percent is over the rail. The average dwell time of trucks is one to two hours and the average truck queue time is 80-90 minutes. The distribution center's busiest day is Monday and the busiest season is summer. The volume of throughput of the containers varies widely. ServiceCraft Logistics does not have any system or devise used to establish initial queue time for trucks arriving at the facility. Its system incorporates receipt of electronic delivery order. It has an internet based truck scheduling and appointment system for access by trucking company dispatchers and independent drivers. But this system does not incorporate a truck driver positive identity. The warehouse has 30 full time employees and no part time employees (Russ Tomazezski, personal communication, May 2, 2003).

Toyota Motor Sales

Company Name: Toyota Motor Sales, U.S.A., Inc.

Address: 1425 S. Rockefeller Way, Ontario, CA 91761

Phone: (909) 975-7970

Fax: (909) 975-7700

Name of the Interviewee: John Sanders

Title of the Interviewee: Quality Administrator

Date of the Interview: 05/02/2003

Toyota Motor Sales, U.S.A., Inc., was built in 1995. It sells auto parts mostly to the North America. Its warehouse's current size is 750,000 square feet and it has 13 inbound and 13 outbound truck doors. Toyota has both 40foot and 53foot container units. It has a secure storage area that has 189 parking spots, alarm systems set all around the facility, and 24-hour physical security. Toyota works with Pinkerton Security Company. Everything comes in by trucks from the Port of Long Beach. Toyota does not have a rail spur. It has a contract with JPL airlines and whenever there is a recall, they use air transportation. Hundred percent of their air cargo is from Ontario International Airport (ONT).

Toyota works with freight forwarders. The parts are shipped to the Port of Long Beach and freight forwarders bring in all to ONT. Toyota mostly supplies parts to North America, Alaska, Mexico and Hawaii. Toyota's second distribution center is in Kentucky where they do inspection of parts. It has 1,000's of different items in its distribution center.

The distribution center participates in the empty container interchange. Both the average dwell time of

trucks and the average truck queue time is one day, depending on workload. The distribution center's busiest day is Tuesday and the busiest season is the beginning of winter and summer. By the first snow in the east many car accidents occur and they need parts for their cars. In the summer, cars need air conditioning, tune up kits so the demand for spare parts goes up. The volume of throughput is 28 trailers per day.

Toyota's system incorporates receipt of electronic delivery orders. Toyota uses AS400, a system produced by Techlogics. With this system it can provide information on trucks' arrival and departure time, and items they carry. When the trucks are loaded, they are given a bar code and the supplier sends a transmission to the Toyota's warehouse. When trucks arrive to the warehouse security people check the bar code and learn what the truck is loaded with.

The company will be fine for 2.1 months if no new parts are received. Parts volume received is $2.98 million and parts volume shipped is $2.89 million. Toyota practices in Just- In-Time thus it tries to keep these two numbers close to each other. Toyota pays for all damages unless it proves that it was the freight forwarder's fault. It currently employs 425 full time employees, ten

floor managers, ten administrator managers, five operational managers, and one national manager (John Sanders, personal communication, May 2, 2003).

## Maytag

Company Name: Maytag

Adress: 11015 Hopkins St., Mira Loma, CA 91752

Phone: (909) 727-0065

Fax: (909) 727-0093

Name of the Interviewee: Dale Duecker

Title of the Interviewee: Regional Distribution Center Manager

Date of the Interview: 05/02/2003

Maytag is a household appliance company. Its warehouse was built in 2002 in Loma Linda and its current size is 469,000 square feet with 56 truck doors. It has 40foot and larger container units but it does not have a container queuing space within its distribution center yard space. The warehouse has the ability to receive 53foot containers. An alarm system, locks, and security people protect its storage area 24 hours, seven days.

Maytag does not own any trucks; it uses outside truck providers. It has neither on-dock rail facility nor rail spur. Maytag carries 1,500 different items and 62,000

total items in its warehouse. Its inventory turnover is 12 times per year. The distribution center participates in the empty container interchange. Fifty percent of inbound and outbound container shipment is trucking and the remaining 50 percent is over the rail.

Both the average dwell time and truck queue time in minutes is 60 minutes. Trucks arrive at the distribution center, unload and leave. The next day they come back with new trailers and take back the empty ones.

The distribution center's busiest day is Monday, Tuesday, and Wednesday and the busiest season is summer. The volume of throughput is 20 truckloads, 15 less-than-truck-loads a day and 120 trailers a week for inbound. It has a system that incorporates receipt of electronic delivery order. It does not have an internet based truck scheduling and appointment system for access by trucking company dispatchers and independent drivers.

The warehouse has 35 full time, ten long-term temporary and none part time employees. If damage occurs to any sealed truck, Maytag pays for the damage. It distributes mostly to

California, Nevada, Oregon, and Hawaii, but once in a while it distributes to Guam, Saipan, and to Japan (Dale Duecker, personal communication, May 2, 2003).

## Caterpillar

Company Name: Caterpillar

Address: 2300 S. Vintage Ave., Ontario, CA 91761

Phone: (909) 778-6138

Fax: (909) 778-9300

Name of the Interviewee: Emma A. Urzua

Title of the Interviewee: System Facility Manager

Date of the Interview: 05/05/2003

Caterpillar is the world's leading manufacturer of construction and mining equipment, diesel and natural gas engines and industrial gas turbines. The company is a technology leader in construction, transportation, mining, forestry, energy, logistics, electronics, financing and electric power generation. In the first half of 2002, Caterpillar posted sales and revenues of $9.70 billion and profit of $280 million or 81 cents per share.

More than half of all sales were to customers who were outside of the United States. These same customers are maintaining Caterpillar's position as a global supplier and leading U.S. exporter. Caterpillar products and components are manufactured in 50 United States facilities and in 65 other locations around the globe.

Caterpillar in Ontario distributes primarily to West Coast. Caterpillar's warehouse in Ontario is one of the

first warehouses in the area and was built in 1988. It is 396,000 square feet and has 59 dock doors. The Distribution Center does not have a queuing space within itself.

Mrs. Urzua said that there are enough dock doors and trucks are strictly scheduled. If there is no door available, then Caterpillar does not schedule any more trucks. The distribution system does not have on-dock rail facility. There is a secure storage area.

The warehouse is protected with an alarm system and physical guards from six am to ten pm every day. Caterpillar carries 170,000 to 200,000 items. It does not own any trucks; it uses outside providers. The Distribution Center has the ability to receive forty,53 foot and larger containers, but sometimes they receive 27 foot containers. It participates in Empty Container Interchange.

At ocean delivery, trucks unload the trailers, leave them in front of the docks and pick them up in two days. At air delivery, trucks unload the goods and leave with the container. The warehouse does not have a rail spur. Ninety percent of their inbound and outbound container shipment is trucking.

Besides trucks, Caterpillar uses ONT for shipment. For shipping, caterpillar works with some airfreight companies such as UPS and Fed-Ex. Its inventory turnover is 11 times per year because it is slow moving inventory. Caterpillar is busy every day of the week and the busiest season for the company is the last quarter of the year.

The number of trucks arriving to the warehouse is 50 to 60 including UPS and Fed-Ex. The appointments are prearranged by phone. Caterpillar does not have to an internet based system to schedule appointments. It uses a warehouse system called Facility Logistics that does the basic tracking of items and transaction for receiving of items. Caterpillar uses a harmonized tariff code that is given to the items that would be exported.

There are 55 full time employees and the ratio of full time to part time workers at the warehouse is 97 percent to two percent. If the seal is broken on the boxes, or if the damage is visibly apparent, then carriers pay for it. Caterpillar is not responsible at any inbound shipment.

On the contrary it is responsible for the damage at any outbound shipment (Emma A. Urzua, personal communication, May 5, 2003).

Table 14. Check List for the Companies

| | Internet based scheduling | Electronic Delivery Order | System to establish initial queue time for trucks | Empty Container Interchange | Secure Storage | On-Dock Rail Facility | Receive 53foot containers | Rail Spur |
|---|---|---|---|---|---|---|---|---|
| Skechers | YES | YES | YES | YES | YES | NO | YES | NO |
| Millard | NO | NO | NO | YES | YES | YES | YES | YES |
| ServiceCraft | YES | YES | NO | YES | YES | YES | YES | YES |
| Maytag | NO | YES | NO | YES | YES | NO | YES | NO |
| Toyota | NO | YES | YES | YES | YES | NO | YES | NO |
| Caterpillar | NO | NO | NO | YES | YES | NO | YES | NO |

# CHAPTER FIVE

## CONCLUSIONS AND RECOMMENDATIONS

The Inland Empire consists of San Bernardino County, the largest county in the lower 48 states (20,121 square miles); and Riverside County, the third largest county in California, (7,177 square miles). The Inland Empire is well situated in relation to the West's major attractions. Downtown Los Angeles is about 60 miles to the west. San Diego is about 100 miles to the south. Las Vegas is about 200 miles to the north, and San Francisco and Sacramento are about 400 miles to the north. The Inland Empire is considered to be the transportation hub of the southwest United States and to be one of the fastest-growing metropolitan areas the United States (www.warehouseguy.com).

Especially in the recent years, many companies started to move to the area because of the area's strategic position. The Inland Empire offers many benefits to the companies locating in the region: well-educated work force, lower labor rates, lower land and lease prices, and easy airport, port, freeway and railway accessibility. The Inland Empire has a significant impact

on the United States economy with its logistics and distribution.

The Inland Empire has grown rapidly during 1990s and is Southern California's growth leader in manufacturing and distribution for the last decade. Manufacturing has been a fast growing sector but distributors have been the fastest growing single sector (269 firms, 22,435 jobs). Both sectors are expanding due to the Inland Empire's available and lower land costs, its less expensive labor and housing, and its multi-modal infrastructure; for this reason, the Inland Empire attracts many companies every year to the area. This situation also affects the job market in the area. The Inland region's job base went from 731,025 to 1,038,363, a gain of 42 percent, from 1990 to 2001.

As a result of the Inland Empire's economic expansion, personal income in the region has quadrupled from 1980 to 2000, rising from $16 billion to $71 billion. The economic expansion has also increased the population. According to the statistics of the Inland Empire Economic Partnership for 2002, The Inland Empire had a population of over 3.8 million people. The Inland Empire would rank 30th in population and 32nd in terms of total income if it were a state.

The Inland Empire comprised of two regions that are the East Valley and the West Valley. Chino, Fontana, Mira Loma, Ontario, and Rancho Cucamonga are the cities of the West Valley. Colton, Corona, Moreno Valley, Redlands, Rialto, Riverside, San Bernardino, and the Pass are the areas that are included in the East Valley. With its approximately 270 million square feet of industrial space the Inland Empire is one of the largest industrial real estate markets in the United States. The total space in the West Valley is 192,339,991 square feet with a vacancy rate of 4.7 percent (9,060,487) and an availability rate of 11.5 percent (22,174,432 square feet).

Excluding Corona, the total space in the East Valley is 51,460,948 square feet with a vacancy rate of 3.18 percent (1,637,873 square feet) and an availability rate of eight percent (4,161,869 square feet).

In Corona, the total space is 26,029,777 square feet with a vacancy rate of 4.24 percent (1,103,843 square feet) and an availability rate of 11.8 percent (3,075,841 square feet). In the Inland Empire, the total industrial space is 269,830,716 square feet and the total available space is 29,412,142 square feet. Total number of buildings at the East Valley is 1,461 while it is 2,208 in the West Valley (Please see Tables 15, 16, and 17).

Table 15. Industrial Space in The West Valley: Chino, Fontana, Mira Loma, Ontario, and Rancho Cucamonga

Greater Ontario Airport Region

All Size Categories

| | Base | Available | Availability Rate | Vacant | Vacancy Rate |
|---|---|---|---|---|---|
| 5,000 to 9,999 sf | 5,574,362 | 602,286 | 10.80% | 185,237 | 3.32% |
| 10,000 to 24,999 sf | 13,514,776 | 1,732,426 | 12.82% | 520,306 | 3.85% |
| 25,000 to 49,999 sf | 16,677,334 | 2,718,346 | 16.30% | 814,097 | 4.88% |
| 50,000 to 99,999 sf | 21,921,263 | 3,104,662 | 14.16% | 1,144,149 | 5.22% |
| 100,000 & Greater sf | 134,652,256 | 14,016,712 | 10.41% | 6,396,698 | 4.75% |
| Totals | 192,339,991 | 22,174,432 | 11.53% | 9,060,487 | 4.71% |

Absorption Figures

| | 1999 | 2000 | 2001 | 2002 | YTD2003 |
|---|---|---|---|---|---|
| Square Feet | | | | | |
| Leasing Activity | 20,132,503 | 27,427,085 | 24,920,249 | 19,703,267 | 8,586,813 |
| Sale Activity | 2,664,972 | 3,526,810 | 2,201,764 | 6,946,304 | 1,251,182 |
| User BTS Activity | 0 | 0 | 236,740 | 0 | 0 |
| Gross Absorption | 22,797,475 | 30,953,895 | 27,358,753 | 26,649,571 | 9,837,995 |
| Number of Transactions | | | | | |
| Leasing Activity | 359 | 378 | 332 | 339 | 102 |
| Sale Activity | 88 | 90 | 78 | 93 | 23 |
| User BTS Activity | 3 | 0 | 2 | 0 | 0 |
| Gross Absorption | 450 | 468 | 412 | 432 | 125 |
| Vacant Space (start of year) | 5,262,235 | 6,877,111 | 5,430,259 | 9,853,381 | 10,661,670 |
| Construction Completions | 11,480,865 | 15,813,446 | 13,427,198 | 8,062,401 | 2,097,586 |
| Net Absorption* | 9,885,989 | 17,260,298 | 9,004,076 | 7,254,112 | 3,698,769 |

Source: Lee & Associates, 2003

Table 16. Industrial Space in The East Valley: Colton, Moreno Valley, Perris, Redlands/Loma Linda, Rialto, Riverside, San Bernardino, and The Pass

**FIRST QUARTER 2003**

| Size | # Bldgs | Base | Available | Availability Rate | Vacant | Vacancy Rate | Gross Activity |
|---|---|---|---|---|---|---|---|
| 5-9,999sf | 453 | 3,099,640 | 116,017 | 3.74% | 71,281 | 2.30% | 47,612 |
| 10-24,999sf | 554 | 8,327,654 | 571,296 | 6.86% | 173,395 | 2.08% | 236,381 |
| 25-49,999sf | 223 | 7,728,411 | 843,539 | 10.91% | 357,381 | 4.62% | 331,619 |
| 50-99,999sf | 131 | 8,867,004 | 782,929 | 8.83% | 187,653 | 2.12% | 74,380 |
| 100,000sf+ | 100 | 23,438,239 | 1,848,088 | 7.88% | 848,163 | 3.62% | 102,545 |
| TOTAL | 1,461 | 51,460,948 | 4,161,869 | 8.09% | 1,637,873 | 3.18% | 792,537 |

Source: Lee & Associates, 2003

Railroads, freeways, airports, and ports are media that carry life to the area. Several LTL (Less Than Load) shipping firms are located in the Inland Empire. Almost all cargo flowing into and out of Southern California passes through the Inland Empire. This is the case as the Cajon Pass on the I-15 and the Banning Pass on the I-10 are the principal rail and trucking routes to the balance of the United States.

Burlington Northern Santa Fe (BNSF) Railroad built a major intermodal railroad yard in San Bernardino. Its capacity is 410,000 container lifts per year. Besides BNSF, Union Pacific Railroad has its main switching yard in Colton and is selecting a location for an intermodal

facility. UP's overnight capacity is four million tonnage and 19,000 trailers.

Table 17. Industrial Space in Corona

Corona

All Size Categories

| | Base | Available | Availability Rate | Vacant | Vacancy Rate |
|---|---|---|---|---|---|
| 5,000 to 9,999 sf | 1,416,838 | 39,534 | 2.79% | 0 | 0.00% |
| 10,000 to 24,999 sf | 4,352,724 | 568,001 | 13.05% | 70,397 | 1.62% |
| 25,000 to 49,999 sf | 4,551,757 | 801,892 | 17.61% | 201,324 | 4.42% |
| 50,000 to 99,999 sf | 6,219,796 | 888,213 | 14.28% | 623,139 | 10.02% |
| 100,000 & Greater sf | 9,488,662 | 778,401 | 8.20% | 208,983 | 2.20% |
| Totals | 26,029,777 | 3,075,841 | 11.82% | 1,103,843 | 4.24% |

Absorption Figures

| | 1999 | 2000 | 2001 | 2002 | YTD2003 |
|---|---|---|---|---|---|
| Square Feet | | | | | |
| Leasing Activity | 1,813,561 | 2,566,482 | 1,189,756 | 1,856,325 | 1,040,524 |
| Sale Activity | 933,489 | 826,033 | 883,625 | 614,158 | 294,865 |
| User BTS Activity | 0 | 70,000 | 59,712 | 0 | 0 |
| Gross Absorption | 2,747,050 | 3,462,515 | 2,133,093 | 2,470,483 | 1,335,389 |
| Number of Transactions | | | | | |
| Leasing Activity | 65 | 82 | 52 | 73 | 25 |
| Sale Activity | 31 | 29 | 23 | 26 | 7 |
| User BTS Activity | 0 | 1 | 0 | 0 | 0 |
| Gross Absorption | 96 | 112 | 75 | 99 | 32 |
| Vacant Space (start of year) | 430,513 | 788,451 | 1,221,308 | 902,043 | 748,843 |
| Construction Completions | 1,671,877 | 1,010,181 | 1,007,039 | 629,035 | 153,330 |
| Net Absorption* | 1,313,939 | 577,324 | 1,326,304 | 782,235 | -201,670 |

Source: Lee & Associates, 2003

There are five main airports in the region. The most important two of those airports are Ontario International Airport (ONT) that is ideally situated to be an airfreight center for Pacific Rim and European air cargo, and Los Angeles International Airport (LAX); the third busiest cargo airport in the world. In 2002, the air cargo of LAX

totaled 1,962,354 tons. In the same year, ONT handled 462,006 tons of cargo.

The Port of Long Beach and the Port of Los Angeles play a major role at the Inland Empire's shipment of goods. Long Beach is the world's 10th busiest container cargo port and is the United State's second busiest port. The value of the cargo was $95 billion and the tonnage through the port was 65.5 million metric tons in 2002. The Port of Los Angeles is America's busiest port. Ocean carriers send the majority of their West Coast cargo to Los Angeles with full confidence in the Port's modern cargo terminals and efficient train and truck intermodal network. Cargo tonnage for the Port of Los Angeles was 123.4 million metric tons and the cargo volume was $104.2 billion in 2002.

The Inland Empire is a paradise of warehouses that distribute locally and internationally contributing to the region's development. Logistics is the most important facet in the area since most of the companies practice Just-In-Time. By the completion of the project of the Alameda Corridor, a 20-mile railroad express line that connects the ports of Los Angeles and Long Beach to the transcontinental rail network east of downtown Los

Angeles, the cargo traffic throughout the United States and to overseas markets will be faster and more efficient.

The Inland Empire has become the heartbeat of California in the recent years and is expected to contribute more to the region each year.

# CHAPTER SIX

# CONCLUSIONS

As a result of the research, it is found that the Inland Empire is a big and important player in the United States' economy with its logistics advantages. With its two counties, the Inland Empire has total land area of 27,298 square miles. The region has witnessed a tremendous development in manufacturing and distribution of goods in the recent areas and by 2025 the population is expected to grow 42 percent. The Inland Empire economy is expected to have 1.8 million jobs by 2020. The Inland Empire also ranks ninth in employment growth in 2002.

The Inland Empire has one of the best logistics scenarios anywhere in the United States and is a very suitable area to start and grow a business due to its low space and labor costs, educated work force, good infrastructure advantages, and easy accessibility to freeways, ports, railroads and airports.

The area has a high rate of available and vacant industrial space compared to other regions in California. The cost of these buildings or land is also inexpensive when compared to other areas of California.

There are many good schools in the area and they provide a highly educated and sophisticated work force for the companies that are planning to station their businesses in the Inland Empire. Moreover, people living in the Inland Empire prefer to work in the area; they dislike long commutes. Workers are willing to work for a little less to avoid long drives.

The Inland Empire has a sophisticated logistics infrastructure. Freeways, airports, ports, and railroads serving the region have significant effect on the development of this area and on the transportation of the goods both locally and internationally. The region's freeways and rail lines stretch out in all directions and run through the heart of the area. Southern California's trucking firms are increasingly locating their major cargo handling facilities in the Inland Empire. Burlington Northern Santa Fe Railroad opened its 400,000-container capacity intermodal rail facility in San Bernardino in 1996; that helps Inland Empire firms avoid the congested intermodal rail yards in Los Angeles County's harbor area.

Ontario is strategically located and can be considered as the economic engine of the Inland Empire. Ontario is a paradise of warehouses. Many companies started to realize the enormous range of environments that

the region has to offer. The majority of the warehouses and distribution centers in the Inland Empire practice Just-In-Time. Firms locating in the area have uncongested access to the Inland Empire's sophisticated and expanding logistics infrastructure that is crucial to goods producers and distributors in the era of Just-In-Time inventory control.

This research demonstrates that it is obvious that the Inland Empire will develop more and start to play a more vital role in the United States' economy in the coming years.

# APPENDIX

# QUESTIONNAIRE

QUESTIONNAIRE

This questionnaire is designed to help ascertain in formation on logistics and good movement in the Inland Empire. If you have any questions or comments please contact us at:

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1. Company name

2. Address

3. Phone and Fax number

4. Name of the interviewee

5. Title of the interviewee

6. Date of Interview

7. Company background/Type of Business

8. When was the warehouse/DC built?

9. What is the current size of your distribution facility?
   a In square footage?
   b In number of truck doors?

10. Do you have container queuing space within your distribution center yard space? If so how much in terms of container units on chassis?
    a 20' container
    b 40' or larger containers

11. Is there a Secure Storage Area?If so what is the size of the Secure Storage area?

12. Does your Distribution center have on-dock rail facility?

13. How many different items do you have in the distribution center?

14. How many total items do you have in your distribution center?

15. Does the Distribution center have the ability to receive 53ft containers?
    a Yes
    b No
    c Uncertain

16. Does the Distribution center participate in Empty container Interchange?
    a Yes
    b No
    c Uncertain

17. Does the DC have a rail spur?
    a Percent of short rail?
    b Length of rail?

18. What is the percent of inbound container shipment is trucking?

19. What is the average Dwell time of trucks in minutes?

20. What is the average truck queue time in minutes?

21. What is the DC's inventory turn over?

22. What are the DC's busiest days for containers? What is the busiest season?

23. What is the volume of throughput of the containers?

24. Does your DC have any system or devise used to establish initial queue time for trucks arriving at the facility?
    a Yes
    b No
    c Uncertain

25. Does your system incorporate receipt of electronic delivery order?
    a Yes
    b No
    c Uncertain

26. Does your DC currently use an internet based truck scheduling and appointment system for access by trucking company dispatchers and independent drivers?
    a Yes
    b No
    c Uncertain

27. If you use such a system, does it incorporate a truck driver positive identification system?
    a Yes
    b No
    c Uncertain

28. What other information technology do you currently use at your DC to track container location, movement, exchange commercial transaction or government required data?

29. How many full time employees work at the DC?

30. What is the ratio of fulltime to part-time workers at the DC?

31. Who pays for local damage? Rail, ocean carrying?

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