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REPORT SUMMARY

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The Prospects for Developing Inland Logistics Ports in California (Summary)

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This is a summary of "The Prospects for Developing Inland Logistics Ports in California" by Cyrus Ramezani and Chris Carr.[1] This research and analysis received funding from USDA's Agricultural Marketing Service (AMS) through cooperative agreement number 21-TMTSD-CA-0003. The opinions and conclusions expressed are the authors' and do not necessarily reflect the views of USDA or AMS. The full paper is available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4175841.

WHAT IS THE ISSUE?

Beginning in 2020, cargo flows through the Ports of Los Angeles and Long Beach in California, which comprise the San Pedro Bay (SPB) port complex, exceeded capacity, contributing to nationwide supply chain challenges. In addition, container volumes through SPB ports are expected to continue rising in coming years, alongside growth in both international trade and the use of mega-ships. Widely embraced to help solve seaport congestion in general, the development of inland ports has, likewise, long been seen as a solution to SPB's specific problems.

The primary objective in developing inland ports is to streamline freight movement and reduce congestion and pollution at the seaports. Projects to directly expand the seaport—such as adding warehouse space or improving vessel, rail, or truck transportation systems—can achieve the same aims. However, expansion at the seaport can cost more than building inland ports. Excessive traffic congestion, high land prices, and increased environmental and zoning regulations all make it costly to directly expand the seaport. Inland ports offer a potential way to store and distribute products in lower cost and less congested areas, while enhancing seaports' productivity through improved intermodal logistics.

The ideal inland port location must balance a host of considerations, including the benefits of proximity to the seaport and population centers, proximity to food production and manufacturing areas, and the ability to generate enough right-size containers at the right times. Because the promise of lower transportation costs is a key factor in inland ports' feasibility, the ideal inland port location must also balance various transportation cost tradeoffs. Tradeoffs include issues of rates and competition, traffic congestion, equipment availability, and cost savings from intermodal competition.

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Several inland port facilities have been proposed to complement SPB logistics, with prospective locations in California, Arizona, Nevada, and Utah. While inland ports have been a common solution to seaport congestion problems around the country, substantial hurdles to developing inland ports near the SPB complex have delayed these projects.

WHAT DID THE STUDY FIND?

The researchers conducted a survey of existing feasibility studies for proposed inland ports to assess the prospects and to determine the challenges of developing such facilities.

California. The authors first consider the potential for inland ports in the region around Los Angeles called the Inland Empire, as well as in California's Central Valley, which stretches diagonally across the center of the State. The Inland Empire would be well suited to an inland port because of its proximity to large population centers and major logistics hubs. Additionally, the area is well connected, with two existing intermodal rail services and access to several interstate highways. The region also processes high volumes of e-commerce, which the authors deem crucial for the economic viability of a new inland port. Another attractive inland port location, the Central Valley, would provide an inland port with access to a major agricultural production center. An inland port in the Central Valley could potentially reduce transportation and shipping costs and increase the number of empty containers near production and processing facilities. Despite the manifold benefits the completed ports would bring, major regulatory barriers face any development of an inland port facility in the Inland Empire or Central Valley. The authors found that environmental regulations are the most binding constraint for these California projects—as distinct from the proposed projects in other States, which have less environmental regulation. Additionally, the public input period, permitting processes, and zoning and land-use regulations can also delay development and increase project costs. Regulatory costs and delays may deter private investment in inland ports as the authors' analysis suggests the proposed California inland ports may take as long as 10 years to be operational.

Utah. The authors also examined the role of inland ports in States near California. For instance, their analysis suggests a proposed inland port in Salt Lake City, UT, which has secured key private investors and public funding, is likely to improve fluidity at SPB ports. The facility's attributes include population density (projected to rise from 3.3 million in 2020 to 5.8 million by 2065) and large, logistics-dependent industries. Salt Lake City is well connected to SPB ports by both rail and highway. The region is served by Union Pacific Railroad (UP) and BNSF Railway (BNSF), as well as short line and switching railroads. By enabling truckers to pick up cargo locally, rather than from the SPB ports, the inland port would provide quick access to the Mountain West region and help alleviate congestion. However, a Utah inland port may have limited benefits for agricultural shippers.

Arizona and Nevada. The authors examined the strengths and weaknesses of other inland ports in Arizona and Nevada. Arizona has an inland port in operation and a potential facility under development. The Port of Tucson is a full-service inland port, rail yard, and intermodal facility. However, its rail service is limited to one railroad, and the volume of goods coming from SPB is relatively small (1.04 million tons). Inland Port Arizona, a new facility being developed near Phoenix, has the advantages of a large population base, growing warehouse and distribution centers, and access to major highways and rail. However, while served by both UP and BNSF, the facility is not on UP's mainline. The study noted that recently proposed inland ports in Nevada face significant challenges from environmental groups and have relatively small volumes originating from SPB ports.

Summary Findings. The critical challenge for agricultural exporters is timely access to containers near their operations, and affordable (stable) shipping freight rates. Inland facilities must be in proximity to food production and manufacturing areas to assist agricultural shippers, but past attempts at developing these sites in California and other Western states have historically been impeded by five main challenges. These challenges persist and must be addressed for any proposal. Broadly, these challenges involve a balancing act with: 1) environmental regulations, 2) the economics of rail and truck transportation (traffic density), 3) coordination and competition among service providers, 4) sufficient public and private investment in supporting infrastructure, and 5) navigating volatile macroeconomic risks. Among these, many regulations require a lengthy permitting process that can delay development for many years. Furthermore, these projects require participation by major stakeholders, especially marine terminals and railroad companies. Together, these challenges can delay or derail the implementation of otherwise highly feasible projects.

HOW WAS THE STUDY CONDUCTED?

The researchers identified existing and planned inland ports in California, Arizona, Nevada, and Utah. They relied on existing feasibility studies and input from SPB stakeholders to catalog the financial, economic, and institutional prospects and challenges to the development of new inland facilities.

PREFERRED CITATION

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