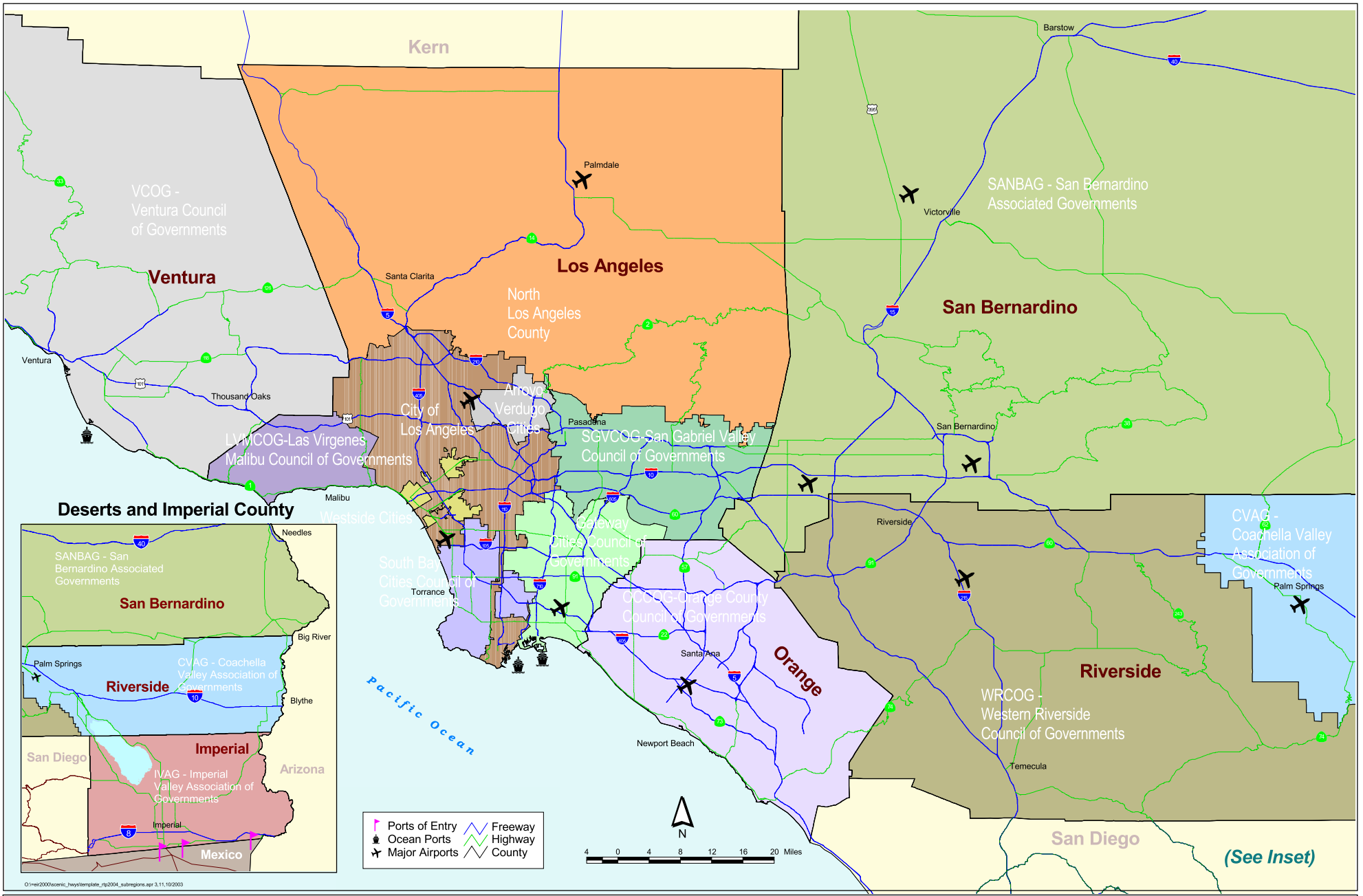

The SCAG Region and Subregions

Figure 2.1-1

Source: SCAG 2002, Thomas Bros. Network

SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS

2004 RTP PEIR

Lane Connector

Base Year (Existing)

Plan

2030 High Occupancy Vehicle (HOV) Lane System

Figure 2.1-2

SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS

2004 RTP PEIR

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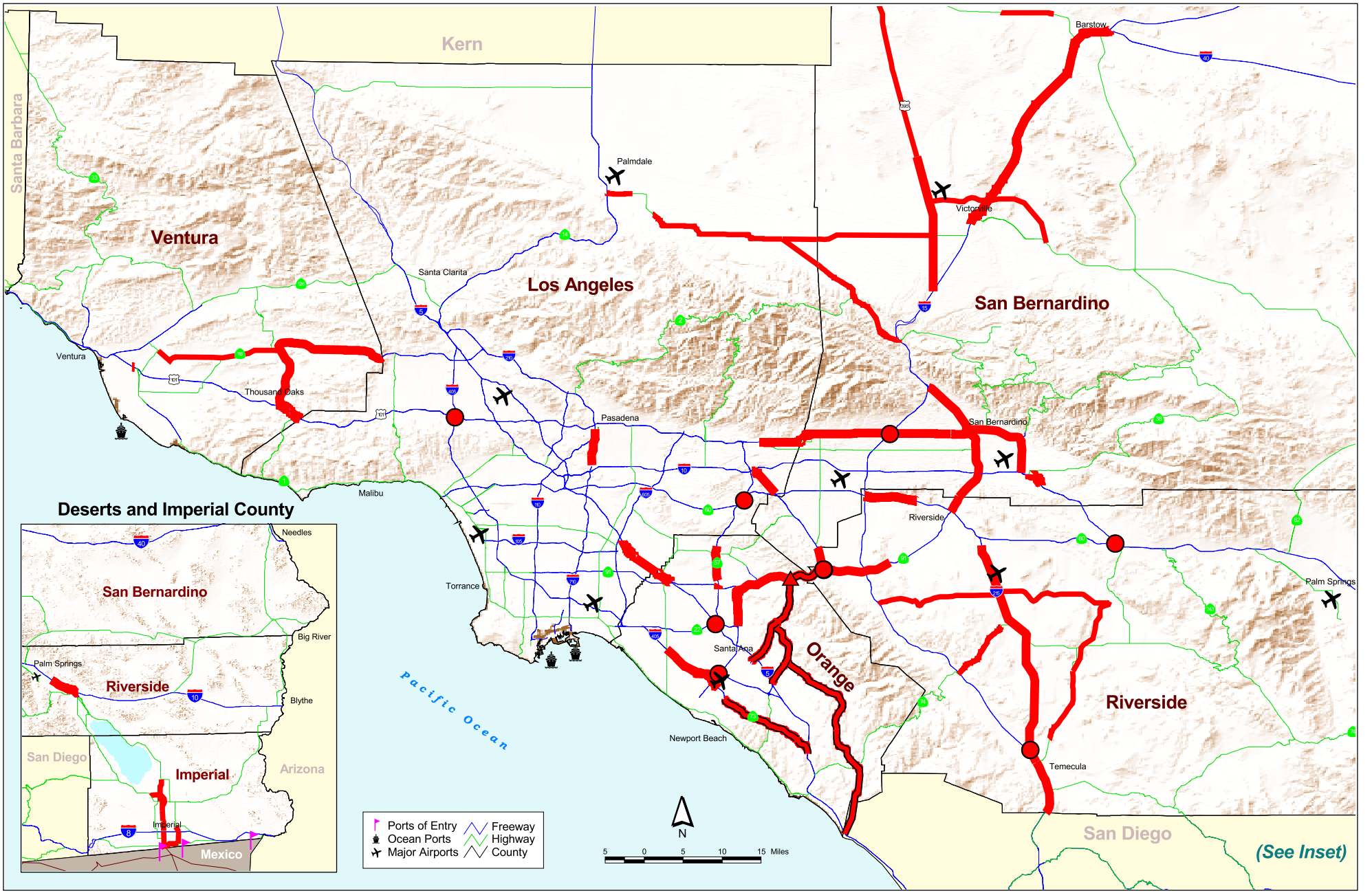


	Mixed Flow Lane	Inter-change	Toll Lane	Toll Connector
Plan				

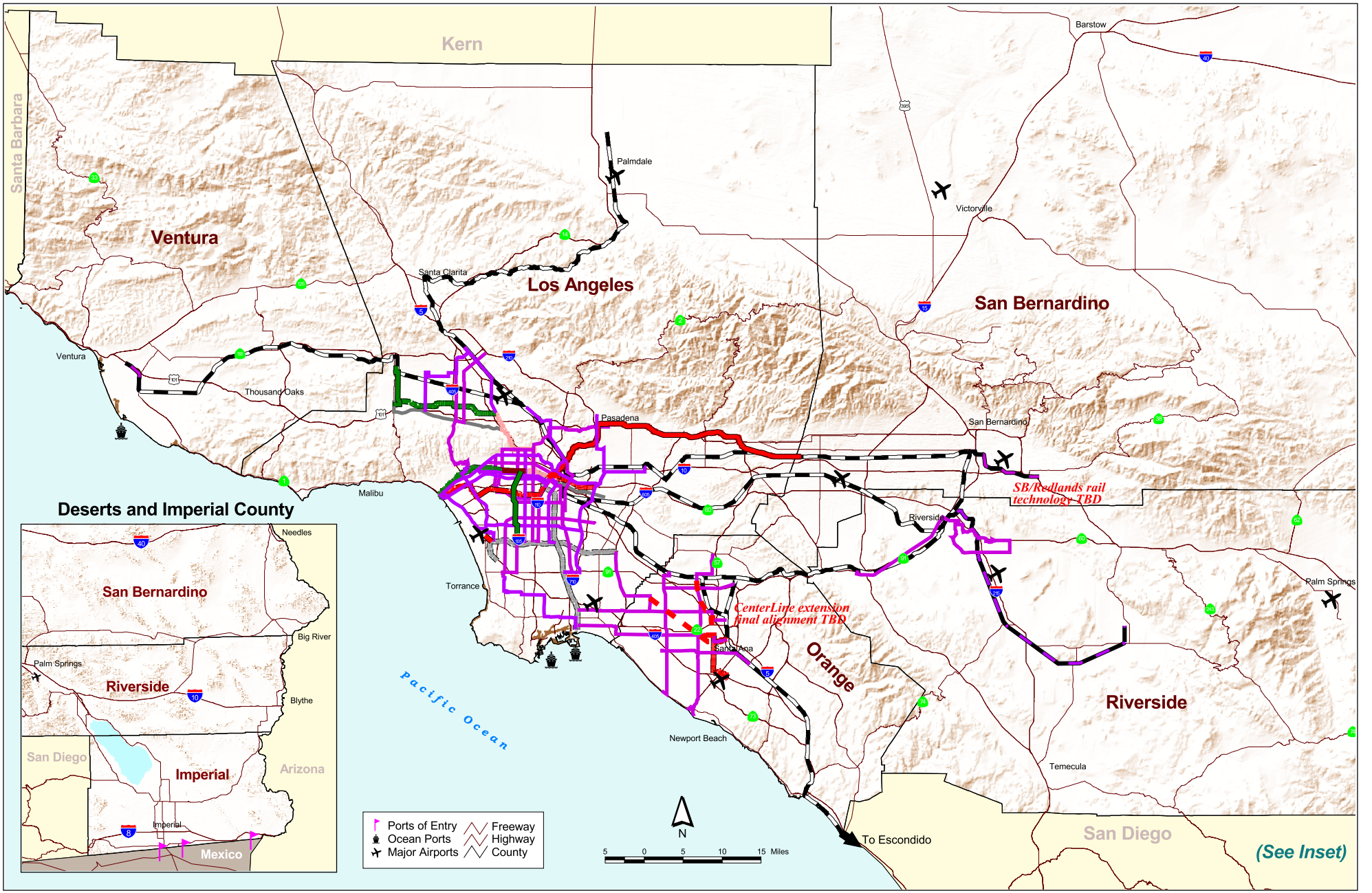
2030 Mixed Flow Improvements

Figure 2.1-3

SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS

2004 RTP PEIR

M:\Law\Apro\2004RTP\Peir\mixedflow.apr 11/13/03



	Light Rail	Heavy Rail	Transit-way	Bus Rapid Transit	Commuter Rail
Base Year (Existing)					
Plan					

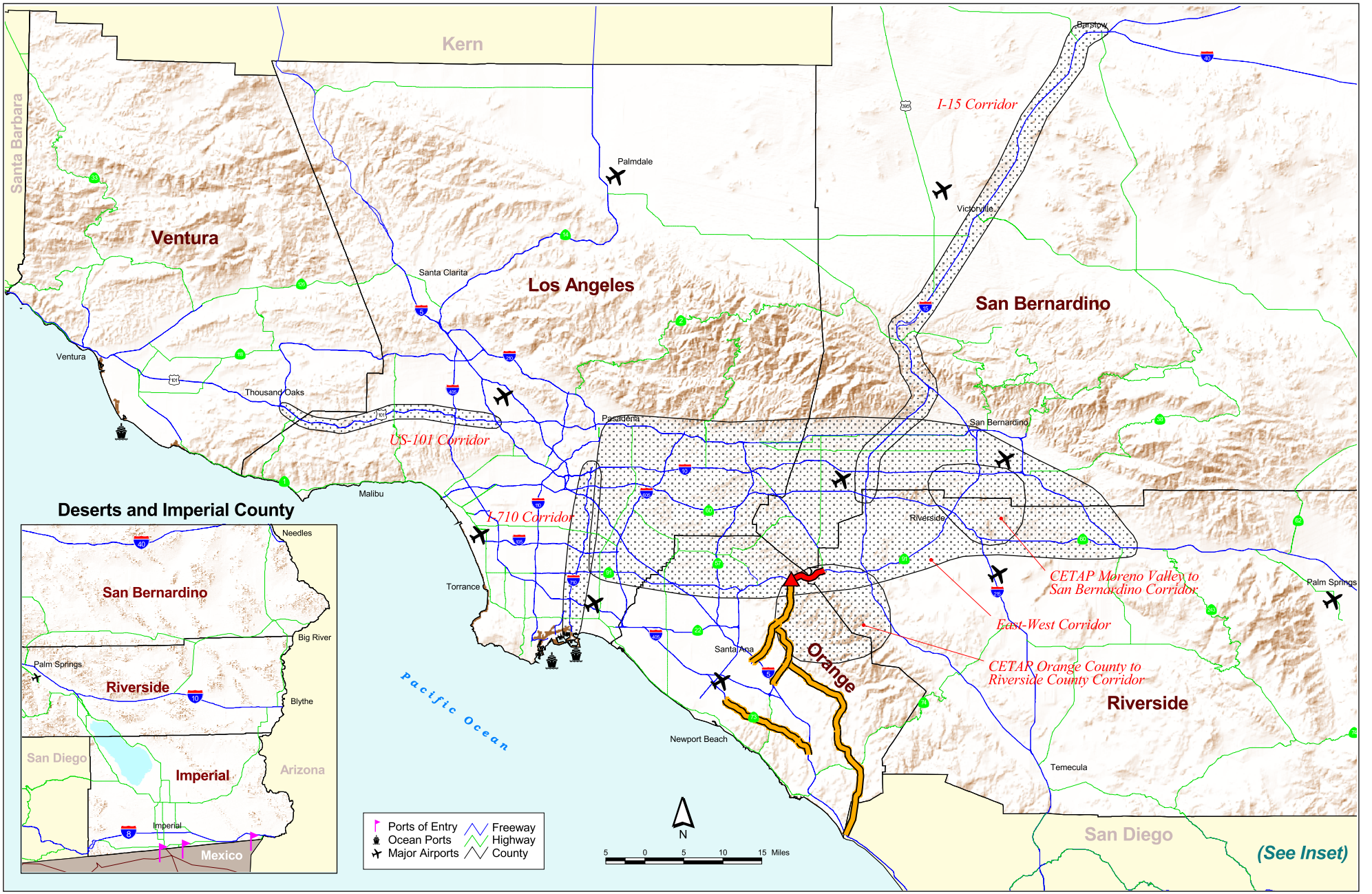
2030 Transit Corridor System

Figure 2.1-4

SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS

2004 RTP PEIR

M:\Law\Aprs\2004RTP\Peir\transit.apr 11/13/03



	Toll Lane	Toll Connector	Corridor (final alignment TBD)
Tier 2			
Plan			

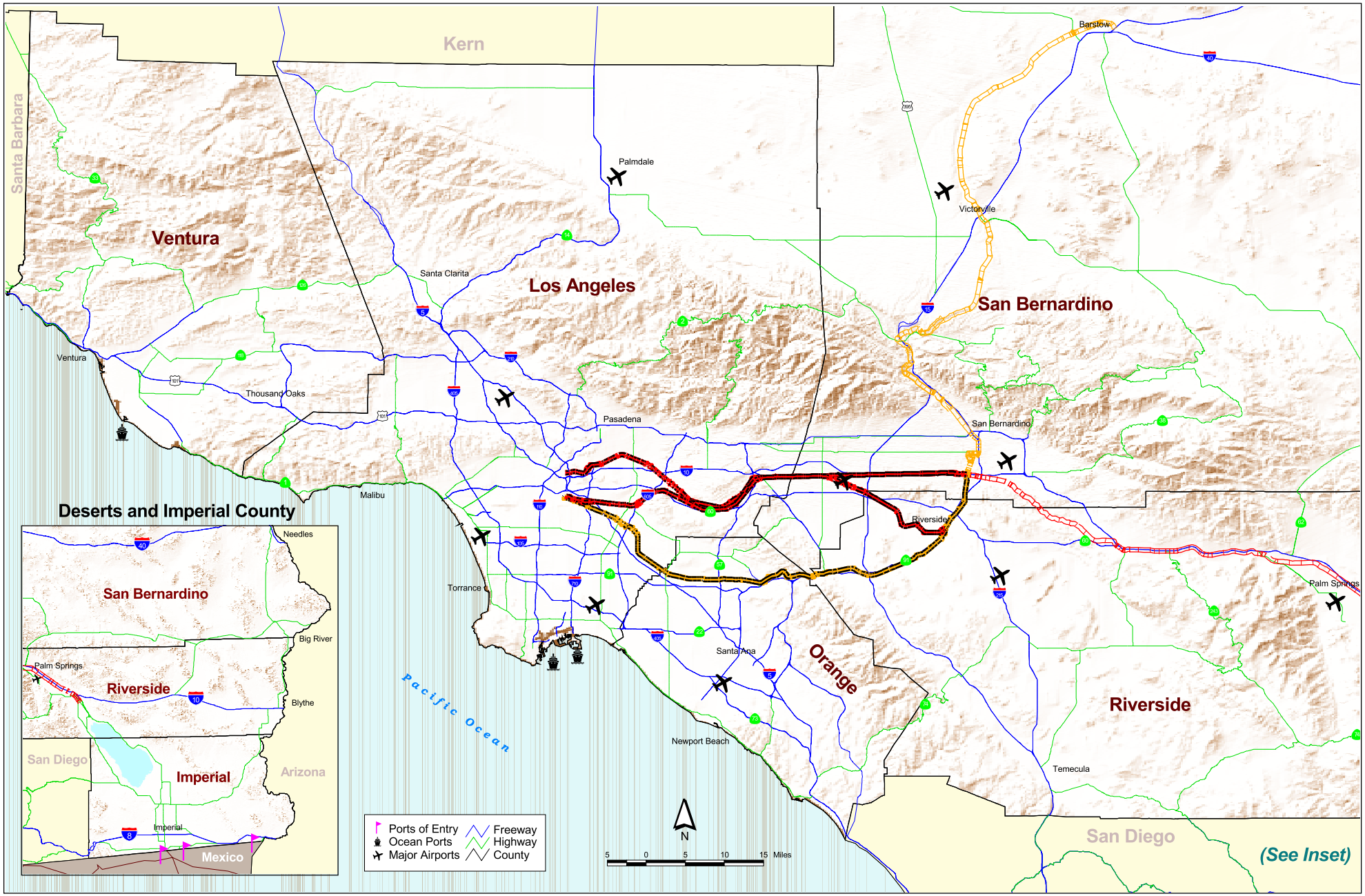
2030 User Fee-Backed Capacity Improvements

Figure 2.1-5

SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS

2004 RTP PEIR

M:\Law\Aprs\2004RTP\Peir\userfeecapacity.apr 11/13/03



BNSF Mainline

Union Pacific Mainline

BNSF Mainline Study In Progress

Union Pacific Mainline Study In Progress

2030 Mainline Freight Rail System Improvements

Figure 2.1-6

SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS

2004 RTP PEIR

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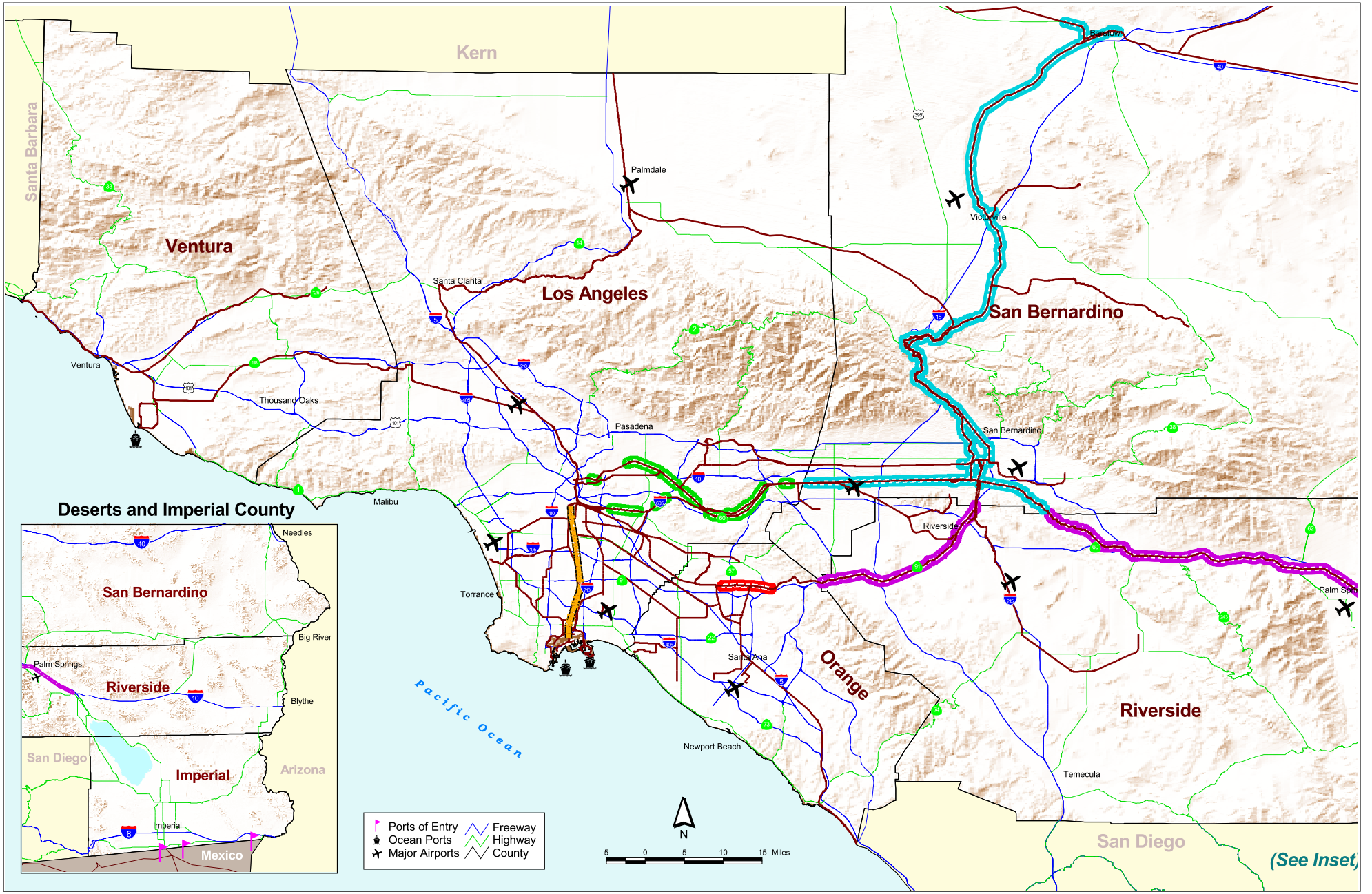

Rail Line

Alameda Corridor

Alameda Corridor East

OnTrac

Riverside County

San Bernardino County

2030 Grade Separations

Figure 2.1-7

SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS

2004 RTP PEIR

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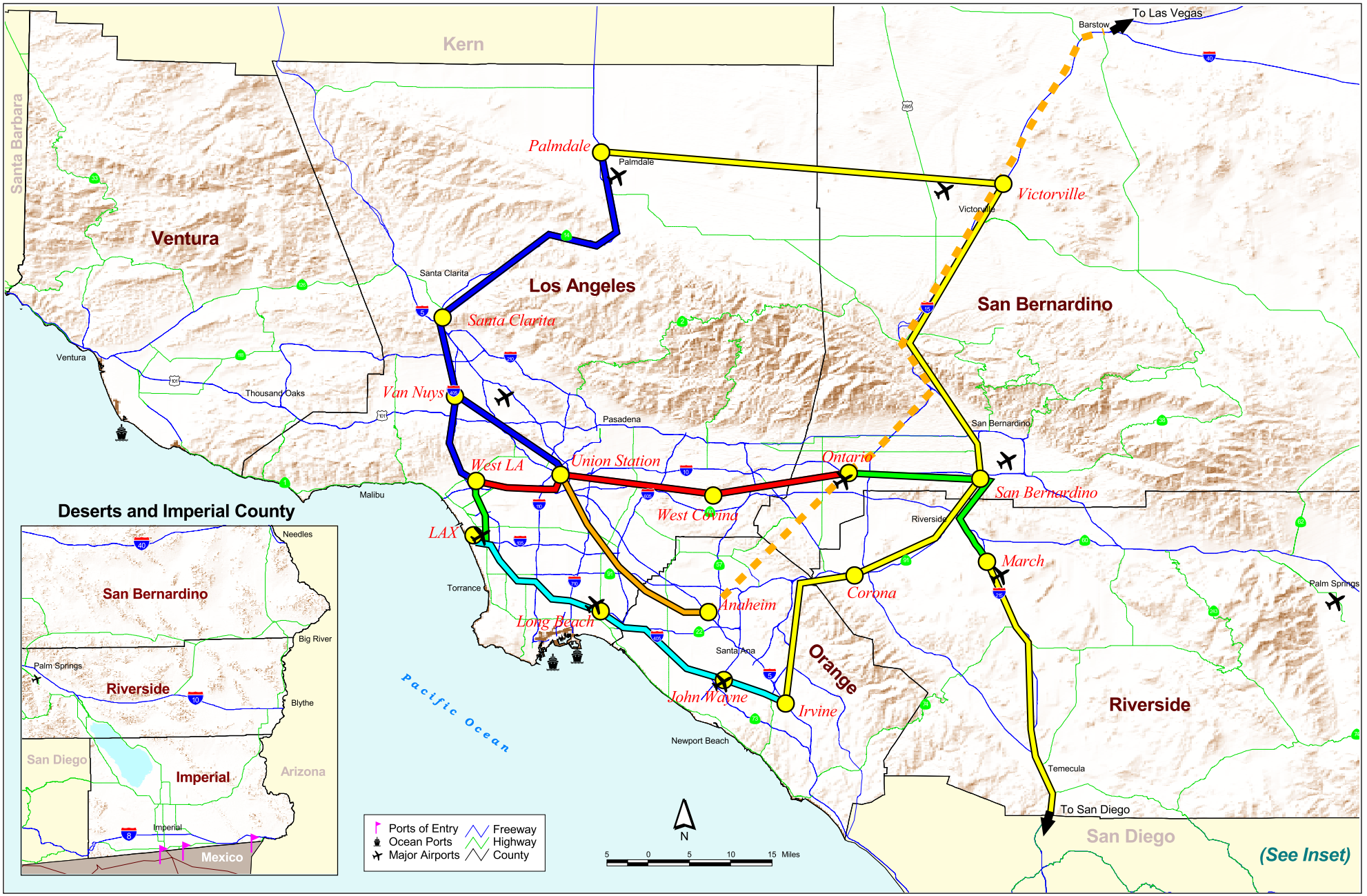

Station
IOS (by 2018)
LAX to March (by 2020)
LAX to Palmdale (by 2024)
LAX to John Wayne Airport to Irvine Transp. Center (by 2030)
LA Union Station to Central Orange County (by 2030)
Anaheim to Las Vegas/Alliance (under study)
Long-Term (Post-2030)

Maglev High-Speed Rail System

Figure 2.1-8

SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS

2004 RTP PEIR

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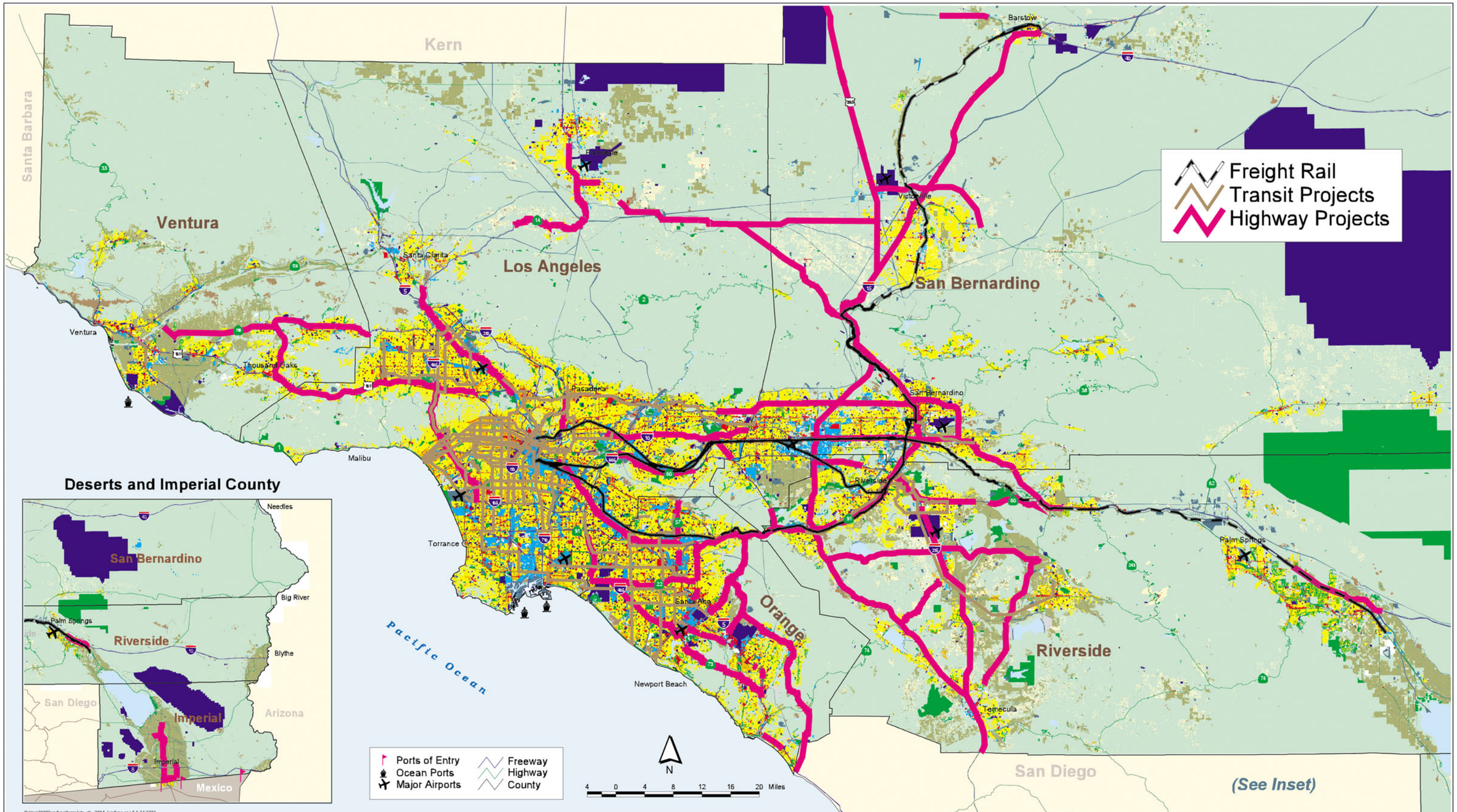


No Data
Agriculture
Commercial
Extraction
Industrial
Low Density Residential
Medium to High Density Residential
Open Space & Recreation
Public Facilities & Institutions
Rural Density Residential
Transportation & Utilities
Under Construction
Water & Floodways
Vacant

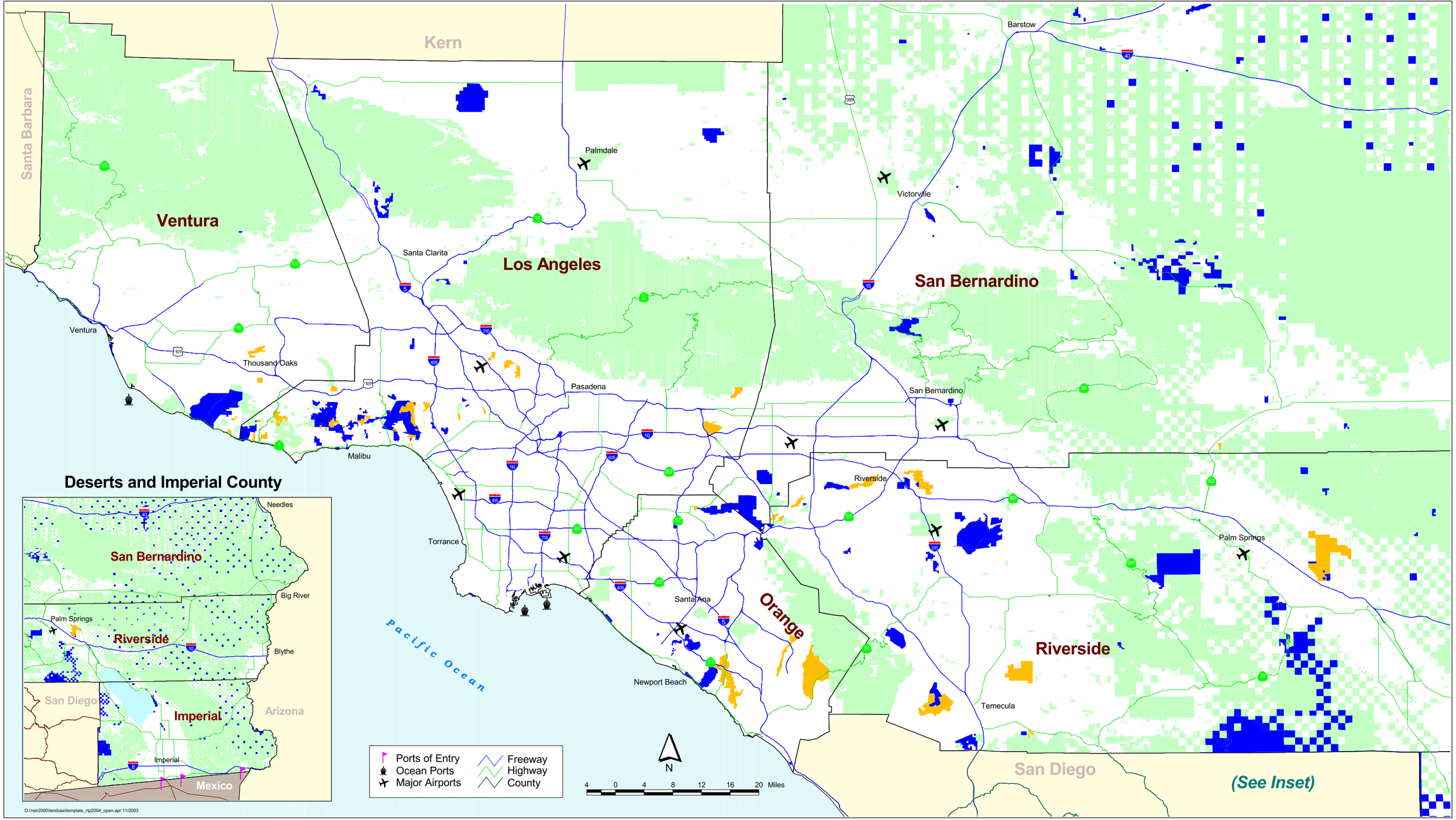
Source: SCAG's Aerial Land Use 2000, Thomas Bros. Network

Existing Land Use Patterns

Figure 3.1-1

SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS

2004 RTP PEIR



Federal
State
Regional/Local

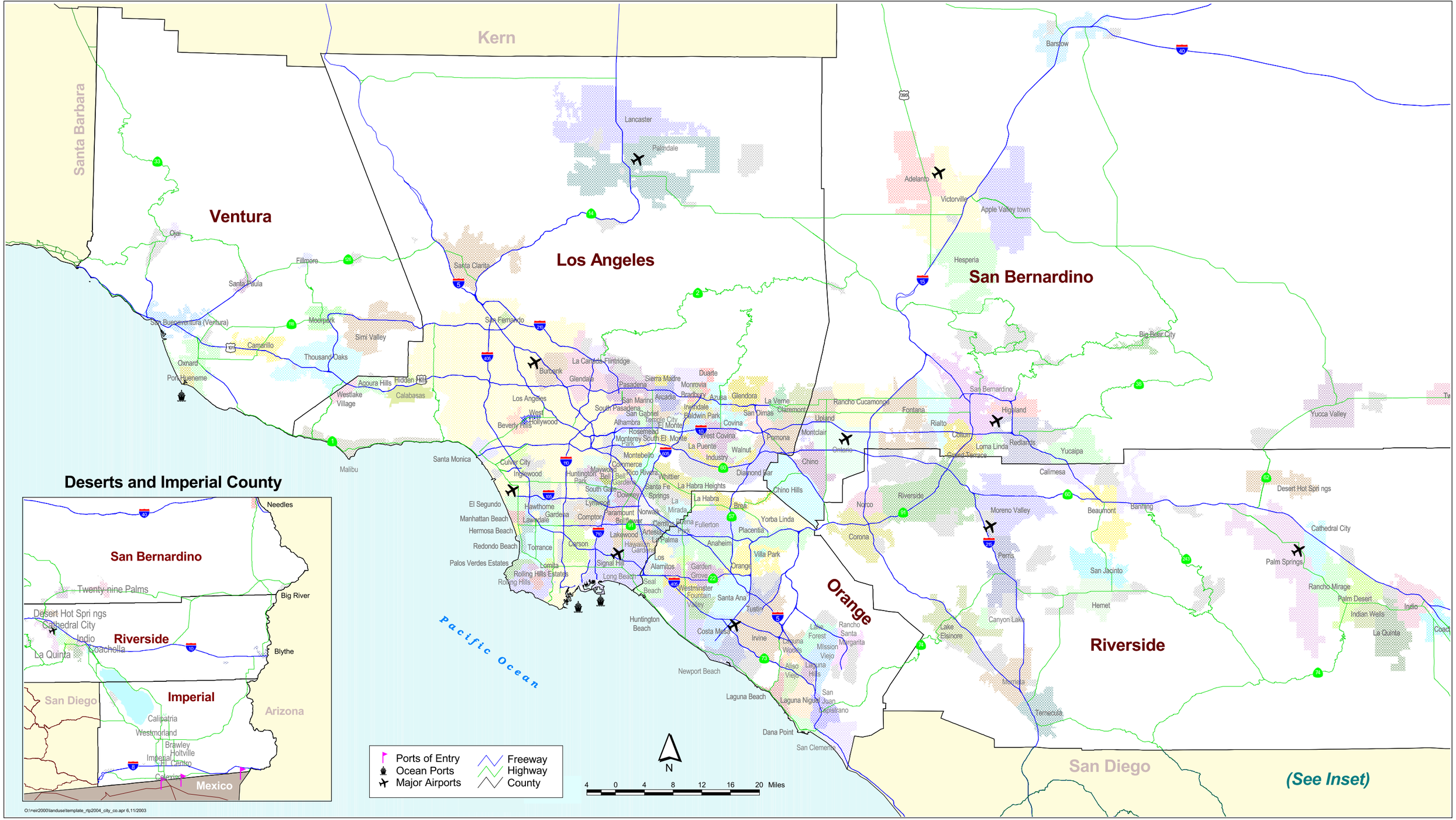
Source: University of California, Santa Barbara's 1999 GAP Database
Thomas Bros. Network

Open Space and Recreation Lands

Figure 3.1-2

SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS

2004 RTP PEIR



City Boundaries

Census Designated Place Boundaries

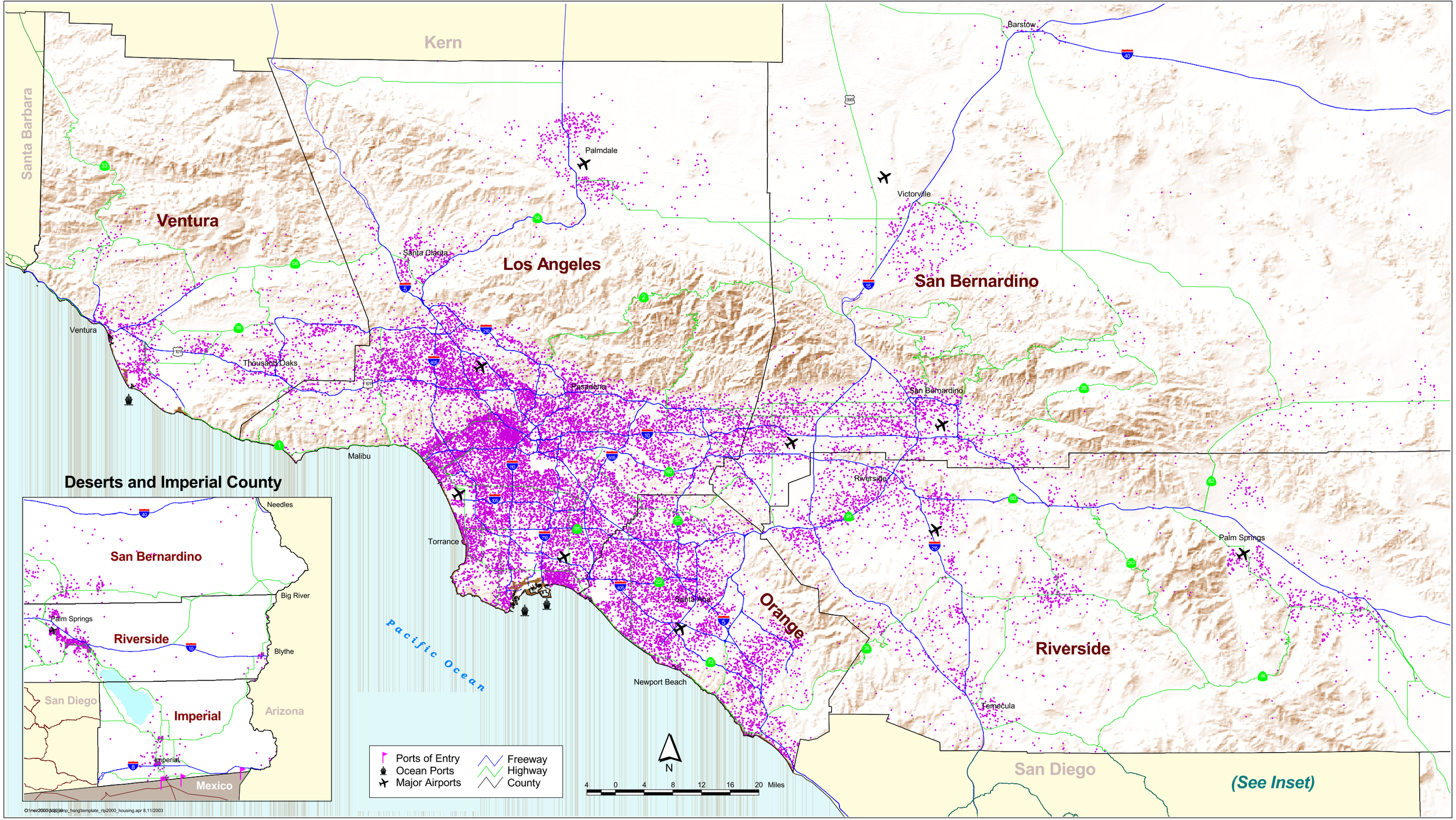
Source: 2000 Census
Thomas Bros. Network

City Boundaries

Figure 3.1-3

SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS

2004 RTP PEIR



Households

Note: 1 Dot = 200 Households

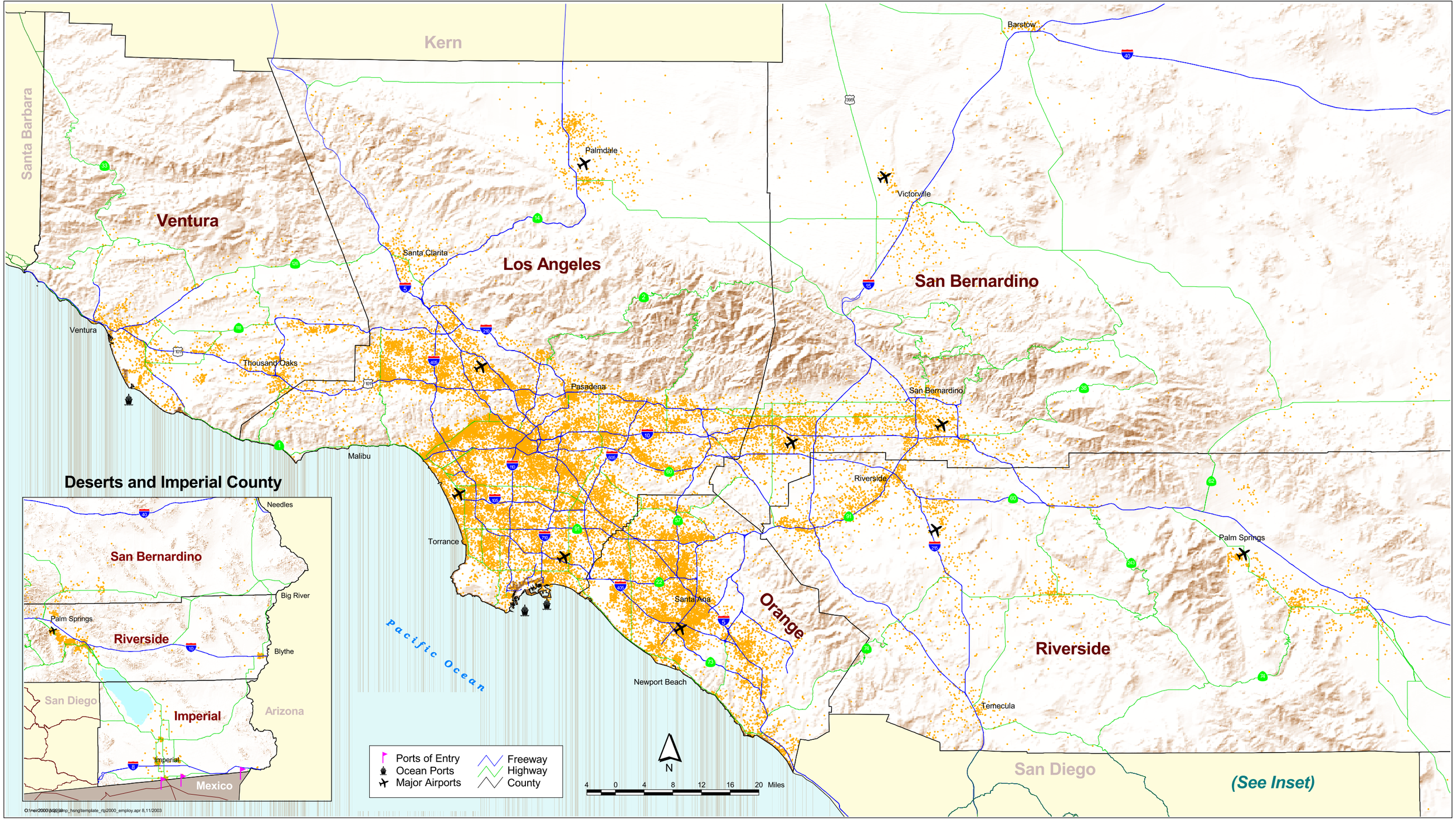
Source: Census 2000,
Thomas Bros. Network

2000 Household Density by Census Tract

SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS

2004 RTP PEIR

Figure 3.1-4



Jobs

Note: 1 Dot = 200 Jobs

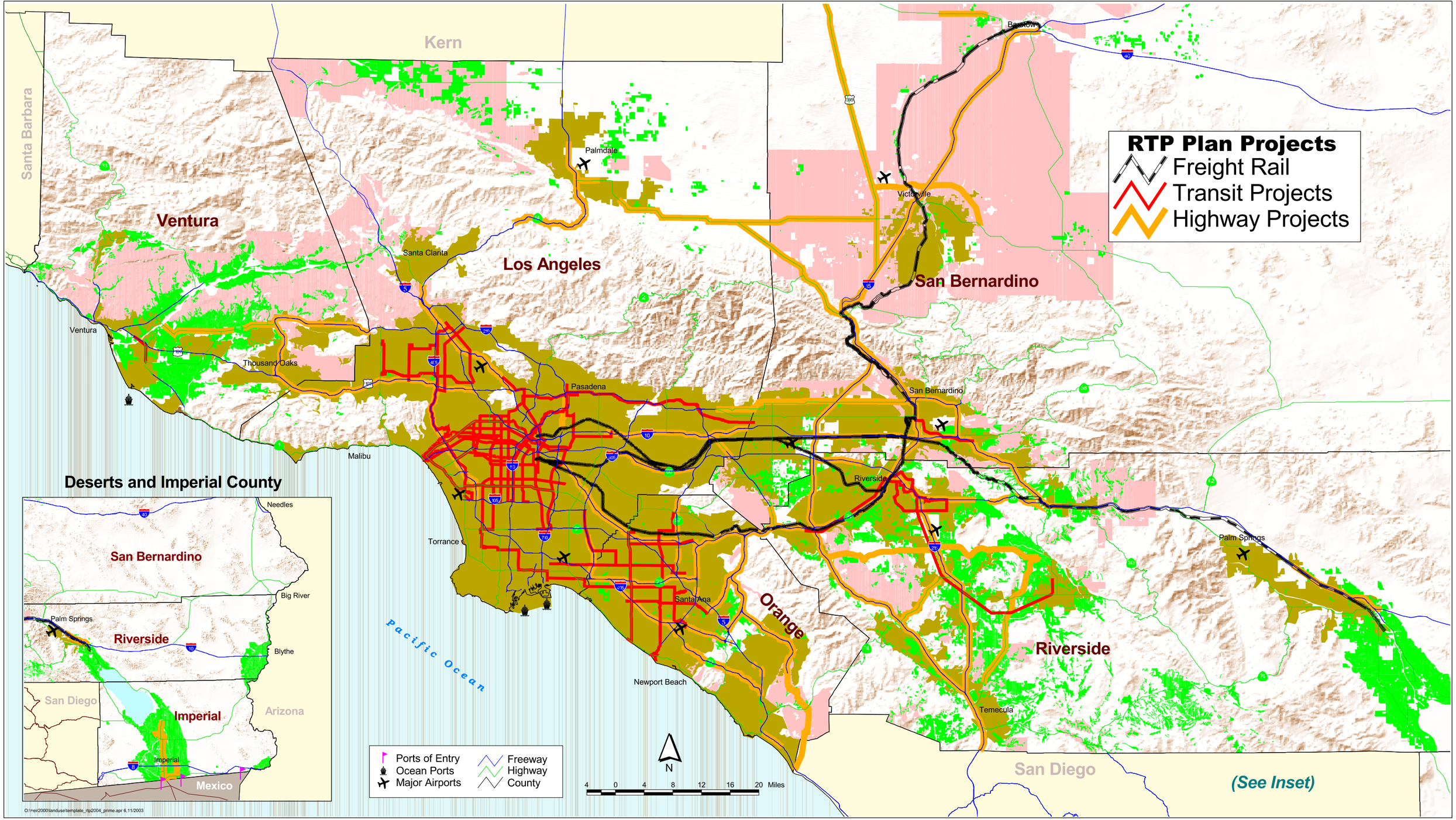
2000 Employment Density by Census Tract

SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS

2004 RTP PEIR

Source: Census 2000,
Thomas Bros. Network

Figure 3.1-5



Prime Agricultural
Grazing Land
Urbanized Area

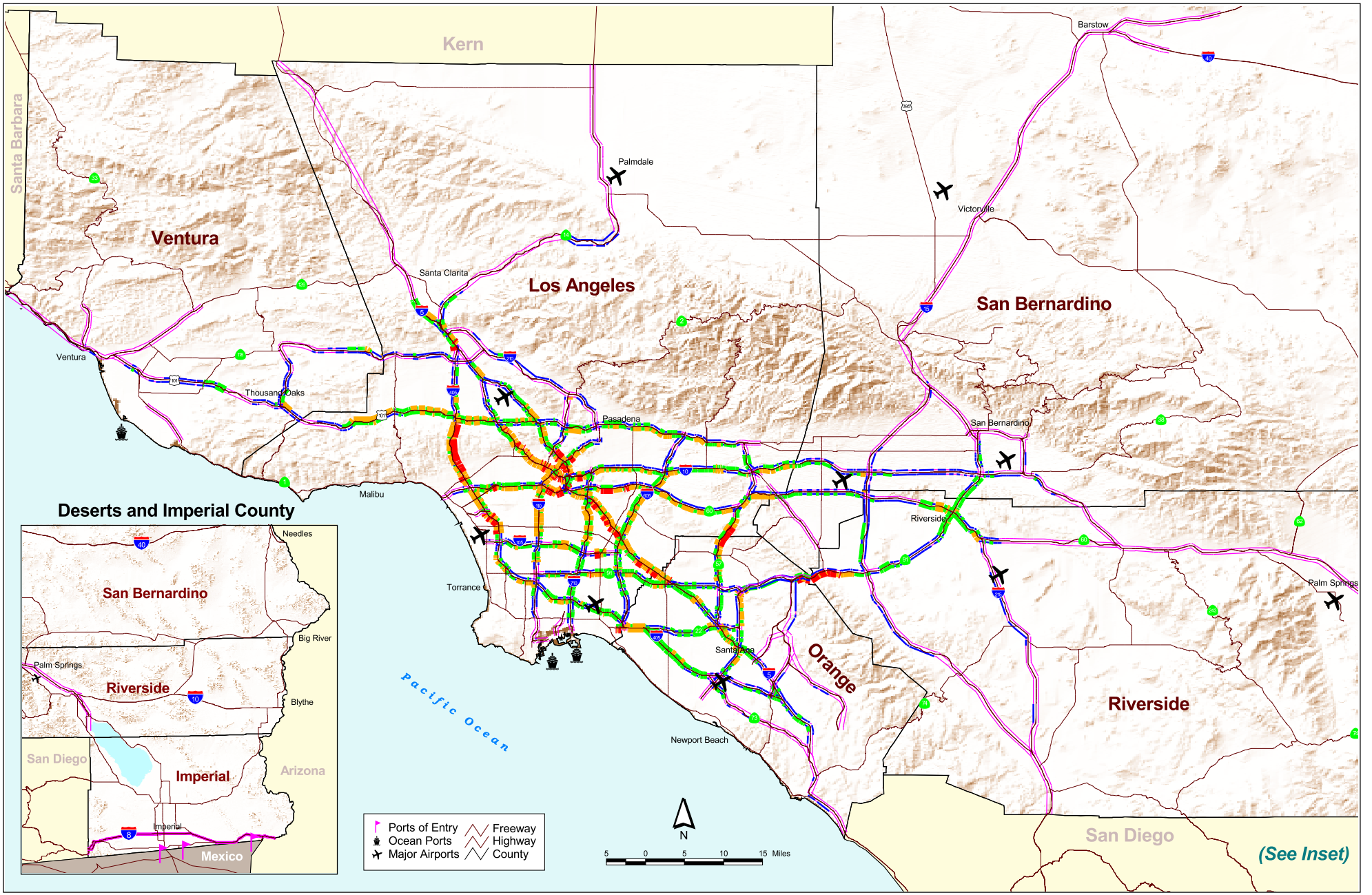
Prime Agricultural Farm Land and Grazing Land

SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS

2004 RTP PEIR

Source: State of California, Dept of Conservation, FMMP, 2001
Census 2000, Thomas Bros. Network

Figure 3.1-6



PM Peak Congested Speed (mph)
- Less than 15
- 15 to 24
- 25 to 34
- 35 to 44
- 45 to 54
- 55 or Greater

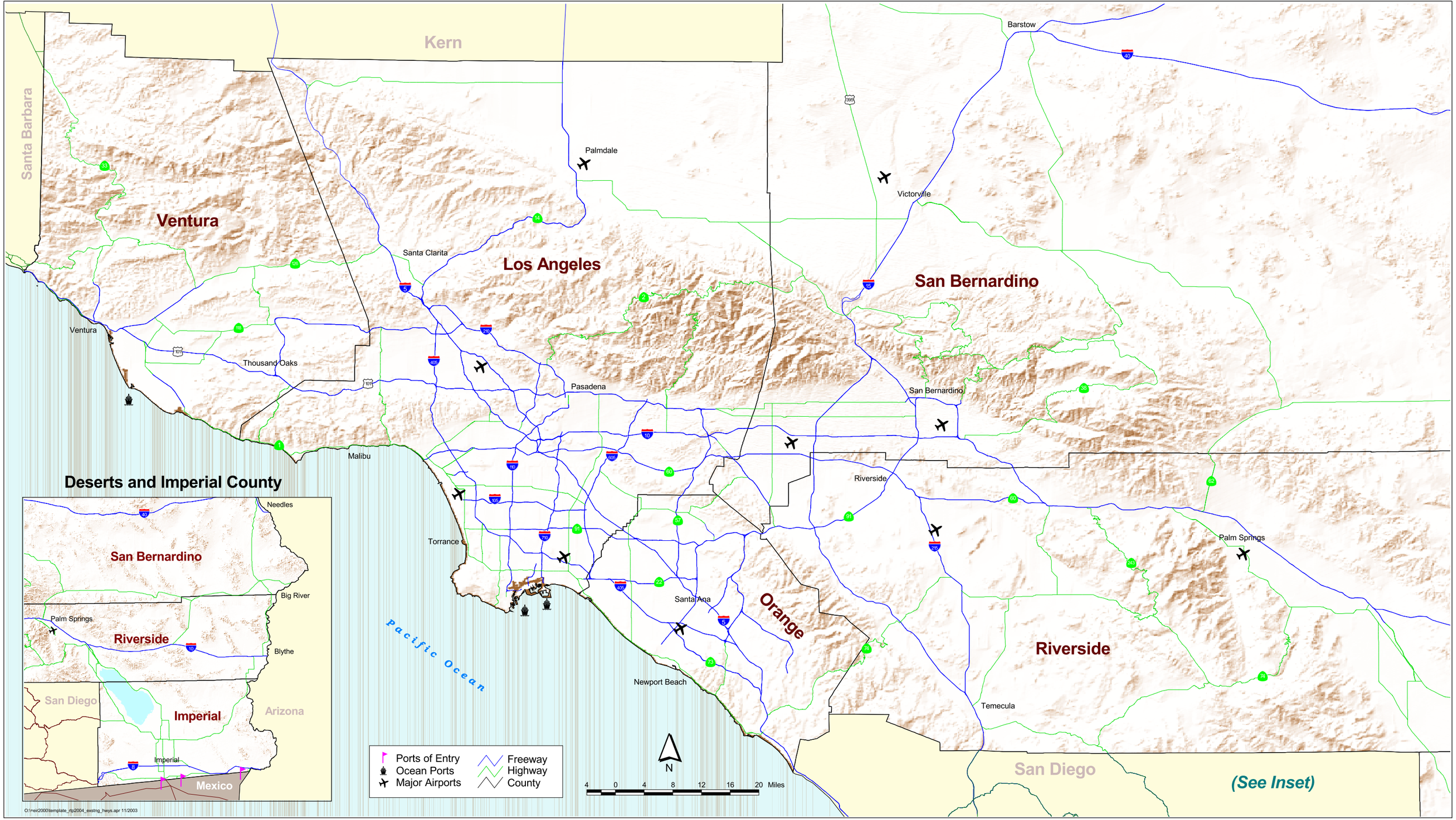
2000 Base Year Freeway Speed PM Peak (3pm to 7pm)

Figure 3.3-1

SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS

2004 RTP PEIR

M:\Lawi\Aprs 09/20/03



Existing (2000) Highway System

Source: Thomas Bros. Network

Figure 3.3-2

SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS

2004 RTP PEIR

Bus Rapid Transit
Commuter Rail
Heavy Rail
Light Rail

Source: SCAG's RTP 2003
Thomas Bros. Network

Existing (2000) Transit System

Figure 3.3-3

SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS

2004 RTP PEIR

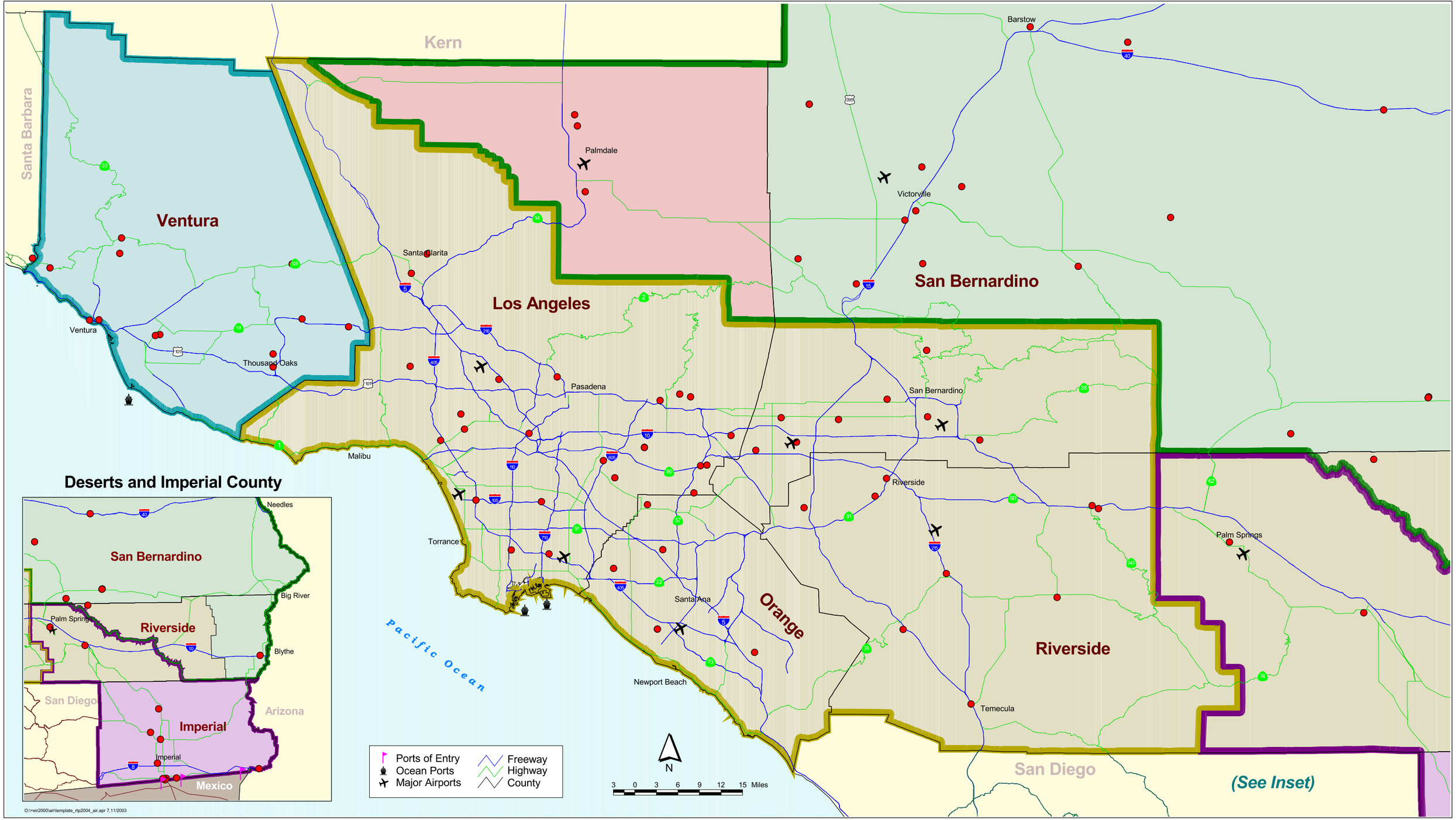
Major Airports

Figure 3.3-4

Source: SCAG
Thomas Bros. Network

SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS

2004 RTP PEIR



Air Districts
- AVAQMD
- ICAPCD
- MDAQMD
- SCAQMD
- VCAPCD

Air Basins
- MDAB
- SCAB
- SSAB
- VC SCCAB

● Monitoring Station

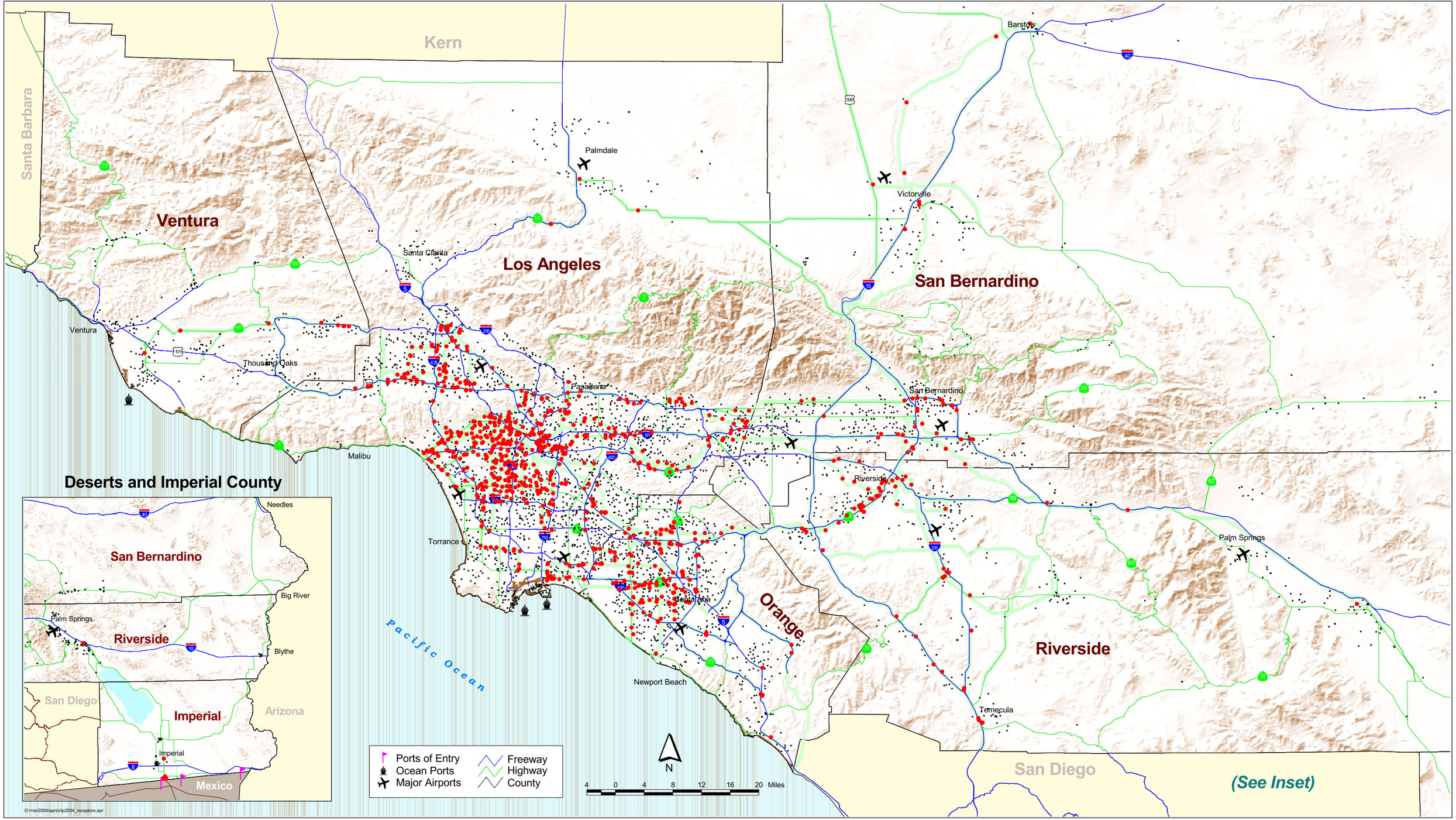
Source: California Air Resources Board and Air Districts, 2002
Note: The MDAB covers the entire county of San Bernardino.

Air Quality Districts, Basins, and Monitoring Stations

Figure 3.4-1

SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS

2004 RTP PEIR



Sensitive Receptors Intersecting the Buffer
Sensitive Receptors
1/4 Mile Buffer of 2030 Plan Freeway, Transit, and Freight Rail Projects

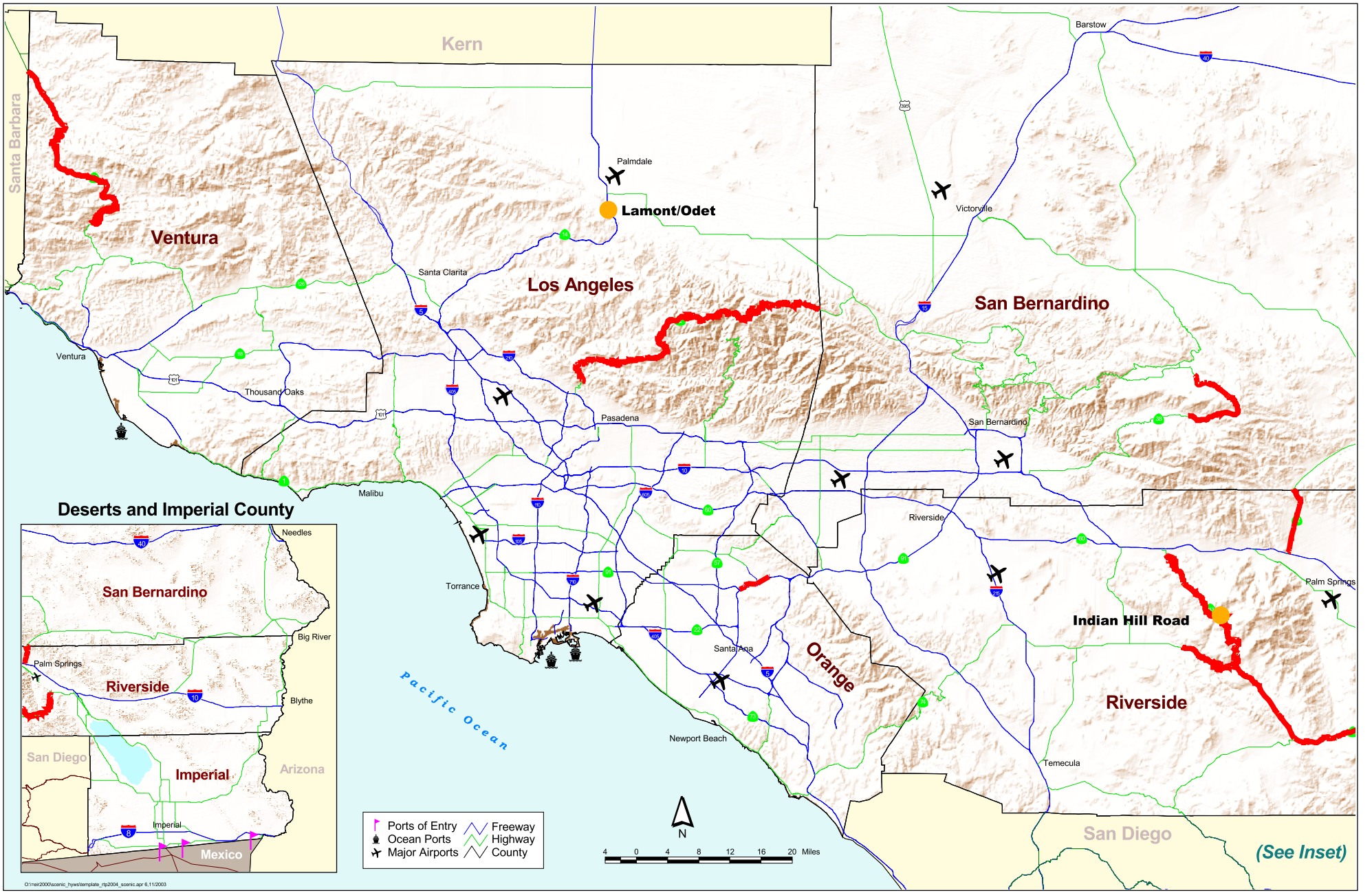
Source: Thomas Bros. Cultural Points Digital Data File, Thomas Bros. Network 2001

Potentially Impacted Sensitive Receptors

Figure 3.4-2

SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS

2004 RTP PEIR



Scenic Highways

California Designated Vista Points

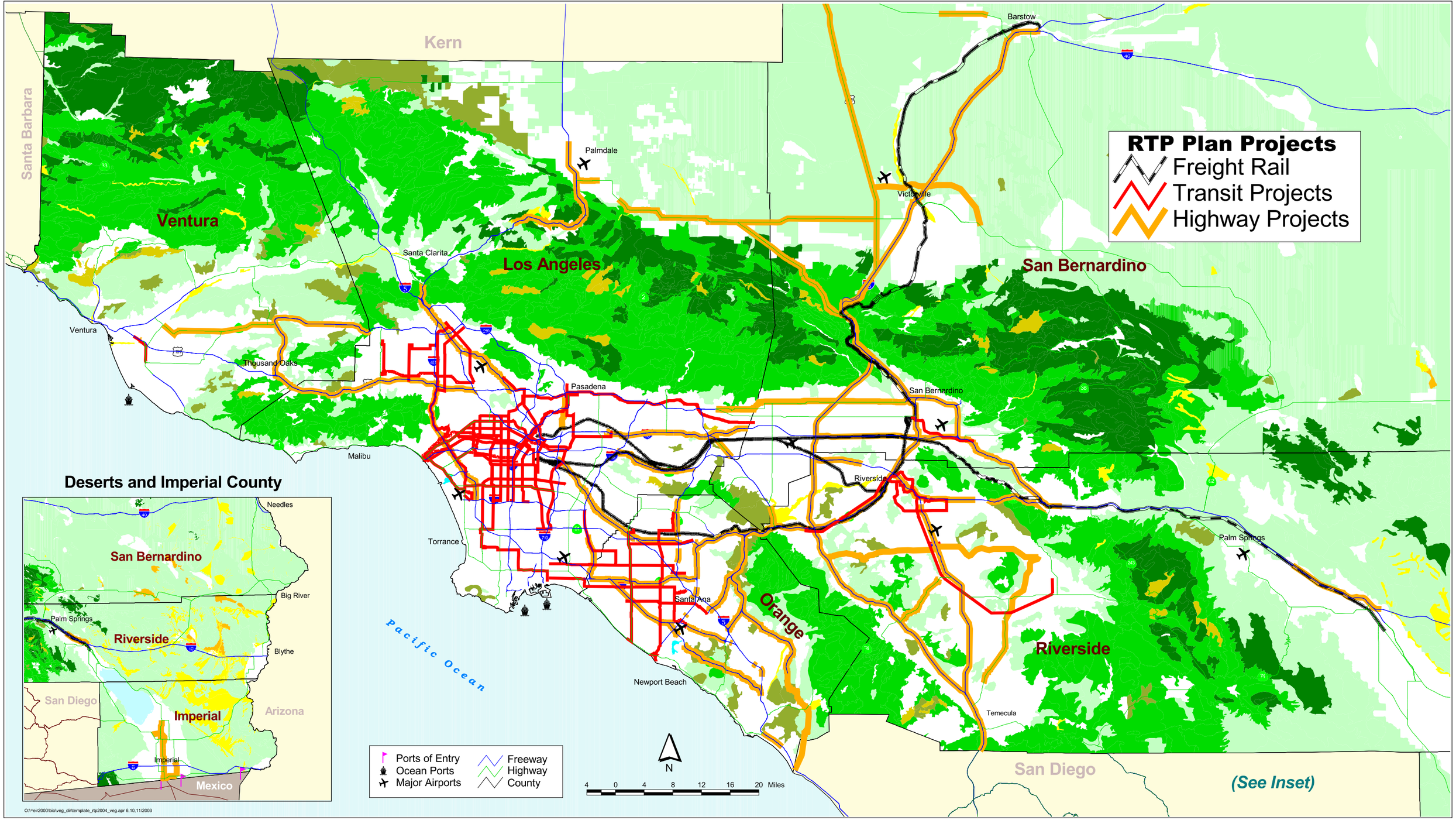
Designated Scenic Highways and Vista Points

Source: Caltrans, GIS Unit, District 7, 2002 Thomas Bros. Network

Figure 3.6-1

SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS

2004 RTP PEIR



Chaparral
Conifer Forests and Woodlands
Desert Dunes
Grassland
Not Classified
Hardwood Forests and Woodlands
Riparian Forest and Scrub
Scrub
Wetland

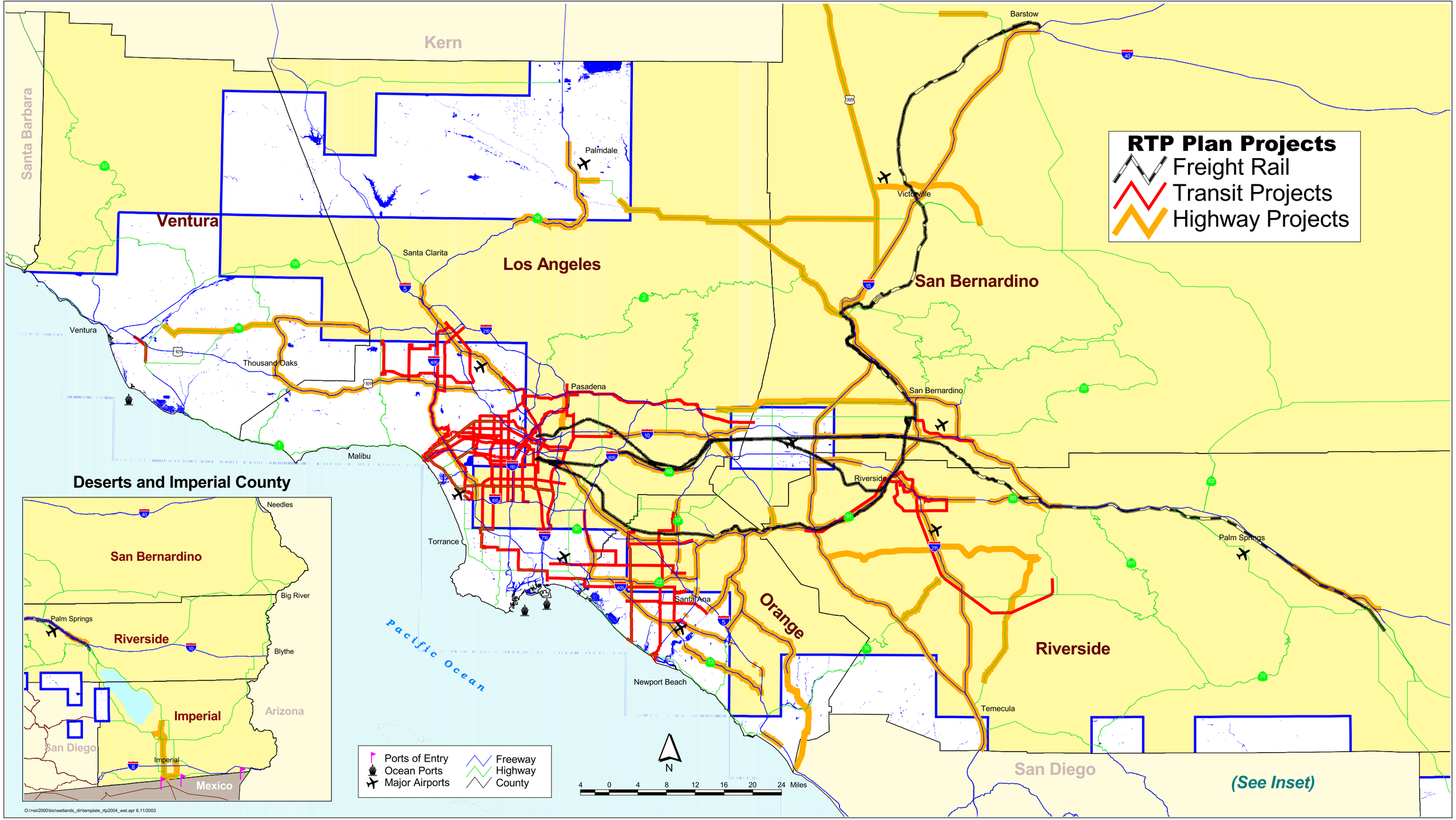
Source: University of Santa Barbara, GAP Analysis, 1999
Thomas Bros. Network

Vegetation Communities

Figure 3.7-1

SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS

2004 RTP PEIR



Wetland
Inventory Area
Non-inventoried Area

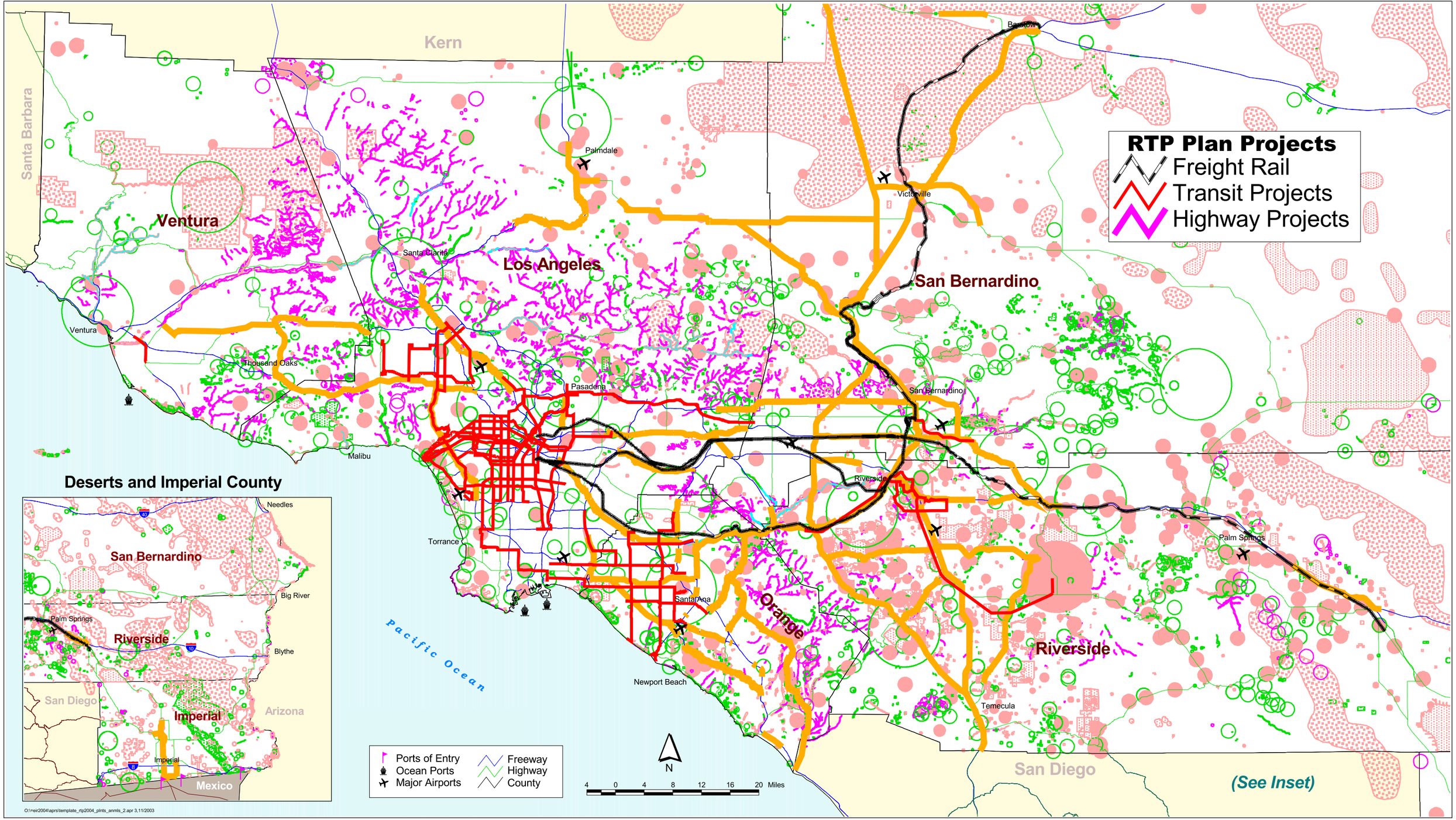
Source: National Wetlands Inventory, 1970-1998
Thomas Bros. Network

General Location of Known Wetlands

Figure 3.7-2

SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS

2004 RTP PEIR



Plant (80m)
Plant (specific)
Plant (non-specific)
Plant (circular)
Animal (80m)
Animal (specific)
Animal (non-specific)
Animal (circular)
Terr. Comm. (80)
Terr. Comm. (specific)
Terr. Comm. (non-specific)
Terr. Comm. (circular)
Aqu. Comm. (80)
Aqu. Comm. (specific)
Aqu. Comm. (non-specfic)
Aqu. Comm. (circular)

Source: California Natural Diversity Database,
Department of Fish and Game, March 2003
Thomas Bros. Network

Known Sighting of Endangered, Threatened, or Rare Plant or Animal Species

Figure 3.7-3

SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS

2004 RTP PEIR

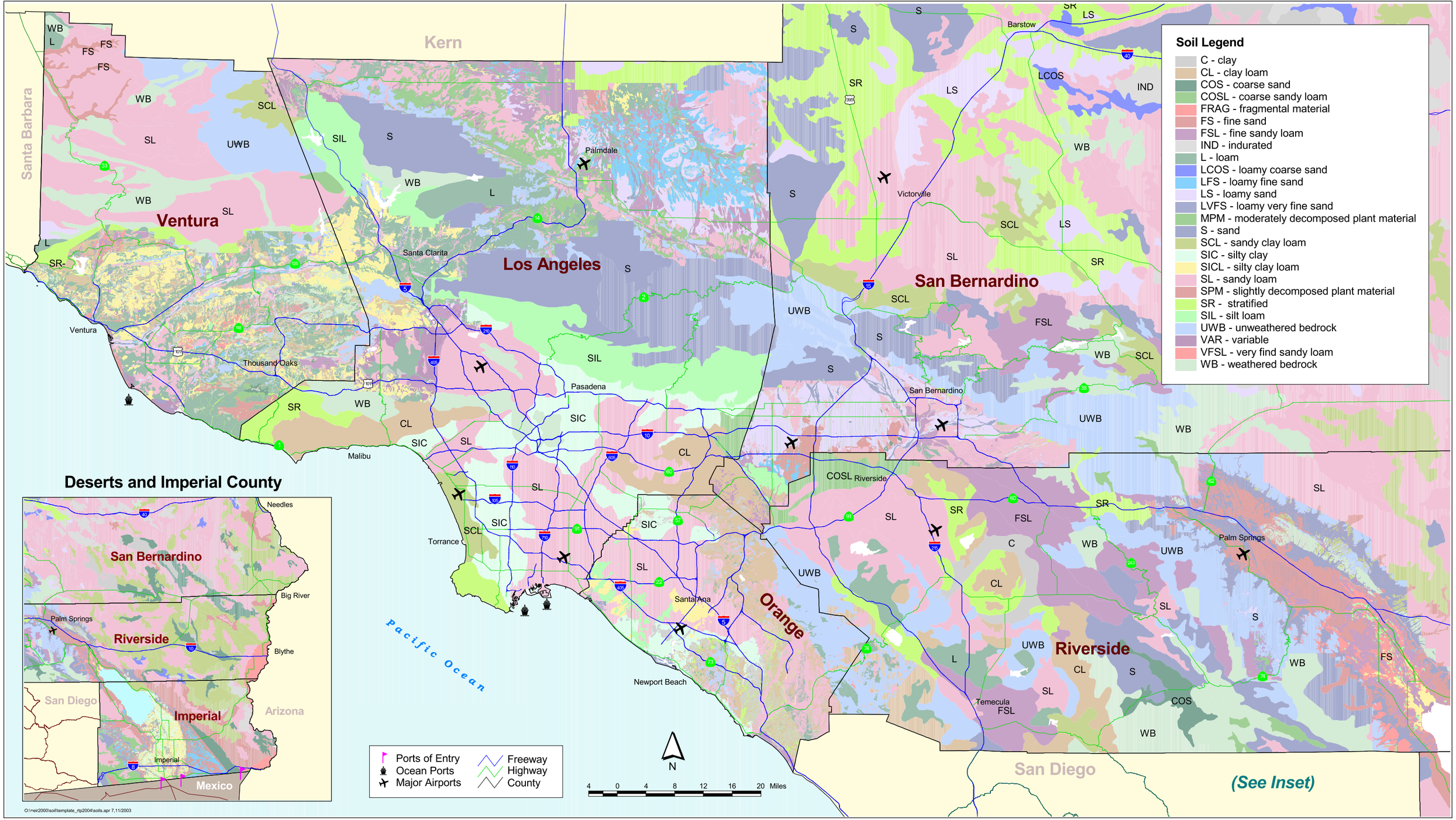
Geomorphic Provinces in the SCAG Region

Figure 3.9-1

SOURCE: Environmental Science Associates, 2000

SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS

2004 RTP PEIR



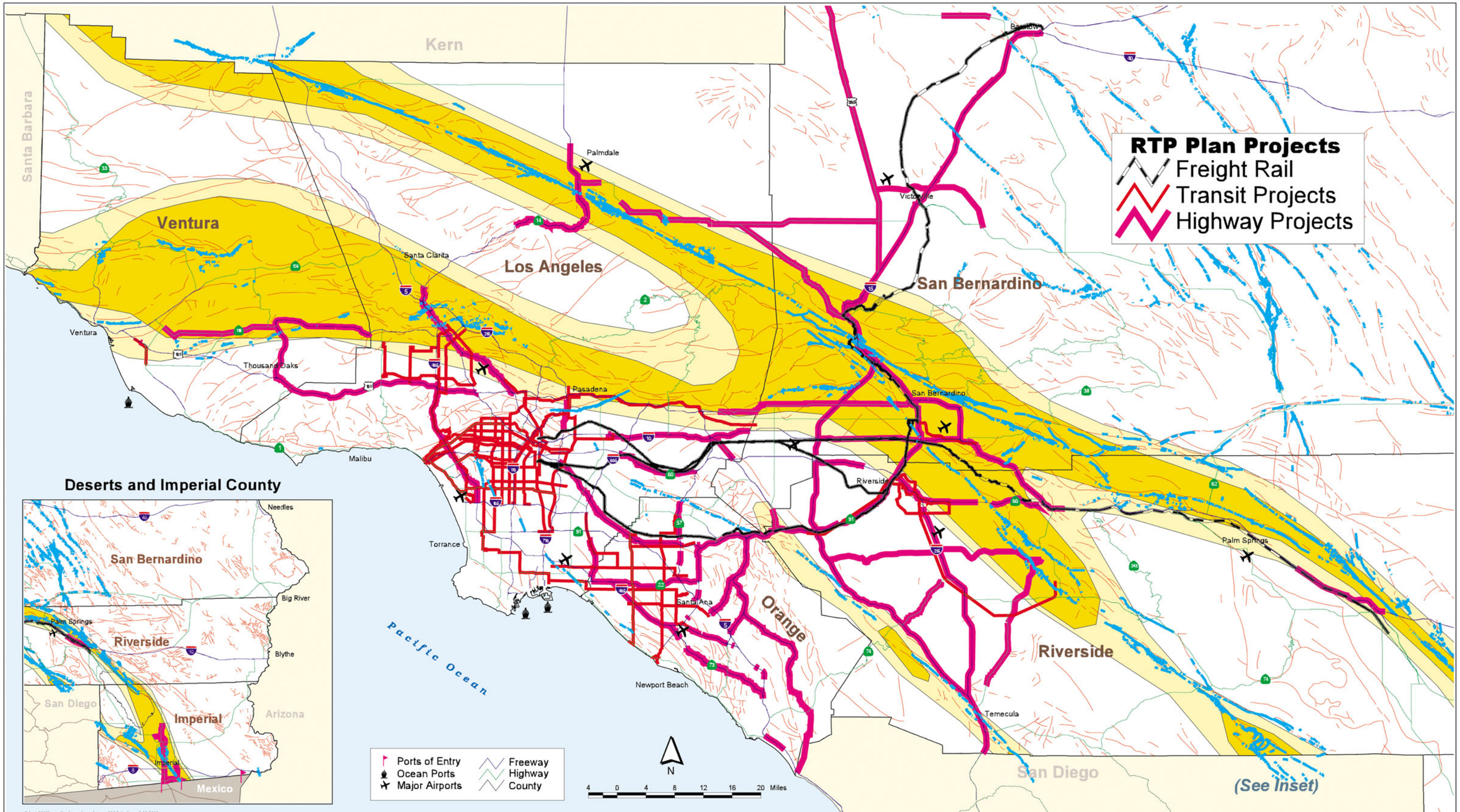
General Soil Types

Source: USDA STATSGO and SSURGO Database, 1998 - 2000
Thomas Bros. Network

Figure 3.9-2

SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS

2004 RTP PEIR



Major Acceleration
Severe Acceleration
Faults
Designated Alquist-Priolo Earthquake Rupture Zones

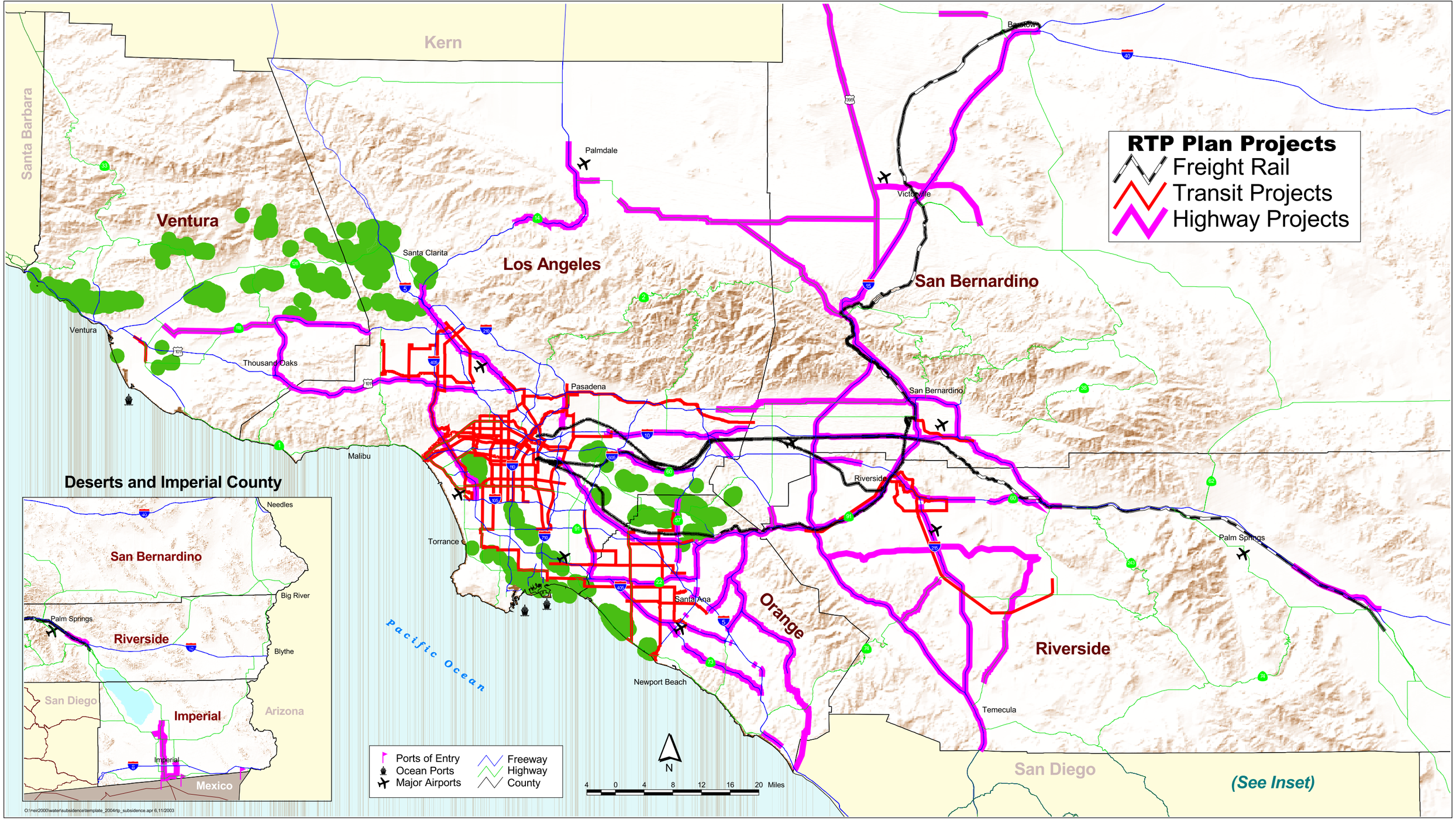
Earthquake Faults and Peak Ground Acceleration

Source: Reproduced with permission, California Division of Mines and Geology, CD-ROM 2000-006 (2000), Digital Database of Faults from the Fault Activity Map of California and Adjacent Areas and from CD-ROM 2001-05 (2002), Official Map of Alquist-Priolo Earthquake Fault Zones, Southern Region Southern California Earthquake Center Thomas Bros. Network

SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS

2004 RTP PEIR

Figure 3.9-3



Subsidence Areas

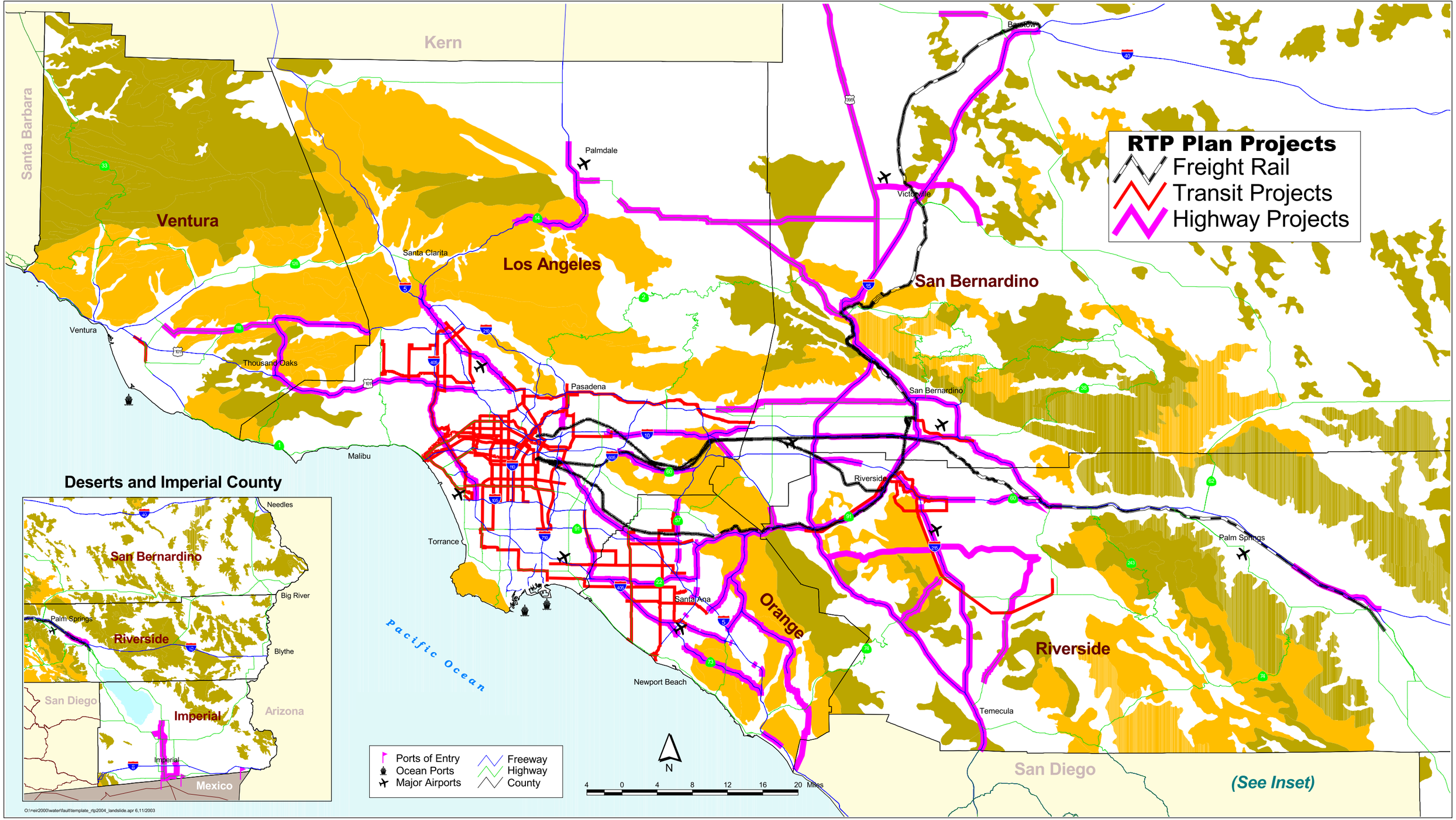
Areas Subject to Subsidence

Source: SCAG's Aerial Land Use Survey, 1993
Thomas Bros. Network

Figure 3.9-4

SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS

2004 RTP PEIR



High Potential, Hard Bedrock
Moderate Potential, Soft Bedrock
Other

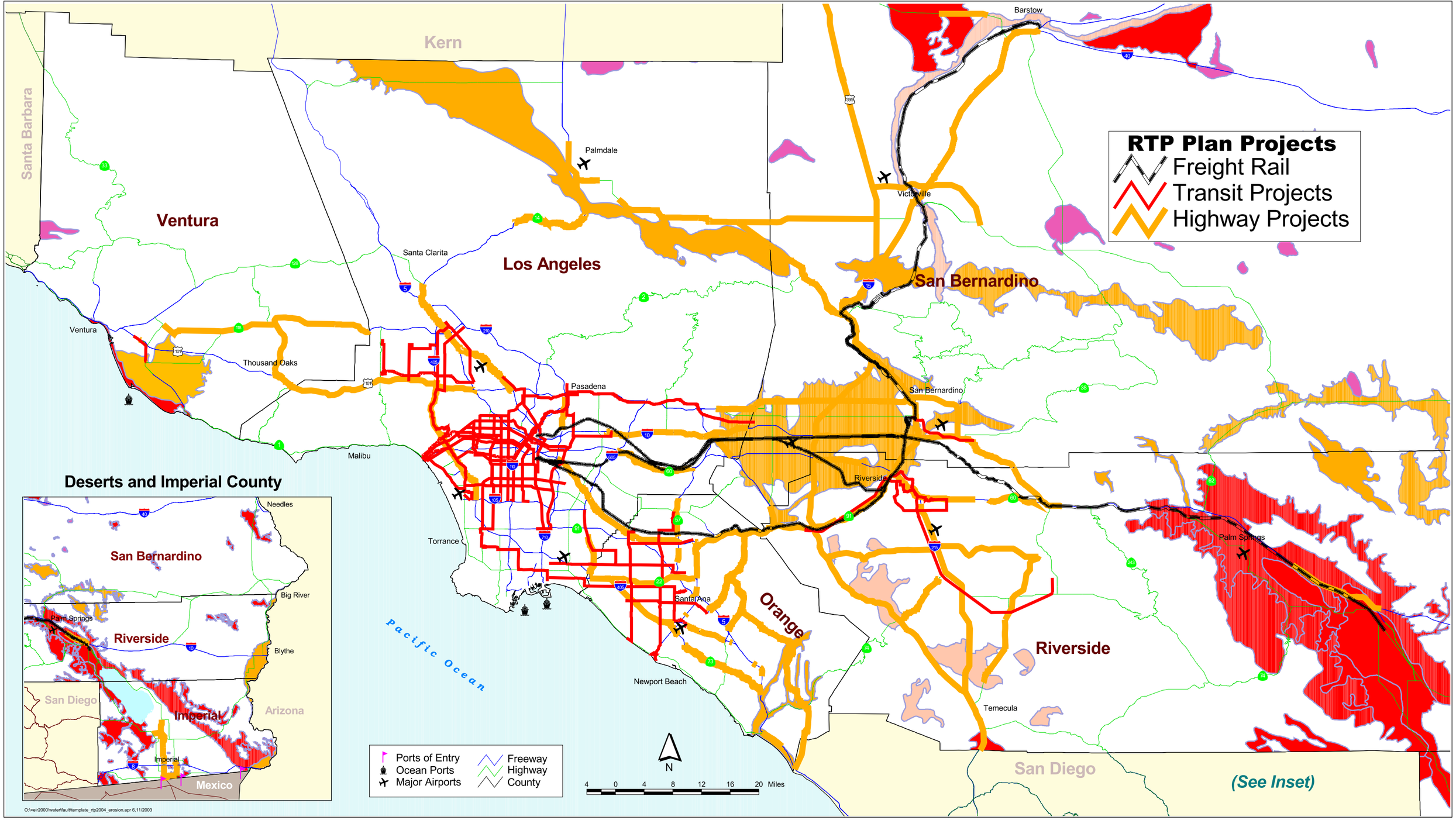
Source: U.S.D.A. STATSGO Database, 2000
Thomas Bros. Network

Relative Landslide Potential

Figure 3.9-5

SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS

2004 RTP PEIR



Wind Erodability Group (WEG)
- Very fine sand
- Loamy very fine sand
- Very fine sandy loam
- Calcareous loam and silt loam
- Noncalcareous loam and silt loam

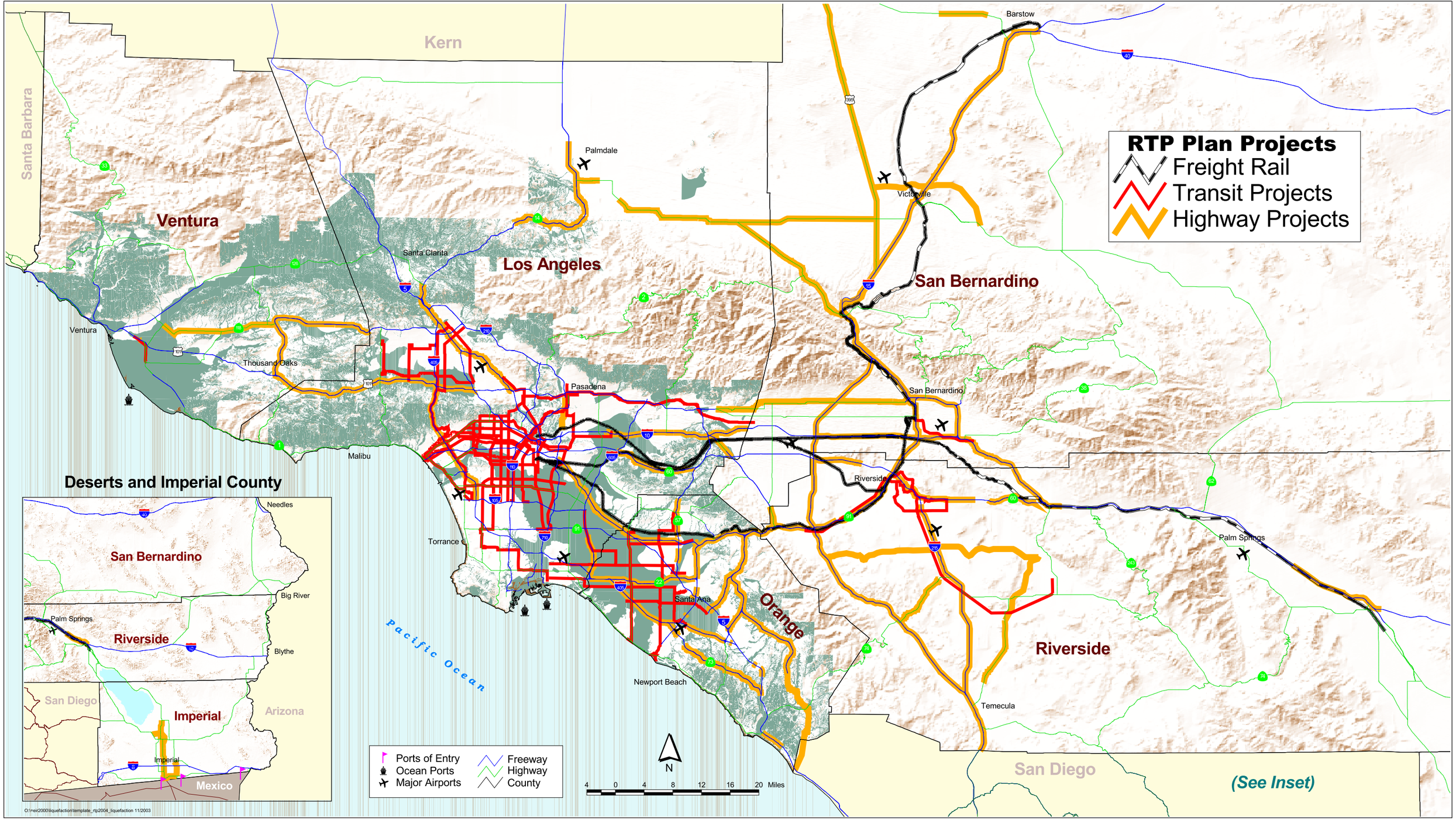
Location of Soils with Moderate to High Erosion Potential

Source: U.S.D.A. STATSGO Dataset, 2000
Thomas Bros. Network

Figure 3.9-6

SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS

2004 RTP PEIR



Liquefaction

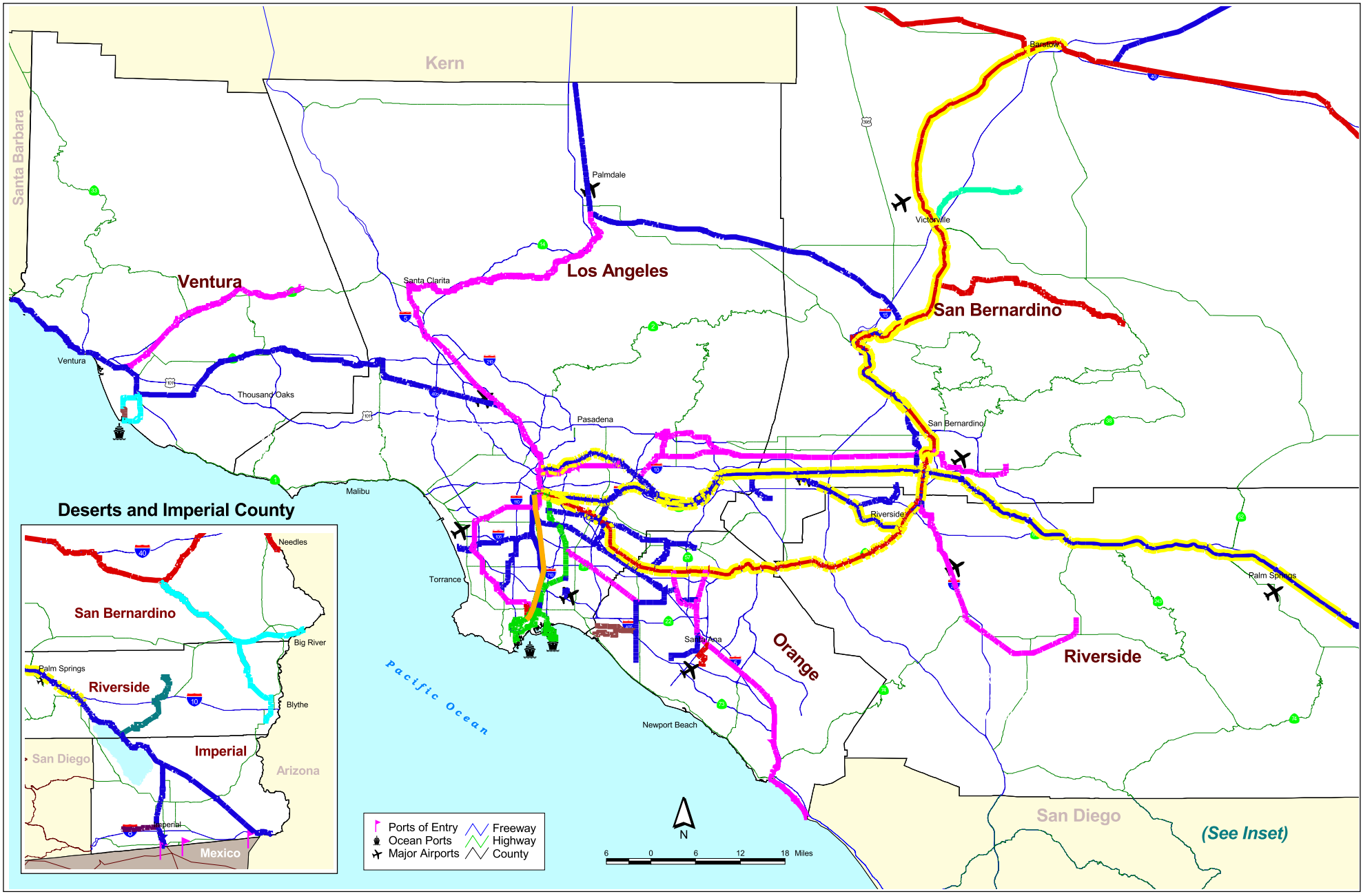
Areas Subject to Liquefaction

Source: California Department of Conservation, 2002
Thomas Bros. Network

Figure 3.9-7

SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS

2004 RTP PEIR



Freight Rail Lines in the SCAG Region

- Alameda Corridor
- Union Pacific (UP)
- Burlington Northern Santa Fe (BNSF)
- City/Ports-owned lines
- County-owned lines
- Eagle Mountain
- Mojave Northern Mining
- San Diego and Arizona
- Short Line/Independent
- U.S. Navy
- Planned Rail Line Improvements in the 2004 RTP

Source: SCAG 2003.

Existing Freight Rail Lines

Figure 3.10-1

SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS

2004 RTP PEIR

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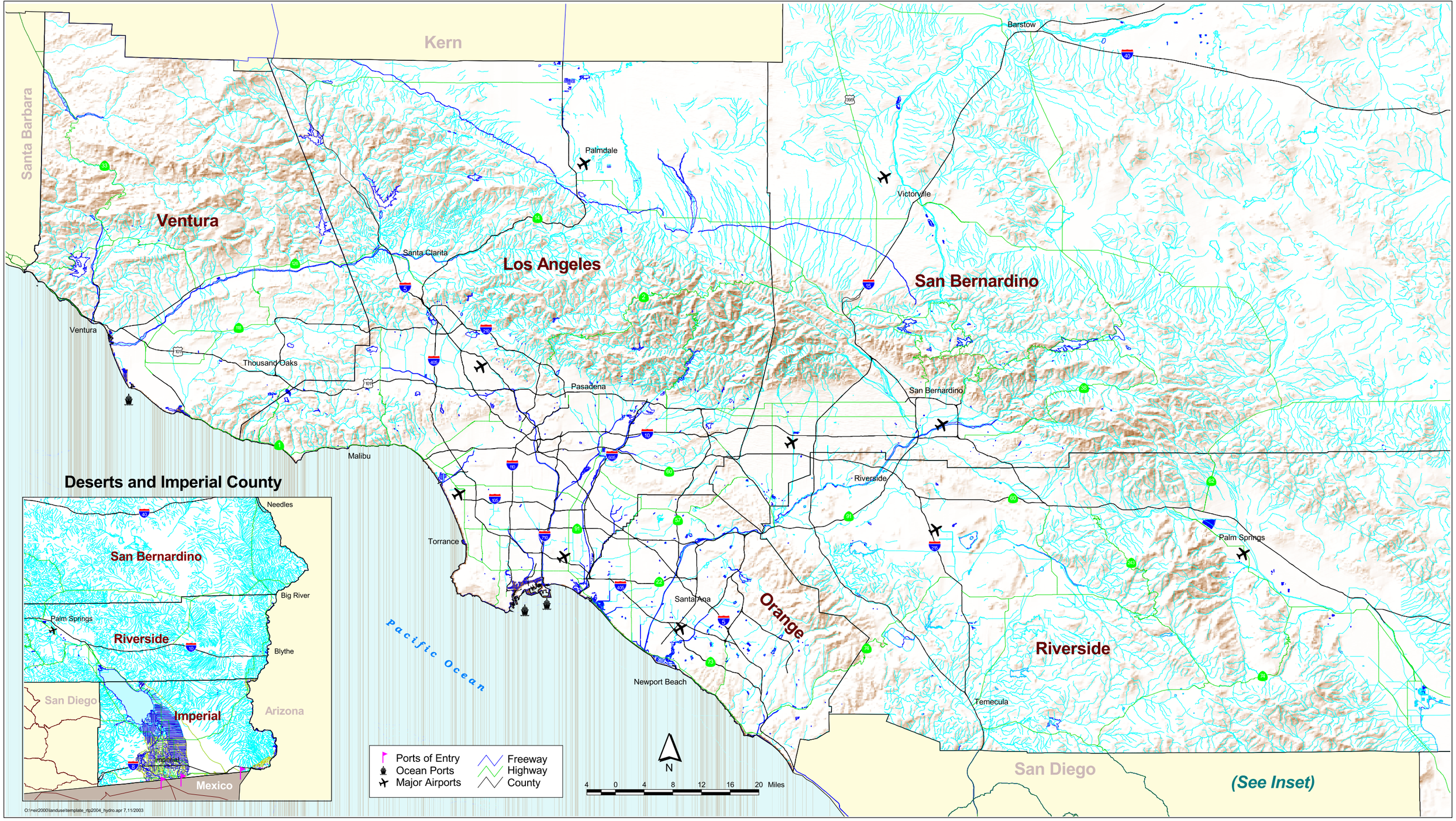


Perennial Water Features

Intermittent Water Features

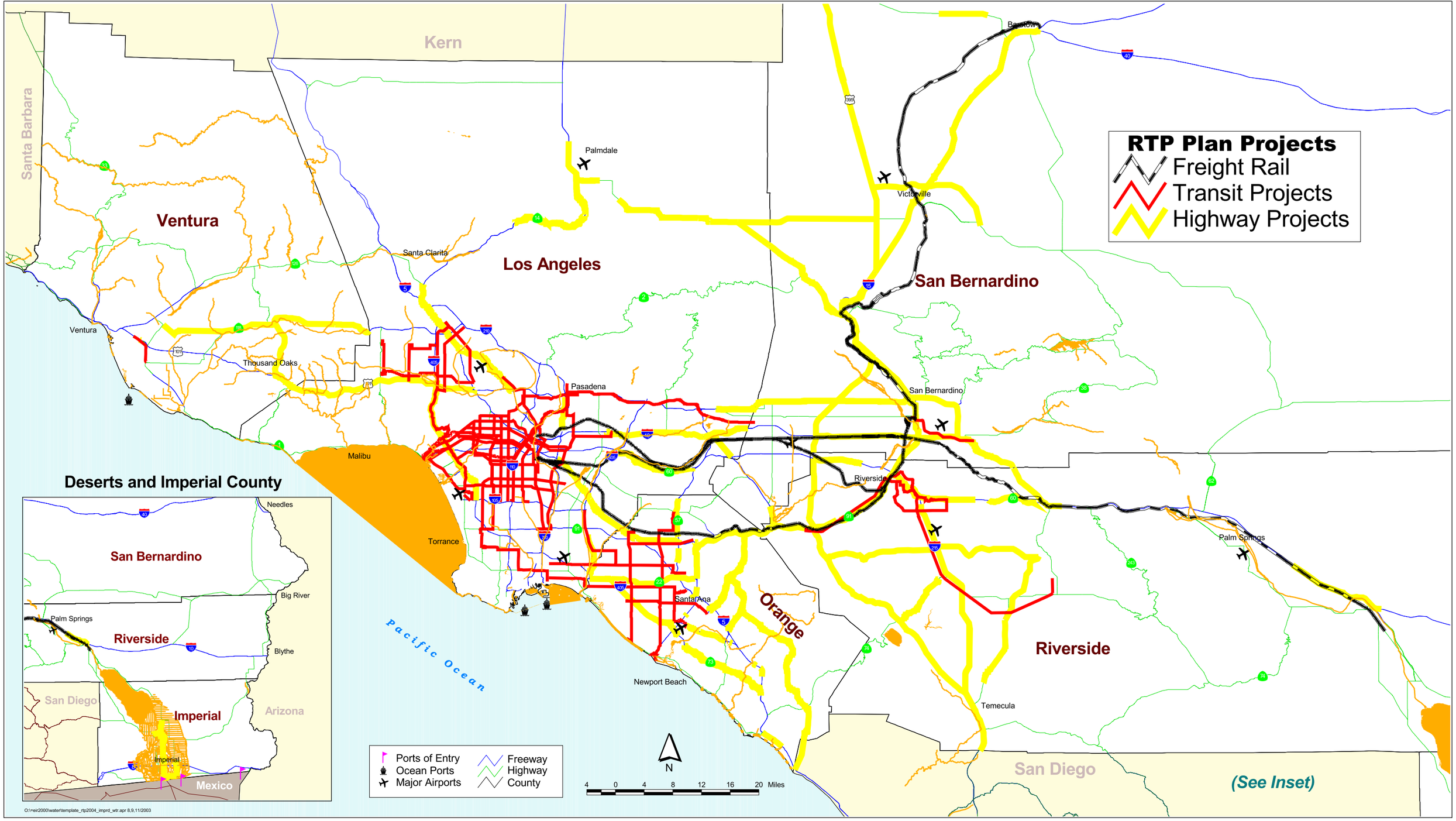
Source: 1990 Tiger & 1998 Thomas Bros.
Thomas Bros. Network

Major Surface Waters

Figure 3.12-2

SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS

2004 RTP PEIR



Impaired Water Bodies

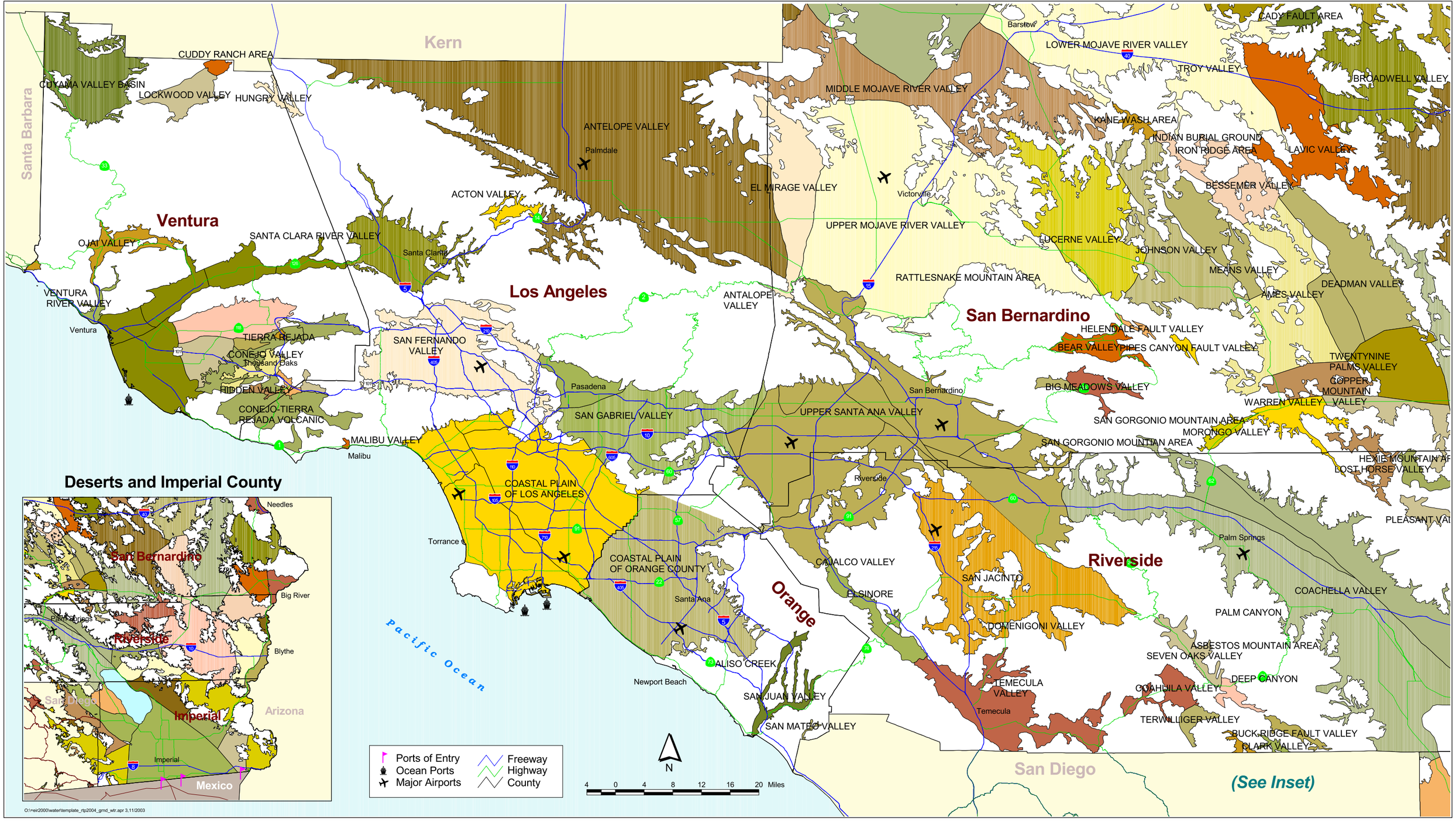
Impaired Water Bodies

Source: State Water Resources Control Board (SCRWD) Clean Water Act Section 303(d) List, 2002, Thomas Bros. Network

Figure 3.12-3

SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS

2004 RTP PEIR



Groundwater Basins

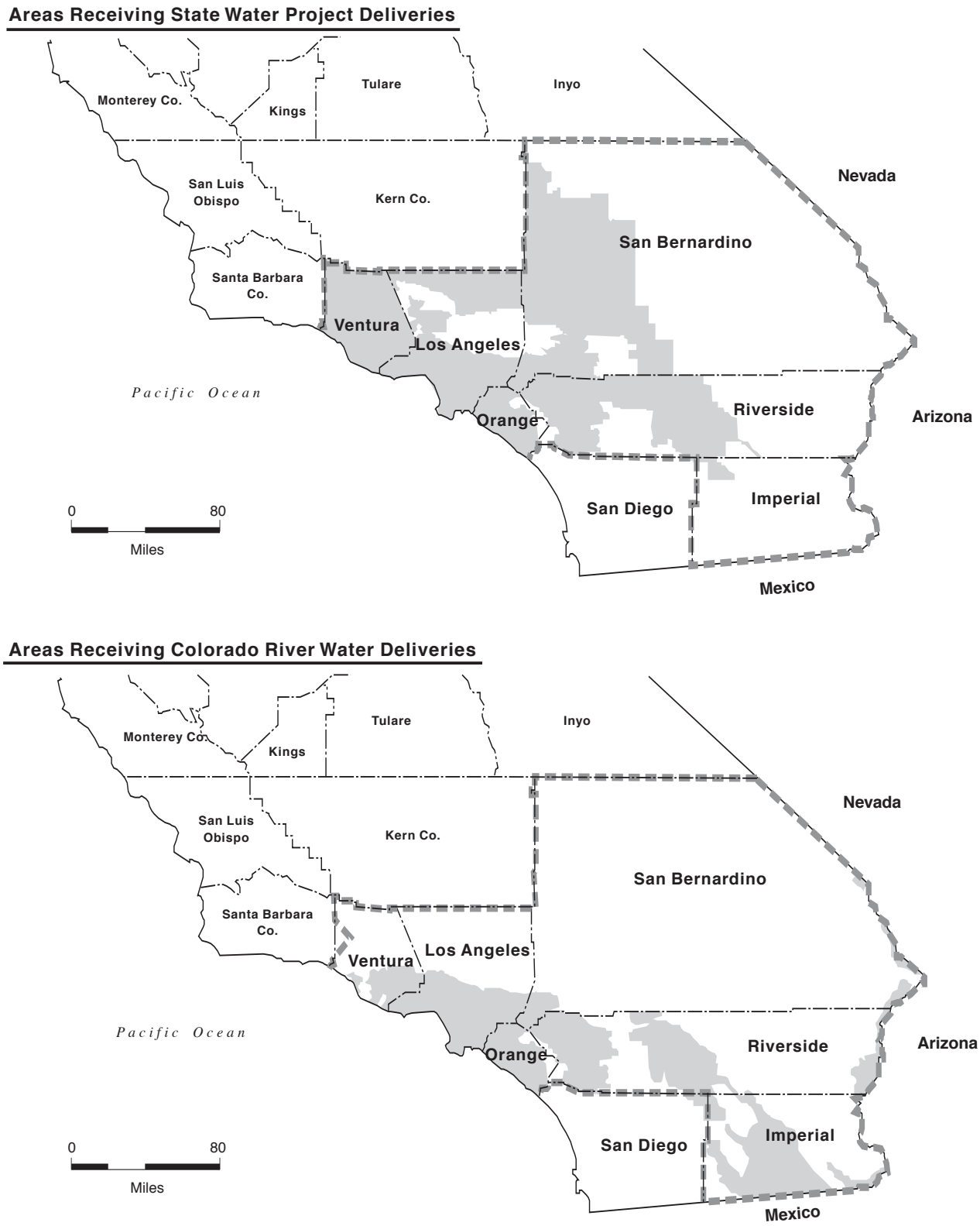
Groundwater Basins

Source: CASIL (California Spatial Information Library, 1997)
Thomas Bros. Network

Figure 3.12-4

SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS

2004 RTP PEIR



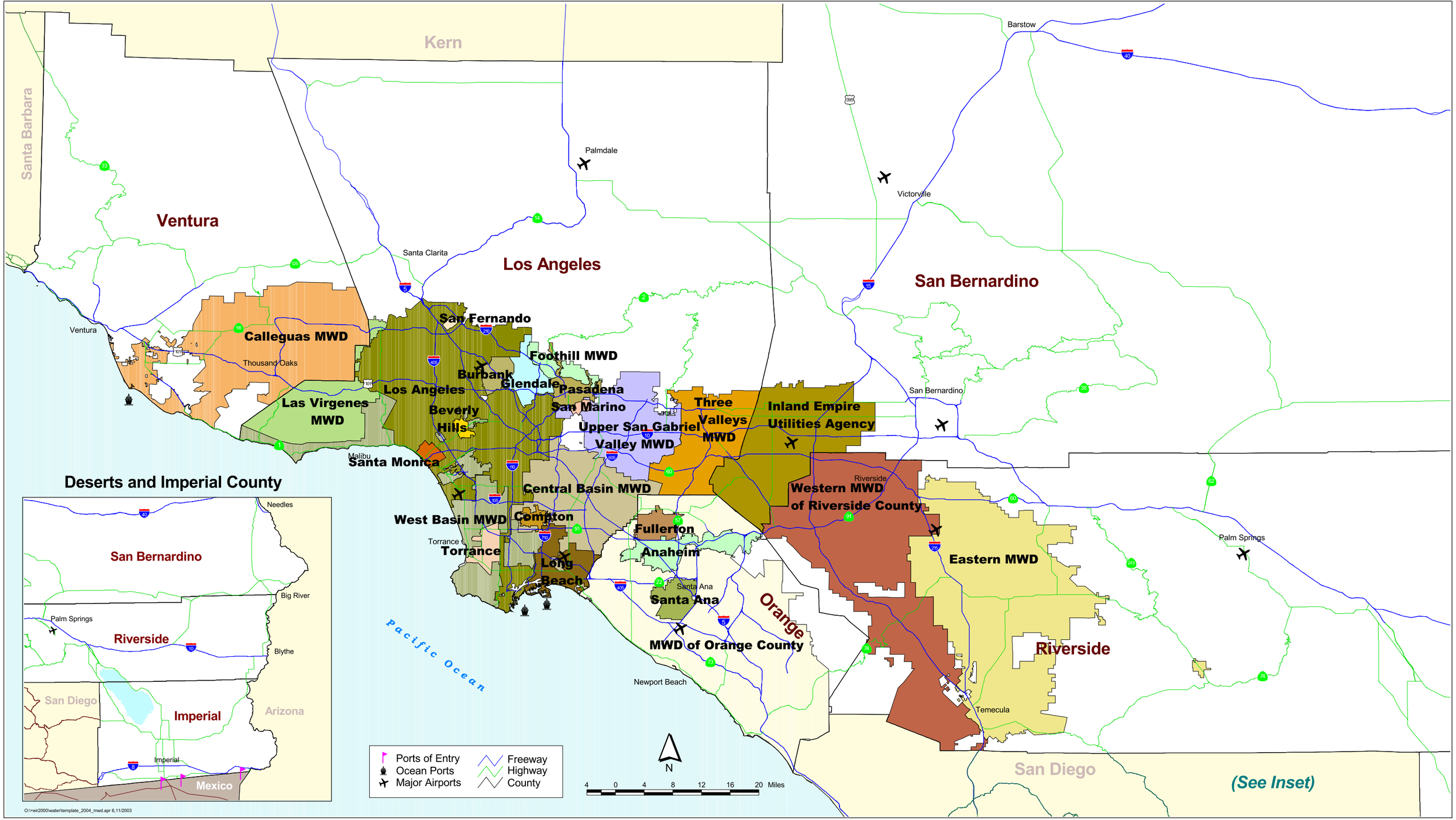
Areas Using Imported Water

Figure 3.12-5

SOURCE: Department of Water Resources, Bulletin 160-98.

SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS

2004 RTP PEIR



Service Areas

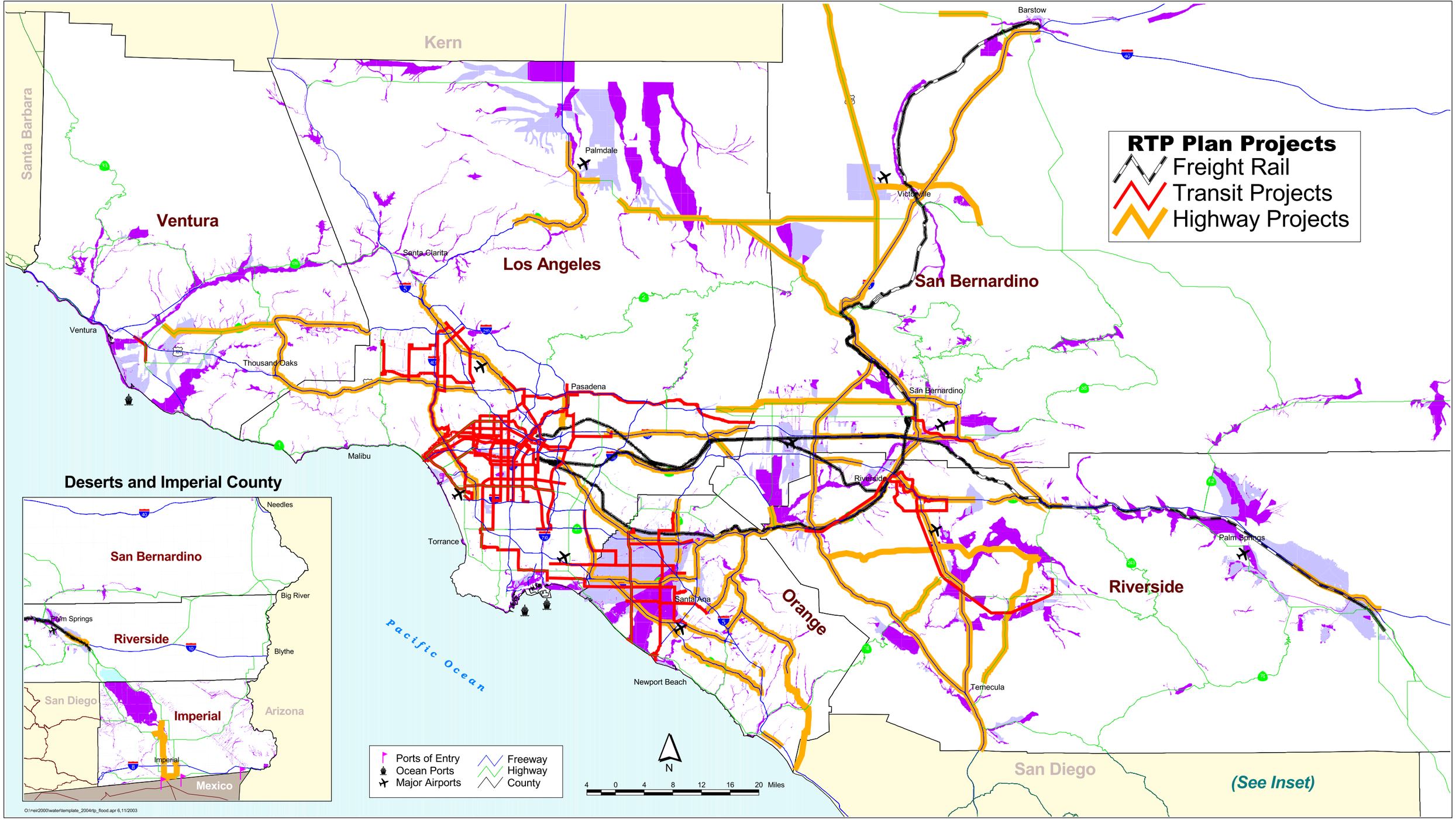
Metropolitan Water District Service Areas

SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS

2004 RTP PEIR

Source: Metropolitan Water District GIS Section, 2003 (Proprietary Data)
Thomas Bros. Network

Figure 3.12-6



100 Year Floodplains
500 Year Floodplains

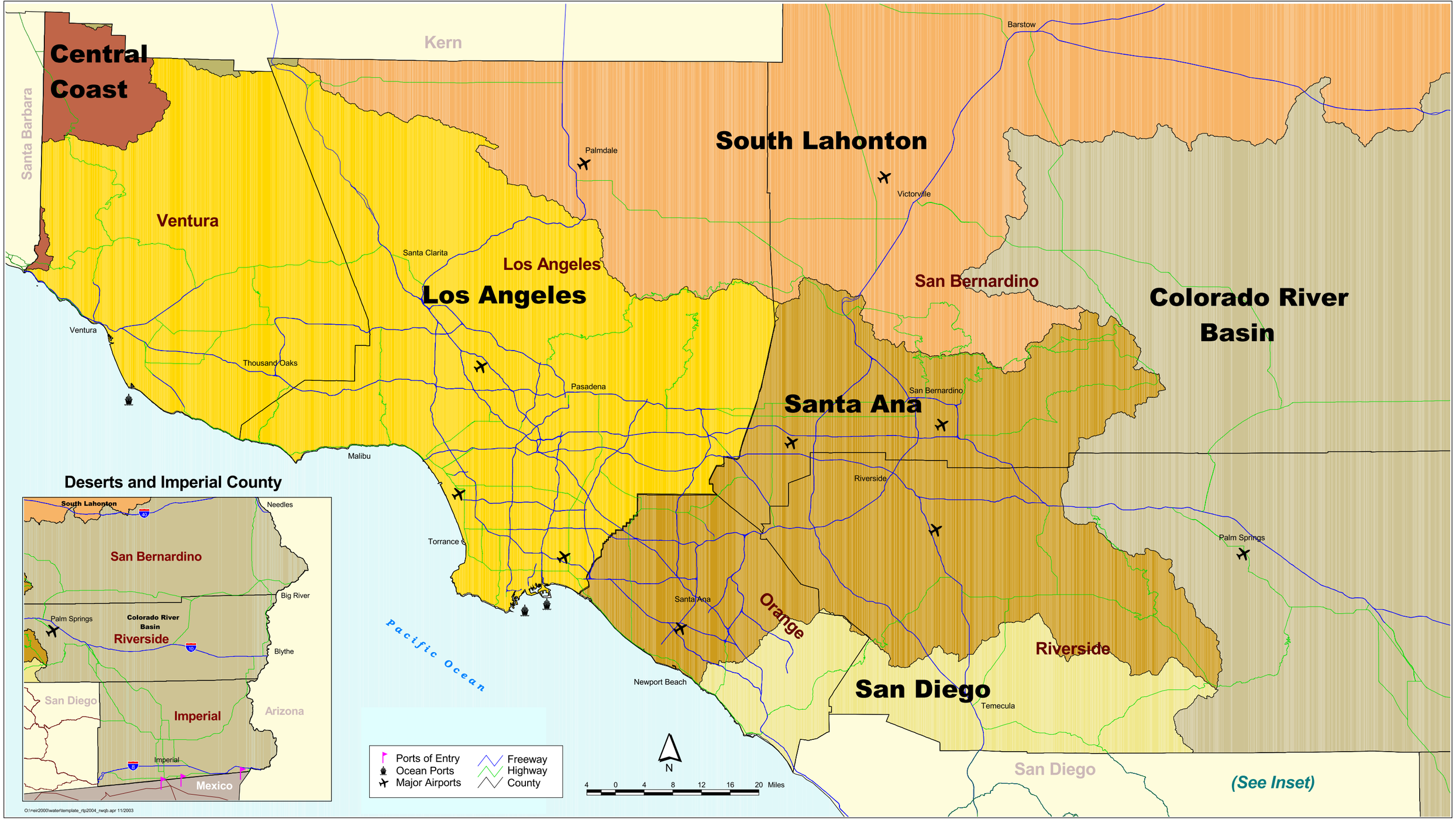
Federally Designated Flood Hazard Zones

SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS

2004 RTP PEIR

Source: FEMA 9Federal Emergency Management Agency's Q3 Flood Data Census, 2001
Thomas Bros. Network

Figure 3.12-7



Central Coast
Los Angeles
Santa Ana
South Lahonton
Colorado River Basin
San Diego

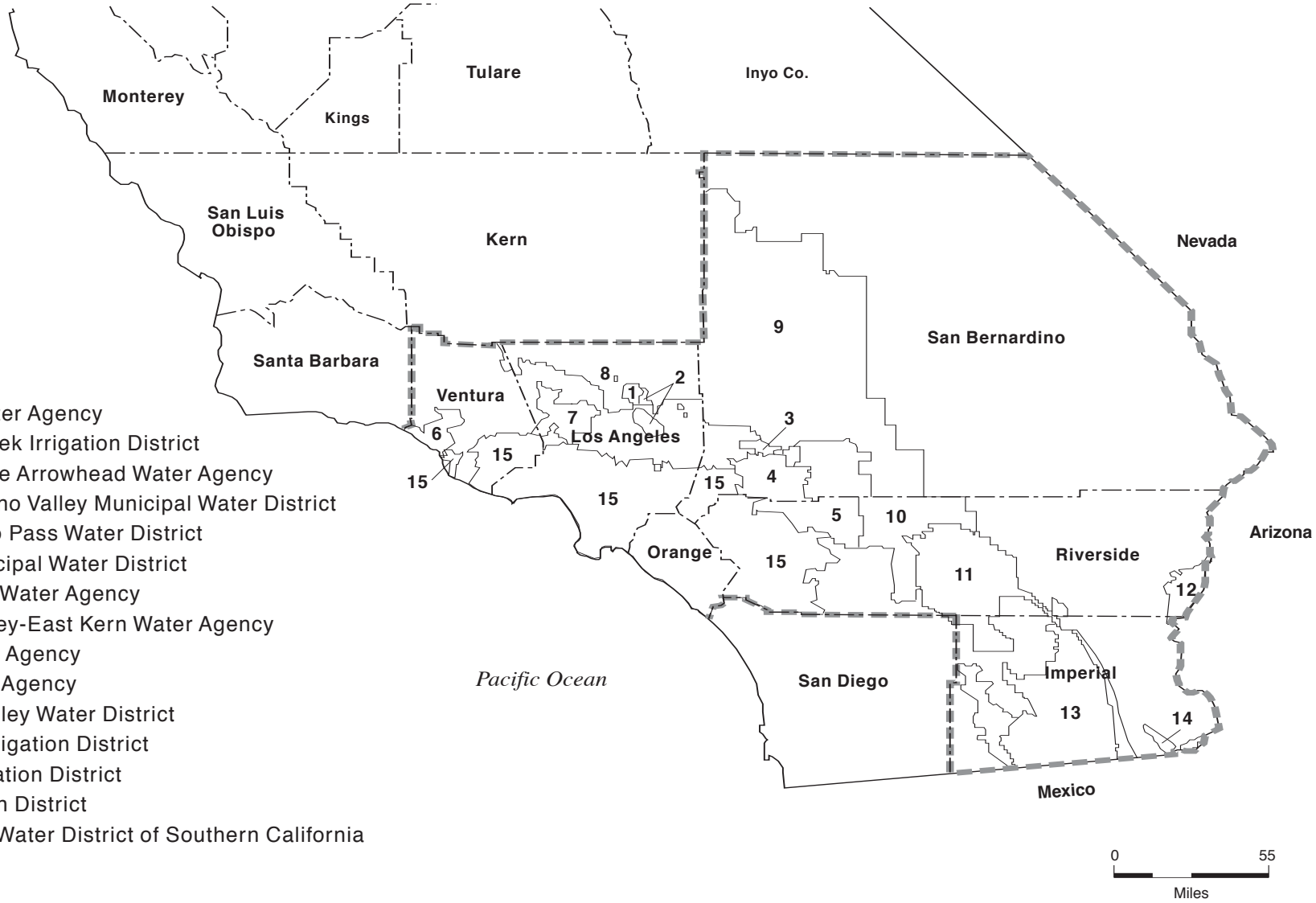
Regional Water Quality Control Boards

SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS

2004 RTP PEIR

Source: CASIL (Calwater2), 2002
Thomas Bros. Network

Figure 3.12-8



1 Palmdale Water Agency
2 Littlerock Creek Irrigation District
3 Crestline-Lake Arrowhead Water Agency
4 San Bernardino Valley Municipal Water District
5 San Gorgonio Pass Water District
6 Casitas Municipal Water District
7 Castaic Lake Water Agency
8 Antelope Valley-East Kern Water Agency
9 Mojave Water Agency
10 Desert Water Agency
11 Coachella Valley Water District
12 Palo Verde Irrigation District
13 Imperial Irrigation District
14 Bard Irrigation District
15 Metropolitan Water District of Southern California

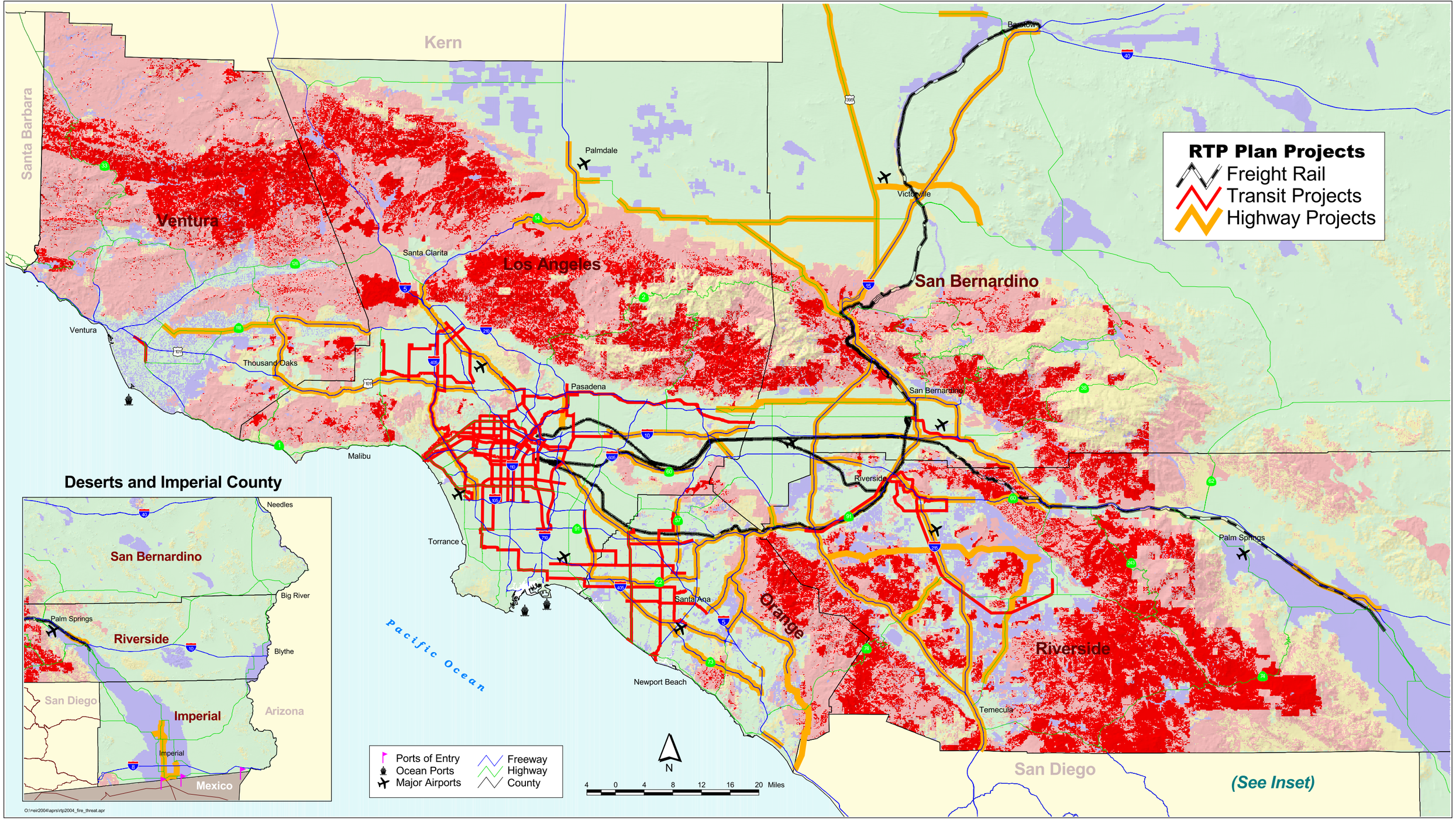
Water Agencies in the SCAG Region

SOURCE: Environmental Science Associates, 2000.

Figure 3.12-9

SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS

2004 RTP PEIR



Little or No Threat
Moderate Threat
High Threat
Very High Threat
Extreme Threat

Source: California Department of Forestry and Fire Protection, Fire and Resource Assessment Program. (2003). Fire threat [Data file]. Available from http://frap.cdf.ca.gov/data/frapgisdata/select.asp

Thomas Bros. Network 2001

Fire Threat

Figure 3.13-1

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