

# Warehousing Supply and Demand

## *Task 5 Progress Report and Next steps*

*presented to*

**Southern California Association of Governments**

*presented by*

**Cambridge Systematics, Inc.**

**John Husing (Economics & Politics)**

**October 13, 2009**

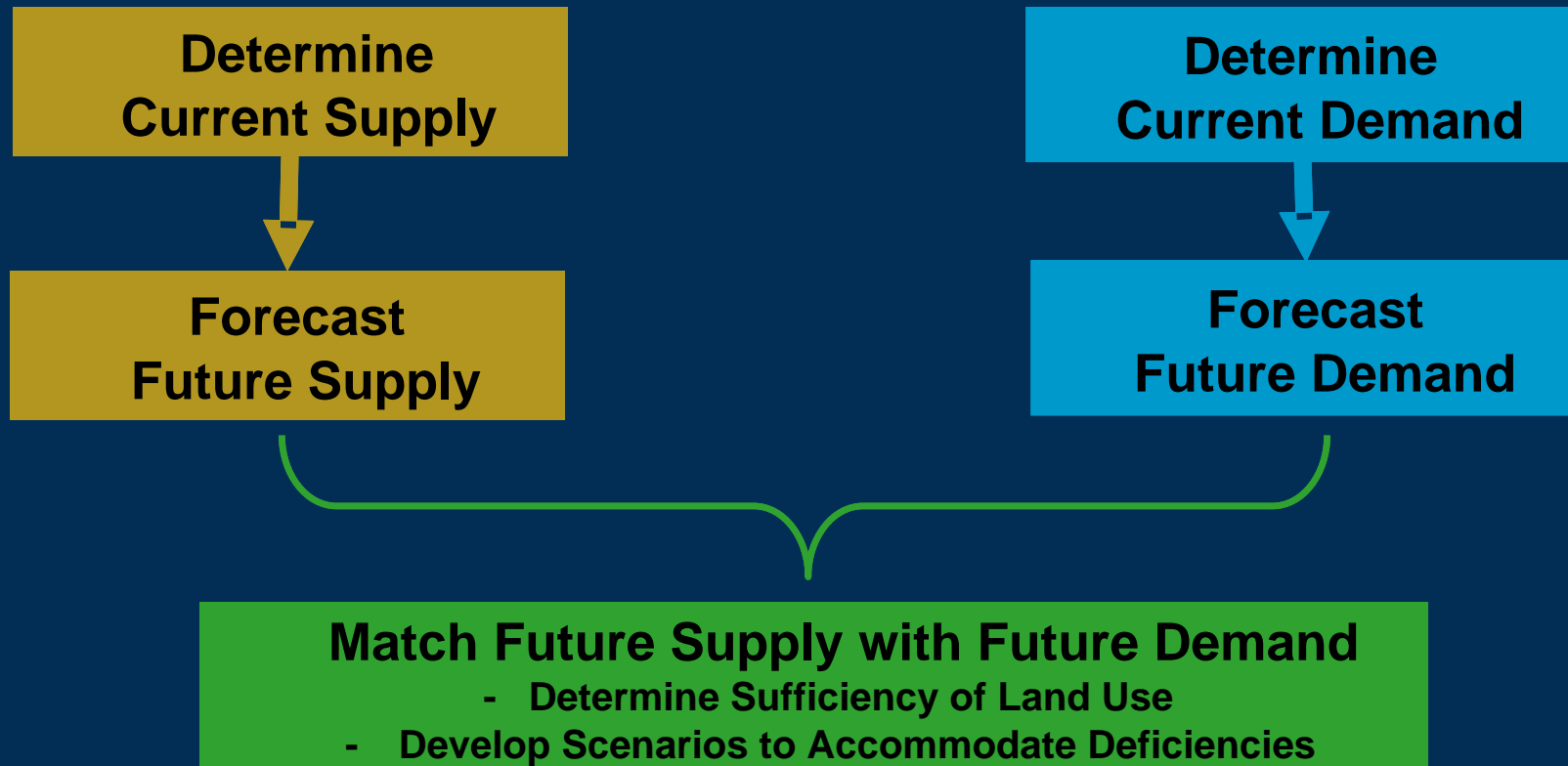
*Transportation leadership you can trust.*

**CAMBRIDGE**  
SYSTEMATICS

# Purpose of the Task

- **The goal of this task is to understand both the existing supply and demand for industrial/warehouse facility space and to forecast growth to determine whether land use allocated to warehousing needs will be sufficient in the Los Angeles basin. The focus of the analysis will be on international trade, where much of the growth in this sector is expected.**

# Overall Study Objectives



# Deliverable Mapping

## Deliverable #1

Determine  
Current Supply

Forecast  
Future Supply

## Deliverable #2

Determine  
Current Demand

Forecast  
Future Demand

Match Future Supply with Future Demand

- Determine Sufficiency of Land Use
- Develop Scenarios to Accommodate Deficiencies

## Deliverable #3

# Status of the Work

- 1) We have already completed a documentation of existing supply of warehouses in the LA basin as well as the supply of land suitable for future warehouse development.
  - COMPLETION DATE: August 31, 2009 (Existing supply of warehouse facilities and undeveloped land.)
- 2) We have developed the survey methodology for a statistically valid sample of warehousing characteristics.
  - PROJECTED COMPLETION DATE: November 30, 2009
- 3) We will create a summary memo with reports and maps to match supply and demand. This will constitute the final deliverable for Task 5.
  - PROJECTED COMPLETION DATE: December 31, 2009



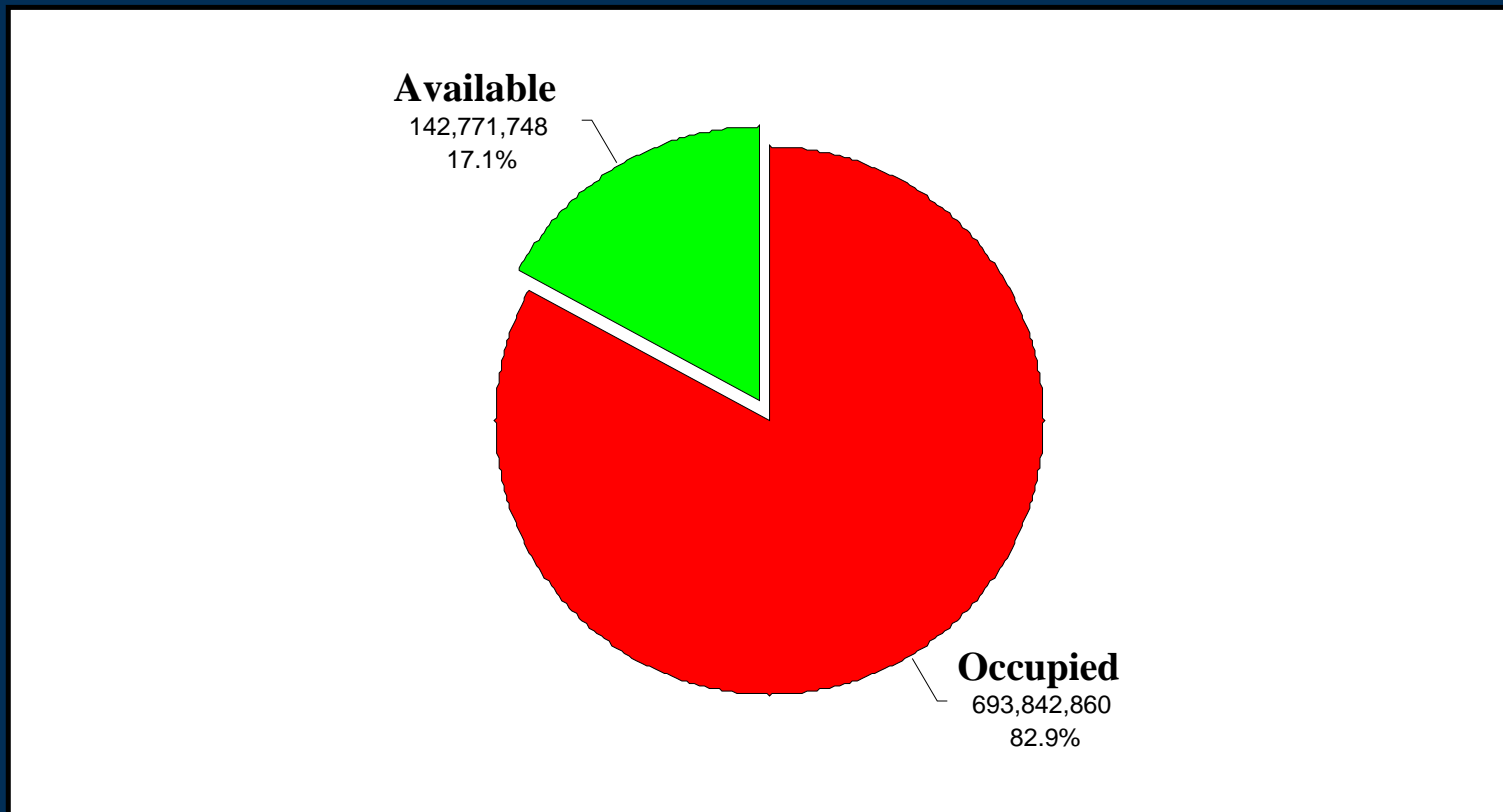
# Deliverable 1: Data Sources

	Los Angeles	Ventura	San Bernardino	Riverside	Orange*	Imperial
Assessor Parcel Code	✓	✓	✓	✓	✓	✓
Use Code	✓	✓	✓	✓	✓	✓
Street Address	✓	✓	✓	✓	✓	✓
City, Zip	✓	✓	✓	✓	✓	✓
Lot and Tract No.	✓	✓	✓	✓	✓	✓
Site Sq Ft.	98.6%	93.5%	90.0%	80.2%	100%	91.8%
Building Sq Ft.	99.3%	0%	99.4%	0%	100%	0%
Owner	✓	✓	✓	✓	✓	✓
Owner's Address	✓	✓	✓	✓	✓	✓
Valuation	✓	✓	✓	✓	✓	✓
Longitude/Latitude	✓	✓	✓	✓	✓	✓

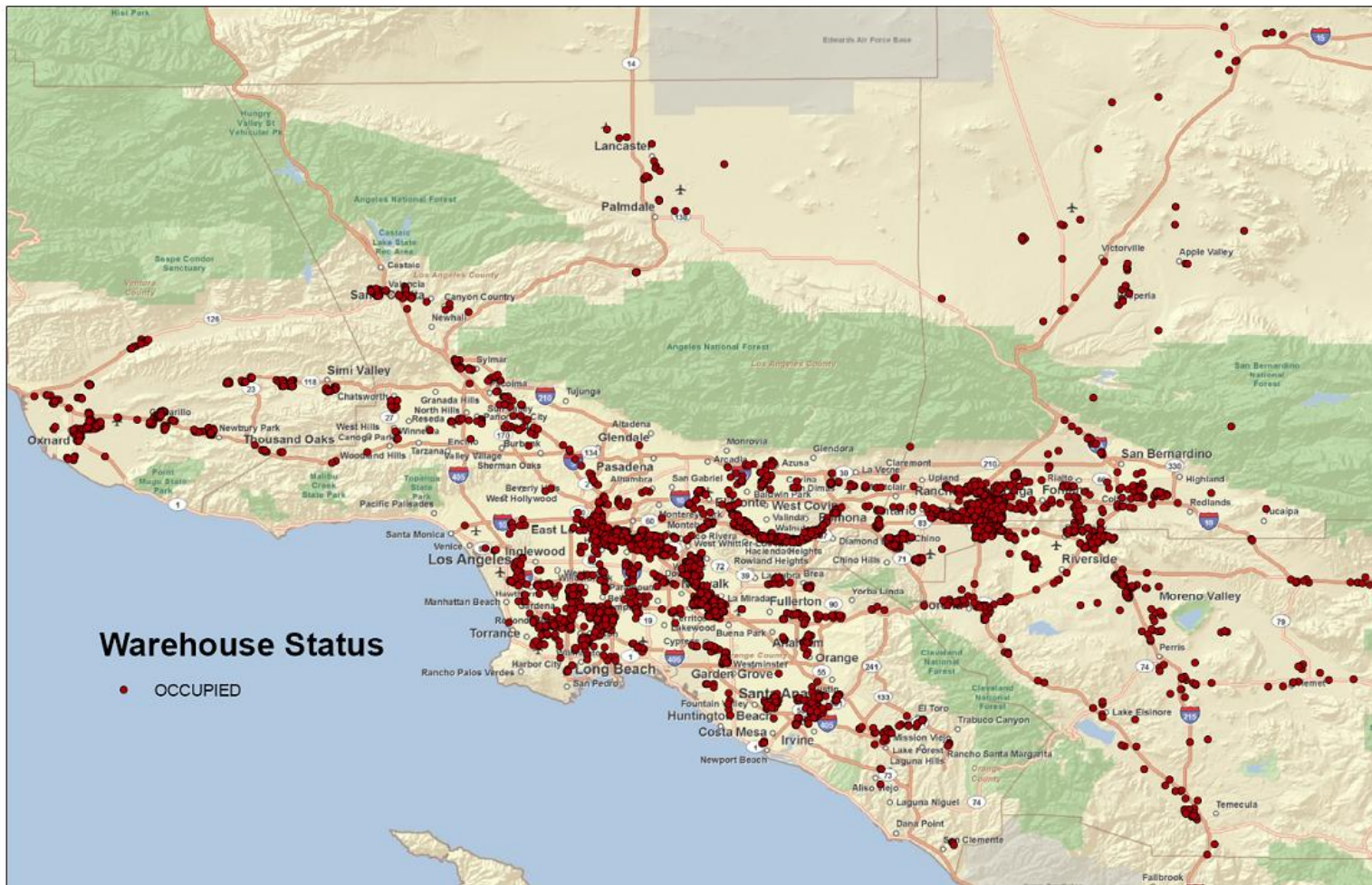
\* Orange County provided all industrial buildings of 50,000 or more square feet, but did not specify whether they were manufacturing or warehousing facilities. It was assumed they were warehousing.

# Deliverable 1 Findings: Total Occupied and Available Warehousing

- Occupancy of Warehousing Facilities in the SCAG region (sq. ft.)

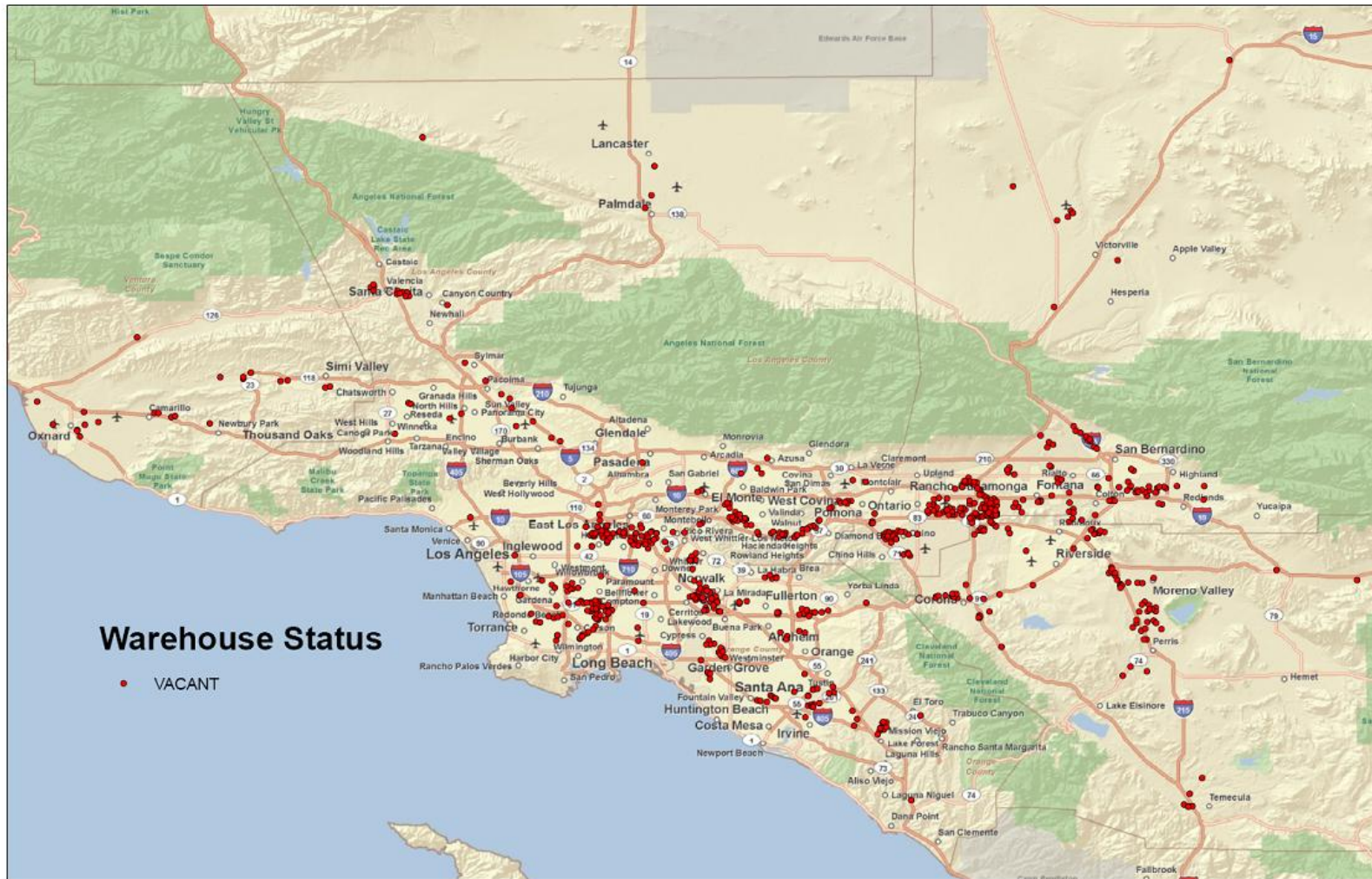


# Deliverable 1 Findings: Total Occupied Warehousing Facilities



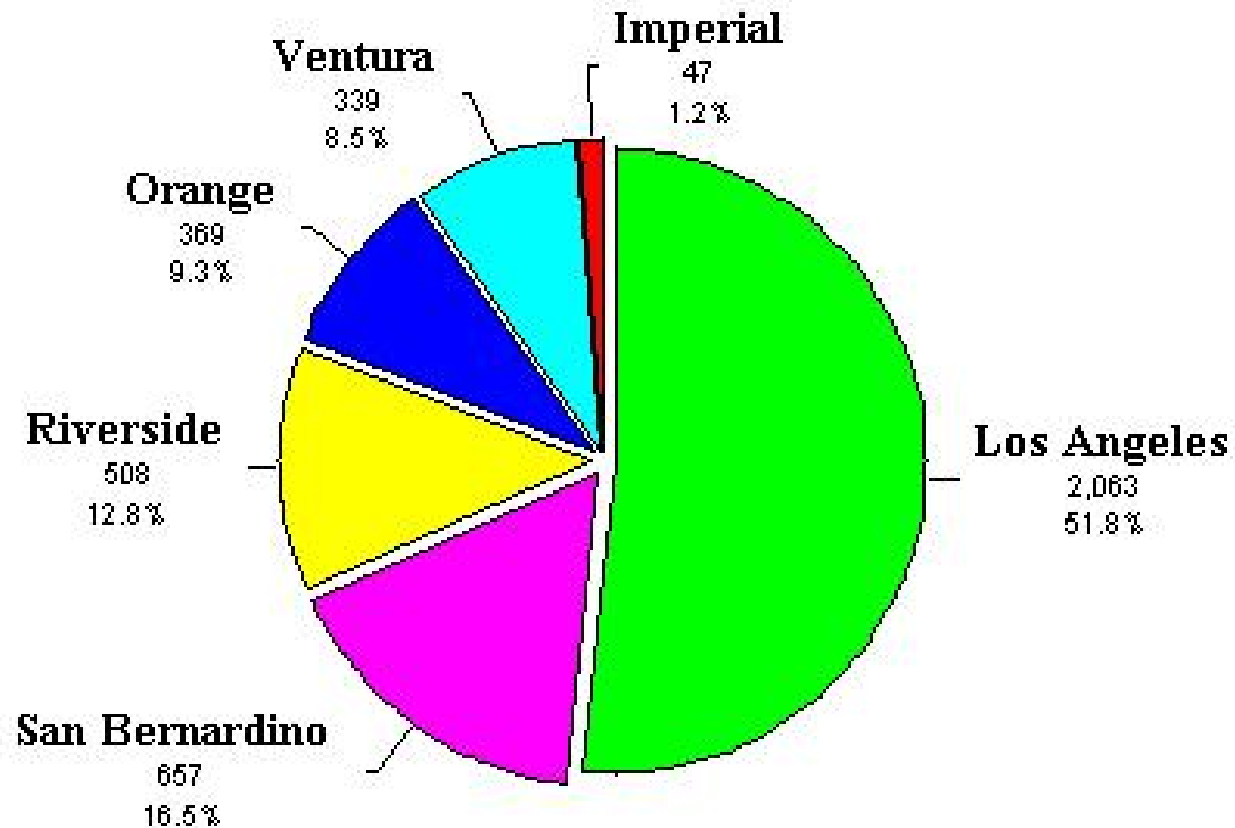


# Deliverable 1 Findings: Total Available Warehousing Facilities



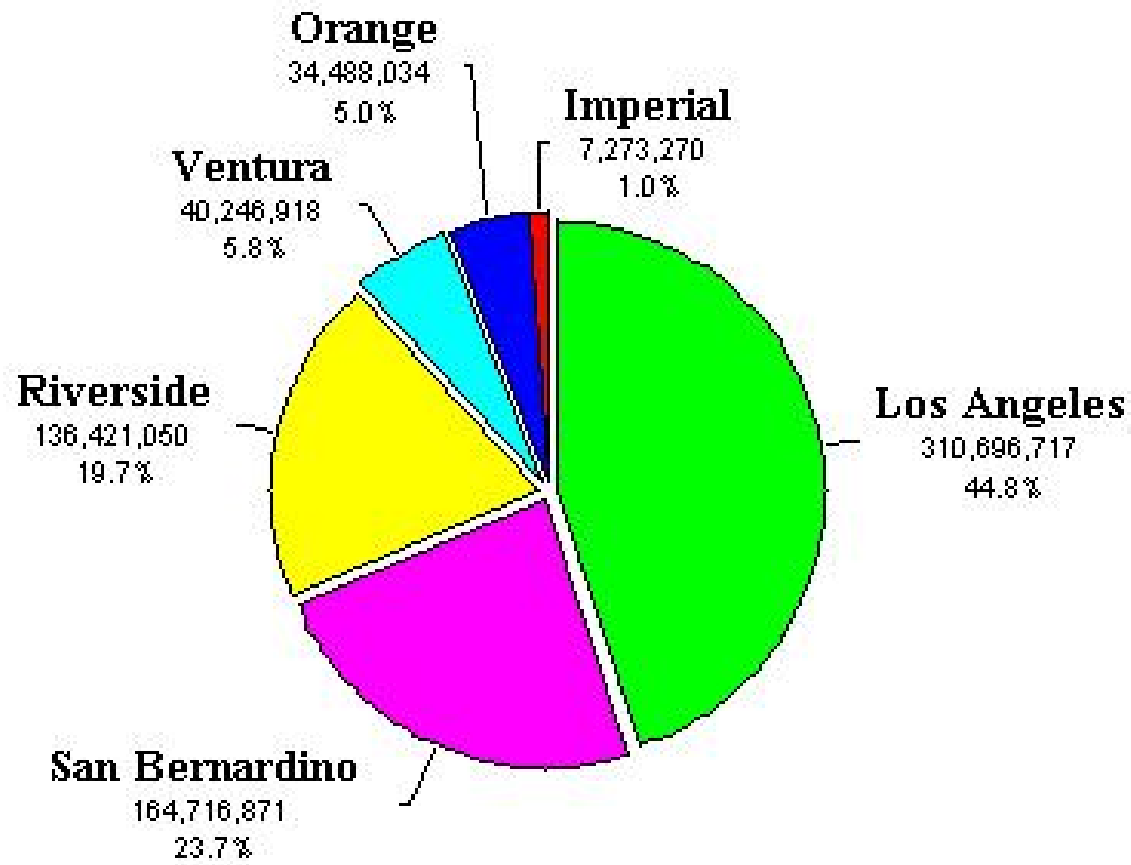
# Deliverable 1 Findings: Existing Supply

- Occupied Warehousing Facilities by County (Number)



# Deliverable 1 Findings: Existing Supply

- Occupied Warehousing Facilities by County (Sq. Ft.)



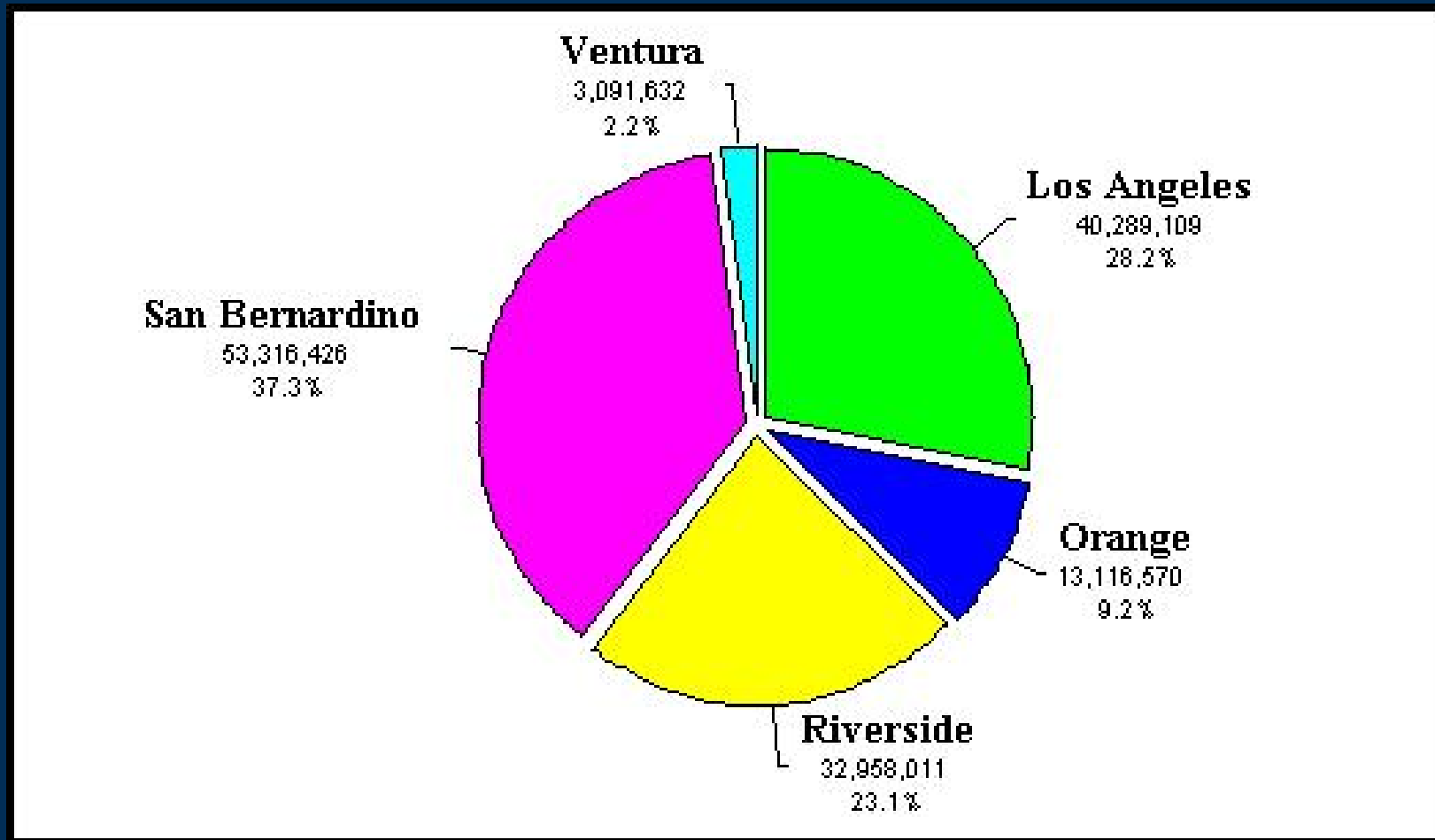
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# Deliverable 1 Findings: Existing Supply

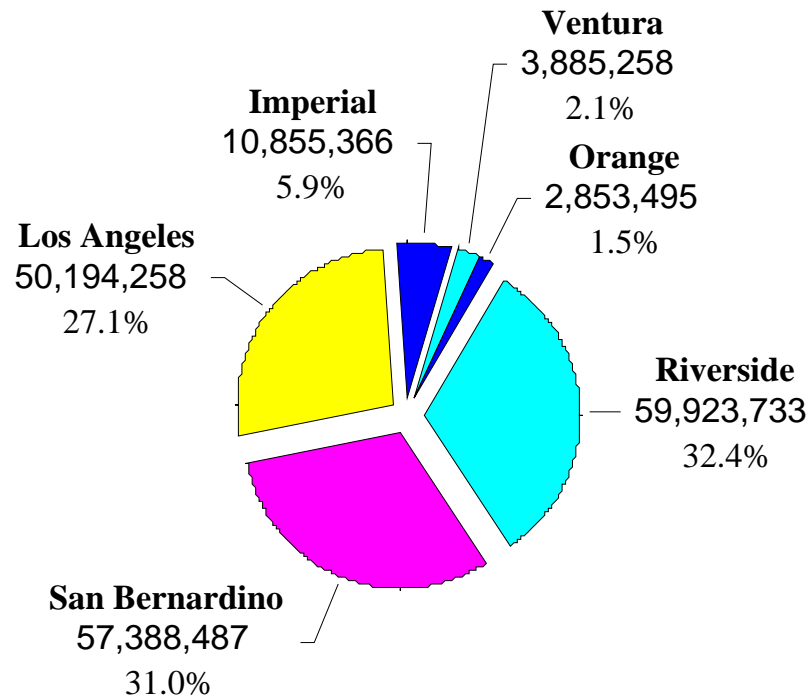
- Available Warehousing Facilities by County (Sq. Ft.)





# Deliverable 1 Findings: Future Supply

**Exhibit 1.-Available Industrial Square Footage  
SCAG Region, by County, 185.1 Million Square Feet**



Note: 55% Floor Area Ratio

# Deliverable 1 Findings: Availability of Land Suitable for Warehousing Development



## Deliverable 2 Next Steps: Existing Demand

- A census of warehousing operations for facilities with more than 200,000 sq. ft. is proposed. The results would provide a comprehensive understanding of warehouse characteristics and operating practices.
- The questions would be developed with a specialist in such work in conjunction with Cambridge Systematics and placed on-line. Lee & Associates would contact the appropriate executive to fill out the survey and request their cooperation. This process is helpful to Lee & Assoc. staff and they will do this for free. For facilities under 200,000 sq. ft., a random sample survey of owners and managers is proposed.

## Deliverable 2 Next Steps: Census/Surveys

- **Occupied Facilities – What we need to know...**
  - Facility-related questions (sq ft, height, type of goods handling, special purpose of operation)
  - Domestic vs. Imported vs. Exported Cargo
  - How deliveries arrive at the facility
  - Value of individual products
  - Where are facilities going when they leave the facility?
  - Do value added operations occur?
  - Classification of facility operator
- **Survey questionnaire and methodology are being developed and will require SCAG review**

## **Deliverable 2 Next Steps: Future Demand**

- Crosscheck will be conducted with census/survey data against the Avison Young methodology to determine future demand for warehousing space.**
- We will conduct this study with variables for warehouse demand by county, spatially.**
- The forecast of future demand will take into account trends in the logistics industry, technological developments and a propensity to shift logistics to out-of-state locations if it is beneficial for the industry.**



# Deliverable 3 Next Steps: Matching Supply and Demand

- **After completing Deliverables 1 and 2, we will identify each county where future supply is insufficient, as the excess demand for one or more of the following outcomes:**
  - Existing space will become more efficient.
  - Other land uses (e.g., failing retail malls, vacant land, underperforming residential or commercial acreage, etc.) will be redeveloped as industrial space.
  - Demand will divert to other counties with available land.
- **We will estimate the likelihood that the excess demand for each intermodal channel will be accommodated by each of these alternatives.**
- **John Husing will apply concepts from “Dirt Theory” to explain how Southern California’s subregions grow and spread over time. This will suggest which subregions will develop their land first.**