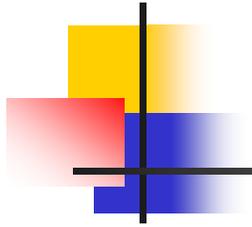


Promoting Healthy Sustainable Development Impacted by Freight Transport

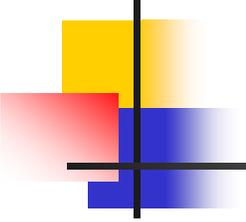
**Linda Wheaton, AICP,
Assistant Director, Intergovernmental Relations
California Department of Housing & Community Development (HCD)**

**California Freight Advisory Committee Meeting
January 21, 2014**



Sustainability Objective

Maximizing the economic development benefits of the freight industry while minimizing adverse community, environmental and public health impacts



Adverse Health Effects of Transport-related Air Pollution

- Asthma
- Cardiovascular diseases
- Cancer risk
- Premature death

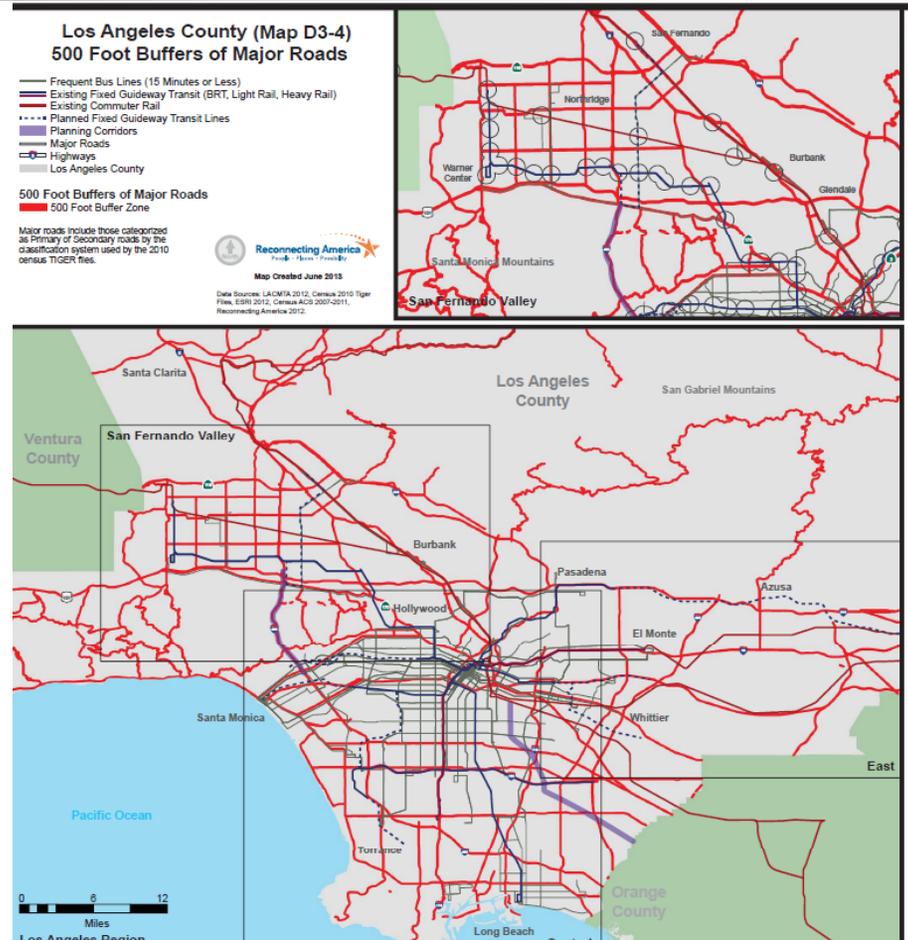
Significant Population Proximate to Major Roadways

Within 500 ft. of a freeway in Los Angeles County:

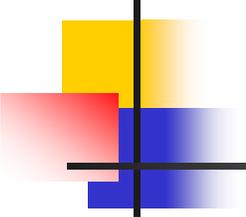
- 227,727 housing units*
- 126,385 parcels (within/partially within)*
- 52,015 acres*
- 646,902 people**

* Los Angeles County Regional Planning Department, 2012. Based on latest Los Angeles Assessor Data in 2012. Parcel and housing unit totals are the estimated values within the 500 foot freeway buffer. **Based on 2010 Census Block Groups. Totals are the estimated values within the 500 foot freeway buffer.

Map D3-4, Los Angeles Equity Atlas



Assessing Population Proximate to Major Truck Routes



Legend

2010 Population Density (persons per square mile)

- No Population Reported
- Less than 500
- 500 to 5,000
- 5,000 to 10,000
- 10,000 to 20,000
- 20,000 to 30,000
- 30,000 to 50,000
- Greater than 50,000

Jurisdictional Boundaries

- Community Plan Areas

Transportation Systems

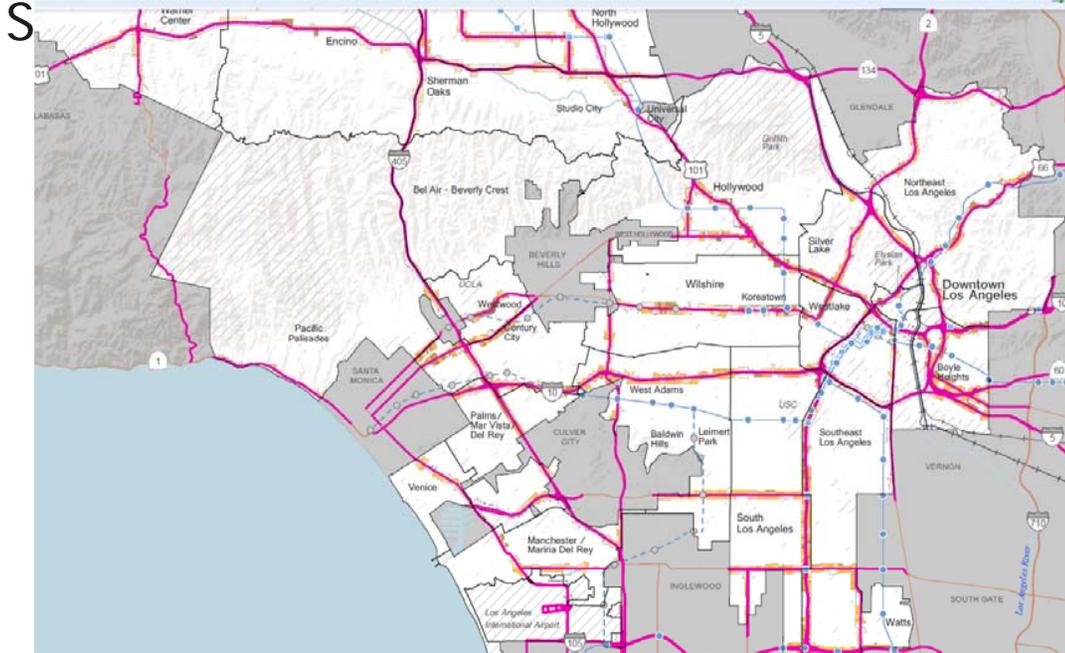
- Metro Rail Stations
- Metro Liner Stations
- Metrolink Stations
- Proposed Metro Rail Stations
- Truck Routes
- Metro Rail Lines
- Metro Liner Lines
- Proposed Metro Rail Projects
- Interstates and Highways
- State Highways
- Metrolink Rail Lines

Truck networks on California highways defined by Caltrans and include National Network, Terminal Access, California Legal Network, and California Legal Advisory routes. Blocks include areas with a population density greater than 500 persons per square mile.

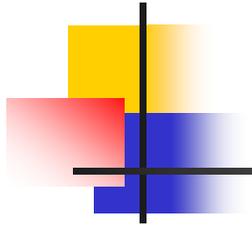
Data Sources: Truck Routes, 2012 Caltrans; Population Data, 2010 U.S. Census; Community Plan Areas, 2012 City of Los Angeles Department of City Planning; Metro Rail and Liner Routes and Stations, 2012 Metro; Metrolink Lines, 2006 Los Angeles County Urban Research; Metrolink Stations, 2012 Raimi + Associates; Proposed Metro Rail Routes and Stations, 2012 Raimi + Associates; Interstates and Highways, 2008 Tele Atlas North America, Inc.; World Terrain Base, 2009 ESRI.

Permission for use of these proprietary data is granted by the City of Los Angeles Department of City Planning. Copyright © 2013 City of Los Angeles. All Rights Reserved.

Produced by Raimi + Associates for the City of Los Angeles and Los Angeles County. Made possible with funding from the Centers for Disease Control and Prevention through the Los Angeles County Department of Public Health and The California Endowment May 2013

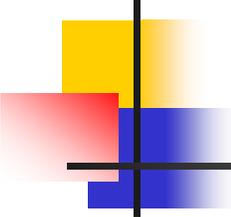


Los Angeles Health Equity Atlas, 2013



Community Impact Mitigation Needs

- Integrated land use planning, especially last mile strategies
- Engage environmental justice organizations
- Evaluate alternatives, e.g., truck routes, delivery times,
- Promote context-sensitive solutions
- Share best practices
- Pursue dedicated mitigation funding



Research Needs Identified by California Air Resources Board (CARB)

Building-related and site mitigation concepts suggested as potentially effective approaches for reducing the traffic-related exposures of those living near high traffic roadways:

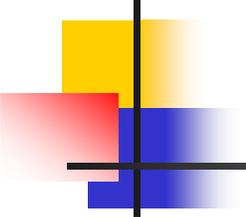
. . . **high efficiency air filtration and reduction of indoor pollution sources** can be effective;

further research is needed on these and other prospective measures such as **conditions where sound walls and vegetation could be consistently effective with limited disbenefits.**

"Status of Research on Potential Mitigation Concepts to Reduce Exposure to Nearby Traffic Pollution,"
August 23, 2012.

Other related, completed research sponsored by CARB:

http://www.arb.ca.gov/research/research-results.php?searchtype=keyword_or&searchterm=Ventilation&partial=N&+beg_yr=&end_yr=&sortfield=publ_date&post=search



Examples of Pending Research

Sponsored by CARB

“Benefits of high efficiency filtration to children with asthma”

Objective is to determine the extent to which high efficiency air filtration in homes reduces indoor exposures to PM and ozone, and whether there is a concomitant reduction in asthma symptoms in children with moderate to severe asthma. [More](#)

“Reducing in-home exposure to air pollution”

Objective is to measure the effectiveness and energy use of combinations of mechanical ventilation and filtration systems in order to identify compatible low-energy systems that are most effective at reducing indoor exposures to indoor, and incoming outdoor, pollutants. [More](#)

“Identifying urban designs and traffic management strategies for southern California that reduce air pollution exposure”

Objective is to characterize pollution levels at transit stop environments in, with a focus on features in the built environment, such as building setback and height. [More](#)

State Housing Programs Implement Sustainable Community Strategies (SCS)

Laws and local financing assistance promote:

- Affordable & mixed income housing
- Infill development, compact development patterns
- Higher densities
- Transit-oriented development
- Mixed use development
- Infrastructure support
- Energy efficient development
- Reduced constraints re: parking standards, height limits, etc.



Green Healthy Affordable Housing



<http://www.ecobuildingpulse.com/awards/2013-aiacote-top-ten-green-project--merritt-crossing-senior-apartments.aspx?dfpzone=awards>



Green Retrofitting
can support improved
health outcomes

Affordable Housing Incorporating Onsite Roadway Buffering

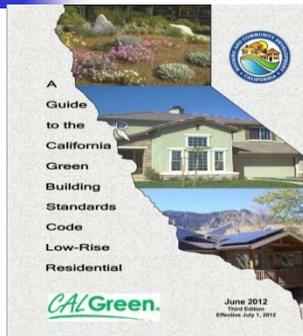


Site Planning Mitigations



New Harmony Development, Davis, CA, Mutual Housing California

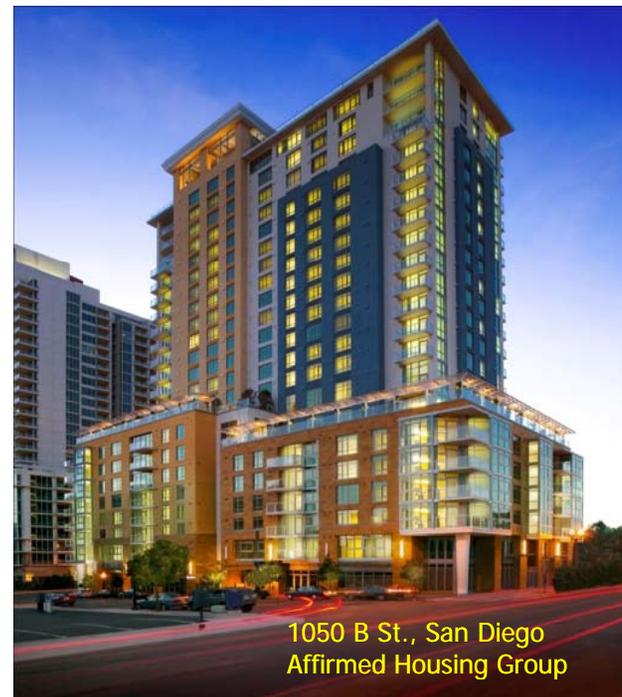
HCD's Energy Efficiency, Residential EV & TOD Support



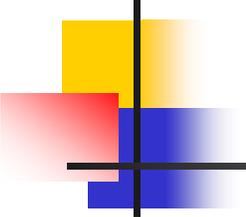
CAL Green – 1st State Green Building Code

- 2013 CAL Green Residential Mandatory Measures, effective 1/1/14
- Electrical Vehicle Readiness study for residential informing building code update

Transit Oriented Development Housing Program



1050 B St., San Diego
Affirmed Housing Group



Thank you

Linda Wheaton

linda.wheaton@hcd.ca.gov

<http://www.hcd.ca.gov/>

Telephone: 916/263-7400

