# US Coastal Barrier Storm Surge Suppression System Protection for **ALABAMA**

# **Economic Protection for Alabama**

The Coastal Barrier Storm Surge Suppression System is a national security and economic protection priority project located along the upper Texas coastline that has significant implications for the state of Alabama.

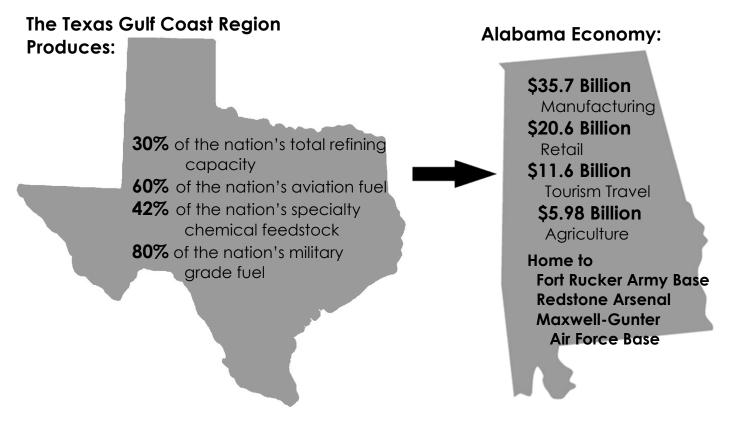
The US Army Corps of Engineers Coastal Texas Study Chief's Report recommends a coastal barrier flood gate and levee system to protect the Houston Port Ship Channel and the petrochemical infrastructure that supports critical manufacturing, retail, agriculture, business, and military supply chains in Texas and the nation.

2022 – Congress authorizes US Army Corps of Engineers projects in Water Resources Development Act legislation.

# **Alabama Economic Implications**

Major hurricane storm surge severely impacting critical port and petrochemical infrastructure located on the upper Texas Gulf Coast would affect operation costs for Alabama tourism and travel, retail, agriculture, and manufacturing.

- Ninety-six (96) percent of manufactured goods are directly touched by the business of chemistry.
- Texas, largest chemistry producing state, provides forty-two (42) percent of the nation's basic chemical stock used in manufacturing semiconductors to everyday consumer products.
- Manufacturers in other states use Texas petroleum derivatives (specialty chemical feedstock) when manufacturing: food and drink packaging, appliances and electronics, hardware and construction materials, pharmaceuticals, fertilizers (produce, grains, meat, dairy), and automotive parts and tires.
- > Texas ports handle a larger volume of jet and diesel fuel to the US military than any other state.



#### Tourism and Travel (Source: US Travel Association)

- > The travel industry employed over 91,000 people in Alabama in 2019.
- In 2019, travelers to Alabama spent over \$11.6 billion and added \$1.2 billion to federal, state and local government tax revenues.

Retail (Source: National Retail Federation)

- > In 2018, the retail industry employed over 464,000 people in Alabama (26 percent of jobs).
- Retail had a \$20.6 billion direct impact on the state's GDP and represented over 19 percent of Alabama's total GDP in 2018.

#### Agriculture (Source: U.S. Department of Agriculture, National Agricultural Statistics Service)

- > The agriculture industry has a direct impact of \$5.98 billion to Alabama's GDP.
- > Livestock and poultry products in Alabama are valued at more than \$4.7 billion.
- > Alabama ranks 4<sup>th</sup> nationally for poultry and egg production.

**Manufacturing** (Source: Center for Manufacturing Research, National Association of Manufacturers)

- > Manufacturing is a \$35.7 billion industry representing 17.4 percent of Alabama's GDP.
- > The automotive sector is the largest manufacturing industry in Alabama.
- > At \$10.8 billion, the chemical sector is the 4th largest manufacturing industry in the state.

# Escalating costs of doing business- disruptions of interstate commerce

Major hurricane storm surge severely impacting critical refinery and petrochemical infrastructure located on the upper Texas Gulf Coast would hit Alabama businesses with higher transportation and manufacturing costs.

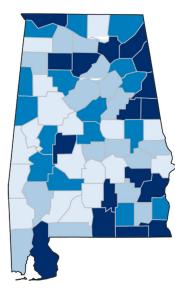
In Alabama: (Sources: U.S. Department of Transportation, Bureau of Transportation Statistics; Alabama Trucking Association)

- > Freight shipments valued at \$214 billion leave the state each year.
- > Alabama moves 196 million tons of freight (87 million inbound; 109 million outbound).
- Trucks transported 79 percent of total manufactured tonnage in the state and 86 percent of Alabama communities depend exclusively on trucks to move their goods.

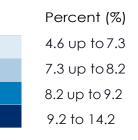
Impacts Small Businesses: (Sources: Statistics of U.S. Businesses, U.S. Census; International Trade Administration, U.S. Dept. of Commerce)

- Alabama small businesses employed 802,920 people, or 47.5 percent of the private workforce, in 2017.
- In 2018, over 80 percent of firms exporting Alabama goods, were small businesses, generating 14.1 percent of Alabama's \$20.6 billion in total exports.

#### Alabama Self–Employment Rates by County, 2018



Self-Employment (includes incorporated and unincorporated businesses with less than 500 paid employees)



# US Coastal Barrier Storm Surge Suppression System Protection for **ARKANSAS**

## **Economic Protection for Arkansas**

The Coastal Barrier Storm Surge Suppression System is a national security and economic protection priority project located along the upper Texas coastline that has significant implications for the state of Arkansas.

The US Army Corps of Engineers Coastal Texas Study Chief's Report recommends a coastal barrier flood gate and levee system to protect the Houston Port Ship Channel and the petrochemical infrastructure that supports critical manufacturing, retail, agriculture, business, and military supply chains in Texas and the nation.

 2022 – Congress authorizes US Army Corps of Engineers projects in Water Resources Development Act legislation.

#### **Arkansas Economic Implications**

Major hurricane storm surge severely impacting critical port and petrochemical infrastructure located on the upper Texas Gulf Coast would affect operation costs for Arkansas tourism and travel, retail, agriculture, and manufacturing.

- Ninety-six (96) percent of manufactured goods are directly touched by the business of chemistry. Texas, the largest chemistry producing state, provides forty-two (42) percent of the nation's basic chemical stock used in manufacturing semiconductors to everyday products.
- Manufacturers in other states use Texas petroleum derivatives (specialty chemical feedstock) when manufacturing: food and drink packaging, appliances and electronics, hardware and construction materials, pharmaceuticals, fertilizers (produce, grains, meat, dairy), and automotive parts and tires and eye glass lenses.
- Arkansas imports/exports through the Houston Port include: retail consumer goods, food and drink, hardware and construction materials, chemicals and minerals, machinery, appliances and electronics.

#### The Texas Gulf Coast Region Produces:

30% of the nation's total refining capacity
60% of the nation's aviation fuel
42% of the nation's specialty chemical feedstock
80% of the nation's military grade fuel

Arkansas Economy:

\$19.56 Billion Manufacturing
\$12 Billion Retail
\$16 Billion Agriculture
\$8 Billion Tourism Travel
Home to
Little Rock Air Force Base

#### Tourism and Travel (Source: U.S. Travel Association)

- > The travel industry employed 67,771 people in Arkansas during 2019.
- In 2019, travelers to Arkansas spent \$8 billion and added \$1.1 billion to federal, state and local government tax revenues.

Retail (Sources: National Retail Federation; Arkansas Grocers and Retail Merchants Association)

- > Retail has a \$12 billion direct impact on the state's GDP and provides 1 in 5 jobs in Arkansas.
- Walmart, Dillard's (department stores), and Murphy USA (national gas station and convenience store chain) are headquartered in Arkansas.

Agriculture (Source: U.S. Department of Agriculture, National Agriculture Statistics Service; Arkansas Farm Bureau)

- > Agriculture adds \$16 billion to the Arkansas economy.
- Arkansas leads the nation in poultry production. Tyson Foods, world's largest poultry producer, and Riceland Foods, largest rice exporter in the US, are both headquartered in Arkansas.

> Arkansas is a major exporter of rice, soybeans, cotton, poultry and feed grains.

Manufacturing (Source: National Association of Manufacturers; Arkansas Trucking Association)

- In 2019, Arkansas manufacturing output was \$19.56 billion, representing 14.93 percent of the state's GDP.
- > Food, beverage, and tobacco products rank as the top manufacturing sector in Arkansas.
- > Over 92 percent of manufactured tonnage is transported by trucks in Arkansas.

# Escalating costs of doing business- disruptions of interstate commerce

Major hurricane storm surge severely impacting critical refinery and petrochemical infrastructure located on the upper Texas Gulf Coast would hit Arkansas businesses with higher transportation and manufacturing costs.

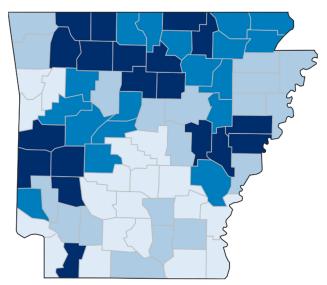
In Arkansas: (Source: Arkansas Trucking Association)

- > 87 percent of Arkansas communities depend exclusively on trucks to move their goods.
- > The demand for Arkansas trucking is estimated to increase by 20% over the next ten years.
- > Over 90% of Arkansas trucking companies are small, locally owned businesses.

Impacts Small Businesses: (Sources: Statistics of U.S. Businesses, U.S. Census; International Trade Administration, U.S. Dept. of Commerce)

- Arkansas small businesses employed 490,680 people, or 47.6 percent of the private workforce, in 2017.
- In 2018, over 77 percent of firms exporting Arkansas goods, were small businesses, generating 18.7 percent of Arkansas's \$5.5 billion in total exports.

#### Arkansas Self–Employment Rates by County, 2018



Self-Employment (includes incorporated and unincorporated businesses with less than 500 paid employees)

Percent (%)

3.2 up to 8.1 8.1 up to 10.1 10.1 up to 12.2 12.2 to 21.9

# US Coastal Barrier Storm Surge Suppression System Protection for **CALIFORNIA**

# **Economic Protection for California**

The Coastal Barrier Storm Surge Suppression System is a national security and economic protection priority project located along the upper Texas coastline that has significant implications for the state of California.

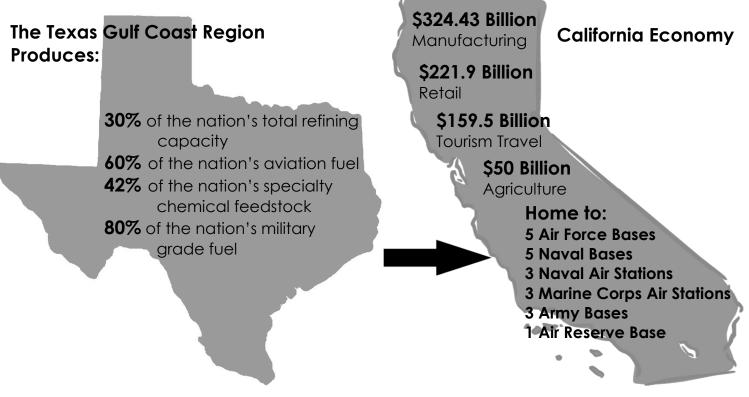
The US Army Corps of Engineers Coastal Texas Study Chief's Report recommends a coastal barrier flood gate and levee system to protect the Houston Port Ship Channel and the petrochemical infrastructure that supports critical manufacturing, retail, agriculture, business, and military supply chains in Texas and the nation.

2022 – Congress authorizes US Army Corps of Engineers projects in Water Resources Development Act legislation.

# **California Economic Implications**

Major hurricane storm surge severely impacting critical port and petrochemical infrastructure located on the upper Texas Gulf Coast that would affect supply chains and operation costs for California tourism, transportation, agriculture, retail, chemical and manufacturing sectors.

- > Ninety-six (96) percent of manufactured goods are directly touched by the business of chemistry.
- Texas, largest chemistry producing state, provides forty-two (42) percent of the nation's basic chemical stock used in manufacturing semiconductors to everyday consumer products.
- Manufacturers in other states use Texas petroleum derivatives (specialty chemical feedstock) when manufacturing: food and drink packaging, appliances and electronics, hardware and construction materials, pharmaceuticals, fertilizers (produce, grains, meat, dairy), and automotive parts and tires.
- California imports/exports through the Houston Port include: chemicals and minerals, food and drink, steel and metals, resins and plastics, hardware and construction materials, automotive, machinery, appliances and electronics.



#### Tourism and Travel (Source: U.S. Travel Association)

- > The travel industry employs over 1 million people in California.
- In 2019, travelers to California spent \$159.3 billion and added \$22.2 billion to federal, state and local government tax revenues.

Retail (Source: National Retail Federation)

- > The retail industry employs over 3.6 million people in California (1 in 4 jobs).
- > Retail has a \$221.9 billion direct impact on California's GDP.

Agriculture (Source: U.S. Department of Agriculture, National Agricultural Statistics Service; California Dept. of Food & Agriculture)

- > California agriculture contributes over \$50 billion to the state GDP.
- > Top commodities include: dairy products & milk, almonds, grapes, cattle, and strawberries.

**Manufacturing** (Source: 2021 California Manufacturing Facts, National Association of Manufacturing; Freight Facts & Figures, Bureau of Transportation Statistics, U.S. Department of Transportation)

- > At over \$324 billion, the manufacturing industry represents 10.36 percent of the state's GDP.
- California exports more to other states than were imported. Electronics are the top outbound commodity from California.
- Top major manufacturing sectors for job growth include pharmaceutical and medicine, aerospace products and parts, beverage, and motor vehicle manufacturing.

# Escalating costs of doing business- disruptions of interstate commerce

Major hurricane storm surge severely impacting critical refinery and petrochemical infrastructure located on the upper Texas Gulf Coast would hit California businesses with higher transportation and manufacturing costs.

In California: (Source: California Trucking Association; California Department of Transportation)

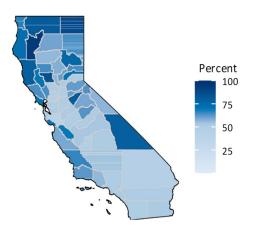
- > Trucks transported 82 percent of the total manufactured tonnage in the state.
- > 77.5 percent of California communities depend exclusively on trucks to move their goods.
- In 2016, California consumed 364.8 million and 118.6 million barrels of motor gasoline and jet fuel, respectively. Out of state Domestic refineries that produce gasoline for California include those along the Texas Gulf Coast.

Impacts Small Businesses: (Sources: Statistics of U.S. Businesses, U.S. Census; International Trade Administration, U.S. Dept. of Commerce)

In 2019, 95.1 percent of firms exporting California goods, were small businesses, generating 41.1 percent of California's \$30.3 billion in total exports.

#### California Self-Employment Rates by County, 2019

4.2 million small businesses 99.8 percent of California businesses



7.3 million small business employees 48.2 percent of California employees

# US Coastal Barrier Storm Surge Suppression System Protection for **DELAWARE**

# **Economic Protection for Delaware**

The Coastal Barrier Storm Surge Suppression System is a national security and economic protection priority project located along the upper Texas coastline that has significant implications for the state of Delaware.

The US Army Corps of Engineers Coastal Texas Study Chief's Report recommends a coastal barrier flood gate and levee system to protect the Houston Port Ship Channel and the petrochemical infrastructure that supports critical manufacturing, retail, agriculture, business, and military supply chains in Texas and the nation.

2022 – Congress authorizes US Army Corps of Engineers projects in Water Resources Development Act legislation.

#### **Delaware Economic Implications**

Major hurricane storm surge severely impacting critical port and petrochemical infrastructure located on the upper Texas Gulf Coast would affect operation costs for Delaware retail, agriculture and manufacturing.

> Ninety-six (96) percent of manufactured goods are directly touched by the business of chemistry.

- Texas, largest chemistry producing state, provides forty-two (42) percent of the nation's basic chemical stock used in manufacturing semiconductors to everyday consumer products.
- Manufacturers in other states use Texas petroleum derivatives (basic chemical feedstock) when manufacturing: food and drink packaging, appliances and electronics, hardware and construction materials, pharmaceuticals, fertilizers (produce, grains, meat, dairy), and automotive parts and tires.
- > Texas ports handle a larger volume of jet and diesel fuel to the US military than any other state.

#### The Texas Gulf Coast Region **Produces:** Delaware **Economy:** \$4.86 Billion **30%** of the nation's total refining Manufacturing capacity \$4.1 Billion **60%** of the nation's aviation fuel Retail **42%** of the nation's specialty \$2.5 Billion chemical feedstock **Tourism Travel** 80% of the nation's military grade fuel \$1.3 Billion Agriculture Home to **Dover Air Force Base**

#### **Tourism and Travel**

- > The travel industry employed 17,932 people in Delaware in 2019.
- In 2019, travelers to Delaware spent \$2.5 billion and added \$285.5 million to federal, state and local government tax revenues.

Retail (Source: National Retail Federation)

- > The retail industry employs 102,400 people and supports 26 percent of jobs in Delaware.
- > Retail has a \$4.1 billion direct impact on the state's GDP.

Agriculture (Source: U.S. Department of Agriculture, National Agricultural Statistics Service)

- > Agriculture in Delaware adds \$1.46 billion to the state's GDP.
- > Delaware ranks 7<sup>th</sup> in the nation for chicken production. Perdue Farms is a major employer.

> Delaware ranks 20<sup>th</sup> in the nation for the amount of acres dedicated to harvesting vegetables.

Manufacturing (Source: Center for Manufacturing Research, National Association of Manufacturers, American Chemistry Council)

- > At \$2 billion, the chemical sector is the largest manufacturing industry in Delaware.
- > Chemical sector generates \$32 million in state & local taxes, and \$56 million in federal taxes.
- > DuPont and AstraZeneca are two of the state's largest employers.
- > Other large sectors include food and beverage, and computer and electronics products.

# Escalating costs of doing business- disruptions of interstate commerce

Major hurricane storm surge severely impacting critical refinery and petrochemical infrastructure located on the upper Texas Gulf Coast would hit Delaware businesses with higher transportation and manufacturing costs.

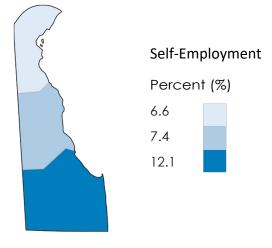
#### In Delaware and the U.S.:

- Nearly 76 million tons of freight flows in and out of Delaware each year, valued at \$94.7 billion. (Source: U.S. Department of Transportation, Bureau of Transportation Statistics)
- Trucks transport 60,273 tons of freight per day in Delaware (Source: Delaware Fast Facts, November 2016, American Transportation Research Institute)
- Over 70 percent of all freight tonnage in the U.S. occurs by truck and it takes over 38 billion gallons of diesel fuel to move it. (Source: American Trucking Association)
- Seventeen (17) East Coast states from Maine to Florida consume more than half of the gasoline in the country, but supplies less than 10 percent of refined gasoline in the country. (Source: U.S. Energy Information Administration)

Impacts Small Businesses: (Sources: Statistics of U.S. Businesses, U.S. Census; International Trade Administration, U.S. Dept. of Commerce)

- Delaware small businesses employed 187,221 people, or 46.7 percent of the private workforce in 2017.
- In 2018, 86.4 percent of firms exporting Delaware goods, were small businesses, generating 23.4 percent of Delaware's \$4.4 billion in total exports.

#### Delaware Self-Employment Rates by County, 2018



# US Coastal Barrier Storm Surge Suppression System Protection for **FLORIDA**

# **Economic Protection for Florida**

The Coastal Barrier Storm Surge Suppression System is a national security and economic protection priority project located along the upper Texas coastline that has significant implications for the state of Florida.

The US Army Corps of Engineers Coastal Texas Study Chief's Report recommends a coastal barrier flood gate and levee system to protect the Houston Port Ship Channel and the petrochemical infrastructure that supports critical manufacturing, retail, agriculture, business, and military supply chains in Texas and the nation.

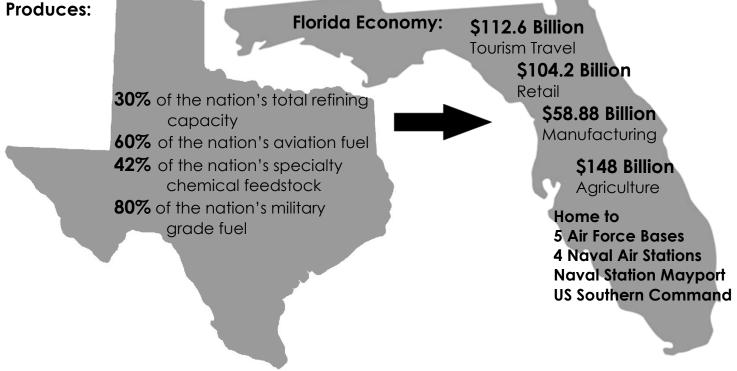
2022 – Congress authorizes US Army Corps of Engineers projects in Water Resources Development Act legislation.

# Florida Economic Implications

Major hurricane storm surge severely impacting critical port and petrochemical infrastructure located on the upper Texas Gulf Coast would affect operation costs for Florida tourism and travel, retail, agriculture, and manufacturing.

- Ninety-six (96) percent of all manufactured goods are directly touched by the business of chemistry. Texas, the largest chemistry producing state, provides forty-two (42) percent of the nation's specialty chemical stock used in manufacturing semiconductors to everyday products.
- Manufacturers in other states use Texas petroleum derivatives (specialty chemical feedstock) when manufacturing: food and drink packaging, appliances and electronics, hardware and construction materials, pharmaceuticals, fertilizers (produce, grains, meat, dairy), and automotive parts and tires and eye glass lenses.
- Florida imports/exports through the Houston Port include: chemicals and minerals, food and drink, steel and metals, machinery, appliances and electronics, furniture, and automotive.

# The Texas Gulf Coast Region



#### Tourism and Travel

- In 2019, Florida travelers spent over \$112.6 billion and added \$15.5 billion to federal, state and local government tax revenues. (Source: US Travel Association)
- > In 2018, Florida was the third-highest motor gasoline user, and third-highest jet fuel user in 2019.
- The aviation industry produced a \$175 billion total economic impact in 2017. (Source: Florida Statewide Aviation Economic Impact Study, Florida Department of Transportation)

Retail (Source: National Retail Federation)

- > The retail industry employs over 2.2 million people and supports 29 percent of jobs in Florida.
- Retail has a \$104.2 billion direct impact on Florida's state GDP.

Agriculture (Source: U.S. Department of Agriculture, National Agricultural Statistics Service)

- Florida agriculture generates an economic impact of \$148 billion.
- Florida is 1st in the nation for orange and sugarcane production.
- Florida is 2nd in the nation for the sale of vegetables, melons, potatoes and sweet potatoes.

Manufacturing (Source: Center for Manufacturing Research, National Association of Manufacturers; American Chemistry Council)

- > \$58.88 billion industry accounting for 5.32 percent of the state's GDP in 2019.
- > At \$9 billion, Florida chemistry is the 3rd largest manufacturing industry in the state.
- > Computer and Electronic Products manufacturing is an \$8.743 billion industry in Florida.

# Escalating costs of doing business- disruptions of interstate commerce

Major hurricane storm surge severely impacting critical refinery and petrochemical infrastructure located on the upper Texas Gulf Coast would hit Florida businesses with higher transportation and manufacturing costs.

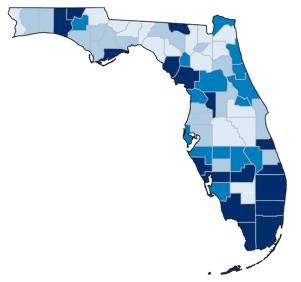
#### In Florida:

- In 2018, Florida interstate flows involved 855 million tons of freight, valued at \$934.4 billion. (Source: U.S. Department of Transportation, Bureau of Transportation Statistics)
- > Trucking moves 95 percent of total manufactured tonnage in Florida.

> 84.9 percent of Florida communities depend exclusively on trucks to move their goods. (Source: Florida Trucking Association)

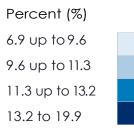
Impacts Small Businesses: (Sources: Statistics of U.S. Businesses, U.S. Census; International Trade Administration, U.S. Dept. of Commerce)

- Florida small businesses employed 3.5 million people, or 41.7 percent of the private workforce in 2017.
- In 2018, 94.7 percent of firms exporting Florida goods, were small businesses, generating 56.4 percent of Florida's \$51.9 billion in total exports.



#### Florida Self-Employment Rates by County, 2018

Self-Employment (includes incorporated and unincorporated businesses with less than 500 paid employees)



# US Coastal Barrier Storm Surge Suppression System Protection for **GEORGIA**

# **Economic Protection for Georgia**

The Coastal Barrier Storm Surge Suppression System is a national security and economic protection priority project located along the upper Texas coastline that has significant implications for the state of Georgia.

The US Army Corps of Engineers Coastal Texas Study Chief's Report recommends a coastal barrier flood gate and levee system to protect the Houston Port Ship Channel and the petrochemical infrastructure that supports critical manufacturing, retail, agriculture, business, and military supply chains in Texas and the nation.

2022 – Congress authorizes US Army Corps of Engineers projects in Water Resources Development Act legislation.

# **Georgia Economic Implications**

Major hurricane storm surge severely impacting critical port and petrochemical infrastructure located on the upper Texas Gulf Coast would affect operation costs for Georgia tourism and travel, retail, agriculture, and manufacturing.

- > Ninety-six (96) percent of manufactured goods are directly touched by the business of chemistry.
- Texas, largest chemistry producing state, provides forty-two (42) percent of the nation's basic chemical stock used in manufacturing semiconductors to everyday consumer products.
- Manufacturers in other states use Texas petroleum derivatives (basic chemical feedstock) when manufacturing: food and drink packaging, appliances and electronics, hardware and construction materials, pharmaceuticals, fertilizers (produce, grains, meat, dairy), and automotive parts and tires.
- Georgia imports/exports through the Houston Port include: hardware and construction materials, food and drink, steel and metals, automotive, chemicals and minerals, resins and plastics, retail consumer goods, machinery, appliances & electronics.

# The Texas Gulf Coast Region Produces:

30% of the nation's total refining capacity
60% of the nation's aviation fuel
42% of the nation's specialty chemical feedstock
80% of the nation's military grade fuel

# Georgia Economy:

\$61.61 Billion Manufacturing \$45 Billion Retail

- \$34.9 Billion Tourism Travel
  - \$73.3 Billion Agriculture
  - Home to
  - 3 Army Bases
  - 1 Army Airfield
  - 1 Air Force Base
  - Naval Submarine Base Kings Bay

#### Tourism and Travel (Source: US Travel Association)

- > The travel industry employs over 290,398 people. Delta Air Lines is headquartered in Georgia.
- In 2019, travelers to Georgia spent over \$34.9 billion and added \$6.2 billion in federal, state and local government tax revenues.

Retail (Source: National Retail Federation)

- > The retail industry employs over 1 million people and supports 27 percent of jobs in Georgia.
- Retail has a \$45 billion direct impact on Georgia's total GDP.

Agriculture (Source: U.S. Department of Agriculture, National Agricultural Statistics Service; Georgia Farm Bureau)

- > Agriculture contributes approximately \$73.3 billion annually to Georgia's economy.
- Georgia is perennially the number on state in the nation in the production of peanuts, broilers (chickens), pecans, blueberries, and spring onions; and ranks second for cotton production.
- > The \$17.7 billion forest industry supports Georgia's leading role as a wood pellet manufacturer.

Manufacturing (Sources: Center for Manufacturing Research, National Association of Manufacturers, American Chemistry Council)
 A \$61.61 billion industry representing 9.85 percent of the state's GDP.

- > Food, beverage and tobacco are the highest-ranking manufacturing sectors in Georgia.
- > At \$12.9 billion, the chemical sector is the 4<sup>th</sup> largest manufacturing industry in the state.

# Escalating costs of doing business- disruptions of interstate commerce

Major hurricane storm surge severely impacting critical refinery and petrochemical infrastructure located on the upper Texas Gulf Coast would hit Georgia businesses with higher transportation and manufacturing costs.

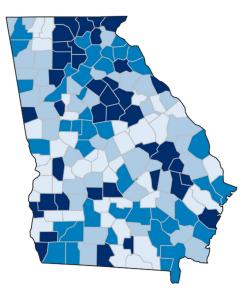
In Georgia: (Sources: U.S. Dept. of Transportation, Bureau of Transportation Statistics; U.S. Energy Information Administration)

- > In 2018, Georgia interstate flows involved 597.2 million tons of freight, valued at \$917.4 billion.
- Major highways and the world's busiest airport help make Georgia 8<sup>th</sup> in the nation in transportation sector energy consumption.
- > The transportation sector accounts for almost nine-tenths of Georgia's petroleum use.

Impacts Small Businesses: (Sources: Statistics of U.S. Businesses, U.S. Census; International Trade Administration, U.S. Dept. of Commerce)

- Georgia small businesses employed 1.7 million people, or 43.1 percent of the private workforce in 2017.
- In 2018, nearly 88 percent of firms exporting Georgia goods, were small businesses, generating 26.4 percent of Georgia's \$37.6 billion in total exports.

#### Georgia Self-Employment Rates by County, 2018



Self-Employment (includes incorporated and unincorporated businesses with less than 500 paid employees)

Percent (%) 3.5 up to 7.6 7.6 up to 9.4 9.4 up to 11.1 11.1 to 19.8

# US Coastal Barrier Storm Surge Suppression System Protection for **ILLINOIS**

### **Economic Protection for Illinois**

The Coastal Barrier Storm Surge Suppression System is a national security and economic protection priority project located along the upper Texas coastline that has significant implications for the state of Illinois.

The US Army Corps of Engineers Coastal Texas Study Chief's Report recommends a coastal barrier flood gate and levee system to protect the Houston Port Ship Channel and the petrochemical infrastructure that supports critical manufacturing, retail, agriculture, business, and military supply chains in Texas and the nation.

2022 – Congress authorizes US Army Corps of Engineers projects in Water Resources Development Act legislation.

#### **Illinois Economic Implications**

Major hurricane storm surge severely impacting critical petrochemical and port infrastructure located on the upper Texas Gulf Coast would affect operation costs for Illinois manufacturing, retail, agriculture, and tourism.

- Ninety-six (96) percent of manufactured goods are directly touched by the business of chemistry.
- Texas, largest chemistry producing state, provides forty-two (42) percent of the nation's basic chemical stock used in manufacturing semiconductors to everyday consumer products.
- Manufacturers in other states use Texas petroleum derivatives (specialty chemical feedstock) when manufacturing: food and drink packaging, appliances and electronics, hardware and construction materials, pharmaceuticals, fertilizers (produce, grains, meat, dairy), and automotive parts and tires.
- Illinois imports/exports through the Houston Port include: chemicals and minerals, food and drink, steel and metals, automotive, resins and plastics, machinery, appliances & electronics.

# The Texas Gulf Coast Region Produces:

30% of the nation's total refining capacity
60% of the nation's aviation fuel
42% of the nation's specialty chemical feedstock
80% of the nation's military

grade fuel

Illinois Economy:

\$100.67 Billion Manufacturing \$60.7 Billion Retail \$45.5 Billion Tourism Travel \$17 Billion Agriculture

Home to Scott Air Force Base Naval Station Great Lakes

#### Tourism and Travel (Source: US Travel Association)

- > The Illinois travel industry employed over 343,000 people in 2019.
- In 2019, travelers to Illinois spent \$45.5 billion and added \$7.8 billion to federal, state and local government tax revenues.

Retail (Source: National Retail Federation)

- > 25 percent of jobs in Illinois are supported by the retail industry (1.2 million directly employed).
- Retail has a \$60.7 billion direct state GDP impact and represents 15 percent of Illinois' GDP.

Agriculture (Source: U.S. Department of Agriculture, National Agricultural Statistics Service)

- Illinois is the leading producer of soybeans, corn and swine.
- > Agriculture adds over \$17 billion to the Illinois GDP.

> In 2018, Illinois ranked 3<sup>rd</sup> in ethanol production, contributing \$46 billion to the nation's GDP.

- **Manufacturing** (Source: An Economic Analysis of the Manufacturing Sector in Illinois, Illinois Manufacturers' Association)
- > With industry output of \$106.67 billion, manufacturing accounts for 12 percent of Illinois' GDP.
- Chemical, motor vehicle and parts, food and beverage, and pharmaceutical and medical equipment are top manufacturing industries in Illinois.
- Illinois industries dependent upon the chemical sector include: construction, agriculture, consumer goods, and medicines, plastics and synthetic rubber supporting Illinois health care.

# Escalating costs of doing business- disruptions of interstate commerce

Major hurricane storm surge severely impacting critical refinery and petrochemical infrastructure located on the upper Texas Gulf Coast would hit Illinois businesses with higher transportation and manufacturing costs.

In Illinois: (Source: Illinois Department of Transportation)

- > Trucks carry over half of Illinois' freight tonnage, 664 million tons valued at over \$1 trillion.
- Illinois has the 3<sup>rd</sup> largest freight tonnage among all U.S. states and ranks 3<sup>rd</sup> in truck volume, with coal, cereal grains, and gravel among the top truck commodities.
- Rockford Airport is the 2<sup>nd</sup> largest UPS hub in North America.
- Approximately 1.8 million tons of freight worth \$200 billion are processed annually ranking O'Hare among the top 25 cargo airports in volume globally.

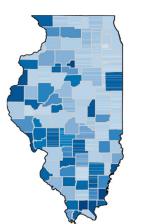
Impacts Small Businesses: (Sources: Statistics of U.S. Businesses, U.S. Census; International Trade Administration, U.S. Dept. of Commerce)

In 2019, 89.1 percent of firms exporting Illinois goods, were small businesses, worth \$13.3 billion, making up 24.2 percent of exports by identified firms.

Percent

#### Illinois Self-Employment Rates by County, 2019

1.2 m illion small businesses 99.6 percent of Illinois businesses



2.5 m illion small business employees 44.8 percent of Illinois employees

# US Coastal Barrier Storm Surge Suppression System Protection for **KENTUCKY**

# **Economic Protection for Kentucky**

The Coastal Barrier Storm Surge Suppression System is a national security and economic protection priority project located along the upper Texas coastline that has significant implications for the state of Kentucky.

The US Army Corps of Engineers Coastal Texas Study Chief's Report recommends a coastal barrier flood gate and levee system to protect the Houston Port Ship Channel and the petrochemical infrastructure that supports critical manufacturing, retail, agriculture, business, and military supply chains in Texas and the nation.

2022 – Congress authorizes US Army Corps of Engineers projects in Water Resources Development Act legislation.

# **Kentucky Economic Implications**

Major hurricane storm surge severely impacting critical port and petrochemical infrastructure located on the upper Texas Gulf Coast would affect operation costs for Kentucky tourism and travel, retail, agriculture and manufacturing.

- Ninety-six (96) percent of manufactured goods are directly touched by the business of chemistry.
- Texas, largest chemistry producing state, provides forty-two (42) percent of the nation's basic chemical stock used in manufacturing semiconductors to everyday consumer products.
- Manufacturers in other states use Texas petroleum derivatives (specialty chemical feedstock) when manufacturing: food and drink packaging, appliances and electronics, hardware and construction materials, pharmaceuticals, fertilizers (produce, grains, meat, dairy), and automotive parts and tires.
- Texas ports handle a larger volume of jet and diesel fuel to the US military than any other state.

# The Texas Gulf Coast Region Produces:

30% of the nation's total refining capacity
60% of the nation's aviation fuel
42% of the nation's specialty chemical feedstock
80% of the nation's military grade fuel

# Kentucky Economy:

\$38.33 Billion Manufacturing
\$17.7 Billion Retail
\$11.2 Billion Tourism Travel
\$5.7 Billion Agriculture
Home to

Fort Campbell Army Base Fort Knox

# Economic Impact on Industry

#### US COASTAL BARRIER STORM SUPPRESSION SYSTEM

Tourism and Travel (Source: US Travel Association)

- > During 2019, the travel industry employed over 102,000 people in Kentucky.
- In 2019, travelers to Kentucky spent over \$11.2 billion and added \$1.4 billion to federal, state and local government tax revenues.

Retail (Source: National Retail Federation)

- > Retail industry employs over 429,000 people and supports 26 percent of jobs in Kentucky.
- > Retail has a \$17.7 billion direct impact on Kentucky's total GDP.

Agriculture (Source: U.S. Department of Agriculture, National Agricultural Statistics Service)

- > Agriculture adds over \$5.7 billion to Kentucky's GDP.
- > Top Kentucky commodities include soybeans, wheat, and poultry products.

> Kentucky ranks second in the nation for unmanufactured tobacco.

Manufacturing (Source: National Association of Manufacturers, Center for Manufacturing Research; Kentucky Distillers' Association)

- > A \$38.33 billion industry representing 17.80 percent of Kentucky's GDP.
- > The largest sector of manufacturing in Kentucky is motor vehicles and parts.
- > At \$10.1 billion, the chemical sector is the 4th largest manufacturing industry in the state.
- Kentucky produces 95 percent of the world's supply of bourbon whiskey. An \$8.6 billion industry generating 20,100 jobs, exported over \$570 million in bourbon and other spirits in 2019.

# Escalating costs of doing business- disruptions of interstate commerce

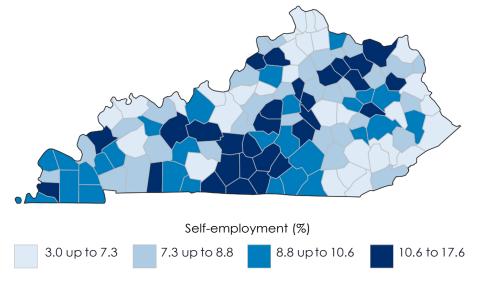
Major hurricane storm surge severely impacting critical refinery and petrochemical infrastructure located on the upper Texas Gulf Coast would hit Kentucky businesses with higher transportation and manufacturing costs.

In Kentucky: (Sources: U.S. Dept. of Transportation Bureau of Transportation Statistics; Kentucky Trucking Association)

- > 86.5 percent of total manufactured tonnage is transported by trucks in Kentucky.
- > 89.2 percent of Kentucky communities depend exclusively on trucks to move their goods.
- Louisville is one of the top three US airports that together handle one-third of the total landed weight of all-cargo operations.
- > Louisville airport is a major Hub for FedEx and United Parcel Service

Impacts Small Businesses: (Sources: Statistics of U.S. Businesses, U.S. Census; International Trade Administration, U.S. Dept. of Commerce)

- Kentucky small businesses employed 712,477 people, or 43.8 percent of the private workforce, in 2017.
- In 2018, 79.2 percent of firms exporting Kentucky goods, were small businesses, generating 12.1 percent of Kentucky's \$30.3 billion in total exports.



# US Coastal Barrier Storm Surge Suppression System Protection for **LOUISIANA**

## **Economic Protection for Louisiana**

The Coastal Barrier Storm Surge Suppression System is a national security and economic protection priority project located along the upper Texas coastline that has significant implications for the state of Louisiana.

The US Army Corps of Engineers Coastal Texas Study Chief's Report recommends a coastal barrier flood gate and levee system to protect the Houston Port Ship Channel and the petrochemical infrastructure that supports critical manufacturing, retail, agriculture, business, and military supply chains in Texas and the nation.

2022 – Congress authorizes US Army Corps of Engineers projects in Water Resources Development Act legislation.

## Louisiana Economic Implications

Major hurricane storm surge severely impacting critical port and petrochemical infrastructure located on the upper Texas Gulf Coast would affect operation costs for Louisiana tourism and travel, retail, agriculture, and manufacturing.

- Ninety-six (96) percent of manufactured goods are directly touched by the business of chemistry.
- Texas, largest chemistry producing state, provides forty-two (42) percent of the nation's basic chemical stock used in manufacturing semiconductors to everyday consumer products.
- Manufacturers in other states use Texas petroleum derivatives (basic chemical feedstock) when manufacturing: food and drink packaging, appliances and electronics, hardware and construction materials, pharmaceuticals, fertilizers (produce, grains, meat, dairy), and automotive parts and tires.
- Louisiana imports/exports through the Houston Port include: food and drink, chemicals & minerals, steel & metals, hardware and construction materials, automotive, and furniture.

## The Texas Gulf Coast Region Produces:

30% of the nation's total refining capacity
60% of the nation's aviation fuel
42% of the nation's specialty chemical feedstock
80% of the nation's military grade fuel

# Louisiana Economy:

\$51.4 Billion Manufacturing

\$22.1 Billion Retail

- \$13.9 Billion Tourism Travel
- \$11.2 Billion Agriculture

Home to Fort Polk Army Base Barksdale Air Force Base Naval Air Station Joint Reserve Base New Orleans

# Economic Impact on Industry

Tourism and Travel (Source: US Travel Association)

- > Travel spending supports 121,010, making the travel industry the state's 6<sup>th</sup> largest workforce.
- In 2019, travelers to Louisiana spent \$13.9 billion and added \$1.6 billion to federal, state and local government tax revenues.

Retail (Source: National Retail Federation)

- > The retail industry employs over 467,500 people in Louisiana.
- Retail has a \$22.1 billion direct impact on the state's GDP and supports 26 percent of jobs in Louisiana.

**Agriculture** (Sources: 2019 Louisiana Summary Agriculture & Natural Resources, Louisiana State University Ag Center; U.S. Dept. of Agriculture, National Agricultural Statistics Service; Farm Flavor)

- > Agricultural activities were estimated to have a total economic impact of nearly \$11.2 billion.
- > Louisiana ranks 2nd for sugarcane production and 3rd in the nation for rice production.
- State commercial fishing produces 25 percent of all seafood in the U.S., placing Louisiana at No. 1 for crawfish, shrimp, alligator, and oyster production.

Manufacturing (Source: National Association of Manufacturers, Center for Manufacturing Research; American Chemistry Council)

- > A \$51.4 billion industry in 2019, representing over 20 percent of the state's economy.
- > Louisiana is the 2<sup>nd</sup> largest chemistry producing state, following Texas.
- Top major ten (10) Louisiana manufacturing sectors for job growth in 2020 include: pharmaceutical and medicine, aerospace product and parts, semiconductor and other electronics, beverages, and motor vehicles.

# Escalating costs of doing business- disruptions of interstate commerce

Major hurricane storm surge severely impacting critical refinery and petrochemical infrastructure located on the upper Texas Gulf Coast would hit Louisiana businesses with higher transportation and manufacturing costs.

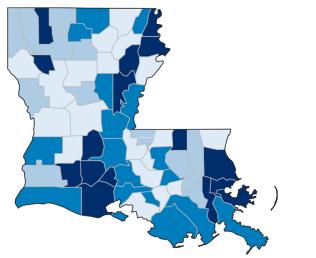
In Louisiana: (Source: U.S. Department of Transportation, Bureau of Transportation Statistics; Louisiana Motor Truck Association)

- > In 2018, Louisiana interstate freight flows involved 1.2 billion tons valued at \$627 billion.
- Roughly 78.2 percent of Louisiana communities depend exclusively on truck to move their goods.
- > In Louisiana manufactured tonnage, 62.6 percent is transported by truck, 170,450 tons per day.

Impacts Small Businesses: (Sources: Statistics of U.S. Businesses, U.S. Census; International Trade Administration, U.S. Dept. of Commerce)

- Louisiana small businesses employed 906,632 people, or 53.6 percent of the private workforce in 2018.
- In 2019, 84.8 percent of firms exporting Louisiana goods, were small businesses, generating 32 percent of Louisiana's \$56.4 billion in total exports.

#### Louisiana Self–Employment Rates by County, 2018





# US Coastal Barrier Storm Surge Suppression System Protection for **MICHIGAN**

# **Economic Protection for Michigan**

The Coastal Barrier Storm Surge Suppression System is a national security and economic protection priority project located along the upper Texas coastline that has significant implications for the state of Michigan.

The US Army Corps of Engineers Coastal Texas Study Chief's Report recommends a coastal barrier flood gate and levee system to protect the Houston Port Ship Channel and the petrochemical infrastructure that supports critical manufacturing, retail, gariculture, business, and military supply chains in Texas and the nation.

2022 – Congress authorizes US Army Corps of Engineers projects in Water Resources Development Act legislation.

## Michigan Economic Implications

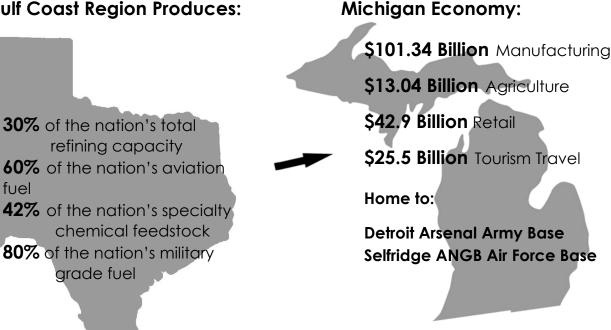
Major hurricane storm surge severely impacting critical refinery and petrochemical infrastructure located on the upper Texas Gulf Coast would affect operation costs for Michigan retail, agriculture, travel and tourism, and manufacturing.

- Ninety-six (96) percent of manufactured goods are directly touched by the business of chemistry.
- Texas, largest chemistry producing state in the nation, provides forty-two (42) percent of the nation's basic chemical stock used in manufacturing electronics and semiconductors to everyday consumer products.
- Manufacturers in other states use Texas petroleum derivatives (specialty chemical feedstock) when manufacturing: electronics, aerospace and transportation equipment, food and drink packaging, hardware and construction materials, pharmaceuticals, fertilizers (produce, grains, meat, dairy), and automotive parts and tires.
- In 2018, the Port of Houston supported \$1.829 billion in total economic value for the state of Michigan.

### **Texas Gulf Coast Region Produces:**

arade fuel

fuel



# Economic Impact on Industry

**US COASTAL BARRIER STORM SUPPRESSION SYSTEM** 

#### Manufacturing (Sources: National Association of Manufacturers)

- > A \$101.34 billion industry that represents 17.98 percent of the state's total output.
- Motor vehicle and parts, pharmaceutical, medical equipment and supplies, and semiconductor and other electronics are the leading Michigan manufacturing sectors by employment.
- Manufacturing drives the Michigan economy, with \$53.20 billion in manufactured goods exports in 2021.

Agriculture (Source: Michigan Department of Agriculture & Rural Development; US Department of Agriculture)

- > Michigan's agricultural sector production value was over \$13 billion in 2022.
- Michigan's top agricultural exports are processed food products; wood and wood products; soybeans; vegetables and dry beans; and cereals, baked goods, and pasta.
- > The food and agriculture industry contributes \$104.7 billion annually to Michigan's economy.

Retail (Source: National Retail Federation)

- > Retail employs 929,780 people in Michigan, supporting 26 percent of jobs in the state.
- > Retail provides a direct impact of \$42.9 billion on the state's GDP.

#### Tourism and Travel (Source: U.S. Travel Association)

- In 2019, travel spending directly supported 203,600 jobs, 7<sup>th</sup> largest employment sector, and generated \$1.8 billion in taxes to state and local governments in Michigan.
- In 2022, Michigan travelers spent \$25.5 billion, 2.5 percent above 2019 and 12.1 percent above 2021 levels.

# Escalating costs of doing business- disruptions of interstate commerce

Major hurricane storm surge severely impacting critical refinery and petrochemical infrastructure located on the upper Texas Gulf Coast would hit Michigan businesses with higher transportation and manufacturing costs.

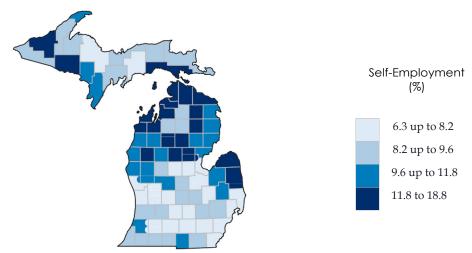
#### In Michigan State:

- > Over 80 percent of Michigan communities depend exclusively on trucks to move their goods.
- Trucks transport over 71 percent of manufactured freight in the state of Michigan. (Source: Michigan Trucking Association)

Impacts Small Businesses: (Sources: Statistics of U.S. Businesses, U.S. Department of Commerce)

- Small businesses represent 99.6 percent of Michigan businesses, employing 49 percent of Michigan employees, and 44 percent of Michigan's manufacturing industry.
- In 2018, 89 percent of firms exporting Michigan goods were small businesses, generating 21.5 percent of Michigan's \$53.4 billion in total exports.

#### Michigan Self-Employment Rates by County, 2018



# US Coastal Barrier Storm Surge Suppression System Protection for **MISSISSIPPI**

# Economic Protection for Mississippi

The Coastal Barrier Storm Surge Suppression System is a national security and economic protection priority project located along the upper Texas coastline that has significant implications for the state of Mississippi.

The US Army Corps of Engineers Coastal Texas Study Chief's Report recommends a coastal barrier flood gate and levee system to protect the Houston Port Ship Channel and the petrochemical infrastructure that supports critical manufacturing, retail, agriculture, business, and military supply chains in Texas and the nation.

2022 – Congress authorizes US Army Corps of Engineers projects in Water Resources Development Act legislation.

### **Mississippi Economic Implications**

Major hurricane storm surge severely impacting critical refinery and petrochemical infrastructure located on the upper Texas Gulf Coast would affect operation costs for Mississippi tourism, agriculture and manufacturing.

- Ninety-six (96) percent of manufactured goods are directly touched by the business of chemistry. Texas, the largest chemistry producing state, provides forty-two (42) percent of the nation's basic chemical stock used in manufacturing semiconductors to everyday products.
- Manufacturers in other states use Texas petroleum derivatives (specialty chemical feedstock) when manufacturing: food and drink packaging, appliances and electronics, hardware and construction materials, fertilizers (produce, grains, meat, dairy), and automotive parts and tires.
- Motor vehicles and parts, food and beverage, tobacco products, machinery, aerospace and other transportation equipment are significant manufacturing sectors in Mississippi.
- In 2018, marine cargo activity at Port of Houston marine terminals and the Houston Ship Channel supported \$9.4 billion of total economic value for the Mississippi economy.

# The Texas Gulf Coast Region Produces:

30% of the nation's total refining capacity
60% of the nation's aviation fuel
42% of the nation's specialty chemical feedstock
80% of the nation's military arade fuel

### **Mississippi Economy:**

\$18.68 Billion Manufacturing \$11.9 Billion Retail \$8.33 Billion Agriculture \$7.1 Billion Tourism Travel Home to Columbus Air Force Base Keesler Air Force Base Naval Air Station Meridian Naval Construction Battalion Center Gulfport

#### Tourism and Travel (Source: US Travel Association)

- > The travel industry employs nearly 89,000 people in Mississippi.
- In 2019, travelers to Mississippi spent over \$7.1 billion and added \$986 million to federal, state and local government tax revenues.

Retail (Source: National Retail Federation)

- The retail industry employs over 277,000 people in Mississippi (26 percent of jobs in Mississippi are supported by the retail industry).
- > Retail has a \$11.9 billion direct impact on the state domestic product.

Agriculture (Source: Mississippi Department of Agriculture and Commerce)

Agriculture, an \$8.33 billion industry, is Mississippi's number one industry that employs 17.4 percent of the state's workforce in jobs either directly or indirectly related.

> Poultry/eggs, soybeans, forestry, corn, and cotton are the top five agricultural products.

- Manufacturing (Sources: National Association of Manufacturers, Center for Manufacturing Research; American Chemistry Council)
- > At \$18.68 billion, manufacturing industry represents 16.11 percent of the state's economy.
- Motor vehicles and parts, food and beverage, tobacco products, machinery, aerospace and other transportation equipment are top manufacturing sectors.
- > At \$3.99 billion, the chemical sector is the 4<sup>th</sup> largest manufacturing industry in the state.

# Escalating costs of doing business- disruptions of interstate commerce

Major hurricane storm surge severely impacting critical refinery and petrochemical infrastructure located on the upper Texas Gulf Coast would hit Mississippi businesses with higher transportation and manufacturing costs.

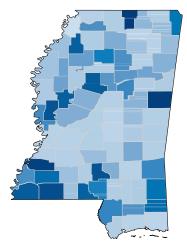
In Mississippi: (Source: Mississippi Department of Transportation)

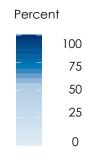
- In Mississippi, 64 percent of freight is moved by truck warehouse/distribution center, coal/petroleum, organic chemicals are the top 3 commodities moved by truck in Mississippi.
- Mississippi consumes nearly four times more energy than it produces the industrial sector consuming nearly two-fifths and transportation at one-third of the state total. In 2021, the state's annual oil production fell to its lowest level in 70 years. (Source: U.S. Energy Information Administration)
- Mississippi receives additional petroleum products from Texas via the Colonial Pipeline. (Source: U.S. Energy Information Administration)

Impacts Small Businesses: (Sources: Statistics of U.S. Businesses, U.S. Dept. of Commerce)

- Small businesses represent 99.3 percent of Mississippi businesses, employing 46.3 percent of Mississippi employees.
- In 2019, 75.2 percent of firms exporting Mississippi goods, were small businesses, generating 15.5 percent of Mississippi's \$11.3 billion in total exports.

# Mississippi Share of Employees Working at Small Businesses by County





# US Coastal Barrier Storm Surge Suppression System Protection for **NEW JERSEY**

# **Economic Protection for New Jersey**

The Coastal Barrier Storm Surge Protection System is a national security and economic protection priority project located along the upper Texas coastline that has significant implications for the state of New Jersey.

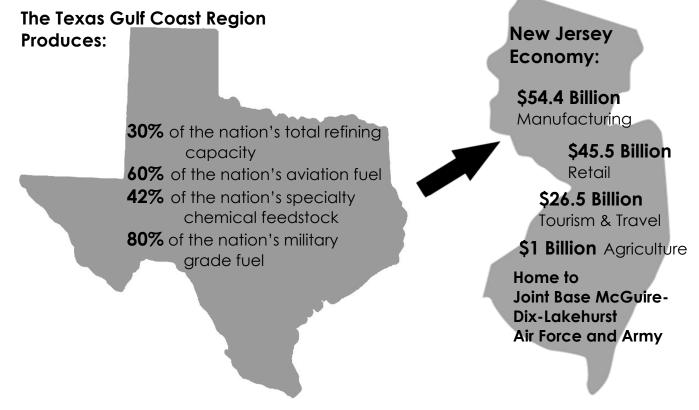
The US Army Corps of Engineers Coastal Texas Study Chief's Report recommends a coastal barrier flood gate and levee system to protect the Houston Port Ship Channel and the petrochemical infrastructure that supports critical manufacturing, retail, agriculture, business, and military supply chains in Texas and the nation.

2022 – Congress authorizes US Army Corps of Engineers projects in Water Resources Development Act legislation.

# **New Jersey Economic Implications**

Major hurricane storm surge severely impacting the Houston Ship Channel and critical petrochemical infrastructure located on the upper Texas Gulf Coast would affect operation costs for New Jersey agriculture, tourism and manufacturing.

- Ninety (96) percent of all manufactured goods are directly touched by the business of chemistry. Texas, largest chemistry producing state, provides forty-two (42) percent of the nation's basic chemical stock used in manufacturing semiconductors to everyday products.
- Manufacturers in other states use Texas petroleum derivatives (specialty chemical feedstock) when manufacturing: food and drink packaging, appliances and electronics, hardware and construction materials, pharmaceuticals, fertilizers (produce, grains, meat, dairy), and automotive parts and tires.
- New Jersey imports/exports through the Houston Port include: chemicals and minerals, steel and metals, resins and plastics, automotive, machinery, appliances and electronics.



#### Tourism and Travel (Source: US Travel Association)

- > The travel industry employs over 219,000 people in New Jersey.
- In 2019, travelers to New Jersey spent over \$26 billion and generated \$4 billion in state and local government tax revenues.

Retail (Source: National Retail Federation)

- The retail industry employs over 841,000 people in New Jersey and supports 25 percent of jobs in the state.
- ➢ Retail has over a \$45.5 billion direct impact on the New Jersey state GDP.

Manufacturing (Source: National Association of Manufacturers, Center for Manufacturing Research; American Chemistry Council)

- A \$54.4 billion industry representing 8.57 percent of the state's GDP.
- > Computer and electronics, food, and pharmaceuticals are large manufacturing sectors.
- > At \$15.57 billion, New Jersey's chemical sector is the second largest manufacturing industry.
- New Jersey manufacturers use Texas specialty chemical feedstock to produce aircraft wing deicing fluid, industrial solvents, fluids, corrugated pipe, and industrial films and packaging.

Agriculture (Source: U.S. Department of Agriculture, National Agricultural Statistics Service; New Jersey Department of Agriculture)

- > The agriculture industry has a direct impact of over \$1 billion to New Jersey's GDP.
- > Top commodities: horticulture, fruits and vegetables, equine, poultry and eggs, and dairy.
- Commercial fishing adds \$133 million to the value of agriculture in New Jersey.

# Escalating costs of doing business- disruptions of interstate commerce

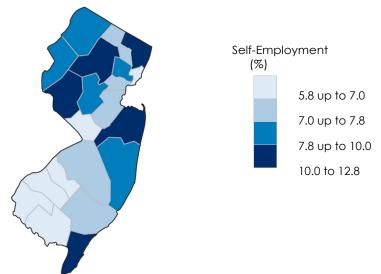
Major hurricane storm surge can severely impact critical refinery and petrochemical infrastructure located on the upper Texas Gulf Coast and communities are more vulnerable to cyberattacks. New Jersey businesses will suffer higher transportation and manufacturing costs.

**In New Jersey:** (Source: U.S. Department of Transportation, Bureau of Transportation Statistics; U.S. Energy Information Administration; New Jersey Department of Transportation)

- > Of the more than 600 million tons of freight moved each year, 75 percent is moved by truck.
- In 2018, the top commodities shipped from New Jersey by value included: motorized vehicles, electronics, pharmaceuticals, textiles/leather, chemical products.

Impacts Small Businesses: (Source: 2020 Small Business Profile, Office of Advocacy, U.S. Small Business Administration)

- New Jersey small businesses employed 1.8 million people, or 49.9 percent of the private workforce, in 2017.
- In 2018, 91.1 percent of firms exporting New Jersey goods, were small businesses, generating 41.4 percent of New Jersey's \$31.8 billion in total exports.



#### New Jersey Self-Employment Rates by County, 2018

# US Coastal Barrier Storm Surge Suppression System Protection for **NORTH CAROLINA**

# **Economic Protection for North Carolina**

The Coastal Barrier Storm Surge Suppression System is a national security and economic protection priority project located along the upper Texas coastline that has significant implications for the state of North Carolina.

The US Army Corps of Engineers Coastal Texas Study Chief's Report recommends a coastal barrier flood gate and levee system to protect the Houston Port Ship Channel and the petrochemical infrastructure that supports critical manufacturing, retail, agriculture, business, and military supply chains in Texas and the nation.

2022 – Congress authorizes US Army Corps of Engineers projects in Water Resources Development Act legislation.

# North Carolina Economic Implications

Major hurricane storm surge severely impacting critical port and petrochemical infrastructure located on the upper Texas Gulf Coast would affect operation costs for North Carolina manufacturing, retail, tourism, and agriculture.

- Ninety-six (96) percent of manufactured goods are directly touched by the business of chemistry. Texas, the largest chemistry producing state, provides forty-two (42) percent of the nation's basic chemical stock used in manufacturing semiconductors to everyday products.
- Manufacturers in other states use Texas petroleum derivatives (specialty chemical feedstock) when manufacturing: food and drink packaging, appliances and electronics, hardware and construction materials, pharmaceuticals, fertilizers (produce, grains, meat, dairy), and automotive parts and tires and eye glass lenses.
- North Carolina imports/exports through the Houston Port include: hardware and construction materials, chemical and minerals, food and drink, furniture, machinery, appliances and electronics.

# The Texas Gulf Coast Region Produces:

30% of the nation's total refining capacity
60% of the nation's aviation fuel
42% of the nation's specialty chemical feedstock
80% of the nation's military grade fuel

# North Carolina Economy:

\$101.60 Billion Manufacturing

- \$41.8 Billion Retail
- \$29.2 Billion Tourism Travel
- \$12.9 Billion Agriculture
- Home to
- 2 Air Force Bases
- 2 Army Bases
- 2 Marine Corps Air Stations
- Camp Lejeune Marine Corps Base

#### Manufacturing – Represents 17.17 percent of North Carolina's Gross State Product

- > 7,792 manufacturing firms produced \$101.60 billion in total manufacturing output.
- Large industries include: food processing and tobacco; computer and electronic products; and machinery.
- > At \$18.7 billion, the chemical sector is the 3<sup>rd</sup> largest manufacturing industry in the state. (Sources: National Association of Manufacturers, American Chemistry Council)

#### Retail Trade – Represents the largest employer in North Carolina - \$41.8 billion GDP Impact

Retail employs 1 million people and supports 27 percent of jobs in North Carolina.

#### Tourism – Travelers to North Carolina spent \$29.2 billion in 2019.

In 2019, travelers to North Carolina added \$4.1 billion dollars to federal, state and local government tax revenues.

(Sources: National Retail Federation, U.S. Travel Association)

#### Agriculture – North Carolina agriculture sector is 8<sup>th</sup> largest in the nation

Top 5 commodities include: #1 sweet potatoes; #2 turkeys; #3 hogs and pigs; #4 cucumbers and broilers; and #5 peanuts, upland cotton, bell peppers and burley tobacco

▶ 46,418 farms in North Carolina have a \$12.9 billion direct economic impact.

(Source: U.S. Department of Agriculture, National Agricultural Statistics Service; North Carolina Farm Bureau)

# Escalating costs of doing business- disruptions of interstate commerce

Major hurricane storm surge severely impacting critical refinery and petrochemical infrastructure located on the upper Texas Gulf Coast would hit North Carolina businesses with higher transportation and manufacturing costs.

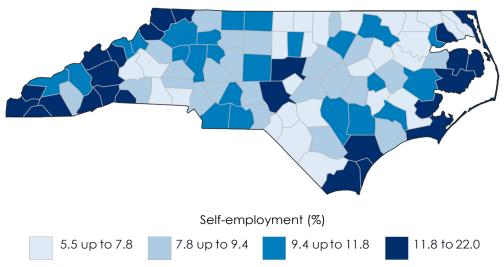
In North Carolina: (Sources: North Carolina Trucking Association; North Carolina Transportation by the Numbers: Meeting the State's Need for Safe and Efficient Mobility, January 2021)

- > Trucks transport 86 percent of manufactured tonnage in North Carolina.
- 85.6 percent of North Carolina communities depend exclusively on trucks to move their goods.
- Each year, \$672 billion in goods are shipped to and from sites in North Carolina, with 81 percent of goods carried by trucks.

Impacts Small Businesses: (Sources: Statistics of U.S. Businesses, U.S. Census; International Trade Administration, U.S. Dept. of Commerce)

- North Carolina small businesses employed 1.7 million people, or 45.3 percent of the private workforce, in 2017.
- In 2018, 87 percent of firms exporting North Carolina goods, were small businesses, generating 22.5 percent of North Carolina's \$29.2 billion in total exports.

#### North Carolina Self-Employment Rates by County, 2018



# US Coastal Barrier Storm Surge Suppression System Protection for **OREGON**

## **Economic Protection for Oregon**

The Coastal Barrier Storm Surge Suppression System is a national security and economic protection priority project located along the upper Texas coastline that has significant implications for the state of Oregon.

The US Army Corps of Engineers Coastal Texas Study Chief's Report recommends a coastal barrier flood gate and levee system to protect the Houston Port Ship Channel and the petrochemical infrastructure that supports critical manufacturing, retail, agriculture, business, and military supply chains in Texas and the nation.

2022 – Congress authorizes US Army Corps of Engineers projects in Water Resources Development Act legislation.

## **Oregon Economic Implications**

Major hurricane storm surge severely impacting critical petrochemical and port infrastructure located on the upper Texas Gulf Coast would affect operation costs for Oregon manufacturing, retail, agriculture, and tourism.

- Ninety-six (96) percent of manufactured goods are directly touched by the business of chemistry. Texas, largest chemistry producing state, provides forty-two (42) percent of the nation's basic chemical stock used in manufacturing semiconductors to everyday products.
- Manufacturers in other states use Texas petroleum derivatives (specialty chemical feedstock) when manufacturing: food and drink packaging, appliances and electronics, hardware and construction materials, pharmaceuticals, fertilizers (produce, grains, meat, dairy), and automotive parts and tires and eye glass lenses.
- Oregon imports/exports through the Houston Port include: food and drink, steel and metals, retail consumer goods, machinery, appliances and electronics.

# Texas Gulf Coast Region Produces:

**Oregon Economy:** 

30% of the nation's total refining capacity
60% of the nation's aviation fuel
42% of the nation's specialty chemical feedstock
80% of the nation's military grade fuel

\$34.38 Billion Manufacturing
\$13 Billion Retail
\$14.1 Billion Tourism Travel
\$5.1 Billion Agriculture

#### Tourism and Travel (Source: US Travel Association)

- > The travel industry employs over 103,000 people in Oregon.
- In 2019, travelers to Oregon spent over \$14 billion and added \$1.7 billion to federal, state and local government tax revenues.

Retail (Source: National Retail Federation)

- > Retail supports 27 percent of Oregon jobs and directly employs over 431,000 people.
- Retail has a \$13 billion direct impact on the state's GDP and represents 14 percent of Oregon's total GDP.

#### Agriculture (Source: Oregon Farm Bureau)

- In Oregon, agriculture makes up 13% of the state's gross product and results in \$5.01 billion in agricultural production (farm gate value).
- > 80 percent of Oregon agriculture production leaves the state, 40 percent leaving the country.
- > Oregon is the nation's #1 producer of softwood lumber and forestry.

**Manufacturing** (Sources: National Association of Manufacturers, Center for Manufacturing Research; Oregon Department of Land Conservation and Development)

- > A \$34.38 billion industry representing 13.55 percent of the state's GDP.
- > At over \$16 billion, computer and electronic products are the largest manufacturing sector.
- In 2019, food and beverage products and wood products ranked as the 2<sup>nd</sup> and 3<sup>rd</sup> manufacturing sectors, respectively.

# Escalating costs of doing business- disruptions of interstate commerce

Major hurricane storm surge severely impacting critical refinery and petrochemical infrastructure located on the upper Texas Gulf Coast would hit Oregon businesses with higher transportation and manufacturing costs.

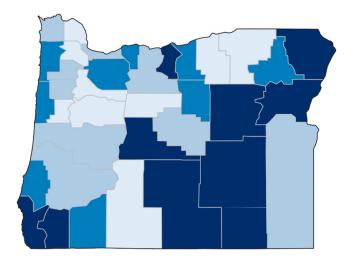
In Oregon: (Sources: U.S. Department of Transportation, Bureau of Transportation Statistics; Oregon Trucking Associations)

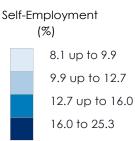
- > Over 107 million tons of freight is shipped each year, valued at over \$147 billion.
- > Trucks transport 88 percent of the total manufactured tonnage in the state.
- > Over 77 percent of Oregon communities depend exclusively on trucks to move their goods.

Impacts Small Businesses: (Source: 2020 Small Business Profile, Office of Advocacy, U.S. Small Business Administration)

- Oregon small businesses employed 871,241 people, or 54.6 percent of the private workforce, in 2017.
- In 2018, 88.1 percent of firms exporting Oregon goods, were small businesses, generating 24 percent of Oregon's \$21.3 billion in total exports.

#### Oregon Self-Employment Rates by County, 2018





# US Coastal Barrier Storm Surge Suppression System Protection for **SOUTH CAROLINA**

### **Economic Protection for South Carolina**

The Coastal Barrier Storm Surge Suppression System is a national security and economic protection priority project located along the upper Texas coastline that has significant implications for the state of South Carolina.

The US Army Corps of Engineers Coastal Texas Study Chief's Report recommends a coastal barrier flood gate and levee system to protect the Houston Port Ship Channel and the petrochemical infrastructure that supports critical manufacturing, retail, agriculture, business, and military supply chains in Texas and the nation.

2022 – Congress authorizes US Army Corps of Engineers projects in Water Resources Development Act legislation.

#### South Carolina Economic Implications

Major hurricane storm surge severely impacting critical refinery and petrochemical infrastructure located on the upper Texas Gulf Coast would affect operation costs for South Carolina agriculture, tourism and manufacturing.

- Ninety-six (96) percent of manufactured goods are directly touched by the business of chemistry.
- Texas, largest chemistry producing state in the nation, provides forty-two (42) percent of the nation's basic chemical stock used in manufacturing semiconductors to everyday consumer products.
- Manufacturers in other states use Texas petroleum derivatives (specialty chemical feedstock) when manufacturing: food and drink packaging, appliances and electronics, hardware and construction materials, pharmaceuticals, fertilizers (produce, grains, meat, dairy), and automotive parts and tires.
- South Carolina imports/exports through the Houston Port include: automotive, chemicals and minerals, resins and plastics, food and drink, steel and metals, hardware and construction materials, machinery, appliances and electronics.

## Texas Gulf Coast Region Produces:

30% of the nation's total refining capacity
60% of the nation's aviation fuel
42% of the nation's specialty chemical feedstock
80% of the nation's military grade fuel

# South Carolina Economy:

- \$40.26 Billion Manufacturing
- \$46.2 Billion Agriculture
- \$21.9 Billion Retail
- \$16.9 Billion Tourism Travel Home to
  - Charleston Air Force Base Shaw Air Force Base
  - Marine Corps Air Station Beaufort
  - Fort Jackson Army Base
- Naval Weapons Station Charleston

#### Tourism and Travel (Source: U.S. Travel Association)

- > The travel industry employs 139,074 people in South Carolina 2019.
- In 2019, travelers to South Carolina spent \$16.9 billion and generated \$2.3 billion tax revenues to federal, state and local governments.

Retail (Source: National Retail Federation)

- > The retail industry employs 519,010 people in South Carolina, supporting 28% of jobs in the state.
- > Retail provides a direct impact of \$21.9 billion on state's GDP.

Agriculture (Source: South Carolina Department of Agriculture)

- The agribusiness sector (agriculture + forestry is the state's No. 1 industry, accounting for \$46.2 billion in annual economic impact.
- The state's top ten commodifies are broilers, turkeys, corn, cattle & calves, soybeans, cotton, chicken eggs, peanuts, floriculture, and tobacco.

**Manufacturing** (Sources: National Association of Manufacturers; American Chemistry Council)

- > A \$40.26 billion industry that represents 16.27 percent of the state's total output.
- > Motor vehicle and parts ranks first out of the top ten manufacturing sectors in South Carolina.
- At \$13.81 billion, the chemical sector is the 3rd largest manufacturing industry in the state, 11<sup>th</sup> in the nation.

# Escalating costs of doing business- disruptions of interstate commerce

Major hurricane storm surge severely impacting critical refinery and petrochemical infrastructure located on the upper Texas Gulf Coast would hit South Carolina businesses with higher transportation and manufacturing costs.

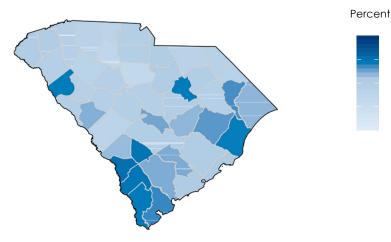
#### In South Carolina:

- Freight and the state-owned and operated school bus system in South Carolina rely on refined products delivered through pipelines from the upper Texas Gulf Coast.
- Roughly 79.8% of South Carolina communities depend exclusively on trucks to move their goods.
- Trucks transport 82% of manufactured tonnage in South Carolina. (Source: South Carolina Trucking Association)

Impacts Small Businesses: (Sources: Statistics of U.S. Businesses, U.S. Dept. of Commerce)

- Small businesses represent 99.4 percent of South Carolina businesses, employing 43 percent of South Carolina employees.
- In 2020, 84.2 percent of firms exporting South Carolina goods, were small businesses, generating 10 percent of South Carolina's \$27.8 billion in total exports.

#### South Carolina Share of Employees Working at Small Businesses by County



# US Coastal Barrier Storm Surge Suppression System Protection for **TENNESSEE**

### **Economic Protection for Tennessee**

The Coastal Barrier Storm Surge Suppression System is a national security and economic protection priority project located along the upper Texas coastline that has significant implications for the state of Tennessee.

The US Army Corps of Engineers Coastal Texas Study Chief's Report recommends a coastal barrier flood gate and levee system to protect the Houston Port Ship Channel and the petrochemical infrastructure that supports critical manufacturing, retail, agriculture, business, and military supply chains in Texas and the nation.

2022 – Congress authorizes US Army Corps of Engineers projects in Water Resources Development Act legislation.

#### **Tennessee Economic Implications**

Major hurricane storm surge severely impacting critical refinery and petrochemical infrastructure located on the upper Texas Gulf Coast would affect operation costs for Tennessee agriculture, tourism and manufacturing.

- Ninety-six (96) percent of manufactured goods are directly touched by the business of chemistry.
- Texas, largest chemistry producing state in the nation, provides forty-two (42) percent of the nation's basic chemical stock used in manufacturing semiconductors to everyday consumer products.
- Manufacturers in other states use Texas petroleum derivatives (specialty chemical feedstock) when manufacturing: food and drink packaging, appliances and electronics, hardware and construction materials, pharmaceuticals, fertilizers (produce, grains, meat, dairy), and automotive parts and tires.
- Tennessee imports/exports through the Houston Port: automotive, machinery, appliances and electronics, chemicals and minerals, resins and plastics, fabrics including raw cotton, and hardware and construction materials.

### **Texas Gulf Coast Region Produces:**

30% of the nation's total refining capacity
60% of the nation's aviation fuel
42% of the nation's specialty chemical feedstock
80% of the nation's military

arade fuel

#### Tennessee Economy:

\$62.13 Billion Manufacturing \$81 Billion Agriculture

- \$34.2 Billion Retail
- \$27.5 Billion Tourism Travel

Home to: Arnold Air Force Base Naval Support Activity (NSA) Mid-South Naval Base

Holston Army Plant Army Base Milan Army Ammunition Plant Army Base Tourism and Travel (Source: U.S. Travel Association)

- In 2019, travel spending directly supported 194,900 jobs, 5<sup>th</sup> largest employment sector in Tennessee.
- In 2022, travelers to Tennessee spent \$27.5 billion and generated \$2.1 billion tax revenues to federal, state and local governments in 2019.

Retail (Source: National Retail Federation)

- > The retail industry employs 705,070 people in Tennessee, supporting 27% of jobs in the state.
- > Retail provides a direct impact of \$34.2 billion on state's GDP.

Agriculture (Source: Tennessee Department of Agriculture)

- Tennessee has the eighth-most farms in the nation, with the agriculture sector producing an estimated annual impact of \$81 billion on the state's economy.
- The state's top ten commodities are beef cattle, soybeans, corn, cotton, broilers, poultry, tobacco, hay, wheat, eggs, and snap beans.

Manufacturing (Sources: National Association of Manufacturers; American Chemistry Council)

- > A \$62.13 billion industry that represents 14.97 percent of the state's total output.
- Food and beverage products are first (\$11.6 billion) and motor vehicle and parts are second (\$10.1 billion) out of the top ten manufacturing sectors in Tennessee.
- > At \$15.02 billion, the chemical sector is the 3rd largest manufacturing industry in the state.
- Manufacturing drives the Tennessee economy, with \$32.91 billion in manufactured goods exports in 2021.

# Escalating costs of doing business- disruptions of interstate commerce

Major hurricane storm surge severely impacting critical refinery and petrochemical infrastructure located on the upper Texas Gulf Coast would hit Tennessee businesses with higher transportation and manufacturing costs.

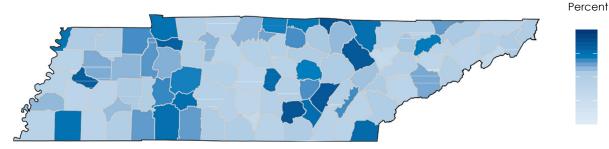
#### In Tennessee:

- With very little petroleum and natural gas reserves, Tennessee benefits from refined products delivered through pipelines from the upper Texas Gulf Coast.
- Roughly 90.5 percent of Tennessee communities depend exclusively on trucks to move their goods.
- Trucks transport roughly 93 percent of total manufactured tonnage in Tennessee or 286,050 tons per day.

(Source: Tennessee Trucking Association)

Impacts Small Businesses: (Sources: Statistics of U.S. Businesses, U.S. Dept. of Commerce)

- Small businesses represent 99.5 percent of Tennessee businesses, employing 42.2 percent of Tennessee employees.
- In 2020, 82 percent of firms exporting Tennessee goods, were small businesses, generating 16.2 percent of Tennessee's \$26 billion in total exports.



# US Coastal Barrier Storm Surge Suppression System Protection for **TEXAS**

## **Economic Protection for Texas**

The Coastal Barrier Storm Surge Protection System is a national security and economic protection priority project located along the upper Texas coastline that has significant implications for the entire state of Texas and the nation.

The US Army Corps of Engineers Coastal Texas Study Chief's Report recommends a coastal barrier flood gate and levee system to protect the Houston Port Ship Channel and the petrochemical infrastructure that supports critical manufacturing, retail, agriculture, business, and military supply chains in Texas and the nation.

2022 – Congress authorizes US Army Corps of Engineers projects in Water Resources Development Act legislation.

### **Texas Economic Implications**

Major hurricane storm surge severely impacting the Houston Ship Channel and critical petrochemical infrastructure located on the upper Texas Gulf Coast would affect operation costs for Texas small businesses, agriculture, tourism and manufacturing.

- Ninety-six (96) percent of manufactured goods are directly touched by the business of chemistry.
- > Texas, the largest chemistry producing state, provides forty-two (42) percent of the nation's specialty chemical stock used in manufacturing semiconductors to everyday products.
- Other states use Texas petroleum derivatives (specialty chemical feedstock) when manufacturing: food and drink packaging, appliances and electronics, hardware and construction materials, pharmaceuticals, fertilizers (produce, grains, meat, dairy), and automotive parts and tires.
- Port Houston is a crucial economic engine as the number one U.S. port in waterborne tonnage, providing \$801.9 billion in national economic value.
- > Texas ports handle a larger volume of jet and diesel fuel to the US military than any other state.

# The Texas Gulf Coast Region Produces:

30% of the nation's total refining capacity
60% of the nation's aviation fuel
42% of the nation's specialty chemical feedstock
80% of the nation's military grade fuel

### Texas Economy:

#### **\$243.94 billion** Manufacturing

**\$141.7 billion** Retail

**\$76.4 billion** Travel and Tourism

**\$24.9 billion** Agriculture

15 military bases in Texas including 6 Air Force bases

**US COASTAL BARRIER STORM SUPPRESSION SYSTEM** 

Manufacturing (Source: 2020 Texas Manufacturing Facts, National Association of Manufacturers)

- > \$243.94 billion in manufactured goods exports in 2019.
- > 73 percent of goods manufactured in Texas are transported by truck.

In 2017, top manufacturing sectors – chemicals, computer & electronic products, petroleum & coal products, motor vehicles and parts, machinery, food, beverage & tobacco products.

- Retail (Source: National Retail Federation; U.S. Small Business Administration)
- > The retail industry supports 30 percent of jobs in Texas.
- Retail has a \$141.7 billion direct impact on the state's GDP and represents the 5<sup>th</sup> largest small business industry in Texas.

#### Tourism and Travel (Source: US Travel Association)

- Travelers to Texas spent \$76.4 billion in 2018, generated \$11.9 billion to federal, state and local revenues that fund police, firefighters, teachers, road projects and convention centers.
- Agriculture (Source: U.S. Department of Agriculture, National Agricultural Statistics Service)
- > In 2017, Texas Farms sold \$24.9 billion in agricultural products, ranking 3<sup>rd</sup> in the nation.
- Livestock, poultry, & cotton represent over 70 percent of Texas commodities sold at nearly \$18 billion.

# Escalating costs of doing business- disruptions of intrastate commerce

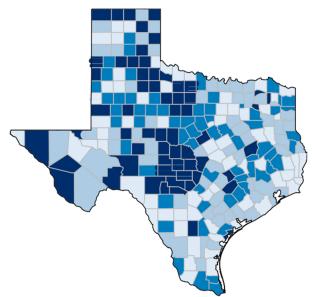
Major hurricane storm surge severely impacting critical refinery and petrochemical infrastructure located on the upper Texas Gulf Coast would hit businesses with higher transportation and manufacturing costs.

Impacts Transportation: (Sources: U.S. Dept. of Transportation, Bureau of Transportation Statistics; Texas Trucking Association)

- Trucks are involved in the supply chain of all top 10 commodities including electronics, grocery and convenient store goods, hardware, gravel, grains, and gasoline.
- > Trucks transported 73 percent of Texas manufactured goods.
- > Texas 2<sup>nd</sup> state in the nation with the highest share of intrastate shipments by value (70.9 percent).
- > Top commodities moved by truck in Texas include mainly agriculture products: live animals/fish, cereal grains, animal feed, meat/fish, fertilizer and milled grain products.

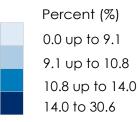
Impacts Small Businesses: (Sources: Statistics of U.S. Businesses, U.S. Census; International Trade Administration, U.S. Dept. of Commerce)

- > Texas small business employed 4.8 million people, 45 percent of the private workforce in 2017.
- In 2018, 92 percent of firms exporting Texas goods were small businesses, generating 36.3 percent of Texas' \$287.1 billion in total exports.



#### Texas Self–Employment Rates by County, 2018

Self-Employment (includes incorporated and unincorporated businesses with less than 500 paid employees)



# US Coastal Barrier Storm Surge Suppression System Protection for **WASHINGTON**

# **Economic Protection for Washington**

The Coastal Barrier Storm Surge Suppression System is a national security and economic protection priority project located along the upper Texas coastline that has significant implications for the state of Washington.

The US Army Corps of Engineers Coastal Texas Study Chief's Report recommends a coastal barrier flood gate and levee system to protect the Houston Port Ship Channel and the petrochemical infrastructure that supports critical manufacturing, retail, agriculture, business, and military supply chains in Texas and the nation.

2022 – Congress authorizes US Army Corps of Engineers projects in Water Resources Development Act legislation.

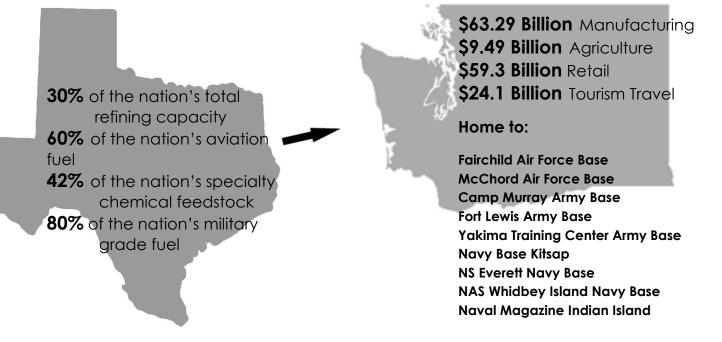
# Washington State Economic Implications

Major hurricane storm surge severely impacting critical refinery and petrochemical infrastructure located on the upper Texas Gulf Coast would affect operation costs for Washington retail, agriculture, travel and tourism, and manufacturing.

- Ninety-six (96) percent of manufactured goods are directly touched by the business of chemistry.
- Texas, largest chemistry producing state in the nation, provides forty-two (42) percent of the nation's basic chemical stock used in manufacturing electronics and semiconductors to everyday consumer products.
- Manufacturers in other states use Texas petroleum derivatives (specialty chemical feedstock) when manufacturing: electronics, aerospace and transportation equipment, food and drink packaging, hardware and construction materials, pharmaceuticals, fertilizers (produce, grains, meat, dairy), and automotive parts and tires.
- In 2018, the Port of Houston supported \$1.151 billion in total economic value for the state of Washington.

# Texas Gulf Coast Region Produces:

### Washington Economy:



Tourism and Travel (Source: U.S. Travel Association)

- In 2019, travel spending directly supported 144,700 jobs, 8<sup>th</sup> largest employment sector, and generated \$1.2 billion in taxes to state and local governments in Washington.
- > In 2022, travelers visiting Washington spent \$24.1 billion, 32.9 percent above 2021 levels.

Retail (Source: National Retail Federation)

- > Retail employs 737,100 people in Washington, supporting 26 percent of jobs in the state.
- > Retail provides a direct impact of \$59.279 billion on the state's GDP.

Agriculture (Source: Washington State Department of Agriculture)

- Washington farmers produce a diverse agricultural economy including over 300 different commodities (\$9.49 billion in 2019), led by the state's apple industry with 70% of U.S. production.
- The state's top five commodities are apples (\$2.185 billion), milk (\$1.209 billion), cattle (\$801.5 million), wheat (\$756.8 million), and potatoes (\$712.4 million).
- Food processing generated more than \$21.8 billion in revenues. (Source: 2019 WA Dept. of Revenue)

**Manufacturing** (Sources: National Association of Manufacturers; American Chemistry Council)

- > A \$63.29 billion industry that represents 8.60 percent of the state's total output.
- > Aerospace and transportation equipment are the top manufacturing sector in Washington.
- > Washington ranks second in the US in wine production, behind only California.
- > At \$2.72 billion, Washington ranks 33<sup>rd</sup> among chemistry producing states.
- Manufacturing drives the Washington economy, with \$33.37 billion in manufactured goods exports in 2021.

# Escalating costs of doing business- disruptions of interstate commerce

Major hurricane storm surge severely impacting critical refinery and petrochemical infrastructure located on the upper Texas Gulf Coast would hit Washington businesses with higher transportation and manufacturing costs.

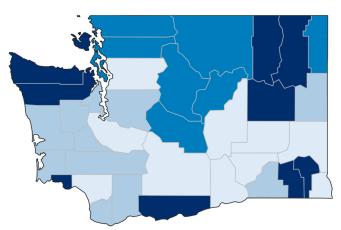
In Washington State:

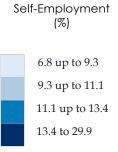
- Roughly 80 percent of Washington State communities depend exclusively on trucks to move their goods.
- Trucks transport roughly 70 percent of the freight in the state of Washington. (Source: Washington Trucking Associations)

Impacts Small Businesses: (Sources: Statistics of U.S. Businesses, U.S. Dept. of Commerce)

- Small businesses represent 99.5 percent of Washington businesses, employing 50.7 percent of Washington employees.
- In 2018, 89.6 percent of firms exporting Washington goods, were small businesses, generating 18.7 percent of Washington's \$73.6 billion in total exports.

#### Washington Self-Employment Rates by County, 2018





# US Coastal Barrier Storm Surge Suppression System Protection for **WISCONSIN**

## **Economic Protection for Wisconsin**

The Coastal Barrier Storm Surge Suppression System is a national security and economic protection priority project located along the upper Texas coastline that has significant implications for the state of Wisconsin.

The US Army Corps of Engineers Coastal Texas Study Chief's Report recommends a coastal barrier flood gate and levee system to protect the Houston Port Ship Channel and the petrochemical infrastructure that supports critical manufacturing, retail, agriculture, business, and military supply chains in Texas and the nation.

2022 – Congress authorizes US Army Corps of Engineers projects in Water Resources Development Act legislation.

#### **Wisconsin Economic Implications**

Major hurricane storm surge severely impacting critical refinery and petrochemical infrastructure located on the upper Texas Gulf Coast would affect operation costs for Wisconsin manufacturing, agriculture, wholesale and retail, and tourism industries.

- Ninety-six (96) percent of manufactured goods are directly touched by the business of chemistry. Texas, the largest chemistry producing state, provides forty-two (42) percent of the nation's basic chemical stock used in manufacturing semiconductors to everyday products.
- Manufacturers in other states use Texas petroleum derivatives (specialty chemical feedstock) when manufacturing: food and drink packaging, appliances and electronics, hardware and construction materials, fertilizers (produce, grains, meat, dairy), and rubber products.
- > Manufactured goods make up 86 percent of Wisconsin's exports, supporting 95,000 jobs.
- Passage through the Panama Canal means Wisconsin's agricultural goods have a shorter trip from the Gulf Coast to eastern Asian ports. In 2018, Port of Houston and Houston Ship Channel marine cargo activity supported nearly \$4.8 billion of total economic value for the Wisconsin economy.

#### The Texas Gulf Coast Region Produces:

30% of the nation's total refining capacity
60% of the nation's aviation fuel
42% of the nation's specialty chemical feedstock
80% of the nation's military grade fuel

#### Wisconsin Economy:



Manufacturing \$25.1 Billion Retail \$104.8 Billion Agriculture \$13.4 Billion Tourism & Travel

Home to: Fort McCoy Army Volk Field Air National Guard Base Air Force

Truax Air National Guard Base Air Force Gen. Mitchell International Airport Air Force

#### Tourism and Travel (Source: US Travel Association)

- > The travel industry employs over 126,000 people in Wisconsin.
- In 2019, travelers to Wisconsin spent over \$13.4 billion and generated \$1.9 billion to taxes to state and local governments.

#### Retail (Source: National Retail Federation)

- The retail industry employs over 603,000 people in Wisconsin (26 percent of jobs in Wisconsin are supported by the retail industry).
- > Retail has a \$25.1 billion direct impact on the state's GDP.

Agriculture (Source: Wisconsin Department of Agriculture)

- > Agriculture provides \$104.8 billion annually to Wisconsin's state economy and 437,700 jobs.
- Wisconsin's food processing industry relies heavily on an essential multimodal transportation system to move produce out the state or country.
- > #1 Producer of cheese, cranberries, milk goats, mink pelts, corn for silage, and snap beans.

**Manufacturing** (Sources: National Association of Manufacturers, Center for Manufacturing Research; American Chemistry Council)

- In 2021, manufacturing contributed over \$68 billion to Wisconsin's economy, nearly 24 percent of GDP, with \$19.51 billion in manufactured goods exports.
- Wisconsin manufacturing relies upon multimodal transportation for shipping raw materials and supplies to factories and job sites and transporting products to market.
- Food, beverage and tobacco products, machinery, fabricated metal products, paper, and electrical equipment and appliances are top manufacturing sectors.
- > At \$3.99 billion, the chemical sector is the 4<sup>th</sup> largest manufacturing industry in the state.

### Escalating costs of doing business- disruptions of interstate commerce

Major hurricane storm surge severely impacting critical refinery and petrochemical infrastructure located on the upper Texas Gulf Coast would hit Wisconsin businesses with higher transportation and manufacturing costs.

In Wisconsin: (Source: Wisconsin Motor Carriers Association; Wisconsin Department of Transportation)

- > In Wisconsin, 77 percent of communities depend exclusively on trucks to move their goods.
- > Wisconsin consumes nearly six times more energy than it produces.
- Industry, including agriculture and food and beverage products, is the state's largest energyconsuming end-use sector, accounting for 31 percent of the state's total energy consumption. (Source: U.S. Energy Information Administration)

Impacts Small Businesses: (Sources: Statistics of U.S. Businesses, U.S. Dept. of Commerce)

- Small businesses represent 99.4 percent of Wisconsin businesses, employing 48.8 percent of Wisconsin employees.
- In 2020, 85.5 percent of firms exporting Wisconsin goods, were small businesses, generating 28.3 percent of exports by identified firms (manufacturers, wholesalers, and other).

#### Wisconsin Share of Employees Working at Small Businesses by County

