

INFRASTRUCTURE



Infrastructure

The Sacramento Region was built to build, so to speak. It has primarily flat terrain, large fresh waterways flowing from the Sierras, stable and mild weather, and very few geographic barriers that would prohibit development. With that said, the original leaders of the region created a slow and careful pathway to development, taking into consideration the environment and agriculture, as well as the need for the regional infrastructure to stay ahead of both residential and commercial development. The region has been extremely successful in maintaining efficient transportation systems, a stable and cost effective flow of resources, and, importantly, a telecommunications infrastructure that has been characterized as one of the most extensive in the nation.

Electricity

The Sacramento Region provides efficient, cost effective and reliable energy to its residents and businesses in the six-county area. Three electricity providers cover the region, including one investor-owned and two municipal utility companies. Capacity is increasing along with the growth of the region. Sacramento County is home to Folsom and Nimbus Dams, which have a combined

capacity of 200 megawatts. Yuba County is home to Colgate Powerhouse which has an output of over 300 megawatts. In 2001, Calpine completed its Sutter County plant which produces 540 megawatts and, recently, the Sacramento Municipal Utility District (SMUD) broke ground on the Cosumnes Power Plant which is expected to produce 500 megawatts. In total, the California Energy Commission shows over 50 operational power plants in the Sacramento Region.

Pacific Gas & Electric (PG&E) is a publicly-owned corporation providing gas and electricity to a major portion of Northern California. In the Sacramento Region, PG&E supplies electricity to Yolo, Sutter, Yuba, El Dorado and Placer (except in the City of Roseville) counties. While PG&E suffered the greatest in the region from energy deregulation which occurred in the 1990's, the utility has emerged from bankruptcy and recently announced a \$799 million rate reduction plan. Energy customers are expected to receive a nine to 15 percent reduction in rates, depending on the level of usage.

Roseville Electric is a not-for-profit electric utility owned by the City of Roseville and regulated by the Roseville

Figure 31 – 2003 Average Retail Electricity Rates by Major Utility
(cents per kilowatt-hour)

Type	PG&E(1)	SMUD(2)	LADWP(3)	SDG&E(4)	SCE(5)	Roseville Electric
Residential	12.87	10.20	10.44	14.00	13.46	8.90
Small Commercial	19.48	10.28	10.84	17.09	18.69	n/a
Large Commercial	14.45	9.40	9.55	13.19	15.78	7.20
Industrial	12.40	7.54	7.41	12.47	12.19	6.00
Agricultural	19.75	9.54	n/a	15.79	13.54	n/a

Sacramento Regional Research Institute, March 2004.
Data Source: California Energy Commission and Roseville Electric.
 Note: (1) Pacific Gas and Electric
 (2) Sacramento Municipal Utility District
 (3) Los Angeles Department of Water & Power
 (4) San Diego Gas & Electric
 (5) Southern California Edison

City Council. Roseville Electric has some of the lowest energy prices in the State. For 90 years, Roseville Electric has assisted its customers in developing electrical plans and specifications, planning new facilities, or launching new businesses. Roseville Electric was recently honored by the Solar Electric Power Association for its leadership in raising public awareness about the benefits of solar power and was also recently recognized as the most reliable electric distribution system in the nation. A new gas-fired electricity generating facility is in the planning stages to add to the utility's independence from high-priced market rate purchasing.

Sacramento Municipal Utility District (SMUD) is Northern California's largest customer-owned electric utility. It has earned a reputation as an innovative, customer focused utility with a superior power reliability record. SMUD offers a stable transmission and distribution network and a diverse mix of power sources, including an extensive hydroelectric system. SMUD's rates are roughly 25 percent less than California's investor-owned utilities. SMUD offers a wide range of rate alternatives, including attractive economic development rate discounts for new and expanding companies, an optional unbundled time of use rate, a monthly market indexed rate for new load, a real time pricing rate with competitive hourly market prices for new load, a *Greenenergy* rate, and customer tailored rates. In addition, SMUD has a staff of experienced engineers, architects, energy specialists, and technicians who can work with a business to design energy efficient and optimal energy use into its facility and processes.

Natural Gas

PG&E provides natural gas to all of the Sacramento Region, as well as most of the state. The utility provides gas to the region without markup, as the price equals the wholesale rate plus the cost of transportation. PG&E has kept up with rapidly increasing demand over the last two years, increasing capacity from nearly 1.7 million cubic feet per day to 8.3 million cubic feet per day.

Water

In Sacramento County alone, over 30 public and private entities supply water services. These companies are organized as water maintenance districts, municipal water districts, irrigation districts, mutual water companies, and commercial water companies.

The City of Sacramento has surface water rights to the Sacramento and American Rivers, granted by permits from the California State Water Resources Control Board and secured with a permanent contract from the U.S. Bureau of Reclamation. A new \$31 million water intake facility on the Sacramento River, which is capable of drawing 161 million gallons of water per day, was recently completed in the City of Sacramento. Sutter County also benefits from excellent water quality pumped from the Feather River and treated for public distribution.

Most of the Sacramento Region enjoys an abundant water supply. Commercial water rates are among the lowest in the state. These low rates are a result of the area's proximity to major rivers and the ability to tap vast underground resources in the Sacramento Valley.

Figure 32 – PG&E Commercial/Industrial Natural Gas Rates

User Class	Summer ⁽¹⁾ Per Therm Charge		Winter ⁽²⁾ Per Therm Charge	
	First 4,000 Therms	Excess Therms	First 4,000 Therms	Excess Therms
Up to 20,800 Therms/Month ⁽³⁾	\$0.66047	\$0.57446	\$0.72135	\$0.61463
Above 20,800 Therms/Month ⁽⁴⁾	\$0.63643	\$0.55042	\$0.69731	\$0.59059

*Sacramento Regional Research Institute, March 2004.
 Data Source: PG&E, Schedules G-NR1 and G-NR2. Rates effective March 5, 2004.
 Note: Rates include gas procurement and transportation charge. Procurement charges change monthly.
 (1) April 1 through October 31.
 (2) November 1 through March 31.
 (3) Customer charge is an additional \$9.62-\$13.78/month.
 (4) Customer charge is an additional \$138.75-\$153.61/month.*

Figure 33 – Monthly Water Rates for 30,000 Cubic Feet with Two Inch Meter

Rocklin	\$311
Woodland.....	\$304
Marysville	\$271
Yuba City.....	\$265
Davis	\$260
Folsom	\$215
Sacramento	\$188
El Dorado Hills.....	\$179
Roseville	\$150

Sacramento Regional Research Institute, March 2004.
Data Sources: California Water Service Company
City of Folsom Department of Finance:
Utility Billing
City of Roseville Utility Finance Department
City of Woodland Public Works
Billing Department
El Dorado Irrigation District
Pacific Gas and Electric Company
Placer County Water Agency
Yuba City Public Works

Note: Costs as of March 2004.

Telecommunications

The Sacramento Region is considered to be one of the most “wired” metropolitan areas in the nation. Nearly all major industrial parks, tech parks, and office complexes and towers have redundant fiber optic service available. Partially because of the seismic and environmental stability in the region and its proximity to the tech center of the country, the San Francisco Bay Area, many major corporate headquarters have moved mission critical systems, back-up server systems, and data storage facilities to the Sacramento Region.

Transportation and Logistics

Very few inland metropolitan areas benefit from a transportation network as developed and accessible as that in the Sacramento Region. Interstate freeways, transcontinental railways, a deep-water shipping channel, and an international airport give the region access to many major markets. Four major highways allow one-day freight delivery throughout California. This makes the Sacramento Region a major hub for logistics and distribution facilities. Similarly, the Port of Sacramento provides deep-draft ship access for both bulk manufactured and agricultural products.

Figure 34 – Sacramento Region Major Distributors

United Parcel Service	West Sacramento	1,475
Blue Diamond Growers	Sacramento	900
Rite Aid Corporation	Woodland	547
Sacramento Coca-Cola Bottling Company Inc	Sacramento	425
FedEx Freight West Inc.	West Sacramento	334
Tony’s Fine Foods	West Sacramento	250
VPD (Video Products Distributors)	Folsom	180
Hewlett Packard	Woodland	80

Source: Above Listed Companies, Sacramento Regional Research Institute (SRRI), March 2004

Overall, Sacramento Region's links to major markets throughout the globe are extensive, creating a competitive advantage for businesses located in the area. Very few metropolitan areas in the nation can claim to have an international airport, rail hub, seaport, and junction of three transnational freeways within ten miles of the downtown area.

Highways

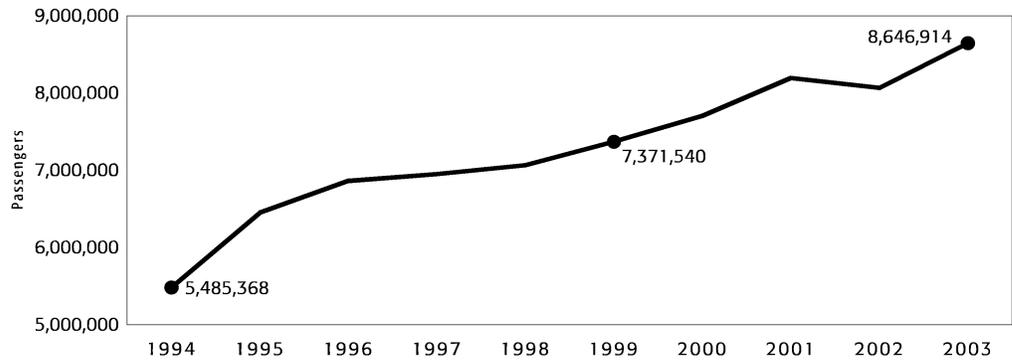
The intersection of several major highways makes the Sacramento Region an excellent center for freight distribution. Interstate 5 provides a direct route to Seattle, Portland and Los Angeles. Interstate 80 permits one-day travel to Reno, Salt Lake City, and the San Francisco Bay Area. Lake Tahoe and Nevada are reachable within two hours on both Interstate 80 and Highway 50. Highway 99 provides quick access to the San Joaquin and upper Sacramento Valleys.

Figure 35 – Sacramento Region Major Trucking Companies

Matheson Trucking Inc.	1,500
Con-Way Western Express Inc.	130

Source: Sacramento Regional Research Institute (SRRI)

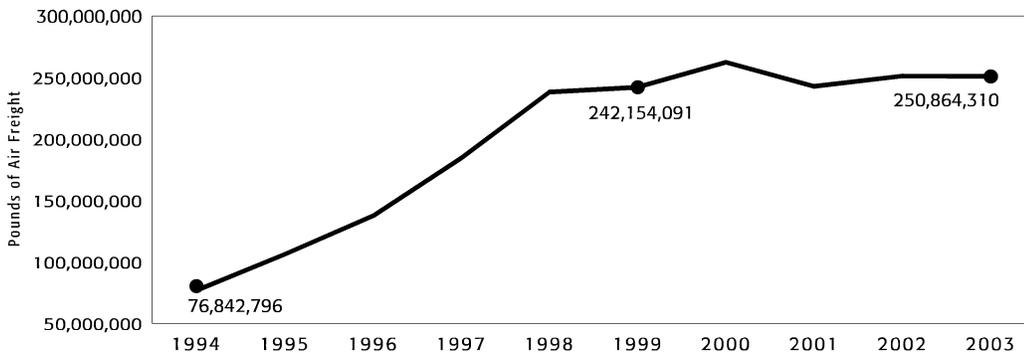
Figure 36 – Total Passengers
Sacramento International Airport



Data Source: Sacramento County Airport System.

Figure 37 – Total Air Freight

Sacramento International Airport & Mather Airport



Data Source: Sacramento County Airport System.

Airports

Sacramento International, Mather Airport and Sacramento Executive are all operated by the Sacramento County Department of Airports. Sacramento International is a commercial passenger air carrier facility offering non-stop or connecting service to every major city in the United States. It has recently added several new non-stop flights to its schedule, including New York City, Newark, Washington D.C., Honolulu and Guadalajara, to name just a few. Sacramento International Airport occupies approximately 5,500 acres of land, including a buffer zone of agricultural land allowing for expansion without the problems of encroachment or incompatible land use. Two 8,600 foot precision instrument runways serve the airport, providing the capability for handling over 400,000 annual operations. Sacramento International Airport continues to expand and improve with its growing customer base. In the summer of 2004, a new multi-story, 5,300 stall parking garage was completed, initiating the \$1.6 billion terminal modernization project. Mather Airport is a former Air Force Base which has been converted to an air cargo and general aviation center. Sacramento Executive is a general aviation facility serving smaller privately-owned aircrafts.

Figure 38 – U.S. Airports Ranked by Travel Growth (1993–2002 and 2002–2003)

1	Chicago, IL (Midway)	190.6
3	Miami / Ft. Lauderdale, FL (Ft. Lauderdale-Hollywood Intl.)	107.4
5	Oakland, CA (Oakland Metropolitan Intl.)	82.9
7	Washington, DC (Dulles Intl.)	73.9
9	Atlanta, GA (Hartsfield Intl.)	71.5
11	Tampa, FL (Tampa Intl.)	60.1
13	Phoenix, AZ (Phoenix Sky Harbor Intl.)	52.1
15	Santa Ana, CA (John Wayne Intl.)	47.9
<i>Note: Growth figures from passenger enplanments.</i>		
<i>Source: U.S. Department of Transportation, Bureau of Transportation Statistics.</i>		

1	Washington, DC (Dulles Intl.)	28.2
3	Chicago, IL (Midway)	10.6
5	Washington, DC (Ronald Reagan National)	9.3
7	Santa Ana, CA (John Wayne Intl.)	8.5
9	Cincinnati, OH (Greater Cincinnati)	8.1
11	Sacramento, CA (Sacramento Intl.)	7.6
13	Las Vegas, NV (McCarran Intl.)	7.2
15	Miami / Ft. Lauderdale, FL (Ft. Lauderdale-Hollywood Intl.)	5.0
<i>Note: Growth figures from passenger enplanments.</i>		
<i>Source: U.S. Department of Transportation, Bureau of Transportation Statistics.</i>		

Port of Sacramento

Located in West Sacramento, less than two miles from downtown Sacramento and one mile from the connection of Interstate 5, Interstate 80 and Highway 50, the Port of Sacramento provides deep water channel access to the Delta region, San Francisco Bay, and the Pacific Ocean. The Port is also connected to major railways, operating on the Port's own track system and 200 car marshalling system.

A variety of bulk and break bulk cargo move through the Port's five berths. The major commodities supported by the Port are wood chips, wheat, fertilizers, clay, logs, newsprint, and animal feeds. It also supports one of the largest rice growing regions in the world, the northern Sacramento Valley.

Located 79 nautical miles northeast of the San Francisco Bay, the inland Port of Sacramento provides environmental protection, enabling it to handle many sensitive cargos. Ship loaders, warehouses, and enclosed conveyor systems are equipped with dust collection equipment.

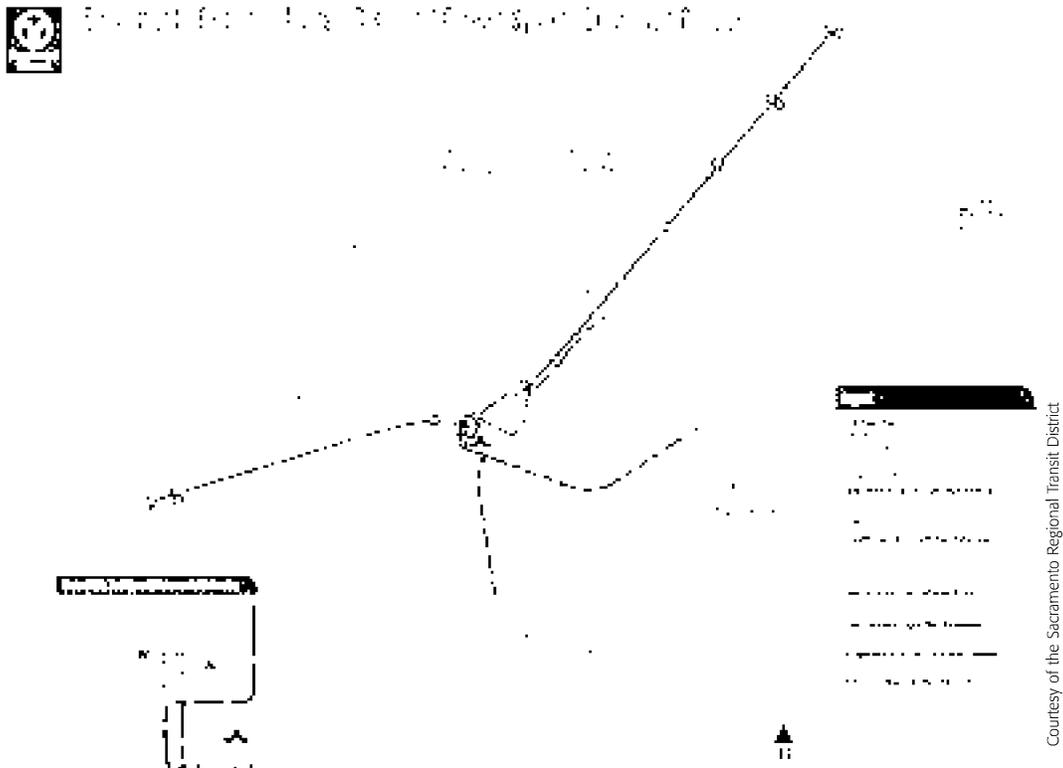
Public Transit

The major public transit system in the Sacramento Region is Sacramento Regional Transit (RT). Additional service is also provided by several other small public and private transit carriers. RT's service area covers a 340 square mile area with a population of over 1.2 million.

RT operates 240 buses and 65 light rail vehicles, transporting over 27 million passengers annually. Significant expansions to light rail are underway to its current 27 mile system. Recently completed was its extension to South Sacramento County, and underway or in the planning stages are projects to extend service to Folsom, Elk Grove, Roseville, Davis, and Sacramento International Airport.

At the same time, RT is continuing to make strides to clean up Sacramento's air by completely phasing out diesel fueled vehicles. Two hundred and twenty of its 240 buses and 100 percent of its light rail service use clean air technology.

Transportation in the Greater Sacramento Area



Courtesy of the Sacramento Regional Transit District