

## CHAPTER 5 ERRATA

This chapter presents changes and corrections to the Draft EIS. The changes were either identified by SEA in its ongoing environmental review or identified through agency and public comments on the Draft EIS.

Each change or correction states the chapter, page, paragraph, and sentence, table, or figure in the Draft EIS, which is being updated. In each case, words being added are underlined and words being deleted are denoted by ~~strikeout~~.

### Chapter 1

Page 1-9, Last paragraph, Second sentence

The FAA has a responsibility to assess the aviation and environmental impacts of releasing Federally obligated airport property and approving changes to the Airport Layout Plan (ALP) associated with the Proposed Action on Ellington Field.

### Chapter 2

Page 2-11, Second paragraph, Twelfth sentence

The analysis recommends that based on projected aviation activity, “up to 50 acres should be reserved to accommodate growth in ~~a-generation~~ general aviation.”

Page 2-28, Third paragraph, Second and fourth sentences

The right-of-way for most of the Build Alternatives (Proposed Action and Alternatives 1C, 2B, and 2D) would ~~disturb~~ include approximately 2.84 acres of jurisdictional wetlands and about 4.22 acres of non-jurisdictional wetlands.

The Original Taylor Bayou Crossing would impact more jurisdictional wetlands, including about 0.18 acres more gilgai habitat and about ~~0.77~~ 0.91 acres more of tidal marsh.

### Chapter 3

Page 3-21, Third paragraph

To characterize the existing traffic delay and safety conditions at existing and proposed grade crossings, SEA used several data sources:

- Texas Department of Transportation (TxDOT) information on average daily vehicle traffic volumes at grade crossings;
- UP, BNSF, and PTRR information on ~~traffin~~ train traffic; and
- FRA’s grade crossing database and Public Crossing Accident Prediction System (PCAPS).

Page 3-46, Second paragraph, Last sentence

The wetland delineation and jurisdictional determination for the wetlands along the proposed Action have been field verified by the USACE Galveston District and the confirmation letter will be issued soon.

Page 3-50, Third paragraph, First sentence

The Build Alternatives Proposed Action and Alternative 1C would cross a 52-acre wetland restoration site that is located near Ellington Field.

Page 3-67, Replace Figure 3.10-3 with the following page.

Page 3-77, Second complete paragraph, Last sentence

The bridge proposed for this crossing would not require a ~~Section 9~~ permit from the USCG.

Page 3-77, Third paragraph, Last sentence

This crossing would not require a ~~Section 9~~ permit from the USCG.

Page 3-77, Fourth paragraph, Last sentence

This crossing would not require a ~~Section 9~~ permit from the USCG.

Page 3-78, Second paragraph, Last sentence

The USCG determined that a ~~Section 9~~ permit would not be required.

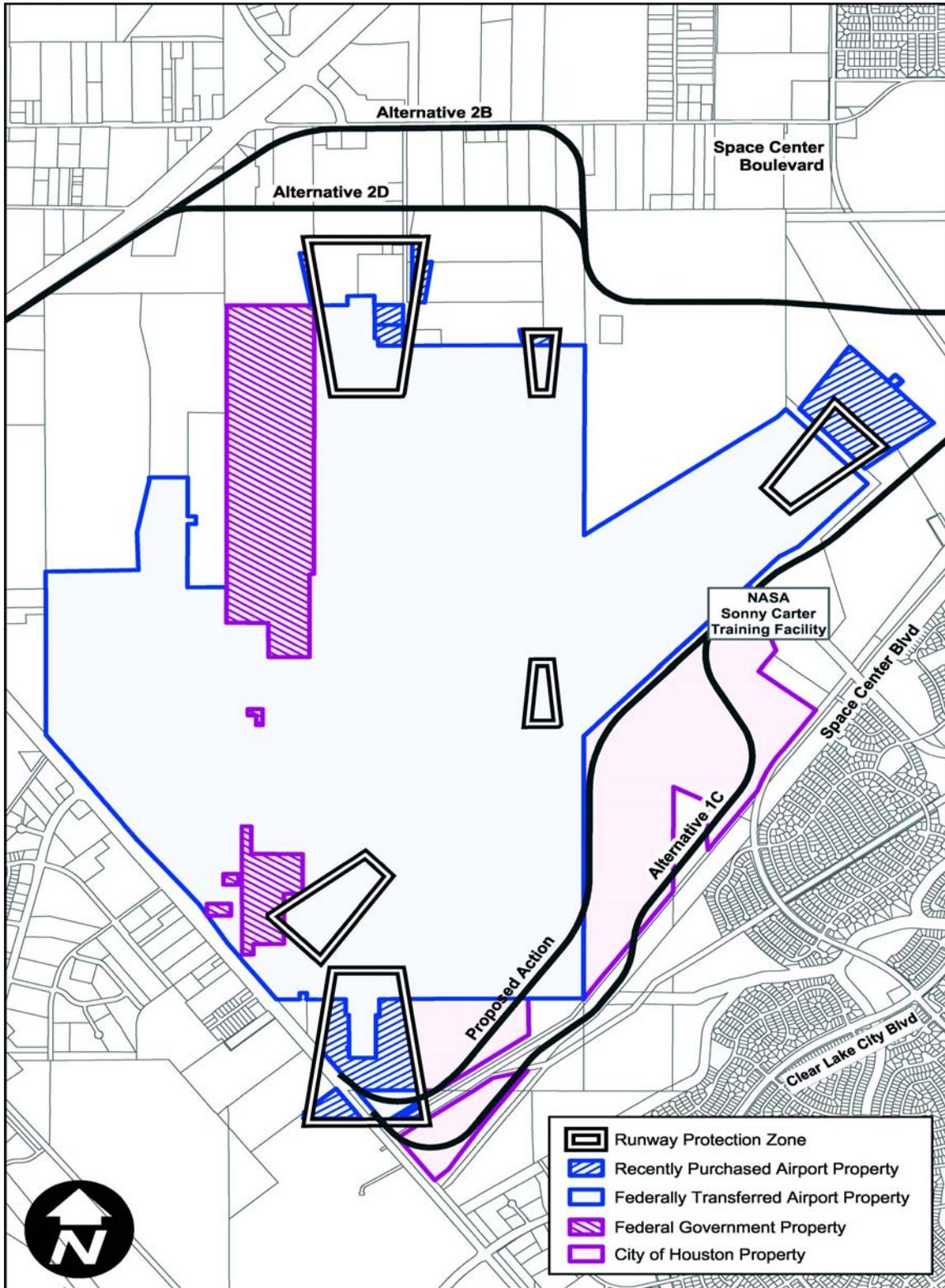
Page 3-79, Replace Table 3.16-1 with the following:

**Table 3.16-1**  
**Percent Minority for Jurisdictions in Project Area**

<b>Geographic Area</b>	<b>Population</b>	<b>% Minority</b>
Harris County	3,400,578	57.9%
City of Houston	1,953,631	69.2%
Pasadena City	141,674	52.8%
La Porte	31,880	29.3%
Deer Park	28,520	19.2%
South Houston City	15,833	<del>19.6%</del> 80.4%
Dayton	5,709	32.4%

Source: U.S. Census Bureau, Census 2000, Summary File 1 Tape (SF1), table P4 available at [www.census.gov](http://www.census.gov).

**Figure 3.10-3**  
**Ellington Field Property Lines and Runway Protection Zones**



Page 3-80, First paragraph

All of the Build Alternatives would use the existing GH&H line to Tower 85. The population along the GH&H line near Ellington Field is ~~not characterized by either a mix of minority and non-minority residents with no predominantly low income populations, or minority status.~~ Heading northwest, the GH&H line passes through more densely populated areas that can be characterized as predominantly minority and partially low income ~~and through some census block areas that are characterized as minority.~~ The line traverses South Houston City, which is a predominantly minority community. The area from Tower 30 to Tower 85, on the GH&H line, and from Tower 85 to Tower 87, on the East Belt Subdivision, contains several low income areas and ~~some census blocks with~~ predominantly minority populations. The areas from Tower 87 to Dayton Junction and on to the CMC Dayton Yard are sparsely populated and are not characterized as low income or minority.

Page 3-80, Second paragraph

**No-Build Alternative.** The No-Build Alternative involves no new rail construction. It would use the existing Baytown, Lafayette, Terminal, and East Belt Subdivisions, Strang Subdivision, and Bayport Loop Industrial Lead to access the Bayport Loop. The segment from the CMC Dayton Yard to Tower 30 is the same as that used under the Build Alternatives and its existing environmental justice populations are discussed above. The population along the Strang Subdivision, near Harrisburg Junction and Manchester Yard, is predominantly low income and some of the census blocks can be characterized as minority. Further east, the Strang Subdivision passes through less densely populated areas that are ~~not~~ characterized as with sporadic low income; ~~but do contain some census blocks with~~ and minority populations. Pasadena City, which is south of the Strang Subdivision, is a diverse community with lower minority concentration than the county average. It includes a substantial number of middle and low income residents. North of Strang Yard is a sparsely populated with some low income areas.

## Chapter 4

Page 4-22, Second paragraph

In the extremely unlikely event of a pipeline release caused by a rail accident, OPS data indicate that the consequences of an incident involving a gas or hazardous liquids pipeline could include damage to property, fire, explosion, and personal injury or death. OPS data also indicate that only a small percentage of pipeline accidents that do occur result in serious consequences such as fire, explosion, or personal injury or death. Potential consequences associated with damage to other types of pipelines (e.g., water, sewage) typically would be much more limited (e.g., temporary disruption of service). In the unlikely event of damage to a large (e.g., 96") water line, the consequences potentially could include longer service disruptions and/or reduced water pressure, which potentially could reduce fire fighting capabilities.

Page 4-37, Second paragraph, First sentence

The Applicants used published vibration data from the Federal Transit Administration and typical freight train vibration spectra to ~~eliminate~~ estimate a noise level of approximately 50 dBA at the astronaut’s ear.

Page 4-38, Table 4.6-1

**Table 4.6-1  
Estimated Maximum\* Emissions from Construction and Operation**

	CONSTRUCTION PHASE		OPERATIONAL
	Averaged Daily Off-Road and Rail (kg/day)	Averaged Daily On-Road (kg/day)	Switching and Line Haul Operations (kg/day)
Diesel PM	2.1	0.62	0.62
NO <sub>x</sub>	35.1	16	25
VOC	<u>2.8</u>	<u>0.74</u>	<u>1.2</u>

\*Based on the Build Alternatives that would result in the largest estimated increase in emissions.

Page 4-38, Third paragraph

SEA developed an emissions inventory for each Build Alternative. Because the length of new rail construction is similar for all of the Build Alternatives, however, the estimated emissions are similar as well. To be conservative, SEA used estimated emissions for construction for the Alternative requiring the most new rail construction (Alternative 2B) in this analysis. ~~Because nearly all of the emission sources associated with the Proposed Action and Alternatives would be associated with the combustion of diesel fuel, which emits very small amounts of VOCs relative to NO<sub>x</sub>, SEA developed quantified estimates only of emissions of NO<sub>x</sub> and diesel PM.~~

Page 4-38, Fifth paragraph

The current State Implementation Plan (SIP) emission inventory for Harris County estimates that total railroad emissions of NO<sub>x</sub> average 9,800 kg/day. Thus, estimated emissions from the Build Alternatives would represent an increase of less than 0.5 percent (51.1/9,800) during construction and a 0.26 percent increase (25.0/9,800) during operation. Similarly, total railroad emissions of VOC average 780 kg/day. Thus, the estimated emissions from the Build Alternatives would represent an increase of less than 0.5 percent (3.44/780) during construction and a 0.15 percent increase (1.2/780) during operation.

Page 4-39, First complete paragraph

A conformity determination is required in the Houston area when NO<sub>x</sub> or VOC emissions from a proposed project would be greater than a threshold amount of 25 tons per year. The maximum estimated NO<sub>x</sub> or VOC 12-month total emission increase is ~~20.5~~ 18.7 tons/year of NO<sub>x</sub> during

construction. Because estimated emissions of NO<sub>x</sub> or VOC are less than 25 tons per year, the Build Alternatives would not be subject to conformity requirements.

Page 4-40, Insert the following paragraph and Table 4.6-5

Table 4.6-5 shows the total emission increase from all sources over the No-Build Alternative for the three phases of the project: first 12 months of construction, a second transition year with 4 months constructions and 8 months of operation, and a third and subsequent years of operation only. The construction phase represents the largest emissions for all pollutants and these emissions are very low, particularly in comparison with total railroad emissions for Harris County. As a result, SEA concluded that the estimated increase in emissions from all phases of the project would be insignificant in the context of existing conditions.

**Table 4.6-5**  
**Summary of Total Emissions (All Sources) by Calendar Year From Proposed Action**  
**Increase over the No-Build Alternative**

		First Year (tons/year)	Second Year (tons/year)	Third and Subsequent Years (tons/year)
VOCs	Construction	1.3	0.41	--
	Operation Phase	--	0.27	0.41
	Traffic Delay	--	0.22	0.33
	Total	1.3	0.9	0.74
NO <sub>x</sub>	Construction	18.7	6.2	--
	Operation Phase	--	6.1	9.13
	Traffic Delay	--	0.08	0.12
	Total	18.7	12.4	9.25
PM	Construction	1	0.33	--
	Operation Phase	--	0.15	0.23
	Traffic Delay	--	0.002	0.003
	Total	1	0.48	0.23
CO	Construction	5.5	1.8	--
	Operation Phase	--	2	3
	Traffic Delay	--	1.1	1.6
	Total	5.5	4.9	4.6

Page 4-44, Last paragraph

Second, the proposed drainage channels and floodplain crossings along the rail line would be designed to manage stormwater flows. In particular, the design would include properly sized, sited, constructed, and maintained bridges and culverts, three stormwater detention basins, and new drainage ditches on both sides of the rail bed along most of the alignment. The proposed ditches would drain into surface waters and existing HCFCD and City of Houston drainage

channels. The proposed drainage channels and detention basins could help reduce flooding in some locations where flood control improvements have not been constructed.

Page 4-45, First complete paragraph, Fifth sentence

SEA has reached a ~~preliminary~~ finding that the Proposed Action and Build Alternatives would be in compliance with Executive Order 11988 on Floodplain Management.

Page 4-46, First paragraph, Second complete sentence

The USACE has field verified and confirmed the delineation along the Proposed Action ~~and will be issuing a verification letter in the near future.~~

Page 4-46, First paragraph, Fourth complete sentence

Stormwater discharge permits would also be needed from the TCEQ or EPA under the NPDES program and Harris County and the City of Houston through the Stormwater Quality Permit Program.

Page 4-48, Last paragraph, First sentence

BMPs for erosion control, sediment control, and post-construction TSS control would be required by the TCEQ's Section 401 Water Quality Certificate and the USACE's Section 404 permit. In addition, the Applicants have proposed to construct three stormwater detention basins near Big Island Slough and the Armand Bayou crossings.

Page 4-48, Last paragraph, Third sentence

The Texas Pollutant Discharge Elimination System (TPDES) permit from the TCEQ for construction activities or NPDES General Construction Permit from the EPA and Storm Water Quality permit from Harris County/City of Houston for stormwater discharges from construction activities also would require stormwater runoff controls.

Page 4-48, Last paragraph, Sixth sentence

The Applicants ~~would have to submitted~~ an application for a Texas Coastal Management Program (CMP) consistency certification to the USACE. The USACE ~~would then~~ forwarded the application to the Coastal Coordination Council of the Texas GLO, which ~~would publish a public notice and~~ initiated a 45-day consistency review process. The Coastal Coordination Council on April 5, 2003 issued a letter indicating that the Proposed Action is consistent with the CMP goals and policies. Therefore, SEA has satisfied the procedural requirements of the Coastal Zone Management Act.

Page 4-49, First complete paragraph, Third sentence

Stormwater discharges to the receiving waterbodies and existing drainage channels from the proposed drainage ditches and drainage ditches in the rail corridor would occur, especially during storms.

Page 4-49, Third complete paragraph, First sentence

Maintenance activities along the Build Alternatives could include excavation, stream bank stabilization, bridge repair, ditch, basin, and culvert clean out, and related disturbances at stream crossings.

Page 4-51, First paragraph, Last sentence

The amount of jurisdictional wetland actually filled by the Proposed Action would be about ~~2.70~~ 2.56 acres.

Page 4-51, Second paragraph, Fourth sentence

Alternatives 2B and 2D would ~~avoid~~ cross the northern tip of the 52-acre wetland mitigation site that is located near Ellington Field.

Page 4-51, Second paragraph, Last sentence

However, the Original Taylor Bayou Crossing would cross Taylor Bayou at a different location from the other Alternatives and would impact more jurisdictional wetlands, including about 0.18 acres more of gilgai habitat and about ~~0.77~~ 0.91 acres more of tidal marsh.

Page 4-51, Last paragraph, Sixth sentence

The conceptual plan includes the purchase and preservation of approximately 24 to 30 acres of bottomland hardwood forest in the Armand Bayou watershed, which would include about 1.5 acres of gilgai wetlands.

Page 4-54, First paragraph, Second complete sentence

In addition, the Applicants propose to regrade an impacted shoreline along Taylor Bayou near Port Road, remove debris in the water, and create approximately ~~0.32~~ 0.40 acres of tidal marsh.

Page 4-54, First paragraph, Third complete sentence

The Applicants' proposed mitigation plan has not yet been approved by ~~the~~ all regulatory agencies. However, the NMFS approved the proposed mitigation plan for EFH impacts along Taylor Bayou.

Page 4-54, First complete paragraph, Second sentence

The FAA and NASA have reached a ~~preliminary~~ final determination regarding the Proposed Action (for both the FAA and NASA) and Alternative 1C (for NASA) that construction in wetlands could not be avoided by the practicable Build Alternatives because of the linear nature of the proposed project.

Page 4-56, Last paragraph, Fourth sentence

In addition, the Applicants have a conceptual plan to acquire and preserve about 24 to 30 acres of bottomland hardwood forest in the Armand Bayou watershed and about 24 acres of coastal prairie near Space Center Boulevard (see Figure 4.8-1).

Page 4-59, Table 4.8-2

**Table 4.8-2  
EFH Impacts for the Alternatives**

EFH Type	Impact on EFH from the Build Alternatives	
	Proposed Action, Alternatives 1C, 2B, 2D	Original Taylor Bayou Crossing
Tidal Marsh	0.11 acres	0.05 acres
Tidal Shrub	<del>0.14</del> 0 acres	1.07 acres
Substrate	173.6 ft <sup>2</sup>	156.8 ft <sup>2</sup>
Open Water (Direct)	1,444.4 ft <sup>3</sup>	117,609.7 ft <sup>3</sup>
Open Water (Indirect from shading)	0.78 acres*	0.55 acres*

\* Actual impact should be approximately 30 percent less because some sunlight could penetrate through the bridge crossies and from the sides due to the height of the bridge above water.

Page 4-60, First complete paragraph, Fifth sentence

The EFH impacts would include a permanent loss of about 0.11 acres of tidal emergent wetland, ~~0.14 acres of tidal shrub wetlands~~, 1,444 cubic feet of water column, and 174 square feet of substrate.

Page 4-60, Last paragraph

To compensate for EFH impacts, the Applicants have proposed to remove debris along a section of shoreline of Taylor Bayou near Port Road (see Figure 4.8-2), to regrade the steep slope, and create about ~~0.32~~ 0.40 acres of tidal marsh to mitigate for the impacts on EFH. Plantings of ~~smooth cordgrass~~ wetland grasses would be used to create a tidal marsh. This mitigation would restore aquatic substrate and water column and create tidal marsh. As stated in Section 4.8.2.1, the Applicants have committed to preserving about 24 acres of coastal prairie and about 24 to 30 acres of bottomland hardwood forest, which would mitigate for the impacts to wildlife habitat. Appendix J includes a more detailed assessment of the impact to EFH and includes consultation

documentation required by the NMFS under the MSFCMA. The impact on EFH from the Build Alternatives is expected to be minor. On October 22, 2002 the NMFS responded to SEA's EFH Assessment Report. NMFS recognized "that the project applicant has minimized impacts to EFH" but has requested a more detailed mitigation plan. The Applicants submitted a more detailed plan to NMFS on November 7, 2002 and February 17, 2003. ~~which has yet to be evaluated. SEA will continue to coordinate with NMFS to ensure that the proposed mitigation plan is acceptable.~~ On March 31, 2003, the NMFS provided EFH conservation recommendations to SEA. SEA adopted those recommendations in the Final EIS (Appendix D) and has recommended their inclusion as mitigation measures in the Board's final decision, if they grant approval of the project. These mitigation measures include a requirement for the Applicants to create a 0.4-acre intertidal marsh along the Taylor Bayou shoreline and to satisfy monitoring and success parameters for the mitigation site. By adopting these mitigation measures, SEA satisfies the procedural requirements of the MSFCMA and its implementing regulations, and meets all requirements of the Magnuson-Stevens Fishery Conservation and Management Act.

Page 4-62, Third complete paragraph, First sentence

Operation of the Build Alternatives would result in stormwater discharges from the proposed drainage ditches and detention basins to waterbodies and EFH.

Page 4-62, Third complete paragraph, Third sentence

Stormwater discharges would also have to meet the "first ½ inch" treatment requirements of Harris County's/City of Houston's Stormwater Quality Permit.

Page 4-64, First paragraph, Last sentence

Nevertheless, SEA ~~is continuing to coordinate~~ with the TPWD concerning the Texas prairie dawn and received no comment.

Page 4-83 through 4-88

Replace Figures 4.16-1a, 4.16-1b, 4.16-3a, and 4.16-3b with the following pages.

Page 4-82, Second paragraph, Last sentence

The latest available income data at the time of this analysis consisted of a forecast based on a 1997 Census sample that is not divided into the same geographic units.

Page 4-82, bottom of page

- 2) Existing rail corridors included in the various Alternatives pass through ~~some~~ areas with significant low income and minority concentrations populations;

- 3) ~~There appear to be fewer~~ are more minority and low income populations along ~~the Strang Subdivision to Tower 30,~~ compared with the Proposed Action to Tower 30 than along the sparsely populated Strang Subdivision;

Page 4-91, First paragraph (footnotes remain unchanged)

SEA determined that some effects from grade crossing delay, hazardous materials transport risk, and train noise would be experienced by environmental justice populations. ~~This is~~ These are shown in Figure 4.16-1 (a and b) and Figure 4.16-2 (a and b). Figure 4.16-1 (a and b) shows minority census blocks that qualify as environmental justice populations because they exceed 50 percent minority population.<sup>9</sup> This figure indicates that the existing GH&H line that would be used by the Build Alternatives passes through areas with a high number of environmental justice communities. Figure 4.16-2 (a and b) shows low income census block groups that qualify as environmental justice populations because the proportion of households that are low income exceeds 28.7 percent.<sup>10</sup>

Page 4-92, Second paragraph

**Minority census blocks along Build Alternatives.** Figure 4.16-1 (a and b) indicates a minimal number of minority census blocks in the vicinity of any Build Segments. No minority census blocks are adjacent to the Build Segments of either the Proposed Action or Alternative 1C, while several sparsely populated minority census blocks are located near the Build Segments of Alternatives 2B and 2D in the vicinity immediately north of Ellington Field. The segment of the GH&H line that would be used by the Build Alternatives is predominantly located among runs beside minority census blocks, although minority blocks appear to be less concentrated near the rail line. From Tower 30 to Tower 87, ~~there are a mix of minority and nonminority~~ the existing rail lines are predominantly lined by minority census blocks along the rail lines and and minority census blocks are found adjacent to the existing grade crossings. Nearly half of the grade crossings along these routes are adjacent to minority blocks. From Tower 87 to the CMC Dayton Yard, there are minority blocks near about 15 percent of the route and near approximately one-third of the grade-crossings.

Page 4-92, Third paragraph

**Minority census blocks along No-Action and No-Build Alternatives.** Figure 4.16-1 (a and b) indicates a minimal number of minority census blocks adjacent to the Bayport Loop Industrial Lead and the Strang Subdivision up to Tower 30, with the majority of grade crossings occurring in areas with no minority census blocks. From Tower 85 ~~30~~ to Tower 87, minority census blocks abut most portions of the existing rail lines and all of the grade crossings. ~~there are interspersed minority census blocks, with about half of the grade crossings occurring adjacent to at least one census block.~~

Figure 4.16-1a  
Census Blocks With A Minority Population That Exceeds 50 Percent

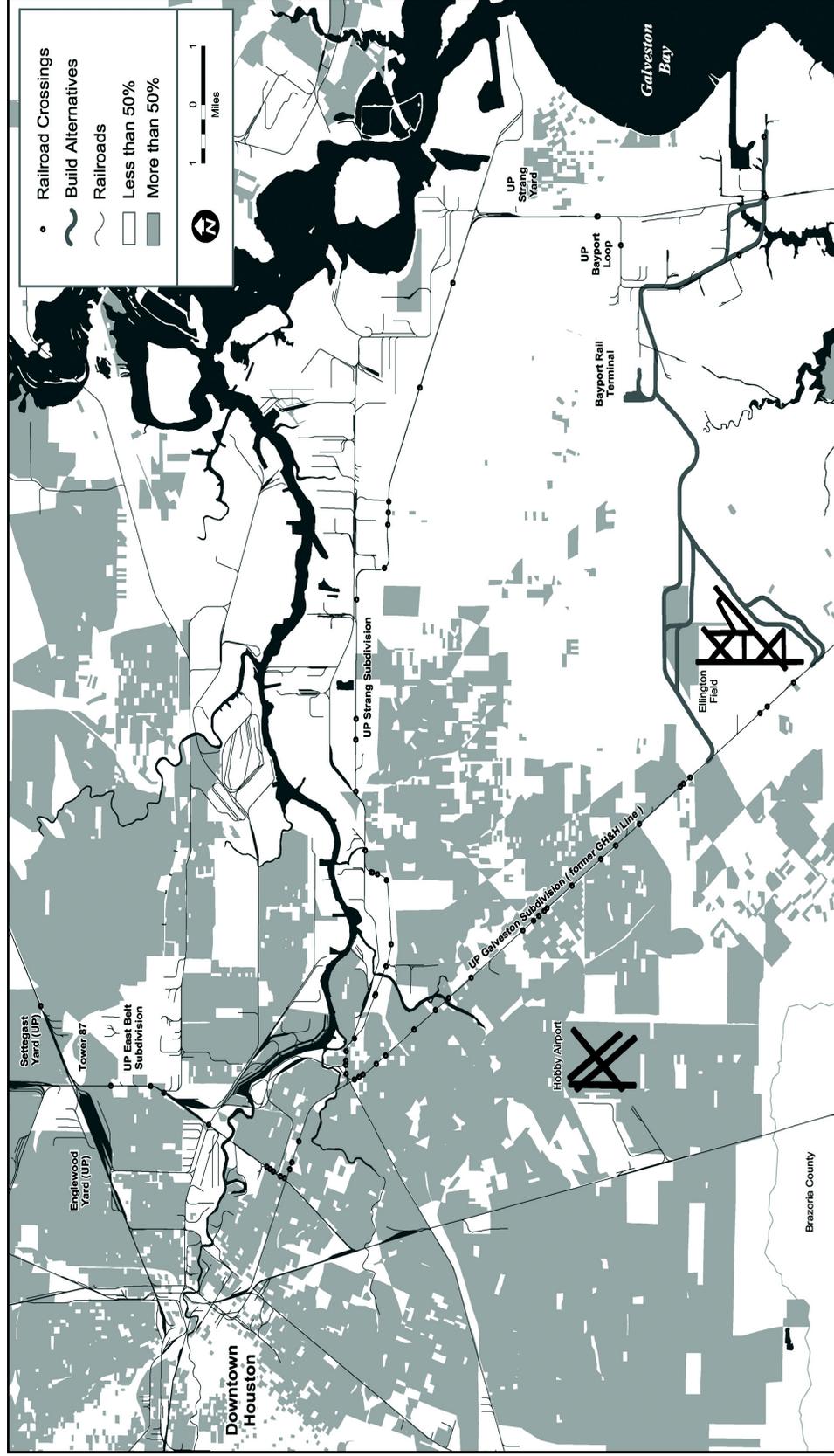


Figure 4.16-1b  
Census Blocks With A Minority Population That Exceeds 50 Percent

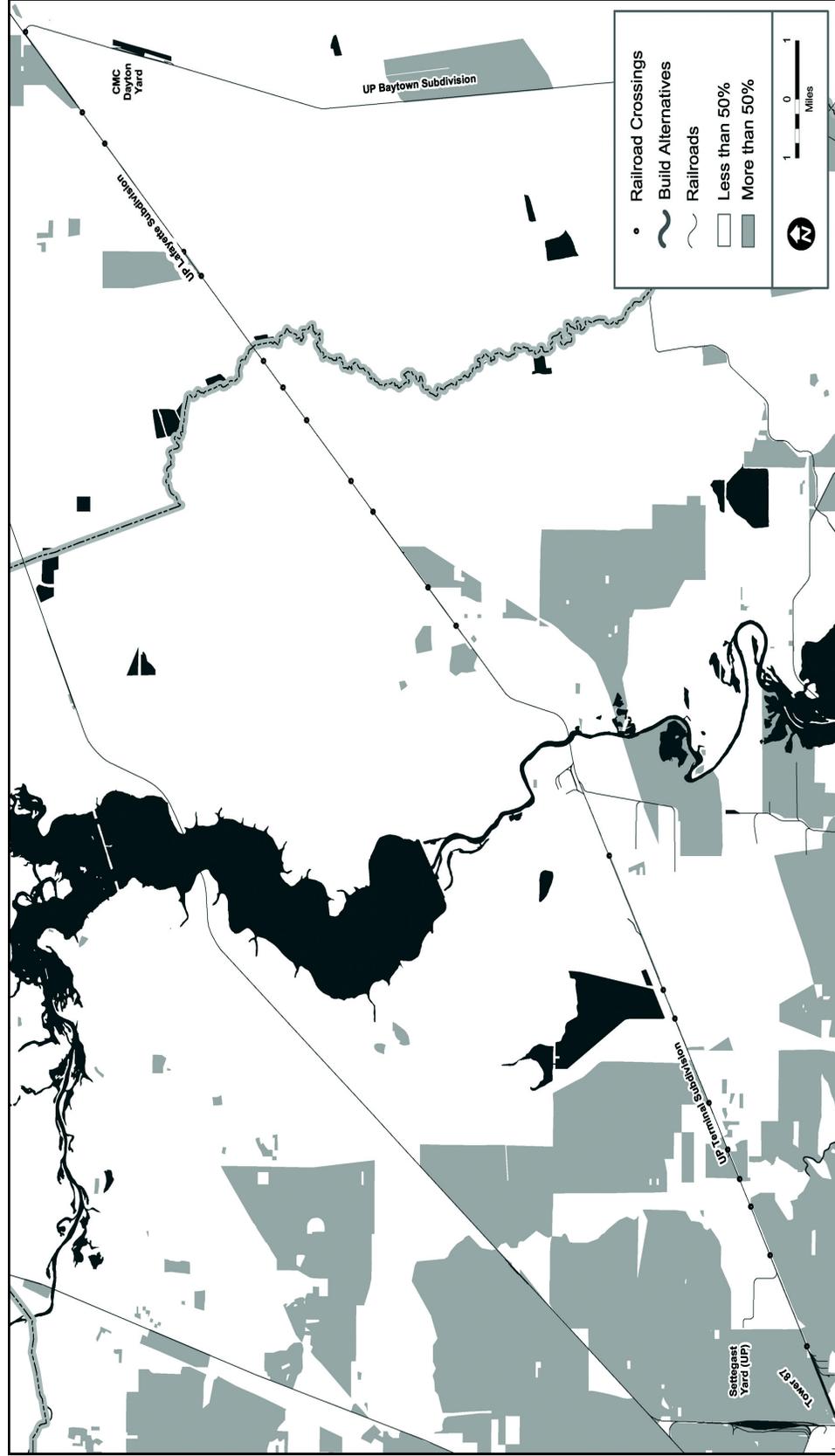


Figure 4.16-3a  
Density of Minority Population

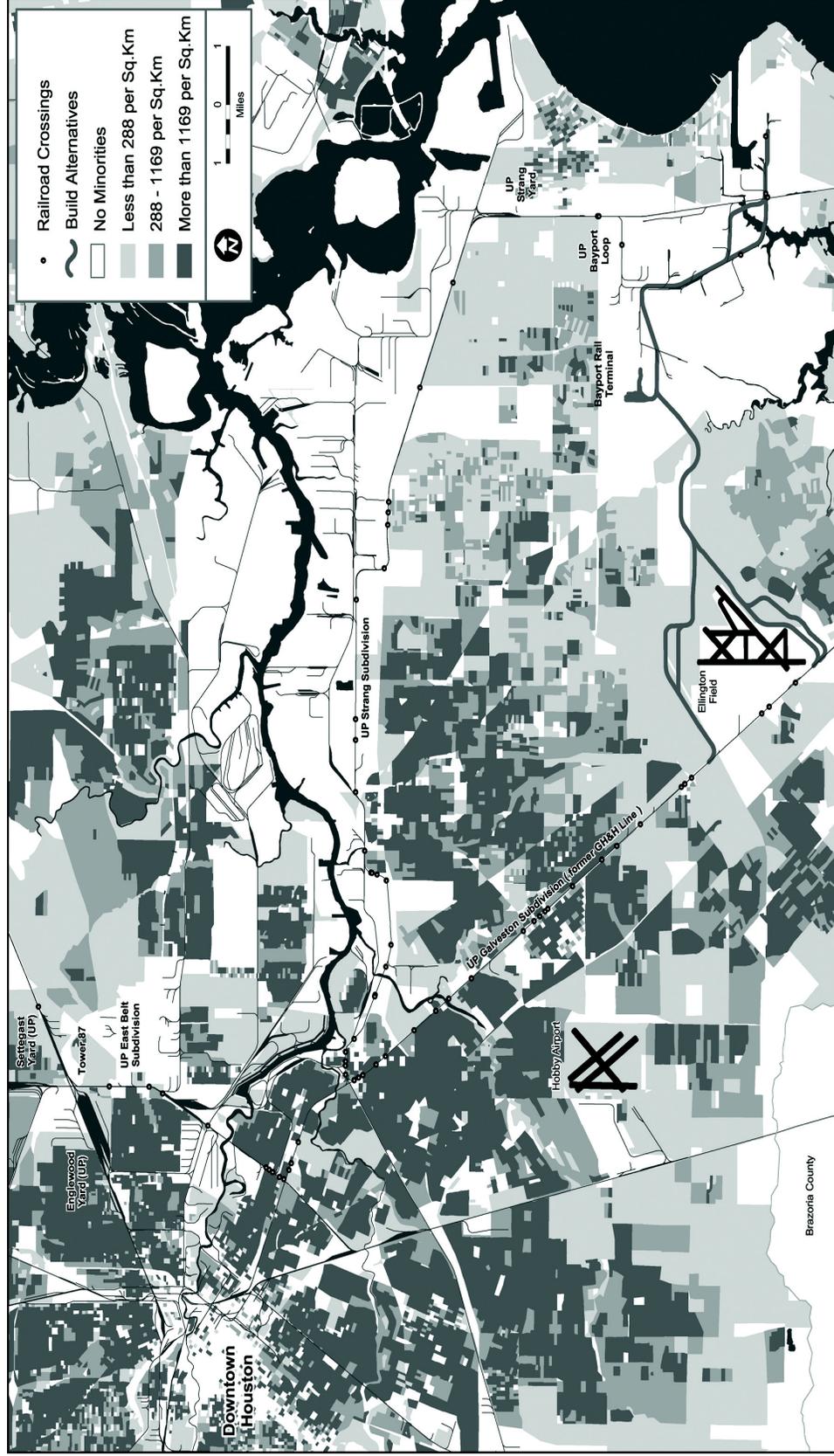


Figure 4.16-3b  
Density of Minority Population



Page 4-92, Last paragraph

**Minority Densities.** Figure 4.16-3 (a and b) indicates sparse minority populations in the vicinity of the Build Segments of the Build Alternatives. Blocks along these segments are either in the lowest or second lowest minority density quartiles. Along the existing GH&H line south of Tower 30, minority populations are substantially more concentrated than compared with the Bayport Loop Industrial Lead and the Strang Subdivision. Many census blocks along this segment of the GH&H line fall in the highest minority density quartile. The existing lines from Tower 30 to Tower 87 have many adjacent blocks in the highest minority population density quartile. ~~Between~~ The majority of the lines between Tower 87 and the CMC Dayton Yard are adjacent to census blocks with no minority population. ~~there is one small segment (Beaumont Place) that falls above the two lowest minority density quartiles.~~

## Chapter 5

Page 5-7, Fourth paragraph, Second and third sentences

The Bayport Loop Proposed Action would result in the ~~filling disturbance~~ of approximately 2.56 ~~2.84~~ acres of jurisdictional wetlands, approximately 4.22 acres of non-jurisdictional wetlands, and impact about 173.6 ft<sup>2</sup> of substrate and 1,444 ft<sup>3</sup> of open water designated as EFH. The Bayport Terminal project would result in the filling of about ~~2.5~~ 19.71 acres of jurisdictional wetlands, 1.56 acres of intertidal mud flats, ~~104~~ 126.70 acres of non-jurisdictional wetlands, and the dredging of ~~150~~ about 127.3 acres of bay bottom (designated as EFH) and the filling of about 0.64 acres of bay bottom.

Page 5-8, First paragraph, Second sentence

The Bayport Loop Proposed Action would create about 0.40 ~~0.32~~ acres of tidal marsh and preserve about 1.5 acres of jurisdictional wetlands (Gilgai) including about 24 to 30 acres of bottomland hardwood forest, and 5 to 6 acres of non-jurisdictional coastal prairie wetlands including 24 acres of coastal prairie habitat to compensate for wetland impacts.

Page 5-8, Second paragraph, Third and sixth sentences

The two projects would ~~affect~~ impact about ~~174~~ 128 acres of EFH in the Galveston Bay/Gulf of Mexico (Bayport Loop Proposed Action - less than one acre and Bayport Terminal Project - ~~173~~ 127 acres). The Applicants for the Bayport Loop project have proposed a ~~conceptual~~ mitigation plan that would compensate for EFH impacts by creating about ~~0.32~~ 0.40 acres of tidal marsh and restoring stream bank/bottom along Taylor Bayou. This plan has been approved by the NMFS but has not yet been approved by the USACE.

## Chapter 6

Page 6-4, Third paragraph, Fifth sentence

SEA acknowledges that the Applicants are responsible for mitigating impacts to ~~expects that~~ surface water and wetlands ~~impacts would be adequately mitigated as required~~ by the relevant

regulatory programs, including the Section 404 Permit and Section 10 Permit from the USACE, and Section 401 Water Quality Certificate from the TCEQ.

## Chapter 10

Page 10-1, Ninth bullet

- U.S. Department of Transportation, Federal Aviation Administration

Page 10-1, Insert the following after the twentieth bullet, as a separate bullet:

- City of Houston Aviation Department

## Appendix F

Page F-3, Table F.1-2, Fifth line of the body of the table (showing information for Bay Area Boulevard), change:

- Average Number of Trains per Day (N) from 12.5 to 2;
- Number of Vehicles Delayed per Day (TD) from 678 to 108;
- Average Delay per Vehicle (seconds) from 6.74 to 1.08; and
- Traffic Level of Service from B to A.

Page F-9, replace with the table on the following page.

## Appendix H

Page H-1, Second paragraph

~~SEA estimated emissions from both the construction and operational phases of the proposed project. Because the Houston area is in attainment for CO and SO<sub>2</sub>, SEA only investigated ozone precursor emissions of NO<sub>x</sub> and VOCs. Because nearly all of the emission sources associated with the Proposed Action and Alternatives would be associated with the combustion of diesel fuel, which emits very small amounts of VOCs relative to NO<sub>x</sub>, SEA developed quantitative estimates only of emissions of NO<sub>x</sub> and diesel PM.~~

Page H-3, Insert following paragraph at the end of Section H.1.1

Because all off-road and on-road equipment and vehicles would be diesel fueled, VOC emissions were estimated based on a constant VOC and NO<sub>x</sub> ratio of (0.68/8.38), which yields an average VOC emission rate of 2.5 kg/day from construction equipment and vehicles. Similarly, the railroad VOC emissions were estimated based on a constant VOC to NO<sub>x</sub> ratio for a switch locomotive of (1.01/17.4), which yields an average emission rate of 0.3 kg/day. Finally, on-road mobile emissions were also estimated based on the heavy-duty diesel VOC to NO<sub>x</sub> ratio of (0.98/21.08), which yields an average daily VOC emission rate of 0.74 kg/day.

**Appendix F, Table F.2-1  
Proposed Action Traffic Safety Analysis Results for Highway/Rail At-Grade Crossings**

Segments	Crossing	Street	Predicted Accident Frequency		
			Pre	Post	Change
GH&H line (mp 15.9 - 4.5)	859598E	BRANTLEY ST.	0.009	0.010	0.002
	859597X	CHALLENGER 7 PKWY	0.030	0.035	0.005
	859596R	N. GATE	0.016	0.018	0.003
	859592N	GENOA-RED BLUFF	0.083	0.090	0.007
	859589F	TIKI LANE	0.015	0.018	0.003
	859587S	SHAVER	0.022	0.025	0.003
	859584W	CORONATION DRIVE	0.015	0.018	0.003
	859583P	EDGEBROOK	0.024	0.028	0.004
	859579A	NEVADA	0.023	0.027	0.004
	859578T	SPENCER	0.064	0.070	0.006
	859577L	PENNSYLVANIA <sup>1</sup>	0.011	0.013	0.002
	859576E	VIRGINIA ST	0.027	0.032	0.005
	859575X	KENTUCKY ST.	0.137	0.151	0.014
	859574R	S. RICHEY ST.	0.021	0.025	0.003
	859570N	HOWARD DRIVE	0.062	0.068	0.006
	859569U	WYNE ST.	0.009	0.010	0.002
	859567F	PARKPLACEBLVD.	0.024	0.028	0.004
	859568M	PARK TERRACE	0.012	0.014	0.002
	859550C	BROADWAY ST.	0.020	0.023	0.003
	859549H	JUNIUS	0.004	0.005	0.001
859548B	BOWIE ST	0.015	0.018	0.003	
859547U	LAWNDALE	0.021	0.024	0.003	
859546M	MANCHESTER ST.	0.012	0.014	0.002	
Tower 30 to Tower 85 (mp 4.5-2.1)	859533L	67TH ST.	0.009	0.011	0.001
	859530R	66TH ST.	0.018	0.021	0.003
	288035Y	HUGHES ST.	0.052	0.057	0.005
Tower 85 to Tower 87 (mp 9.4-4.7)	288034S	HARRISBURG BLVD.	0.094	0.095	0.002
	288033K	SHERMAN ST.	0.023	0.023	0.001
	288032D	BRADY ST.	0.046	0.047	0.001
	288024L	CANAL ST.	0.023	0.023	0.001
	288009J	OLD CLINTON RD.	0.011	0.011	0.000
	288010D	CLINTON DR.	0.032	0.033	0.001
	287996C	MARKET	0.099	0.101	0.002
	287994N	LYONS AVE.	0.075	0.077	0.002
	287982U	WALLISVILLE RD.	0.064	0.066	0.001
Tower 87 to Dayton (mp 356.8-327.7; 353 at Dawes)	758293C	FIELDS	0.020	0.021	0.001
	745074B	OATES ROAD	0.028	0.029	0.001
	762907S	RALSTON RD	0.021	0.022	0.001
	762905D	HEATHER ROW RD	0.017	0.018	0.001
	762904W	CE KING PKWY	0.027	0.028	0.001
	762901B	VAN HUT RD	0.024	0.025	0.001

Page H-11, Insert following paragraph at the end of Section H.1.2

SEA estimated switch and line-haul locomotive emissions for VOC from both switching and line-haul operations based on the VOC to NO<sub>x</sub> ratios reported in Table H-1 from USEPA's "Emissions Factor for Locomotives." For the Alternative with the largest overall length, SEA estimated that the average daily VOC emissions would be 1.2 kg/day.

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