



Port of Stockton and SSA Pacific

Transformation of Heavy Duty Equipment at Seaports in California

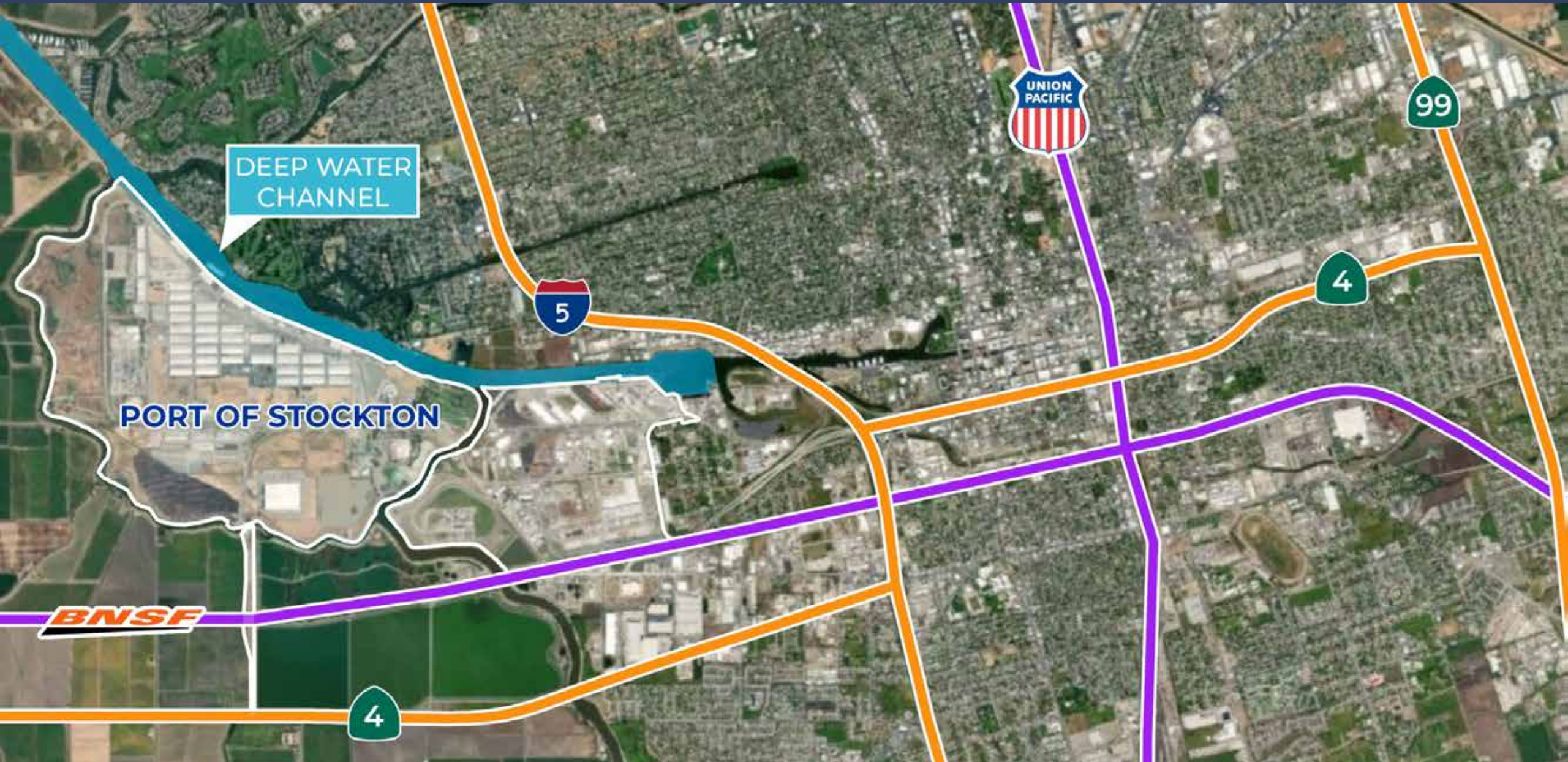
January 25, 2024 | 2024 Association of Pacific Ports Winter Conference



Highlights

- Port Overview
- Environmental Setting
- Stockton Soda Bump
- ZANZEFF Opportunity
- Port Outreach Committee
- Clean Air Plan
- Collaboration
- Results







PROPERTY

NEARLY 4,000
TOTAL ACRES
(1620 HECTARES)

OF PROPERTY ALONG THE
DEEPWATER CHANNEL

STORAGE

Over 7 MILLION
SQUARE FEET



(650,000 SQ. METERS) OF COVERED STORAGE AREA

DOCK

12,000+
LINEAR FEET

(3,600 METERS) OF DOCK



RAILROAD

OVER 75 MILES
(120 KILOMETERS) OF
RAILROAD TRACK





**10,077
JOBS**

Supported by
Port activity

**\$77.7
MILLION**

State and local
taxes

\$1.6 BILLION

Of total impacts plus
related impacts supported
in the region

**\$630.1
MILLION**

Total personal
income/ local
consumption

Approved Projects

Value of Projects \$2.43 Billion
2,318 Jobs



Port of Stockton
CALIFORNIA



- ENERGY / \$37.8M
- BULK MATERIALS / \$118.6M
- BULK MATERIALS / \$159.9M
- STORAGE-DISTRIBUTION / \$412.7M
- WAREHOUSE / BULK MATERIALS / \$30M
- DISTRIBUTION WAREHOUSE / \$60M
- DISTRIBUTION / \$20M

Proposed Projects

Value of Projects \$839 Million
667 Jobs



Port of Stockton
CALIFORNIA





TOP 5 SHIPPING IMPORTS – METRIC TONS

BULK CEMENT

1,261,064

LIQUID FERTILIZER

405,263

STEEL

267,764

FOOD GRADE OILS

221,459

BAGGED FEED

213,578



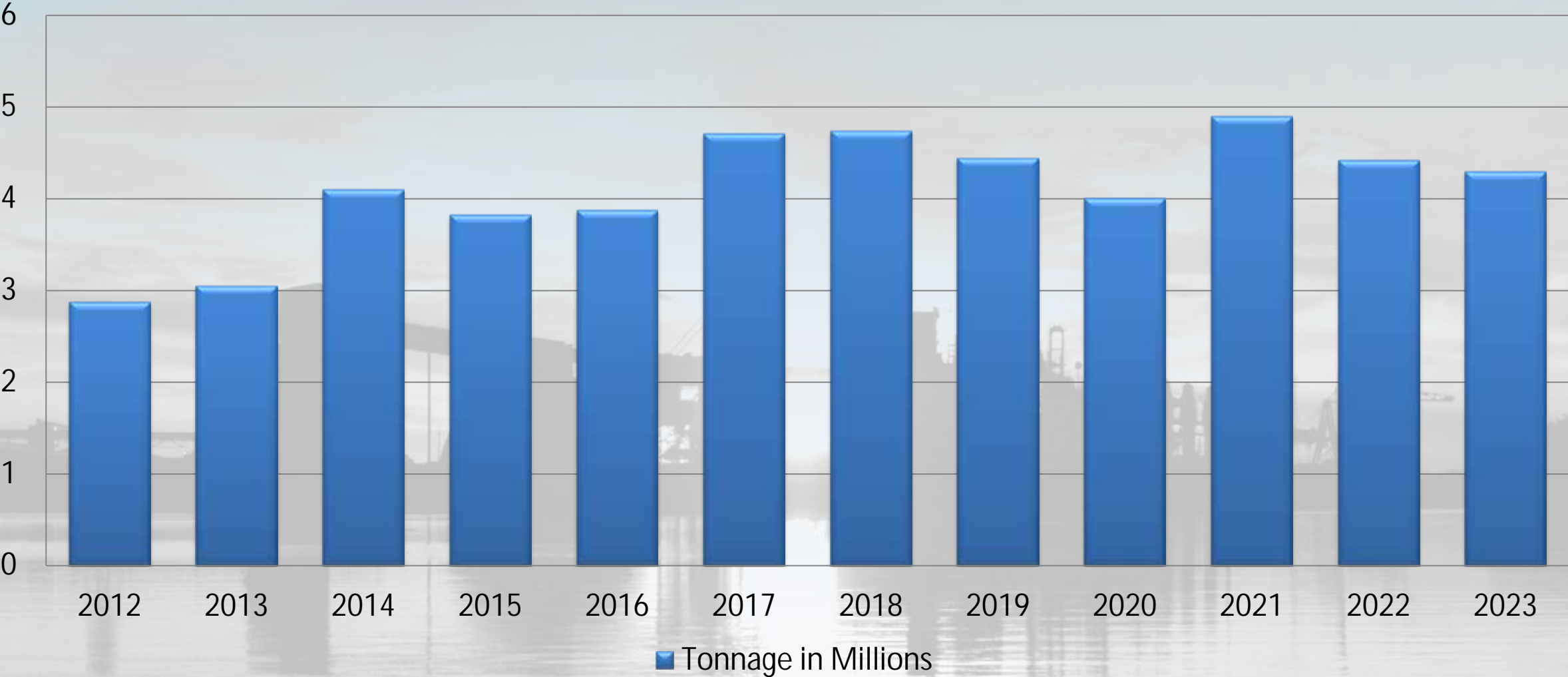
TOP 5 SHIPPING EXPORTS – METRIC TONS

DRY BULK	393,562
BULK SAND	289,207
BULK SULFUR	133,332
BAGGED RICE	62,710
RENEWABLE FEEDSTOCK	14,524

Waterborne Tonnage 2012-2023



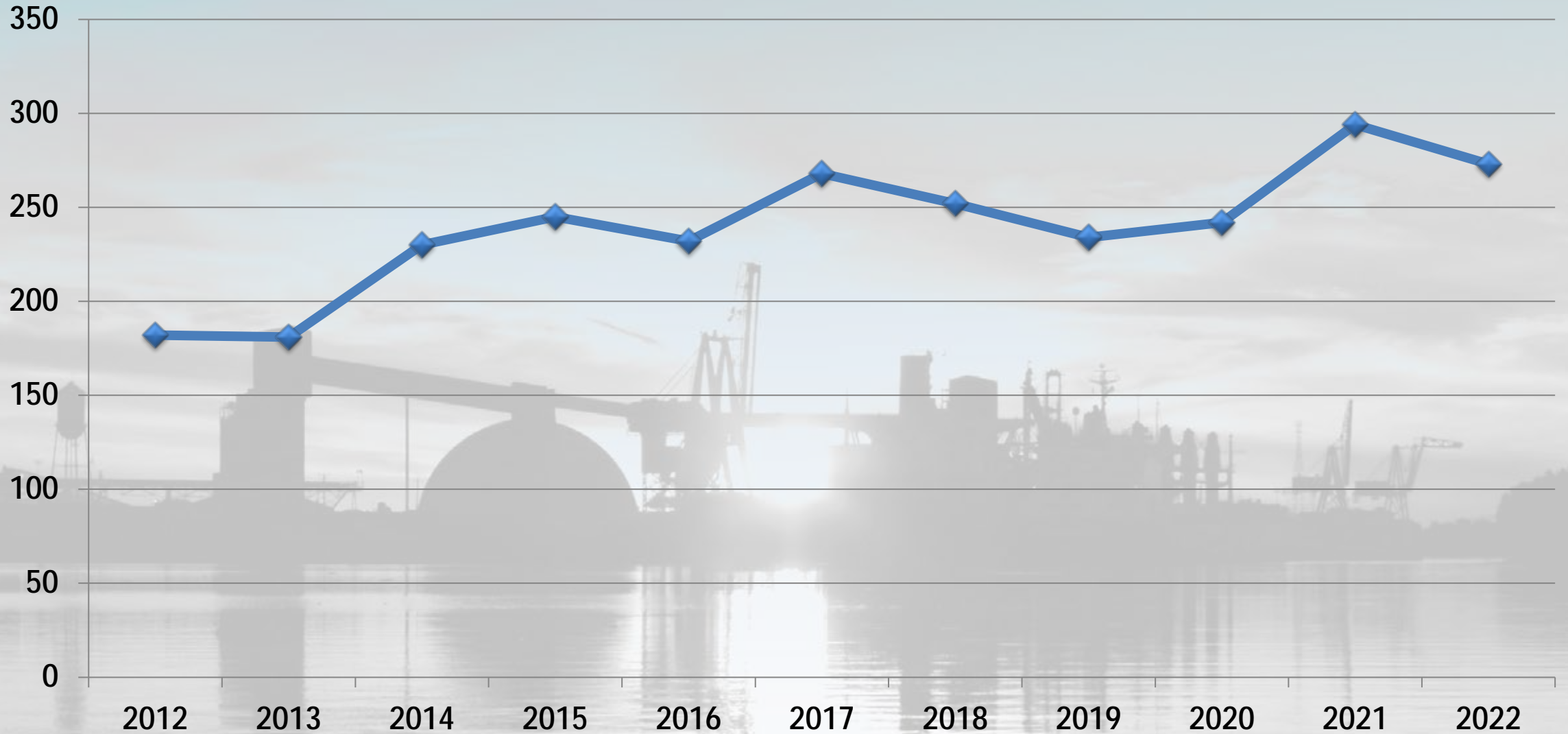
Port of Stockton
CALIFORNIA

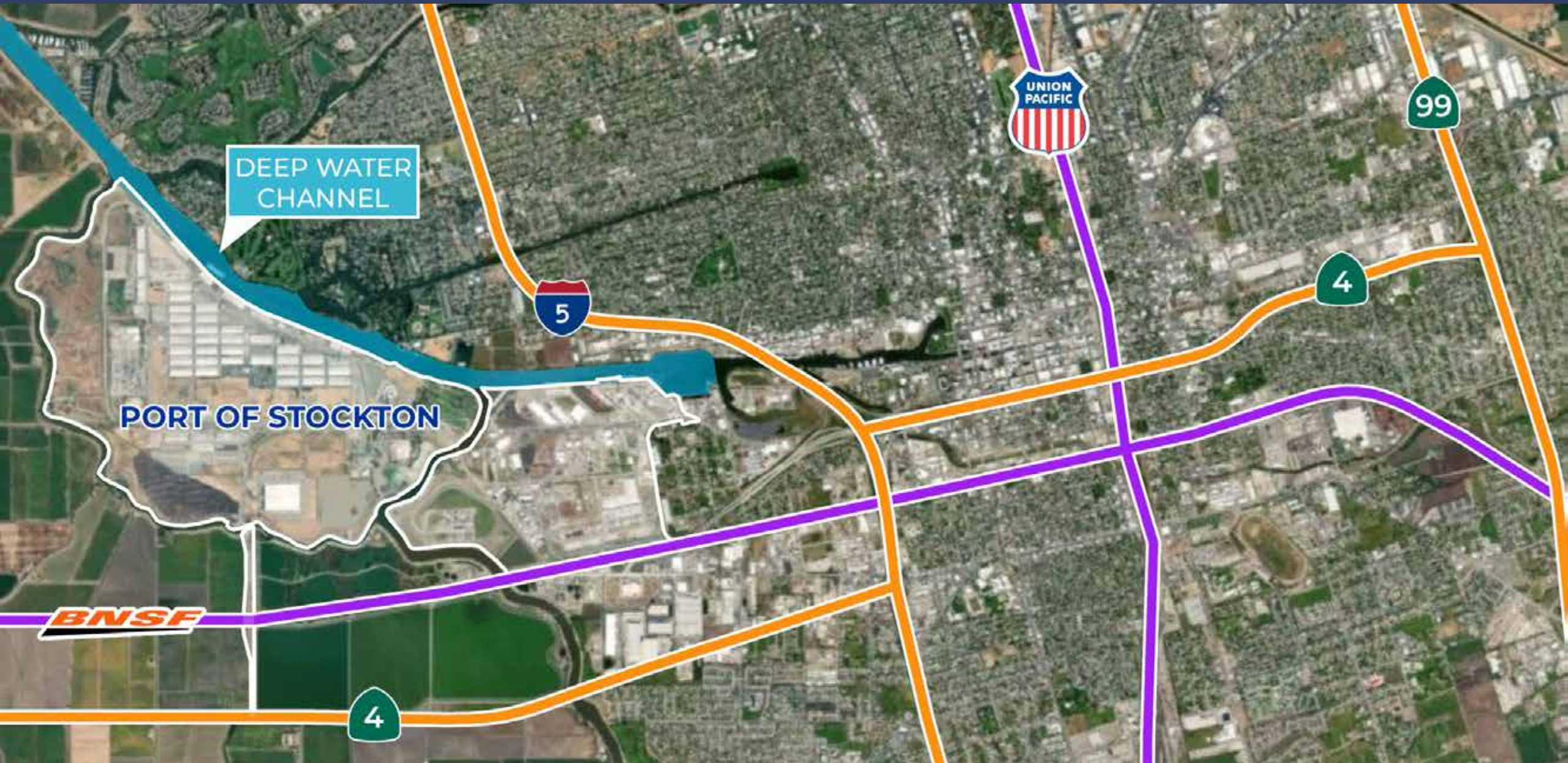


Ship Calls 2012-2022



Port of Stockton
CALIFORNIA

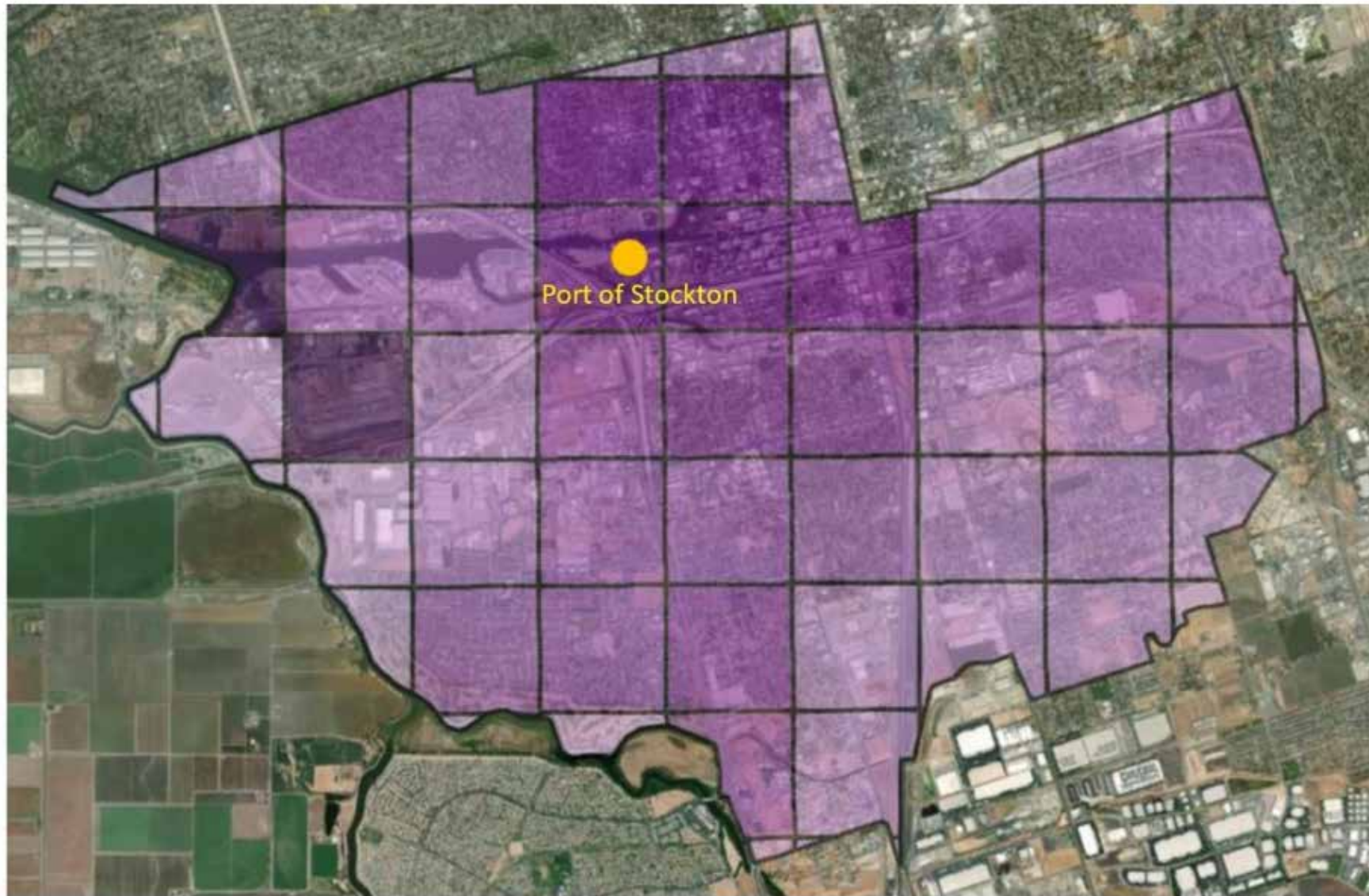




Concentrations of Area-Wide Emissions within the Stockton Community



Port of Stockton
CALIFORNIA

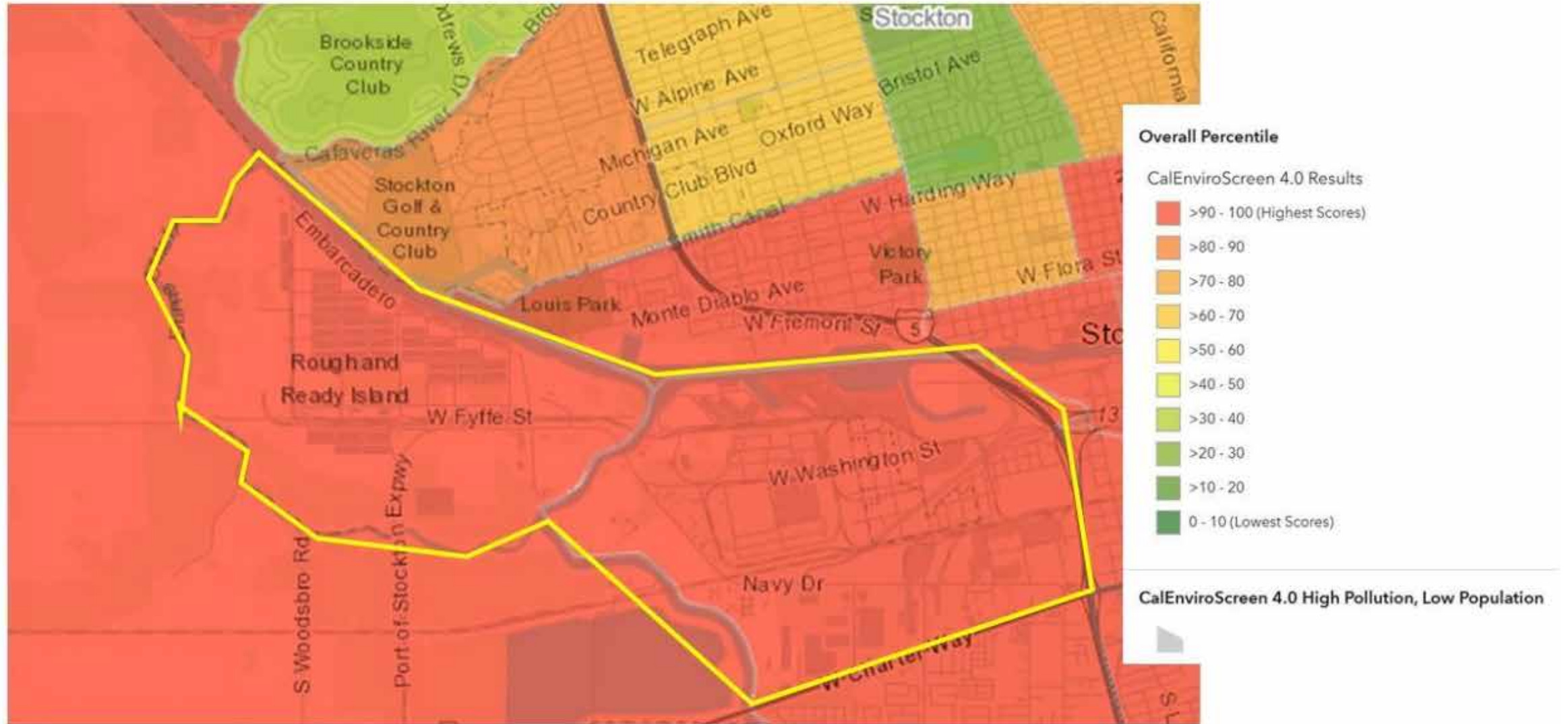


Source: Stockton Community Emissions Reduction Program, San Joaquin Valley Air Pollution Control District

Disadvantaged Communities Surrounding the Port of Stockton



Port of Stockton
CALIFORNIA



Source: CalEnviroScreen

Location of Boggs Tract Neighborhood



Port of Stockton
CALIFORNIA

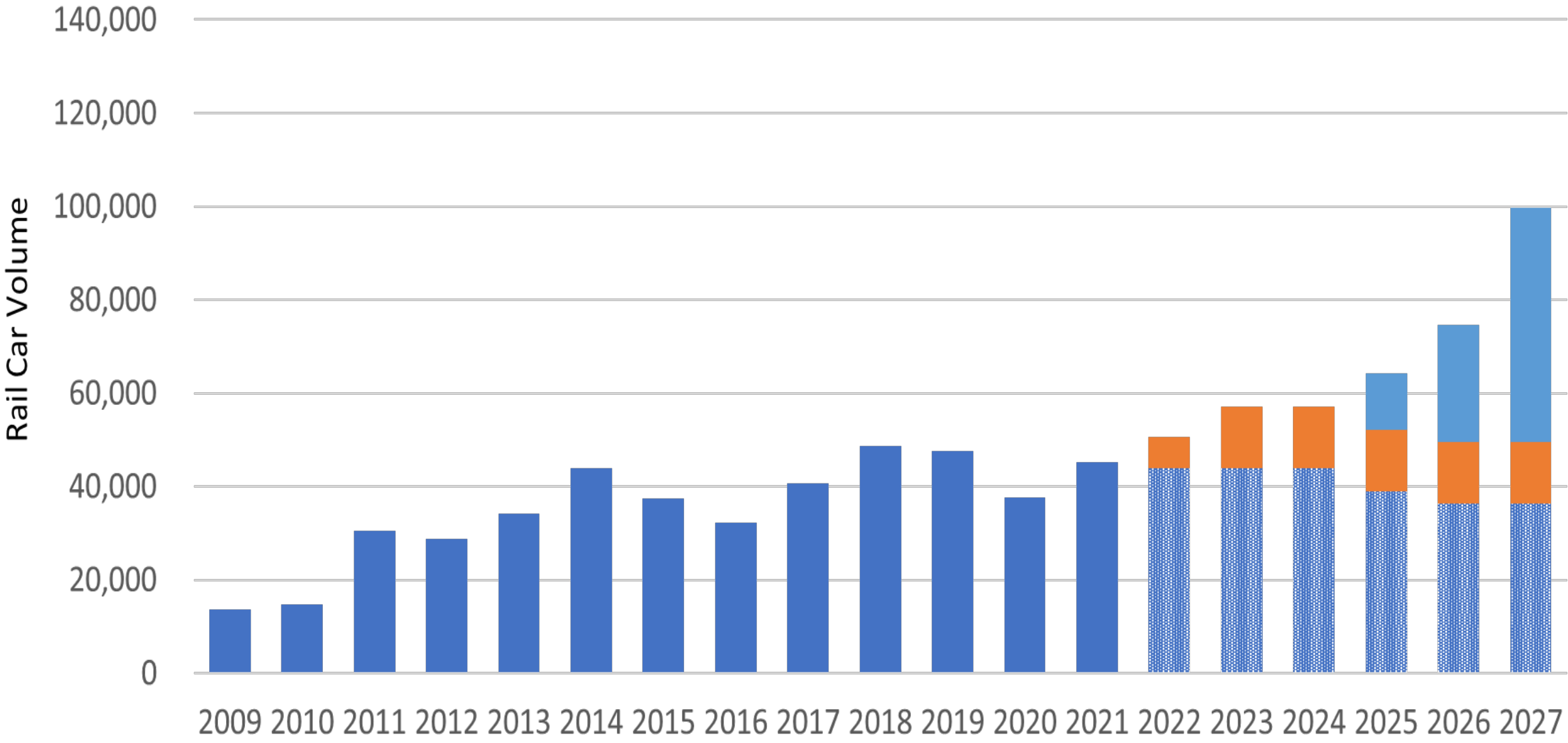


Stockton Soda



Part of Stockton
CALIFORNIA

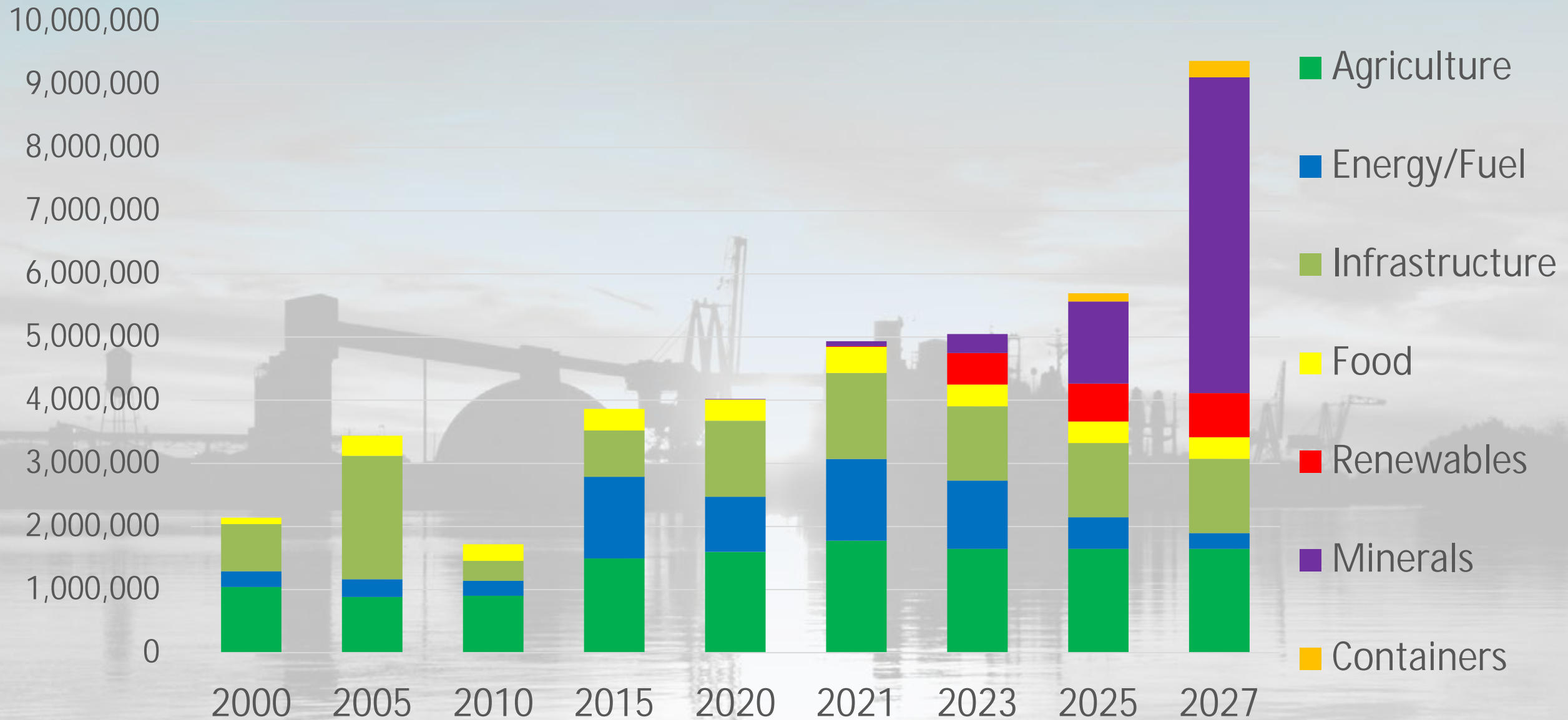
■ Historical Volume ■ Eco ■ Demand



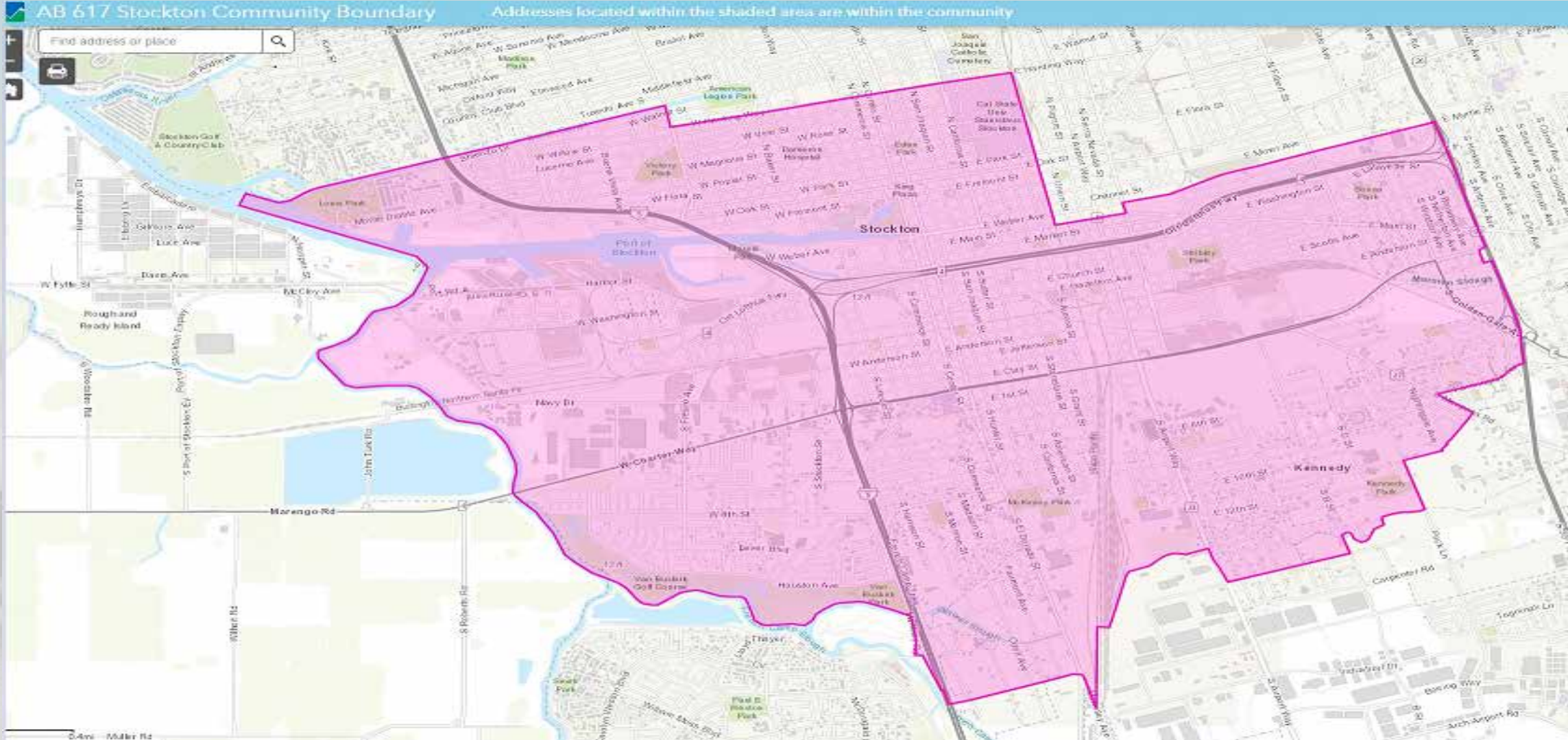
Projected Tonnage and Commodities



Port of Stockton
CALIFORNIA



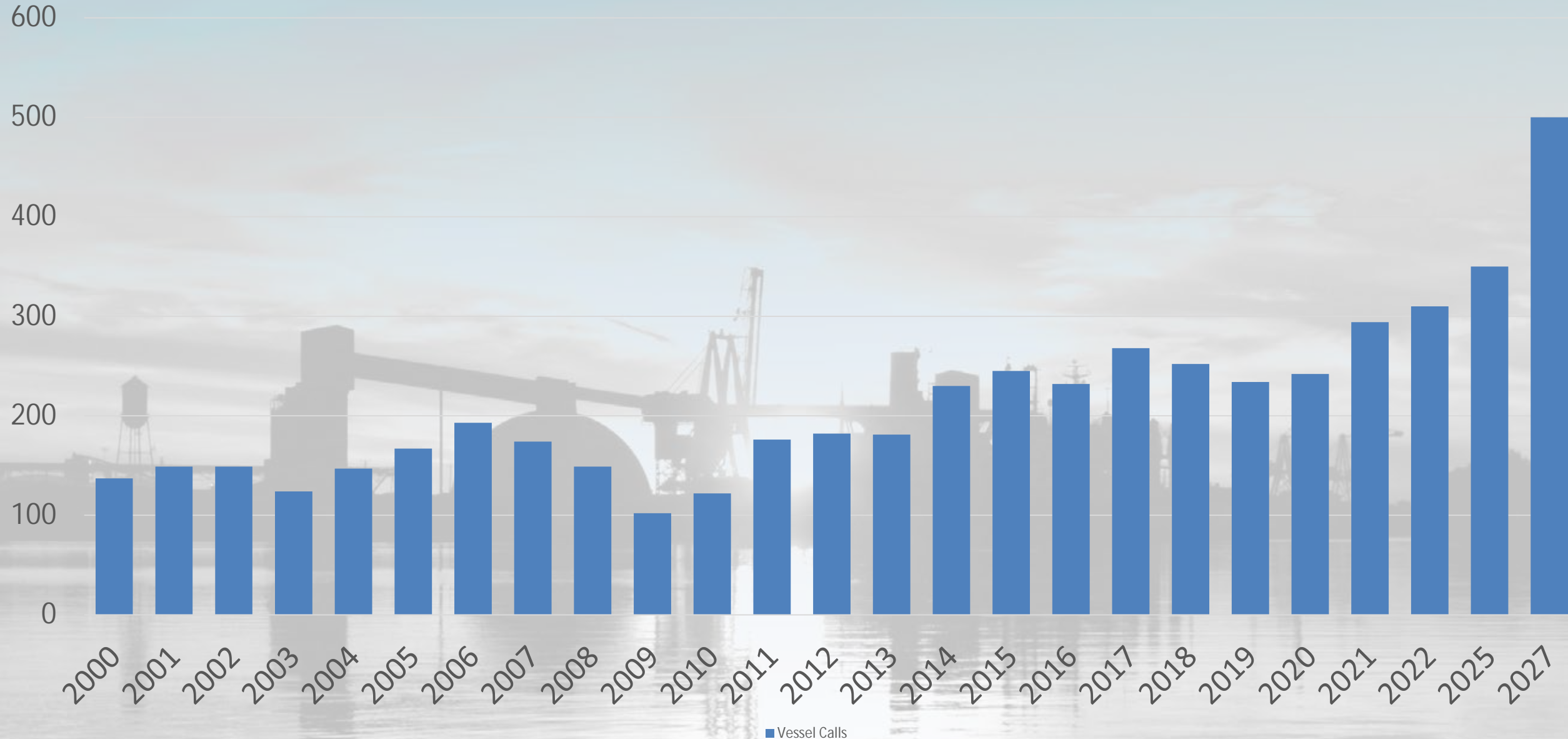
Annual Rail Car Volume | Historical and Projected



2000-2027 Vessel Calls



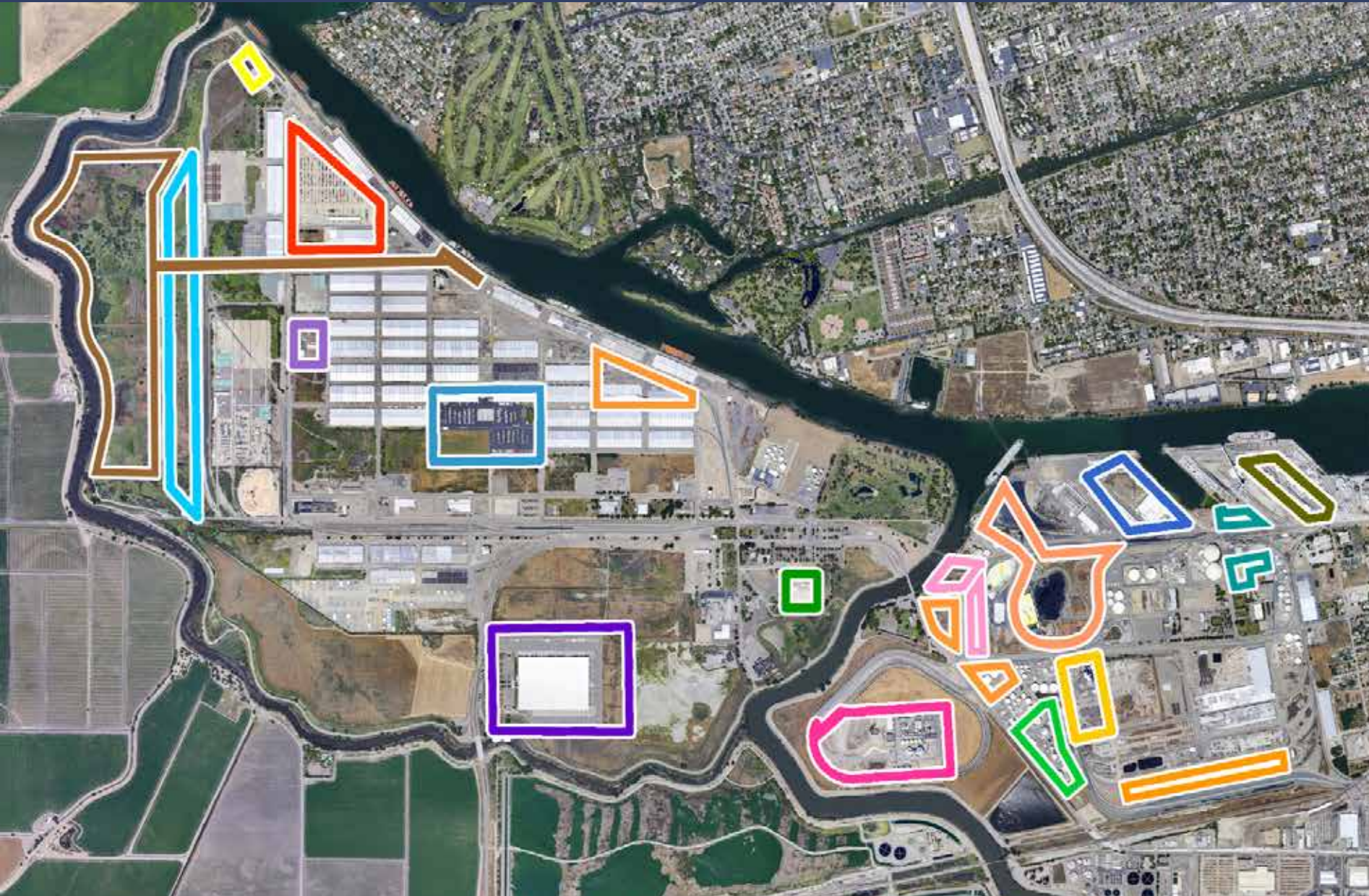
Port of Stockton
CALIFORNIA



Infrastructure Improvements



Port of Stockton
CALIFORNIA



FERGUSON PIPE / \$96.4M

UNION PACIFIC / \$77.6M

NUSTAR / \$156M

CANARY RENEWABLES / \$61.2M

LOWE'S HIW / \$72.1M

YARA NORTH AMERICA / \$93.4M

CLEAN PLANET / \$93.4M

FERGUSON DC / \$312.2M

SATCO / \$40.6M

METRO / \$172.8M

CASTLE & COOKE / \$56.8M

WILMAR / \$66M

PELICAN / \$240M

BWC / \$116.6M

DTE / \$199.8M

ECO ENERGY / \$41.6M

Port Outreach Committee Meetings



Port Outreach Committee Meeting | August 16, 2023



Port Outreach Committee Meeting | August 16, 2023



- Committee established in 2021 in response to AB-617
- Meetings held monthly
- Attendees: environmental justice groups, port tenants, local residents, regulatory agencies

Partnership with Local School



**WASHINGTON ELEMENTARY SCHOOL
BACK TO SCHOOL DRIVE
CLOTHING & SUPPLIES**

DROP OFF LOCATION:
Port Administration Building Lobby
2201 W Washington St,
Stockton, CA 95203

WHAT THEY NEED:
New or gently used clothes of all sizes. Jeans, polo shirts (all colors except red and royal blue)
Shoes - must be new

BASIC SCHOOL SUPPLIES:
Spiral notebooks, pens, pencils, pencil sharpeners, pencil boxes, scissors, glue sticks, Kleenex

Port Outreach Committee Summaries

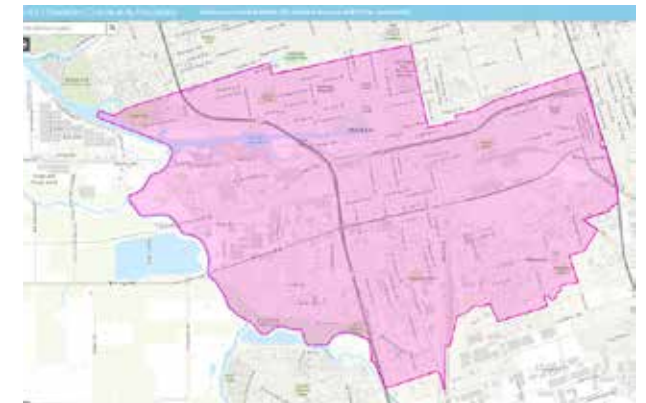
Port of Stockton - 1 / 16

Item	Thumbnail	Duration	Meeting Title	Date	Location
1		59:24	Port Outreach Committee Meeting August 16, 2023	August 16, 2023	Port of Stockton
2		52:42	Port Outreach Committee Meeting June 21, 2023	June 21, 2023	Port of Stockton
3		1:04:56	Port Outreach Committee Meeting May 17, 2023	May 17, 2023	Port of Stockton
4		56:07	Port Outreach Committee April 19, 2023	April 19, 2023	Port of Stockton
5		1:01:56	Port Outreach Committee Meeting: February 15, 2023	February 15, 2023	Port of Stockton
6		50:35	Port Outreach Committee Meeting January 18, 2023	January 18, 2023	Port of Stockton
7		51:26	Port Outreach Committee Meeting Clean Air Plan November 9, 2022	November 9, 2022	Port of Stockton
8		1:21:21	Port Outreach Committee - August 17, 2022 Meeting	August 17, 2022	Port of Stockton
9		1:28:37	Port Outreach Committee Meeting - May 18, 2022	May 18, 2022	Port of Stockton

- Back to school drives
- Sponsor 8th grade trips/dances
- Class presentations
- Traffic rerouting
- Soccer nets

Port of Stockton Tenant Jobs Board

- Developed an online platform
- Over 100 businesses operating at the port can post open positions on the Jobs Board
- Community members can apply for local jobs located at the port
- If a tenant hires someone from the AB-617 community, they will receive a \$1,000 rent credit



- Partnerships with local school districts, colleges, and educational organizations
- Working to identify workforce development opportunities for students



Delta Waterway Clean-up Events



Port of Stockton
CALIFORNIA



Green Marine Certification



Port of Stockton
CALIFORNIA



- Leading environmental certification program for maritime industry
- Certified in 2018, 2019, 2020, 2021, 2022, 2023
- Targets key environmental issues related to air, water, soil quality, and community relations
- Tenants have also joined

Antioch Sand Dunes

- Evening Primrose
- Lange's Metalmark Butterfly





Fyffe Grade Separation

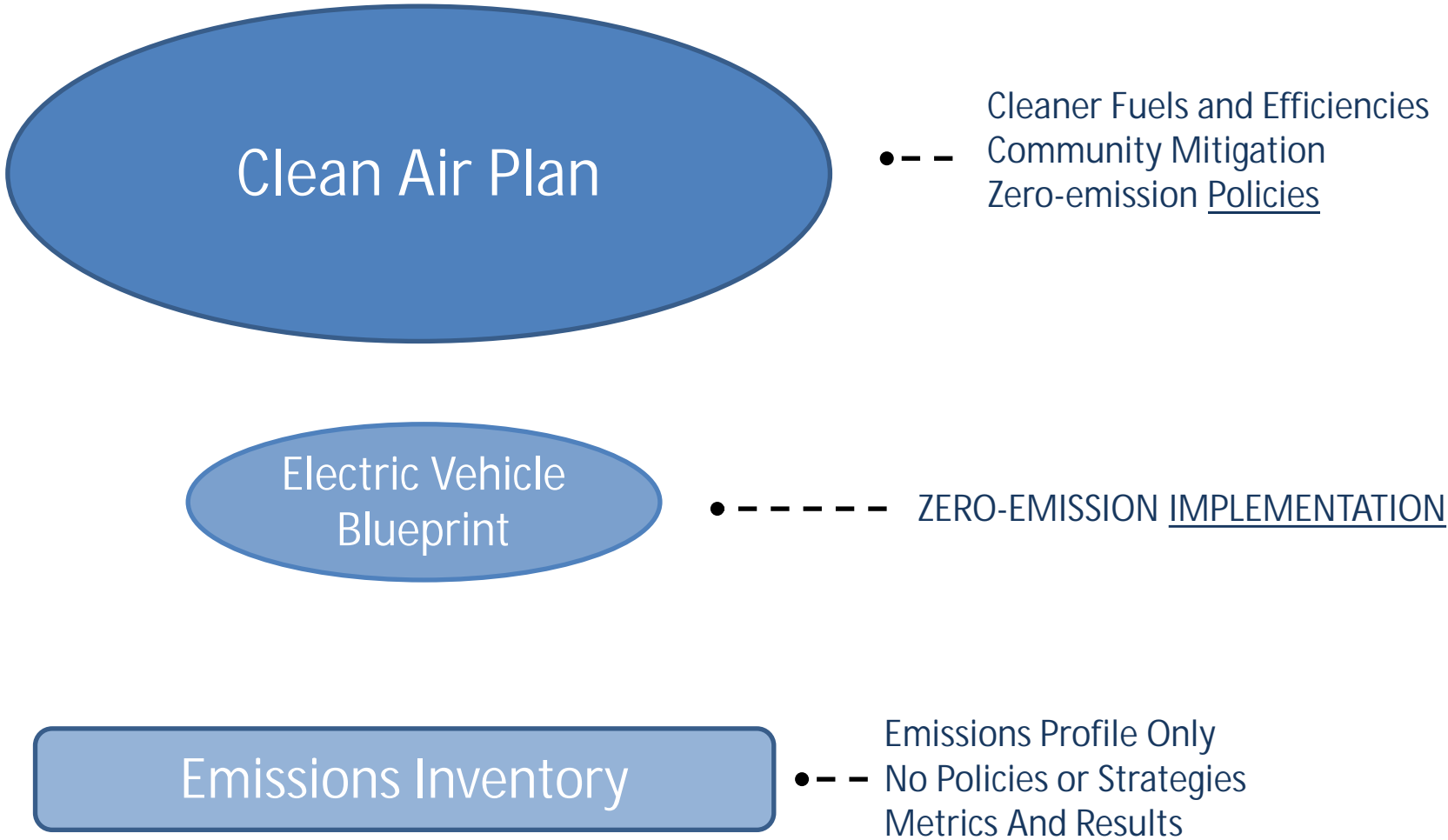


Zero Emissions Equipment

- 60% of port owned cargo handling equipment is zero emissions
- 40% of the cargo handling equipment operating at the port is zero emissions



Port of Stockton Clean-Air Toolbox



How to Use the Tools



What are we doing?

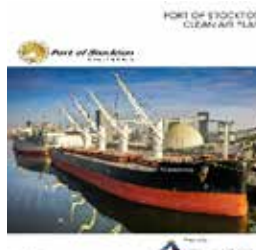
Clean Air Plan

How do we do it?

EV Blueprint and other implementation plans

How are we doing?

Emissions inventory



Port of Stockton Clean Air Plan



Port of Stockton
CALIFORNIA

- Identifies strategies to reduce air pollution, greenhouse gases, and negative public health and community impacts
- Developed through a collaborative effort among community groups, industry, regulatory agencies, and the Port
- Leverages the Port's existing investments in zero-emission technology and community mitigation



Clean Air Plan Objectives



- **Complement** other local, regional, and state air quality initiatives and avoid duplication of effort
Accelerate state and regional air quality regulations whenever possible.
- Reflect the perspectives of all our stakeholders – the maritime industry, community, regulatory agencies, city officials, and others – through **transparent and comprehensive outreach**.
- Prioritize **cost-effective** strategies that minimize negative impacts on the local economy and workforce; if possible, pursue strategies that strengthen the economy and workforce.
- Move as **expeditiously** as possible within the Port's jurisdictional, legal, and budgetary constraints and provide **accountability** for commitments to improve air quality.
- Whenever possible, prioritize strategies that provide **co-benefits**, such as noise reduction, traffic reduction, water quality benefits, or consistency with industry strategies that align with the Port's goal; in all cases, ensure that strategies do not worsen impacts in these areas.

Strategies



Port of Stockton
CALIFORNIA

- Heavy-duty trucks
- Cargo-handling equipment
- Harbor craft
- Ships
- Locomotives

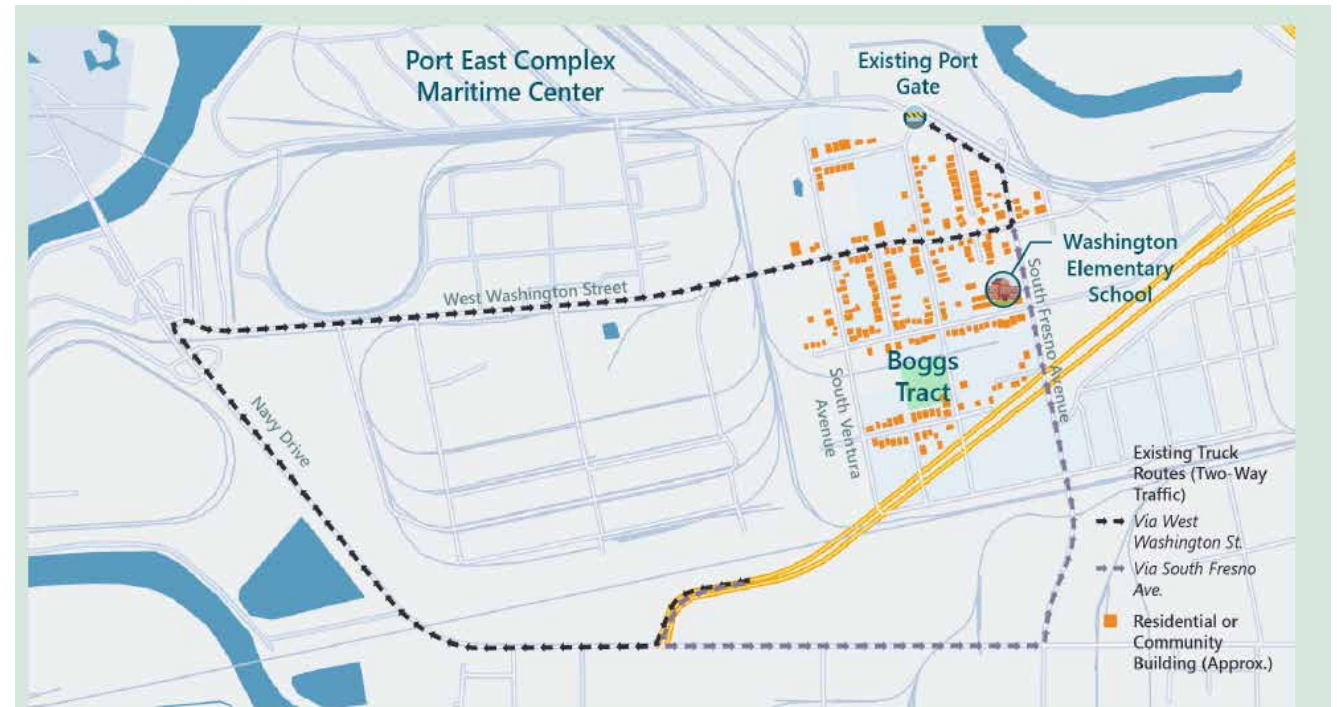


Figure 2: Existing Truck Routes To/From the Port's East Complex Maritime Center and Residential/Community Features

The West Washington Widening and Ventura Access Project features four key elements for reducing long-standing safety, noise, and air quality concerns for the Boggs Tract and West Washington Elementary community.

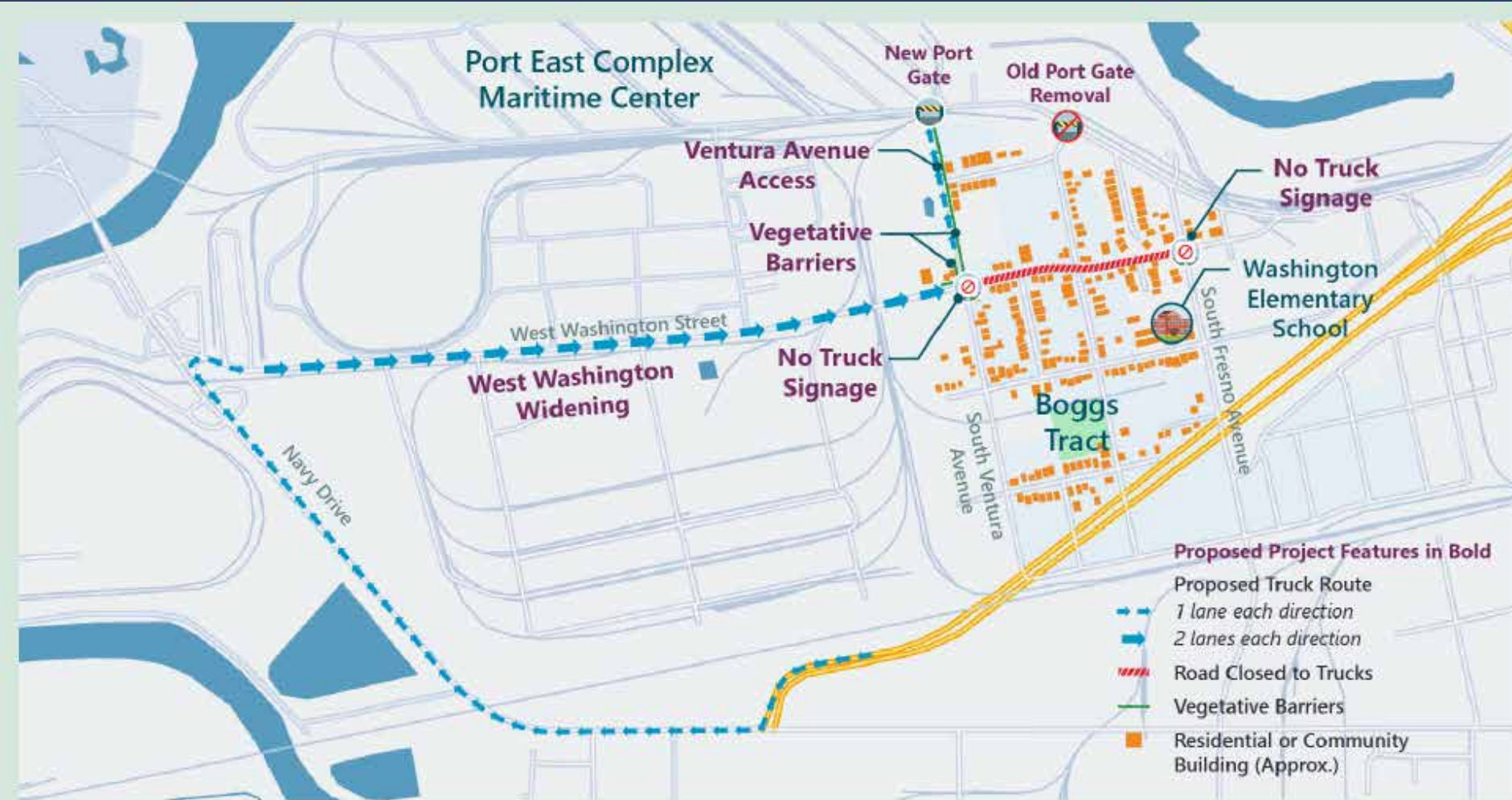
Heavy Duty Trucks



Port of Stockton
CALIFORNIA

- Truck routing
- Fugitive dust
- Anti-idling measures
- Enhance efficiency
- Grants for zero-emission trucks
- Blueprint to define pathway to zero emissions
- Zero-emission truck transition plans

West Washington Widening and Ventura Access Project



Existing Route

Figure 3: Proposed Truck Routes To/From the Port's East Complex Maritime Center and Residential/Community Features

The West Washington Widening and Ventura Access Project features four key elements for reducing long-standing safety, noise, and air quality concerns for the Boggs Tract and West Washington Elementary community.

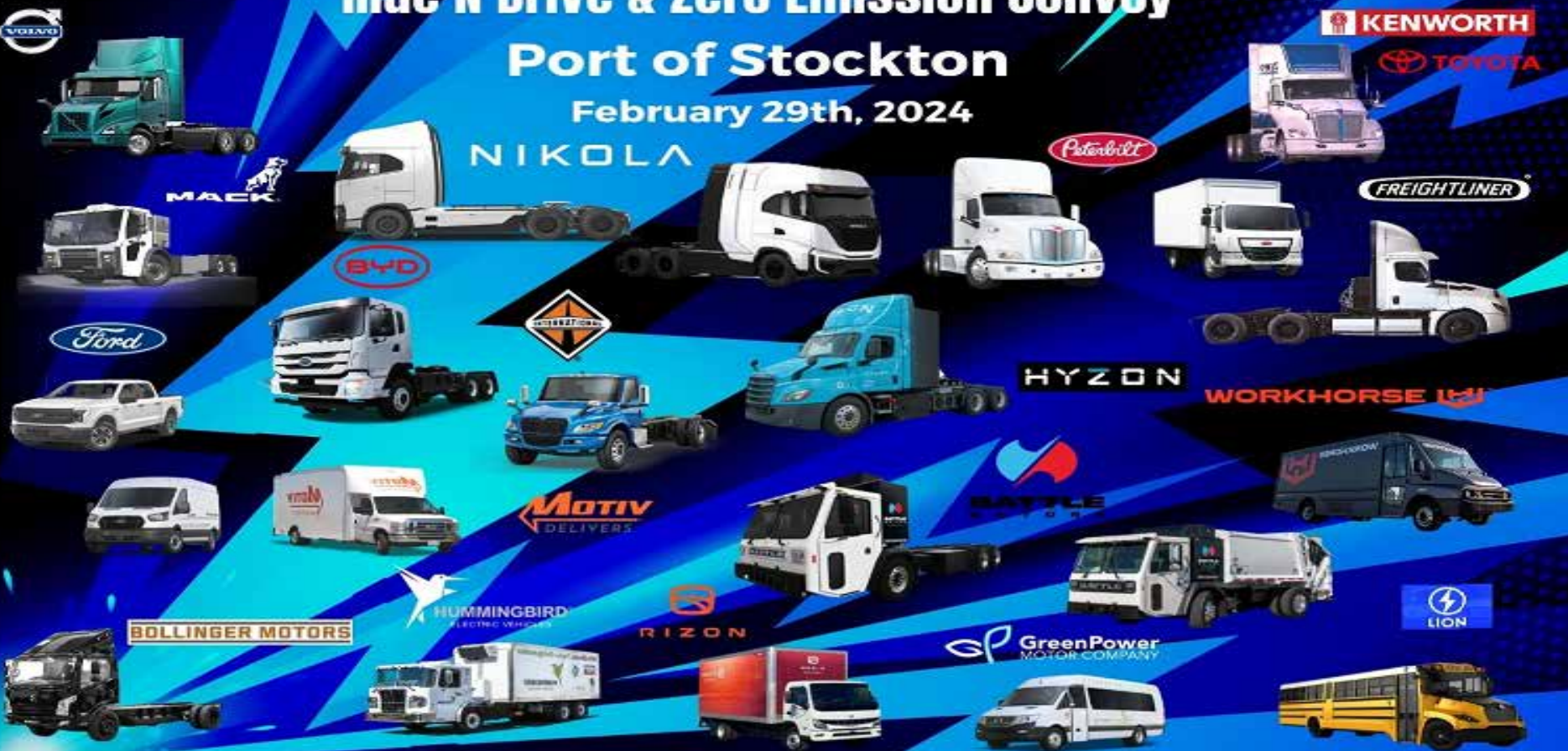


2024 Trucking with Clean Fuels Conference

Ride N Drive & Zero Emission Convoy

Port of Stockton

February 29th, 2024

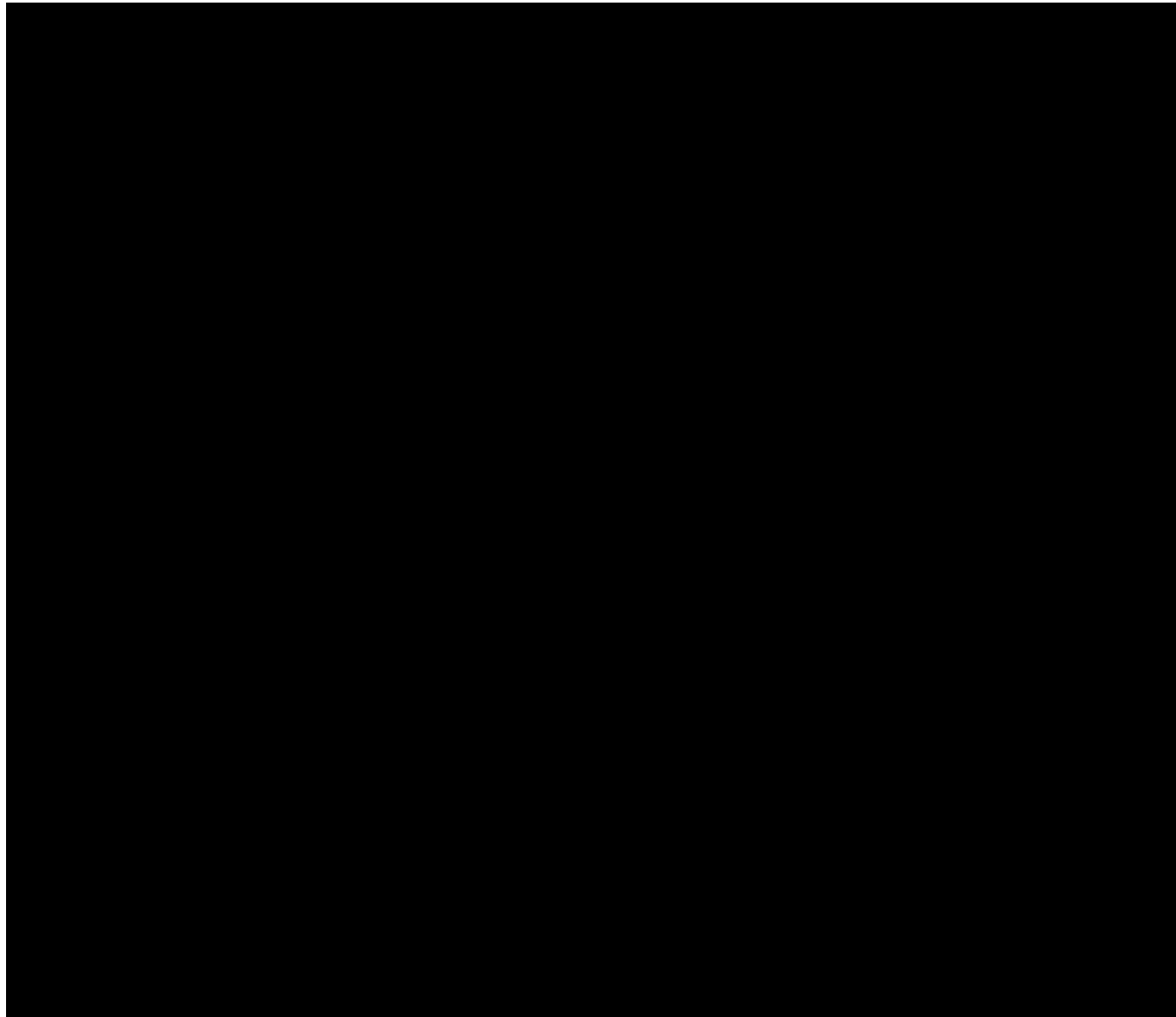


Proposed Route

TCFC Conference Sessions

Vehicles - Infrastructure - Energy - Incentives - Regulations

Industry Appreciation Reception - Feb. 28th (5pm to 7pm)



Cargo-handling Equipment

Strategies are designed to expand upon the Port's already significant investments in zero emissions and to accelerate State actions.

- Blueprint to define pathway to zero emissions
- Grants for zero-emission equipment
- Zero-Emission Terminal Transition Plans
- Zero-emission Port equipment
- Zero-emission tenant equipment
- Renewable diesel



Harbor Craft



Port of Stockton
CALIFORNIA

Strategies are designed to support and accelerate the new State regulation.

- Grant funds for cleaner tugs
- Shore power
- Slow-speed zones
- Phase out older tugs



Ships



Port of Stockton
CALIFORNIA

Strategies are designed to support and accelerate State regulations for at-berth emissions and to encourage cleaner ships to call Stockton.

- At-berth emission control systems
- Incentive program for cleaner ships



Rail Locomotives

- **Grants for zero-emission locomotives**

Seek grants to help rail operators transition to the cleanest available locomotives and to demonstrate advanced zero-emission technologies.

- **Cleaner switcher locomotives**

Evaluate the possibility of contractual conditions to require Central California Traction Company, the short-line rail operator, to deploy cleaner locomotives in advance of the State locomotive regulation.



- **Zero-emission Port fleet**

Transition the Port's fleet of on-road vehicles to zero emissions by 2035.

Sub-strategies:

- » Beginning in 2024, all new vehicle purchases will be zero emissions, if feasible.
- » By 2030, the Port's light- and medium-duty fleet vehicles (i.e., cars, SUVs, and some pickup trucks) will transition to zero emissions, if feasible.
- » By 2035, all other vehicles will transition to zero emissions, if feasible.

- **Blueprint to define pathway to zero emissions**

Develop the Port of Stockton Electric Vehicle Blueprint to identify the actions needed to support a zero-emissions on-road fleet transition.



Strategies are designed to mitigate community air-quality impacts as the transition to zero emissions and cleaner equipment occurs.

BARRIERS-1: Vegetative screens.

- Evaluate potential locations for vegetative barriers and work with the community and regional partners to install such barriers, particularly around facilities and along truck routes in close proximity to residents, schools, and other neighborhood uses.

TREES-1: Urban forest.

- Expand the Port's urban greening program through more tree plantings, particularly in parts of the community that are highly impacted by trucks and Port-related uses.

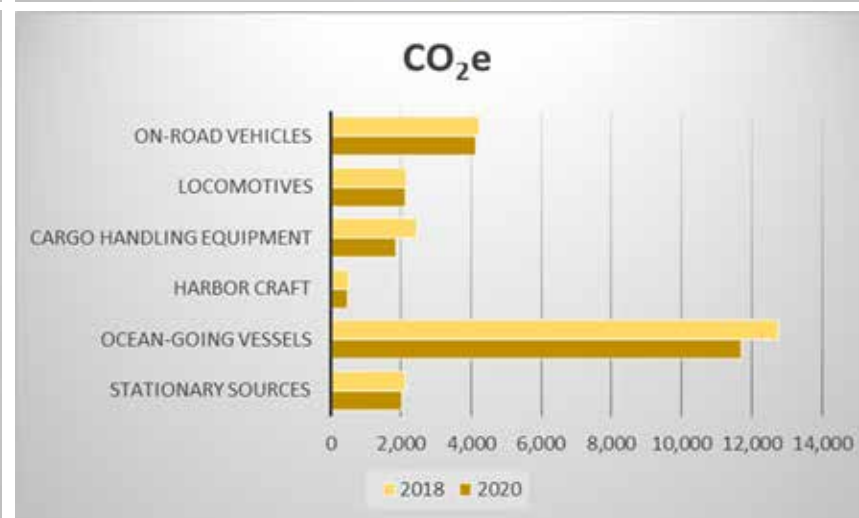
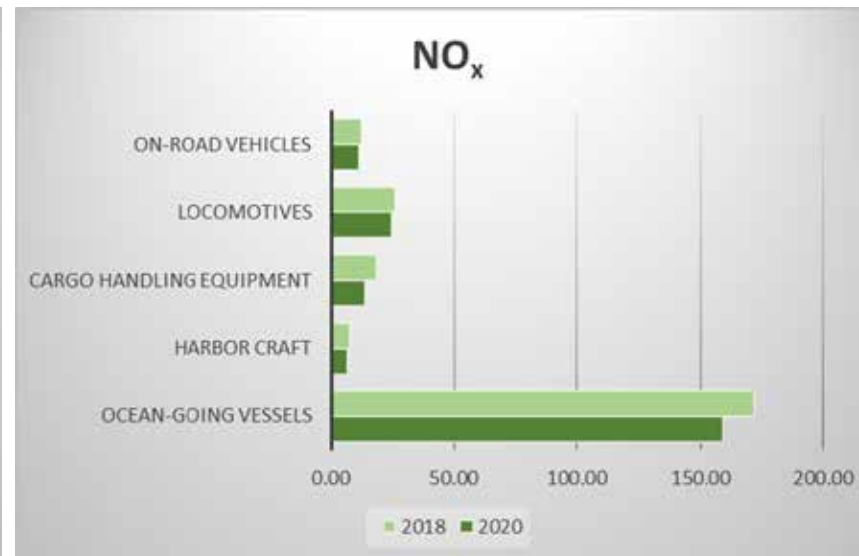
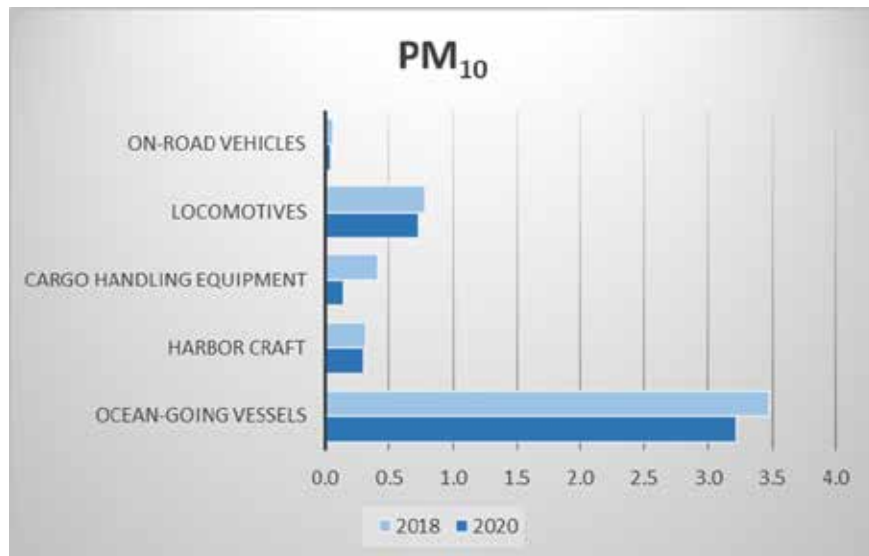


Next Steps

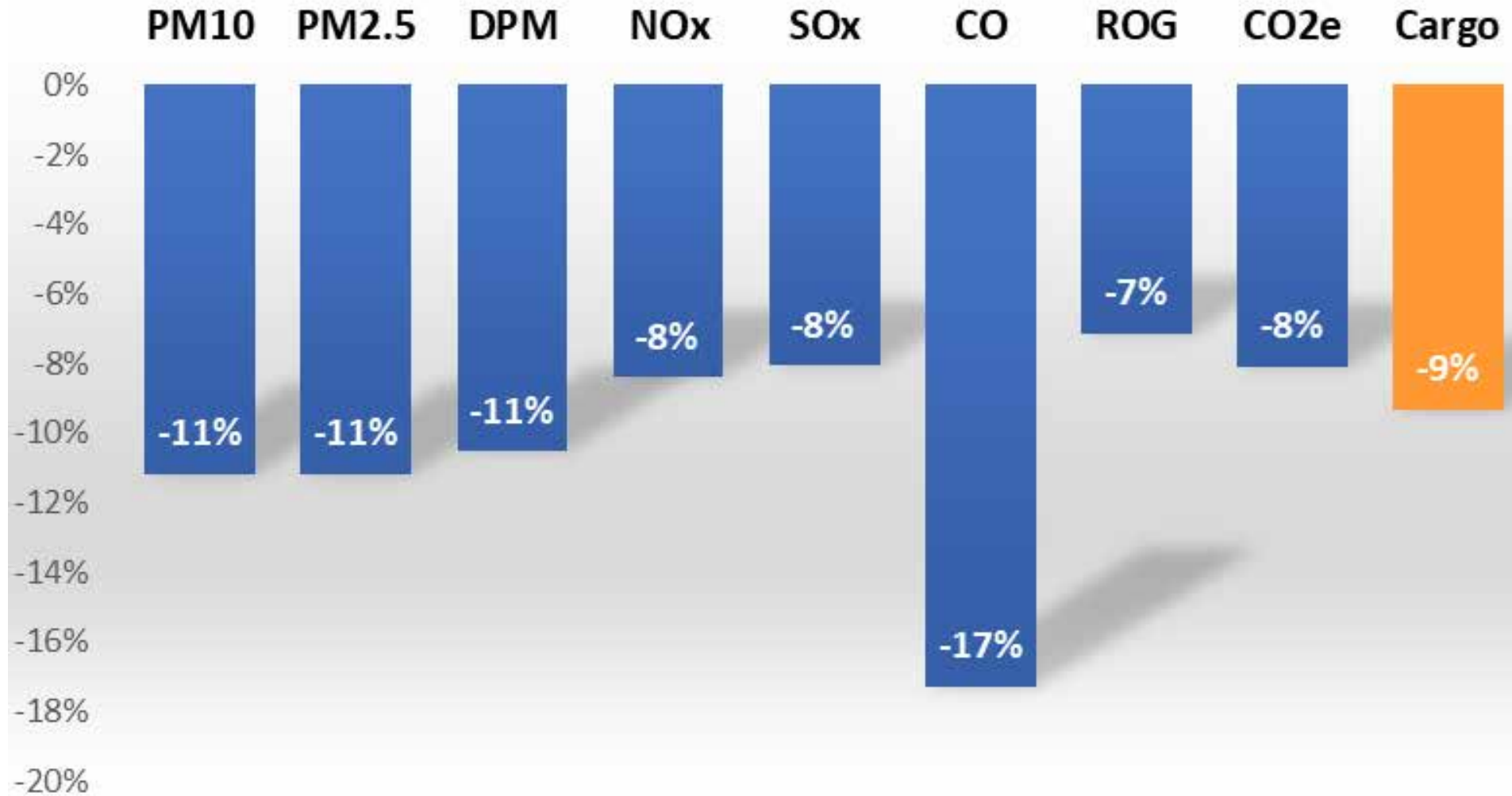


- Begin to implement the CAP strategies.
- Continue to work with our stakeholders to prioritize implementation actions and to develop new programs and policies, as needed
 - Many strategies require additional stakeholder outreach and research
- Track progress through the emissions inventory and performance milestones
- Continue to communicate with community groups, residents, regulatory agencies, tenants, and industry partners

2018 and 2020 Emissions (tons or tonnes/yr)



Emission Changes from 2018 to 2020



Zero-Emission Results



Port of Stockton
CALIFORNIA

40+ pieces of zero-emission equipment deployed in five years: heavy forklifts, small forklifts, rail car movers.

40% *of the cargo-handling equipment fleet is zero emissions*

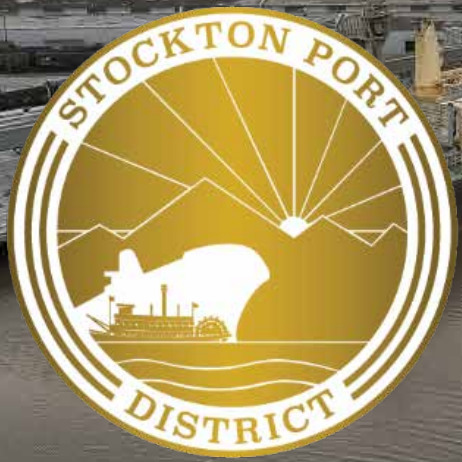
62% *reduction in particulate matter emissions from cargo-handling equipment*

64% *reduction in nitrogen oxides emissions from cargo-handling equipment*

32% *reduction in greenhouse gases from cargo-handling equipment*

91,000 *fewer gallons of diesel consumed annually*

\$455,000 *in annual fuel savings*



An Integral Part of California's Economic Future