INTRODUCTION

HARBOR COMMUNITY
OFF-PORT
LAND USE STUDY
A LOOK AT THE PORT OF LOS ANGELES, SAN PEDRO, AND WILMINGTON

Harbor Community Benefit Foundation

OCTOBER 2017
October 1, 2017

Greetings:

On behalf of the Board of Directors and staff of the Harbor Community Benefit Foundation (HCBF), enclosed please find a copy of our “Harbor Community Off-Port Land Use Study.” This report, completed with the assistance of our consultant Raimi + Associates, is an important discussion of the impacts of the activities of the Port of Los Angeles and Port-related businesses on the surrounding communities of Wilmington and San Pedro. Raimi + Associates have compiled a wealth of data that portrays those impacts, providing local residents and organizations a better understanding of and ability to respond to the adverse conditions affecting people due to their proximity to the Port.

The HCBF was formed six years ago as one outcome of the 2008 settlement of a dispute related to the TraPac terminal expansion. Knowing that such an expansion would increase the environmental hazards associated with the Port’s activities, a group of organizations and individuals appealed the Port’s approval of the terminal expansion. In the resulting agreement, the Port created a fund, administered by HCBF, to mitigate the impacts of its activities on Port community residents. Over the last six years the HCBF has granted $5.2 million of approximately $8 million available to 58 community groups serving Wilmington and San Pedro. These grants have improved the community’s aesthetics, health care access, respiratory and circulatory health, and community pride, while educating youth about ecology and their ocean environment.

As part of the TraPac agreement, the HCBF was obligated to undertake an assessment of the Port’s impact on surrounding land uses. This Study, along with complementary studies on the noise levels in Wilmington and San Pedro, is intended to help HCBF prioritize our grant making to target specific issues and concerns raised by the assessment.

The study also identifies other industrial activities and impacts that were found to have little or no nexus to Port activities. These additional impacts were included with the intention to inform the surrounding communities but not to imply that the Port is responsible for mitigating non-Port related impacts. The accompanying report is not intended, on its own, to establish a legal nexus between Port activities and any specific proposed impact or any particular mitigation intervention that HCBF might propose. We did not have the funds or the mission to complete a study that would establish a legal nexus between any particular mitigation project and Port impacts. Instead, this report effectively compiles information and insights into the lives of Port community residents, the challenges they confront in living adjacent to a large industrial complex, and the adverse health and well-being direct and indirect impacts of that adjacency. The report also may well serve as a jumping-off point for further, future research.

We hope that you find the Harbor Community Off-Port Land Use Study a useful resource. We thank Raimi + Associates, many community residents, and environmental experts, who ensured that the report faithfully portrayed the Port communities, for their hard work in producing and vetting the report.

Sincerely,

David C. Sloane
Chair, Board of Directors
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ACKNOWLEDGMENTS

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EXECUTIVE SUMMARY

CONTEXT

Sea ports are a critical ingredient to keep our current global economic system running. International producers benefit by having access to global markets and American consumers benefit by having easy access to goods imported from all over the world.

The Port of Los Angeles is the busiest port in the United States by container volume. This massive port is also next to the Port of Long Beach, which is the second busiest port in the country. These two ports combined create the ninth busiest container port in the world. They shape much of the economy and infrastructure in the immediate region.

The communities of San Pedro and Wilmington border the Port of Los Angeles. While residents and businesses in these communities also reap these consumer benefits, they bear a disproportionate burden of the Port- and related off-Port activities. Since the Port of LA has expanded over the past few decades, these communities have experienced increased impacts to their economic, aesthetic, environmental, and social conditions – all which can impact health.

PROBLEM/PURPOSE

The Port of LA has numerous community mitigation programs in place to lessen the negative impacts, however they are limited in how and where they can spend their revenues based on the California State Lands Commission’s (CSLC) public trust doctrine. This legal framework requires that “there must be a nexus that can be justified, documented, and that is proportional to a port’s impacts and/or operations and the proposed off-site project”. Because of this, previous Port of L.A. impact studies only analyzed direct impacts of Port activities. However, community members experience a host of “off-Port” impacts from the Port of Los Angeles and Port-related businesses which are important to understand and document.

The Harbor Community Benefit Foundation commissioned the Harbor Community Off-Port Land Use Study to:

1. Explore and document off-Port community impacts in San Pedro and Wilmington;
2. Explore the relationship between these impacts with the Port of Los Angeles operations and related activities;
3. Inform future activities of the Harbor Community Benefit Foundation and community groups.

While this document does not create a legal nexus to alter what the CSLC considers a Port impact, it offers theoretical causal pathways about and documents, visualizes, and quantifies the types of Port- and off-Port impacts that residents experience every day. The Harbor Community Benefit Foundation hopes that the information provided here is used to inform future decision making.
KEY FINDINGS

ROAD AND RAIL MOBILITY, SAFETY, AND INFRASTRUCTURE

This chapter explores industrial land use impacts on walkability, truck and vehicle collisions, truck volumes, and railroad crossings and infrastructure.

• Industrial land uses and urban form create unpleasant walking environments and increased exposure to pollutants. In the study area, blocks with industrial uses are almost twice as large as blocks with non-industrial uses. This reduces the number of intersections which negatively impacts pedestrian activity.

• Truck traffic and parked trucks reduce pedestrian visibility, increasing the perception of crime in these areas. Reduced visibility due to trucks also leads to a higher density of vehicle collisions along certain routes.

• Many at-grade railway crossings increase traffic delays and lack enhanced safety infrastructure which poses a safety risk to pedestrians and bicyclists.

LAND USE

This chapter examines incompatible land uses, Port and Port-related businesses, vacant property, storage yards, and aesthetic and visual impacts.

• The visual impact of a poorly maintained and barren industrial landscape takes away from the beauty of the bay and poorly affects property values.

• Two percent of all parcels in the study area assessed as a lower-intensity use (i.e., commercial, recreational, residential, or institutional), but are zoned for a higher-intensity use (i.e., industrial, manufacturing, warehousing, processing, etc.)

• Port-related businesses (PRBs) are three times as likely to locate in San Pedro and Wilmington than in the City of Los Angeles overall. PRB’s demand for land near the Port of L.A. competes with other community-serving uses and businesses.

• We worked with community groups (Long Beach Alliance for Children with Asthma (LBACA) and Coalition for a Safe Environment (CFACE)) and local residents to collect and ground truth new data on chassis, truck, and container storage yards. There are 383 parcels with these storage uses totaling 329 acres of land. These storage yards create a nuisance for residents by harboring rodents and increasing air pollution, noise pollution, and large truck traffic through residential neighborhoods.

HAZARDOUS AND POLLUTING LAND USES

• This chapter documents and analyzes the location and proximity of hazardous and polluting land uses in the study area.

• Beach water quality is worse close to the Port of L.A. operations, limiting safe recreational opportunities for residents.

• East and South Wilmington are in the highest percentile of pollution burden in the state according to CalEnviro Screen.

• 62% of the study area residents live within 1,000 feet of hazardous or polluting land use and face a higher risk of cancer and other health related disorders.

• The study area has 8 times the number of cleanup sites 65 times the number of groundwater impact sites per square mile compared to L.A. County.

ACCESS TO NEIGHBORHOOD GOODS AND SERVICES

This chapter focuses on understanding the effect of on- and off-Port activities on the availability of neighborhood goods and services in the study area.

• San Pedro and Wilmington have fewer child care slots per 100 children than L.A.
INTRODUCTION

- L.A. County has approximately 1.4 times the number of medical facilities compared to the study area.
- The study area has more than twice the number of fast food restaurants per capita compared to the City of L.A. (84 fast food restaurants).
- 54% of study area residents live within a quarter-mile of a fast food restaurant and only 23% live within quarter-mile of a healthy food option.

EMPLOYMENT AND REAL ESTATE

- This chapter analyzes Port-related employment opportunities and how on- and off-Port activities correlate with residential property values.
- South and East Wilmington and Northwest and Central San Pedro have the highest number of port-related jobs.
- Of all the employed residents in the study area – we estimate that only 3.5% of them work in “port- or port-related” jobs in the full study area.
- Resident assumptions that San Pedro’s cost per square foot increases as distance to the shoreline increases seems to be correct, inverse to other coastal communities where proximity to the beach yields more expensive real estate values.
- In our exploratory statistical model of residential real estate values, assessed price per square foot has a positive correlation with distance from beach, distance to industrial or manufacturing parcels, distance to rail lines, distances to storage yards, and number of Port-related businesses within a quarter-mile.

RECOMMENDATIONS

The final chapter in this study presents recommendations collected from a peer review expert panel, community stakeholders, and the HCBF Board of Directors. This study explores a broad array of topics which opened up additional research questions worthy of study. The most important recommendation is that this study is widely distributed among community members, businesses, decision makers, Port staff, City staff, public health professionals, and other interested parties so that discussions about community improvement can be more data informed for better health, environmental justice, and economic prosperity for all!
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INTRODUCTION

OVERVIEW

The Port of Los Angeles (the Port or LA Port) is the busiest port in the United States by volume and is a massive physical presence in the San Pedro Bay, covering about 7.5 thousand acres of land and 32 miles of waterfront.\(^1\) The Port moved 8.2 million twenty-foot equivalent units (TEUS) of cargo valued at $270 billion in 2015. In terms of economic impacts, 133,000 jobs in Los Angeles and 479,000 jobs in the five-county Southern California region are directly and indirectly related to the Port of Los Angeles.\(^2\)

Many businesses that serve the Port or Port-related activities and operations are in San Pedro and Wilmington because of proximity and ease of access to the Port of Los Angeles, other similar industries in the area, and transportation infrastructure. Many institutional and systemic policies, laws, and practices - such as zoning designations - along with the history and legacy of industries in the area and prolonged civic disinvestment of residents, facilitate continued concentration and expansion of hazardous and polluting land uses. These industries bring an array of externalities that negatively impact the health of Wilmington and San Pedro residents, economic development, and the physical environment of the area.

While economic gains from the Port of Los Angeles primarily benefit the region and state, the negative impacts from concentrated goods movement operations and related industries are more localized. The Port of Los Angeles operations and related activities come at a steep cost to nearby communities, and Wilmington and San Pedro community residents experience numerous impacts related to the Port’s presence. A great deal of research on the environmental impacts of Port and Port-related activities have been conducted over recent years in Wilmington and San Pedro.\(^3,4,5,6,7\) However, less is known about results of Port and Port-related operations on Wilmington and San Pedro. This study of off-Port impacts aims to shed light on some of these effects.

THIS STUDY HAS THREE PRIMARY GOALS:

1. Explore and document off-Port community impacts in San Pedro and Wilmington;
2. Explore the relationship between these impacts with the Port of Los Angeles operations and related activities;
3. Inform future activities of the Harbor Community Benefits Foundation and community groups.

A secondary goal of this report is to provide a resource to community stakeholders, including residents, local institutions, public agencies, local businesses, and other foundations in identifying and implementing strategies to improve neighborhood conditions and livability in Wilmington and San Pedro. Additionally, this study investigates novel pathways of impact that have not been extensively documented in previous research. This is done by weaving together spatial analyses, secondary quantitative data, direct observations and groundtruthing, and qualitative stakeholder interviews.

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\(^1\) Port of Los Angeles. 2016. About the Port. Available from https://www.portoflosangeles.org/idx_about.asp.
\(^4\) Port of Los Angeles. 2006. Port of Los Angeles Portwide Light and Glare Survey Findings.
BACKGROUND

The Harbor Community Benefit Foundation (HCBF) was established to facilitate a port community mitigation fund as part of the settlement between the Port of Los Angeles and the TraPac Appellants in 2008. The purpose of the mitigation fund is to compensate the Wilmington and San Pedro communities for the damages from Port and Port-related activities. The resulting TraPac Memorandum of Understanding (TraPac MOU)\(^8\) also established funding for an off-port land use impacts study to examine the effects of port-related land uses and activities in San Pedro and Wilmington, which this report fulfills. In August 2014, HCBF released a Request for Proposals (RFP) for the completion of a study of the off-port land use impacts on the communities of San Pedro and Wilmington. Through a competitive proposal and interview process, HCBF selected Raimi + Associates to lead the study with advisory support from The Civic Engine.

In this report, we identify Port and Port-related land uses and analyze how these land uses and activities affect the communities of Wilmington and San Pedro. The land use analysis clarifies the range of pathways through which Port land uses can impact Wilmington and San Pedro, including the health and wellbeing of residents, economic development of the area, safety impacts, and the ability of residents to access vital neighborhood resources and services. Guided by an Ad Hoc Advisory Committee and HCBF staff, we shared a draft report with an expert external peer review panel January 2017 and released a draft report in February 2017. Based on external feedback, in October 2017, HCBF requested minor modifications and more attractive graphic design.

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STUDY METHODOLOGY

OVERVIEW

This study weaves together an array of qualitative and quantitative data from primary and secondary data sources and existing evidence. The study's initial step was a literature review of primary and secondary research, gray literature, and review of previous community engagement data and surveys to comprehend and document known and well-studied impacts. We also gathered information on specific topics, where literature or data did not exist, by conducting stakeholder interviews with key community leaders and reviewing historic documents, maps, and photos. The interviews provided important perspectives from the community and key stakeholders who are disproportionately burdened by the Port and Port-related activities.

Next, the consultant team coordinated with the Ad-Hoc Advisory committee (HCBF staff and three board members) to document our holistic understanding of Port and Port-related impacts by creating causal pathway diagrams. These pathways, or causal models, are used to describe how environmental and social conditions, and risk and resilience factors influence community outcomes. The causal pathways provide a visual representation of plausible ways in which the Port and Port-related businesses, infrastructure, and activities impact the communities of Wilmington and San Pedro, through various intermediary factors. These pathways can also support possible interventions for preventing or mitigating impacts.

After reviewing existing research and data on Port-related activities and information and creating numerous plausible causal pathways, the project team prioritized the following topics for analysis:

- Road and rail
- Land use
- Hazardous and polluting land uses
- Access to neighborhood goods and services
- Employment and real estate

Within each of these topics, we prioritized a list of indicators or research questions to study and obtained appropriate data. There are numerous other valid causal pathways that future research should explore, but due to limited resources and a desire to highlight HCBF stakeholder priorities, this study maintains a focus on the selected research topics. We based the final causal pathways presented in this report on literature and our best understanding of impacts, given the results of our quantitative and qualitative analysis.

We used maps and associated spatial analysis to understand the geographic distribution of impacts. The study presents findings by neighborhoods (or study subareas), where feasible. We subdivided San Pedro into four neighborhoods: Northwest San Pedro, Coastal San Pedro, Central San Pedro, and Unincorporated San Pedro; and Wilmington into four neighborhoods: East Wilmington, North Wilmington, South Wilmington, and West Wilmington. We also included the Port of Los Angeles as a study subarea. A more robust discussion of the study area and neighborhood subareas appears in Chapter 1: Community Profile.

NEXUS CRITERIA FOR COMMUNITY IMPACTS FROM PORT AND PORT-RELATED ACTIVITIES

The team identified a set of criteria to better understand the interrelation between Port and Port-related activities and impacts in the communities of San Pedro and Wilmington. In consultation with the Ad Hoc Advisory Committee and HCBF staff, the consultant team devised nexus evaluation criteria:

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NEXUS CRITERION 1: IS THE SOURCE AN ESTABLISHED PORT OR PORT-SERVING LAND USE OR ACTIVITY?

A “yes” response means that the proximal source activity of the impact of interest is a Port or Port-related land use, activity, or operation. For example, truck and train traffic through the study area is a source of numerous community impacts and is an established Port-serving activity.

NEXUS CRITERION 2: IS THE IMPACT A DIRECT RESULT OF THE PORT OR PORT-SERVING LAND USE OR ACTIVITY?

A “yes” response means that the distal impact of interest is a direct result of the Port or Port-related activities. For example, air pollution in the study area is a major community concern and is the direct result of multiple Port and Port-serving activities – such as truck traffic traveling through the area, ships idling in the harbor, and drayage trucks on Port property.

NEXUS CRITERION 3: IS THE IMPACT AN INDIRECT RESULT OF THE PORT OR PORT-SERVING LAND USE OR ACTIVITY?

A “yes” response means the distal impact of interest is an indirect result of Port or Port-related activities. For example, increased crime in the study area and a decreased sense of safety could be linked to the overabundance of aesthetic and visual impacts from the heavily industrialized landscape, trash and vandalism, and vacant and abandoned properties in the area. Social science research supports these linkages. Although not a direct impact of the Port or Port-related activities, the presence of the Port and related industries and activities can be indirectly linked to these outcomes.

NEXUS CRITERION 4: IS THE CAUSAL PATHWAY LOGICAL AND PLAUSIBLE?

A “yes” response means that the causal pathway is plausible and makes sense. As much as feasible, linkages and correlations are based on evidence-based literature.

NEXUS CRITERION 5: IS THERE GENERALIZABLE EMPIRICAL EVIDENCE TO SUPPORT THE CAUSAL PATHWAY?

A “yes” response means that there is evidence or data to support relationships in the causal pathway.

NEXUS CRITERION 6: IS THERE A DISTANCE-BASED RELATIONSHIP TO PORT OR PORT-SERVING USE OR ACTIVITY?

A “yes” response means that the impact is reduced as distance to the Port- or Port-related impact increases. For example, environmental quality impacts decrease as the distance increases from polluting land uses.

NEXUS CRITERION 7: IS THERE A TEMPORAL-BASED RELATIONSHIP TO PORT DEVELOPMENT IN THE STUDY AREA?

A “yes” response means that changes in the impact correspond with changes in Port development, infrastructure, or goods movement volume changes. For example, impacts from polluting and hazardous land uses in the study area have concentrated and intensified over time since the early 1900’s.

NEXUS CRITERION 8: IS THERE A DISPROPORTIONATE BURDEN/IMPACT RELATIVE TO THE CITY/REGION?

A “yes” response means that there is an undue burden from the impact of concern in the study area compared to another geography, such as the City or County of Los Angeles.

NEXUS CRITERION 9: IS THERE LOCAL QUALITATIVE EVIDENCE TO SUPPORT THE PATHWAY?

A “yes” response means that community stakeholders expressed concerns linking the community impact and Port or Port-related activities.
The study’s contents are presented in the following seven chapters:

1. **COMMUNITY PROFILE:** Provides an overview of the study area, including information about the boundaries and geography of the study area and subarea neighborhoods and demographic information about study area residents.

2. **ROAD AND RAIL MOBILITY, SAFETY, AND INFRASTRUCTURE:** Explores industrial land use impacts on walkability, truck and vehicle collisions, truck volumes, and railroad crossings and infrastructure.

3. **LAND USE:** Examines incompatible land uses, Port and Port-related businesses, vacant property, storage yards, and aesthetic and visual impacts.

4. **HAZARDOUS AND POLLUTING LAND USES:** Documents and analyzes the location and proximity of hazardous and polluting land uses in the study area.

5. **ACCESS TO NEIGHBORHOOD GOODS AND SERVICES:** Focuses on understanding the effect of on- and off-Port activities on the availability of neighborhood goods and services in the study area, using a select set of neighborhood goods and services as indicators.

6. **EMPLOYMENT AND REAL ESTATE:** Analyzes Port-related employment opportunities and how on- and off-Port activities correlate with residential property values.

7. **RECOMMENDATIONS:** Presents a list of recommendations to be considered and implemented by the Harbor Community Benefit Foundation (or other foundations), the City of Los Angeles, The Port, local residents and businesses, and community based organizations.

The first six chapters are organized by the following sections:

- An overview of the community impact;
- Discussion of the nexus criteria and causal pathway;
- Description of research questions and methodology;
- Presentation of findings via tables, figures, images, and maps; and
- List of data sources.