



# **American Association of Port Authorities (AAPA) Professional Port Manager (PPM) Research Paper**

## **The Economic Benefits Of A Port Being Designated As A Foreign Trade Zone**



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## Biography



**Joseph C. Powell, MPE**, is a seasoned maritime executive with over two decades of expertise in waterfront operations, port security, emergency management, and business development. With a distinguished career spanning the U.S. Secret Service, U.S. Coast Guard, and private sector leadership, Joseph has built a reputation for his ability to strategize, implement, and oversee complex safety, security, and development programs on both national and international stages.

Currently serving as the Director of Security for Port Pascagoula, Joseph has been instrumental in advancing the port's operational growth and environmental sustainability. He spearheaded the development of the port's Green Marine certification, significantly reducing its ecological footprint. His innovative Maritime Cybersecurity Program, aligned with NVIC 01-20 compliance, earned the prestigious Lighthouse Award for Best Practices in Cybersecurity from the American Association of Port Authorities.

A proven leader in business development, Joseph successfully crafted and implemented a Strategic Plan Request for Proposal (RFP), outlining long-term objectives and positioning the Port of Pascagoula for sustained growth. His efforts directly led to the approval of customs clearance for 1,500 containers monthly, streamlining import/export operations and enhancing the port's revenue potential. As the primary liaison for workforce initiatives, Joseph actively promotes maritime careers and generational education through programs such as "We Work the Waterways" and "GenSea."

An industry thought leader, Joseph is a certified maritime port executive and holds a Bachelor of Arts in Homeland Security and Emergency Management from the University of Arizona. He is a member of the National Maritime Security Advisory Committee and serves as President of the Port of Pascagoula Propeller Club.

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## **Abstract**

This paper uses the Port of Pascagoula as a central case study to explore the economic impact of Foreign Trade Zone (FTZ) designation on port operations. FTZs offer critical incentives—such as tariff deferrals and streamlined customs procedures—that enhance global trade efficiency, stimulate local investment, and drive regional employment. Through a mixed-methods approach that includes comparative data from Duluth Seaport, the Port of Alaska, and the Port of Vancouver USA, this research evaluates the influence of FTZs on trade volume, infrastructure development, and job creation. The findings reveal significant benefits, including \$100 million in merchandise flow and multimillion-dollar infrastructure investments at some ports. However, underutilization due to regulatory hurdles and limited marketing remains a common challenge. Key performance indicators (KPIs) and policy recommendations are proposed to improve FTZ adoption and sustainability, particularly for emerging FTZs like Pascagoula. This study contributes to the strategic understanding of FTZ implementation and offers actionable insights for port authorities, policymakers, and trade professionals seeking to leverage FTZ status for regional economic growth. (C. Beckham, personal communication, March 5, 2025) (J. Hagar, personal communication, March 6, 2025)

## Introduction and Relevance

Foreign Trade Zones (FTZs) have emerged as powerful instruments in the global trade ecosystem, enabling ports and the regions they serve to compete more effectively in an increasingly complex and interconnected economy. Established under the Foreign-Trade Zones Act of 1934, FTZs are designated geographic areas that operate under U.S. Customs and Border Protection (CBP) supervision but are considered outside U.S. customs territory for tariff and tax purposes. These zones allow businesses to defer, reduce, or even eliminate customs duties, offering a critical edge in a competitive global market. (U.S. Customs and Border Protection. (2024, January). Foreign Trade Zones manual. U.S. Department of Homeland Security. <https://www.cbp.gov>)

For U.S. seaports, FTZ designation is more than a regulatory tool—it is a catalyst for growth. FTZs promote operational efficiency, enhance supply chain flexibility, and reduce overall costs for importers, exporters, and manufacturers. By improving cash flow and lowering barriers to entry, FTZs help ports attract new industries, retain existing businesses, and increase throughput. These economic activities, in turn, contribute significantly to the Gross Domestic Product (GDP) at the local, state, and national levels while reinforcing America’s role in global commerce.

The Port of Pascagoula on Mississippi’s Gulf Coast exemplifies a mid-sized deepwater port with strategic geographic positioning, multimodal connectivity, and growing trade ambitions. As regional and national logistics strategies shift post-COVID and amid global supply chain realignments, Pascagoula’s role is evolving from a traditional port of entry to a diversified logistics and manufacturing hub. The successful implementation of the FTZ designation at Pascagoula offers a pathway to increase trade volume, improve port utilization, and drive long-term investment, workforce development, and infrastructure enhancement.

FTZ incentives—such as duty deferrals, inverted tariffs, and streamlined customs entry procedures—can transform a port’s operating model. These tools allow for more competitive positioning relative to foreign ports and other U.S. ports without FTZ status. FTZs also offer strategic value to policymakers and port administrators by aligning trade infrastructure with broader economic development goals. From enabling advanced manufacturing to supporting

energy sector growth, FTZs play a crucial role in shaping the future of resilient, trade-driven regional economies.

This capstone project investigates the financial, operational, and strategic benefits of FTZ designation, using the Port of Pascagoula as the central case study. Through comparative analysis of three peer ports, Duluth Seaport (MN), the Port of Alaska (Anchorage), and the Port of Vancouver USA (WA)—this research evaluates how FTZ designation influences port performance across key metrics: trade volume, employment growth, private-sector investment, and infrastructure development. It also identifies common barriers, such as regulatory complexity and under-marketing, and offers practical recommendations to maximize Pascagoula’s FTZ potential. (C. Beckham, personal communication, March 5, 2025) (J. Hagar, personal communication, March 6, 2025)

Ultimately, this study aims to provide actionable insights for port authorities, policymakers, and logistics professionals seeking to leverage FTZ designation as a mechanism for sustained regional economic growth, global competitiveness, and operational innovation. The FTZ program supports over 550,000 jobs and processes nearly \$949 billion in merchandise annually across 200 active zones. This national success provides a compelling backdrop for Pascagoula to remain active to capture similar economic advantages.

## Methodology

This report employs a mixed-methods research design to evaluate the economic and strategic benefits of Foreign Trade Zone (FTZ) designation, specifically in the context of mid-sized U.S. ports such as the Port of Pascagoula. A mixed-methods approach combines quantitative data analysis with qualitative contextual interpretation, allowing for a more comprehensive and nuanced understanding of FTZ implementation, performance, and potential.

### Quantitative Data Collection and Analysis

Quantitative data was sourced from three active FTZ-designated ports selected for their diversity in geographic location, operational scale, and strategic focus:

**Duluth Seaport (Minnesota – FTZ 51) (Port of Duluth. (2025, March 5).** *Foreign Trade Zone 51 overview*. Duluth Seaway Port Authority. (Interview: Kate Ferguson, Director of Trade & Business Development)

**Port of Alaska (Anchorage – FTZ 160) (Port of Alaska. (2025, March 5).** *Foreign Trade Zone 160 information*. Municipality of Anchorage. (Interview: Cheryl J. Beckham, Deputy Director, Finance & Administration)

**Port of Vancouver USA (Washington – FTZ 296) (Port of Vancouver USA. (2025, March 6).** *Foreign Trade Zone 296 summary*. Port of Vancouver USA. (Interview: Jim Hagar, Director of Operations, FTZ)

Structured surveys were used to collect key performance indicators (KPIs) across the following categories:

- **Trade Volume** (annual merchandise flow processed under FTZ procedures)
- **Job Creation** (direct and indirect employment attributed to FTZ operations)
- **Infrastructure Investment** (capital improvements linked to FTZ designation)
- **Business Attraction and Retention** (number and type of firms operating in FTZ areas or subzones)

Where available, data from official port reports, FTZ board filings, and municipal economic development documents were extracted to validate and supplement survey responses. These numerical benchmarks were then mapped against the Port of Pascagoula's strategic development objectives, including its goals for trade expansion, regional employment, and industrial diversification.

### **Qualitative Data Collection and Synthesis**

In parallel, qualitative insights were derived from a range of published sources, including:

- FTZ Board annual reports
- NAFTAZ policy briefs and industry white papers
- Port-authored strategic plans and FTZ zone summaries
- Public meeting minutes and stakeholder statements
- Press releases and economic development media coverage

These materials were analyzed thematically to identify trends in FTZ utilization, challenges in implementation (e.g., regulatory bottlenecks or marketing gaps), and strategies employed by peer ports to overcome those challenges. Without direct stakeholder interviews, these documents served as proxies for primary source perspectives, offering valuable insight into the lived experiences, policy priorities, and strategic responses of port executives and economic developers.

### **Comparative Benchmarking Framework**

The study integrates both data types into a comparative benchmarking model, structured around Pascagoula's potential performance as an FTZ. Each peer port was evaluated across uniform criteria to ensure comparability and support evidence-based conclusions. These findings were further validated against national-level data from the Foreign-Trade Zones Board (2023) and the National Association of Foreign-Trade Zones (2024) to contextualize Pascagoula's readiness and potential contribution to the broader FTZ network.



## Strengths of the Approach

This blended methodology allows the study to:

- Assess the outcomes FTZs have produced and why specific strategies succeed or fail.
- Translate national policy trends and localized implementation data into actionable recommendations.
- Offer a model that Pascagoula and similar ports can adapt to measure, justify, and optimize FTZ-related investments.

The methodology ensures that findings are empirically valid and operationally relevant for real-world decision-making by grounding the research in numerical rigor and qualitative depth.

### A. Common Themes Across All Three Ports

Theme	Duluth Seaport	Port of Alaska	Vancouver USA
Job Creation	4 direct, 30 indirect	Implied	13 longshoremen, 20 indirect
Cost Savings	Mainly due to Canada's proximity	Uses white paper for business outreach	Newer FTZ, subzone-based model
Operational Awareness	Under-marketed, underutilized	Uses white paper for business outreach	Clark County ASF model
Use of ASF	✓	✓	✗ (Clark County ASF, not general ASF)

### B. Key Differences by Port

Feature	Duluth Seaport	Port of Alaska	Port of Vancouver USA
Trade Volume Impact	\$100M+ merchandise through FTZ	Trade volume (no exact figure stated)	No increase in trade; benefit via rent revenue
Business Attraction	No regional investment due to <u>lack</u> of marketing	Active <u>subzones</u> ; significant private sector activity	<u>Wind</u> energy industry attracted limited foreign investment
Infrastructure Modernization	\$35M in improvements tied to FTZ	Not stated explicitly	No infrastructure tied to FTZ
Performance Indicators (KPIs)	Used for project evaluation	Specified	None used

ASF: Alternative Site Framework – a flexible FTZ model allowing multiple site designations across a region without complex, multi-year activation processes

## **FTZ Benefits in Light of the Capstone Objectives**

This section draws directly from peer port case studies and national FTZ data to demonstrate how real-world applications inform and support these goals, offering valuable insights for the Port of strategic considerations. Peer port findings provide valuable context. Duluth benefited from significant merchandise throughput and capital improvements but struggled with foreign direct investment due to limited outreach. Alaska demonstrated the ability to deploy subzones creatively, extending into aviation and energy, showcasing the FTZ's versatility. Vancouver USA capitalized on flexible leasing strategies to support industrial users but cited regulatory delays as a persistent obstacle.

### **Objective 1: Evaluate FTZ Economic Advantages**

- Duluth Seaport recorded over \$100 million in merchandise flow through its FTZ, reinforcing that designation leads to increased cargo throughput and port utilization (Port of Duluth, 2025). (K. Ferguson, personal communication, March 5, 2025)
- The Port of Alaska uses seven subzones, including an airport and oil refinery, which shows the FTZ model's versatility in attracting various industries, from energy and aviation to logistics (Port of Alaska, 2025). (C. Beckham, personal communication, March 5, 2025)
- Port of Vancouver USA employs a creative land lease strategy that offsets slower trade volume growth by maximizing duty deferral and space monetization (Port of Vancouver USA, 2025), demonstrating alternative economic benefits outside of raw trade metrics. (J. Hagar, personal communication, March 6, 2025)

These examples affirm that FTZs offer tangible trade and investment incentives, even in ports with diverse logistical profiles and varying economic baselines.

### **Objective 2: Analyze Job Creation Impact**

- All three ports—Duluth, Alaska, and Vancouver—reported direct and indirect job gains in key sectors, including longshore labor, customs brokerage, and FTZ administration.
- Vancouver's zone employed over 30 workers, including 13 longshoremen and indirect hires in third-party logistics. At the same time, Duluth and Alaska showed increased port-related employment due to zone-based operations.

These findings validate the abstract’s premise that FTZs stimulate job creation at the port and across associated warehousing, freight, and regulatory services.

### **Objective 3: Assess Long-Term Economic Development**

- \$35 million in infrastructure improvements tied to FTZ activity at Duluth (Port of Duluth, 2025) demonstrate how designation can unlock capital investments through increased throughput and public-private partnerships. (K. Ferguson, personal communication, March 5, 2025)
- Alaska’s cross-jurisdictional FTZ model, which spans multiple municipalities, shows how state and regional coordination can drive broader economic inclusion and accessibility.
- However, both Duluth and Vancouver have struggled to attract foreign direct investment (FDI) due to weak marketing and outreach, highlighting a key area where Pascagoula can excel by launching a targeted promotional campaign.

These examples underscore that FTZs influence short-term trade and can serve as catalysts for sustained regional development, provided awareness and engagement strategies are in place.

### **Objective 4: Track KPIs for ROI Measurement**

- A consistent theme across the peer ports is the lack of comprehensive KPI frameworks to measure the success of their FTZ programs.
- None of the ports systematically report on performance metrics, which limits their ability to assess return on investment (ROI), justify policy support, or benchmark growth.

For Pascagoula, this gap presents a strategic opportunity. By implementing a real-time dashboard of KPIs, the Port could lead to transparency and accountability. Suggested metrics include:

- Year-over-year trade volume increases
- Number of businesses attracted
- Jobs created or retained
- Amount of infrastructure investment

- Export volume and duty savings realized

By linking these indicators to FTZ activity, Pascagoula could demonstrate measurable progress and justify further public/private investment.

### **Objective 5: Policy Recommendations**

Based on the peer port analysis and national reports, several actionable policy recommendations emerge:

- **Regulatory Streamlining:** Simplify U.S. Customs and Border Protection (CBP) procedures to facilitate faster subzone activation and merchandise processing (highlighted in Duluth and Pascagoula).
- **State-Level Incentives:** Advocate for Mississippi-based FTZ tax credits or permit fee reductions, mirroring regional incentive programs like those proposed in Washington State (Vancouver).
- **FTZ Utilization Support:** Launch an education and technical assistance program for businesses considering FTZ entry, helping them navigate compliance, benefits, and operational logistics (addressing gaps noted in Duluth).

These recommendations would position Pascagoula to create a more business-friendly, policy-aligned FTZ environment, improving both adoption and performance.

## **Advantages of FTZ Designation**

### **Direct Business Benefits**

- **Duty Deferral and Elimination:** Reduce cash flow burdens for importers/exporters.
- **Inverted Tariff Relief:** Save on component-heavy production where end-product tariffs are lower.
- **Logistics and Customs Savings:** Benefit from streamlined customs entries and reduced brokerage fees.
- **Improved Global Competitiveness:** Enhance attractiveness for multinational firms comparing U.S. sites with offshore alternatives.

## Strategic Development Advantages

- **Attract Foreign and Domestic Investment:** Position the port as a cost-effective, logistics-optimized location.
- **Support Infrastructure Expansion:** Enable public and private entities to justify upgrades tied to FTZ activation.
- **Enhance Workforce Development:** Grow regional jobs in freight, logistics, customs compliance, and production.
- **Flexible ASF Framework:** Extend FTZ eligibility to industrial parks and business districts across Jackson County, not just within the port footprint.

## Application to Pascagoula

The Port of Pascagoula is strategically positioned to take full advantage of FTZ designation as the port is currently designated as a FTZ under FTZ #092 with multiple sub-zones. As a Gulf Coast deep-water port with expanding international trade links, Pascagoula could:

- Reduce trade friction in an era of post-pandemic supply chain rebalancing and heightened global trade tensions.
- Strengthen regional competitiveness against larger ports by offering duty relief, faster processing, and lower logistics costs.
- Serve as a statewide model for effective FTZ implementation, tracking measurable impact through KPIs and ensuring long-term economic growth for the region.

## National FTZ Program Data and Context

To support Pascagoula's potential, this report incorporates comprehensive data from:

- The **2023 FTZ Board Annual Report**, which details FTZ operations, trade volumes, and industry sector breakdowns.
- The **2024 NAFTA Facts & Figures** publication, which outlines policy priorities, economic contributions, and growth trends.

Together, these national sources reinforce the **broad economic impact** and **strategic value** of FTZ programs nationwide, making a compelling case for Pascagoula’s adoption and tailored application.

**SUMMARY STATISTICS, 2019 – 2023**  
(**\$ billion**)

	2019	2020	2021	2022	2023
<i>Merchandise Received</i>	767.0	624.9	835.6	1,011.3	948.8
<i>Warehouse/Distribution</i>	301.1	283.7	369.8	387.4	363.9
<i>Production</i>	465.9	341.2	465.8	623.9	584.9
<i>% Production</i>	61%	55%	56%	62%	62%
<i>Foreign Status Inputs</i>	279.4	254.2	293.7	329.1	307.6
<i>Warehouse/Distribution</i>	167.0	165.0	186.9	200.6	189.8
<i>Production</i>	112.4	89.2	106.8	128.5	117.8
<i>Domestic Status Inputs<sup>1</sup></i>	487.6	370.6	541.9	682.2	641.2
<i>Warehouse/Distribution</i>	134.1	118.6	182.9	186.9	174.1
<i>Production</i>	353.5	252.0	359.0	495.3	467.1
<i>Domestic Status Inputs Ratio</i>	64%	59%	65%	67%	68%
<i>Warehouse/Distribution</i>	45%	42%	49%	48%	48%
<i>Production</i>	76%	74%	77%	79%	80%
<i>Exports<sup>2</sup></i>	111.4	94.2	123.6	161.9	148.8
<i>Warehouse/Distribution</i>	39.6	39.4	47.3	56.5	53.0
<i>Production</i>	71.8	54.8	76.3	105.4	95.8
<i>Number of Approved FTZs<sup>3</sup></i>	260	261	258	259	261
<i>Active FTZs<sup>4</sup></i>	193	195	197	197	200

<sup>1</sup> Domestic status merchandise includes both domestic-origin items and foreign-origin items that have been entered for consumption (duty-paid) prior to FTZ admission.

<sup>2</sup> Export figures are based on material inputs and do not include value added.

<sup>3</sup> The number of approved FTZs is the sum of all zones approved by the FTZ Board, minus those that have lapsed or been terminated.

<sup>4</sup> Active FTZs have at least one site or subzone in operation.

The table above presents national FTZ merchandise flow and employment trends to illustrate the macroeconomic significance of FTZs. This contextual benchmark allows Pascagoula to visualize the scale of opportunity and the types of industries most impacted.

## **National Impact of FTZs**

As of 2023, the United States is home to 200 active Foreign-Trade Zones (Foreign-Trade Zones Board, 2023) (FTZs), which collectively support over 550,000 U.S. jobs and operate across more than 1,300 individual business sites. These zones play a pivotal role in global commerce and domestic industry by facilitating the processing of nearly \$949 billion in merchandise (Foreign-Trade Zones Board, 2023) receipts, of which approximately \$148.8 billion was exported (Foreign-Trade Zones Board, 2023) to international markets. The production segment of FTZ operations—representing 62% of all FTZ activity—processed more than \$584.9 billion in goods (Foreign-Trade Zones Board, 2023), reflecting the strong integration of FTZs within the U.S. manufacturing and value-added supply chain.

Beyond their role in boosting trade volume, FTZs contribute to regional economic development, promote capital investment, and support supply chain resilience. The program's scope underscores its importance as a tool for industrial competitiveness and international trade policy, particularly in a climate of growing geopolitical and economic uncertainty.

## **Core Economic and Trade Benefits**

Foreign-Trade Zones offer a suite of incentives that reduce costs, enhance operational flexibility, and improve the bottom line for participating businesses. Key advantages include:

- **Duty Deferral:** Customs duties are postponed until merchandise leaves the FTZ and enters U.S. commerce.
- **Duty Elimination:** No duties are owed on goods that are re-exported from the zone.
- **Inverted Tariff Relief:** When the tariff on a finished product is lower than the tariff on its imported components, companies may pay the lower finished-goods duty rate.
- **Streamlined Customs Procedures:** Weekly entry filings and direct delivery reduce paperwork, lower brokerage costs, and minimize delays.

These mechanisms are especially advantageous for manufacturers with global supply chains, allowing them to operate with lower overhead and greater agility. As a result, FTZs help retain

and grow domestic jobs, foster onshoring of production, and enhance the global competitiveness of U.S. exporters.

## **Industry Sectors and Product Composition**

The FTZ program supports a diverse cross-section of the U.S. economy, spanning strategic sectors such as energy, pharmaceuticals, automotive, aerospace, technology, and logistics. In 2023, top foreign-status inputs processed through FTZs included:

- Oil and Petroleum Products
- Pharmaceuticals and Biotech
- Automotive Parts and Vehicles
- Consumer Electronics
- Industrial Chemicals
- Iron and Steel Products

A notable statistic: 68% of all FTZ-handled merchandise (National Association of Foreign-Trade Zones, 2025) had domestic status, illustrating that FTZs are not solely focused on import/export flow, but also function as integrated hubs of domestic manufacturing, packaging, processing, and distribution. This domestic linkage reinforces the zones' role in strengthening supply chain security and supporting U.S.-based economic ecosystems.

## **Policy Issues and Strategic Recommendations**

Despite their effectiveness, FTZs face regulatory and policy challenges that could hinder growth and competitiveness if left unaddressed. Regulatory streamlining is both realistic and necessary. For example, the Port of Houston has successfully worked with its local CBP office to implement pre-authorization protocols for subzone activation. Achieving this in Pascagoula would require formal coordination with the CBP Field Operations Office and possible engagement with Mississippi's congressional delegation to support regulatory modernization at the federal level. These precedents demonstrate that procedural innovation is achievable with interagency buy-in.

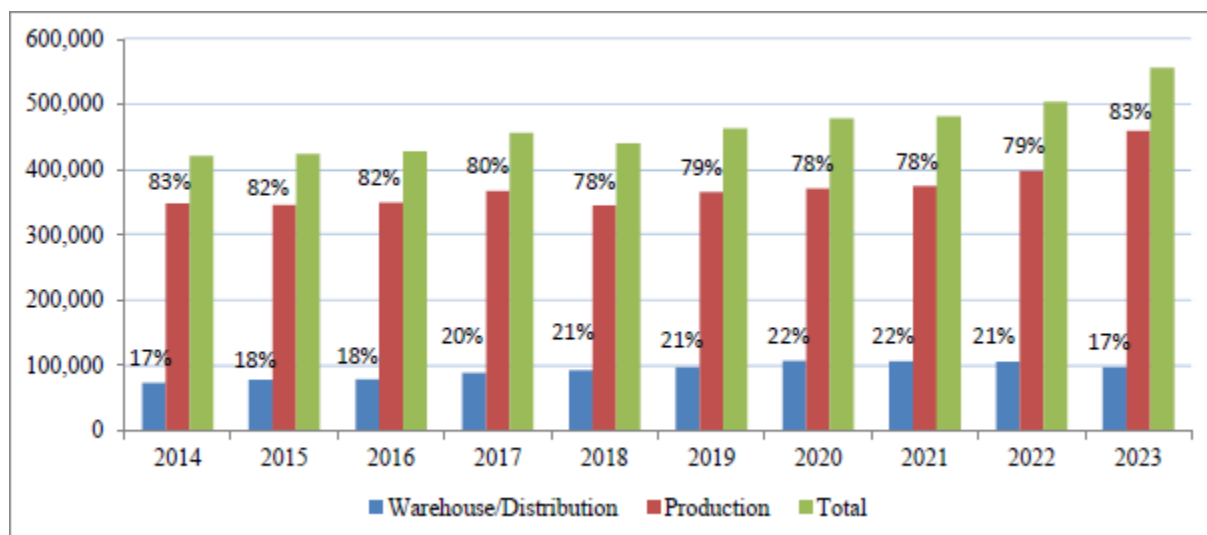
- Section 301 Tariff Clarity: Ensure consistent and fair application of 301 tariffs on FTZ merchandise, as misapplications can deter use and create legal uncertainty.



- **USMCA Harmonization:** Align FTZ treatment under the U.S.-Mexico-Canada Agreement (USMCA) to allow FTZ-made exports to Canada and Mexico to qualify for preferential treatment.
- **Enhanced Enforcement Tools:** Improve oversight mechanisms for forced labor restrictions and de minimis import thresholds to align with national security and ethical sourcing standards.
- **Regulatory Modernization:** Update and streamline outdated federal FTZ rules (notably 19 CFR Part 146 and 15 CFR Part 400) to reflect modern supply chain practices and digital processes.

These reforms are essential to fortify the FTZ program’s role as a pillar of national trade infrastructure, ensure equitable treatment for U.S.-based producers, and uphold compliance with global labor and security norms.

**FTZ Employment By Year**



**Foreign-Trade Zones Board. (2023, December).** *Annual report to Congress 2023.* U.S. Department of Commerce. <https://enforcement.trade.gov/ftzpage/annualreport.html>

## Top 25 Production Operations

### Merchandise Received

	Zone	Company
1	93C	Merck Sharp & Dohme LLC
2	149C	Phillips 66 Company
3	84O	ExxonMobil
4	154A	Exxon Corporation
5	124E	Marathon Ashland Petroleum LLC
6	18G	Tesla, Inc.
7	116A	Motiva Enterprises LLC
8	115B	ExxonMobil Oil Corporation
9	38A	BMW Manufacturing Company, LLC
10	199A	Marathon Petroleum Company LP
11	87B	CITGO Petroleum Company LP
12	98A	Mercedes-Benz U.S. International, Inc.
13	92D	Chevron Corp.
14	50H	Marathon Petroleum Company LP
15	202B	Chevron Products Company
16	177B	Toyota Motor Manufacturing
17	3B	Chevron Products Company
18	129A	West Coast Products LLC
19	116C	Premcor Refining Group
20	29E	Toyota Motor Manufacturing Kentucky, Inc.
21	122J	Valero Refining Co.
22	168D	Samsung Electronics America, Inc.
23	222A	Hyundai Motor
24	116B	TotalEnergies Petrochemicals & Refining USA
25	87A	Phillips 66 Company

### Exports

	Zone	Company
1	98A	Mercedes-Benz U.S. International
2	115B	ExxonMobil Oil Corporation
3	291	Cheniere Energy Partners, LP
4	7K	Lilly del Caribe, Inc.
5	93C	Merck Sharp & Dohme LLC
6	177A	AstraZeneca Pharmaceuticals, LP
7	116C	Premcor Refining Group
8	124E	Marathon Ashland Petroleum LLC
9	122J	Valero Refining Co.
10	116A	Motiva Enterprises LLC
11	149C	Phillips 66 Company
12	92D	Chevron Corporation
13	199A	Marathon Petroleum Company LP
14	87B	CITGO Petroleum Company LP
15	84O	ExxonMobil
16	154A	Exxon Corporation
17	122X	Cheniere Energy, Inc.
18	3B	Chevron Products Company
19	18G	Tesla, Inc.
20	193A	Catalent Pharma Solutions, LLC
21	18F	Lam Research Corporation
22	2J	Valero Refining-Meraux, LLC
23	177B	Toyota Motor Manufacturing
24	196A	TTI, Inc.
25	27R	Wyeth Pharmaceuticals, LLC

## Recommendations (Informed by Peer Port Performance)

### 1. Implement a Robust Marketing Campaign to Educate Industries About FTZ

#### Incentives

Launch a region-wide outreach initiative that includes industry roundtables, informational webinars, success-story videos, and printed materials tailored for target sectors. Engage with local chambers of commerce, economic development agencies, and trade associations to extend reach. Peer ports like Vancouver USA and Duluth Seaport demonstrate that underutilization often stems from limited awareness—not lack of interest. Highlight cost savings, streamlined customs procedures, and duty deferral opportunities to position FTZ participation as a competitive advantage.

### 2. Develop a Dashboard of KPIs to Evaluate Performance Across Economic and Operational Metrics

Establish a centralized, real-time data dashboard to track FTZ impact on cargo throughput, job creation, private sector investment, and customs clearance times. Metrics

should include both leading and lagging indicators to support evidence-based decision-making. Benchmark against high-performing ports such as the Port of Alaska, which uses white papers and reports to monitor FTZ-related business activity. This visibility can inform strategic adjustments and attract additional stakeholders by showcasing tangible results. (C. Beckham, personal communication, March 5, 2025)

**3. Work with Federal Agencies to Streamline CBP-Related Processes and Reduce Regulatory Burdens**

Initiate formal partnerships with U.S. Customs and Border Protection (CBP), the Department of Commerce, and the Foreign-Trade Zones Board to improve documentation flow, reduce approval timelines, and provide technical assistance to first-time users. Consider adopting a joint task force or liaison position, as seen in other ports, to support smoother subzone designation and site activation. Simplifying access will significantly lower barriers for small to mid-sized enterprises seeking to engage with the FTZ.

**4. Pursue Targeted Industry Attraction, Especially in Energy, Logistics, and Advanced Manufacturing**

Conduct a strategic gap analysis of current regional strengths and align FTZ marketing efforts to industries with the most significant potential for investment and job growth. For example, the Port of Vancouver USA has leveraged FTZ benefits to attract companies in renewable energy, while Duluth has explored opportunities in heavy manufacturing. Tailoring incentives, site development packages, and workforce training programs to these sectors will increase site utilization and long-term economic returns. (J. Hagar, personal communication, March 6, 2025)

**5. Capitalize on ASF Flexibility to Quickly Onboard Businesses in the Wider Jackson County Region**

Maximize the Alternative Site Framework (ASF) by identifying pre-qualified industrial and commercial sites throughout Jackson County that can be rapidly activated. Promote the ASF structure as a low-risk entry point for companies interested in trade zone benefits without the need for complex, multi-year development plans. Collaborate with real estate developers and site selectors to make these locations visible to national and international investors, thereby increasing economic resilience and regional competitiveness.

## Conclusion

In reflecting on what I have learned, this study has demonstrated that Foreign Trade Zones (FTZs) offer significant economic advantages for U.S. ports, particularly in enhancing trade efficiency, supporting domestic manufacturing, and driving regional job creation. Using the Port of Pascagoula as the central case study and comparing it to Duluth Seaport, the Port of Alaska, and the Port of Vancouver USA, this research has provided a clear picture of how FTZ designation can influence trade volume, infrastructure development, and business attraction. (C. Beckham, personal communication, March 5, 2025) (J. Hagar, personal communication, March 6, 2025)

The comparative analysis revealed tangible benefits, such as over \$100 million in merchandise flow at Duluth and multimillion-dollar infrastructure improvements linked to FTZ status. However, it also identified key barriers to success—including limited public awareness, complex regulatory procedures, and inconsistent use of performance tracking metrics. These challenges underscore the importance of strong policy frameworks, strategic outreach, and standardized key performance indicators (KPIs) to ensure long-term FTZ sustainability and impact.

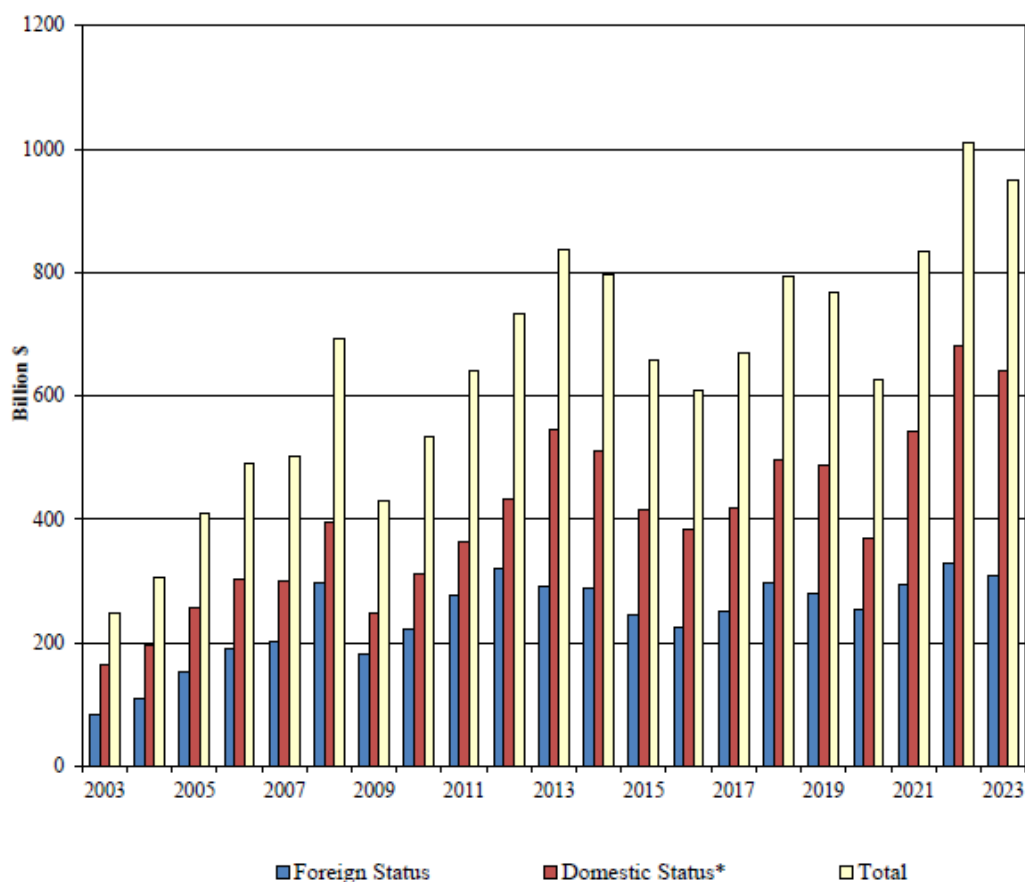
For Pascagoula, the findings affirm that it is strategically positioned to unlock the full potential of its FTZ designation. By implementing the proposed recommendations—including improved marketing, streamlined customs coordination, and KPI-driven oversight—the Port can attract new investment, expand its trade footprint, and serve as a national model for effective FTZ deployment.

Ultimately, this research contributes to a deeper, practical understanding of FTZ implementation and offers actionable guidance for port directors, policymakers, and logistics professionals who aim to optimize economic growth through trade zone strategies. By capitalizing on the inherent advantages of FTZ programs—such as duty deferral, inverted tariffs, and logistical efficiencies—ports can not only strengthen their global competitiveness but also create sustainable economic ecosystems that support small businesses, attract foreign direct investment, and promote long-term regional development.

As the global trade environment continues to evolve with shifting supply chains, emerging technologies, and heightened competition, the strategic application of FTZ status will be increasingly critical. Ports that embrace innovation, proactively engage stakeholders, and align FTZ operations with broader economic development goals will be best positioned to thrive. The Port of Pascagoula has the opportunity to lead by example, demonstrating how targeted FTZ strategies can translate into measurable economic resilience, growth, and prosperity for the Gulf Coast region and beyond.

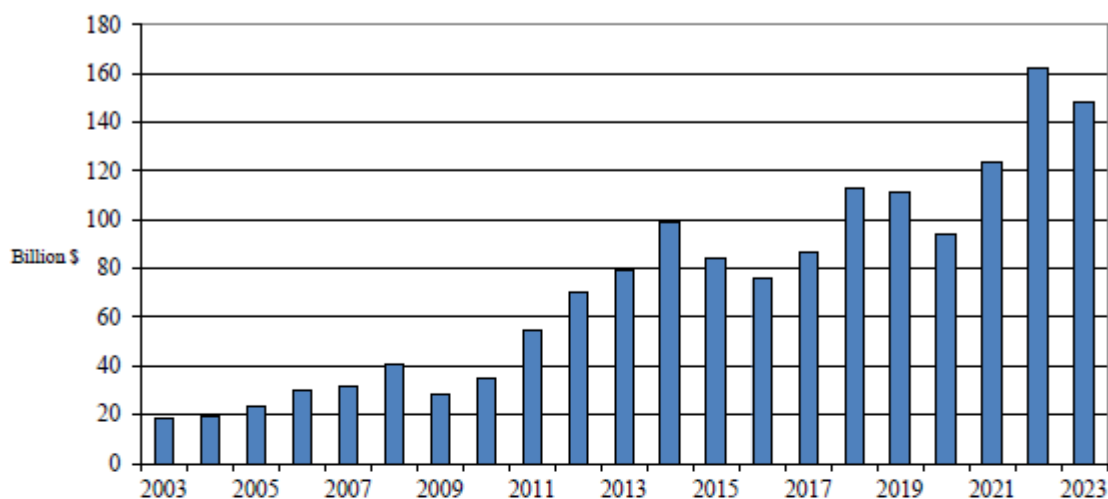
## National FTZ Import/Export Numbers

**Figure 1: Merchandise Received**  
2003-2023

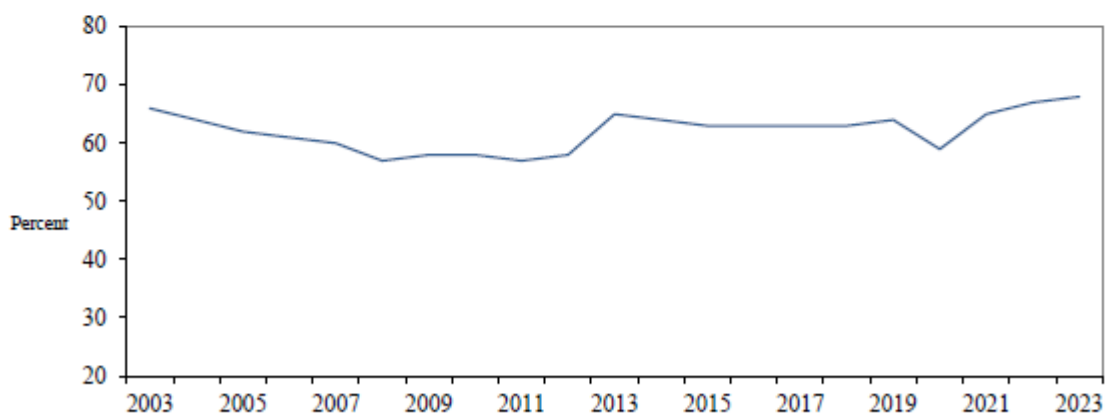


\* "Domestic status merchandise" includes both domestic-origin items and foreign-origin items that have been entered for consumption (duty-paid) prior to FTZ admission.

**Figure 2: Exports**  
(2003-2023)



**Figure 3: Domestic Status\* Merchandise Ratio**  
(As percent of Total Merchandise Received)  
(2003-2023)



\* "Domestic status merchandise" includes both domestic-origin items and foreign-origin items that have been entered for consumption (duty-paid) prior to FTZ admission.

**Foreign-Trade Zones Board. (2023, December).** *Annual report to Congress 2023*. U.S. Department of Commerce. <https://enforcement.trade.gov/ftzpage/annualreport.html>

## **Reflection on Learning**

This research project gave me a deeper understanding of the operational, regulatory, and economic complexities associated with Foreign Trade Zone (FTZ) designation and implementation. Analyzing and comparing the FTZ performance of Duluth Seaport, the Port of Alaska, and the Port of Vancouver USA allowed me to contextualize Pascagoula's unique opportunities and challenges. The process emphasized the importance of data-driven policy recommendations and highlighted how strategic initiatives, like KPI tracking, targeted marketing, and interagency coordination, can amplify FTZ benefits. Most importantly, this capstone enhanced my ability to synthesize federal policy, local operational data, and economic development goals into a cohesive strategy for port growth. It also reinforced the importance of collaborative research and peer benchmarking in developing actionable insights. (C. Beckham, personal communication, March 5, 2025) (J. Hagar, personal communication, March 6, 2025)

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