

**AQMD High Cube  
Warehouse Truck Trip  
Study Stakeholder  
Working Group**

August 9, 2012

# Summary of High Cube Warehouse Definitions

	>100,000 sf	>200,000 sf	>500,000 sf	>24-ft ceiling	>28-ft ceiling	>30-ft ceiling	>1 dock door/10,000 sf	'High level" of automation	Used for storage of automation distribution	Used for the storage of goods prior to assembling of component parts and products at all stages in the supply chain	Small employee count	Off-peak truck activity	Good freeway access	>50% land coverage
<b>WRCOG</b>		X	X			X	X	X		X	X			
<b>San Bernardino County</b>	X		X			X	X	X		X	X	X	X	
<b>Moreno Valley</b>		X	X			X								
<b>Fontana</b>		X		X			X	X						
<b>Perris</b>		X	X			X								
<b>Fontana Truck Study</b>	X							X						
<b>NAIOP 2011 Study</b>			X		X		X		X					
<b>ITE 8th Edition</b>			X				X	X		X	X	X		

# Key Criteria for High Cube Warehouses

- Greater than 200,000 sf building size
- Minimum ceiling height of 24 feet
- Minimum dock door ratio of 1 per 10,000 sf
- Used primarily for distribution of goods to stores or other warehouses
- High level of automation/mechanization

# Business Survey Pilot Study

- Draft Business Survey will be sent to 10 warehouses
- 10 warehouses chosen have all been visited by AQMD staff
- Not all warehouses in Pilot Study are high-cube warehouses

# Draft Pilot Study Warehouses

Costco Depot (dry)	11600 Riverside Drive, Jurupa Valley
Costco Depot (refrig.)	11600 Riverside Drive, Jurupa Valley
Skechers	29800 Eucalyptus Ave., Moreno Valley
Kohl's	890 E. Mill St., San Bernardino
TTSI/ NEC (Bldg. 1)	18735 South Ferris Ave., Compton
Stater Brothers	301 South Tippecanoe Ave., San Bernardino
California Cartage	2401 E. Pacific Coast Highway, Wilmington
New Balance	5540 East 4th Street, Ontario
Jakks Pacific Inc.	21749 Baker Parkway, City of Industry
Target	14750 Miller Avenue, Fontana

# AQMD High Cube Warehouse Business Survey - Internal Draft

## User Information

	12%
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### 1. Facility Information

Facility Name	<input type="text"/>
Facility Street Address	<input type="text"/>
City	<input type="text"/>
State	<input type="text"/>
Zip Code	<input type="text"/>

### 2. Contact

Name	<input type="text"/>
Title	<input type="text"/>
Phone	<input type="text"/>
E-mail	<input type="text"/>

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Building Information



25%

**3. What is the size of your warehouse excluding office space?**

Warehouse size in square feet

**4. Are you the only tenant at this facility?**

Yes

No

**5. What is the approximate ceiling height of your building?**

Ceiling height in feet

**6. How many dock doors are located at your warehousing operation?**

Number of dock doors

**7. What percent of goods are transported to/from your warehouse using an onsite rail line?**

0 percent

1 to 25 percent

25 to 50 percent

Greater than 50 percent

**8. What percentage of floor space is typically dedicated to each activity?**

Storage racks

Cross dock

Parcel

Sorting

Refrigeration/freezer

Value added service (labeling, etc.)

Supporting activities (pallet handling, forklift battery charging, cardboard handling, etc.)

Other

**9. What type of goods do you handle at your warehouse?**

- Raw materials
- Durable goods (furniture, appliances, etc.)
- Non-perishable consumable goods (clothing, toys, etc.)
- Perishable consumable goods (food, drinks, etc.)
- Parcel

Other (please specify)

**10. Approximately how many employees work at your facility on a typical day?**

full time   
part time

**11. Which month(s) do you move the highest volume of goods?**

- |                                   |                                 |                                    |
|-----------------------------------|---------------------------------|------------------------------------|
| <input type="checkbox"/> January  | <input type="checkbox"/> May    | <input type="checkbox"/> September |
| <input type="checkbox"/> February | <input type="checkbox"/> June   | <input type="checkbox"/> October   |
| <input type="checkbox"/> March    | <input type="checkbox"/> July   | <input type="checkbox"/> November  |
| <input type="checkbox"/> April    | <input type="checkbox"/> August | <input type="checkbox"/> December  |

**12. How much busier are you during these month(s) compared to average months?**

% increase

**13. How does your current number of total deliveries compare to your historical best year? (only fill in one)**

% higher   
% lower

**14. At what percentage of utilization is your warehouse?**

- |  |  |   |
|--|--|---|
| <input type="radio"/> Less than 50 percent utilization | <input type="radio"/> 60 to 70 percent utilization | <input type="radio"/> 80 to 90 percent utilization  |
| <input type="radio"/> 50 to 60 percent utilization     | <input type="radio"/> 70 to 80 percent utilization | <input type="radio"/> 90 to 100 percent utilization |

**15. How long do you generally take to turn over most of your inventory?**

- |                              |                                 |                                     |
|------------------------------|---------------------------------|-------------------------------------|
| <input type="radio"/> Daily  | <input type="radio"/> Monthly   | <input type="radio"/> Semi-annually |
| <input type="radio"/> Weekly | <input type="radio"/> Quarterly | <input type="radio"/> Annually      |

## AQMD High Cube Warehouse Business Survey - Internal Draft

### Automation



**16. If your warehouse uses conveyORIZED track/belt to move goods throughout your facility, approximately how many miles of conveyor do you use?**

- We don't use conveyors
- 0 to 3 miles
- 3 to 6 miles
- 6 to 9 miles
- Greater than 9 miles

**17. How many forklifts/pallet jacks does your business use?**

Number of forklifts/pallet jacks

**18. Does your facility use any of the following processes to automate your warehouse operations?**

- Barcode scanning
- Automated sorting
- Automated storage
- ConveyORIZED loading and/or unloading directly into trailers
- Other

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Vehicle Activity

**19. How many employee vehicles enter through your gate(s) on the busiest day of a typical week?**

Number of light duty cars and pickup trucks

**20. How many delivery trucks enter through your gate(s) on the busiest day of a typical week?**

Number of delivery trucks

**21. What percentage of deliveries come from the following locations?**

- Port of Los Angeles
- Port of Long Beach
- Port of San Diego
- Port Hueneme
- Other Warehouses
- Rail Yard
- Airport
- Local Store (southern CA)
- Non-local Store (other CA)
- Out of State

**22. What percentage of deliveries go to the following locations?**

- Port of Los Angeles
- Port of Long Beach
- Port of San Diego
- Port Hueneme
- Other Warehouses
- Rail Yard
- Airport
- Local Store (southern CA)
- Non-local Store (other CA)
- Out of State

Fleet Information



75%

**23. How many hostlers (i.e., yard goats) does your warehouse operate?**

Number of hostlers

**24. If you own heavy duty delivery trucks, please indicate which engine technology makes up the largest portion of your fleet:**

- Pre-2007 model year diesel engines
- Model year 2007 or newer diesel engines
- Model year 2010 or newer diesel engines
- LNG
- Other alternative fuel

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**25. List any other features of your operation that you think might benefit or impact air quality.**

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