Clean Technologies for Last Mile Delivery, Truck Aerodynamics, and Data Collection Workshop

Part 3: Data Collection and Freight Hub Survey

November 1, 2016

Transportation and Toxics Division

California Environmental Protection Agency

Air Resources Board

Workshop Overview

Presentation

I. Background/Purpose

II. Data Collection

III. Survey Content

IV. Next Steps

Question/Answer Session

- Please hold all questions and comments until after the presentation.
- For those viewing remotely, you may submit questions via email to sierrarm@calepa.ca.gov

Background

Data Collection Purpose

- Guide and support policy
- Identify technologies in use
- Update ARB's emission inventory
- Assess any local, regional, and statewide impacts

Data Collection

Data Collection Methods to Minimize Survey Content

- Utilize data from existing reporting requirements
- Use existing, publically available data

Freight Hub Survey Data Interests

- Facility information
- Activity information
- Equipment information
- Geographic Location

Data Collection

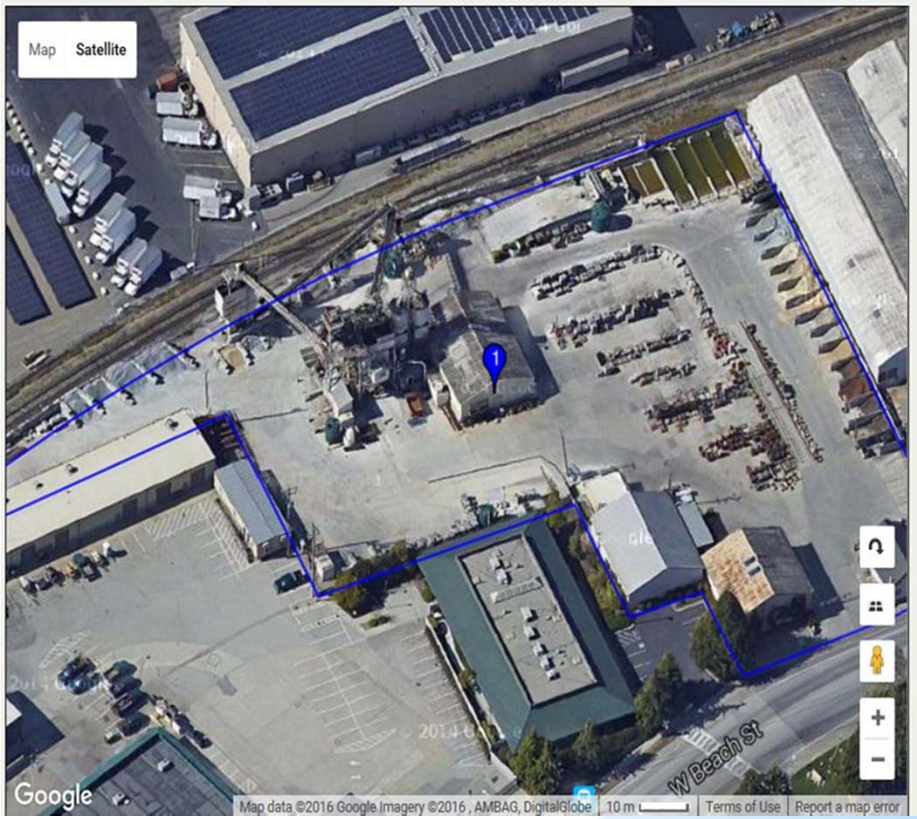
Freight Hub Types

- Truck Stop
- Border Crossing
- Seaport
- Airport
- Rail Yard
- Warehouse/
  Distribution Center

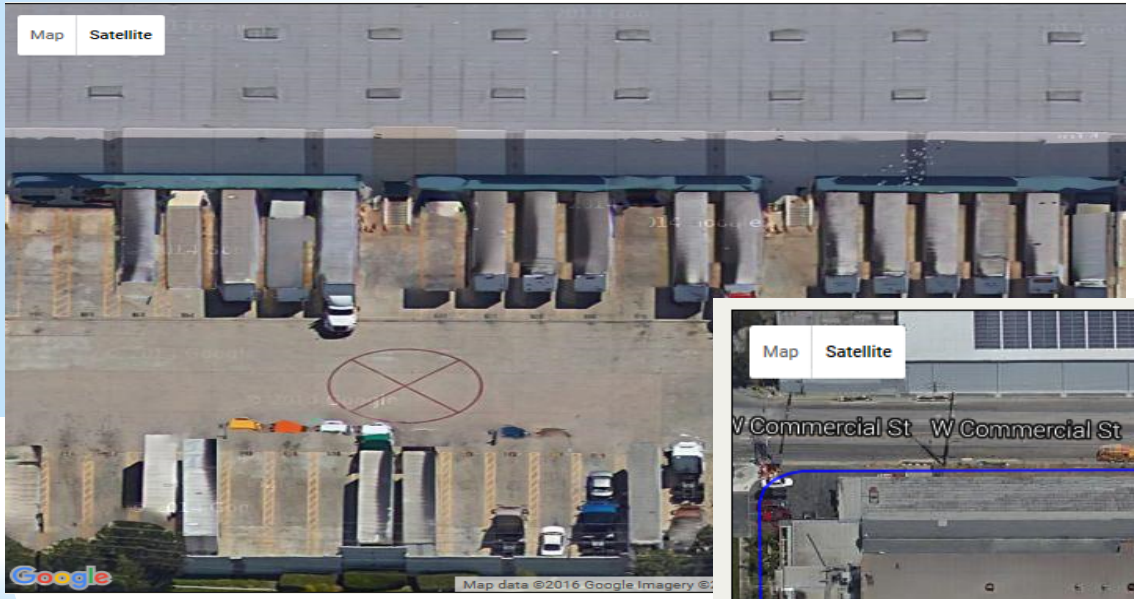
Data Collection – Freight Hub Identification

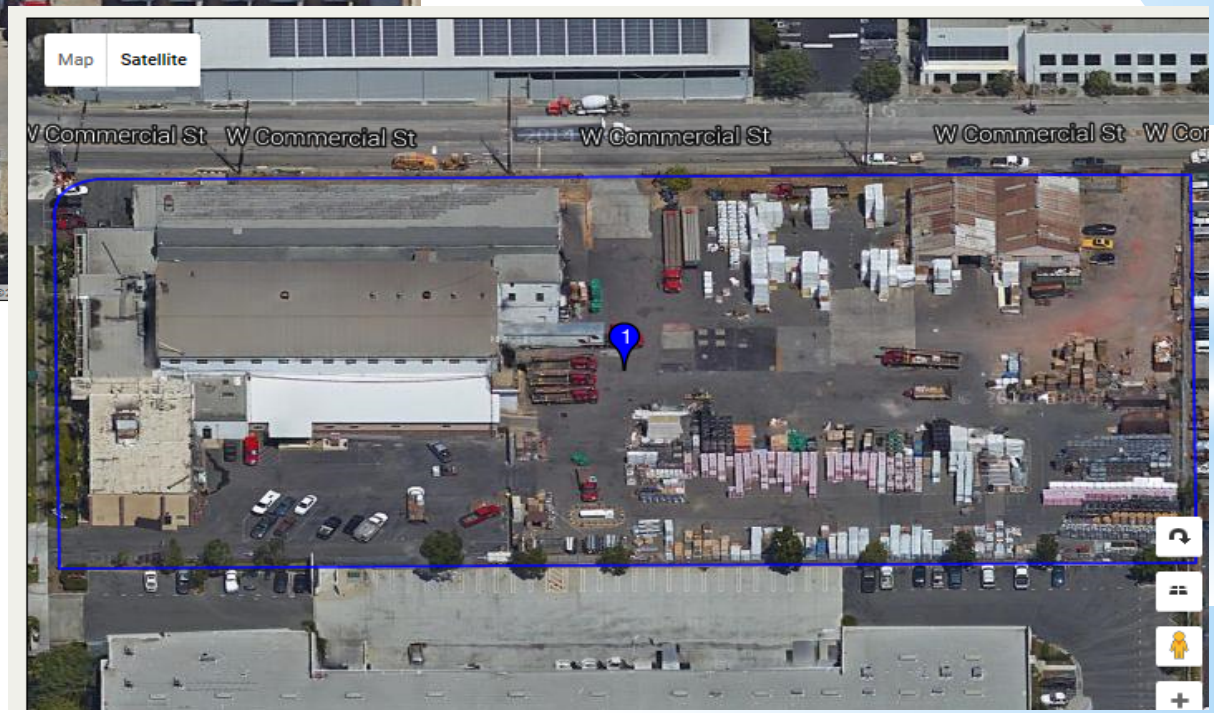
Tax Assessors' Data

- Data from 58 County tax assessor's offices
- Used to locate warehouses and distribution centers
- Data includes property/owner addresses and property characteristics



Data Collection – Freight Hub Identification





Data Collection – Existing Data

Stakeholder Engagement

- Warehouses and Distribution Centers
- Seaports
- Airport
- Railroads
- Truck Stops
- Industry Representatives
- Local Government Agencies
- State Agencies

Draft Sample Content – Contact Info

A. Owner Operator/Tenant Contact Information

Check the box that applies to your occupancy status. If you check the box for "Owner Operator" skip to Section III.

☐ Owner Operator ☐ Tenant ☐ Sub-tenant (Lessor: _____)

Company Names(s):_____

Primary Contact Name: _____Title: _____

Mailing Address: _____

City: _____ State/Province: _____ Zip: _____ Country: _____

Phone Number: _____ Email Address: _____

Business Entity Type (check one):

☐ Corporation ☐ Limited Partnership (LP) ☐ Limited Liability Partnership (LLP)
☐ Limited Liability Company (LLC) ☐ General Partnership (GP) ☐ Sole Proprietorship

List the five or six-digit North American Industry Classification System (NAICS) code that best describes the primary purpose of your business.

_____

If you do not have a NAICS code please check the most appropriate industry title for your business:

☐ Agriculture, Forestry, Fishing and Hunting ☐ Mining ☐ Manufacturing

☐ Transportation and Warehousing ☐ Other: _____

How many acres do you have access to in accordance with your lease agreement? _____

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Draft Sample Content – Property Characteristics

B. General Property Information

1. What is the size of this property in acres? _____
2. How many acres are associated with freight activities? _____
3. How many tenants are located on this property? _____
4. Of those tenants, how many tenants and subtenants handle freight on this property? _____
5. How many buildings on this property are fully or partially used for freight activities? _____
6. What is the total square footage of those buildings associated with freight activities? _____
7. How many acres of undeveloped land are on this property? _____
8. How many acres of undeveloped land on the property have the potential to be developed in the future? ____

Draft Sample Content – Building Information

B. Owner Operated or Leased Buildings

	Building Identification	Number of Stories	Total Building Square Footage	Square Footage Under Your Operation	% Dedicated to Freight Activities[a]	Total # of Loading Bays	Square Footage Under Your Operation That Is Refrigerated[b]	# of Docks Serving Only Refrigerated Storage Spaces	Maximum Capacity of Freight (ft^3)[c]
1.									
2.									
3.									

Draft Sample Content – Infrastructure

C. Open Space and Parking

1. How many square feet is used for the storage, housing, or parking of freight outside of your building in open space? _____

2. Do you provide a rest area (overnight? parking that is paved or unpaved) for trucks? ☐ Yes ☐ No

3. If yes, what is the size of your truck parking area in square feet (include parking that is paved and unpaved)?

   _____

4. If yes, what is the maximum number of truck parking spaces (paved and unpaved) available on this property?

   _____

D. Advanced Technology/Infrastructure

1. If applicable, which rail company provides you with rail service? _____

2. If applicable, fill in the quantity of fuel dispensing stations at your facility, the storage capacity of the storage tanks and the amount of fuel dispensed in 2014.

Fuel Type(s):	Quantity of Fuel Tanks:	Storage Tank Capacity (gallons):	Fuel Dispensed (gallons):
Gasoline:	_____	_____	_____
Diesel:	_____	_____	_____
Biodiesel (blend: ____):	_____	_____	_____
CNG:	_____	_____(GGE)	_____(GGE)
LNG:	_____	_____	_____
Hydrogen:	_____	_____(kg)	_____(kg)
Propane:	_____	_____	_____
E85 (85% Ethanol Fuel):	_____	_____	_____
Other (_____):	_____	_____	_____

3. How many electrified plug-in stations (shorepower) do you operate at this facility? _____

4. If applicable, of the electrified plug-in stations you have in operation how many electrified plug-ins are for transport refrigeration units (TRU)? _____

5. If applicable, how many amps do you provide at your electrified plug-in stations? _____

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Draft Sample Content - Operations

A. Operational Information

1. For each month in the year 2014 indicate the inbound and outbound volumes of freight moved through your property, the number inbound and outbound shipments, and your typical hours of operation. Also indicate the unit type you are using for volume.

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Inbound	Volume*												
	Number of Shipments												
Outbound	Volume*												
	Number of Shipments												
Typical Hours of Operation													

*Volume unit type used: ☐ Tons ☐ Tonnes ☐ TEU ☐ Auto Unit ☐ Other: _____

2. Indicate for each mode type the **inbound** volume (or percent?), number of shipments, and percentage of shipments that were refrigerated that entered your facility in the year 2014. The inbound volume and number of shipment values should add up to the inbound values indicated in question III.A.1. above.

Mode Type	Inbound Data		
	Inbound Volume	Number of Shipments	% of Shipments That Were Refrigerated
Truck			
Train			
Aircraft			

3. What percentage of **inbound** refrigerated shipments entering the facility in 2014 had the following transportation refrigeration unit (TRU) configuration:

Truck TRU: _____ %

Container TRU: _____ %

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Draft Sample Content - Equipment

IV. Freight Equipment Data

Answer the questions below for each equipment type that you OWN or OPERATE only.

A. Stationary Equipment

1. List the District Permit Number for each stationary equipment you store or operate at this facility that is permitted by your local air district.

i. _____

ii. _____

iii. _____

iv. _____

v. _____

vi. _____

vii. _____

viii. _____

ix. _____

x. _____

xi. _____

xii. _____

B. Portable Equipment

1. List the Portable Equipment Registration Program (PERP) Registration Number or District Permit Number for each portable equipment you store or operate at this facility that is permitted by the ARB or your local air district.

xiii. _____

xiv.

xviii. _____

xix

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Draft Sample Content – Equipment

2. On-road Vehicles

a. On average, how many box trucks visit your facility daily? _____

b. On average, how many miles do they travel to get to your facility? _____

c. On average, how many miles do they travel when they leave your facility? _____

d. How many vehicles remain at this facility overnight? _____

e. How are vehicles at this location parked?
☐ Front-to-Back ☐ Assigned Spaces ☐ Vehicle Types Grouped Up

☐ Other: _____

f. How are vehicles at this facility dispatched?
☐ First-in First-Out ☐ Assigned Route per Vehicle ☐ Assigned Route per Driver

☐ Other: _____

g. Approximately, how many days a year are your vehicles loaded to their **weight** capacity? _____

h. Approximately, what percentage of your vehicles are typically loaded to within 1000 lb. of their weight capacity? _____

i. Approximately, how many days a year are your vehicles loaded to their volume capacity? _____

j. How is vehicle maintenance performed at this facility?
☐ In-house ☐ Manufacturer ☐ Off-site mechanic ☐ Contracted to outside party

☐ Other: _____

Body Type	Class	Engine Model Year	Fuel	Estimated MPG	Avg. An. Miles Per Vehicle	Bin Vehicles By Daily Miles (mi/day)			
						<50	50-100	101-150	>150
Example Van	3	2010	Diesel	8	20,000	10	53	21	8

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Potential Timeframe

- **November 2016:** Collect input from stakeholders
- **December 2016**: Post draft surveys and collect input from stakeholders
- **January-Fall 2017:** Staggered distribution of surveys in the following possible order:
  - Truck Stops
  - Border Crossings
  - Seaports
  - Airports
  - Railyards
  - Warehouses and Distribution Centers.
- **Spring 2017-Spring 2018**: Collect and analyze data

We Need Your Input

- Are there other sources of data?
- Should we be asking additional questions?
- What questions can/cannot be answered by freight hub owners/operators?
- Concerns or questions about the overall effort?

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