

# Warehouse Space Forecasts

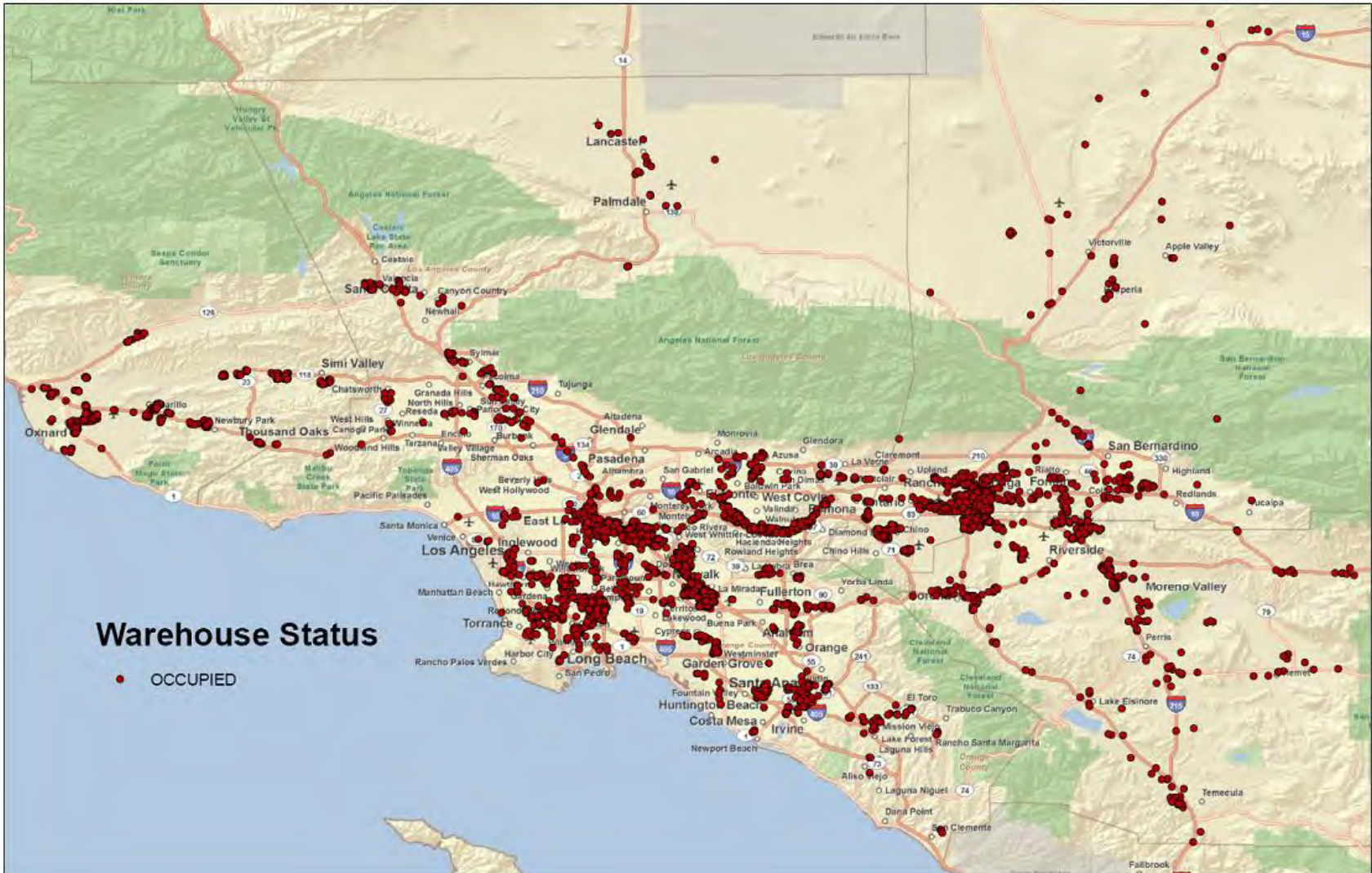
Presented to Goods Movement Steering Committee



SOUTHERN CALIFORNIA  
ASSOCIATION of GOVERNMENTS

Gill V. Hicks  
Cambridge Systematics, Inc.  
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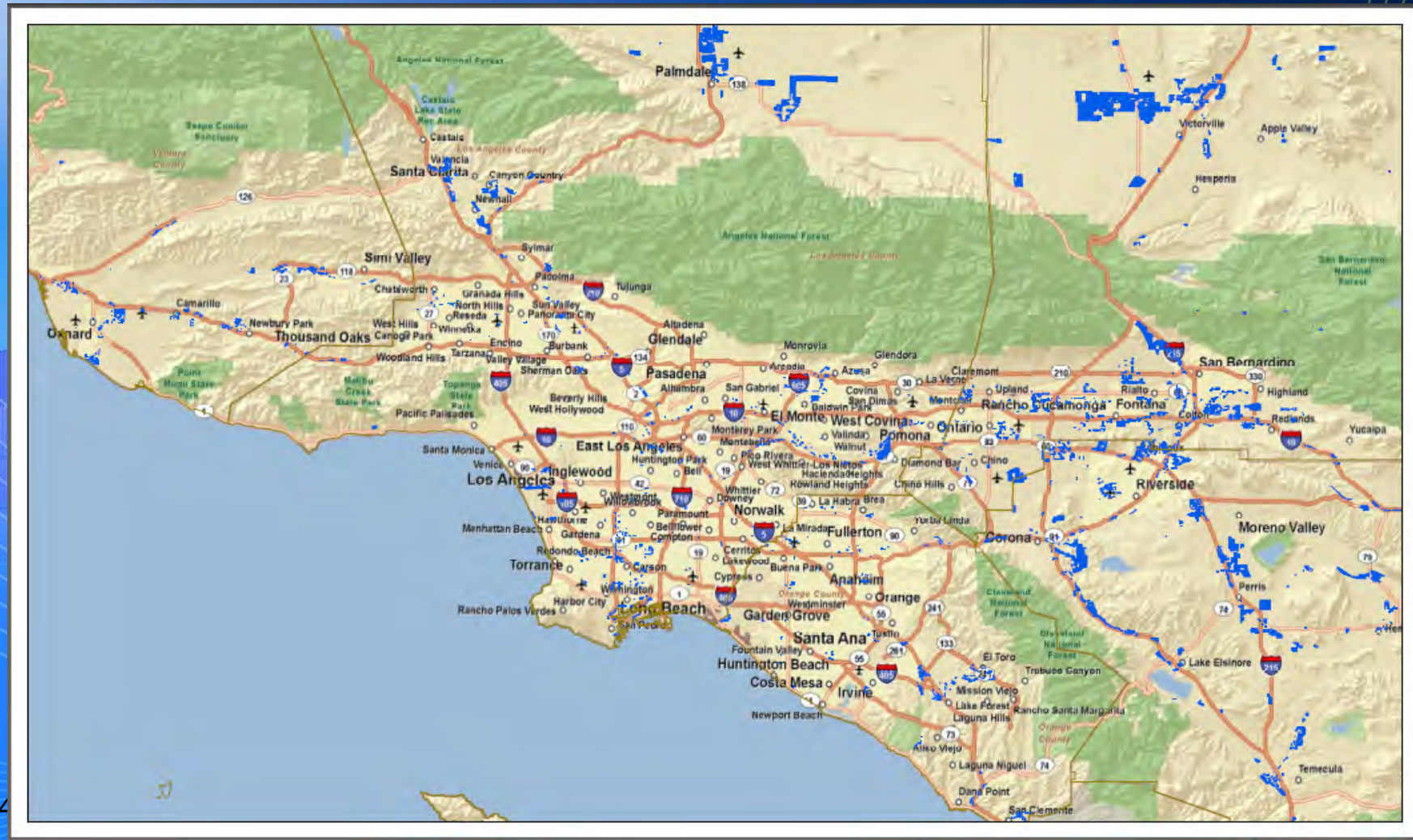
# Total Occupied Warehousing



# Total Available Warehousing Facilities



# Availability of Land Suitable for Warehousing Development



# Warehouse Square Footage

- How much warehouse square footage is currently being used to store/process port-related and non-port-related cargo?
- How much warehousing will be required in 2035?
- Where will new facilities be located?
- How will square footage grow over time and space?

# Future Warehousing Supply and Demand

*2008 total occupied warehouse space*

*694 million sq. ft.*

*2008 available warehouse space*

*143 million sq. ft.*

*2008 undeveloped suitable space*

*185 million sq. ft.*

*Demand in 2035 to accommodate port and non-port related warehouse growth*

*1,250 million sq. ft.*

Potential shortfall of warehouse space by 2035

$$=694+143+185 -1,250 =$$

*228 million sq. ft.*

# Input Variables in Modified Avison Young Warehouse Space Model

- Total TEUs through ports (14.3 million TEUS in 2008)
- Percent local loaded imports (26.4%)
- Percent local loaded exports (8.5%)
- Percent of loaded exports needing warehouse space (30%)
- Percent in region (100%)
- Percentage of times cargo is moved twice in region (10%)

# Input Variables in Modified Avison Young Warehouse Space Model (continued)

- Percent full (90%)
- Dimensions of a TEU (8ft X 8.5ft X 20ft)
- Number of times cargo in warehouse turns over per year (12)
- Warehouse cubic space utilization rate at full capacity (23%)
- Percent capacity utilization (75%)
- Average building ceiling height (27 feet)



# Aggregate Results: Port-Related Warehousing

- 102 million square feet in 2008 (15% of all occupied square footage)
- 307 million square feet in 2035 (25% of all occupied square footage)
- 201% growth between 2008 and 2035
- Assumes growth in TEUs to 43.2 million TEUs by 2035

# Aggregate Results: Non-Port-Related Warehousing

- 592 million square feet in 2008 (85% of all occupied square footage)
- 943 million square feet in 2035 (75% of all occupied square footage)
- 59% growth between 2008 and 2035

# Aggregate Results: All Occupied Warehousing

- 694 million square feet in 2008
- 1,250 million square feet in 2035
- 80% growth between 2008 and 2035

# Future Warehousing Supply and Demand

*2008 total occupied warehouse space*

*694 million sq. ft.*

*2008 available warehouse space*

*143 million sq. ft.*

*2008 undeveloped suitable space*

*185 million sq. ft.*

*Demand in 2035 to accommodate port and non-port related warehouse growth*

*1,250 million sq. ft.*

Potential shortfall of warehouse space by 2035

$$=694+143+185 -1,250 =$$

*228 million sq. ft.*