

Achieving Excellence for California's Freight System: Developing Competitiveness and Performance Metrics; Incorporating Sustainability, Resilience, and Workforce Development

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In recent years, numerous major California-headquartered companies such as Tesla, Hewlett Packard, Oracle, and Toyota have announced plans to move their main offices or manufacturing plants to competing states such as Texas. For example, in March 2021, Elon Musk, the Tesla and SpaceX CEO, shared on his Twitter account that a Tesla manufacturing plant being built near Austin, Texas will hire more than 10,000 people through 2022. Companies appear to be attracted to lower tax rates and softer regulatory environments, as well as better freight access to US heartland markets and global supply chains.

Why are firms leaving California and bound for competing states such as Texas? Is California competitive enough to attract and keep business in state? Considering the state's freight system competitiveness as a central component of its overall business attractiveness, this study identifies and evaluates performance metrics to measure the competitiveness of California's freight system.

Study Methods

Through interviews with industry experts and public data sources, this study develops a framework to evaluate the overall freight competitiveness of states or regions through the scorecard. This framework compares all primary freight segments, consisting of seaports, airports, highways, freight rail service, and distribution centers.

By analyzing the importance of performance measures and the relative performance percentiles of California and other U.S. states, this study evaluates the current position of California's freight system relative to other U.S. states and regions.

Findings

The scorecard below shows that California's freight system is highly competitive in terms of seaports, airports, and freight rail. However, California has significant disadvantages in highways and distribution centers, with results highlighting a particular need to improve the

reliability of travel time and address the high operation costs in California. Based on relative scores, the top three competitors to California are New York & New Jersey, Texas, and Georgia.

California requires significant investments to improve highway travel time reliability and expand seaport and air cargo handling facilities.

Policy/Practice Recommendations

California needs to prioritize the investments for enhancing freight competitiveness. Findings from this study highlight the particular need for improvements to highways and distribution centers in comparison to competitor regions. This study calls for significant investments to reduce congestion on urban interstates and improve highway travel time reliability, and address the high labor, land, fuel, and electricity costs in California.

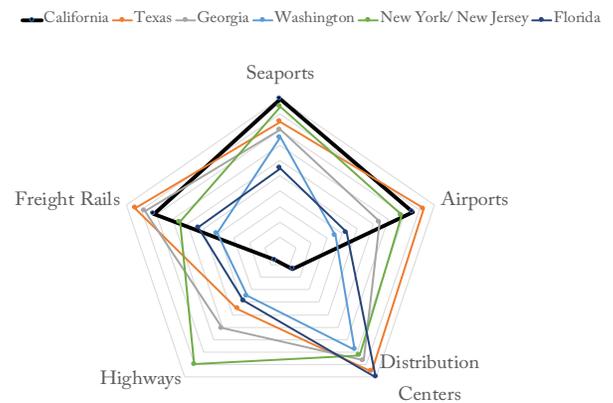
California should also make significant investments in seaports and airports to facilitate freight competitiveness throughout the system, such as expanding seaport container terminals and air cargo handling facilities, and providing more intermodal connections between ports and other transport modes. Automated seaports can reduce the average container vessel dwell time and enhance the efficiency of loading and unloading. The state should expand and upgrade seaport container terminals and air cargo handling facilities. New technology can help ports to manage the flow of chassis, container trucks, empty containers, and address the cargo backlogs and congestion at ports and warehouses.

In addition, California should invest in providing better intermodal transport services between seaports, airports, freight rails, and highways. Given congestion on urban interstates and poor highway travel time reliability in California, the state should consider investing in inland ports, transporting goods by rail directly from seaports to processing facilities inland, in the Inland Empire and Central Valley.

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Scorecard of California's Freight Competitiveness

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To Learn More

For more details about the study, download the full report at transweb.sjsu.edu/research/2023



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