











#### **OVERVIEW OF STUDY**

- Martin Associates was retained by World Trade Center New Orleans on behalf of the five Lower Mississippi River ports to:
  - Assess the marine cargo market in which the LMR ports compete, and identify strategic directions for future market growth
  - Expand the cargo markets handled along the Lower Mississippi River
- The LMR ports under study are the Port of Greater Baton Rouge; the Port of South Louisiana; the Port of New Orleans; the St. Bernard Port, Harbor and Terminal District; and Plaquemines Port.
- It is important to emphasize that the report is the result of the five port districts coming together to engage Martin Associates to conduct a "regional cargo study".













#### **ADVANTAGES OF LOWER MISSISSIPPI RIVER PORTS**

- Access to Mississippi River System energy efficient, low-cost transportation system connecting the region to the central and midwestern U.S.
- Served by 6 class I railroads
- Five port districts connecting the world to the region
- Served by major north-south and east-west interstate highway systems
- Region served by well developed pipeline system, as well as refineries, petrochemical plants, and LNG export facilities
- State-wide focus on future energy project development









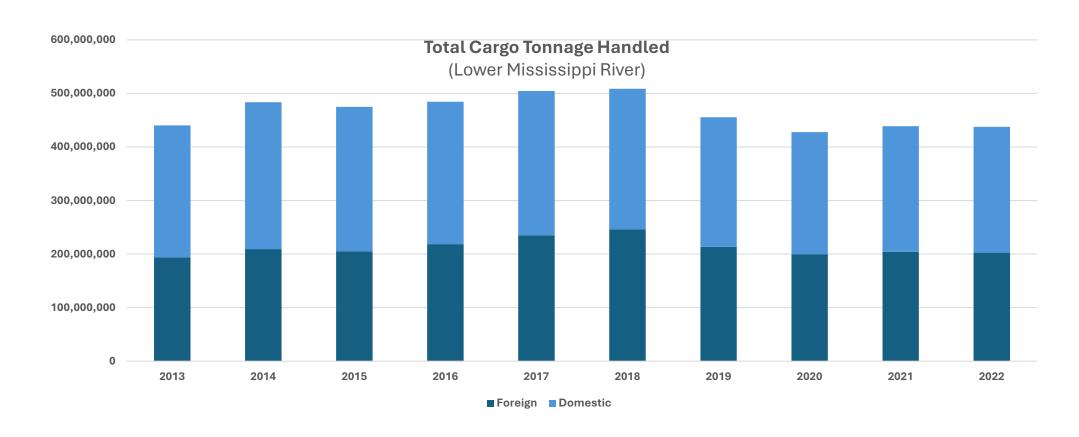






### **TOTAL TONNAGE**

In 2018 ports along the Lower Mississippi River experienced peak volume for foreign and domestic cargo.















#### **TOTAL TONNAGE**

- Domestic receipts have been driven by grain dependent on crop production and world demand
- Domestic shipments on the river driven by petroleum and petro-chemical products – dependent on production levels at the regional refineries and petrochemical plants
- Focus on international break bulk and containerized cargo - increase business at LMR ports by competing with other Gulf Coast ports and increasing value of import base
- Expanding bulk market will rely on future energy sector growth in Louisiana















#### **BULK MARKET OPPORTUNITIES**

- Strong growth opportunities in export of biofuels, including ethanol, methanol and LNG:
  - Consistent with future energy projects and focus within the region as well as in the state
- Export dry bulk market has had consistent growth over past 10 years driven by grain exports:
  - Storage capacity is critical for export grain as well as biofuel production
- Potential for export of wood pellets to Europe with increased focus on Japan
- Opportunities for cement imports and development of fertilizer manufacturing operations for domestic and international markets













#### **OPPORTUNITIES FOR GROWTH IN RED RIVER REGION**

- Carbon capture and sequestration projects in Red River Region and Central Louisiana present potential markets for LMR ports
- Production of green/blue methanol from green hydrogen used for export as well as bunkering of ocean vessels at LMR ports
- Major future energy projects in the region will likely stimulate increased steel imports via LMR ports as well as project cargo for use in project construction















# BREAK BULK CARGO MARKET OPPORTUNITIES

- Strong opportunities in forest products import market pulp and packaging paper:
  - Competitive logistics costs to mills
  - Warehouse capacity required
- Precious metals (copper, lead, zinc) represent strong potential market and used in:
  - Pipeline construction
  - Petro-chemical industry
    - Off-shore drilling
    - Battery production
    - EV production and charging stations













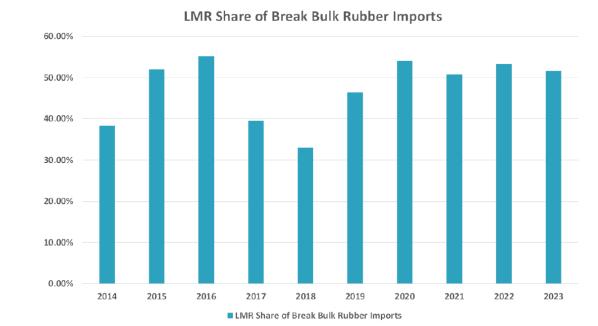
### **BREAK BULK CARGO MARKET OPPORTUNITIES**

#### Aluminum import opportunities:

- Traditional and EV auto manufacturing
- Aerospace

#### Iron and steel import opportunities:

- LMR ports and river transportation provide key low cost logistics linkage to central and upper Midwest auto manufacturing
- LNG facilities construction as well as carbon capture projects key drivers
- LMR terminals handle large market share of break bulk rubber imports:
- Used in tire manufacturing within the state as well as in the central and Midwest U.S.
  - Covered storage necessary















#### POTENTIAL RORO/AUTO MARKET

- Opportunities are limited due to:
  - Proximity to major auto import ports on South Atlantic that have more attractive logistics costs to key markets
  - Long transit up-river
- Rail access to Ro/Ro manufacturers in Midwest is attractive and should be pursued, but longer transit up-river is an issue















#### PERISHABLE MARKET OPPORTUNITIES

- With cold storage infrastructure in place, pork and beef offer potential export market
- Focus on Central America and Caribbean for export poultry market, and reestablishing carrier service to Mexico, Guatemala, Honduras and Caribbean
- Direct marketing efforts to fruits and vegetables exporters from:
  - Mexico
  - Central America
  - South America
  - Africa
  - Mediterranean
- Explore potential to export local seafood













#### PROJECT CARGO OPPORTUNITIES

- Project cargo market likely to grow to support major projects:
  - LNG facility construction
  - Carbon capture projects
  - Off-shore wind projects and supporting component manufacturing
- Maximize use of river system and 6 class I railroads serving the LMR ports















#### **CONTAINER MARKET ANALYSIS**

Container volume handled at LMR ports, primarily Port of New Orleans, has been contracting since 2019 despite strong growth in volume at Ports of Houston and Mobile

- LMR region smaller market 2.2 million persons vs. 7.5 million persons in Houston MSA
- Low value of import commodities and export commodities Mobile and Houston serve an important market with an average value per ton twice that of the import market in the LMR region - less value to ocean carriers to call LMR ports
- Key export containerized cargo via LMR is plastic resins, low value export cargo and hence less incentive for ocean carriers to call
- Imbalance of equipment more empty containers are discharged than full containers makes LMR region an expensive market to call for container operators
- Intermodal service by 6 class I railroads is attractive to carriers, but not panacea for future growth











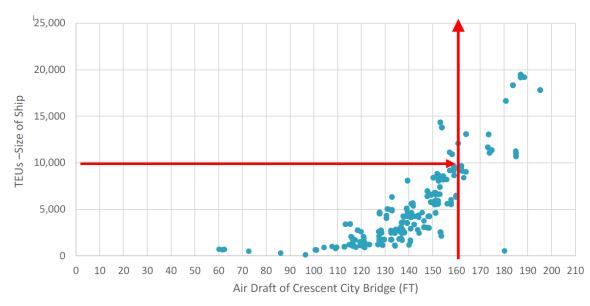


#### **CONTAINER MARKET ANALYSIS**

Crescent City Bridge limits size of container vessel - need for downriver container terminal to accommodate growing size of container vessel fleet

- To grow container volume into LMR region:
  - Downriver container terminal
  - Increase distribution center square footage
  - Focus on development of higher value manufacturing - aerospace, battery production, medical devices, future energy projects, food processing
- Develop container terminal downriver

#### RELATIONSHIP BETWEEN TEU SIZE OF VESSEL AND AIR DRAFT



Source: S&P Seaweb













#### **FUTURE ENERGY POTENTIAL**

- Focus on future energy projects and efforts of Louisiana economic development have and will provide significant opportunities for growth in cargo activity at LMR ports:
  - Growing size of market as well as higher value import and export container market
  - Increasing demand for precious metals, steel and project cargo imports
  - Export of LNG and green and blue methanol and biofuels
- Continual dialogue necessary between Louisiana economic development and LMR ports
- Focus on bringing more direct foreign investment into Louisiana which will support LMR port growth















# STATE AND FEDERAL FUNDING OF LMR PORT PROJECTS

- Current port priority program provides \$40 million annually for projects at all Louisiana ports compared to:
  - \$170 million allocated funding for Florida ports by state of Florida
  - \$230 million allocated by state of Texas for Texas ports
- Continue to apply for federal grants:
  - Between 2022-2024, Louisiana ports received \$101.7 million of \$344.6 million of federal grants awarded















LOUISIANA GATEWAY PORT