

***The Dire Economic Consequences of
Continued Market Share Declines at the
Ports of Los Angeles and Long Beach
The Transition to a Regional Port Complex***



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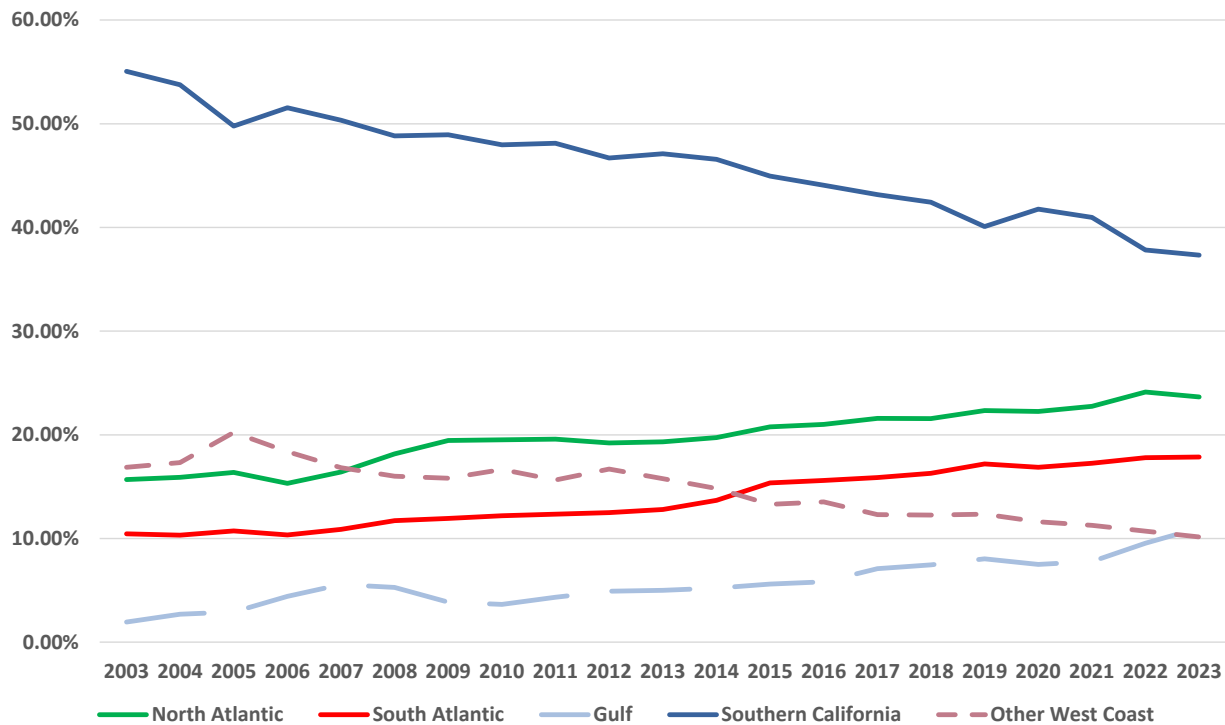
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The Dire Economic Consequences of Continued Market Share Declines at the Ports of Los Angeles and Long Beach – The Transition to a Regional Port Complex

In 2021, the volume of containers handled at the San Pedro Bay Ports reached a record volume of 20 million twenty-foot equivalent units (TEUs). Since then, the number of TEUs handled at the port complex has fallen by nearly 20%, to about 16.6 million TEUs in 2023. In addition to this loss of absolute container volume, is the fact that the share of the U.S. containerized cargo market served by the San Pedro Bay Ports has continued to erode. With the loss of container throughput, the economic significance of the Port Complex to the state of California as well as the San Pedro Bay area shrinks. As shown in Exhibit 1, the San Pedro Bay Ports' market share of Asian imported containerized cargo at the U.S. ports (in the lower 48 states) has continually contracted since 2003, falling from 55% in 2003 to 37% in 2023. In 2023, the Atlantic Coast ports actually handled a larger share of Asian imported containerized cargo (42%) than the San Pedro Bay Port Complex. This loss of market share reflects the fact that discretionary cargo handled at the Ports of Los Angeles and Long Beach, which is cargo that destined for consumption markets east of California, and typically east of the Rocky Mountains, and moved via intermodal rail, has been continually diverted to East and Gulf Coast ports.¹ This diversion began as the result of the lockdown of West Coast ports during the 2002 contract negotiations between the International Longshore and Warehouse Union and the Pacific Maritime Association (representing the steamship lines and marine terminal operators that serve the West Coast ports). Between September 29 and October 9, 2002, operations at the West Coast ports were shut down following labor slowdowns at the ports. The shutdown ended when President George Bush enacted the Taft-Hartley Act. This shutdown and the ensuing impacts that occurred since 2002 highlight the long-term impacts that the 10-day disruption of the West Coast ports supply chain had on the overall use of the West Coast ports, particularly the San Pedro Bay Ports of Los Angeles and Long Beach.

¹ As noted in Exhibit 1, while small in comparative volume to the San Pedro Bay Ports, the other West Coast ports also experienced a declining market share of Asian imported cargo, falling from about 20% in 2005 (the highest share recorded during the period) to about 10% in 2023.

Exhibit 1
Market Share by Port Range of Asian Imported Cargo Tonnage into the U.S.



Source: USA Trade OnLine

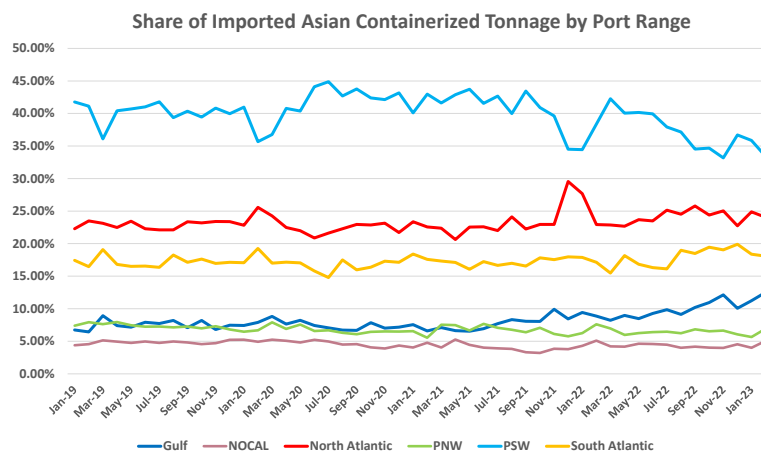
The disruption of port operations had an immediate cumulative effect not only on the port industry and its employees, but also on the exporters and importers as well as the entire transportation infrastructure and supply chain of the United States. The impact of the port shutdown was not just confined to 2002 but has had a long-lasting impact on the use of the West Coast ports by importers and exporters that have responded by developing alternative logistics supply chains. After the 2002 port closure, importers and exporters responded by using Atlantic Coast and Gulf Coast U.S. ports and Western Canadian ports to handle Asian cargo. To support this change in the logistics supply chain, these importers and exporters have established an increasing number of import distribution centers on the Atlantic and Gulf Coasts, which are now served by all water Asian cargo services calling such ports as New York, Norfolk, Charleston, Savannah, Miami, Jacksonville, Baltimore, Houston, and Mobile.

Adding to the increased deployment of direct all-water Asian service at the East and Gulf Coast ports was the port operations slowdown that occurred during the 2014-2015 ILWU contact negotiations and the opening of the expanded Panama Canal in 2016, which allowed larger container vessels to transit the Canal to the Atlantic and Gulf coast ports. To accommodate the deployment of the larger container vessels, a majority of the Atlantic Coast ports engaged in channel and harbor deepening projects to handle the larger containerships. Similar channel deepening and intermodal rail projects also have been undertaken at Gulf Coast ports of Houston, Mobile, and New Orleans.

In addition to channel and harbor deepening projects, these Atlantic and Gulf Coast ports have established competitive rail service to also serve the midwestern markets such as Chicago, Dallas, Indianapolis, St. Louis, Kansas City, etc. that are also the key markets of the West Coast ports intermodal/discretionary cargo. As a result, more direct Asian container ship service and cargo is now discharged at these ports and destined for key consumption points that had previously been served intermodally via the San Pedro Bay Ports.

It is to be noted that during the surge in imports at the San Pedro Bay Ports in 2021, the decline in the San Pedro Bay Ports’ market share accelerated from September 2021 and troughed in December 2021, marking the period of the highest level of vessel congestion at the Ports of Los Angeles and Long Beach. This congestion and loss of supply chain reliability in Southern California has led to a steep increase in market share at the North Atlantic ports, particularly at the Port Authority of New York and New Jersey container terminals. As the supply chain congestion eased after December 2021, the San Pedro Bay Ports regained some lost market share, but an assessment of the monthly market share (Exhibit 2) shows that this loss of market share once again accelerated in the third quarter of 2022, as shown in Exhibit 2, reaching its lowest monthly level of the share of Asian imported containerized tonnage recorded during the time period of analysis. This accelerated loss of market share in the third quarter of 2022 reflects the uncertainty of the prolonged labor negotiations that were in progress since May 2022 between the Pacific Maritime Association and the International Longshore and Warehouse Union. This uncertainty in dependability of service at the West Coast ports, and in particular at the San Pedro Bay Ports, resulted in the continual diversion of Asian imported containerized cargo (that historically moved intermodally via the West Coast ports) to the East and Gulf Coast ports.² It is important to note that since 2002, the West Coast ports, and in particular the San Pedro Bay Ports, have never regained long term lost market share, and this reversal is not likely in the foreseeable future. The uncertainty around the pending imposition of stringent environmental regulations on the drayage industry serving the Port complex as well as the marine terminals operating in the Port Complex will likely exacerbate this loss of market share and decline in discretionary cargo handled at the San Pedro Bay Ports.

Exhibit 2
Monthly Port Range Share of Asian Imported Containerized Tonnage During the Pandemic



Source: USA Trade OnLine

² “New Routings for Big Business”, The Wall Street Journal, Exchange, by Paul Berger, December 10-11, 2022

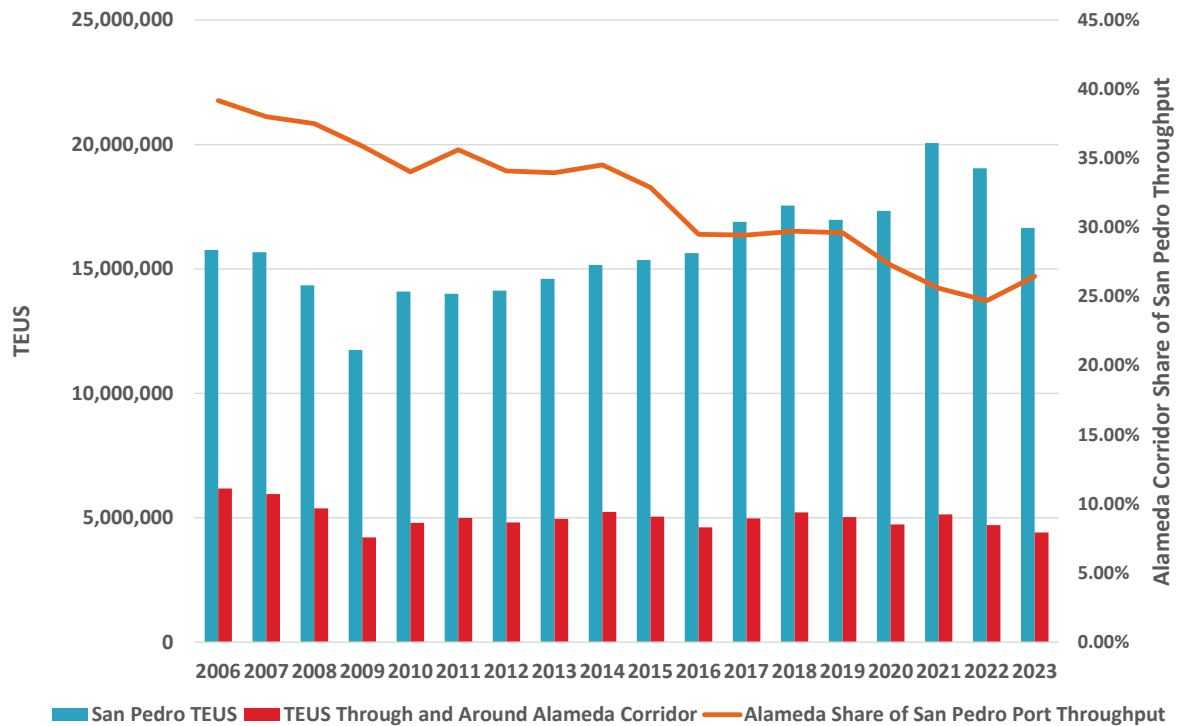
As noted, this erosion of the Port Complex's market share is driven by the continued loss of discretionary cargo. This discretionary cargo is increasingly served by other port regions, primarily the Atlantic and Gulf Coast ports. Typically, this discretionary cargo is cargo that is not consumed or produced in the local and regional economy and is moved between the San Pedro Ports and inland locations by rail. This discretionary cargo consists of international marine containers loaded directly at the ports for delivery inland, or transloaded cargo, which is trucked to a local cross-dock/transload operation where the marine container is stripped, and its contents moved into a domestic container and then loaded onto the rail for a move to an inland consumption point. The discretionary cargo is further identified by the fact that the majority of inland destinations and origins are typically east of the Mississippi River as well as Texas (accounting for about 60 percent of the international intermodal rail cargo leaving the San Pedro Bay Ports), which are areas that can be competitively served via the Atlantic and Gulf Coast ports. The inland points west of the Mississippi River are subject to potential diversion to Canadian Pacific ports and to a lesser extent, Mexican Pacific ports. The balance of this report focuses on the competition with the U.S. Atlantic and Gulf Coast ports for the discretionary cargo market. It is estimated that overall discretionary cargo accounts for about 42% of total containerized cargo handled at the San Pedro Bay Ports in 2023. This includes international marine containers that are moved directly via rail to eastbound locations, as well as international cargo that is transloaded from marine containers to domestic 53 ft. containers for transcontinental rail shipments.

Changes in Intermodal Volume Leaving the San Pedro Bay Ports

The loss of intermodal/discretionary cargo moving via the San Pedro Bay Ports is very evident when the volume of international intermodal cargo moving via the Alameda Corridor is evaluated. The Alameda Corridor is a 20-mile-long rail high-capacity freight expressway linking the San Pedro Bay Ports to the BNSF Hobart Yard and UP East Los Angeles Yard where transcontinental intermodal trains are assembled. The majority of the international intermodal rail traffic leaving the San Pedro Bay Port Complex moves on this corridor. Thus, the corridor's historical volume of intermodal traffic moving on this corridor is a strong indicator of the flow of discretionary cargo handled at the San Pedro Bay Ports.

The fact that the intermodal volume moving on the Alameda Corridor has remained nearly constant at about 5 million TEUs annually since 2010 is in direct contrast to the growth in TEU volume at the Ports of Los Angeles and Long Beach. Exhibit 3 shows the annual volume (in TEUs) of intermodal traffic moving on the Alameda Corridor, the TEUs handled at the San Pedro Bay Ports, as well as the share of the intermodal traffic on the Alameda Corridor compared to total TEUs handled at the San Pedro Bay Ports of Los Angeles and Long Beach. As this exhibit indicates, the share of San Pedro Bay Port's annual volume moving via intermodal rail through the Alameda Corridor has continually fallen since 2006, from a high of about 39% in 2006 to a low of 24.7% in 2022, with a slight increase in 2023 due to the decline in volume handled at the San Pedro Bay Port Complex. The declining share of intermodal rail traffic on the Alameda Corridor reflects the overall loss of U.S. discretionary container market share that has characterized the San Pedro Bay Ports since 2003.

Exhibit 3
Comparison of TEU Volume Handled at the Ports of Los Angeles and Long Beach and the Intermodal TEUs Moving on the Alameda Corridor



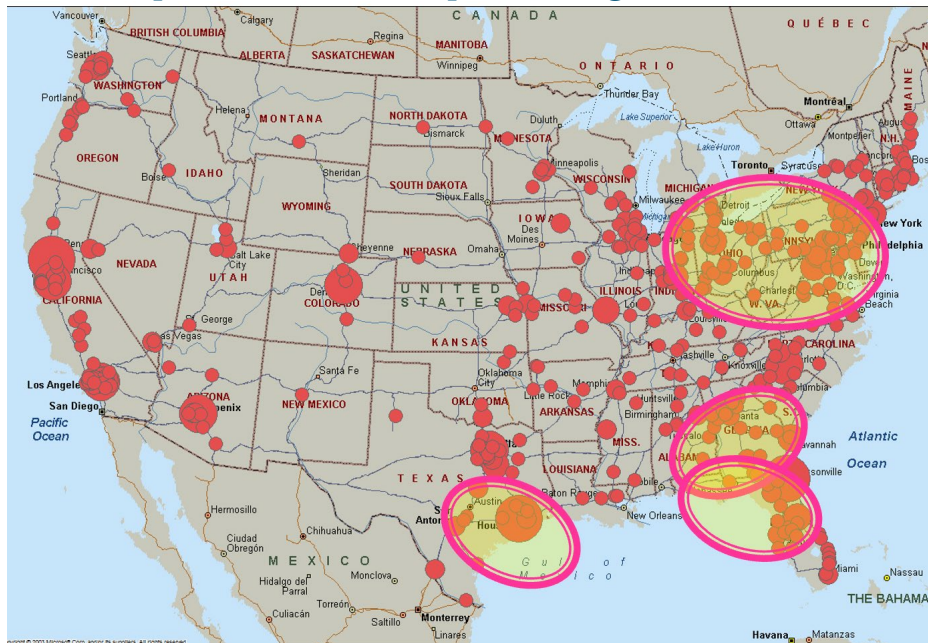
Source: Ports of Los Angeles and Long Beach and The Alameda Corridor Transportation Authority

Changes in Logistics Patterns of Importers/Exporters

The impact of the port shutdown was not just confined to 2002 but has had a long-lasting impact on the use of the West Coast ports by importers and exporters that have responded by developing alternative logistics supply chains. After the 2002 port closure, importers and exporters responded by using Atlantic Coast and Gulf Coast U.S. ports and Western Canadian ports to handle Asian cargo. To support this change in the logistics supply chain, these importers and exporters have established an increasing number of import distribution centers on the Atlantic and Gulf Coasts, which are now served by all water Asian cargo services calling such ports as New York, Baltimore, Norfolk, Charleston, Savannah, the Florida ports of Jacksonville, Port Everglades, Miami, Houston, and Mobile. Exhibit 4 shows the distribution center locations of the top 25 retailers in the United States. As indicated by the highlighted areas, these distribution centers are highly concentrated in the northeast, southeast and the Houston area, which are all in close proximity to key ports of New York, Baltimore, Norfolk, Charleston, Savannah, Jacksonville, Miami/Port Everglades, Houston, and Mobile.

Hence, these ports have become the logical gateways to serve these markets on all trade lanes, including China, Southeast Asia, Southwest Asia, the West and East coasts of South America, as well as Europe, the Mediterranean/Middle East, Africa, Central America, and the Caribbean.

Exhibit 4 Location of top 25 Retail Chains Import and Regional Distribution Centers



Source: Chain Store Guide

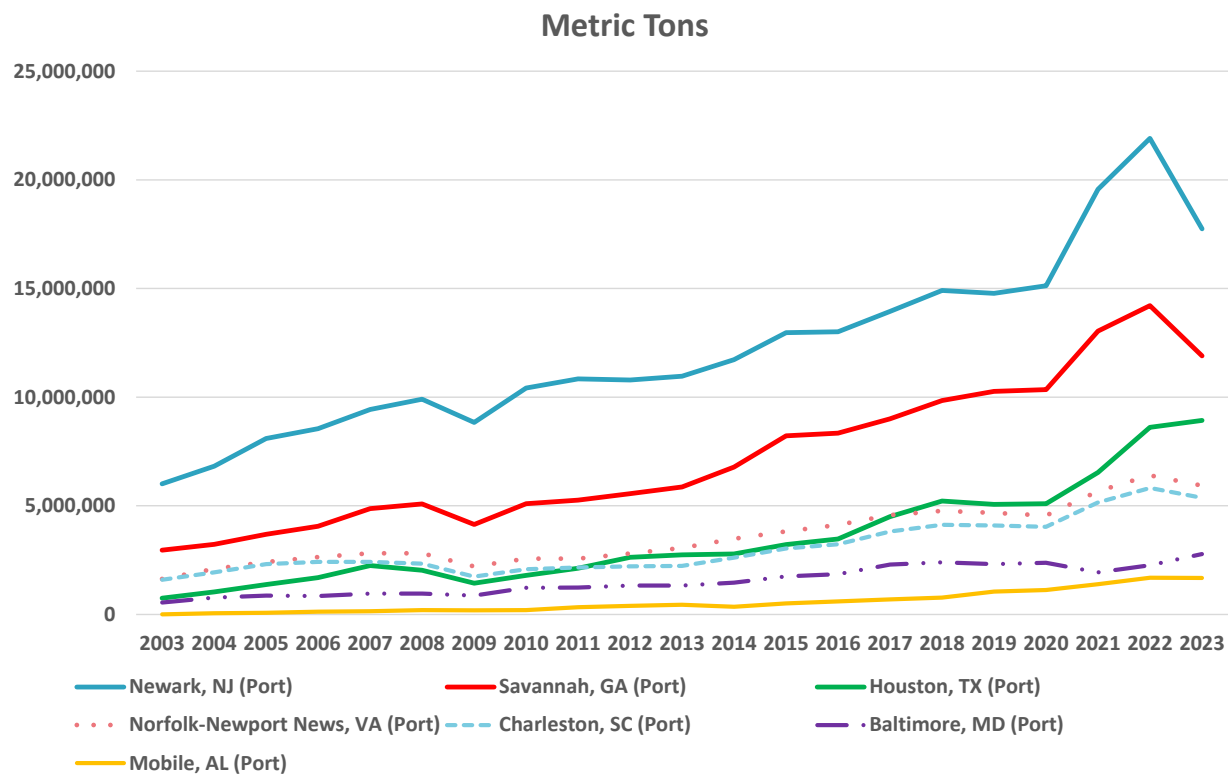
The location of distribution centers is critical in attracting cargo, particularly consumer goods such as furniture, apparel, electronics, toys, and perishables, and the location of distribution centers in proximity to the port is critical in attracting ocean carrier service. Port-centric locations are becoming more critical in attracting ocean carrier service to the nearby port in that a key cost component to an ocean carrier is the ability to control empty containers and minimize the cost of repositioning the empty containers from the consumption points back to the seaport, with no revenue bearing cargo. In addition, carriers are continuing to price “port-to-port” moves more frequently than “point-to-point” moves. Under the port-to-port moves, the ocean carrier is responsible for the cost of moving the cargo from the foreign port to the U.S. port, including the terminal and stevedoring charges. The beneficial cargo owner (BCO) is responsible for the inland transportation part of the move. With the greater emphasis on port-to-port pricing, BCO’s are incentivized to develop distribution centers closer to the port as well as to population centers, thereby minimizing the inland cost from the port to the consumption point, and further from the import distribution center to a regional distribution center or directly to the consumer from the distribution center. This later method of serving the consumers directly from the distribution center/fulfillment center is very advantageous to the growth in e-commerce, as the distribution center serves not only as an import distribution center, but also as a fulfillment center. At the distribution center, the marine containers are stripped, and cargo is warehoused, orders filled, and transloaded into domestic trailers (often 53 ft. trailers) for delivery to a regional distribution center. In cases where the distribution center also serves as a fulfillment center supporting e-commerce and last mile delivery (often within 24 hours), the imported containers are stripped, and often the cargo is reloaded into less than truckload lots for direct delivery to consumers.

Whether serving as an import center located in proximity to the port or as a fulfillment center, the near port location of distribution centers reduces the drayage cost between the port of discharge and the distribution center, as well as provides the ocean carrier with near port control of its marine container. In addition, with the escalation in trucking costs due to rising fuel prices, strictly enforced driving hours due to the mandatory electronic logging devices (ELD) installed on all trucks, and truck driver shortages, the minimization of trucking costs is critical to beneficial cargo owners. Thus, near port and near consumer market locations to the distribution center is a key factor driving ocean carrier port selection.

Growth in the Deployment of All-Water Services Connecting Asia and the Atlantic and Gulf Coasts

Exhibit 5 highlights this increased growth in Asian imported containerized tonnage at the U.S. Atlantic and Gulf Coast ports. It is to be noted that this growth accelerated after the West Coast port shutdown in 2002. The impact of labor contract issues in 2014 and 2015 at the West Coast ports that led to service disruptions and terminal congestion is also visible in the increased rate of growth in Asian imports at the Ports of New York and Savannah during this time. In addition, the impact of the opening of the expanded Panama Canal in 2016 (to accommodate larger vessels operating on all water Trans-Pacific trade) is clearly seen by the accelerated growth in Asian imports at these key Atlantic and Gulf Coast ports. Finally, the unprecedented growth in Asian imported containerized cargo at the Atlantic and Gulf Coast ports is clearly visible in Exhibit 5. This growth also reflects the vessel and terminal congestion that occurred at the West Coast ports, particularly the San Pedro Bay Ports, during the height of the Pandemic in 2021. Also noted in this Exhibit is the overall decline in imports from Asia in 2023, primarily driven by the decline in imports from China, which has occurred not only at the San Pedro Bay Ports but at the container terminals at the Port Authority of New York and New Jersey and Savannah. It is important to note that this decline (2022 to 2023) in Asian imported cargo at the Port of Houston did not occur, as the container terminals at the Port of Houston continue to realize the increase in imported Asian container volume as the volume of containers moving intermodally by rail from the San Pedro Bay Port Complex to Dallas and then distributed by truck throughout Texas, Oklahoma, Louisiana region has been declining over time. This is known as mini-landbridge and will be discussed in the following section.

Exhibit 5
Asian Imported Containerized Cargo by Key Atlantic and Gulf Coast Port



Source: USA Trade OnLine

To accommodate the growing demand for the use of the Atlantic and Gulf Coast ports to handle Asian cargo, ocean carriers responded by increasing sailings between Asia and the Atlantic and Gulf Coast ports via the Panama Canal and the Suez Canal (Exhibit 6). Typically, the Suez routing provides a more competitive transit time to the Atlantic and Gulf Coast ports (over the use of the Ports of Los Angeles and Long Beach) to serve the southeastern Asian market (typically south and west of Singapore), while the Panama Canal routing is the all-water routing usually used to serve the Asian trade north of Singapore, including, China. This is particularly the case to serve the consumption markets located in proximity to the Atlantic and Gulf Coast ports.

Exhibit 6
All-Water Asian Service Routings to the East and Gulf Coasts



As the ocean carriers increased the number of all-water sailings between Asia and the Atlantic and Gulf Coast ports after the 2002 West Coast ports shutdown, the size of the container ships deployed on the all-water routings also began to increase in order to minimize shipping costs per container. An expanded Panama Canal was opened in 2016, further increasing the cost competitive all-water Asian routing. The Trans-Pacific trade is characterized by the deployment of larger containerships compared to the size of vessels deployed on European, Mediterranean, Middle East and South American trade lanes. This deployment of larger ships is driven by the economies of scale that are achieved on the size of the market, as well as on the length of sail for container vessels transiting the Trans-Pacific trade and the Panama Canal (and Suez Canal) routings to the U.S. East Coast and Gulf Coast ports. As the ships of larger sizes cascade from one trade lane to another, there is a constant growth in the size of vessels deployed on all trade routes.

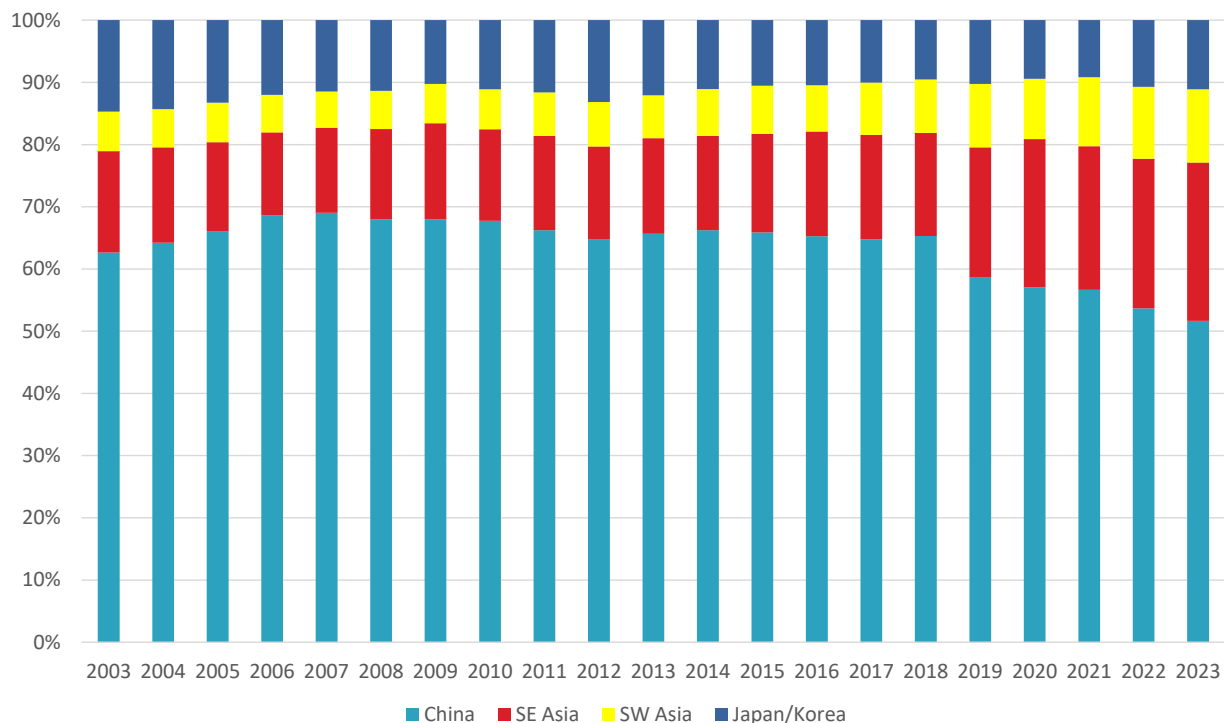
For example, the largest container vessels, those in the 18,000 - 22,000 TEU and above category are deployed on the Asia-Europe trade, as the economies of the largest container vessels are realized on the longest trade routes with minimal port calls. As these larger ships, the 18,000 TEU vessels and greater, are deployed on the Asia-Europe routings, the current vessels on that route are moved to the Trans-Pacific routing, which is the routing offering the next level of distance and minimal port calls. These newly deployed vessels on the Trans-Pacific trade (from the Asia-Europe trade) displace the current sized fleet on the Trans-Pacific trade and these displaced vessels then cascade to the all-water Asia-U.S. Atlantic Coast/Gulf Coast trade via the Panama Canal.

As the vessel size increased on the all-water Asian trades on the Atlantic and Gulf Coast ports, investment in wider and deeper channels, super-post Panamax cranes and efficient terminal operations and expanded intermodal rail operations have become a necessity at those ports participating in the Asian all-water services. As documented, these investments have been and are continuing to be made at the Atlantic and Gulf Coast ports, as will be discussed later in this report.

Changes in U.S. Import Sourcing and Impact on Discretionary Cargo Market

The production centers in Asia for imports destined into the United States have gradually been shifting away from China to other regions, particularly countries in Southeast Asia. Exhibit 7 shows that China continues to be the leading source of imports into the United States, but the share of U.S. imports from China has been declining over the period, and in particular since 2018, reflecting the impact of trade policy actions, and is likely to continue to fall as importers diversify the logistics supply chains away from China into countries in Southeast Asia such as Vietnam, Thailand, and Cambodia as well as Southwest Asian countries such as India and Pakistan.

Exhibit 7
Supply Sources of U.S. Containerized Imports



Source: USA Trade OnLine

The COVID-19 Pandemic has further underscored the importance of diversification of supply sourcing in the future. While China will likely continue to be the largest trading partner in the short to mid-term, its dominance will likely diminish as manufacturing infrastructure and port, highway and rail infrastructure are developed in the other areas of Asia.

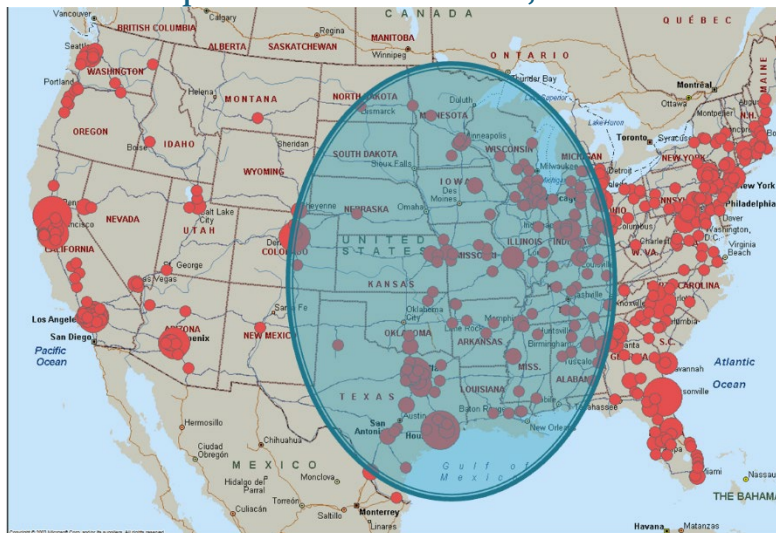
These changes in the sourcing of imports to diversify the supply chains of key U.S. importers away from China, has further implications on the future shipping patterns. For example, as supply sources shift away from China into Southeast Asia, the Suez Canal becomes the preferred trade lane to serve all water services into the Atlantic and Gulf Coast ports, and transit time differentials to serve the midwestern consumption markets with Southeast Asian cargo via these two coasts become more

competitive with the use of the San Pedro Bay Port Complex. As near market sourcing continues, overall Trans-Pacific trade will likely be negatively impacted, affecting not only the discretionary cargo moving via the San Pedro Bay Ports destined for the midwestern, southeastern and south central U.S., but the overall level of containers moving via the San Pedro Bay Port Complex into California and western U.S. states.

Port Terminal Investment to Accommodate the Growth in All-Water Service and Increased Intermodal Service via U.S. Atlantic and Gulf Coast Ports

As the vessels increased in size requiring deeper and wider channels at the Atlantic and Gulf Coast ports, the key container ports embarked on channel deepening and widening projects, and also invested in larger (post Panamax) container cranes, as well as terminal upgrades. Finally, the investment in rail service at the Atlantic and Gulf Coast ports increased in order to serve more inland markets and logistics centers that were previously served via the West Coast ports. These investments in deeper channels, terminal infrastructure and equipment, and intermodal rail terminals at the Atlantic and Gulf Coast ports are not only focused on serving the port local consumption markets, but the focus has been on increasing the markets of these Atlantic and Gulf Coast ports to serve the distribution centers located in the midwestern states that have historically been served intermodally via the West Coast ports for Asian trade, particularly the San Pedro Ports Complex. This battle ground market area is shown in Exhibit 8.

Exhibit 8
Region for Intermodal Competition Between Atlantic, Gulf Coast and West Coast Ports



With respect to channel dredging projects at the Atlantic and Gulf Coast ports to accommodate the growing size of container vessels, several ports on the Atlantic coast have a 50 ft. or greater shipping channel. These are the Ports of New York, Baltimore, Norfolk, Charleston, and Miami. Deepening projects of 47 ft. and greater are under way or have been completed at the Ports of Boston, Savannah, Jacksonville and Port Everglades, and the Port of Charleston is completing a 52 ft. channel. The Delaware River shipping channel has been deepened from 40 ft. to 45 ft. On the Gulf Coast, the deepening and widening of the Houston Ship Channel to accommodate container

vessels in excess of 1,100 ft. in length (LOA) is now under way. The U.S. Army Corps of Engineers allocated the funding for the Port of Mobile's shipping channel navigational project in fiscal 2020, which will deepen the channel to 50 ft. from its current 45 ft. depth and widen the channel from 400 ft. to 500 ft. to accommodate the larger sized container vessels. Furthermore, the deepening of the Lower Mississippi River Shipping Channel from 45 ft. to 50 ft. between Baton Rouge and the Gulf of Mexico is now underway.

Not only have the Atlantic and Gulf Coast ports responded to the growing number of all-water sailings utilizing the larger container vessels, but the ports have also responded to this growth in Asian all water services by investing in terminal and intermodal rail capacity. Nearly \$13 billion of investment has been or is planned to be invested over the next 5-7 years in port terminal infrastructure investments to accommodate the growth in all-water service and increased intermodal service via U.S. Atlantic and Gulf Coast Ports. New container terminal development is planned for the Houston Ship Channel, the Louisiana International Container Terminal, and Trade Point Atlantic in Baltimore, while continued investments in rail intermodal terminals are planned for Savannah, Charleston, Baltimore, and New York.

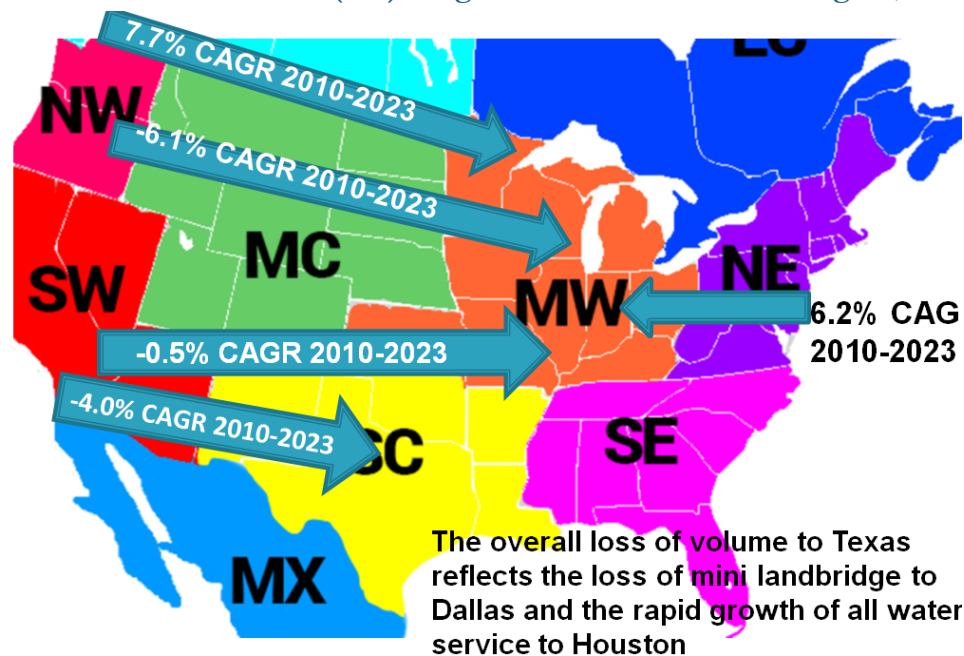
Shifting Intermodal Trade Volumes

A comparison of trends in the share of Inland Point Intermodal (IPI) activity, which is the movement of import/export marine containers by rail, underscores impact that the investment in marine terminal development and accompanying rail infrastructure at the U.S. Atlantic and Gulf Coast ports and underscores the loss of market share to serve the "battle ground" of Midwest and South-Central consumption markets described previously. To assess the changes in intermodal international containers moving from the San Pedro Bay Ports to the Midwestern and the South Central (Dallas) consumption market battle grounds compared to the growth in intermodal international volume from the Northeastern ports, (primarily New York, Norfolk, Baltimore, and Philadelphia), Pacific Northwest US Ports, and Pacific Canadian Ports (Vancouver and Prince Rupert), historical intermodal international container volumes developed by the Intermodal Association of North America (IANA) were evaluated. The IANA database provides intermodal lifts (defined as actual containers whether 20 ft., 40 ft., or 53 ft.) that are loaded or discharged from a rail car. This data base includes strictly international cargo moving in marine containers from the San Pedro Bay Ports, Pacific Northwest US Ports, Pacific Canadian ports and Northeast U.S. Ports to inland points in the midwestern U.S. such as Chicago, as well as in the south central region such as Dallas. The international cargo is classified as Intermodal Point Inland (IPI).

Exhibit 9 shows the historical flows of international intermodal cargo (IPI) to the midwestern region and the south central region, which are the destinations and origins of the largest intermodal lane flows. As Exhibit 9 shows, between 2010 and 2023, the international intermodal traffic between the Southwest region, in which the San Pedro Bay Ports and the midwest actually declined at a -0.5% CAGR over the period. This compares to a 6.2% CAGR for international intermodal volume from the northeastern ports (primarily New York and Norfolk) to the midwestern region, reflecting the shift in discretionary containerized cargo from the West Coast to the East Coast ports to serve the midwestern market. Additionally, international intermodal cargo (IPI) from the Pacific Northwest container ports of Seattle, Tacoma and Portland posted a significant annual decline of -6.1% annually, reflecting the loss of discretionary cargo destined from the PNW ports to the midwestern U.S.,

primarily the Chicago market. In contrast international intermodal cargo grew by 7.7% annually from the Canadian Pacific ports to the U.S. midwest. With respect to the south central U.S. consumption market, which is dominated by the Texas consumption market, international intermodal cargo declined by -0.4% annually from the southwestern region to the south central region. This decline in international intermodal cargo into the south central region reflects the decline in mini-land bridge service, where the imported Asian cargo via the San Pedro Bay Ports is moved intermodally to Dallas, and then distributed by truck from the distribution centers located in the Dallas/Fort Worth/Alliance Texas markets throughout Texas and the other south central consumption points in Louisiana and Oklahoma. This intermodal mini-land bridge move via the San Pedro Bay Port Complex has been replaced by the growth in the direct all water services into the Port of Houston container terminals, fueling the growth in Asian imports at the Port of Houston that was noted previously.

Exhibit 9
International Intermodal (IPI) Cargo Flows to the Midwest Region, 2010-2021



Source: IANA IPI Trade Lane Data

The Impact of the Continued Loss of Discretionary Cargo at the San Pedro Bay Ports

This report has documented the decline in the market share of the West Coast ports in handling Asian imported containers, with an emphasis on the San Pedro Bay Ports, which have handled the majority of this cargo historically. As noted, this decline in market share has been driven by the loss of discretionary cargo that has typically moved from the San Pedro Bay Ports to inland destinations, most concentrated in the midwestern states. Further as demonstrated in this report, the lack of service dependability at the West Coast ports, starting with the West Coast port shutdown in 2002, and continuing through the last 21 years, has resulted in beneficial cargo owners (BCOs) searching for alternative logistics solutions to handle imported Asian cargo. With the service interruptions that started in 2002, and again reappeared during the 2014-2015 ILWU contract negotiations, and the accelerated loss of discretionary cargo that occurred during the 2022 contract negotiations, no end appears in sight. Furthermore, as documented, the West Coast ports, and in particular the San Pedro Bay Ports, have not been successful in regaining lost market share since 2002.

To underscore the impact of the discretionary containerized cargo handled at the San Pedro Bay Ports, Martin Associates developed a specific container economic impact model that isolates the economic impact of the San Pedro Bay Port Complex container operations, and is used to assess the impacts of the Port Complex should it become a regional port -- the discretionary cargo volume would disappear. This impact model was initially developed as part of the Economic Impact of the West Coast Ports conducted by Martin Associates in 2022 for the Pacific Maritime Association.³ As part of the “Economic Impacts of the West Coast Ports”, Martin Associates developed individual seaport models for the 27 West Coast deep water ports in order to assess the economic impacts that are generated by these ports in terms of total cargo throughput at the marine terminals, including terminals operated by the International Longshore and Warehouse Union (ILWU), as well as the terminals not operated by the ILWU, which are primarily handling petroleum and certain dry bulk cargoes⁴. For this current study, the San Pedro Bay Port Complex model was refined to focus only on container operations at the Ports of Los Angeles and Long Beach in 2023, and includes updated induced and indirect impact models for the state of California, updated revenue and wage and salary metrics, as well as updated assumptions as to the share of intermodal and discretionary cargo based on interviews with the current container terminal operators.

³The Economic Impacts of the West Coast Ports, by Martin Associates, for the Pacific Maritime Association, February 15, 2022. The San Pedro Bay Ports economic impact model is based on a series of more than 5,000 interviews with terminal operators, maritime service firms, government agencies, conducted by Martin Associates, and reflect operational metrics for the each marine terminal located in the San Pedro Bay Ports Complex, including terminal productivity by commodity type, ILWU vs. terminals not operated by the ILWU, inland modal share (truck vs. rail), average truck trips per day per driver, intermodal rail operations, transload operations, etc., as well as the evolving size of the container ships that have been deployed at the Ports of Los Angeles and Long Beach. These metrics were developed from direct interviews with each terminal operator. Wages are updated for 2023, and the re-spending impact is based on the most recent personal income multiplier for the water transportation sector as developed for the state of California by the U.S. Bureau of Economic Analysis.

⁴The economic impacts of the non-ILWU terminals are included in the analysis to measure the *total* economic impact of the West Coast ports on the U.S. and the regional economies. The comparison of the total economic impacts of all marine terminals on the West Coast with the impacts generated by the cargo activity handled by ILWU operated terminals underscores the importance of the ILWU terminals when compared to the total economic impacts generated by cargo activity at all marine terminals, including those operated by non-ILWU workers.

Exhibit 10 presents the economic impacts to the state of California of the 2023 level of containerized cargo at the San Pedro Bay Port Complex; the estimated economic impacts should the San Pedro Bay Port Complex lose its discretionary cargo; and the estimated lost economic impact that would occur should the Port Complex not handle the 2023 discretionary cargo.

Exhibit 10
Estimated Annual Economic Impact of the San Pedro Bay Ports Should if the Port Complex Was a Regional Port (2023)

	Current San Pedro Bay Container Impacts	San Pedro Bay Ports as Regional Container Port Impacts	Potential Loss of Impacts if Regional Port
JOBS			
Direct	65,972	40,869	25,104
Induced	82,362	50,578	31,784
Indirect	<u>17,128</u>	<u>10,610</u>	<u>6,517</u>
Total Jobs	165,462	102,057	63,405
PERSONAL INCOME			
Direct	\$6,662	\$4,082	\$2,580
Re-spending/Local Consumption	\$16,055	\$9,838	\$6,217
Indirect	<u>\$1,095</u>	<u>\$678</u>	<u>\$417</u>
Total Income and Consumption (Millions \$)	\$23,812	\$14,598	\$9,214
DIRECT BUSINESS REVENUE (Millions \$)	\$21,838	\$10,561	\$11,277
STATE AND LOCAL TAXES (Millions \$)	\$2,701	\$1,622	\$1,079

Source: Martin Associates Economic Impact Model for the San Pedro Bay Ports Complex

In 2023, the containerized cargo handled at the San Pedro Bay Ports supported 165,462 direct, induced, and indirect jobs, \$21.8 billion of direct business revenue to the local service providers, and \$2.7 million of state and local taxes to the State.⁵ The majority of the direct induced and indirect impacts occur in the San Pedro Bay regional economy.

If the discretionary containerized cargo is no longer handled at the Port Complex, the economic impacts of a regional port are 102,057 direct, induced and indirect jobs, \$10.6 billion of direct business revenue and \$1.6 billion of state and local taxes.

Should the discretionary cargo handled in 2023 be lost to other port ranges, 63,405 direct, induced and indirect jobs would be lost, primarily from the San Pedro Bay region; \$11.3 billion of

⁵The nearly 20% loss of containerized cargo at the Port Complex since 2021 is reflected by the fact that in 2021, the container activity at the Ports of Los Angeles and Long Beach generated about 207,420 direct, induced and indirect jobs, a loss of nearly 42,000 direct, induced and indirect jobs.

direct business revenue would be lost; and the state and local taxes would be reduced by nearly \$1.1 billion annually.

Summary

As emphasized in this report, the market dynamics favor the growth in all water Asian services at Atlantic and Gulf Coast ports, as well as Pacific Canadian ports, and terminal investment and development of intermodal rail capacity at Atlantic and Gulf Coast ports have positioned these port ranges well to compete for the intermodal cargo now moving via the San Pedro Bay Port Complex. In order to maintain the San Pedro Bay Ports' market share of Asian containerized imports at the current level, it is critical that any further disruptions to service at the San Pedro Bay Port Complex be averted, and the potential impacts of environmental regulations on drayage and terminal operations be evaluated as to further impacts on the loss of discretionary cargo, including the loss of major distribution centers located in the State. While it is unlikely that the San Pedro Bay Ports can regain significant lost market share of the Asian imported containerized cargo that has occurred since 2002, the assurance of long-term continuity of service at the San Pedro Bay Port Complex must be demonstrated to beneficial cargo owners. This continuity of service includes minimizations of labor disruptions that have plagued the San Pedro Bay Port Complex over the past 21 years; capacity issues that will likely arise as drayage companies react and attempt to meet the zero carbon footprint by 2035 as mandated by the Clean Air Action Program; the zero emissions target by 2030 for terminal yard equipment/operations as mandated by the California Air Resources Board; and increasing political hurdles faced by the terminal operators to invest in terminal expansion and electrification to meet the 2030 zero emissions mandates. Should continuity of service continue to be interrupted, it is possible that the San Pedro Bay Ports container terminals could be relegated to serving a regional market, rather than a national market, hence significantly reducing their economic impact to the region and state