

Appendix H

Community Impact Assessment for Environmental Justice Community of Gulfport

APPENDIX H
COMMUNITY IMPACT ASSESSMENT
FOR ENVIRONMENTAL JUSTICE COMMUNITY OF GULFPORT

Prepared for:

U.S. Army Corps of Engineers, Mobile District
109 Saint Street
Mobile, Alabama 36602-3630

Prepared by:

Atkins
6504 Bridge Point Parkway, Suite 200
Austin, Texas 78730

April 2017

Contents

	Page
List of Figures	v
List of Tables	v
Acronyms and Abbreviations	vii
Executive Summary	ES-1
1.0 INTRODUCTION.....	1-1
1.1 COMMUNITY IMPACT ASSESSMENT PURPOSE.....	1-1
1.2 PROJECT BACKGROUND.....	1-3
1.2.1 Project Information.....	1-3
1.2.1 Project Purpose.....	1-3
1.2.2 Project Need	1-4
2.0 COMMUNITY IMPACT ASSESSMENT METHODOLOGY.....	2-1
2.1 DATA, INFORMATION SOURCES, AND METHODOLOGY	2-1
3.0 BASELINE CONDITIONS.....	3-1
3.1 HISTORY OF THE GULFPORT AREA.....	3-1
3.1.1 Establishment of Gulfport	3-1
3.2 COMMUNITY DESCRIPTION.....	3-2
3.2.1 Gulfport	3-2
3.3 POPULATION CHARACTERISTICS	3-2
3.3.1 Population.....	3-2
3.3.2 Race and Ethnicity.....	3-3
3.3.3 Age	3-3
3.3.4 Income	3-3
3.4 HOUSING.....	3-5
3.5 ECONOMY	3-6
3.5.1 City of Gulfport Budget	3-6
3.5.2 Employment and Business	3-6
3.6 COMMUNITY RESOURCES.....	3-7
3.6.1 Educational Facilities	3-7
3.6.2 Limited English Proficiency.....	3-9
3.6.3 Places of Worship and Cemeteries	3-9
3.6.4 Parks and Recreational Facilities.....	3-9
3.6.5 Medical Facilities	3-10
3.6.6 Emergency Services	3-11
3.6.7 Bike and Pedestrian Facilities	3-12
3.7 ZONING AND LAND USE.....	3-12
3.7.1 Zoning	3-12

	Page
4.0 ALTERNATIVE OPTIONS EVALUATED.....	4-1
4.1 NO-ACTION ALTERNATIVE.....	4-2
4.2 PROPOSED PROJECT ALTERNATIVE.....	4-3
5.0 POTENTIAL COMMUNITY IMPACTS.....	5-1
5.1 SOCIOECONOMIC RESOURCES	5-1
5.1.1 Income and Employment.....	5-1
5.1.1.1 Income and Employment Environmental Justice Viewpoint	5-2
5.1.2 Potential Mitigation Recommendations	5-2
5.2 ROAD AND RAIL TRAFFIC	5-3
5.2.1 Traffic	5-3
5.2.1.1 No-Action Alternative	5-5
5.2.1.2 Proposed Project Alternative	5-7
5.2.1.3 Traffic Environmental Justice Viewpoint.....	5-8
5.2.2 Potential Mitigation Recommendations	5-10
5.2.2.1 Traffic Mitigation – No-Action Alternative	5-10
5.2.2.2 Traffic Mitigation – Proposed Project Alternative	5-11
5.3 AIR QUALITY	5-11
5.3.1 Potential Impacts	5-12
5.3.1.1 No-Action Alternative	5-12
5.3.1.2 Proposed Project Alternative	5-15
5.3.1.3 Air Quality Environmental Justice Viewpoint	5-25
5.3.2 Potential Mitigation Recommendations	5-25
5.4 NOISE.....	5-25
5.4.1 Potential Noise Impacts.....	5-25
5.4.1.1 No-Action Alternative	5-25
5.4.1.2 Proposed Project Alternative	5-27
5.4.1.3 Summary of Potential Airborne Noise Impacts.....	5-30
5.4.1.4 Noise Environmental Justice Viewpoint	5-31
5.4.2 Potential Mitigation Recommendation.....	5-31
5.5 COMMUNITY COHESION	5-32
5.5.1 Community Cohesion Environmental Justice Viewpoint	5-33
5.5.2 Potential Mitigation Impacts	5-33
6.0 SUMMARY AND RECOMMENDATIONS.....	6-1
7.0 REFERENCES	7-1

Attachments:

- A Summary of Community Impact Assessment Interview Contact
- B Interview Questions and Summary Matrix

Figures

	Page
1 Project Location	1-5
2 Existing Port Facilities	1-6
3 Zoning Map, City of Gulfport	3-15
4 2010 Percentage Minority by Census Block Group	5-9
5 Dispersion Modeling Results, NO ₂ Annual, No-Action Alternative 2060.....	5-17
6 Dispersion Modeling Results, NO ₂ 1-hour, No-Action Alternative 2060.....	5-18
7 Dispersion Modeling Results, NO ₂ Annual, Proposed Project Alternative 2060.....	5-23
8 Dispersion Modeling Results, NO ₂ 1-hour, Proposed Project Alternative 2060.....	5-24

Tables

	Page
1 State of Mississippi , Harrison County, and City of Gulfport Population and Percent Change 1990, 2000, 2010, and Projected Population 2010–2025.....	3-3
2 Population by Race and Ethnicity (2000 and 2010)	3-4
3 Population by Age and Median Age (2000 and 2010)	3-4
4 Median Income and Poverty Status	3-5
5 Housing Trends	3-5
6 Subsidized Housing Program Trends	3-6
7 Regional Unemployment Rate	3-7
8 Gulfport School District Enrollment	3-7
9 Gulfport School District Student Race and Ethnicity, 2012–2013.....	3-8
10 Educational Attainment for the Population Age 18 and Older.....	3-8
11 Limited English Proficiency.....	3-9
12 Alternative 1B, Direct Impact Estimates.....	4-1
13 Port Footprint Following Restoration Project, including the Turning Basin.....	4-3
14 Port Footprint Following Proposed Port of Gulfport Expansion Project, including the Turning Basin (approximate acres)	4-4
15 Estimated Dredged Material Quantities (Proposed Project Alternative).....	4-6
16 Roadway Corridor Level of Service Deficiencies – 2012 Existing Conditions	5-4
17 Roadway Corridor Level of Service Values – 2020 No-Action Alternative and Proposed Project Alternative.....	5-4
18 Roadway Corridor Level of Service Values – 2060 No-Action Alternative and Proposed Project Alternative	5-6
19 Crossing Delay Before and After KCS Rail Line Improvements Implemented	5-7
20 Roadway Improvement Needs – No-Action Alternative	5-10
21 Roadway Improvement Needs – Proposed Project Alternative	5-11
22 AERMOD Modeling Results – 2020 No-Action Alternative	5-14
23 AERMOD Modeling Results – 2060 No-Action Alternative	5-15

Tables, cont'd.

	Page
24	Proposed Project Alternative – Annual Estimated Traffic Emissions – 2020 Compared with Harrison County Emissions (2011) 5-16
25	Proposed Project Alternative – Annual Estimated Traffic Emissions – 2060, Compared with Harrison County Emissions (2011) 5-19
26	AERMOD Modeling Results – 2020 Proposed Project Alternative 5-21
27	AERMOD Modeling Results – 2060 Proposed Project Alternative 5-22
28	No-Action Alternative – Distance to Noise Impact Contours 5-27
29	No-Action Alternative – Impacted Receptors 5-27
30	Proposed Project Alternative – Distance to Noise Impact Contours 5-30
31	Proposed Project Alternative – Impacted Receptors 5-30
32	Summary of Noise Impacts to Category 2 Receptors..... 5-31

Acronyms and Abbreviations

ARM2	Ambient Ratio Method 2
BMC	Biloxi Marsh Complex
BMP	Best Management Practices
BU	beneficial use
BUG	Beneficial Use Group
CBD	Central Business District
CEQ	Council on Environmental Quality
CFR	U.S. Code of Federal Regulations
CIA	Community Impact Assessment
City	City of Gulfport
CO	carbon monoxide
CO ₂ e	carbon dioxide equivalents
County	Harrison County
cy	cubic yard
DA	Department of the Army
dB	decibel
dBA	A-weighted sound level
DMMP	Dredged Material Management Plan
EIS	Environmental Impact Statement
EJ	Environmental Justice
EJ Community	low-income or minority population
EO	Executive Order
EPA	U.S. Environmental Protection Agency
FHWA	Federal Highway Administration
FNC	Gulfport Harbor Federal Navigation Channel
FRA	Federal Railway Administration
FTA	Federal Transit Administration
GIWW	Gulf Intracoastal Waterway
GRPC	Gulf Regional Planning Commission
Gulf	Gulf of Mexico
HAP	Hazardous Air Pollutants
HHS	Department of Health and Human Services
I	Interstate
KCS	Kansas City Southern
L _{dn}	day-night sound level
LDNR	Louisiana Department of Natural Resources
LEP	limited English proficiency

LOS	level of service
LRP	Long-range Plan
mcy	million cubic yards
MDMR	Mississippi Department of Marine Resources
mph	miles per hour
MSA	Metropolitan Statistical Area
msl	mean seal level
MSPA	Mississippi State Port Authority
MT	metric ton
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NO ₂	nitrogen dioxide
NO _x	nitrogen oxide
O ₃	ozone
ODMDS	Ocean Dredged Material Disposal Site
OSHA	Occupational Safety and Health Administration
PGEP	Port of Gulfport Expansion Project
PM ₁₀	particulate matter of 10 micrometers or less
PM _{2.5}	particle diameters of 2.5 micrometers or less
Port	Port of Gulfport, Mississippi
RMG	rail-mounted gantry (crane)
ROI	region of influence
SO ₂	sulfur dioxide
SSM	Supplemental Safety Measure
TEU	Twenty-foot Equivalent Unit
TWLTL	two-way left-turn lane
µg/m ³	micrograms per cubic meter
US	U.S. Highway
USACE	U.S. Army Corps of Engineers
USCG	U.S. Coast Guard
VOCs	volatile organic compound

Executive Summary

INTRODUCTION

The current proposal being evaluated for a Department of the Army (DA) permit is expansion of the Port of Gulfport (Port) via modifications to the West Pier, East Pier, North Harbor, and Gulfport Turning Basin, and includes construction of a breakwater on the eastern side of the Gulfport Harbor Federal Navigation Channel (FNC). This proposed action is referred to as the Port of Gulfport Expansion Project (PGEP).

As a result of the alternatives development, screening, and further refinement, there are two alternatives to be carried forward for evaluation in the Environmental Impact Statement (EIS): the No-Action Alternative and the Proposed Project Alternative. The Community Impact Assessment (CIA) was based on an earlier iteration of the proposed Project and presented four Project alternatives, the No-Action Alternative and three Action Alternatives. The Proposed Project Alternative evaluated in this document was developed from the previous alternatives (see Section 2.0 of the EIS) that were presented to the community leaders during the development of the CIA. The comments and concerns of the community and their impressions of the previous alternatives would apply to the No-Action Alternative and the Proposed Project Alternative. Therefore, the findings of the CIA are consistent with the two alternatives that are being evaluated in this document.

PURPOSE AND NEED

The purpose of the proposed PGEP is to contribute to the long-term economic development of the State of Mississippi and the Gulf Coast region by expanding the Port footprint and facilities to increase the Twenty-foot Equivalent Unit (TEU) throughput, provide additional employment opportunities, and to increase the economic benefits produced by the Port. An expanded footprint would allow the Port to increase container throughput and add direct, indirect, and induced jobs within the region by attracting new tenants to expand and grow.

The Port currently has limited capability to grow in size. To provide long-term growth for the Port, the Port needs additional acreage to attract new tenants or concessionaires that would utilize a semi-automated container terminal. Therefore, additional backlands and wharf space are necessary for increasing Port capacity to meet expected needs (volume projections of 1.0 million TEUs by 2040 and 1.7 million TEUs annually by 2060 (Section 1.4 and Appendix B of the EIS). Increased Port capacity would enable the Port to contribute to future employment opportunities and economic growth in Gulfport and its surrounding communities (see Appendix C of the EIS).

DESCRIPTION OF PROPOSED ACTION

The proposed action evaluated in this EIS is to expand the facilities at the Port to provide appropriate infrastructure for handling 1.7 million TEUs annually by 2060 and includes the following main features:

- Expansion of the West Pier
- Expansion of the East Pier
- Fill in the North Harbor
- Expansion of the federally authorized Gulfport Turning Basin (at 36-foot depth)
- Construction of an eastern breakwater
- Placement of dredged material
- Site configuration and automation

Such an effort involves the dredging and filling of estuarine mud and sand bottom in Mississippi Sound; construction of wharfs, bulkheads, terminal facilities, container storage areas, and intermodal container transfer facilities; placement of new-work and maintenance dredged material; and construction of a breakwater. The Proposed Project Alternative assumes that the Restoration Project has been completed. The proposed PGEP features would be added to the post-Restoration Project footprint, with a few exceptions.

The proposed expansion features (not including the post-Restoration Project footprint) would be elevated up to +25 feet mean sea level (msl) to provide protection against future tropical storm surge events. The post-Restoration Project footprint would be elevated up to +14 feet msl, with the proposed expansion footprint elevated up to +25 feet msl. Fill material would be obtained from permitted sites along the Tennessee-Tombigbee River and transported into the Port via barge for construction. A conceptual schedule was developed by the Mississippi State Port Authority (MSPA), and based on that schedule, it is assumed that construction would occur in 2018.

POTENTIAL COMMUNITY IMPACTS

This CIA evaluates how the PGEP would affect the community and its quality of life and specifically the environmental justice (EJ) communities within the area. The CIA evaluates the overall potential effects of the Project on the people, institutions, community, organizations, and the social and economic setting of Gulfport, Mississippi with regard to the area's low-income and minority populations. It also addresses important issues, such as income and employment, traffic, air quality, noise, and community cohesion, all from an EJ perspective.

Socioeconomics Resources

New employment and income opportunities would be created by the PGEP. Temporary employment opportunities would be created during construction of the PGEP. Permanent jobs would also be created during the operational phase of the Port expansion resulting from the increased container capacity. Wage earnings are also anticipated to increase, benefiting personal income levels throughout the greater Gulfport metropolitan area and surrounding areas. Additional public finances would be generated by the taxes associated with the Port expansion and from the economic benefits of the Project. Overall, the Proposed

Project Alternative would have a benefit on all economic sectors and would have greater overall benefits on labor force, employment, and industrial sectors.

Roadway and Rail Traffic

Traffic is currently an issue in Gulfport's EJ communities. Background and unrelated Port traffic have contributed to the current traffic conditions in the City of Gulfport (City). The CIA presents information from the traffic analysis conducted for the PGEP (see Appendix I of the EIS). Transportation impacts for the No-Action Alternative were assessed under the most recent official traffic forecasts, 2012 conditions, and under forecast conditions in the years 2020, 2040, and 2060. This baseline represents the level of growth expected to occur if the Port remains as approved by current permits and no additional work under the jurisdiction of the U.S. Army Corps of Engineers (USACE) is performed. Travel demand model forecasts were used to determine future traffic levels in 2020, 2040, and 2060 under the Proposed Project Alternative.

Results of the traffic analysis for the increase in freight truck and freight rail traffic, as well as passenger car and service truck traffic studied 40.2 miles of roadways around the Port and found 0.3 mile would be deficient. Other than the eastbound approach of 28th Street at Canal Street, the analysis indicates that neither the Proposed Project Alternative nor background traffic growth through 2020 (No-Action Alternative) would cause other roadway segments in the study area to experience a level of service (LOS) worse than D. Since virtually no Port traffic uses this road segment, the capacity deficiency is likely due to background traffic growth not associated with the Proposed Project Alternative.

Overall, the majority of impacts seen in the vicinity of the Port based on the traffic analysis would be caused by background traffic rather than Port-related traffic. Additionally, it should be noted that traffic forecasting and modeling included only those roadway improvements that have been approved and funded. Thus, it is likely that changes in roadway planning over time would alleviate many of the LOS issues identified.

While additional train trips would be generated by the Port, the analysis projects the duration of delays and frequency of delays caused by the additional train trips generated by the Proposed Project Alternative should fall within the same thresholds as the No-Action Alternative. Therefore, impacts associated with changes in rail transport activities at the Port are expected to be the same as described for the No-Action Alternative. The slight changes in throughput would not substantially change expected delays at rail road crossings.

Air Quality

Air quality impacts associated with construction of the Proposed Project Alternative would include emissions from marine vessels and land-based equipment. As discussed in Section 3.5 of the EIS, Harrison County (County) is currently designated as attainment or unclassifiable with the National Ambient Air Quality Standards (NAAQS) for all regulated pollutants. The estimated air contaminant emissions, except ozone (O₃), are compared with the 2011 emissions inventory for Harrison County. Minor, short-term and localized impacts on air quality caused by temporary increases in air pollution are anticipated from

equipment associated with construction and the combustion of fuel for dredging and support vessel activities. Due to the limited duration of the expansion activities, no long-term impacts would be associated with construction and are therefore not expected to adversely impact the long-term air quality in the area.

Under the Proposed Project Alternative, an increase in throughput and ancillary operations would result in an increase in air contaminant emissions due to increased truck, rail, employee vehicle, and ship traffic resulting from both the growth of existing business and new business at the Port. However, criteria pollutant and Hazardous Air Pollutants (HAP) emissions from the Proposed Project Alternative would equal very small percentages of the total criteria pollutants and HAPs emitted in the study area. Impacts of criteria pollutants and HAPs from the operational inventory of the Proposed Project Alternative would be minor. Estimates for the projected near-road and near-rail impacts on ambient air quality from line haul locomotives and container trucks operating off-property from the Port of Gulfport north to Creosote Road are provided in Section 4.5 of the EIS. Dispersion modeling results of these sources estimated carbon monoxide (CO), nitrogen dioxide (NO₂), particulate matter of 10 micrometers or less (PM₁₀), and particle diameters of 2.5 micrometers or less (PM_{2.5}) concentrations would not exceed the NAAQS. Impacts to localized air quality from the Proposed Project Alternative would be minor. Additionally, annual maintenance dredging and disposal activities would result in minor impacts on air quality from the combustion of fossil fuels. The air quality analysis conducted for the PGEP, including the dispersion modeling results, are discussed in detail in Appendix P of the EIS.

Noise

The implementation of the PGEP would result in short- and long-term noise impacts in the vicinity of the Port. Construction of the proposed Project would require the use of heavy equipment. As noted in Section 3.6 of the EIS, the noise-sensitive receptors nearest to the Port include a recreational park located 2,100 feet from the site, a residential area 2,300 feet from the site, a school 2,300 feet from the site, and a church located approximately 3,000 feet from the site. Expansion activities at the East Pier, West Pier, and proposed breakwater would be a greater distance from noise-sensitive receptors; therefore Project-related construction noise at sensitive receptor sites would be lower when work is underway in those areas. Considering the distance between Port expansion or dredging operations and the noise-sensitive sites, the short-term noise increase associated with the Proposed Project Alternative would be anticipated to be insignificant.

Additionally, projected changes in traffic volume resulting from the implementation of the Proposed Project Alternative would result in very small increases in traffic volumes within the regions of influence (ROI). The increase would range from 0.5 percent on 25th Street to 10.5 percent on 30th Avenue. The change in noise resulting from this small increase in traffic when compared to the No-Action Alternative would not be perceptible to the human ear.

A study of rail traffic noise concluded impacts throughout the study area affecting EJ and non-EJ communities alike; however, the impacts do not disproportionately impact EJ communities. Federally mandated best management practices (BMP) and mitigation measures would reduce any potential impacts.

Environmental Justice

To address Presidential Executive Order (EO) 13166, *Improving Access to Services for Persons with Limited English Proficiency* and EO 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, this CIA focuses on population characteristics of the City, such as, race, ethnicity, and age, from an EJ perspective.

The CIA found no disproportionate impacts on minority, low-income, or limited English proficiency (LEP) populations from the PGEP, and found that the Proposed Project Alternative is the more beneficial alternative from an EJ perspective through provision of increased jobs, revenue, and other associated economic benefits. Both the No-Action Alternative and the Proposed Project Alternative would result in minor or no impacts to air quality, community cohesion or other socioeconomic indicators. In addition, both the No-Action Alternative and the Proposed Project Alternative would generate minor impacts to traffic and noise in census tract block groups with a higher minority percentage than the city population. However, there would be no disproportionate impacts to EJ communities. The minor impacts to traffic and noise would occur in EJ communities and non-EJ communities alike. Additionally, potential impacts to traffic under 2060 forecast scenarios for the Proposed Project Alternative would be essentially the same as described for the No-Action Alternative. Overall, the majority of impacts experienced in the vicinity of the Port would be caused by background traffic rather than Port-related traffic. Also, the potential minor impacts to traffic for the Proposed Project Alternative would not be felt immediately due to the expected gradual increase in TEU throughput. As a result, there would be sufficient time to address the potential issues associated with the No-Action and Proposed Project Alternatives; these issues would therefore be mitigated before being considered impacts. The CIA also presents mitigation measures that would ensure that the beneficial impacts from the PGEP, increased jobs and economic growth, are maximized.

Community Cohesion

Community cohesion is generally characterized by interaction amongst neighbors and friends, participation in community activities and organizations, and involvement in local government and politics. In assessing impacts to community cohesion in the City, a qualitative methodology was utilized, which was based on field observation within the community, discussions with community leaders, and review of Project comments from past public involvement activities (see Section 2.0). The community cohesion analysis found the PGEP would change the face of the Port but not the sense of community. The City's EJ and non-EJ communities would be able to continue as they have and would not be adversely or disproportionately affected by the PGEP.

Recommended potential mitigation measures to address community involvement based on this CIA would be to develop a plan of continuous outreach between the Port and community leaders. This measure would work with community leaders to allow them to voice their needs, beyond that of flexible work scheduling and promoting entrepreneurship, and identify mechanisms through which the Port and community could work together to enhance the cohesion within the community. Another mitigation measure to address community involvement would be implemented by a beautification program around the Port. Through input from local residents and community leaders, the Port could undertake actions that would greatly aid in community cohesion.

Summary

The alternatives analysis presented in Sections 2.0 and 4.0 of the EIS provides information necessary to identify the environmentally preferable alternative, i.e., the one with the least overall negative impacts to the environment. The Proposed Project Alternative was evaluated in the EIS and compared to the No-Action Alternative. The results of this CIA indicate that the Proposed Project Alternative is the more beneficial alternative when compared to the No-Action Alternative.

Based on the CIA analysis, any potential negative impacts associated with the Proposed Project Alternative would either be temporary or potentially mitigated. Also, no disproportionate impacts on minority, low-income, or LEP populations would be anticipated. Information presented in this CIA, in conjunction with field observations made during the CIA process, demonstrate there would be no appreciable difference between the potential impacts to EJ communities and the general communities. Finally, long-term beneficial impacts such as job creation and the associated boost to the local economy would result from the Proposed Project Alternative.

1.0 INTRODUCTION

1.1 COMMUNITY IMPACT ASSESSMENT PURPOSE

The purpose of this Community Impact Assessment (CIA) is to evaluate how the Port of Gulfport Expansion Project (PGEP) at the Port of Gulfport (Port), Mississippi, would affect the community and its quality of life and specifically the environmental justice (EJ) communities within the area. The CIA evaluates the overall potential effects of the Project on the people, institutions, community, organizations, and the social and economic setting of Gulfport, Mississippi with regard to the area's low-income and minority populations.

EJ was first presented in Presidential Executive Order (EO) 12898, entitled *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*. It required that each Federal agency "...shall make achieving EJ part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations..." The three fundamental principles of EJ are as follows:

- To avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects on minority populations and low-income populations.
- To ensure the full and fair participation by all potentially affected communities in the transportation decision-making process.
- To prevent the denial of, reduction in, or substantial delay in the receipt of benefits by minority and low-income populations.

EO 12898 mandates that Federal agencies identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of the programs on minority and low-income populations as defined by the following:

- Low income means a household income at or below the Department of Health and Human Services (HHS) poverty guideline. The 2012 national poverty level is \$23,050 for a family of four or four persons in a household (HHS, 2013).
- Low-income population means any readily identifiable group of low-income persons who live in geographic proximity, and, if circumstances warrant, geographically dispersed/transient persons (such as migrant workers or Native Americans) who would be similarly affected by a proposed Federal Highway Administration (FHWA) program, policy, or activity. Unlike the Council on Environmental Quality (CEQ) guidance on minority population, no EJ order or guidance document contains a quantitative definition of how many low-income individuals constitute a low-income population. The FHWA defines low income as "a person whose household income level is at or below the HHS poverty guidelines."

- Minority means a person who is:
 - Black (having origins from any of the black racial groups of Africa),
 - Hispanic (of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race),
 - Asian-American (having origins from any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands), and
 - American Indian and Alaskan Native (having origins from any of the original people of North America and who maintains cultural identification through tribal affiliation or community recognition).
- Minority population means any readily identifiable group of minority persons who live in geographic proximity, and if circumstances warrant, geographically dispersed/transient persons (such as migrant workers or Native Americans) who would be similarly affected by a proposed FHWA program, policy, or activity. Minority populations were identified based on the Federal CEQ guidance document *Environmental Justice: Guidance Under the National Environmental Policy Act* (NEPA). Based on this guidance, minority populations should be identified where either: (a) the minority population of the affected area exceeds 50 percent, or (b) the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis.
- Disproportionately high and adverse effect on minority and low-income populations means an adverse effect that is predominantly borne by a minority population and/or a low-income population or would be suffered by the minority population and/or low-income population and is appreciably more severe or greater in magnitude than the adverse effect that would be suffered by the non-minority population and/or nonlow-income population.

Additionally, EO 13166, *Improving Access to Services for Persons with Limited English Proficiency*, requires Federal agencies to examine the services they provide and identify any need for services to those with limited English proficiency (LEP). The EO requires Federal agencies to ensure that recipients of Federal financial assistance provide meaningful access to their LEP applicants and beneficiaries. Failure to ensure that LEP persons can effectively participate in or benefit from federally assisted programs and activities may violate the prohibition under Title VI of the Civil Rights Act of 1987, 42 USC 2000d and Title VI regulations against national origin discrimination.

Persons that are protected by the two EOs are the focus of this CIA. Essentially, the CIA largely considers the direct impacts from the proposed Project including construction related “temporary” impacts as well as indirect impacts, those impacts which the Project may induce. The CIA will also evaluate whether the PGEP would have a disproportionately high and adverse effect on minority and low-income populations when compared to the community as a whole. A disproportionate adverse effect means that an adverse effect would be predominantly borne by a minority population and/or a low-income population or would be suffered by the minority population and/or low-income population and is appreciably more severe or greater in magnitude than the adverse effect that would be suffered by the nonminority population and/or nonlow-income population.

1.2 PROJECT BACKGROUND

1.2.1 Project Information

The current proposal being evaluated for a Department of the Army (DA) permit is expansion of the Port via modifications to the West Pier, East Pier, North Harbor, and Turning Basin, and includes construction of a breakwater on the eastern side of the Gulfport Harbor Federal Navigation Channel (FNC). The Port is located south of the City of Gulfport (City) in Harrison County (County), Mississippi, within city limits and is approximately 7 miles south of Interstate (I)-10, approximately 80 miles west of Mobile, Alabama, and 80 miles east of New Orleans, Louisiana (Figure 1). The Port encompasses approximately 369 acres and is located on the north shore of the Mississippi Sound within 5 miles of the Gulf Intracoastal Waterway (GIWW) and 10 miles from the Gulf of Mexico (Gulf) and Gulf Island National Seashore.

The proposed action evaluated in this Environmental Impact Statement (EIS) is to expand the facilities at the Port (see Figure 2 for existing Port facilities) to provide appropriate infrastructure for handling 1.7 million Twenty-foot Equivalent Units (TEUs) annually by 2060. Such an effort involves the dredging and filling of estuarine mud and sand bottom in the Mississippi Sound; construction of wharfs, bulkheads, terminal facilities, container storage areas, and intermodal container transfer facilities; placement of new-work and maintenance dredged material; and construction of a breakwater. The proposed expanded Port facility would be elevated to up to +25 feet mean sea level (msl) to provide protection against future tropical storm surge events. A conceptual schedule was developed by the Mississippi State Port Authority (MSPA), and based on that schedule, it is assumed that construction would occur in 2018.

As a result of the alternatives development, screening, and further refinement, there are two alternatives to be carried forward for evaluation in the EIS: the No-Action Alternative and the Proposed Project Alternative. The CIA was based on an earlier iteration of the proposed Project and presented four Project alternatives, the No-Action Alternative and three Action Alternatives. The Proposed Project Alternative evaluated in this document was developed from the previous alternatives (see Section 2.0 of the EIS) that were presented to the community leaders during the development of the CIA. The comments and concerns of the community and their impressions of the previous alternatives would apply to the No-Action Alternative and the Proposed Project Alternative. Therefore, the findings of the CIA are consistent with the two alternatives that are being evaluated in this document.

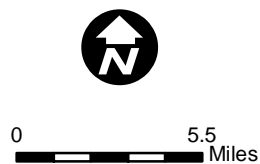
1.2.1 Project Purpose

The purpose of the proposed PGEP is to contribute to the long-term economic development of the State of Mississippi and the Gulf Coast region by expanding the Port footprint and facilities to increase the TEU throughput, provide additional employment opportunities, and to increase the economic benefits produced by the Port. An expanded footprint would allow the Port to increase container throughput and add direct, indirect, and induced jobs within the region by attracting new tenants and allowing existing tenants to expand and grow.

1.2.2 Project Need

The Port currently has limited capability to grow in size. The Restoration Project will raise the elevation of the Port to up to +14 feet msl and reduce the potential impacts associated with storm events. Raising the Port will benefit existing tenants and may attract future tenants, as the increase will reduce the need for tenants to remove equipment and goods from the Port facility in the event of a storm. The Port would have an estimated effective capacity of between 250,000 and 400,000 TEUs per year immediately following completion of the Restoration Project, with the potential to increase to up to 1.0 million TEUs annually by 2060.

To provide long-term growth for the Port, the Port requires additional acreage to attract new tenants or concessionaires that would utilize a semi-automated container terminal. The ability to recruit tenants and concessionaires is constrained by the Port's capacity. Unencumbered land available on the restored Port will be very limited and will be utilized, along with automation and improved intermodal infrastructure, to realize the effective capacity of up to 1.0 million TEUs annually by 2060. Therefore, additional backlands and wharf space are necessary for increasing Port capacity to meet expected needs (volume projections of 1.0 million TEUs annually by 2040 and 1.7 million TEUs annually by 2060 under the optimistic growth scenario; Section 1.4 and Appendix B of the EIS). Increased Port capacity would enable the Port to contribute to future employment opportunities and economic growth in Gulfport and its surrounding communities (Appendix C of the EIS).



- GIWW
- FNC Sound Channel
- FNC Bar Channel
- County Line
- Highway

Esri, i-cubed, USDA, USGS, AEX, GeoEye, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community, World Imagery, February 2012. 1:316,800; generated by Ty Summerville; using ArcMap. <http://services.arcgis.com/ArcGIS/rest/services/World_Imagery/MapServer> (23 February 2012).

Figure 1
Port of Gulfport Expansion Project
Project Location

Prepared By: 25913	Scale: 1" = 30,000 feet
Job No.: 100018536	Date: Oct 31, 2013

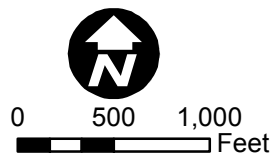


Figure 2

**Port of Gulfport Expansion Project
Existing Port Facilities**

Prepared By: 25913

Scale: 1" = 1000 feet

Job No.: 100018536

Date: July 22, 2015

2.0 COMMUNITY IMPACT ASSESSMENT METHODOLOGY

While the Project is being advanced by the U.S. Army Corps of Engineers (USACE), the FHWA's *Community Impact Assessment: A Quick Reference Guide* (September 1996) was used to help develop the study methodology and outline, as the USACE does not have such guidance available. Consistent with the FHWA guidance, a community profile was developed and is used as a basis to assess potential community impacts and then impacts to the low-income or minority population (EJ community). It should be noted that while the overall potential impacts being considered in the EIS extend into Hancock, Harrison, and Jackson counties, the study area for this CIA is the City and County. The Port is an integral part of that community and the majority of the potential impacts would be more likely to occur in the City. Harrison County is included because the City is an integral part of the County.

2.1 DATA, INFORMATION SOURCES, AND METHODOLOGY

The resources used to complete the CIA are included in Section 7. The following data sources provided useful information in understanding existing conditions and likely trends:

- U.S. Census Bureau data, American Community Survey, Mississippi Institutions of Higher Learning, Center for Policy Research and Planning population projections
- Interviews with community leaders, non-profits and a business owner
- Mississippi Development Authority
- Field visits on May 20–22, 2013; February 19 and 20, 2014
- Secondary sources as identified in Section 7 of this report

The selected interviewees were deemed likely to have extensive knowledge of their respective areas and capable of providing critical information on local concerns, community interests, opinions, and issues of targeted groups. Interviews were conducted with the municipal staff and field views were conducted within the study area to gain an understanding of existing conditions and how the Project could affect the community. Attachment A documents the entities contacted for interview and provides a summary of the contact efforts or the interview dates. Attachment B documents the questions asked and provides summaries of information received.

Background information and data obtained during the interviews and field visits were then used to support a qualitative impact assessment on the community with a specific focus on the minority and low-income populations within the City and County.

This page intentionally left blank.

3.0 BASELINE CONDITIONS

3.1 HISTORY OF THE GULFPORT AREA

3.1.1 Establishment of Gulfport

The Mississippi coast saw little direct action during the American Civil War. Ship Island was seized by the Union Navy in September 1861 after it was abandoned by Confederate forces. Construction of a masonry fort, first begun by the USACE in 1859 as part of the United States Third System of Coastal Fortifications, continued through the war, but was not fully completed until 1871 (Irion, 1989; Mississippi Department of Marine Resources [MDMR], 2005). Ship Island, with its naturally deep harbor and central location on the northern Gulf, served as a staging area for Union forces in their assaults on New Orleans in 1862 and Mobile in 1864. The island and fort also functioned as a prison for captured Confederate soldiers and a detention center for Confederate sympathizers from New Orleans (MDMR, 2005).

The establishment of Gulfport was the result of the region's vast timber resources and the extension of rail connections. In the 1880s, William H. Hardy purchased the Gulf and Ship Island Railroad. His goal was to provide a link between the pine forests of the interior and the coast (Mistovich, 1987). As neither Biloxi nor Pascagoula could accommodate deep-draft vessels, Hardy intended to establish a new city that could take advantage of the natural harbor at Ship Island. Land for the new city was purchased and divided into lots, but Hardy's enterprise went bankrupt in 1892 with the railroad still 20 miles from the coast.

The railroad was purchased by Joseph T. Jones in 1895 and within 5 years it had reached Gulfport, established just 2 years prior. Completion of the line led to an explosion in the timber industry. Prior to completion, 18 sawmills were in operation along the Gulf and Ship Island's tracks, but by 1902, that number grew to 60 mills, producing some 300,000,000 board feet per year. Jones's interests also lay in developing port facilities for the city. In addition to lobbying the Federal government to dredge a navigation channel and anchorage basin, Jones and his Bradford Construction Company initiated the construction of harbor facilities. As the city lay along a stretch of exposed coastline, Jones constructed a protected harbor by building two long piers into Mississippi Sound to bracket the intended anchorage area (Mistovich, 1987). The harbor was protected on its seaward side by a timber-and-stone breakwater.

Gulfport quickly became the largest lumber exporting city in the nation. Other cargoes leaving its docks included naval stores, cotton, and cottonseed. Depletion of the pine forests by the end of the second decade of the twentieth century led to a decline in timber exports. However, a new product quickly replaced lumber in the Port's revenue stream. In 1919, the first banana boat arrived in Gulfport. Handling facilities for the fruit were soon constructed by Standard Fruit and United Brands. By mid-century, Gulfport had become one of the leading banana importers in the nation.

Development of the city and harbor were integrally tied to water depths through Mississippi Sound. Shallow waters in the Sound meant that large vessels had to stop at the Ship Island anchorage and lighter goods to

shore. Timber was either barged to Ship Island to waiting ships or towed there via rafts. Shallow water over the bar at the entrance to the anchorage also limited the size of vessels that could call on the Port. Lobbying on behalf of the city and its vested commercial interests spurred Congress to authorize improvements for the harbor. The Rivers and Harbors Act of 1899 authorized the dredging of a channel 19 feet deep and 300 feet wide from the newly created Port to Ship Island. The act also provided for the creation of an anchorage 2,640 by 1,320 feet along the Gulfport shoreline (Mistovich, 1987). A separate provision authorized a 26-foot-deep channel through the Ship Island Bar.

However, shoaling was a constant problem in Mississippi Sound. A USACE report noted in 1919 that the FNC shoaled at a rate of 2.6 million cubic yards (mcy) per year. As a consequence, the Gulfport channel had to undergo periodic maintenance dredging to maintain the authorized depth. In an effort to reduce maintenance costs as a result of shoaling, the channel across the bay was reduced in width from 300 to 220 feet and the channel over the bar was relocated 5,000 feet west, providing a shorter and more direct route into the harbor. To accommodate ever-increasing ship sizes, the River and Harbors Act of 1930 increased the channel depths to 27 feet from the outer bar to Ship Island and 26 feet deep through Mississippi Sound to Gulfport. This was further increased to 32 feet over the bar and 30 feet in the Gulfport channel and harbor in 1948 (Mistovich, 1987).

3.2 COMMUNITY DESCRIPTION

3.2.1 Gulfport

The City has been described by study interviewees as a small town, without much money, but with people that have pride in their community. For example, Hurricane Katrina in 2005 proved that the people of Gulfport are willing to help each other regardless of their race or financial means. The interviewees further stressed that Gulfport was a community that really lacks lower-skilled employment opportunities and being able to provide opportunities for their under skilled workers. Although they expressed pride in Gulfport, there is recognition that the City is somewhat of a struggling community.

3.3 POPULATION CHARACTERISTICS

3.3.1 Population

Table 1 presents population trends for the County and the City. According to the U.S. Census, the County and the City grew between 1990 and 2000. Both the City and the County had a population decrease between 2000 and 2010, likely a result of Hurricane Katrina (2005). The Mississippi Institute of Higher Learning predicts growth for Harrison and its surrounding counties (Table 1).

Table 1
State of Mississippi, Harrison County, and City of Gulfport Population
and Percent Change 1990, 2000, 2010, and Projected Population 2010–2025

Place	Population				Percent Change		
	1990	2000	2010	2025	1990– 2000	2000– 2010	2010– 2025
Mississippi	2,575,475	2,884,658	2,967,297	3,227,364	+12.0	+2.9	+8.8
Harrison County	165,365	189,601	187,105	219,047	+14.7	–1.3	+17.1
City of Gulfport	40,775	71,127	67,793	N/A	+74.4	–4.7	N/A

Source: U.S. Census Bureau (2013a, 2013b, 2013c); Mississippi Institutions of Higher Learning, Center for Policy Research and Planning (2012).

N/A = Not Applicable

3.3.2 Race and Ethnicity

Table 2 provides a summary of the major racial and ethnic groups in the County and the City. As shown in the table, the County and City are predominately white. Both the County and the City experienced a population decline between 2000 and 2010. As of 2010, both the County and the City have a significantly higher percentage of Hispanics or Latinos than reported in 2000. In addition, the County's and City's Hispanic or Latino, Two or More Races, Some Other races, and Native Hawaiian or Pacific Islander populations comprised the same percentage of population in 2000 and 2010.

3.3.3 Age

As shown in Table 3, between 2000 and 2010, the age of the population in the County and the City had little variation. Both the County and the City had nearly a third of each of their populations under 19 years of age and a third between 20–44 years of age; the final third of each population was distributed between the 45–64 and over 65 age groups. Between 2000 and 2010, the percentage of those aged 45–64 in the County increased by over 17.4 percent. The median age of the City's population was slightly lower than that of the County.

3.3.4 Income

Data on median household income within the County and the City are shown in Table 4. The median household income for both areas increased between 2000 and 2010. In 2012, the median household income for the County and City were \$44,550 and \$39,246 respectively.

Both the County and the City have a notable percentage of their populations comprised of low-income individuals. A comparison of 2000 and 2012 data reveals that the percentage living in poverty increased during that time period for both the County and the City. In 2012, nearly 18 percent of the County and 21.9 percent of the City had individuals living below the poverty level.

Table 2
Population by Race and Ethnicity (2000 and 2010)

Race/Ethnicity	Harrison County			Gulfport		
	2000 (% of total)	2010 (% of total)	Percent Change	2000 (% of total)	2010 (% of total)	Percent Change
Total Population	189,601	187,105	-1.3	71,127	67,793	-4.7
White Alone	138,692 (73.1)	125,741 (67.2)	-9.3	44,229 (62.2)	37,038 (54.6)	-16.3
Black/African American Alone	39,984 (21.1)	40,975 (21.9)	+2.5	23,848 (33.5)	24,266 (35.8)	+1.8
American Indian or Alaskan Native Alone	861 (0.5)	719 (0.4)	-16.5	305 (0.4)	223 (0.3)	-26.9
Asian Alone	4,934 (2.6)	5,258 (2.8)	+6.6	891 (1.3)	1,134 (1.7)	+27.3
Native Hawaiian or Pacific Islander Alone	163 (0.1)	227 (0.1)	+39.3	65 (0.1)	87 (0.1)	+33.8
Some Other Race	1,697 (0.9)	214 (0.1)	-87.4	622 (0.9)	69 (0.1)	-88.9
Two or More Races	3,270 (1.6)	4,034 (2.2)	+23.4	1,167 (1.6)	1,457 (2.1)	+24.9
Hispanic or Latino*	4,910 (2.6)	9,937 (5.3)	+102.4	1,814 (2.6)	3,519 (5.2)	+94.0

Source: U.S. Census Bureau (2000, 2010).

*All Races (Hispanic or Latino ethnicity can be of one or more race).

Table 3
Population by Age and Median Age (2000 and 2010)

Age Group	Harrison County			City of Gulfport		
	2000 (% of total)	2010 (% of total)	Percent Change	2000 (% of total)	2010 (% of total)	Percent Change
Total Population	189,601	187,105	-1.3	71,127	67,793	-4.7
≤19 Years	55,929 (29.5)	51,673 (27.6)	-8.2	20,749 (29.2)	18,915 (27.9)	-9.7
20–44 Years	72,384 (38.2)	64,733 (34.6)	-11.8	27,293 (38.4)	24,170 (35.7)	-12.9
45–64 Years	40,286 (21.2)	48,747 (26.1)	+17.4	14,978 (21.1)	16,871 (24.9)	+11.2
≥65 Years	21,002 (11.1)	21,952 (11.7)	+4.3	8,107 (11.4)	7,837 (11.6)	-3.4
Median Age	33.9	35.3	-	33.6	34.3	-

Source: U.S. Census Bureau (2000, 2010).

Table 4
Median Income and Poverty Status

Area	Poverty Status			
	Median Household Income		Individuals Living in Poverty (% of total)*	Individuals Income in Past 12 Months Below Poverty Level (% of total)*
	2000	2012	2000	2012
Harrison County	\$35,624	\$44,550	26,597 (14.6)	33,162 (18.2)
City of Gulfport	\$32,779	\$39,246	12,023 (17.7)	14,442 (21.9)

Source: U.S. Census Bureau (2000, 2012).

*Percent based on sample population.

3.4 HOUSING

A majority of the housing in the City consists of single-family homes. However, there are multi-family units scattered throughout the City.

Table 5 provides a summary of more recent housing trends in numbers, ownership, and value for the County and the City. There were several new housing units identified between 2000 and 2010 in the County and the City. Overall, the percentage of owner-occupied housing units is similar and relatively high among the County and City. Finally based on field visits in 2013 and 2014 to the City, it appears that a high percentage of the residential properties that are vacant or abandoned have fallen in disrepair and lack structural integrity.

Table 5
Housing Trends

Area	Total Housing Units			Occupied Housing Units			Median Value Owner-occupied Units	
	2000	2012	% Change	2000	2012	% Change	2000	2012
Harrison County	76,636	85,048	+11.0	71,538 (89.9)	71,418 (84.0)	-0.2	\$87,200	\$143,900
City of Gulfport	29,559	31,556	+6.7	26,943 (91.1)	26,094 (82.7)	-3.2	\$80,300	\$126,700

Source: U.S. Census Bureau (2000, 2010).

Table 6 provides a summary of more recent public subsidized housing trends in numbers and occupancy for the County and the City. Subsidized housing units increased between 2009 and 2012 for both the County and the City. Occupancy and total people in subsidized housing increased significantly between 2009 and 2012. Percent occupancy in subsidized housing for the County increased from 79 to 91 percent. Percent occupancy in subsidized housing for the City increased from 81 to 91 percent. Total people in subsidized housing increased 24.2 and 16.3 for the County and the City, respectively.

Table 6
Subsidized Housing Program Trends

Area	Total Subsidized Housing Units			Percent Occupied		Total People in Subsidized Housing		
	2009	2012	% Change	2009	2012	2009	2012	% Change
Harrison County	4,452	4,479	0.6	79	91	7,966	10,503	24.2
City of Gulfport	1,735	1,864	7.4	81	91	3,506	4,079	16.3

Source: HUD (2012).

3.5 ECONOMY

3.5.1 City of Gulfport Budget

The City had a 2013 General Fund adopted budget of \$54,200,647. Operating revenues were \$53,323,343. Thirty-six percent of the revenue collected in the City is obtained from sales tax, property taxes (33 percent), licenses/permits/franchise fees (10 percent), and gaming (6 percent). Nearly a third of the budget is associated with the police department, including personnel, material and supplies, other services and charges, and capital outlay. The second highest expenditure is fire department (22 percent), the third is public works and engineering (17 percent), fourth is general government (14 percent), fifth is culture and recreation (10 percent), and sixth is urban and economic development (4 percent). There was a budget shortfall of \$877,304, which was covered with cash reserves of \$2,674,996, leaving \$1,526,246 for the City (City of Gulfport, 2013a).

3.5.2 Employment and Business

Of the 15 top employers listed for the County, seven are located in Gulfport. Of these seven, the leading employer is the Naval Construction Battalion Center followed by institutional entities (Memorial Hospital, Harrison County School District, and Mississippi Power). The largest employer for the County is Keesler Air Force Base, in Biloxi, which is located approximately 13 miles east of Gulfport. The main business district within the City exists along U.S. Highway (US) 49. According to interviewees, the main business district was revitalized after Hurricane Katrina. It should be noted that the Gulf Coast of Mississippi and other areas that were struck by Hurricane Katrina in 2005 experienced an economic downturn. The recovery of this area was affected by the greater economic downturn that occurred in the U.S. in 2008. Table 7 shows the unemployment rate in the region for the previous 10 years. Unemployment data at the city level was not available from the Mississippi Labor Market Information database, so unemployment data for the Metropolitan Statistical Area (MSA) of Gulfport-Biloxi-Pascagoula is included (Pascagoula was added to the Gulfport-Biloxi MSA in 2013). The State of Mississippi and the U.S. are included for comparison.

Table 7
Regional Unemployment Rate

Geography	Years									
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Gulfport-Biloxi-Pascagoula MSA	9.1	5.3	5.5	7.9	9.1	9.5	8.7	8.1	7.3	6.5
Harrison County	10.0	5.3	5.4	7.7	8.8	8.9	8.2	7.6	6.8	6.1
Mississippi	6.5	6.1	6.6	9.5	10.4	10.0	9.0	8.6	7.6	6.5
United States	4.6	4.6	5.8	9.3	9.6	8.9	8.1	7.4	6.2	5.3

Source: Mississippi Department of Employment Security (2016); U.S. Department of Labor Bureau of Labor Statistics (2016).

Not seasonally adjusted.

MSA = Metropolitan Statistical Area

3.6 COMMUNITY RESOURCES

3.6.1 Educational Facilities

The City and portions of the County lie within the Gulfport School District. According to the Mississippi Department of Education, total enrollment has increased 6 percent since the 2009–2010 school year (Table 8) (Mississippi Department of Education, 2014). The school district complex is located in central Gulfport on Pass Road and includes the administration offices and the elementary, junior high, and high schools.

Table 8
Gulfport School District Enrollment

Grade	2009–2010	2010–2011	2011–2012	2012–2013
Elementary*	2,802	2,809	2,924	3,102
Junior High	1,224	1,322	1,314	1,368
High	1,650	1,575	1,549	1,532
School District Total	5,676	5,708	5,802	6,013

Source: Mississippi Department of Education (2014).

*Includes Pre-Kindergarten. Special education kindergarten and secondary. GED numbers suppressed to avoid identification; therefore, numbers will not add to total.

Table 9 present Gulfport School District enrollment by group. The school district is predominantly female and Black/African American at 50.5 and 53.0 percent, respectively. The school district has 71.2 percent graduation rate. The school district has a “B” Mississippi State Accountability Status, which means that the school is a high performing school (Mississippi Department of Education, 2012).

Table 9
Gulfport School District Student Race and Ethnicity, 2012–2013

Group Name	Group Number	Group Percentage
Female	3,034	50.5
Male	2,979	49.5
Asian	60	1.0
Black/African American	3,189	53.0
Hispanic or Latino	239	4.0
Native American	21	0.3
White	2,481	41.2
Multi-Racial	23	0.4
School District Total	6,013	

Source: Mississippi Department of Education (2014).

The Gulfport School District Strategic Plan for 2013–2018 sets strategies, goals, and objectives for the following areas: technology, parent and community involvement, district organization, and operations facilities and maintenance (Gulfport School District, 2013).

As shown in Table 10, the educational attainment of the Gulfport-Biloxi MSA is generally consistent with the County and the State of Mississippi. A majority of the population of Gulfport-Biloxi MSA (54.1 percent of the population aged 18 and older) have achieved some college instruction or a higher level of attainment, which is slightly higher than the State of Mississippi (50.0 percent) (U.S. Census Bureau, 2010). The Gulfport-Biloxi MSA and the County areas have slightly higher percentages of those with some college education; this could be due to the fact that the University of Southern Mississippi Gulf Park Campus is located in Long Beach, in Harrison County.

Table 10
Educational Attainment for the Population Age 18 and Older

Place	Population Age 18 and Older	Percent of Population with Highest Level of Education Achieved						
		Less than 9 th Grade	9 th to 12 th Grade, No Diploma	High School Graduate, GED, or Alternative	Some College	Associate's Degree	Bachelor's Degree	Graduate or Professional Degree
Gulfport-Biloxi MSA	185,801	5.2	10.6	30.1	27.2	8.4	11.7	6.8
Hancock County	32,916	5.3	9.0	31.6	24.1	8.9	13.7	7.5
State of Mississippi	2,199,726	6.4	13.2	30.3	24.9	7.5	11.5	6.1

Source: U.S. Census Bureau (2010).

MSA = Metropolitan Statistical Area

3.6.2 Limited English Proficiency

Federal agencies are required to ensure that recipients of Federal financial assistance provide meaningful access to their LEP applicants and beneficiaries. Failure to ensure that LEP persons can effectively participate in or benefit from federally assisted programs and activities may violate the prohibition under Title VI of the Civil Rights Act of 1987, 42 USC 2000d and Title VI regulations against national origin discrimination. LEP populations were determined utilizing census tract level data from the 2010 Census. For the population 5 years and older, persons who speak English “not well” or “not at all” are considered to be LEP. Table 11 shows that approximately 5 percent of the population within the County and the City has LEP.

Table 11
Limited English Proficiency

	Harrison County	City of Gulfport
Population 5 Years and Over*	174,257	62,354
Limited English Proficiency	5,370	1,823
Percent Limited English Proficiency	3.1	2.9

Source: U.S. Census Bureau (2012).

*Total population 5 years and older.

3.6.3 Places of Worship and Cemeteries

According to Church Angel, a Christian church listing service, there are 113 churches of 26 denominations of Christian and 1 Jewish Synagogue located within the City (Church Angel, 2011). Baptist are the most prevalent with 43 listed, followed by Methodist with 13 listed, and Church of God churches make up 9 of the listed churches.

3.6.4 Parks and Recreational Facilities

The Port lies near the center of Mississippi’s 26 miles of coastal beaches on the Gulf. These beaches and the nearshore waters of Mississippi Sound and the Gulf offer numerous recreational opportunities to beach goers and recreational boaters. The Port and the associated Gulfport Small Craft Harbor are centrally located along this stretch of public beaches. These beaches are accessed from US 90 (Beach Boulevard) by periodic pullover areas where public parking, restrooms/bath house, and beach concessions are available at strategic locations to serve the needs of beach goers. Popular beach recreation activities include sun bathing, swimming, and other water-based recreational pursuits.

The Gulfport Small Craft Harbor is located east of and adjoining the Port and shares the deep-water access of the main FNC. The Gulfport Small Craft Harbor, as with most of the Gulf Coastal communities, was severely damaged by Hurricane Katrina in 2005 and both Gustav and Ike in 2008. The redesigned harbor features a variety of mixed-use leisure and recreational facilities. Among these are Harbor Square Park, a new marina with up to 319 slips, Gulfport Yacht Club facilities (72 slips), boat ramp, Urie Pier, a

recreational beach, and a fisherman's village with a mix of resorts, retail shops, and restaurants. All redesigned facilities are accommodated with ample parking and accessed from US 90 on landscaped internal roadways. The Gulfport Small Craft Harbor will also support the U.S. Coast Guard (USCG) Station Gulfport and a marine life education center. Later phases could include a casino, new residential condominium development, and a second marina (City of Gulfport, 2010)

Harbor Square Park (Bert Jones Park) is located between the Gulfport Small Craft Harbor and US 90. It is the largest public park on the Gulf Coast and offers passive and recreational opportunities for residents and visitors. Access to the park is from US 90 on 20th, 23rd, and 25th avenues. Other predominant land uses in the vicinity of the Port include the Island View Casino, Gulfport Senior Citizens Center, and Gulf Haven Campground, all located north of US 90 west of the Port and the U.S. Post Office, east of US 49 in downtown Gulfport.

Additionally, Gulfport's Department of Leisure Services provides residents and visitors with programs for youth and the elderly, parks, pools, and sports facilities, including gymnasiums, ball fields, and weight rooms. In addition, the department is responsible for community centers, senior centers, recreational facilities, youth athletic leagues, and after school and summer programs (City of Gulfport, 2014a).

The department operates 38 ball fields, 31 parks, 5 tennis courts, 3 gymnasiums, 7 walking tracks, all fishing piers and municipal boat ramps and jetties, the Small Craft Harbor, fitness centers, a senior center, a swimming pool, and more than 600 acres of parks and recreational areas.

Also, gambling is legal in Mississippi and the presence of casinos along the Gulf Coast of Mississippi serves to attract a number of visitors to the area. While not recreation in the traditional sense, visitors attracted to the casinos may participate in other recreational activities during their stay on the Gulf Coast. Other commercial recreational facilities include golf courses, resort hotels, and retail establishments.

Collectively, these recreational resources along the Mississippi Gulf Coast are a benefit to the local and state economy, creating jobs and providing revenue to local businesses while preserving the local natural and cultural heritage of the region.

3.6.5 Medical Facilities

The County is served by three civilian general medical hospitals (Biloxi Regional Medical Center, Garden Park Medical Center, and Gulfport Memorial Hospital), and one limited services facility (Select Specialty Hospital Gulf Coast), with a combined total of 834 licensed beds, as well as seven ambulatory surgical facilities. The County also has five licensed and certified long-term care facilities, seven licensed personal care homes, and six certified hospices.

The County has 144 active primary care medical doctors. The 2008 estimated population of the County leads to a primary care physician-to-population ratio of one care provider for every 1,247 persons, which is much lower than the state-preferred ratio of 1,488 persons per primary physician (Cossman et al., 2005).

3.6.6 Emergency Services

Emergency fire and medical services are provided by the City as well as the County. All of the fire departments within the County maintain a mutual-aid policy and provide fire and emergency medical support to other departments upon request.

The City Fire Department has 11 fire stations, with another under construction, and employs 174 full-time fire protection and rescue service workers (City of Gulfport, 2013b). The department responds to a variety of calls, such as structure fires, aircraft emergencies, hazardous material spills, emergency medical calls, and marine emergencies. They also provide special services in hazardous waste response and disaster preparedness and have trained personnel to respond to the potential threats of weapons of mass destruction.

The County fire service protects the citizens living in the unincorporated areas of the County, a total rural area of approximately 408 square miles with a population of 43,931. They employ eight full-time paid fire personnel, one clerical person, six part-time paid personnel, and 140 volunteers (Harrison County Board of Supervisors, 2013).

The Port enforces fire protection rules through the provision of the Port tariff and maintains cooperative agreements with county and municipal fire departments for fire protection and emergency medical services. The Port has a fire protection and fire suppression system in place that works in cooperation with the City's Fire Department to address fire protection in and around the Port. A Hot Work Permit will be issued before any hot work (e.g., welding) begins (MSPA, 2012). Hot work is defined by the Occupational Safety and Health Administration (OSHA) as any work that involves burning, welding, using fire- or spark-producing tools, or that produces a source of ignition (OSHA, 2014).

The fire station located nearest to the PGEP is at 1515 23rd Avenue, two blocks north of US 90.

Law enforcement is provided by the County sheriff and Gulfport police departments. The County Sheriff's Department provides protective services to unincorporated portions of the County. The department has various divisions, including aviation, criminal investigation, communications, community relations, criminal records, operations, adult detention facility, marine patrol, motor carrier, and professional standards and reserves (Harrison County Sheriff's Department, 2011).

The City Police Department provides public safety service to the incorporated areas of the City, including the Port. The department employs 293 personnel, including 201 sworn officers, and serves a community population of 80,000 residents and a daily service population of 144,000 (City of Gulfport, 2013c).

The MSPA works in cooperation with the Gulfport Police Department and the Department of Homeland Security to implement safety and security programs for the Port. Security functions are maintained on MSPA premises through contract with an independent security service. The security service provides continuous surveillance of all Port facilities, protects against unlawful entry and pilferage, enforces fire detection control regulations, and performs other assigned security duties. The security functions of the

service are coordinated with municipal, county, state, and Federal law enforcement authorities (MSPA, 2012).

As an international transportation facility, the Port is supported by the U.S. Customs and Border Protection and the Department of Homeland Security, each of which provides security services for cargo movement and personnel. Employees and transient Port workers are required to obtain security clearance in order to access the Port facilities and maintain current transportation workers identification cards (MSPA, 2012). The USCG also enforces safety and security provisions for vessels operating in waters of the U.S. (USCG, 2011).

3.6.7 Bike and Pedestrian Facilities

Pedestrian sidewalks exist primarily throughout the City. There are no dedicated bike paths within the City. Additionally, there are no plans for bike or pedestrian mobility expansion.

3.7 ZONING AND LAND USE

3.7.1 Zoning

The City established a zoning ordinance in 1972, and it is utilized to govern zoning requests today. There are six zoning districts identified within the ordinance (Municode, 2014), and they include:

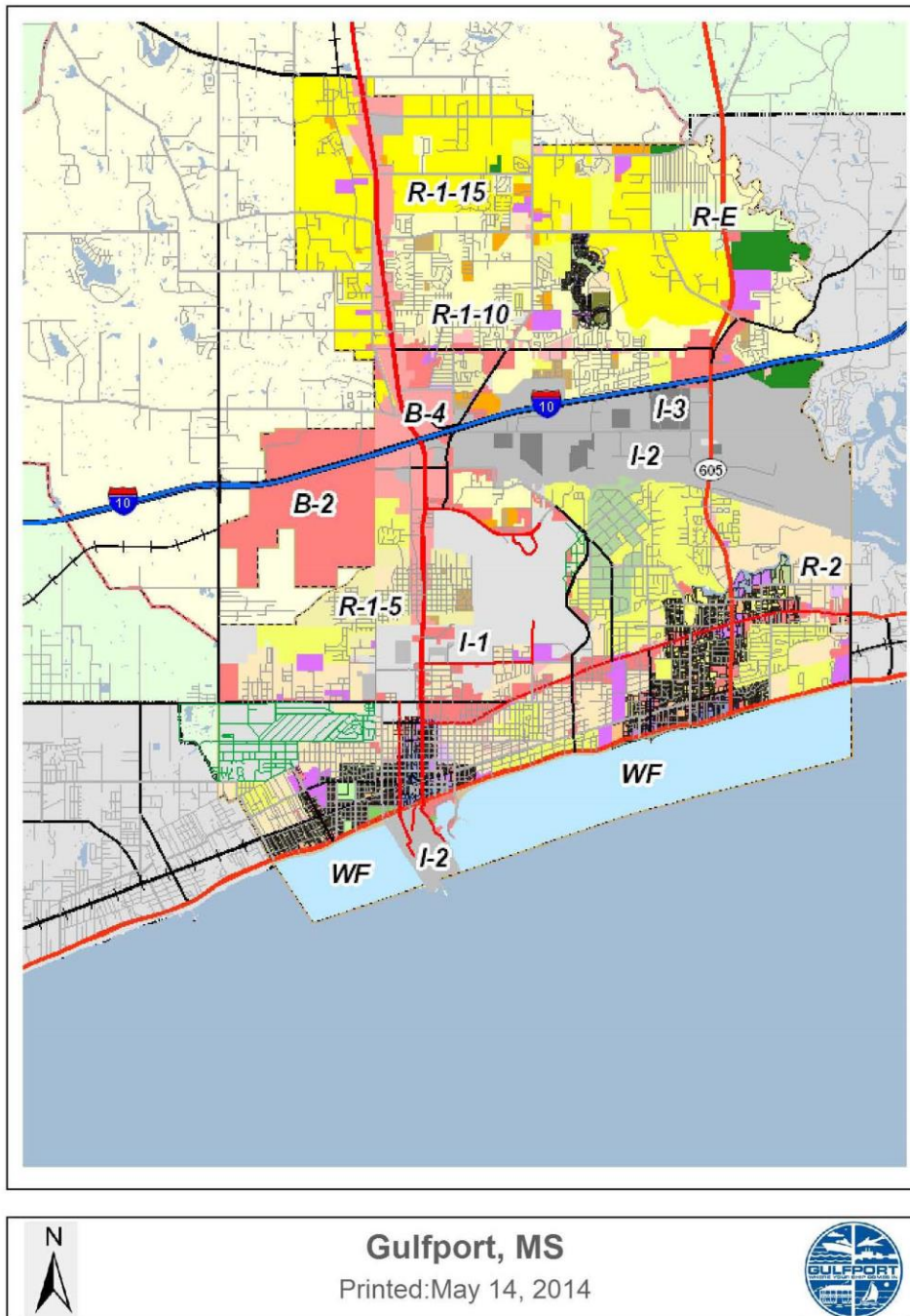
- Agricultural districts (A-1) – Agricultural districts is mainly composed of areas for low-density residential and agricultural and horticultural uses. The rural development characteristics and low density of population in this district requires only that uses essential to agriculture and horticulture have a reasonable setback of buildings from dedicated streets and/or highways. It is the purpose of this district to encourage and protect such uses from urbanization until such is warranted by development pressure and an appropriate change in district classification is made.
- Residence Estate (R-E) – Residence Estate (suburban) districts are composed mainly of areas containing one-family dwellings and open area where such development seems likely to occur. The district regulations are designed to protect the residential character of the districts by prohibiting all commercial activities; to encourage a suitable neighborhood environment for family life by including among the permitted uses such facilities as schools and churches; to prevent overcrowding of the land by requiring certain minimum yard and other open spaces for all buildings; and to avoid excessive population density by requiring a minimum building site area for each dwelling unit.
- Residential R-1-15, R1-10, R-1-7.5 – This district is comprised of low density, single-family homes, churches, parks, libraries, schools, recreation facilities, farms, orchards, nurseries, other religious or philanthropic institutions, and accessory building for these uses.
- Residential 1-1-5 (R1) – Same as other Residential except it is medium density plus two-family/duplex homes.
- Residential 2 (R2) – Same uses as in R1-5 plus multiple-family dwelling.

- Residential 3 (R3) – These are multifamily residence districts. Same uses as in R1.5, but high density apartments or multi-family dwelling, boarding/lodging/rooming houses, and private clubs.
- Residential 4 (R4) – Same uses as in R3 but high density.
- Residential (R-O) – Residence-office districts, these districts are composed of areas containing or suitable for a mixture of residential uses and light commercial uses such as offices, studios, and small shops.
- Residence-business districts (R-B) – These districts are composed of areas containing a mixture of residential, public and semipublic, and light commercial uses. Although usually located between residential areas and business areas, these districts are, in some instances, freestanding and may include hotel, hospital, or similar building groups and related uses or land suitable for such uses.
- Business 1 (B1) – Neighborhood business districts. Any use allowed in R3, plus retail shops, hotels/motels, offices, parking lots, public buildings, theatres, assembly halls, restaurants, automobile garage/gas stations, wholesale facilities, storage facilities, advertising, mobile home parks, and accessory building for these uses.
- Business 2 (B2) – General business districts. Same uses as in B1 plus the wider range of retail goods and services required by residents of a group or community of neighborhoods, and by the city generally.
- Business 3 (B3) – Central business districts (CBD). Same uses as in B1. The district regulations are designed to permit the further development of the district for its purpose in a compact and convenient arrangement of uses and structures that is highly urban in character.
- Business 4 (B4) – Highway business districts. This district is intended to include high intensity commercial activities requiring high visibility and accessibility in which all or some of the business is conducted outdoors. This includes such activities as automobile, truck, or other vehicle dealerships; heavy equipment dealers; recreational vehicle sales, mobile home sales; yard and garden centers; building material dealers; truck stops; bus terminals; outdoor recreational enterprises such as recreational vehicle campgrounds, water parks, drive-in theaters, amusement parks, etc. Also included in this district would be uses which cater to the motoring public such as fast food restaurants, service stations, motels, and similar uses.
- Entertainment gaming districts (E-G) – This district is composed of lands and structures, which are occupied by or suited for the accommodation of the gaming industry and related entertainment land uses. The district regulations are designed to encourage a mixture of uses including hotels, restaurants, shopping, live entertainment, limited residential, public and open space, and tourist-oriented recreational uses. This district shall be of such size, shape, and location as to enable development of well-organized facilities with proper access to streets, sidewalks, off-street parking and loading facilities, and other requirements and amenities.
- Industrial (I-1) – Light industry districts. These districts are composed of land and structures occupied by or suitable for light manufacturing, wholesaling, and similar uses. Located for convenient access from existing and future arterial thoroughfares, highways, and railway lines, these districts are usually separated from residential areas by business districts or by natural barriers. The district regulations are designed to permit a range of light industrial activities subject to limitations intended to protect nearby residential and business districts.

- Industrial (I-2) – Heavy industry districts. These districts are composed of land and structures occupied by or suitable for heavy manufacturing and related activities. Located for convenient access from existing and future arterial thoroughfares, highways, railway lines or waterways, these districts are usually separated from residential areas by business or light industry areas or by natural barriers; where they are adjacent to residential areas some type of artificial separation may be required.
- Industrial (I-3) – Planned industrial park district. This district includes uses in a self-contained environment, which do not operate in such a manner as to be obnoxious to surrounding properties. Included are manufacturing, fabrication, distribution, and storage or warehouse uses, which are conducted both indoors and outdoors. It is intended that this district have uses grouped in a park-like setting with appropriate setbacks and buffers from adjoining properties.
- Sand Beach (SB) – Sand beach district. There is hereby created a sand beach district that is subject to the Sand Beach Ordinance of Gulfport, Mississippi.
- Waterfront districts (WF) – Waterfront district classification is intended to include all areas situated south of US 90 located within the City, which are not specifically zoned for other uses.
- Flood Hazard (FZ) – Flood Hazard Overlay Zone here is hereby created a Flood Hazard Overlay Zone, which is subject to the Flood Control Ordinance of Gulfport, Mississippi, Ordinance Number 1793 as found in Appendix B of the Code of Ordinances of the City of Gulfport, Mississippi. This district is defined as the zones so designated on the most recent Flood Insurance Rate Maps and Floodway maps covering the corporate boundaries of the City.
- Airport (AP) – Gulfport-Biloxi Regional Airport Environs and Airspace Zoning District is hereby created with the following purpose: to preserve the general public's investment in and the viability of the Gulfport-Biloxi Regional Airport and to protect and enhance the health, safety, and general welfare of the population in the vicinity of the airport.

The zoning ordinance outlines additional development rules and procedures. Changes in zoning are reviewed for consistency and approved by the City Council.

The zoning districts were estimated based on mapping available at the City office. These zoning districts are depicted on Figure 3. It should be noted that the mapping from the City was difficult to read and the zoning information are estimates.



Source: City of Gulfport (2014b).

Figure 3
Zoning Map, City of Gulfport

This page intentionally left blank.

4.0 ALTERNATIVE OPTIONS EVALUATED

The alternatives considered for evaluation started with the No-Build Alternative and three action alternatives. Based on comments to reduce the size of the impact area received from the public and State and Federal agencies following notice of the Permit Application (April 2010), an alternative to the Permit Application Alternative was developed. In early 2011, the MSPA revised the scope of the Project to encompass a smaller footprint (referred to as Alternative 1B in the EIS). This alternative would impact approximately 300 acres of estuarine mud and sand bottom in Mississippi Sound for the construction of backlands, wharfs, bulkheads, terminal facilities, container storage areas, intermodal container transfer facilities, expanded turning basin, and construction of a breakwater of approximately 4,000 linear feet. Estimates of direct impacts are provided in Table 12.

Table 12
Alternative 1B, Direct Impact Estimates

Feature	Estimated Area Impact (acres)	Estimated Dredged Material Volume (mcy)
West Pier Expansion	155	2.40
East Pier Expansion	15	0.56
North Harbor Fill	9	0.91
Breakwater	18	0
Turning Basin Expansion	85	3.80
Totals	282	7.68

mcy = million cubic yards

Alternative 1B was further developed over the next two years, including consideration of different levels of efficiencies and automation. In April 2013, the MSPA proposed that the proposed Project be modified to include widening and deepening of the existing FNC, and submitted a revised permit application to include modifications to the FNC (2013 Revised Permit Application alternative). The intent of these changes was to allow for increased ease of navigation of the FNC by current users and to allow larger, deeper-draft vessels to enter the Port. Over the next year, the MSPA continued to pursue new tenants, and in 2014 a new tenant (McDermott) was added to Port operations on the East Pier. This addition and other changes in tenant use promulgated a reconfiguration of tenants on the West Pier. In February 2015, MSPA determined that widening and deepening of the FNC is no longer a requirement of known incoming tenants, and MSPA does not intend to expand or maintain an expanded FNC, without first receiving funding and proper prior Federal approval through the WRDA 204(f) process. Therefore, modifications to the FNC are no longer part of the proposed Project.

As a result of the alternatives development, screening, and further refinement described above, there are two alternatives to be carried forward for evaluation in the EIS: the No-Action Alternative and the Proposed Project Alternative. These alternatives are described in more detail in the following sections. As stated previously, the CIA was based on an earlier iteration of the proposed Project and presented five Project alternatives, the No-Action Alternative and four Action Alternatives. The Proposed Project Alternative evaluated in this document was developed from the previous alternatives (see Section 2.0) that were presented to the community leaders during the development of the CIA. The comments and concerns of the community and their impressions of the previous alternatives would apply to the No-Action Alternative and the Proposed Project Alternative. Therefore, the findings of the CIA are consistent with the two alternatives that are being evaluated in this document.

4.1 NO-ACTION ALTERNATIVE

While the PGEP would not occur under the No-Action Alternative, it is assumed that previously permitted actions at the Port and in the vicinity of the Port (e.g., Restoration Project) would continue and are assumed as complete during the environmental consequences evaluation. The Restoration Project (which is under construction and will be completed in 2017, see Section 1.3.1 of the EIS), is reflected as complete in the No-Action Alternative, thus, future projected conditions from approved NEPA documentation will be used to aid in the description of future conditions under the No-Action Alternative, as appropriate.

Following completion of the Restoration Project, the Port facilities would include a footprint of approximately 264 acres and the currently federally authorized FNC and turning basin (Table 13). Immediately following completion of the Restoration Project, an annual throughput of between 250,000 and 400,000 TEUs is anticipated due to tenant configuration and cargo handling practices. Thus, under the No-Action Alternative, the Port would continue to operate without the proposed expanded facilities, and Port activities would be limited by the existing, post-Restoration Project facility configuration. As described in Section 2.1 of the EIS, the Port has been constructed within the Mississippi Sound on estuarine mud and sand bottom and all backlands space is generated from filling of estuarine mud and sand bottom (with proper permits and approvals). As discussed in Appendix B of the EIS, it is expected that over time improved economic conditions, improvements in Port efficiencies, changes in tenant configuration and automation, and other unforeseeable changes in Port practices or economic conditions would allow the Port to achieve an annual throughput up to 1.0 million TEUs by 2060. This assumption allows a worst-case scenario with regard to the maximum potential throughput under the No-Action Alternative for comparison purposes with the Proposed Project Alternative. It is assumed that space constraints would limit throughput to 1.0 million TEUs annually. Thus, under this alternative, the USACE's purpose and need for the Project would not be met.

Table 13
Port Footprint Following Restoration Project,
including the Turning Basin (approximate acres)

Feature	Post- Restoration Footprint
West Pier	171
East Pier	30
North Harbor	63
Turning Basin	105
Breakwater	N/A
Total Footprint	369

Although the No-Action Alternative does not meet the purpose and need of the proposed PGEP, it is carried forward in the EIS (per 40 U.S. Code of Federal Regulations [CFR] section 1502.14(d)) to provide a means by which to compare potential future conditions for action alternatives. In other words, the potential environmental effects of the future *without* the Project are compared to the effects of the future *with* the Project.

4.2 PROPOSED PROJECT ALTERNATIVE

The Proposed Project Alternative is to expand the Port facility, including:

- Expansion of the West Pier
- Expansion of the East Pier
- Fill in the North Harbor
- Expansion of the federally authorized Gulfport Turning Basin (at 36-foot depth)
- Construction of an eastern breakwater
- Placement of dredged material
- Site configuration and automation

As noted for the No-Action Alternative, the Proposed Project Alternative assumes that the Restoration Project has been completed. The proposed PGEP features would be added to the post-Restoration Project footprint, with a few exceptions.

The proposed expansion features (not including the post-Restoration Project footprint) would be elevated up to +25 feet msl to provide protection against future tropical storm surge events. The post-Restoration Project footprint would be elevated up to +14 feet msl, with the proposed expansion footprint elevated up to +25 feet msl. Each feature of the proposed expansion footprint is provided in Table 14 and described in

detail below. Fill material would be obtained from permitted sites along the Tennessee-Tombigbee River and transported into the Port via barge for construction.

Table 14
Port Footprint Following Proposed Port of Gulfport Expansion Project,
including the Turning Basin (approximate acres)

Feature	Post-Restoration Footprint	Proposed Expansion Footprint	Total Footprint
West Pier	171	155	326
East Pier	30	14.5	44.5
North Harbor	63	9	72
Turning Basin	105	85	190
Breakwater	N/A	18	18
Total Footprint	369	281.5	650.5

To simplify the description of Project features and because it is considered the baseline condition for all alternatives evaluated in this EIS, the post-Restoration Project footprint will be considered the “existing” condition from this point forward.

West Pier Expansion

The West Pier Expansion is intended for development of a new concession area consisting of new multiuse semi-automated container terminals. The proposed concession area would extend to the south of the West Pier footprint approximately 3,500 linear feet, adding approximately 155 acres to the existing facility. Prior to construction, the expansion footprint may require dredging for removal of soft to very soft foundation materials and to mitigate mud waves outside of the Project footprint. The estimated volume of dredged material is 2.4 mcy (Anchor QEA LLC, 2017, Appendix F of the EIS).

East Pier Expansion

The East Pier Expansion would add approximately 14.5 acres to the working surface of the Port’s existing East Pier facility. This area would be used for rail operations and a new berth, and would provide additional space for McDermott. Similar to the West Pier Expansion, the fill area may require dredging prior to construction. The estimated volume of dredged material is 560,000 cubic yards (cy), which is generally debris that would be disposed of in the permitted upland Harrison County Development Commission disposal site on Industrial Seaway in Gulfport Anchor QEA LLC, 2017, Appendix F of the EIS). The disposal site is immediately adjacent to a canal and material would be transported by barge and unloaded and placed into disposal cells, with no additional hauling or trucking required.

North Harbor Expansion

The North Harbor Expansion would create approximately 9 acres of upland in the area formerly occupied by the *Copa Casino* boat. This upland area would be used as a new berthing area. Both new work dredging associated with the construction of this berth and future maintenance dredging would be required in this area (Anchor QEA LLC, 2017, Appendix F of the EIS).

Turning Basin Expansion

The existing Gulfport Turning Basin would be expanded to support the West Pier Expansion. The proposed Turning Basin Expansion (approximately 85 acres) would be between the existing Sound Channel and the proposed terminal, immediately adjacent to the existing Gulfport Turning Basin. This area would be dredged to a depth of -36-foot mean lower low water (MLLW) plus 2 feet of advance maintenance, plus 2 feet of allowable overdepth, and up to an additional 3 feet due to a sediment disturbance layer consistent with the adjacent FNC and USACE maintenance dredging practices (Anchor QEA LLC, 2017, Appendix F of the EIS). The estimated volume of dredged material is 3.8 mcy.

Eastern Breakwater

A 4,000-linear-foot rip-rap breakwater is proposed on the eastern side of the FNC to provide protection from tropical storm events. The breakwater would vary from 98 to 102 feet wide at its base with a top width of 10 feet and a top elevation of +10 feet NAVD 88. The proposed breakwater would require placing approximately 250,000 cy of rip-rap over a footprint of approximately 18 acres. Baker (2011) evaluated four breakwater alternatives for the PGEP to determine the need to protect the expanded West Pier under storm conditions. Numerical modeling was used to recommend alternatives that would provide protection to the turning basin and terminals while maintaining operational and navigational utility. Modeling indicated that wave action would impact the expanded West Pier compared with current conditions and a need for a breakwater could not be ruled out. The Proposed Project Alternative provides protection from wave energy from the south and east. A breach midway along the alignment of the structure is planned to allow shallow-draft access to the FNC from the adjacent Bert Jones Marina and at the recommendation of the pilots performing ship simulations (see Appendix D of the EIS).

Dredged Material Placement

The new work dredging associated with the construction of the proposed West Pier and East Pier expansions, North Harbor and West Pier berthing areas, and the Turning Basin Expansion is estimated to require removal of approximately 7.68 mcy of dredged material, including 560,000 cy of dredged material (debris from East Pier) that would be designated for upland disposal. Following construction of the Turning Basin Expansion, the MSPA would be responsible for maintenance dredging of the portion of the new turning basin that is not part of the federally authorized project, as well as the berthing areas associated with the expanded East Pier, North Harbor, and West Pier. Maintenance dredging associated with these areas is anticipated to require removal of approximately 486,000 cy to 1.3 mcy every year. A Dredged Material

Management Plan (DMMP) was prepared to evaluate the potential placement options for the new work and maintenance dredged material associated with the Proposed Project Alternative (Anchor QEA LLC, 2017, Appendix F of the EIS). Estimated dredge quantities are shown in Table 15. Estimated dredge quantities assume maintenance for a 30-year period. At this time, it is expected that new work dredging would occur using a mechanical/hopper dredge and maintenance dredging would occur using a hydraulic/cutterhead or mechanical/hopper dredges, as necessary.

Table 15
Estimated Dredged Material Quantities (Proposed Project Alternative)

Feature	West Pier Expansion	East Pier and East Pier Berthing Areas	North Harbor and West Pier Berthing Areas	Turning Basin Expansion	Totals
New Work	2.4 mcy		913,000 cy	3.8 mcy	7.11 mcy
New Work (upland disposal)		560,000 cy			560,000 cy
Maintenance	N/A	63,000–172,000 cy/year	212,000–581,000 cy/year	211,000–586,000 cy/year	486,000 cy–1.3 mcy/year

Source: Anchor QEA LLC (2017, Appendix F of the EIS).

cy – cubic yards

mcy – million cubic yards

The DMMP evaluated multiple placement alternatives for new work and maintenance dredged material.

Sites considered for placement of dredged material include:

- Use as fill for the West Pier Expansion
- 12 designated beneficial use (BU) sites
- Thin-layer placement
- Candidate BU sites
- Placement in an approved Ocean Dredged Material Disposal Site (ODMDS)
- Placement in an approved and permitted upland disposal site(s)

All sites were evaluated based on feasibility, potential environmental impacts, cost, and suitability of material. Potential BU sites were evaluated based on capacity and distance to the dredge site, taking into consideration habitat value, stability, and sediment transport. Recommendations were made for each option (Anchor QEA LLC, 2017, Appendix F of the EIS). Considering additional information is needed to finalize the recommendations of dredged material placement alternatives, the following summarizes the various placement options.

New work dredged material structurally suitable would be used for fill at the Project site. Any material not structurally suitable would be evaluated for potential beneficial use and possible placement at a designated or candidate BU site. The MDMR submitted a permit application to the USACE and Louisiana Department of Natural Resources (LDNR) in February 2016 to permit the Biloxi Marsh Complex (BMC) in Louisiana for beneficial use of dredged material. The goal of this designation is to provide a new BU site on the western side of the state to accommodate material generated from private and public dredging projects to meet the requirements of Mississippi's beneficial use law.

During the DMMP evaluation, the Port began discussions with the MDMR/USACE Beneficial Use Group (BUG) on using the BMC as a placement area for suitable dredged material from the Port. For the proposed PGEP, the BUG was in favor of a BU site instead of an ODMDS. As such, the BMC is the recommended placement alternative for the new work dredged material for the proposed Project (Anchor QEA LLC, 2017, Appendix F of the EIS). If a suitable BU site is identified, appropriate coordination with MDMR for placement of dredged material at the approved and permitted location would occur at that time. The BMC BU site would function to provide needed particulate material for shoreline nourishment, as protection from shoreline erosion on the Mississippi and Louisiana coasts, and to offset impacts to Essential Fish Habitat (EFH). If the BMC is not permitted prior to dredging, and no other suitable BU sites are available, the Pascagoula ODMDS would be used for disposal of new work dredged material if the material is determined to be in compliance with Section 103 of the Marine Protection, Research, and Sanctuaries Act (MPRSA) (33 USC 1413). Appendix G of the EIS provides results from sediment sampling and testing conducted by MSPA for all sediment that would be dredged according to requirements of Section 103 of the MPRSA. This comprehensive sampling process satisfies the requirements of the U.S. Environmental Protection Agency (EPA), MDMR, USACE New Orleans District, Mississippi Department of Environmental Quality, and LDNR for the placement of dredged material in either an ODMDS or BU site. New work, dredged material not suitable for beneficial use would also be placed in the Pascagoula ODMDS if it meets the criteria in Section 103 of the MPRSA (33 USC 1413). If the dredged material is not suitable for the ODMDS, the material would be placed in an approved and permitted upland disposal site(s). Initial results indicate that only a portion of the disposal material would not be feasible for ODMDS disposal (see Appendix G of the EIS) and would therefore be placed in a permitted and approved upland disposal site. Currently, the Harrison County Development Commission dredged material disposal site on the Industrial Seaway has capacity for up to 750,000 cy. The material would be transported by barge and offloaded to the disposal site as described in the DMMP (Anchor QEA LLC, 2017, Appendix F of the EIS). Because dewatering of the material occurs in the disposal site, dewatering of the dredged material before transporting or offloading is unnecessary. This site would be suitable for the East Pier Expansion dredged material. An upland disposal site 30 miles north of the Port in Stone County has been identified as a potential placement site for the remaining 7.11 mcy of dredged material; the name of the site and specific location have been withheld at the owner's request. For this option, the material would be mechanically dredged, dewatered, placed into trucks, and hauled to the disposal site for offloading. Considering that it would require approximately 14 years to dredge, transport, and offload the material to the upland disposal site, and would cost over \$200 million, use of an upland disposal site for the 7.11 mcy of dredged material is not a viable

placement alternative (Anchor QEA LLC, 2017, Appendix F of the EIS). However, this upland site may still be utilized for the portion of disposal material that could not feasibly be placed in an ODMDS or BU site. The Port would be responsible for maintenance dredging of those areas outside of Federal jurisdiction. Maintenance dredged material would be disposed of using thin-layer placement, as discussed in the DMMP (Anchor QEA LLC, 2017, Appendix F of the EIS).

Site Configuration/Automation

The PGEP would further develop the Port into a semi-automated container terminal. The Port has added three rail-mounted gantry (RMG) cranes to Port operations. The road and rail access constructed for the Restoration Project would be extended south on the western side of the West Pier along the expansion footprint. The gantry crane rail would be extended south on the eastern side of the West Pier along the expansion footprint. New infrastructure would include a new wharf, backlands, gates, and an additional warehouse. The new terminal would increase throughput by reducing handling times, allowing ships to come into the Port, unload, reload, and depart in a day or less. The proposed layout assumes that all berths would be utilized as common berths, and the berthing of a vessel would be based on berth availability, vessel schedule, and tenant needs. With the semi-automated operation of the container terminal via RMG cranes, refrigerated containers would be grounded within the RMG crane container blocks and placed four containers high and nine containers wide per row. This layout would require reefer racks (three-story steel platforms) in front of each row for mechanics to access containers, plug into reefer receptacles, and perform monitoring, inspection, and pretripping of refrigerated equipment. Loading and unloading of containers would be performed by utilizing two RMG cranes to transfer containers between trackside ground positions and railcar well positions. The operation of the West Pier and the Turning Basin Expansion areas would include shared facilities, berths, backlands, and utilization of RMG cranes. With this layout, throughput capacity is projected to reach up to 1.7 million TEUs annually by 2060.

5.0 POTENTIAL COMMUNITY IMPACTS

5.1 SOCIOECONOMIC RESOURCES

The No-Action Alternative and the Proposed Project Alternative would have impacts to socioeconomic resources in the area.

5.1.1 Income and Employment

For the year 2015 the Gulfport-Biloxi-Pascagoula MSA has an annual unemployment rate of 6.5 percent, and the labor force has been declining for a decade. Jobs created by the proposed Project would provide opportunities for those currently unemployed, and increased throughput capacity at the Port could attract workers to the area, likely providing a positive impact to the declining economy.

The No-Action Alternative assumes that the existing Port operations with the Restoration Project would continue but does not include the proposed PGEP; therefore, the potential for impacts to the existing employment and income associated with the proposed action would not occur.

Through the No-Action Alternative, it is assumed that the Port would have an annual throughput between 250,000 and 400,000 TEUs, which would grow up to 1.0 million TEUs by 2060. It is estimated that Port operations would require 4,758 employees per 1,000 TEUs (see Appendix C of the EIS). Therefore, the No-Action Alternative would provide between 1,190 and 1,903 jobs at completion of the Restoration Project and 4,758 employees by 2060 (see Table 4.3-1 in the EIS). The No-Action Alternative would have some benefit to the area labor force, but it would have the least positive impact to labor force and employment compared with the action alternatives.

Along with the creation of approximately 2,767 construction-related jobs annually for 5 years, the Proposed Project Alternative would have a larger increase in TEU throughput of up to 1.7 million by 2060, which would potentially require 8,089 employees (see Table 4.3-1 in the EIS). Put another way, this Alternative would generate 3,331 more jobs than the No-Action Alternative, of which 875 would be Port jobs. This Alternative would have a greater capacity for TEUs and have a more beneficial impact on the labor force and employment than the No-Action Alternative.

The Proposed Project Alternative would also require dredging and placement of materials, but this activity is specialized and the type of work done by only a few companies within the U.S. Thus, this specific measure of the alternative would have virtually no effect on local employment rates.

Regardless of which alternative is advanced, including the No-Action Alternative, job growth is anticipated at the Port. Based on data obtained and interviews conducted, this job growth would likely be in more skilled positions at the Port than the City labor force may currently have available. Based on the education level of the population, it is more than likely that the local community members could be trained to handle the future jobs at the Port. This issue is discussed further in Section 5.1.2.

5.1.1.1 Income and Employment Environmental Justice Viewpoint

The PGEP will not disproportionately or adversely impact an EJ Community. The potential impacts anticipated from the PGEP to income and employment would be beneficial. The EJ Community of the City would have the opportunity to benefit from the increased employment. One of the comments presented during the interviews was that the Port would require technically skilled labor. Interviewees felt that the local population would be able to fulfill those roles capably and with specialized job training a higher percentage of local residents would excel in those future roles.

5.1.2 Potential Mitigation Recommendations

A recurring concern from the interviewees was the creation of a job training program. Each of the interviewees understood the importance of economic growth and job creation for the people of Gulfport. They also wanted the Port to take measures to help local residents train and apply for any of the future jobs that would occur as a result of the PGEP. The following potential mitigation recommendations are a result of the interviews conducted for this CIA.

Even if Port expansion is limited to previously approved actions under the No-Action Alternative, Port traffic demand is still expected to grow, as are jobs associated with the Port. However, any growth from the No-Action Alternative would be at a lower rate than under the action alternatives due to lack of the proposed improvements that could help attract more tenants and other shipping to the Port.

As one interviewee said, “There are no more unskilled labor jobs. All the back-breaking jobs will be gone. All the new jobs will be online and high tech.” Current Gulfport residents could fill these jobs; however, if there was a comprehensive job training program, even more residents could benefit from the new jobs. Any potential training program would need to meet the requirements and provide the skill set for a job at the Port.

Another interviewee stressed the importance of including a training program and internship for high school students. Such a program could provide valuable first job experiences for the youth of Gulfport and could cover everything from applying online for a job and interviewing to teaching the skills necessary to succeed in the occupation.

Another interviewee emphasized the importance of flexible scheduling for the job training programming in order to make it available for students, single mothers, and other community members who face time constraints. The interviewee went on to stress the importance of scheduling the work day or offering more part-time positions that are in line with the school schedule.

A job training program as a potential mitigation measure for the No-Action Alternative would not only benefit the community, but also provide the Port with a capable, qualified, and competitive workforce. Additionally it should be stated that the creation of any potential job training program would need the

considerable involvement of local community leaders. The local leaders have greater insight into what skills the community members have and what skills need to be augmented by the training programs.

The potential mitigation measures for effects on income and employment are the same for the Proposed Project Alternatives as for the No-Action Alternative.

5.2 ROAD AND RAIL TRAFFIC

5.2.1 Traffic

A roadway and rail traffic analysis was completed for the No-Action Alternative and the Proposed Project Alternative (see Appendix I of the EIS). The analysis included six level of service (LOS) ratings that are depicted by the letters A through F. A description of what these qualitative measures mean is described below:

- LOS A is the best LOS, and represents uncongested traffic with light traffic volumes;
- LOS B represents reasonably free flow, where maneuverability is slightly restricted;
- LOS C is normally the worst LOS tolerated in rural areas before improvements are warranted;
- LOS D is normally the worst tolerated in urban areas;
- LOS E represents traffic volumes near capacity; and
- LOS F is the worst, and represents congested traffic conditions due to traffic volumes that exceed the road's capacity.

The worst acceptable LOS tolerated in urban areas is LOS D, thus road segments operating at LOS E or F would be considered unacceptable.

A traffic evaluation of year 2012 conditions showed one intersection approach on 28th Street that had a minor issue associated with traffic signal delay (Table 16). Though there is sufficient capacity to accommodate 2012 traffic, the intersection carries traffic volumes that are fairly high for an intersection of two lane roadways. Thus, a long signal cycle time is the cause of the delay.

Table 16
Roadway Corridor Level of Service (LOS) Deficiencies – 2012 Existing Conditions

Corridor Name	Corridor Limits	Potential Cause of LOS E-F
I-10 Freeway	All LOS D or better	No issues
US 49 (25th Avenue)	All LOS D or better	No issues
US 90 (Beach Blvd.)	All LOS D or better	No issues
Canal Road	All LOS D or better	No issues
25th Street	All LOS D or better	No issues
28th Street	AM LOS E, eastbound approaching Canal Road	Traffic signal delay due to long cycle time, capacity is adequate
30th Avenue	All LOS D or better	No issues

Table 17 identifies which segments of each corridor would operate at LOS E or F in 2020 for the No-Action and Proposed Project Alternatives, and potential causes. Of 40.2 directional miles studied, 0.3 mile is deficient. The results indicate that neither the Proposed Project Alternative, nor background traffic growth through 2020 (No-Action Alternative) will cause other roadway segments in the study area to experience a LOS worse than D.

Table 17
Roadway Corridor Level of Service (LOS) Values – 2020 No-Action Alternative and Proposed Project Alternative

Corridor Name	Corridor Limits	Potential Cause of LOS E-F
I-10 Freeway	All LOS D or better	No issues
US 49 (25th Avenue)	All LOS D or better	No issues
US 90 (Beach Blvd.)	All LOS D or better	No issues
Canal Road	All LOS D or better	No issues
25th Street	All LOS D or better	No issues
28th Street	AM LOS F, eastbound approaching Canal Road	Intersection capacity
30th Avenue	All LOS D or better	No issues

Results of the traffic analysis described in Appendix I of the EIS indicate that the eastbound approach of 28th Street at Canal Road has a capacity issue in 2020. The west leg of this intersection carries a relatively high future traffic volume for a two lane roadway. Since virtually no Port traffic uses this road segment, the capacity deficiency is likely due to background traffic growth between 2012 and 2020.

The results also indicate that background traffic growth and growth associated with the No-Action Alternative increase demand such that two approaches to the intersection of Canal Road and 28th Street experience LOS worse than D by 2040. The same conclusion applies to 2040 conditions under the Proposed Project Alternative.

The two road segments that have LOS worse than D are two of the approaches to the intersection of Canal Road and 28th Street. There are unfunded Gulf Regional Planning Commission (GRPC) Long-range Plan (LRP) projects to add two-way left-turn lanes to both the west and north leg of this intersection; however, these improvements do not address the intersection capacity issue. The changes in LOS are mostly triggered by year 2040 background traffic growth. Port truck traffic would not use these roadways, and only 14 percent of Port employees access the Port via Canal Road and 28th Street. Impacts associated with the Proposed Project Alternative are similar to the No-Action Alternative impacts.

Because 2060 throughput and resulting traffic count projections present the “worst-case” scenario, the following sections discuss potential traffic impacts in 2060 for the No-Action and Proposed Project Alternatives. This allows for a comparison of the alternatives in a meaningful manner. Potential impacts associated with rail facilities are also discussed.

5.2.1.1 No-Action Alternative

Table 18 provides anticipated LOS values for 2060 under the No-Action Alternative. Results of 2060 traffic evaluation indicate that background traffic growth and growth associated with No-Action Alternative increase demand such that a section of US 49 and a longer section of 28th Street experience LOS worse than D. As was the case with 2040, the combination of 2060 background traffic growth and Port employee traffic from the No-Action Alternative further increase demand on the intersection of Canal Road and 28th Street such that four lane widening improvements would be needed to achieve a meaningful increase in intersection capacity, and the low-cost intersection channelization improvement would not provide sufficient relief. Additionally, two other intersections (Canal Road and 28th Street and 28th Street at 30th Avenue) would experience LOS of E or F in 2060.

Capacity issues on US 49 pertain to the segment between 25th Street and 28th Street. US 49 transitions from six lanes north of 28th Street to four lanes from south of 28th Street to US 90. Though the US 49 roadway south of 28th Street is six lanes wide, the right lane in each direction is currently dedicated to right turns and as a buffer for on-street angle or parallel parking. The third lane in each direction can be restored by restriping the existing pavement and removing the angle parking. This change is only required for the quarter mile segment from 28th Street to a point south of 25th Street. Sections of US 49 farther south toward the beach and CBD operate at an acceptable LOS with four lanes.

Finally, the volume of traffic using the I-10 westbound loop exit ramp to southbound US 49 results in LOS E operations during the PM peak hour in 2060, mostly due to background traffic growth. Loop ramps have less capacity than other single-lane ramps due to their lower operating speed, and due to weaving traffic at either end of the ramp at cloverleaf interchanges. There are planned projects that could address this issue, though they are not committed at this time for different reasons. One project is the I-310 that would divert much of the traffic from this ramp that is destined for the Gulfport CBD and Port. The other is a planned new I-10 interchange east of US 49 that would connect with Airport Road at the northeast end of the Gulfport-Biloxi International Airport. This interchange would also attract I-10 traffic from the US 49

interchange. Other options involve modifications to the I-10/US 49 interchange. One low-cost modification involves closing the loop ramp and adding two left-turn lanes from the existing westbound I-10 to northbound US 49 ramp such that this ramp can also be used for left turns via a new signalized ramp intersection on US 49. Potential mitigation measures are provided in Section 6.2 of the EIS.

Table 18
Roadway Corridor Level of Service (LOS) Values –
2060 No-Action Alternative and Proposed Project Alternative

Corridor Name/Limits	No-Action Alternative		Proposed Project Alternative	
	LOS	Potential Cause	LOS	Potential Cause
I-10 Freeway	D	No issues	D	No issues
I-10–US49 Interchange/Westbound to southbound loop ramp	E	High traffic volume for loop ramp	E	High traffic volume for loop ramp
US 49/Northbound approaching 28th Street and southbound approaching 25th Street	F	Reduction in US 49 Traffic Lanes from 6 to 4 lanes at 28th Street	F	Reduction in US 49 Traffic Lanes from 6 to 4 lanes at 28th Street
US 49/Southbound approaching Creosotte Road	D	No issues	E	Intersection Capacity
US 90	D	No issues	D	No issues
Canal Road/Southbound approaching 28th Street	E	Intersection Capacity	E	Intersection Capacity
25th Street	D	No issues	D	No issues
28th Street/Eastbound and westbound approaching Canal Road	F	Intersection Capacity	F	Intersection Capacity
28th Street/Eastbound approaching 30th Avenue	F	Intersection Capacity	F	Intersection Capacity
30th Avenue/Northbound approaching 25th Street	D	No issues	E	Intersection Capacity
30th Avenue/Northbound approaching 25th Street	D	No issues	D	No issues

At-grade railroad crossings were evaluated as part of a study conducted by Burk-Kleinpeter, Inc., et al. (2011) on June 14, 2011, as part of the EA for the Kansas City Southern (KCS) Railway Track Upgrade Project, Hattiesburg to Gulfport, Mississippi. Results indicated that although some delays would be experienced as a result of the proposed Project, those impacts are likely to be confined to the immediate vicinity of the rail line. Of the 92 rail grade crossings along the corridor, all but one can be accommodated within the existing transportation system with no improvements. Only the Landon Road crossing north of I-10 was expected to experience queues longer than the existing roadway could handle. Also, the study concluded, as seen in Table 19 that crossing delays would decrease due to the higher operating speed from the KCS rail line improvements, except for between 33rd Street and Polk Street, where crossing closure

time may increase up to 66 seconds due to longer trains travelling north from the Gulfport Rail Yard. In the downtown Gulfport area, at each of the at-grade rail crossings between US 90 and 33rd Street, the KCS rail line improvements decrease the total crossing closure time by approximately 37 seconds. The KCS Improvements Project has since been completed.

Table 19
Crossing Delay Before and After KCS Rail Line Improvements Implemented

Existing Conditions	From	To	Allowable Train Length (feet)	Train Speed (miles per hour)	Train Speed (feet/second)	Track Clearance Time (seconds)	Total Crossing Closure Time (seconds)
Before KCS Rail Improvement	US 90	O'Neal Road	2,940	10	14.7	30	230
	US 90	33rd Street	2,400	10	14.7	30	193
After KCS Rail Improvements	33rd Street	Polk Street	3,900	10	14.7	30	296
	Polk Street	Dedeaux Road	3,900	20	29.3	30	163
	Dedeaux Road	O'Neal Road	3,900	49	71.9	30	84

The changes in throughput anticipated at the Port under the No-Action Alternative (up to 1.0 million TEUs by 2060) combined with the shift in transport of goods to and from the Port using rail facilities would be expected to result in potential impact to delays at railroad crossings. Delays in the southern limits of the line, from US 90 to 33rd Street (approximately the Gulfport Rail Yard) are expected to decrease by 37 seconds, due to train lengths being shortened from 2,940 to 2,400 feet. Between 33rd Street and Polk Street crossing times are expected to increase, as longer trains (3,900 feet) are capable of leaving to the Gulfport Rail Yard and travelling north. These trains eventually increase their speed to 20 miles per hour (mph) at Polk Street and 49 mph at Dedeaux Road, according to the KCS Railway Environmental Assessment. Because of the increase in travel speed for trains north of the Gulfport Rail Yard, crossing delays may decrease by 67 to 146 seconds per crossing. By 2060 it is expected that under the No-Action Alternative there would be up to 28 train trips per day between (to or from) the Port and the Gulfport Rail Yard; north of the Gulfport Rail Yard, nearly 18 train trips per day are anticipated by 2060.

5.2.1.2 Proposed Project Alternative

Potential impacts to traffic under 2060 forecast scenarios for the Proposed Project Alternative would be essentially the same as described for the No-Action Alternative. This would be primarily because while additional trips are generated by the Proposed Project Alternative, the trips are distributed throughout the

day and therefore do not significantly impact traffic peaks. Thus, LOS would not be expected to change and any unacceptable conditions would be caused by background growth not associated with the Proposed Project Alternative. Potential mitigation measures are provided in Section 5.2.2 of the EIS.

By 2060, it is expected that under the proposed Project conditions, there would be up to 47 train trips per day between (to or from) the Port and the Gulfport Rail Yard; nearly 29 train trips per day are anticipated north of the Gulfport Rail Yard by 2060. While additional train trips would be generated by the Port, the analysis projects the duration of delays and frequency of delays caused by the additional train trips generated by the Proposed Project Alternative should fall within the same thresholds as the No-Action Alternative. Therefore, impacts associated with changes in rail transport activities at the Port are expected to be the same as described for the No-Action Alternative. The slight changes in throughput would not substantially change expected delays at railroad crossings.

Overall, the majority of impacts seen in the vicinity of the Port would be caused by background traffic rather than Port-related traffic. Additionally, it should be noted that traffic forecasting and modeling included only those roadway improvements that have been approved and funded. Thus, it is likely that changes in roadway planning over time would alleviate many of the LOS issues identified.

5.2.1.3 Traffic Environmental Justice Viewpoint

Traffic is currently an issue in Gulfport's EJ communities. Background and unrelated Port traffic have contributed to the current traffic conditions in the City. All of the roadways that were analyzed for this CIA showed that traffic in 2012 was predominantly LOS D, which is normally the worst tolerated in urban areas. The one intersection that came out to a LOS E, which represents traffic volumes near capacity, is located in a census tract block group with minority population percentage greater than the City average of 43.1 percent (Figure 4).

The No-Action Alternative and Proposed Project Alternative would generate impacts to traffic in census tract block groups with higher minority population percentage than the average city minority population. This is an unavoidable impact as the truck routes associated with the Port were established on the roadways prior to the growth of the neighborhoods. However, the majority of those impacts will not be felt until 2020 and they would be felt in both EJ and non-EJ neighborhoods. Given the sufficient timeframe to address the potential issues associated with the Proposed Project Alternative, and even with the No-Action Alternative, these issues would not be considered impacts if they are mitigated beforehand.

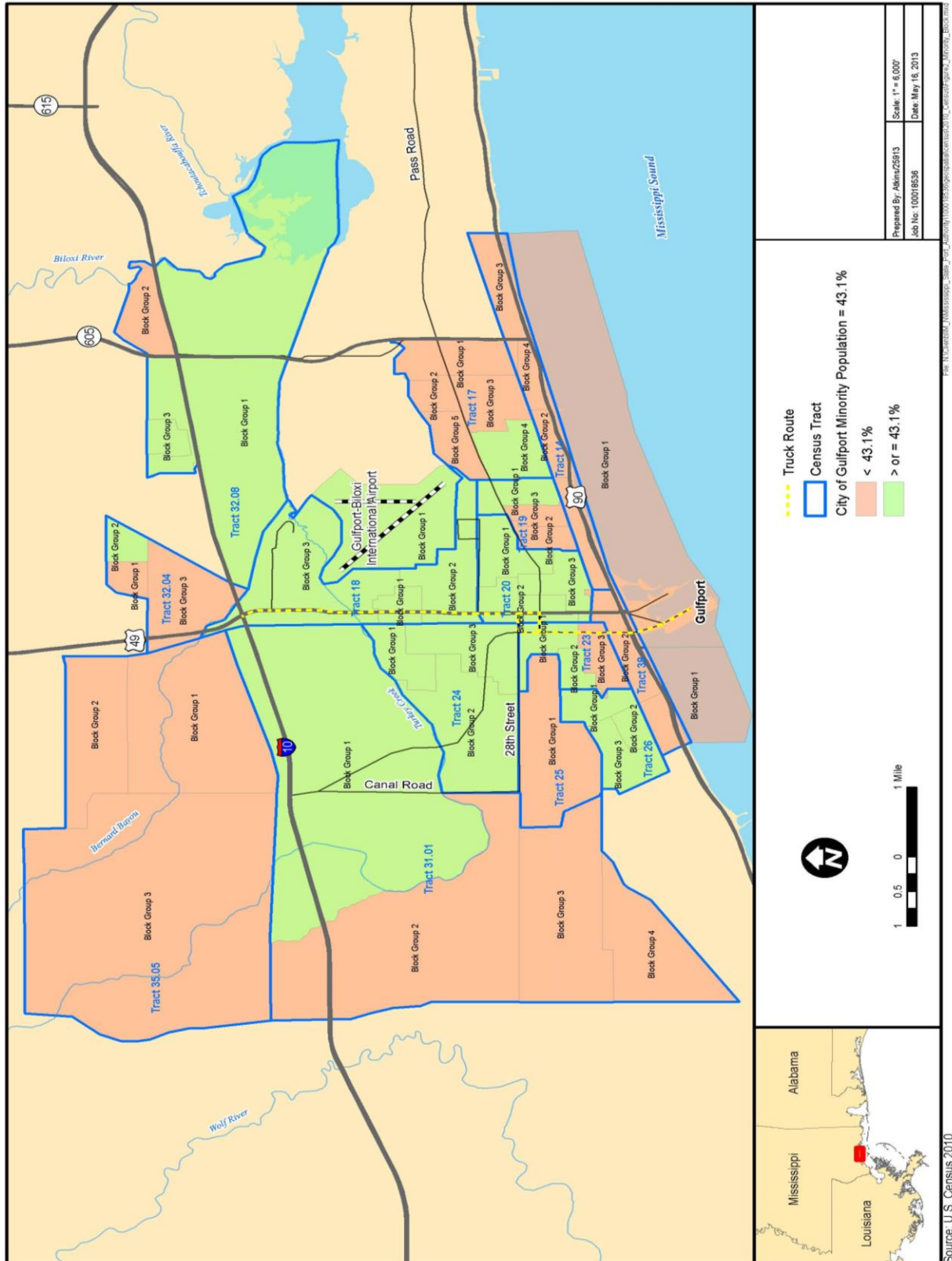


Figure 4: 2010 Percentage Minority by Census Block Group

5.2.2 Potential Mitigation Recommendations

This section organizes the list of roadway improvements to identify those that might be a direct result of new traffic generated by the Proposed Project Alternative. Those improvements that are a product of background traffic growth in the Gulf Coast urbanized area and growth in shipping activity constrained by previously approved expansion actions are initially identified so that those explicitly resulting from the proposed Port expansion alternatives can be separated.

5.2.2.1 Traffic Mitigation – No-Action Alternative

With completion of the Restoration Project in 2017, under the No-Action Alternative, Port traffic demand is expected to grow, but at a lower rate because the Port footprint will be completely built out with no additional space for new tenants. Table 20 summarizes which road network improvements would be needed from 2020 to 2060 to maintain an acceptable LOS as a result of increased Port traffic associated with the No-Action Alternative.

Table 20
Roadway Improvement Needs – No-Action Alternative

Year Needed	Corridor Name	Location	Potential Improvement	Comments
2020	28th Street	Canal Road Intersection	Eastbound Channelized Through Lane	Could be included with the committed LRP project to add TWLTL to 28th Street from Canal Road to 30th Avenue
2040	28th Street	West of Canal Road to 30th Avenue	Widen 28th Street to 4 lanes with TWLTL	New project needed to handle regional traffic growth beyond 2035 Gulf Regional Planning Commission GRPC LRP
2040	Canal Road	28th Street Intersection	Add second southbound left-turn lane	Could be included with uncommitted LRP project to add TWLTL to Canal Road from south of I-10 to 28th Street
2060	US 49	25th Street to south of 28th Street	Eliminate on-street parking, restripe existing roadway from 4 to 6 lanes	Low cost project
2060	I-10/US 49 Interchange	Westbound to southbound loop ramp	Close loop ramp, construct left turn lanes on existing westbound to northbound ramp, add traffic signal to US 49 for left turn lanes	New project needed to handle regional traffic growth beyond 2035 GRPC LRP if planned new I-10 interchanges are not built (Airport Road or I-310)

LRP = Long-range Plan

TWLTL = Two-way left-turn lane

GRPC = Gulf Regional Planning Commission

5.2.2.2 Traffic Mitigation – Proposed Project Alternative

Table 21 summarizes the roadway improvements that would be needed in addition to the No-Action Alternative improvements (see Table 20) due to additional traffic generated by the Proposed Project Alternative. No additional improvements would be needed in 2020 or 2040.

Table 21
Roadway Improvement Needs – Proposed Project Alternative

Year Needed	Corridor Name	Location	Potential Improvement	Comments
2060	30th Avenue	Northbound at 25th Street	Add northbound right-turn bay	Low cost project
2060	US 49	Southbound at Creosote Road	Widen roadway to add second southbound left-turn lane	Depends on uncommitted GRPC LRP project to widen Creosote Road to 4 lanes from US 49 to Three Rivers Road

LRP = Long-range Plan

GRPC = Gulf Regional Planning Commission

5.3 AIR QUALITY

The evaluation of impacts to air quality is based on the identification of air contaminants and estimated emission rates associated with the No-Action Alternative and Proposed Project Alternative. Air emissions are considered for Port expansion construction activities and placement of dredged material as well as emissions from vehicular traffic and maintenance dredging. Project emissions are estimated based on the construction and equipment schedule developed for the Proposed Project Alternative as well as associated increased truck, rail, and ship traffic rates.

The estimated air contaminant emissions, except ozone (O₃), are compared with the 2011 emissions inventory for the County, which is discussed in Section 3.5 of the EIS. Construction equipment and marine vessels burn fuel that forms nitrogen oxides (NO_x) and volatile organic compounds (VOCs). NO_x and VOC are precursors to O₃. The burning of fuels on its own does not produce O₃ as a product of combustion and therefore, O₃ is not calculated as an air contaminant from the No-Action Alternative and the Proposed Project Alternative for comparison to the County emissions inventory. Assuming an increase in air emissions would result in a corresponding increase in the ambient air concentration for that air contaminant, the ratio of the estimated emissions to the existing 2011 emissions for that contaminant provides a relative indication of the potential increase in ambient concentrations for the air contaminant.

The emission estimates provided in this document represent the increase in criteria pollutant emissions that would result from the No-Action Alternative and the Proposed Project Alternative. For the purpose of this air impact assessment, the regional area is considered to include the County; the Proposed Project Alternative is located at the southern end of the County. The impact assessment addresses the projected

incremental increase in air emissions associated with the No-Action Alternative and Proposed Project Alternative in the years 2020 and 2060, as representative years for analysis.

Emissions evaluated were those that would primarily result from off-road and on-road mobile sources associated with construction of the Proposed Project Alternative. There would also be regional emission increases from marine, rail, and roadway traffic traveling to and from the terminal site (i.e., off-site emissions) associated with the operation of the No-Action Alternative and Proposed Project Alternative. The off-site traffic would be distributed over the Gulfport urban area, primarily along US 49 between US 90 and I-10 and along the FNC leading up to the Port.

Air dispersion modeling was performed in response to comments from the U.S. Environmental Protection Agency (EPA) on the Draft EIS and was meant to provide information about potential hot spot impacts due to the additional line haul locomotive and container truck activity in the No-Action Alternative and the Proposed Project Alternative. EPA's comments specified the following National Ambient Air Quality Standards (NAAQS) pollutants of concern for modeled impacts: carbon monoxide (CO), nitrogen dioxide (NO₂), particulate matter of 10 micrometers or less (PM₁₀), and particulate matter of 2.5 micrometers or less (PM_{2.5}). Concentrations of these criteria pollutants resulting from the operation of the No-Action Alternative and the Proposed Project Alternative were predicted using the AERMOD Dispersion Model. As discussed in Section 3.5 of the EIS, the County is currently designated as attainment or unclassifiable with the NAAQS for all regulated pollutants. Detailed assumptions, model data, and calculations for emissions inventories and dispersion modeling are in Appendix P of the EIS.

5.3.1 Potential Impacts

5.3.1.1 No-Action Alternative

No construction or new operating emission sources are associated with the No-Action Alternative. Therefore, there would be no adverse impact to air quality from the construction of the No-Action Alternative.

It would be expected that over time, the Port would achieve an annual throughput of up to approximately 1.0 million TEUs by 2060. Thus, it is expected that air contaminant emissions within the Project area would increase within the operational constraints on the existing system due to increased truck, rail, and ship traffic resulting both from growth of existing business and new business at the Port.

According to the Air Quality Technical Memorandum (Appendix P of the EIS) the No-Action Alternative would result in a relatively small increase in air contaminant emissions above those from existing sources in the County by 2020 and 2060; the largest being for emissions of NO_x and carbon dioxide equivalents (CO₂e) primarily due to the increase in truck, railroad, and container ship traffic. Criteria pollutant and Hazardous Air Pollutants (HAPs) emissions from the No-Action Alternative would equal very small percentages of the total criteria pollutants and HAPs emitted in the study area. Impacts of criteria pollutants and HAPs from the operational inventory of the No-Action Alternative would be minor. Due to the

anticipated short-term duration of the maintenance dredging activities once every ten years, emissions from these activities are not expected to adversely impact the long-term air quality in the area. Impacts of criteria pollutants and HAPs from the maintenance dredging of the No-Action Alternative would be minor.

It is expected that air contaminant emissions resulting from the increase in container volume traffic may result in a corresponding increase in impacts to air quality in the immediate vicinity of the Project area, diminishing as emissions are dispersed over the County. These localized impacts from air contaminants were analyzed using dispersion modeling. The purpose of the air quality modeling was to provide an estimate of the projected near-road and near-rail impacts on ambient air quality from line haul locomotives and container trucks operating off-property from the Port of Gulfport traveling north to Creosote Road, just south of I-10. Emissions factors from MOVES 2014a model for container trucks and emissions factors for line haul locomotives from *Current Methodologies for Preparing Mobile Source Port-Related Emission Inventories* were used for the analysis (EPA 2009). AERMOD was run to predict the impact of emissions of CO, NO_x, PM₁₀ and PM_{2.5} for the No-Action Alternative in 2020 and 2060.

The AERMOD results of CO, NO₂, PM₁₀, and PM_{2.5} concentrations and comparison to the NAAQS in 2020 and 2060 for the No-Action Alternative are shown in Tables 22 and 23, respectively. Detailed calculations, figures, and files are shown in Appendix P of the EIS.

As shown in Figures 5 and 6, the predicted NO₂ concentrations are higher along the railroad tracks and nearer to the Port than the locations along US 49. The concentrations drop quickly at receptor locations away from the railroad tracks. As shown in Tables 22 and 23, criteria pollutant concentrations resulting from the operation of the No-Action Alternative would not exceed the applicable NAAQS.

Table 22
AERMOD Modeling Results – 2020 No-Action Alternative

Pollutant	Averaging Period	NAAQS ($\mu\text{g}/\text{m}^3$)	Modeled Concentration ($\mu\text{g}/\text{m}^3$)
CO	8-hour	10,000	44.3
	1-hour	40,000	165.6
NO ₂	Annual	100	14.7
	1-hour	188	161.5
PM ₁₀	24-hour	150	1.8
PM _{2.5}	Annual	12	0.5
	24-hour	35	1.3

Note:

- The maximum 1-hour NO₂ concentration includes Ambient Ratio Method 2 (ARM2) ratios of 0.2 to 0.9 and annual NO₂ includes the ARM ratio of 0.75.
- Total predicted concentration for the 1-hour NO₂ standard is the average of the H8H (98 percentile) modeled over 5 years.
- Total predicted concentration for the Annual NO₂ standard is maximum of five years modeled concentrations.
- Total predicted concentrations for the 1-hour and 8-hour CO standards are the maximum modeled over 5 years.
- Total predicted concentration for the 24-hour PM₁₀ standard is the max of the H2H modeled over 5 years.
- Total predicted concentration for the 24-hour PM_{2.5} standard is the average of the H8H (98 percentile) modeled over 5 years.
- Total predicted concentration for the Annual PM_{2.5} standard is the five year average of the annual concentrations.

CO = carbon monoxide

NO₂ = nitrogen dioxide

PM₁₀ = particulate matter of 10 micrometers or less

PM_{2.5} = particulate matter of 2.5 micrometers or less

NAAQS = National Ambient Air Quality Standards

Table 23
AERMOD Modeling Results – 2060 No-Action Alternative

Pollutant	Averaging Period	NAAQS ($\mu\text{g}/\text{m}^3$)	Modeled Concentration ($\mu\text{g}/\text{m}^3$)
CO	8-hour	10,000	110.2
	1-hour	40,000	323.8
NO ₂	Annual	100	7.0
	1-hour	188	135.6
PM ₁₀	24-hour	150	1.0
PM _{2.5}	Annual	12	0.2
	24-hour	35	0.5

Note:

- The maximum 1-hour NO₂ concentration includes ARM2 ratios of 0.2 to 0.9 and annual NO₂ includes the ARM ratio of 0.75.
- Total predicted concentration for the 1-hour NO₂ standard is the average of the H8H (98 percentile) modeled over 5 years.
- Total predicted concentration for the Annual NO₂ standard is maximum of five years modeled concentrations.
- Total predicted concentrations for the 1-hour and 8-hour CO standards are the maximum modeled over 5 years.
- Total predicted concentration for the 24-hour PM₁₀ standard is the max of the H2H modeled over 5 years.
- Total predicted concentration for the 24-hour PM_{2.5} standard is the average of the H8H (98 percentile) modeled over 5 years.
- Total predicted concentration for the Annual PM_{2.5} standard is the five year average of the annual concentrations.

CO = carbon monoxide

NO₂ = nitrogen dioxide

PM₁₀ = particulate matter of 10 micrometers or less

PM_{2.5} = particulate matter of 2.5 micrometers or less

NAAQS = National Ambient Air Quality Standards

5.3.1.2 Proposed Project Alternative

Construction of the Proposed Project Alternative would lead to temporary air quality impacts. These construction activities would be considered one-time activities, i.e., the construction activities would not continue past the date of completion. The construction is anticipated to occur from 2018 through 2024. Air contaminant emissions from the construction activities associated with the Proposed Project Alternative would result in a relatively small increase in emissions above those from existing sources in the County. As a result, the estimated increase in emissions may also result in corresponding minor short-term impacts on air quality in the immediate vicinity of the Project area. Due to the limited duration of these activities,

emissions from these construction activities are not expected to adversely impact the long-term air quality in the area.

Increased operational impacts to air quality were also analyzed. The total air contaminant emissions estimated for the Proposed Project Alternative were compared to the 2011 emissions inventory for the County as described in Section 3.5 of the EIS. The comparisons for 2020 and 2060 are presented in Tables 24 and 25, respectively.

Table 24
Proposed Project Alternative – Annual Estimated Traffic Emissions – 2020
Compared with Harrison County Emissions (2011)

Air Contaminant	Projected Emissions Totals (tons per year)	2011 Harrison County Emissions Inventory	Project Emissions % of Harrison County Emissions
NO _x	606.01	16,468	3.68
CO	355.45	62,403	0.57
PM ₁₀	15.52	25,598	0.23
PM _{2.5}	11.25	4,892	0.23
VOC	28.21	32,666	0.09
SO ₂	15.08	32,925	0.05
CO _{2e} (MT)	58,900	5,356,551	1.09
HAPs	4.61	5,911	0.08

Notes: CO_{2e} is presented in metric tons (MTs).

EPA 2015a, EPA 2015b.

CO = carbon monoxide

NO_x = nitrogen oxides

PM₁₀ = particulate matter of 10 micrometers or less

PM_{2.5} = particulate matter of 2.5 micrometers or less

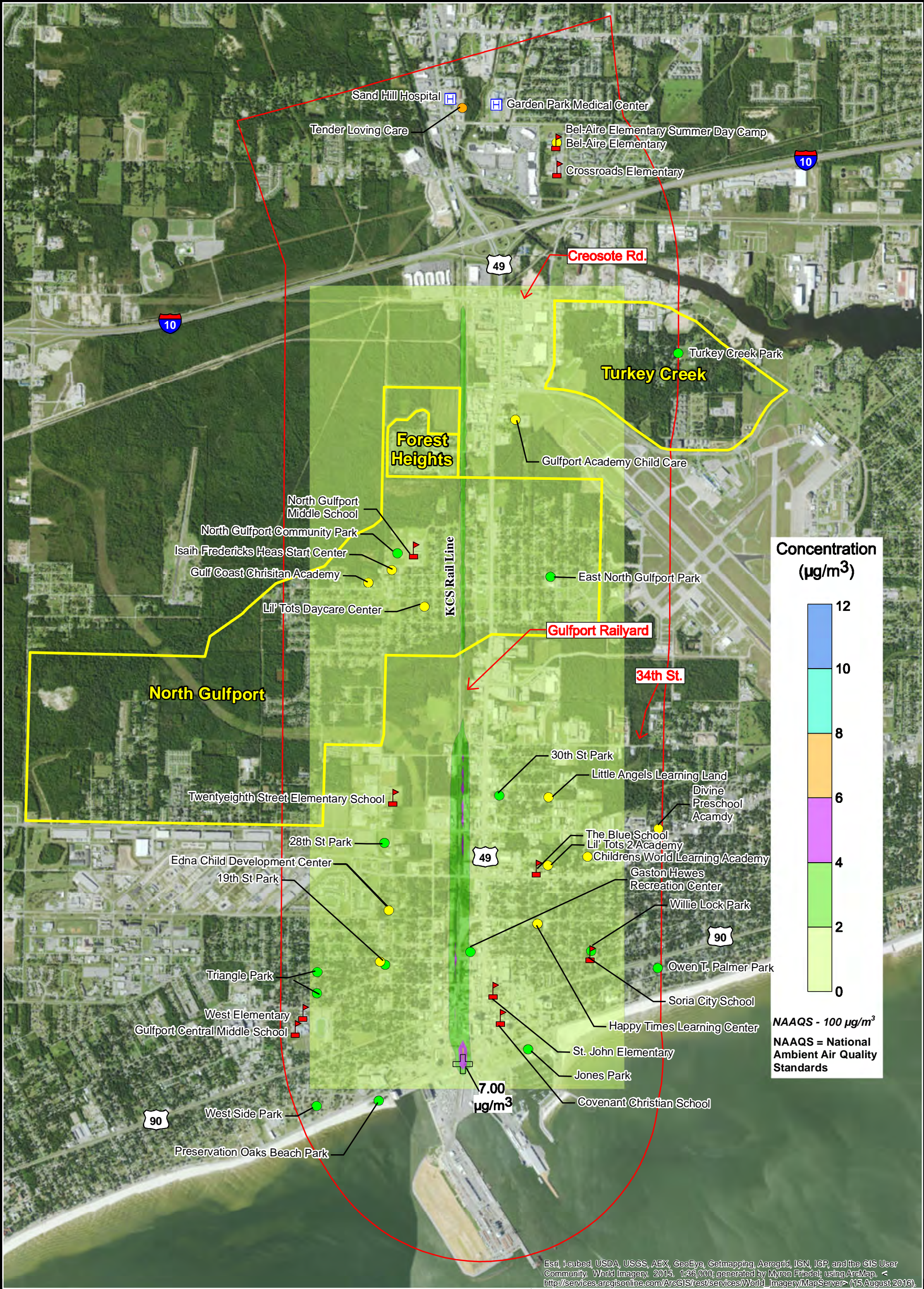
SO₂ = sulfur dioxide

VOC = volatile organic compounds

CO_{2e} = Carbon Dioxide Equivalents

HAPs = hazardous air pollutants

MT = metric tons



- School
- Convalescence Facility
- Daycare
- Hospital
- Park
- Environmental Justice Community
- Sensitive Receptors Area Boundary



0 0.5 1 Miles

Figure 5

Port of Gulfport Expansion Project

Dispersion Modeling Results

NO₂ Annual

No-Action Alternative 2060

Prepared By: 18827	Scale: 1" = 3000'
Job No.: 100018536	Date: April 27, 2017

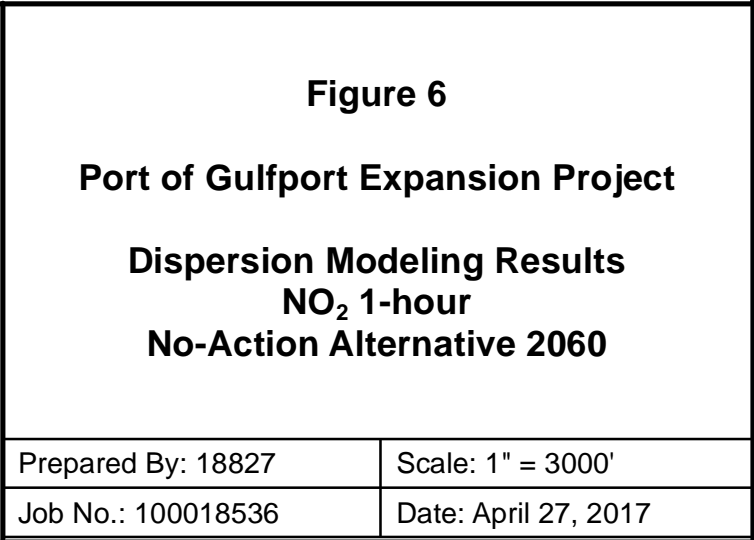
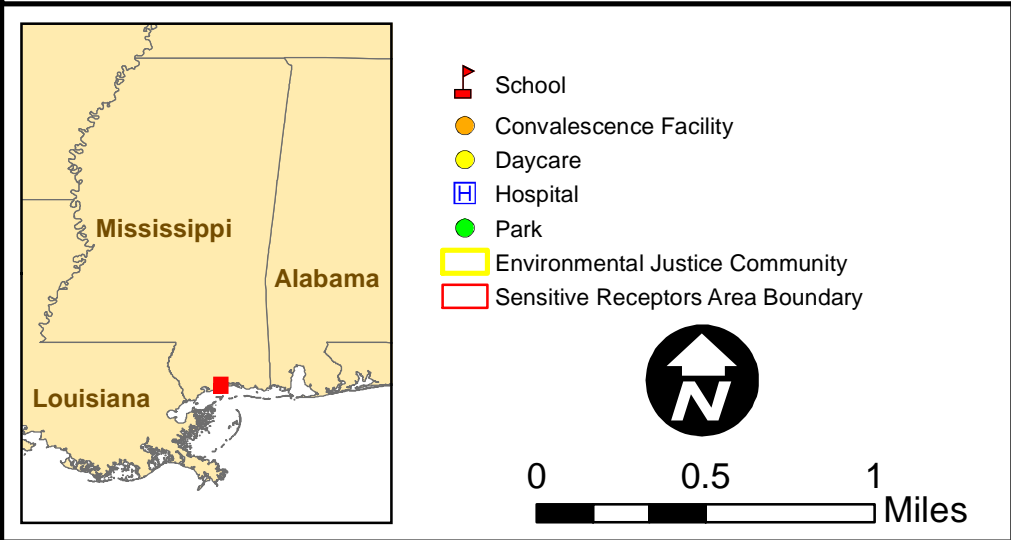
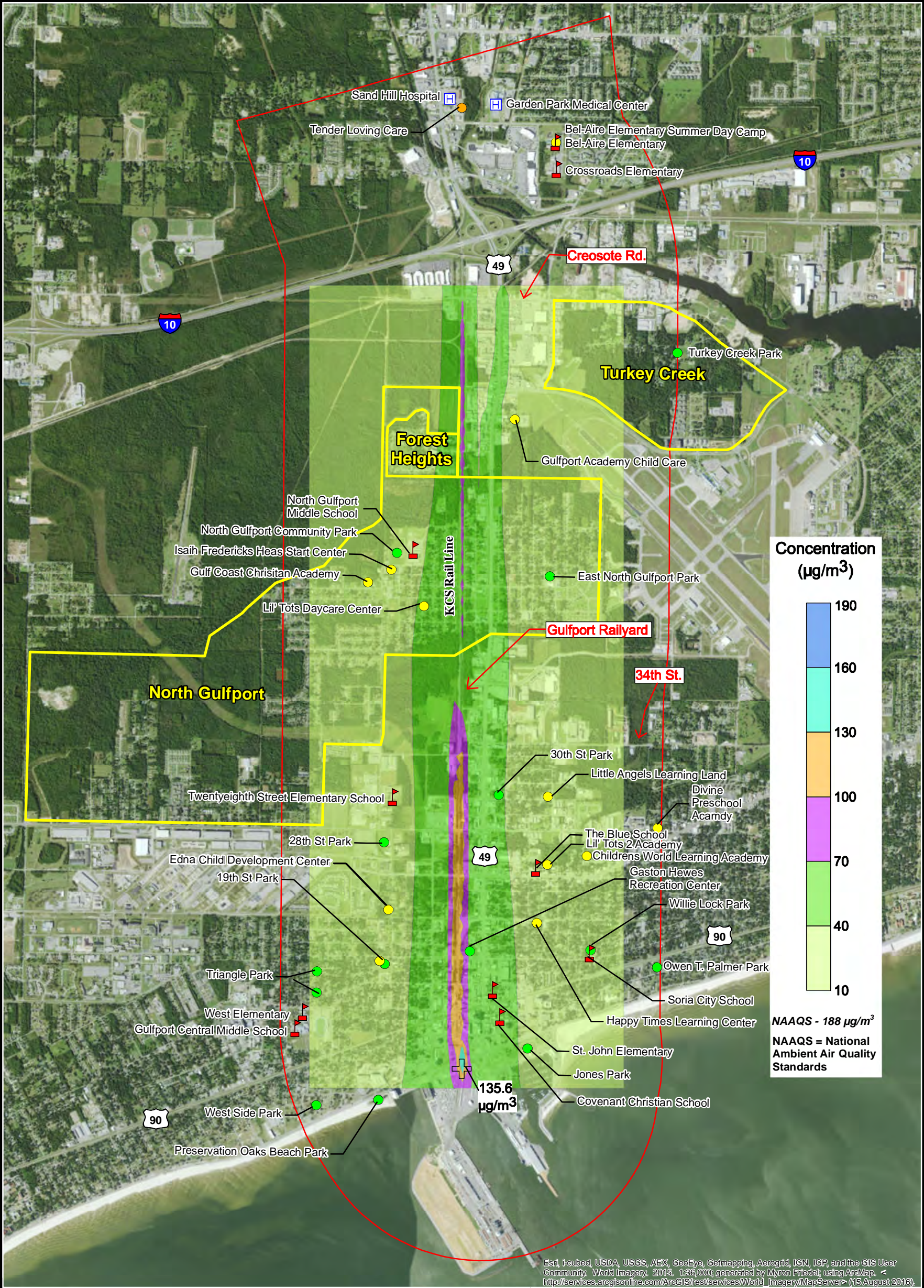


Table 25
Proposed Project Alternative – Annual Estimated Traffic Emissions – 2060
Compared with Harrison County Emissions (2011)

Air Contaminant	Projected Emissions Totals (tons per year)	2011 Harrison County Emissions Inventory	Project Emissions % of Harrison County Emissions
NO _x	1,409.43	16,468	8.56
CO	635.09	62,403	1.02
PM ₁₀	48.69	25,598	0.19
PM _{2.5}	35.29	4,892	0.72
VOC	75.83	32,666	0.23
SO ₂	52.51	32,925	0.16
CO _{2e} (MT)	196,295	5,356,551	3.66
HAPs	15.92	5,911	0.27

Notes: CO_{2e} is presented in metric tons (MT).

EPA 2015a, EPA 2015b.

CO = carbon monoxide

NO_x = nitrogen oxides

PM₁₀ = particulate matter of 10 micrometers or less

PM_{2.5} = particulate matter of 2.5 micrometers or less

SO₂ = sulfur dioxide

VOC = volatile organic compounds

CO_{2e} = Carbon Dioxide Equivalents

HAPs = hazardous air pollutants

As shown in Tables 24 and 25, the Proposed Project Alternative would result in a relatively small increase in air contaminant emissions above those from existing sources in the County by 2020 and 2060; the largest being for emissions of NO_x and CO_{2e} primarily due to the increase in truck, railroad, and container ship traffic. In the long term, the Proposed Project Alternative would be anticipated to have an increase in impacts compared with the No-Action Alternative due to increased cargo transport to and from the Port and increased material volumes for maintenance dredging. However, criteria pollutant and HAPs emissions from the Proposed Project Alternative would equal small percentages of the total criteria pollutants and HAPs emitted in the study area. Long-term adverse impacts of criteria pollutants and HAPs from the operational inventory of the Proposed Project Alternative would be minor.

Annual maintenance dredging activities for the Proposed Project Alternative would result in higher air contaminant emissions compared to the maintenance dredging activity required under the No-Action Alternative. However, the air contaminant emissions resulting from maintenance dredging related to the Proposed Project Alternative would be a relatively small fraction of the estimated annual operational

emissions. Long-term adverse impacts of criteria pollutants and HAPs from the maintenance dredging of the Proposed Project Alternative would be minor.

It is expected that air contaminant emissions resulting from the increase in container volume traffic may result in a corresponding increase in impacts to air quality in the immediate vicinity of the Project area, diminishing as emissions are dispersed over the County. Air dispersion modeling was conducted to determine the amount of impact.

The purpose of the air quality modeling is to provide an estimate of the projected near-road and near-rail impacts on ambient air quality from line haul locomotives and container trucks operating off-property from the Port of Gulfport traveling north to Creosote Road just south of I-10. Emissions factors from MOVES 2014a for container trucks and emissions factors for line haul locomotives from *Current Methodologies for Preparing Mobile Source Port-Related Emission Inventories* were used for the analysis (EPA, 2009). AERMOD was run to predict the impact of emissions of CO, NO_x, PM₁₀ and PM_{2.5} from the Proposed Project Alternative in 2020 and 2060.

The AERMOD results of CO, NO₂, PM₁₀, and PM_{2.5} concentrations and comparison to the NAAQS in 2020 and 2060 for the Proposed Project Alternative are shown in Tables 26 and 27, respectively. Detailed calculations, figures, and files are shown in Appendix P of the EIS.

As shown in Figures 7 and 8, the predicted NO₂ concentrations are higher along the railroad tracks and close to the Port than the locations along US 49. The concentrations drop quickly at receptor locations away from the railroad tracks. As shown in Tables 26 and 27, criteria pollutant concentrations modeled based on emissions from the Proposed Project Alternative would not exceed the applicable NAAQS. Long-term impacts to localized air quality from the operation of the Proposed Project Alternative would be below the NAAQS.

Table 26
AERMOD Modeling Results – 2020 Proposed Project Alternative

Pollutant	Averaging Period	NAAQS ($\mu\text{g}/\text{m}^3$)	Modeled Concentration ($\mu\text{g}/\text{m}^3$)
CO	8-hour	10,000	77.8
	1-hour	40,000	167.4
NO ₂	Annual	100	25.6
	1-hour	188	162.2
PM ₁₀	24-hour	150	3.2
PM _{2.5}	Annual	12	0.8
	24-hour	35	2.3

Note:

- The maximum 1-hour NO₂ concentration includes ARM2 ratios of 0.2 to 0.9 and annual NO₂ includes the ARM ratio of 0.75.
- Total predicted concentration for the 1-hour NO₂ standard is the average of the H8H (98 percentile) modeled over 5 years.
- Total predicted concentration for the Annual NO₂ standard is maximum of five years modeled concentrations.
- Total predicted concentrations for the 1-hour and 8-hour CO standards are the maximum modeled over 5 years.
- Total predicted concentration for the 24-hour PM₁₀ standard is the max of the H2H modeled over 5 years.
- Total predicted concentration for the 24-hour PM_{2.5} standard is the average of the H8H (98 percentile) modeled over 5 years.
- Total predicted concentration for the Annual PM_{2.5} standard is the five year average of the annual concentrations.

CO = carbon monoxide

NO₂ = nitrogen dioxide

PM₁₀ = particulate matter of 10 micrometers or less

PM_{2.5} = particulate matter of 2.5 micrometers or less

NAAQS = National Ambient Air Quality Standards

$\mu\text{g}/\text{m}^3$ = micrograms per cubic meter

Table 27
AERMOD Modeling Results – 2060 Proposed Project Alternative

Pollutant	Averaging Period	NAAQS ($\mu\text{g}/\text{m}^3$)	Modeled Concentration ($\mu\text{g}/\text{m}^3$)
CO	8-hour	10,000	176.2
	1-hour	40,000	493.7
NO ₂	Annual	100	11.5
	1-hour	188	142.5
PM ₁₀	24-hour	150	1.6
PM _{2.5}	Annual	12	0.3
	24-hour	35	0.9

Note:

- The maximum 1-hour NO₂ concentration includes ARM2 ratios of 0.2 to 0.9 and annual NO₂ includes the ARM ratio of 0.75.
- Total predicted concentration for the 1-hour NO₂ standard is the average of the H8H (98 percentile) modeled over 5 years.
- Total predicted concentration for the Annual NO₂ standard is maximum of five years modeled concentrations.
- Total predicted concentrations for the 1-hour and 8-hour CO standards are the maximum modeled over 5 years.
- Total predicted concentration for the 24-hour PM₁₀ standard is the max of the H2H modeled over 5 years.
- Total predicted concentration for the 24-hour PM_{2.5} standard is the average of the H8H (98 percentile) modeled over 5 years.
- Total predicted concentration for the Annual PM_{2.5} standard is the five year average of the annual concentrations.

CO = carbon monoxide

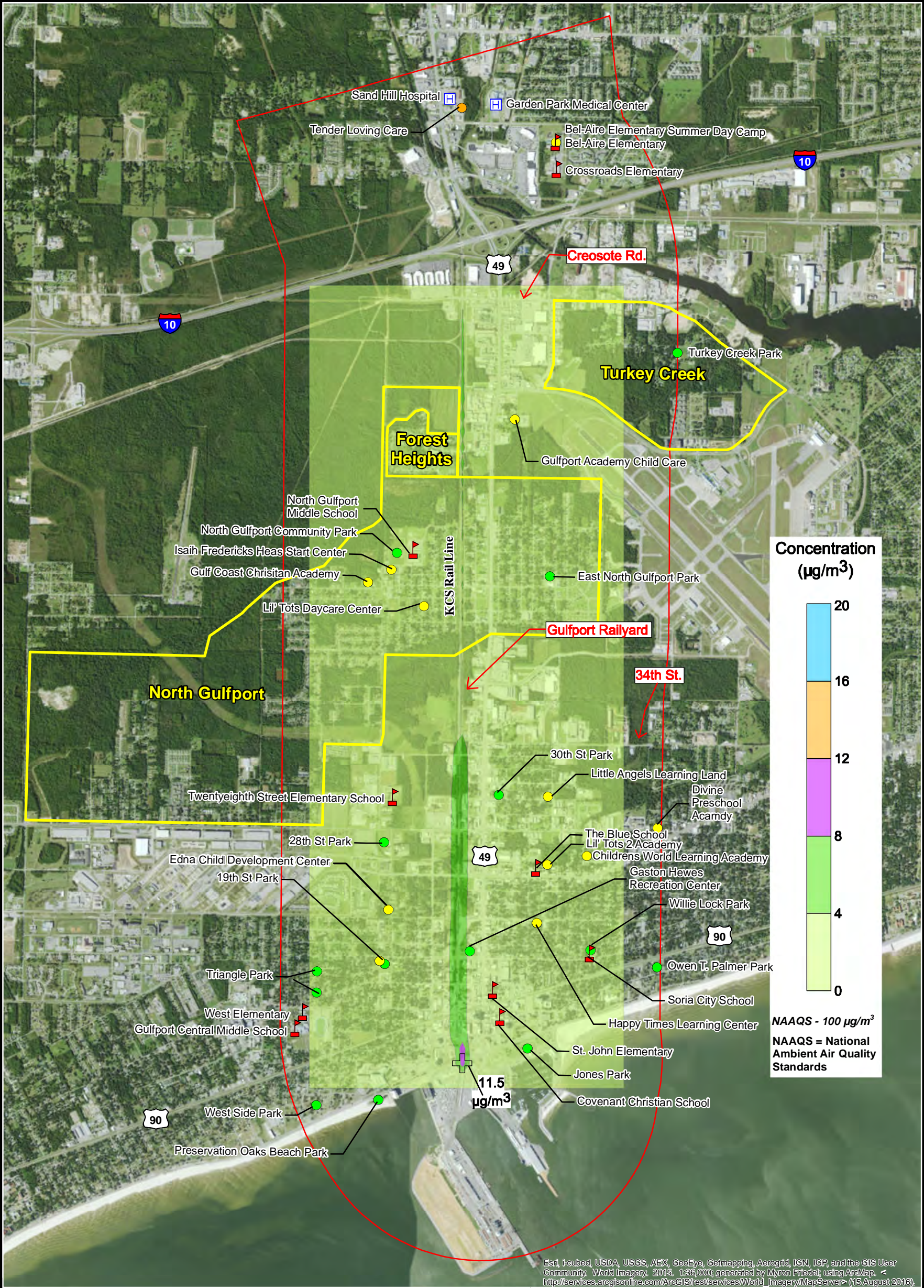
NO₂ = nitrogen dioxide

PM₁₀ = particulate matter of 10 micrometers or less

PM_{2.5} = particulate matter of 2.5 micrometers or less

NAAQS = National Ambient Air Quality Standards

$\mu\text{g}/\text{m}^3$ = micrograms per cubic meter



- School
- Convalescence Facility
- Daycare
- Hospital
- Park
- Environmental Justice Community
- Sensitive Receptors Area Boundary

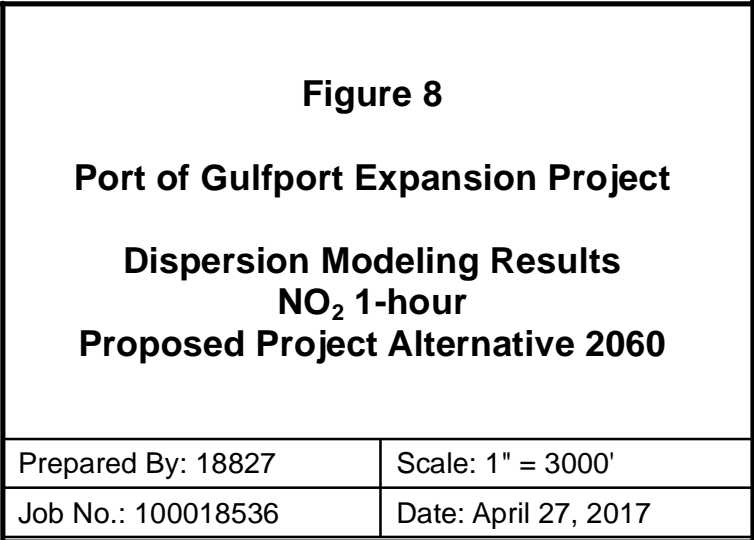
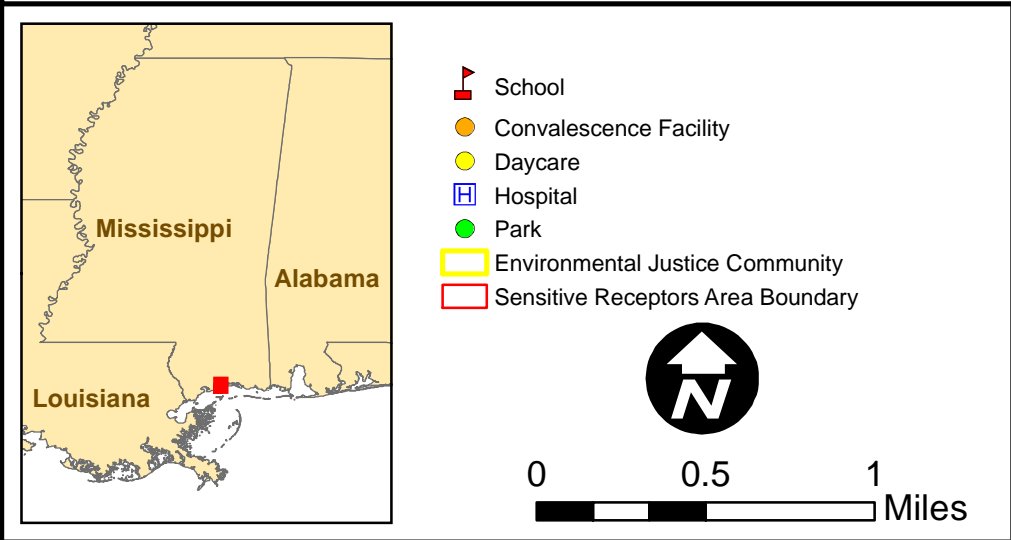
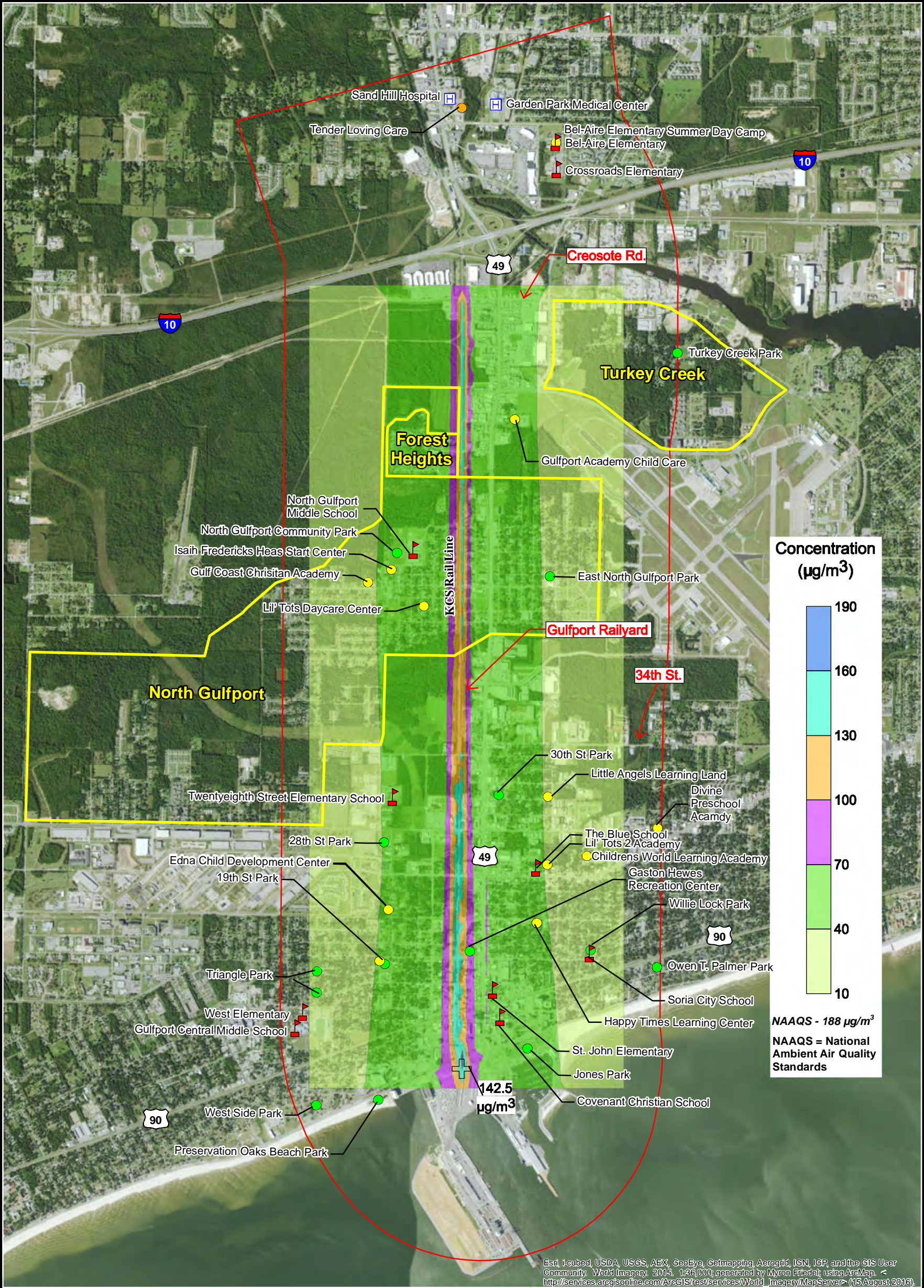


0 0.5 1 Miles

Figure 7

Port of Gulfport Expansion Project
Dispersion Modeling Results
NO₂ Annual
Proposed Project Alternative 2060

Prepared By: 18827	Scale: 1" = 3000'
Job No.: 100018536	Date: April 27, 2017



5.3.1.3 Air Quality Environmental Justice Viewpoint

The air quality analysis indicates that there would not be disproportionate adverse impacts to EJ communities. The model shows impacts being below the NAAQS threshold and impacts being dispersed throughout the County. For the full analysis please see Appendix P of the EIS.

5.3.2 Potential Mitigation Recommendations

Mitigation recommendations are not needed as there are no significant impacts. However, best management practices (BMP) listed in Section 4.5.3 of the EIS would be utilized.

5.4 NOISE

5.4.1 Potential Noise Impacts

During any construction project, the overall noise levels vary based on the level of construction activity, the types of equipment that are being operated onsite, proximity to construction site, and the types of equipment operated simultaneously. Noise data for the Port were not available; however, noise data from the Port of Los Angeles were adjusted to levels anticipated from operational activities at the Port.

The amplitude of a sound corresponds to the human sensation of loudness. Human reaction to loudness, or sound pressure, is measured in terms of sound pressure levels, and expressed in terms of decibels (dB). Regulatory agencies involved in assessing community noise or establishing noise standards typically require that measurements and analysis of noise be performed using the A-weighted sound level (dBA), which is adjusted in a manner similar to human perception.

5.4.1.1 No-Action Alternative

Under the No-Action Alternative, an annual throughput of between 250,000 and 400,000 TEUs would be anticipated, with the potential to reach 1.0 million TEUs by 2060. Most of the increase in Port operations would occur at the existing West Pier, which is located approximately 2,400 feet from the nearest noise-sensitive receptor. Using the operational range from the Port of Los Angeles, which has a throughput of approximately 8.0 million TEUs resulting in an operational noise level of 55 to 70 dBA at 1,100 feet (discussed in Section 3.6.2 of the EIS), noise levels at the noise-sensitive receptor nearest the West Pier Expansion caused by operations at the Port would be in the approximate range of 39 to 54 dBA for year 2060.

Forecasted increases in 2060 traffic volumes resulting from the No-Action Alternative ranged from a low of 80.4 percent on 25th Street to a high of 97.4 percent on 30th Avenue. Because traffic volume increases would be less than double, we can conservatively estimate a less than 3-dBA increase in traffic noise throughout the regions of influence (ROI). Using the current noise conditions identified in Section 3.6.1.2 of the EIS, Port-related roadway traffic noise levels would conservatively increase from 53 dBA to less

than 56 dBA within the ROI. Changes in noise levels of 3 dBA or less are not typically detectable by the average human ear (FHWA, 2011)

Therefore, based on Federal Transit Administration (FTA) (2006) transit noise impact parameters, the No-Action Alternative would have a negligible effect on the noise environment. This means that the change in the cumulative noise level within the traffic corridor would result in an insignificant increase in the number of people highly annoyed by the noise increase.

Under the No-Action Alternative, the Port would generate approximately 28 train trips per day between (to or from) the Port and the Gulfport Rail Yard by 2060, and 18 train trips per day to or from the Gulfport Rail Yard and the KCS railway northern terminus.

Table 28 presents the calculated distance from the track to the moderate and severe impact contours for Land Use Category 2 receptors associated with the No-Action Alternative. Impact contours for various shielding scenarios and speed regimes were calculated and are shown in Appendix J of the EIS. Table 28 shows the number of noise sensitive receptors that would fall within the moderate and severe noise impact contours under the No-Action scenario. The Land Use Category 2 receptors are primarily single-family residences. However, the impacted receptors include two hotels and 18 multi-unit residences within the moderate noise impact contour, and seven multi-unit residences in the severe noise impact contour. Two campgrounds located adjacent to the KCS rail line are included as Land Use Category 3 receptors. Both campgrounds fall within the severe noise impact contour.

As shown in Table 29, 1,054 Land Use Category 2 receptors (approximately 15 per mile) would be included in the moderate impact contour, and 1,638 (approximately 24 per mile) would fall within the severe impact contour. The majority of these receptors are located in or near the cities of Gulfport and Hattiesburg, primarily due to the combination of population density and the high number of at-grade crossings in these more urbanized areas.

Table 28
No-Action Alternative – Distance to Noise Impact Contours

Segment Location	Ambient Noise Level	Train Speed (miles per hour)	Train Length (feet) [Rail Cars]	Train Trips Per Day	Distance to Moderate Impact Contour (feet)		Distance to Severe Impact Contour (feet)	
					Road Crossing	Wayside	Road Crossing	Wayside
Port to Gulfport Rail Yard (33rd St.)	53	10	2,400 [37]	28	1,572	680	952	386
Gulfport Rail Yard (33rd St.) to Polk St.	53	10	3,900 [60]	18	1,346	579	806	324
Polk St. to Dedeaux Rd.	53	20	3,900 [60]	18	1,313	533	838	295
Dedeaux Rd. to Clark Rd.	53	49	3,900 [60]	18	1,199	857	760	505
Clark Rd. to Hwy 98	50	49	3,900 [60]	18	1,969	1,013	1,216	590
Hwy 98 North to MP 65	53	49	3,900 [60]	18	1,456	857	898	505
MP 65 to Northern Terminus	53	10	3,900 [60]	18	1,149	538	726	317

Table 29
No-Action Alternative – Impacted Receptors

Land Use Category	Moderate Impact	Severe Impact
Category 2	1,054	1,638
Category 3	0	2

5.4.1.2 Proposed Project Alternative

The implementation of the PGEP would result in short- and long-term noise in the vicinity of the Project area. Short-term noise would be associated with construction activities at the West and East Piers, placement of fill in the North Harbor, construction of an eastern breakwater, and dredging associated with the expansion of the Turning Basin. Project-related long-term noise would be associated with increased Port operations.

Evaluation of potential noise sources indicates that 10 pieces of simultaneously operating heavy equipment would have an average noise level of 85 dBA at 50 feet and a combined noise level of 95 dBA. The noise level would be 63 dBA at 2,100 feet (i.e., the distance from the North Harbor to the nearest noise-sensitive receptor). Expansion activities at the East Pier, West Pier, and proposed breakwater would be a greater

distance from noise-sensitive receptors, so Project-related construction noise at communities would be less when work is underway in those areas.

A dredge with a noise level of 70 dBA at 50 feet would result in a noise level of about 29 dBA at a distance of 5,700 feet (i.e., distance between dredging activities and the nearest noise-sensitive site). Two dredges operating in close proximity to each other would result in a noise level of 32 dBA at a distance of 5,700 feet. The noise generated by dredging activities would not be noticeable in communities and should not generate complaints at noise-sensitive sites.

Noise levels collected in 2014 for Gulfport indicated a calculated day-night sound level (L_{dn}) of 53.6 dBA. Therefore, peak noise levels generated by construction activities would likely be noticeable at the nearest receptor sites, but should not be loud enough to generate complaints. Noise from dredging activities would be lower than ambient levels, and therefore would be unlikely to generate complaints. Considering the distance between Port expansion or dredging operations and the noise-sensitive sites (between 2,100 and 5,700+ feet), the short-term noise increase associated with the Proposed Project Alternative would be anticipated to be insignificant.

Port Operations

The Proposed Project Alternative would increase the throughput at the Port by approximately 70 percent over the No-Action Alternative. This would increase TEUs handled at the West Pier from 1.0 million TEUs to 1.7 million TEUs annually. With the expansion, the nearest noise-sensitive receptor remains approximately 2,400 feet from the West Pier. Using the operational range from the Port of Los Angeles, which has a throughput of approximately 8.0 million TEUs resulting in an operational noise level 55 to 70 dBA at 1,100 feet (discussed in Section 3.6.2 of the EIS), typical noise levels at the noise-sensitive receptor nearest the West Pier caused by operations at the Port with a throughput of 1.7 million TEUs would be in the approximate range of 41 to 56 dBA. This would be an increase of about 2 dBA compared with the No-Action Alternative. Considering the distance from the operational noise sources to the nearest sensitive receptor and typical ambient noise levels in communities, the low level of Project-related operational noise resulting from the proposed Project should not be noticeable and should not result in noise complaints.

Vehicle Traffic

Forecasted changes in traffic volume resulting from the implementation of the Proposed Project Alternative would result in very small increases in traffic volumes within the ROI. The increase would range from 0.5 percent on 25th Street to 10.5 percent on 30th Avenue. The change in noise resulting from this small increase in traffic when compared to the No-Action Alternative would not be perceptible to the human ear.

Rail Traffic

Under the Proposed Project Alternative, the Port would generate up to 47 train trips per day between (to or from) the Port and the Gulfport Rail Yard, and nearly 29 train trips per day to or from the Gulfport Rail Yard and the KCS railway northern terminus.

Table 30 presents the calculated distance from the track to the moderate and severe impact contours for Land Use Category 2 receptors associated with the Proposed Project Alternative. Impact contours for various shielding scenarios and speed regimes were calculated and are shown in Appendix J of the EIS. Table 31 shows the number of noise sensitive receptors that would fall within the moderate and severe noise impact contours under the Proposed Project Alternative scenario. The Category 2 receptors are primarily single-family residences. However, the impacted receptors include three hotels (one more than the No-Action Alternative) and 18 multi-unit residences (the same as the No-Action Alternative) within the moderate noise impact contour. One hotel (one more than the No-Action Alternative) and eight multi-unit residences (one more than the No-Action Alternative) would occur within the severe noise impact contour. Two Land Use Category 3 receptors (same two campgrounds as the No-Action Alternative) would be within the severe noise impact contour under the Proposed Project Alternative scenario. The number of receptors within the moderate impact contour would increase by 268 (a 25 percent increase) compared to the No-Action Alternative, and receptors in the severe impact contour would increase by 144 (a nine percent increase) (Table 31).

Table 30
Proposed Project Alternative – Distance to Noise Impact Contours

Segment Location	Ambient Noise Level	Train Speed (miles per hour)	Train Length (feet) [Rail Cars]	Train Trips Per Day	Distance to Moderate Impact Contour (feet)		Distance to Severe Impact Contour (feet)	
					Road Crossing	Wayside	Road Crossing	Wayside
Port to Gulfport Rail Yard (33rd St.)	53	10	2,400 [37]	47	1,867	825	1,144	476
Gulfport Rail Yard (33rd St.) to Polk St.	53	10	3,900 [60]	29	1,612	709	978	403
Polk St. to Dedeaux Rd.	53	20	3,900 [60]	29	1,342	601	858	358
Dedeaux Rd. to Clark Rd.	53	49	3,900 [60]	29	1,408	1,030	903	617
Clark Rd. to Hwy 98	50	49	3,900 [60]	29	2,013	1,213	1,246	719
Hwy 98 North to MP 65	53	49	3,900 [60]	29	1,726	1,030	1,078	617
MP 65 to Northern Terminus	53	20	3,900 [60]	29	1,651	756	1,028	440

Table 31
Proposed Project Alternative – Impacted Receptors

Land Use Category	Moderate Impact	Change from No-Action	Severe Impact	Change from No-Action
Category 2	1,322	+268	1,782	+144
Category 3	0	0	2	0

5.4.1.3 Summary of Potential Airborne Noise Impacts

As described in the preceding sections, the Proposed Project Alternative would result in increases in train-generated noise along the KCS rail line when compared to the No-Action Alternative. Table 32 provides a summary of the impacts to Land Use Category 2 receptors. No Land Use Category 1 receptors were identified within the impact contours. Two Land Use Category 3 receptors were included in the analysis (campgrounds situated near the KCS rail line in the rural area between Gulfport and Hattiesburg). These two receptors would be within the severe impact contours for both the No-Action Alternative and the Proposed Project Alternative. Table 32 summarizes the change in noise impacts between the No-Action and Proposed Project Alternatives. Under the Proposed Project Alternative, the number of moderately impacted receptors would increase by 25 percent, and the number of severely impacted receptors would

increase by nine percent. The implementation of the Proposed Project Alternative would result in an additional four receptors per mile that would be moderately impacted, and two receptors per mile that would be severely impacted compared to the No-Action Alternative.

Table 32
Summary of Noise Impacts to Category 2 Receptors

	Impacted Category 2 Receptors	Change from No-Action	Percentage Change in Impacted Receptors	Number of Impacted Receptors per Mile
No-Action Alternative				
Moderate Impact	1,054	NA	NA	15
Severe Impact	1,638	NA	NA	24
Proposed Project Alternative				
Moderate Impact	1,322	+268	+25%	19
Severe Impact	1,782	+144	+9%	26

5.4.1.4 Noise Environmental Justice Viewpoint

Overall vehicular operation noise from the Proposed Project Alternative or No-Action Alternative would not disproportionately impact any EJ communities. A study of rail traffic noise concluded impacts throughout the study area affecting EJ and non-EJ communities alike; however, the impacts do not disproportionately impact EJ communities. Federally mandated BMPs and mitigation measures would reduce any potential impacts.

5.4.2 Potential Mitigation Recommendation

The FTA and Federal Railway Administration (FRA) require that mitigation measures be considered when a noise assessment suggests either severe or moderate impacts. The Proposed Project Alternative would result in an increase in both severe and moderate impacts to noise-sensitive receptors. The majority of these impacts would occur in the Hattiesburg and Gulfport areas due to the combination of high population densities and numerous at-grade rail crossings (with their associated horn noise).

Reducing horn noise by the use of noise barriers is generally not feasible because they reduce driver visibility at intersections. Residential soundproofing is a mitigation option for smaller scale impacts, but is not feasible in this case due to the large number of impacted receptors. The most feasible noise mitigation measure would likely be the establishments of Quiet Zones in the Greater Gulfport and Hattiesburg areas.

By adopting approved Supplemental Safety Measures (SSM) at each public grade crossing, a Quiet Zone of at least a half-mile long can be established that would preclude the need for use of a horn at rail crossings, and thus eliminate this noise source. These measures would be applicable in addition to the standard safety

devices required at most public grade crossings (e.g., stop signs, reflective cross bucks, flashing lights with gates that do not completely block travel over the tracks). The six SSMs identified below have been predetermined by the FRA to fully or in tandem compensate for the lack of a locomotive horn:

1. *Reconstruct the street crossing into an under-over pass.* This measure, while expensive, would completely eliminate the need for a train to sound its horn.
2. *Temporary closure of a public highway-rail grade crossing.* This measure requires closure of the grade crossing one period for each 24 hours, and must be closed the same time each day.
3. *Four-quadrant gate system.* This measure involves the installation of at least one gate for each direction of traffic to fully block vehicles from entering the crossing.
4. *Gates with medians or channelization devices.* This measure keeps traffic in the proper travel lanes as it approaches the crossing. This denies the driver the option of circumventing the gates by traveling in the opposing lane.
5. *One-way street with gates.* This measure consists of one-way streets with gates installed so that all approaching travel lanes are completely blocked.
6. *Pole-mounted wayside warning horns.* This measure places warning horns on signal poles directly at the street crossing in question. The wayside horns are still relatively loud (92 dBA at 100 feet) but can be effectively aimed directly down the affected street to minimize disturbance to adjacent neighborhoods.

The lead agency in designating a Quiet Zone is the local public authority responsible for traffic control and law enforcement on the roads crossing the tracks. In order to satisfy the FRA regulatory requirements, the public transit agency must work closely with the highway/traffic agency while also coordinating with any freight or passenger railroad operator sharing the right-of-way.

5.5 COMMUNITY COHESION

Community cohesion is generally characterized by interaction amongst neighbors and friends, participation in community activities and organizations, and involvement in local government and politics. Cohesive communities may also have several generations of families, extended families, and strong informal (nongovernmental) social support networks that can provide for childcare, emergency assistance, and spiritual guidance, among other possibilities. Transportation and land use changes can have effects on community cohesion. People and relationships can be separated by barriers and greater distances, affecting their ability to see and communicate with one another easily. Alternatively, transportation facilities can tie the communities more closely together, making it easier for people to interact.

Community cohesion can be defined in many ways, but primarily it is identified as those things that allow shared perceptions and attitudes about a specific place. According to the FHWA, Office of Environment and Planning, it is generally expressed through “identification with, commitment to, and attitude toward a particular identifiable area” (FHWA, 1996). Consequently, it is usually defined in terms of spatial relationships, but can also be based on common characteristic, interest, or economic status. In assessing

impacts to community cohesion in the City, a qualitative methodology was utilized, which was based on field observation within the community, discussions with community leaders, and review of Project comments from past public involvement activities (see Section 2.0).

5.5.1 Community Cohesion Environmental Justice Viewpoint

While some of the residents of the City walk and bike to access various parts of the City, as observed during field investigations, residents do rely heavily on vehicular transportation for access to work sites, schools, recreational opportunities, places of worship, medical facilities/services, and other community activities. As identified in the U.S. Census Bureau and by interviews conducted for this CIA, the City has an aging population and a high concentration of minority population.

According to one interviewee, “Growth and lack of growth each have their problems. We can work with the growing pains. It is an inconvenience but a good inconvenience... Growth can provide opportunities for people to get along with each other.” The PGEP would be primarily situated in an industrial area, but it would affect the whole community of Gulfport. The Port is one of Gulfport’s largest employers and is one of Gulfport’s economic pillars; in fact, the Port predates the City of Gulfport. The PGEP would increase the viability of the Port, which according to one of the interviewees would help increase community cohesion. The Port would not change the community’s overall sense of place; however, increased traffic could cause neighborhoods to feel more isolated and difficult to navigate for motorist and pedestrians. However, the traffic analysis presented earlier indicates that potential impacts to area traffic would be largely a result of background traffic, though the Port would be one of many contributors to the overall roadway traffic of Gulfport. Additionally, the potential effects of traffic would not occur until 2020. This added traffic would ramp up gradually over the course of years, which would give the community time to adapt, plan, and prepare.

Furthermore, induced growth from the PGEP would occur that would also improve the local economy. However, rail traffic associated with increased Port capacity would need to be addressed through the mitigation measures provided throughout the EIS.

The PGEP would change the face of the Port but not the sense of community. The City’s EJ communities would be able to continue as they have and would not be adversely or disproportionately affected by the PGEP.

5.5.2 Potential Mitigation Impacts

A recurring concern from the interviewees was the lack of dialogue between community leaders and the Port. Each of the interviewees understood the importance of economic growth and job creation for the people of Gulfport, and they also wanted the Port to involve them in any measures taken to mitigate any potential impacts from growth at the Port. One interviewee said, “People feel like they have been betrayed, lied to, and mistreated because of the way the data was presented.” Therefore, it is important to have community involved in a significant way in any implementation of mitigation.

Regardless of which alternative is advanced for the Port, the Port is still expected to grow. The degree of change would be the only difference among the four Project alternatives. As a result, the mitigation discussion for community cohesion is the same regardless of the alternative advanced.

An interviewee stressed the importance of flexible scheduling for work hours at the Port: “Changing the schedule would make it easier for parents to have day jobs at the Port, jobs that could be done by single mothers.” This sentiment was also echoed by other interviewees.

A recurring topic from the interviews was entrepreneurship. Many of the interviewees felt that entrepreneurship was lacking in the community. That lack of entrepreneurship was creating an attitude of negativity. Projects like the PGEP would have the opportunity to change that by providing a dialogue and mechanism for involving the community and local vendors in the PGEP and ultimately supporting entrepreneurial activities.

Another recurring topic of discussion was about community improvements. Many felt that the Port was not doing its best at visual beautification along US 90 when the community was making efforts in this area. Suggestions were made to include public art, mosaics, and context-sensitive design to beautify the area around the Port and create a sense of place for the community. The interviewees felt that any activity undertaken to meet the community needs would greatly enhance community cohesion and make local residents more proud of Gulfport.

Recommended potential mitigation measures to address community involvement based on this CIA would include development of a plan of continuous outreach between the Port and community leaders. This measure would work with community leaders to allow them to voice their needs, beyond that of flexible work scheduling and promoting entrepreneurship, and identify mechanisms through which the Port and community could work together to enhance the cohesion within the community. Another mitigation measure to address community involvement would be implemented through a beautification program around the Port. Through input from local residents and community leaders, the Port could undertake actions that would greatly aid in community cohesion.

6.0 SUMMARY AND RECOMMENDATIONS

The alternatives analysis presented in the EIS (Sections 2 and 4) provides information necessary to identify the environmentally preferable alternative, i.e., the one with the least overall negative impacts to the environment. In general, the selected alternative should minimize damage to the biological and physical environment while protecting, preserving, and enhancing historic, cultural, and natural resources (40 CFR 1508.14).

The Proposed Project Alternative was evaluated in this EIS and compared to the No-Action Alternative. There must be a balance with potential beneficial impacts outweighing potential negative impacts. Since the EIS looks at actions today affecting decades into the future, there are actions that could be taken to mitigate for traffic delays at rail crossings (see Section 6 of EIS).

Any potential negative effects associated with the Proposed Project Alternative compared to the No-Action Alternative would be either short term or potentially mitigated, and the jobs created and the associated boost to the local economy, would be long-term benefits.

The results of this CIA indicate that the Proposed Project Alternative is the more beneficial alternative when compared to the No-Action Alternative. Increased throughput potential associated with the Proposed Project Alternative would equate to an increase in beneficial impacts such as increased jobs, increased revenue, and associated economic benefits in the area. It was stated in conversations with community members that economic growth is needed in the City.

This CIA also suggests implementing mitigation measures even if the No-Action Alternative is selected. Suggested mitigation measures include:

- A job training program, as outlined in Section 5, would not only benefit the community but also provide the Port with a capable, qualified, and competitive workforce. This mitigation measure ensures that the PGEP would meet its potential to beneficially impact the EJ community.
- Roadway improvements listed in Section 5.2 would ensure that minority neighborhoods would not be adversely impacted.
- Flexible work schedules for work hours at the Port would allow greater participation from not only the EJ communities but also the City.
- The Port could promote entrepreneurship in the community. Projects like the PGEP could have the opportunity to involve local vendors and ultimately support entrepreneurial activities. Again, this measure would allow greater participation from not only the EJ communities but also the City.
- The Port could engage in additional visual beautification along US 90. Providing public art, mosaics, and context-sensitive design to beautify the area around the Port and create a sense of place for the community.

- The Port could engage in a plan of continuous outreach between the Port and community leaders. This measure would work with community leaders to hear their needs and identify areas where the community could work together.

Finally, census data were used in the CIA to evaluate the City relative to the County so as to assess the potential for disproportionate impacts on minority, low-income, or LEP populations from the proposed alternatives. Based on those data, no disproportionate impact on minority, low-income, or LEP populations would be anticipated. Information presented in this CIA, in conjunction with field observations made during the CIA process, demonstrate there would be no appreciable difference between the potential impacts to EJ communities and the general communities. Additionally, there would be beneficial impacts to all communities in the form of increased jobs and economic growth. The mitigation measures presented for income, employment, and community cohesion are designed to provide a forum for greater involvement between the Port and the community. The mitigation measures presented for traffic impacts must be implemented to ensure adequate roadway capacity and to lessen any potential future impacts from the PGEP.

7.0 REFERENCES

- Anchor QEA LLC. 2017. Dredged Material Management Plan, Port of Gulfport Expansion Project. Prepared for Mississippi State Port Authority-Port of Gulfport. April 2017.
- Burk-Kleinpeter, Inc., HDR Engineering, Inc., and BMI Environmental Services, LLC. 2011. Kansas City Southern Railway (KCSR) Track Upgrade Project: Hattiesburg to Gulfport, Mississippi Environmental Assessment. Prepared for Mississippi State Port at Gulfport, Mississippi development Authority, and Kansas City Southern Railway. August.
- Church Angel. 2011. Churches in Gulfport, Mississippi by Denomination. <http://www.churchangel.com/WEBMS/gulfport.htm>
- City of Gulfport. 2010. Gulfport Works Harbor Proposal for Gulfport MS final Phase. <http://www.gulfport-ms.gov/EconDev/harborOverall.pdf>.
- . 2013a. Annual Budget for Year Ending September 30, 2013. <http://www.gulfport-ms.gov/Finance/Final2013Budget.pdf>
- . 2013b. Gulfport Fire Department. <http://www.ci.gulfport.ms.us/fire/>
- . 2013c. Gulfport Police Department. <http://www.ci.gulfport.ms.us/police/about.htm>
- . 2014a. Department of Leisure Services. <http://www.gulfport-ms.gov/LS.shtml>
- . 2014b. Online Atlas. <http://map.gulfport-ms.gov/GOLADC/index.html>
- Cossman, J.S., J.B. Ritchie, and W.L. James. 2005. Mississippi physicians labor force, a look at primary care physicians. http://www.academia.edu/1314868/Mississippis_Physician_Labor_Force.
- Federal Highway Administration (FHWA). 1996. Community Impact Assessment: A Quick Reference Guide. September 1996.
- . 2011. FHWA-HEP-10-025. Highway Traffic Noise: Analysis and Abatement Guidance https://www.fhwa.dot.gov/environment/noise/regulations_and_guidance/analysis_and_abatement_guidance/revguidance.pdf
- Federal Transit Administration (FTA). 2006. Transit Noise and Vibration Impact Assessment. FTA-VA-90-1003-06.
- Gulfport School District. 2013. Gulfport School District Strategic Plan 2013-2018. <http://www.gulfport-schools.org/domain/87>
- Harrison County Board of Supervisors. 2013. Fire services. <http://co.harrison.ms.us/departments/fire%20services/>.
- Harrison County Sheriff's Department. 2011. <http://www.harrisoncountysheriff.com/>

- Irion, J.B. 1989. Underwater archaeological investigations Ship Island Pass, Gulfport Harbor, Mississippi. Prepared for U.S. Army Corps of Engineers, Mobile District by GAI Consultants, Inc., Monroeville, Pennsylvania.
- Mississippi Department of Education. 2014. Office of Research and Statistics, Mississippi Assessment and Accountability Reporting System. <http://orsap.mde.k12.ms.us/MAARS/index.jsp>
- Mississippi Department of Marine Resources (MDMR). 2005. Mississippi Gulf Coast National Heritage Area Management Plan. Mississippi Department of Marine Resources, Biloxi.
- Mississippi Institutions of Higher Learning, Center for Policy Research and Planning. 2012. <http://www.mississippi.edu/urc/downloads/PopulationProjections.pdf>
- Mississippi Department of Employment Security. 2016. Labor Market Annual Averages. [http://mdes.ms.gov/information-center/labor-market-information/labor-market-publications/annual-average/Mississippi State Port Authority \(MSPA\). 2012. Revised Terminal Tariff No. 6: Schedule for Charges, Rules and Regulations for Port Terminal Services. http://www.sos.ms.gov/ACProposed/ 00018442b.pdf](http://mdes.ms.gov/information-center/labor-market-information/labor-market-publications/annual-average/Mississippi%20State%20Port%20Authority%20(MSPA).%202012.%20Revised%20Terminal%20Tariff%20No.%206:%20Schedule%20for%20Charges,%20Rules%20and%20Regulations%20for%20Port%20Terminal%20Services.%20http://www.sos.ms.gov/ACProposed/00018442b.pdf)
- Mistovich, T.S. 1987. Documentary research, submerged cultural resources in the vicinity of Gulfport, Mississippi. Prepared for U.S. Army Corps of Engineers, Mobile District by OSM Archaeological Consultants, Inc., Moundville, Alabama.
- Municode. 2014. Gulf, Mississippi Code of Ordinances. <http://municode.com/library/ms/gulfport>
- Occupational Safety and Health Administration (OSHA). 2014. General Safety and Health – Hot Work/Welding. https://www.osha.gov/SLTC/etools/oilandgas/general_safety/hot_work_welding.html
- U.S. Coast Guard (USCG). 2011. USCG Missions. <http://www.uscg.mil/top/missions/>
- U.S. Census Bureau. 2000. United States Census 2000. <http://www.census.gov/main/www/cen2000.html>
- . 2010. United States Census 2010. <http://2010.census.gov/2010census/>
- . 2012. 2008–2012 American Community Survey. <http://factfinder2.census.gov>
- . 2013a. 2010 Census. <http://www.census.gov/2010census/>
- . 2013b. 1990 Census. <http://www.census.gov/main/www/cen1990.html>
- . 2013c. 2000 Census. <http://www.census.gov/main/www/cen2000.html>
- U.S. Department of Health and Human Services. 2013. HHS Poverty Guidelines for 2013. <http://aspe.hhs.gov/poverty/13poverty.cfm> (accessed on April 17, 2013).
- U.S. Department of Labor Bureau of Labor Statistics. 2016. Labor Force Statistics <http://data.bls.gov/timeseries/LNS14000000>

U.S. Environmental Protection Agency (EPA). 2009. Current Methodologies in Preparing Mobile Source Port-Related Emission Inventories. April 2009.

———. 2015a. AERMOD Implementation Guide. August 2015.

———. 2015b. Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM_{2.5} and PM₁₀ Nonattainment and Maintenance Areas. November 2015.

This page intentionally left blank.

Attachment A

Summary of Community Impact Assessment Interview Contact

**Attachment A: Summary of Community Impact
Assessment Interview Contact**

Interview Entity	Contact Person	Result of Contact Efforts	Interview Held Date/Time/Location
Service Organizations			
N. Gulfport Senior Center		Called 10-22-13 and left message. Called 10-23-13 and left another message.	NO INTERVIEW MADE
Gulfport School District	Velma Johnson, Coordinator	Called 10-22-13 and left message. Received return call offered interview, was told to expect a return call. Did not hear back.	NO INTERVIEW MADE
Rotary Club of Gulfport	Edwin Allen, Community Service Chairman	Sent message via Rotary website.	NO INTERVIEW MADE
Mississippi City Lions Club	Billy Bragg, President	Called 10-22-13. Wrong number listed. Could not find the correct number.	NO INTERVIEW MADE
PEO Sisterhood, Chapter B, Gulfport	Carol Reeves	Called on 10-23-2013. Declined to be interviewed.	NO INTERVIEW MADE
America Business Women's Association	Liz Hoop, Secretary	Sent email, no response.	NO INTERVIEW MADE
National Association of Retired Federal Employees (NARFE)	Norman, Member	Called 10-22-13. Wrong number listed.	NO INTERVIEW MADE
Coast Young Professionals	Kelsey Blum, Communications Director	Left message 1-3-2014. Blum called back, denied request.	NO INTERVIEW MADE
Boys and Girls Club	Tawana Banks	Left message 1-3-14. Left message 1-31-14.	NO INTERVIEW MADE
Coastal Family Health Center	Cathy Dumal, Project Director	Left message 1-3-14. Left message 1-31-14.	NO INTERVIEW MADE
Coastal Women For Change	Latanya Winn	Left message 1-3-14. Phone didn't connect after three attempts on 1-31-14.	NO INTERVIEW MADE
Disability Connection		Called 1-3-14. Called 1-7-14 and left message. Called 1-31-14 and left message.	NO INTERVIEW MADE
Gaston Point Community/Development Corporation	Brillia Hudson, Program Coordinator	Left message 1-3-14. Tentative yes. Sent information on 1-31-14. Called on 2-7-14 to follow up and confirm appointment time on 2-20, left message.	2-20-14 at 2:00 pm
Habitat For Humanity	Lindsay Freise Adele Lyons	Tentative yes, email info pack. Agreed to participate. Emailed to set up interview for morning of 2-20-14	2-20-14 at 9:00 am.

**Attachment A: Summary of Community Impact
Assessment Interview Contact**

Interview Entity	Contact Person	Result of Contact Efforts	Interview Held Date/Time/Location
Gulf Coast Community Ministries	Amelia Bordeaux, Volunteer Coordinator	Left message 1-3-14. Left message 1-31-14.	NO INTERVIEW MADE
Gulf Coast Community Foundation	Lisa Schonewitz	Left message 1-3-14. Left message 1-31-14.	NO INTERVIEW MADE
Gulf Coast Community Action Agency, Inc.	Erica Hollimon	Left message 1-3-14. Left message 1-31-14.	NO INTERVIEW MADE
Hands on Mississippi	Holly Gibbs, Executive Director	Agreed on 1-3-14. Called on 2-7-14 to follow up and confirm appointment time on 2-20, left message.	2-20 at 11:00 am. Cancelled
Gulf Coast Heritage Trails Partnership	Geneva Drummer, Assistant	Denied request 1-3-14.	NO INTERVIEW MADE
HOPE Adult Learning	Donna Daulton, Program Director	Tentative yes, emailed info pack. Decided to not participate on 1-31-14. Emailed on 2-13 to see if we would do a telephone interview.	Week of 2-17-14 NO INTERVIEW MADE
Land Trust for the Mississippi Coastal Plain	Connie Thrift, Operations Manager	Denied request 1-3-14.	NO INTERVIEW MADE
International Relief and Development- Youth Build	Thomas Patten	No longer operational.	NO INTERVIEW MADE
Open Doors Homeless Coalition	Brandi Clarke, Project Homeless Connect	Left message 1-3-14. Left message	NO INTERVIEW MADE
The Nourishing Place	Brenda Boothe, Associate Director	Call the Rev Jane Stanley (228) 596-1186. Called 1- 31-14 agreed to interview. Confirmed interview on 2- 17	2-20 at 1:00 pm.
Presbytery of MS Disaster Recovery	Virginia Stewart	Disconnected number.	NO INTERVIEW MADE
The Village El Pueblo	Jennie Searcy, Executive Director	Closed on Fridays. Called on 1-7 and left message.	NO INTERVIEW MADE

**Attachment A: Summary of Community Impact
Assessment Interview Contact**

Interview Entity	Contact Person	Result of Contact Efforts	Interview Held Date/Time/Location
United Way of South Mississippi	Aletha Burge, Director Community Impact	Agreed. Left message 1-3-14. Spoke later in day 1-3-14. She would confirm with her boss. She left message on 1-6-14 to say they could do it on 1-17-14. I confirmed on 1-9-14 that we will interview week of 2-17-14. Called on 2-7-14 to follow up and confirm appointment time on 2-20, left message.	2-20 at 1:00 pm.
Southern Mississippi Planning and Development District - Area Agency on Aging	Cynthia Caldwell	Left message 1-3-14. Left message 1-31-14.	NO INTERVIEW MADE
South Mississippi Housing & Development Corp	Vicky Richardson, Volunteer Coordinator Judith Moran	Tentative yes, email info pack to Judith Moran. Called on 2-7-14 to follow up and confirm appointment time on 2-20, left message. Confirmed appointment.	2-20 at 3:00 pm. Canceled interview
Salvation Army	Zach Rhodes, Volunteer Coordinator	Left message 1-3-14. Left message 1-31-14.	NO INTERVIEW MADE
Gulfport Branch NAACP	Ruth Story?	Emailed group on 1-31-14, asked for response by 2-5-14, none received as of 2-6-14	NO INTERVIEW MADE
Center for Fair Housing	Teresa Bettis	tfbettissacfh.org. Emailed group on 1-31-14, asked for response by 2-5-14, none received as of 2-6-14.	NO INTERVIEW MADE
Center for Environmental and Economic Justice	Bishop James Black, Executive Director	Emailed on 1-31-14, asked for response by 2-5-14, none received as of 2-6-14	NO INTERVIEW MADE
Religious Groups			
The Tabernacle of Faith Ministries	Bishop Anthony Thompson	Verbally agreed on 1-3-14. Called on 2-7-14 to follow up and confirm appointment time on 2-20. Opted for 10 am meeting time.	2-20 at 10:00 am.
Little Rock Missionary Baptist Church	Pastor James Beal	Verbally agreed on 1-3-14. Called on 2-7-14 to follow up and confirm appointment time on 2-20, couldn't leave message. Will send email. Sent email set interview.	2-20 at 11:00 am. Canceled interview

**Attachment A: Summary of Community Impact
Assessment Interview Contact**

Interview Entity	Contact Person	Result of Contact Efforts	Interview Held Date/Time/Location
Christian Worship Holy Ministries	Pastor Cora Walker	Verbally agreed on 1-3-14. Called on 2-7-14 to follow up and confirm appointment time she was unable to speak due to death in family. She urged me to call back next week. Called back and left message 2-10.	NO INTERVIEW MADE
Christian Missionary Baptist Church	Pastor Alphonso P Butler	Left message 1-3-14. Called on 2-7-14, he is a tentative yes. Will email him an info pack and ask for response by 2-12-14. Wrong email address. Called to correct address and left message on 2-10.	2-20 at 2:00 pm. Cancelled interview.
Rivers of Living Waters	Bishop B.R. Jackson	Verbally agreed on 1-3-14. Called on 2-7-14 to follow up and confirm appointment time on 2-20. Opted for 1 pm meeting time.	2-20-14 at 1:00 pm. Cancelled interview.
Cornerstone Baptist Church	Pastor B. Simpson	Verbally agreed on 1-3-14. Called on 2-7-14 to follow up and confirm appointment time on 2-20. Opted for 10 am meeting time.	2-20-14 at 10:00 am. Cancelled interview.
Mt. Calvary M.B Church	Pastor Fred Harper	Left message 1-31-14. Called back on 2-7-14 to agree to meeting.	2-20-14 at 2:00 Cancelled interview.
Family of Life Christian Center	Pastor Darnel Turner	Tentative yes 1-31-14. Sent info pack. Unsure if he can attend, wants me to put him down as a maybe for the 1:00 pm session.	Maybe 2-20-14 at 4:00 pm. Cancelled interview.
Greater Mount Rest	Pastor Charles Miskell	Left message 1-31-14. Left message 2-7-14.	NO INTERVIEW MADE
Mount Pleasant United Methodist Church	Flower White (POC) Pastor Lindsey Robinson	Left message 1-31-14. Called on 2-7-14. Tentative yes. Will email info pack. Sent info pack and scheduled interview.	2-20 at 10:00 AM Cancelled interview.
The following individuals spoke at the last scoping meeting			
Harrison County Development Commission	John "Shorty" Sneed	Called on 10-22-13 and left message. Called again on 10-23-13.	NO INTERVIEW MADE

**Attachment A: Summary of Community Impact
Assessment Interview Contact**

Interview Entity	Contact Person	Result of Contact Efforts	Interview Held Date/Time/Location
Steps Coalition	Howard Paige	Spoke with Mr. Paige, asked him to join meeting. He is going to coordinate with Mr. Morse about number of people to bring. He will return with a number or Wednesday the 12 th .	2-20-14 at 2:00 pm
Turkey Creek Community	Lettie Evans Caldwell	Called number on sign in sheet was not able to connect.	NO INTERVIEW MADE
Services International Gulfport	William Davis	Called on 10-22-13 no message machine.	NO INTERVIEW MADE
MS Center for Justice	Reilly Morse	Spoke with Mr. Morse, asked him to join meeting. He is going to coordinate with Mr. Paige about number of people to bring. He will return with a number or Wednesday the 12 th . Emailed on 2-12 to say that they would not be able to make it that day.	2-20-14 at 1:00 pm
North Gulfport Community Land Trust	Rose Johnson	Called 10-22-2013 mailbox full, unable to leave message. Called 2-7-14, mailbox is still full.	NO INTERVIEW MADE
Port Campaign Coalition	Glenn Cobb	Mr. Paige offered to contact the Port Campaign Coalition and bring them to the meeting.	2-20-14 at 2:00 pm Cancelled.
Gulfport Towing	Michael Vitt	Called 10-22-13 and 10-23-13. Left messages.	NO INTERVIEW MADE

**Attachment A: Summary of Community Impact
Assessment Interview Contact**

This page intentionally left blank.

Attachment B

Interview Questions

Date: _____ Location: _____

Interviewee: Adele Lyons, Habitat for Humanity

Interviewer: Alex Amponsah and Munther Sahawneh

Open questions about their entity:

(These questions are intended as an icebreaker to get the interviewee talking and comfortable)

Baseline Information

1. How long have you been in the Gulfport area?
2. How would you best describe Gulfport?
3. What changes have you noticed during your time in Gulfport?
4. How have these changes affected Gulfport?
5. How have the changes affected your organization?
6. Where/Who are the major employers for Gulfport citizens?

Attachment B: Interview Questions

Questions about the proposed expansion:

1. How do you see the proposed Port Expansions project affecting Gulfport overall?
2. What specific changes do you anticipate?
3. How do you think it will affect employment opportunities?
4. How do you think it would affect access to and within town?
5. How do you think the project would affect interaction by the citizens?
6. What changes in land use and development would you anticipate overall for these options?
7. Could the project be improved to better represent the needs of Gulfport? If so, how would that be accomplished?

General comments: