



Caltrans Division of Research,
Innovation and System Information

Research

Notes

Planning
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Project Title:
Goods Movement and Industrial
Land Supply

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Assessing Goods Movement and Industrial Land Supply

Preserving industrially zoned land that will complement Metropolitan Transportation Commission's (MTC) efforts to improve regional goods movement and reduce Greenhouse Gas (GHG) emissions.

WHAT IS THE NEED?

The location of production, distribution, and repair businesses within the region has important implications for smart growth and regional sustainability. Locating logistics businesses in particular (wholesale distributors) in the urban core, near major trading ports, helps ensure the efficient movement of goods. Displacing these firms from the core into peripheral areas, a trend that is already occurring, could mean a significant increase in Vehicle-miles Traveled (VMT) from trucks. Growth in recent decades has put pressure on industrial land owners to convert prime areas along the waterfront to residential and office uses, despite vacancy rates of just five percent. Overall, 38% of industrial land in the region is already planned for new office, residential, or mixed uses (Hausrath Economics Group and Cambridge Systematics 2008).

Although demand from industrial businesses is steady or growing, the amount of warehouse and manufacturing space in central areas is declining: in a recent five-year period in the East Bay, about seven percent of building space was lost or converted (Hausrath Economics Group and Cambridge Systematics 2008). Even if this land remains industrial, the supply may still be insufficient to house demand by 2035. This may cause many businesses to shift location to the region's periphery, or even adjacent lower-cost regions (in this case, the Central Valley), with increasing VMT and its implications for greenhouse gas emissions.



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WHAT ARE WE DOING?

- Task 1: Analyze present and future demand for industrially zoned land in the San Francisco Bay Area. Technology and globalization have meant ongoing shift in space demands for industry. This task looks first at what the function of industrial land is in today's (and tomorrow's) economy, and then at what the specific demands of businesses are (now and into the future) on industrial land for location, building space, and goods movement. This will involve analyzing the needs by industry (for selected growing sectors) for different types of industrial land and buildings.
- Task 2: Determine the supply of industrially zoned land in the San Francisco Bay Area. This second step is to provide an overview of where the region's industrial land supply lies. This task will answer the question of how much land within the nine counties is currently zoned for industrial use.
- Task 3: Identify areas at risk for conversion. The loss of industrially zoned land occurs for many different reasons, including demand from more profitable ("higher and better") uses, obsolescence of industries, new developments arising nearby, and so forth. Here we look at what industrially zoned land has disappeared, and why, in order to determine the susceptibility of industrial land to loss in the future.
- Task 4: Analyze economic and transportation impacts. As land is converted from industrial use, older businesses close and relocate, while new businesses start up and move in. This task examines the effects of the loss of industrial land.
- Task 5: Determine zoning effectiveness. Changes in Production, Distribution, and Repair (PDR) businesses, as well as the conversion of industrial land, are not uniform across the nine-county region, but depend in part on how well local zoning regulations (such as manufacturing, mixed use, or industrial protection zones) protect PDR uses. This task examines the types of zoning that are most effective at preserving industrial land and its businesses.

- Task 6: Develop strategies for preserving industrially zoned land. The need for industrial land preservation – possibly via Priority Industrial Areas throughout the region – will depend on the type and amount of land projected to be demanded by businesses in the future. But it also should be viewed in terms of regional goals for the efficient movement of goods and people, economic growth, job quality, and GHG reduction. This task analyzes how much land should be preserved and where the Priority Industrial Areas should be located.
- Task 7: Prepare draft and final reports and obtain feedback from MTC/ABAG staff and boards.

WHAT IS OUR GOAL?

This project is a study of the demand for and supply of industrially zoned land in the San Francisco Bay Area, in order to determine a strategy for preserving industrially zoned land that will complement MTC's efforts to improve regional goods movement and reduce greenhouse gas emissions.

WHAT IS THE BENEFIT?

This study will analyze the location of industrially zoned land in the San Francisco Bay Area, as well as the demand of businesses for such land. The location of industrially zoned land and businesses is closely linked to the availability of transportation infrastructure. Thus, understanding location patterns in this region will provide insights into California's other metropolitan regions as well. The location of industrially zoned lands, as well as industrial businesses, has implications for vehicle miles traveled in California regions, as well as their economic competitiveness. Understanding how to optimize the location of industrially zoned lands in California's regions will help transportation and land use planners and modelers plan more efficient investments for Caltrans.

WHAT IS THE PROGRESS TO DATE?

In the first quarter of the study (January to March 2015), we began collecting data on zoning and businesses, as well as interviewing key stakeholders (particularly industrial brokers and city officials). We collected industrial zoning data from MTC, only to discover that it was not correct. We thus contacted 101 Bay Area jurisdictions, as well as the unincorporated areas of the nine counties, to obtain their zoning files. We also began cleaning the business data and linking it to assessor data. We conducted 6 broker interviews in this period.

From April to June 2015, we will focus on building the zoning database by joining shapefiles in the 37 jurisdictions where this is possible, and manually entering data for the other places where digital layers are not available. We will then create a standardized zoning typology across the region. At the same time, we will finish our projections of industrial businesses (2010 to 2040). We will then link the zoning and business location in order to determine how business growth patterns relate to zoning throughout the region. We will complete our broker interviews, and also review trade publications to determine what types of industrial buildings are in demand now and in the future. We expect to produce an interim memo providing an overview of the location of industrially zoned land and businesses by the end of the quarter.

We communicate with MTC and Association of Bay Area Governments (ABAG) about the study on an ongoing basis, and hold monthly meetings to coordinate. MTC and ABAG have assembled a technical advisory committee which is scheduled to meet on July 8 at 10 AM, at ABAG. The committee consists of the following members:

INDUSTRY LAND STUDY TECHNICAL ADVISORY COMMITTEE

- Tracey Grose, Vice President, Bay Area Council Economic Institute (BACE)
- Cynthia Murray, President & CEO, North Bay Leadership Council
- Egon Terplan, Regional Planning Director, San Francisco Planning and Urban Research (SPUR)
- Steve Levy Ph.D, Director and Senior Economist, Center for Continuing Study of the California Economy (CCSCE)
- Greg Greenway, Executive Director, Seaport Industrial Association
- Amit Ghosh Ph.D, Economist, Retired Chief of Comprehensive Planning
- Rich Seithel, Chief of Annexations & Economic Stimulus Contra Costa County, Northern Waterfront Initiative
- Laurel Prevetti, Community Development Director
- Steve Wertheim, City Planner, San Francisco Planning
- Margot Prado, Senior Economic Development Specialist Industrial Businesses, Oakland Economic Development