

Task 5 Final Findings: Needs Assessment of Industrial/Warehouse Facilities



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Economics & Politics, Inc.**

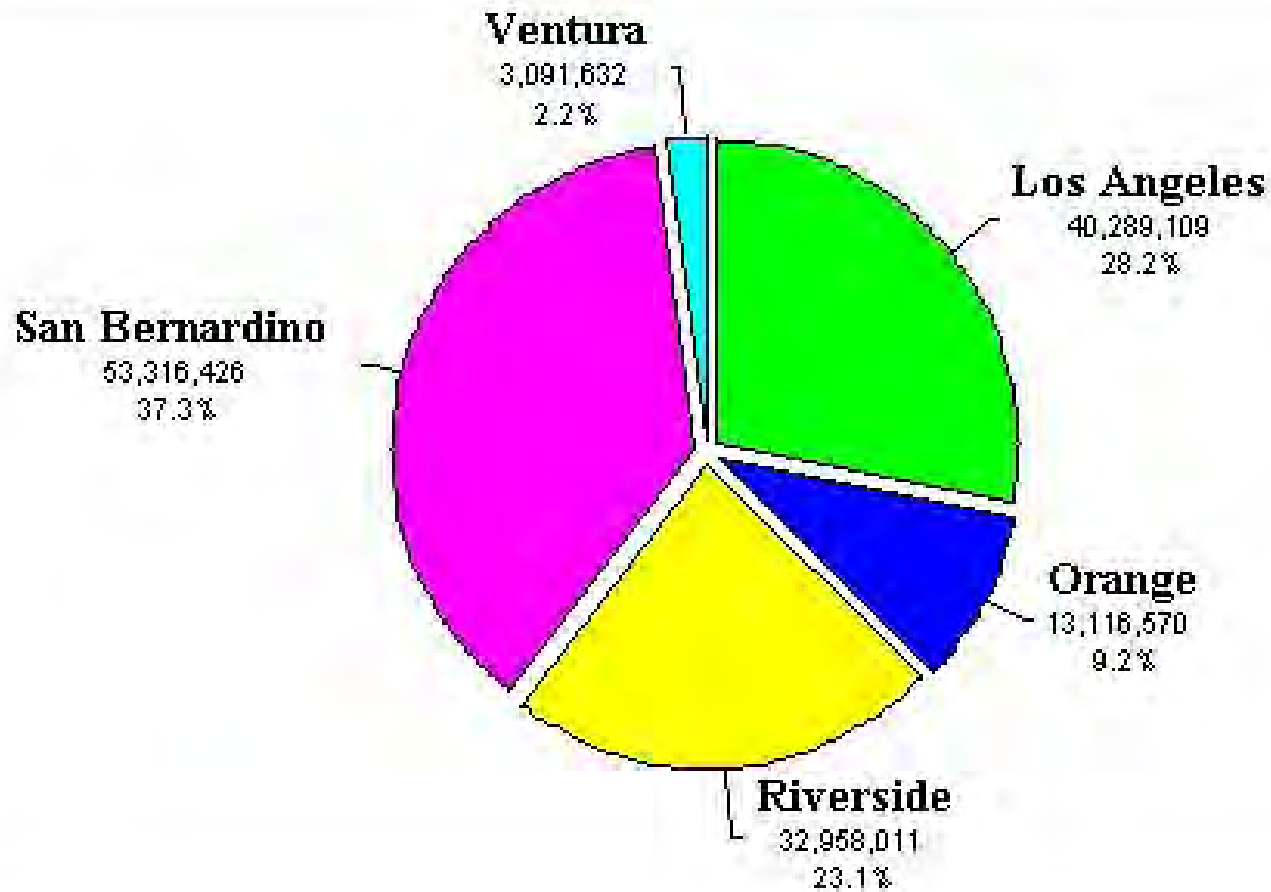
	County	Sub-Market
1	L.A. County	South Bay
2	L.A. County	Mid-I 710
3	L.A. County	Central L.A.
4	L.A. County	605
5	L.A. County	San Gabriel
6	San Bernardino County	Westend SB
7	Orange County	West Orange
8	L.A. County	I-5
9	Ventura County	Port Hueneme
10	Riverside County	West Riverside
11	San Bernardino County	East SB Valley
12	Riverside County	March JPA
13	Orange County	Orange Airport
14	Orange County	North Orange
15	Ventura County	118
16	Ventura County	101
17	Orange County	South Orange
18	Riverside County	SW Riv. County
19	Riverside County	Pass
20	San Bernardino County	High Desert
21	L.A. County	North L.A.
22	Ventura County	126
23	Riverside County	Coachella
24	Imperial County	South Imperial
25	Imperial County	North Imperial

25
Sub-Markets
&
Demand
Sequence

Available Existing Space



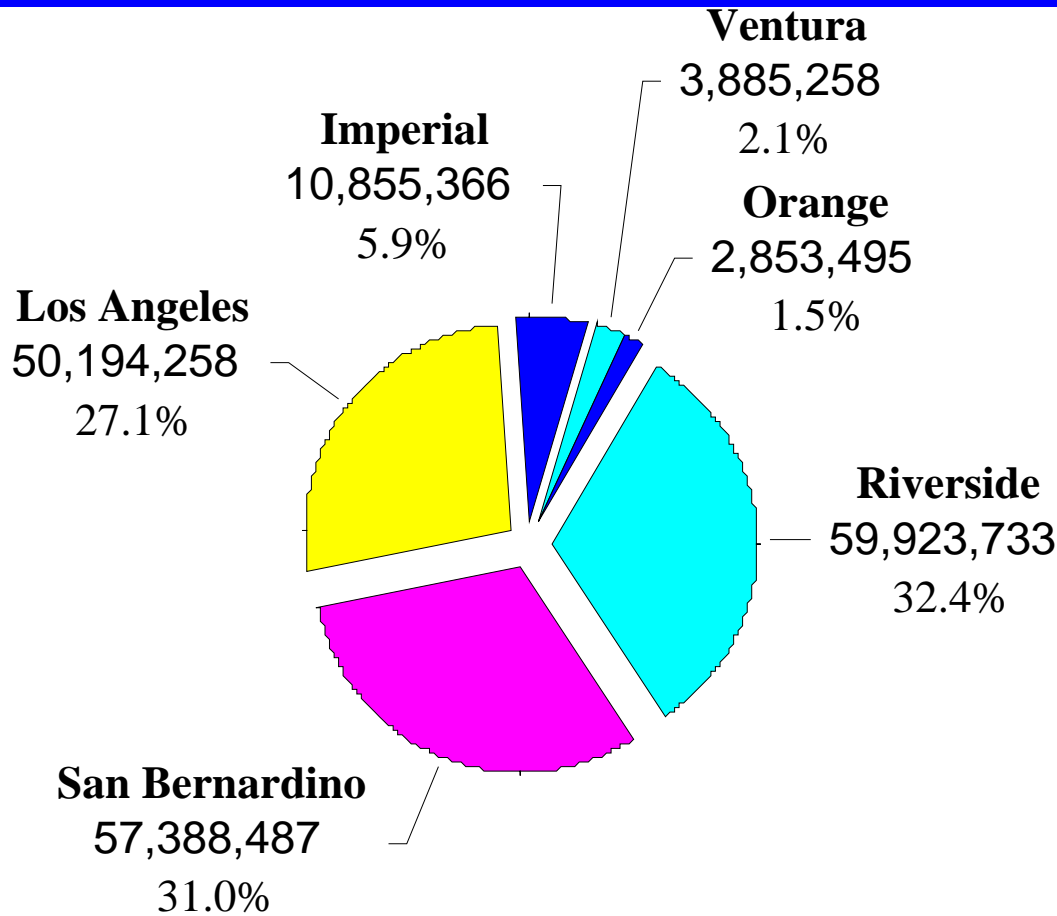
Vacant Facilities by County



Undeveloped Industrial Land



Developable Facilities



Note: 55% Floor Area Ratio

Total Available Warehousing Space

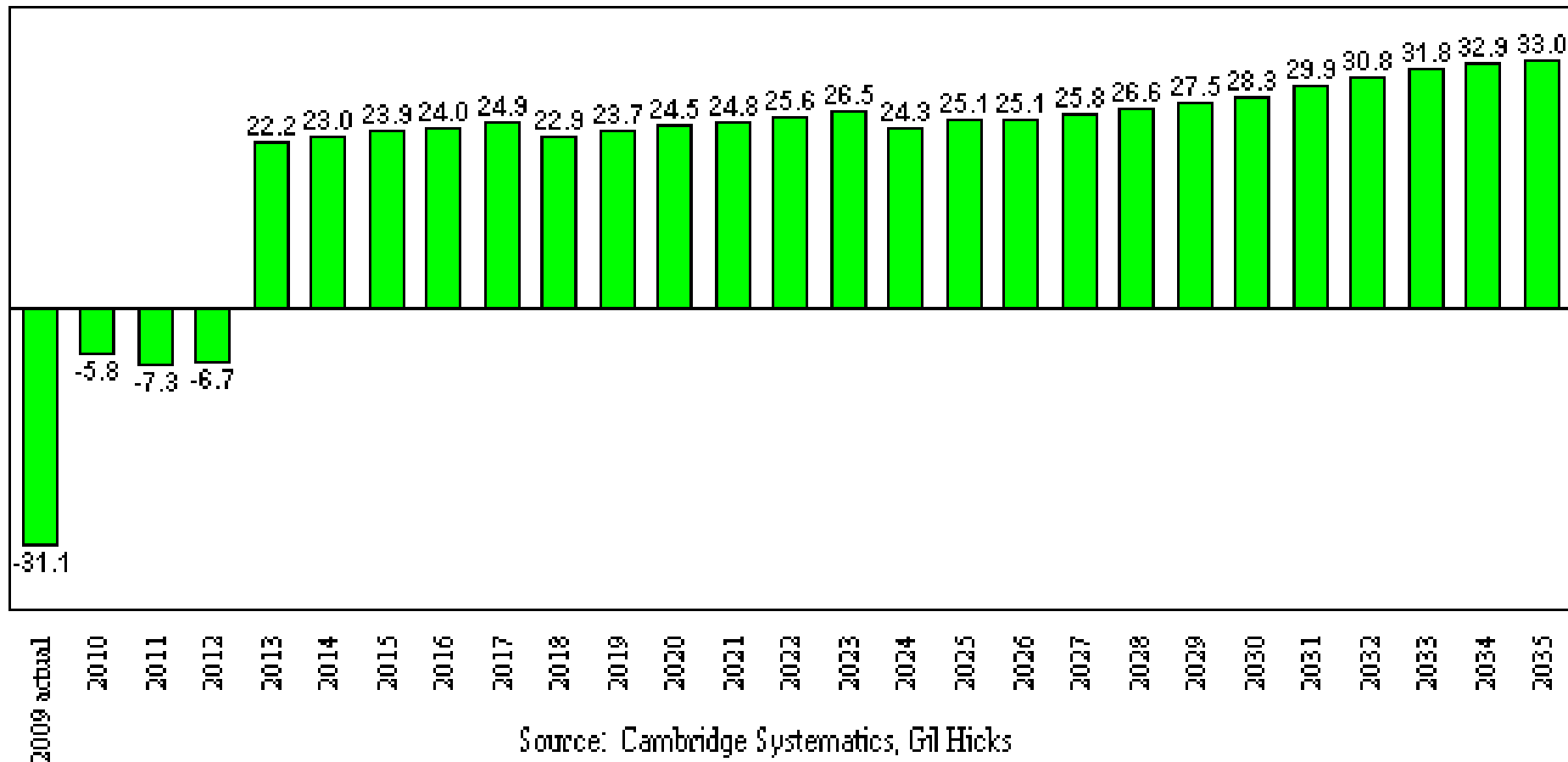
Available sq ft.	Based On Vacant Land Sq Ft	total unused supply
143,846,908	186,274,798	330,121,706

Distribution of Occupied Warehousing Space, 2008

Port Occupied	Non-Port Occupied Sq Ft	Total Port and Non-Port Sq. Ft.	Port Share
102,082,701	591,760,159	693,842,860	14.7%

Total Warehousing Demand

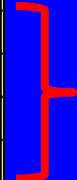
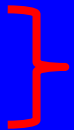
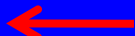
Non-Port Related Demand, 2009-2035 Warehousing Space (million sq. ft.)



Source: Cambridge Systematics, Gil Hicks

Port Demand allocation based on sub-market's location relative to ports & 2009 vacant space available

Priority	County	Sub-Market	Beginning Share
1	L.A. County	South Bay	20.0%
2	L.A. County	Mid-I 710	6.0%
3	L.A. County	Central L.A.	15.0%
4	L.A. County	I-605	10.0%
5	L.A. County	San Gabriel	7.5%
6	San Bernardino County	Westend SB	12.5%
7	Orange County	West Orange	3.5%
8	L.A. County	I-5	1.5%
9	Ventura County	Port Hueneme	0.4%
10	Riverside County	West Riverside	6.3%
11	San Bernardino County	East SB Valley	5.6%
12	Riverside County	March JPA	5.3%
13	Orange County	Orange Airport	2.0%
14	Orange County	North Orange	1.6%
15	Ventura County	SR-118	0.5%
16	Ventura County	SR-101	0.2%
17	Orange County	South Orange	0.1%
18	Riverside County	SW Riv. County	0.1%
19	Riverside County	Pass	0.3%
20	San Bernardino County	High Desert	1.2%
21	L.A. County	North L.A.	0.5%
22	Ventura County	SR-126	0.0%
23	Riverside County	Coachella	0.0%
24	Imperial County	South Imperial	0.0%
25	Imperial County	North Imperial	0.0%
	Total		100.0%



Allocation Rules: Port Trade

As each market, hits 2.5% vacancy available at the beginning of a year, demand for space that goes under 2.5% passed to next priority market able to accommodate it.

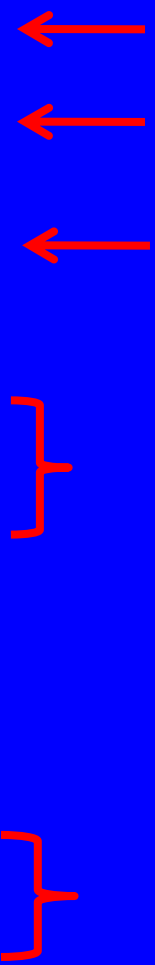
From the next year on, that next market's share gets share that had been assigned to its now saturated neighbor.

As each priority sub-market, in turn, becomes saturated, the share of the total market passed on to the next priority area is the cumulative share of all previously saturated sub-markets.

No Port trade to Ventura County's SR-126, Coachella Valley, or two Imperial County markets.

Non-Port Demand allocation based on location away from ports, near L.A.'s center & ability to add new space

Priority	County	Sub-Market	Beginning Share
1	L.A. County	South Bay	0.0%
2	L.A. County	Mid-I 710	1.0%
3	L.A. County	Central L.A.	2.0%
4	L.A. County	I-605	0.6%
5	L.A. County	San Gabriel	3.2%
6	San Bernardino County	Westend SB	7.0%
7	Orange County	West Orange	3.9%
8	L.A. County	I-5	4.0%
9	Ventura County	Port Hueneme	1.0%
10	Riverside County	West Riverside	8.0%
11	San Bernardino County	East SB Valley	15.0%
12	Riverside County	March JPA	15.0%
13	Orange County	Orange Airport	2.0%
14	Orange County	North Orange	0.3%
15	Ventura County	SR-118	0.9%
16	Ventura County	SR-101	1.0%
17	Orange County	South Orange	1.0%
18	Riverside County	SW Riv. County	2.5%
19	Riverside County	Pass	2.0%
20	San Bernardino County	High Desert	12.0%
21	L.A. County	North L.A.	10.0%
22	Ventura County	SR-126	0.5%
23	Riverside County	Coachella	6.0%
24	Imperial County	South Imperial	1.0%
25	Imperial County	North Imperial	0.1%
	Total		100.0%



Allocation Rules: Non-Port Trade

Non-Port treated as driver for new development since port trade is accommodated by existing available space

As non-Port related demand for space in each sub-market exceeded the supply of developable space in it, excess demand moved to the nearest sub-market able to accommodate it.

Not always to the adjacent market and may require the demand to be split between several markets.

As space gets very tight, demand transferred to any market able to handle it.

2.5% vacancy limit used: combined port/non-port space.

Rezoning allowed for 95 million extra sq. ft. in outlying markets in 2024-2027 as region runs out of space.

Resulting Build-Out Sequence

1. Areas near ports and central L.A.
2. East on SR-60, I-10 to Fontana
3. West Orange County
4. North on I-5 to Santa Clarita
5. Port Hueneme area
6. Eastern Inland Empire
7. South Orange County
8. West on SR-101, SR-118 in Ventura County
9. Southwest Inland Empire
10. I-15 area of High Desert from East
11. Lancaster, Palmdale from East
12. Coachella Valley from East
13. Imperial County from East, West and South

Location

Distance from Ports
Distance from Population Center
Gateway for U.S. supplied cargo

Economics

Land Availability
Price per Cubic Foot
Fuel Cost

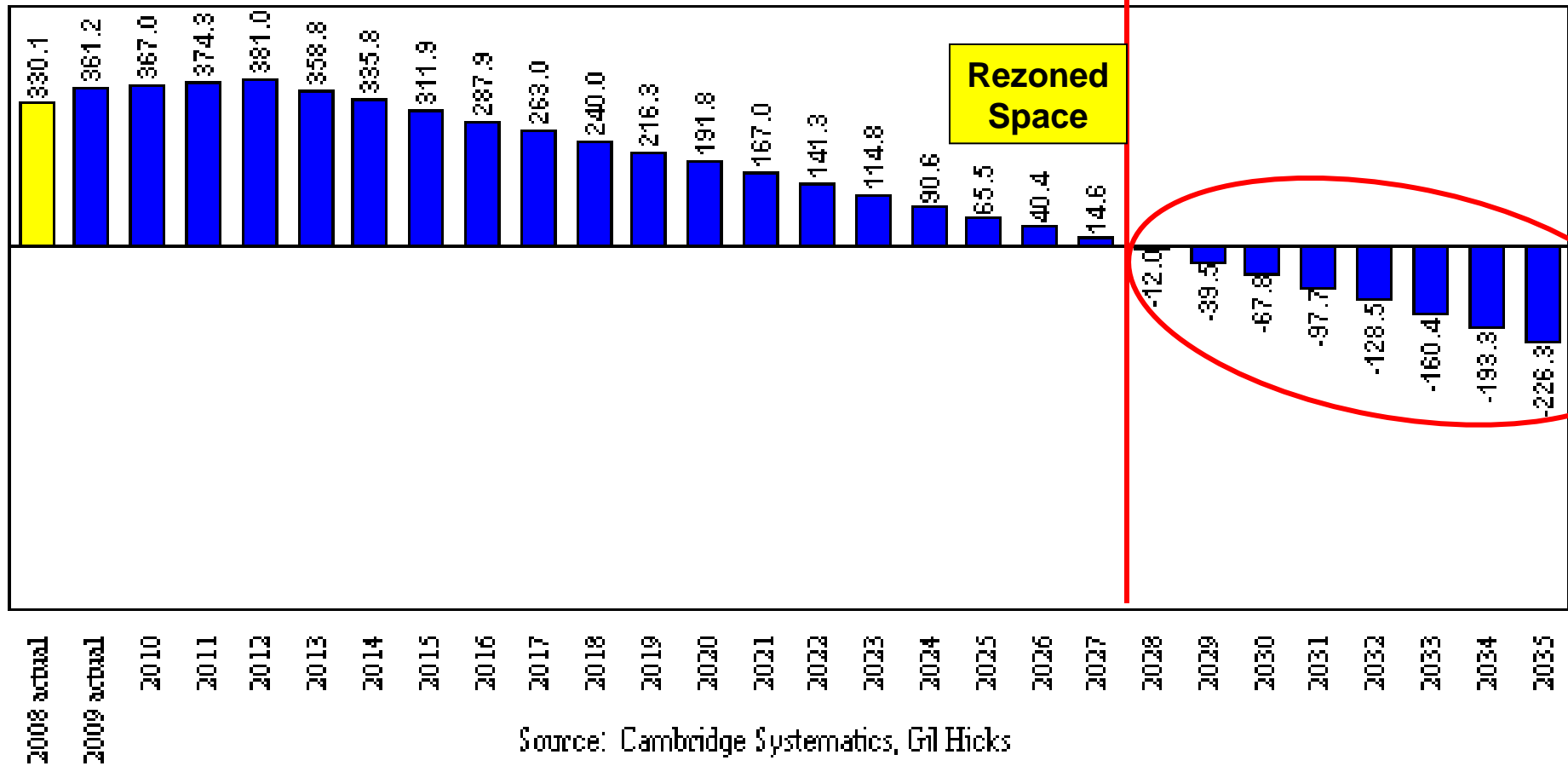
Results: Build-Out



Sprawl is inevitable given land availability

Available Warehousing Space After Port & Non Port Demand

Available Warehousing Square Footage (million square feet)
After Port & Non-Port Demand, 2008-2035



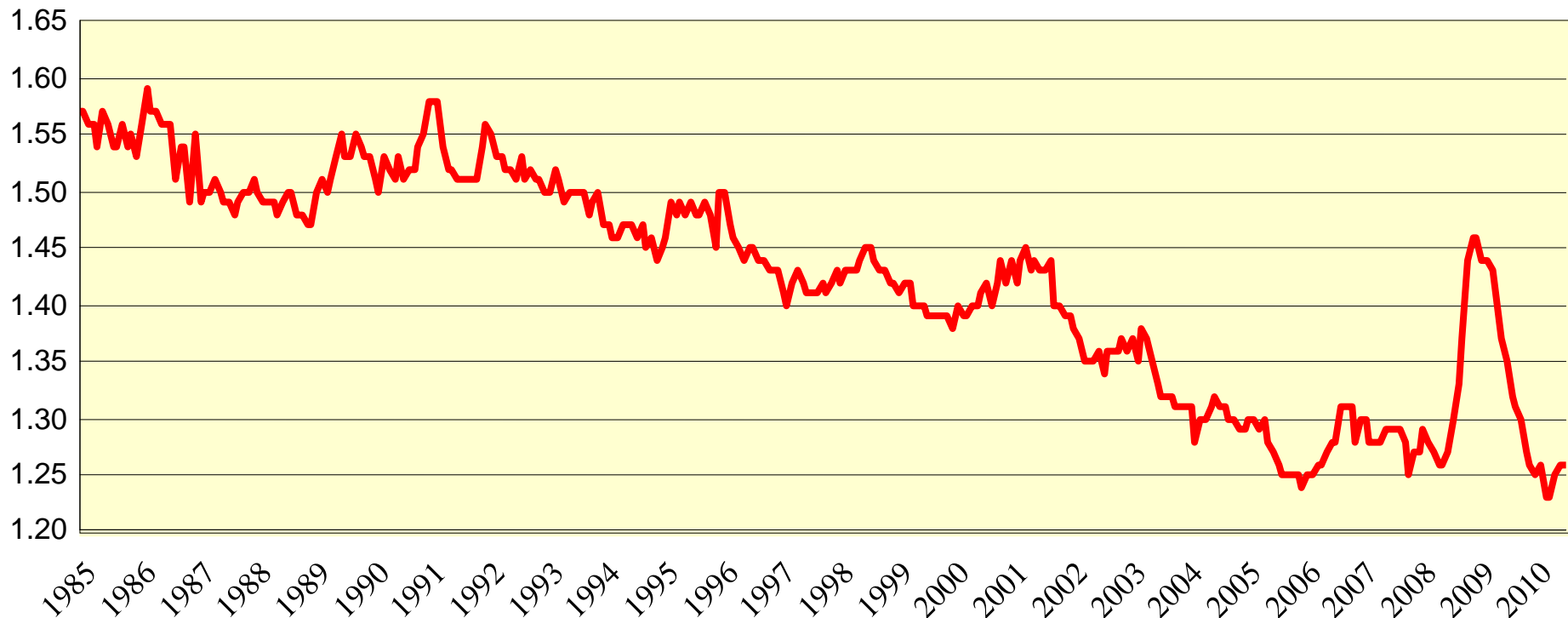
Long Term Results

1. Assuming demand modeling is correct, by 2027, in 17 years, today's existing industrial space will be occupied.
2. All of the remaining land currently zone industrial will be built-out and occupied. Some land will be rezoned
3. International will go from occupying 17.7% to 21.3% of space due to a faster growth than domestic cargo. Domestic will fall from 85.3% of space to 78.7%.
4. Pricing and fuel cost will ultimately force facilities in the urban valleys to specialize more in international cargo.
5. Deserts will specialize in domestic cargo from the east.
6. Starting in 2028, a shortage of space will emerge that will reach 226,000,000 feet by 2035.
7. Pricing should ultimately make it economical to redo existing older space.

Recent DATA

Inventories Historically Low

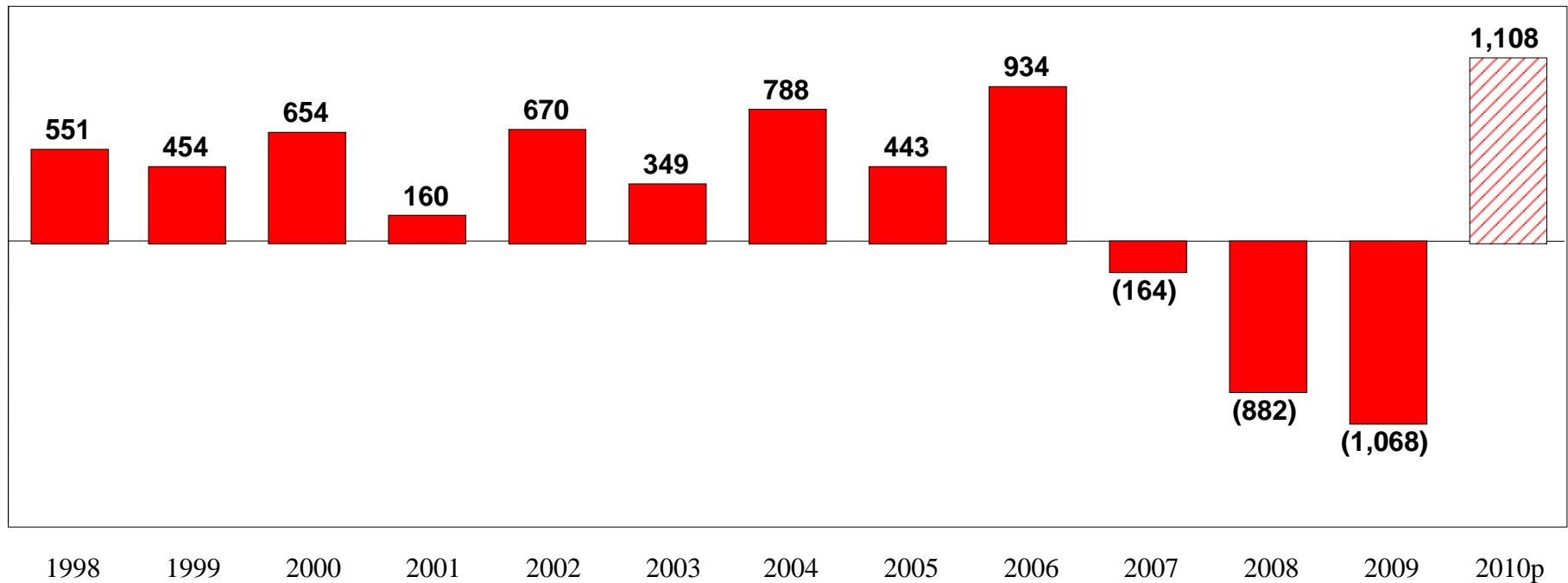
U.S. Inventory to Sales Ratio, 1985-2010
Months of Inventory On Hand At Existing Sales Levels



Source: U.S. Census Bureau

Port Imports Have Started Recovering

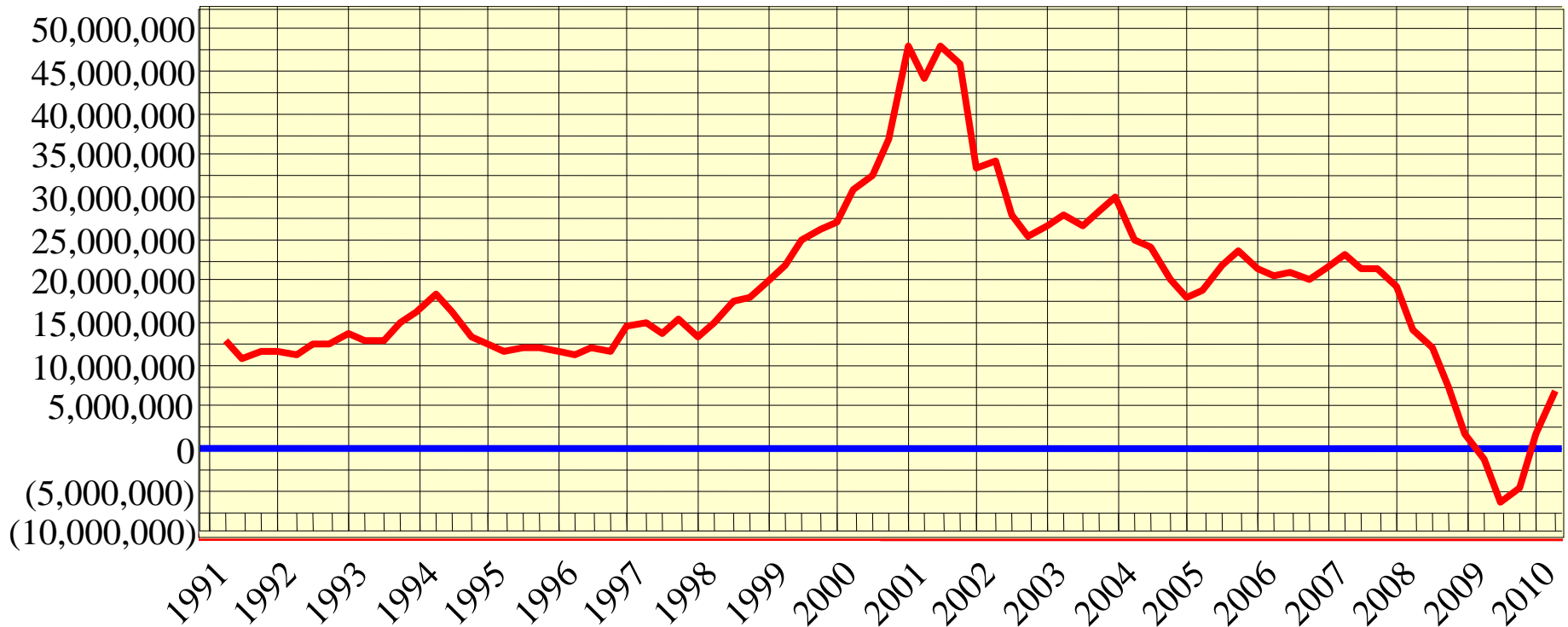
Change In Imported Containers
Ports of Los Angeles-Long Beach, 1998-2010e (000 of teus)



Source: Port Import Export Reporting Service (PIERS), collected from Vessel, LA-LB for 2009
2010 based on first eight months growth = 18.3%

Inland Industrial Absorption Restarted

**Industrial Space Gross Absorption
Inland Empire, 1991-2010 (moving 4-quarter total)**



Source: Grubb & Ellis & Economics & Politics, Inc.

Questions?

www.johnhusing.com