

# PGEP Container and Economic Studies

## Container Volume Projections

- Considers historic and current container volumes for large Gulf ports
- Considers trade regions, commodity demands, Panama Canal expansion
- Projects three scenarios for container throughput at Gulfport
  - o Baseline (at completion of Restoration Project) - growth projected in current markets and commodity flows
  - o Low Growth - assumes lower growth rate due to reduced consumption
  - o High Growth - assumes higher growth rate from increased consumption of goods and/or increase in Central American imports
  - o Optimistic Growth - dependent upon ability of Port of Gulfport to attract imports from Caribbean, Central America, and South America and ability to reach inland markets

## Economic Impacts

- Evaluates economic impacts associated with No-Action, Alternative 1 (Medium Efficiency), and Alternative 2 (Maximum Efficiency)
- Based on previous studies conducted for Gulfport, New York, Los Angeles, and Long Beach, and per University of Southern California Dept. of Civil Engineering MARAD Port Economic Impact Kit
- Job creation and revenue from construction
  - o Direct-On - site design and construction
  - o Indirect - Increase in need for goods and services associated with construction
  - o Induced - Re-spending of wages earned from direct and indirect activity
- Job creation and revenue from operation
  - o Direct on - port container handling
  - o Off - port warehousing, distribution and trucking, freight forwarders & ship services
  - o Other container-related transport associated with rail shipments
- Assessment of impacts related to traffic changes, visual effects, and physical footprint to:
  - o Tourism
  - o Recreational boating
  - o Commercial fishing

## Projected Annual TEU Throughput

Scenario	Up To
Baseline (No-Action)	1.0 million
Low Growth	0.9 million
High Growth (Alt 1)	1.2 million
Optimistic Growth (Alt 2)	1.7 million

# Special Studies

## Gulf Sturgeon/Essential Fish Habitat

- Benthic Sampling
  - o Determine substrate type
  - o Identify potential food source for Gulf sturgeon
- Monitoring and Tagging Gulf Sturgeon
  - o Purpose: to determine if sturgeon are crossing Port facilities and potential related impacts
  - o Consistent with other studies (NOAA)
  - o Done in conjunction with ERDC and GCRL
  - o Placement of 19 receivers
  - o Two years of data collection
  - o Goal to tag 20 fish in Pearl River and 20 fish in Pascagoula River over 2 year period

## Traffic Analysis

- Objective evaluation of road and rail impacts from proposed PGEP
- Determine existing conditions and forecast to Post-Restoration and Post-Expansion
  - o Assumes I-310 is in place as permitted and KCS Rail Improvements Project is complete

## Air Emissions Analysis

- Estimate of air contaminant emissions from expansion project construction and operation including:
  - o Emissions of criteria pollutants for which a National Ambient Air Quality Standard (NAAQS) has been established,
  - o Emissions of toxic air contaminants normally evaluated for mobile sources, and
  - o Greenhouse Gas emissions
- Considers incremental difference anticipated with the proposed expansion project, primarily related to road/rail traffic

## Environmental Justice

- Expanded community analysis considering air quality, traffic, noise, job creation/economics

## Market/Economics

- Conducted objective Container Volume Projections through 2060
- Conducted objective PGEP Economic Impact Evaluation (Jobs and Revenue Generation)



# Special Study: Air Emissions Analysis

As part of the evaluation of potential expansion project-related effects it was determined that to adequately address changes to regional air quality resulting from the proposed PGEP an in-depth evaluation needed to be conducted on emissions from mobile sources such as cars, trucks, and trains.

Following final determination of alternatives to be evaluated in the EIS, the study will be initiated. Results of the transportation study will be used for truck, rail, and employee traffic estimates. Results of the air emissions analysis will be included in the DEIS.

The study will consider emissions associated with:

- Construction of the proposed Expansion Project
  - o Dredge and dredge support equipment
  - o Land-based construction equipment
  - o Construction workers traveling to and from Port
- Operation of the expanded Port
  - o On-site operations
  - o Ship, truck, rail traffic to and from the Port
  - o Vehicles of employees working at the Port

The analysis will consider the increase in air contaminant emissions relative to the existing air emissions inventory for Harrison County and state and Federal air emissions standards.

This inventory will consider:

- Emissions for which a National Ambient Air Quality Standard (NAAQS) has been established
- Emissions of toxic air contaminants normally evaluated for mobile sources
- Greenhouse Gas emissions



## Special Study: Traffic Analysis

During the evaluation of potential expansion project-related effects it was determined that an in-depth evaluation of effects to the transportation network in Gulfport needed to be conducted. The evaluation will consider traffic associated with increased throughput resulting from the proposed Expansion Project.

Following final determination of alternatives to be evaluated in the EIS, the study will be initiated. Results of the transportation analysis will be used for determining air emissions, noise, and potential effects to local communities.

The study will consider effects from:

- Construction of the proposed Port expansion
  - Construction-related transport of goods
  - Construction employees
- Operation of the proposed Port expansion
  - Container truck traffic
  - Port employee traffic
  - Train traffic

The study will include:

- Collection of real-time traffic counts at key intersections
- Estimates of future truck and rail traffic based on container throughput forecasts
- Addition of expected traffic from Expansion Project to local Planning Commission traffic forecasts (2020, 2040, 2060)
- Evaluation of highway capacity and potential traffic delays
- Evaluation of safety based on projected traffic and generalized accident rates

