

APPENDIX J

Socioeconomics and Environmental Justice Background Data

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Socioeconomic and Environmental Justice Background Data

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1.1. OVERVIEW

This appendix supports the Dallas Floodway Project Environmental Impact Statement (EIS), which has been prepared to identify the environmental consequences associated with the implementation of proposed flood risk management elements, Balanced Vision Plan Study features (including ecosystem restoration and recreational facilities), and Interior Drainage Plan improvements in and around the Dallas Floodway Levee System in Dallas, Texas. The discussion and material presented in this appendix supplement and support the analysis and conclusions presented in Sections 3.9 and 4.9 of the EIS.

The ROI for socioeconomics and environmental justice are defined by the census tracts that are at least partially located within the boundaries of the City of Dallas Trinity River Corridor Comprehensive Land Use Plan (Figure 1) and located wholly within the City of Dallas and Dallas County. Seventy census tracts and 142 census block groups make up the ROI.

1.1.1 Socioeconomics

1.1.1.1 Population

As shown in Table 1, the total population for the ROI in 2010 was 272,761 (U.S. Census Bureau 2010a), representing about 22.8% of the population of the City of Dallas (1,197,816). Dallas County, the second largest county in Texas, had a 2010 population of 2,368,139, making it the second largest county in Texas and 9th largest county in the nation.

Table 1. Population, 2010

<i>Region</i>	<i>Population</i>
ROI	272,761
City of Dallas	1,197,816
Dallas County	2,368,139
Texas	25,145,561

Source: U.S. Census Bureau 2010a.

1.1.1.2 Employment

As shown in Table 2, in 2010, employment in Dallas County was 1.1 million, more than half of which was in the City of Dallas (563,170). Employment in the ROI was just over 108,000. Employment in the ROI was concentrated in the construction industry (15.1% of employment), the Education and Health Care industry (14.6% of employment), the Professional, Scientific, Management industry (12.9% of employment), and the retail trade industry (10.6% of employment).

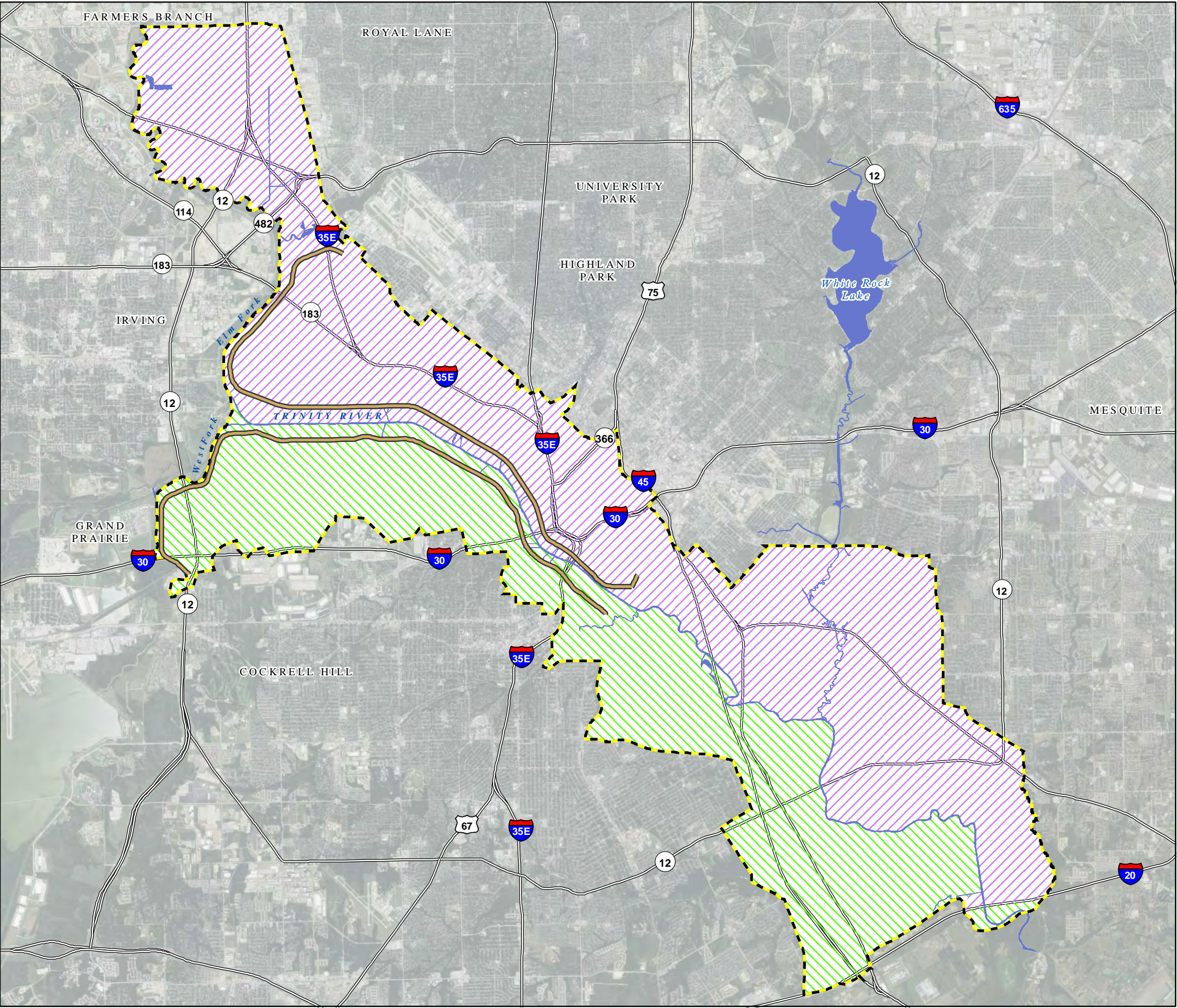





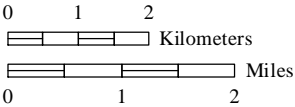
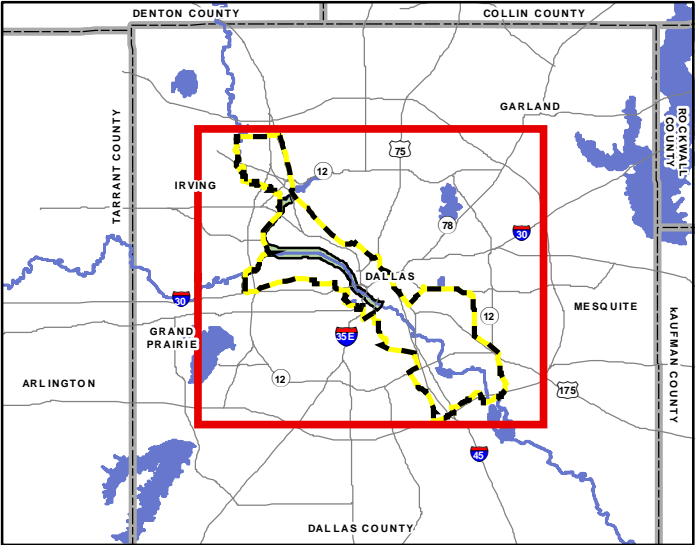


Figure 1
ROI for Socioeconomics and Environmental Justice

LEGEND

-  East Levee Side
-  West Levee Side
-  ROI
-  Surface Water
-  Dallas Floodway Levee
-  Freeway



GIS Sources: City of Dallas 2008a, NCTCOG 2008



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Table 2. Employment in the ROI, by Industry, 2010

<i>Industry</i>	<i>Dallas County</i>		<i>City of Dallas</i>		<i>ROI</i>	
	<i>No. of Employees</i>	<i>Percent</i>	<i>No. of Employees</i>	<i>Percent</i>	<i>No. of Employees</i>	<i>Percent</i>
Total Civilian Employed Population 16 Years and Older	1,114,379	100	563,170	100	108,229	100
Agriculture, Extraction	6,982	0.6	3,284	0.6	594	0.5
Construction	109,444	9.8	61,658	10.9	16,296	15.1
Manufacturing	109,533	9.8	49,048	8.7	10,057	9.3
Wholesale Trade	35,145	3.2	16,456	2.9	4,049	3.7
Retail Trade	123,586	11.1	61,330	10.9	11,448	10.6
Transportation, Warehousing, Utilities	62,682	5.6	26,751	4.8	6,342	5.9
Information	30,615	2.7	13,658	2.4	2,290	2.1
Finance, Insurance, Real Estate	101,082	9.1	53,665	9.5	8,659	8.0
Professional, Scientific, Management	150,510	13.5	83,204	14.8	13,936	12.9
Education, Health Care	193,417	17.4	94,082	16.7	15,816	14.6
Arts, Entertainment, Accommodation, Food Services	101,126	9.1	55,441	9.8	10,076	9.3
Other Services	59,737	5.4	31,584	5.6	5,830	5.4
Public Administration	30,520	2.7	13,009	2.3	2,836	2.6

Source: U.S. Census Bureau 2010a.

1.1.1.3 Education

Table 3 presents school enrollment by level of education for the ROI, the City of Dallas, Dallas County, the State of Texas, and the U.S. for the year 2010. The ROI had a higher percentage of enrolled students in Grades 1-8 and high school than any other region shown in Table 2. Alternatively, the ROI had a lower percentage of its enrolled students that were enrolled in college or graduate school.

Table 3. School Enrollment by Level of Education, 2010

<i>Education Level</i>	<i>Percent of Enrolled Students</i>				
	<i>ROI</i>	<i>City of Dallas</i>	<i>Dallas County</i>	<i>Texas</i>	<i>U.S.</i>
Preschool-Kindergarten	12.7	13.6	12.2	12.1	11.2
Grades 1-8	45.7	44.1	44.6	42.9	40.3
High School	24.2	21.1	22.0	21.6	21.7
College and Graduate School	17.4	21.1	21.1	23.3	26.9

Source: U.S. Census Bureau 2010b.

Table 4 presents information on educational attainment for the ROI, the City of Dallas, Dallas County, the State of Texas, and the U.S. for the year 2010. While the ROI has a high level of elementary and high school enrollment, the ROI had a lower level of educational attainment than each of the other regions shown in Table 4. In addition, the ROI had a higher percentage of those who did not complete high school (38.2%) than any other region, and had a lower percentage of those who had some college or an associate degree (18.8%) or a bachelor's or advanced degree (17.3%) than any other region.

Table 4. Educational Attainment¹, 2010

<i>Highest Education Level</i>	<i>ROI</i>	<i>City of Dallas</i>	<i>Dallas County</i>	<i>Texas</i>	<i>U.S.</i>
Did not complete high school	38.2%	27.1%	23.6%	20.0%	14.9%
High school or equivalent, no college	25.7%	21.9%	23.3%	26.0%	29.0%
Some college or Associate degree	18.8%	22.4%	25.2%	28.3%	28.1%
Bachelor's degree or advanced degree	17.3%	28.7%	28.0%	25.8%	27.9%

Note: ¹ Educational attainment for individuals 25 years of age and older.

Source: U.S. Census Bureau 2010b.

1.1.1.4 Housing

Table 5 presents that in 2010 there were 104,247 housing units in the ROI, of which 86.1% of the units were occupied and 13.9% were vacant. The vacancy rate of 13.9% for the ROI was greater than the City of Dallas (12.8%), Dallas County (10.7%), the State of Texas (12.1%), and the U.S. (12.2%). Also in 2010, as a percentage of occupied housing units, the ROI had fewer units occupied by homeowners (42.8%) and more units occupied by renters (57.2%) than any other region.

Table 5. Housing Occupancy, 2010

<i>Housing Occupancy</i>	<i>ROI</i>	<i>City of Dallas</i>	<i>Dallas County</i>	<i>Texas</i>	<i>U.S.</i>
Total Housing Units	104,247	515,414	932,072	9,718,470	130,038,080
Percent Occupied	86.1%	87.2%	89.3%	87.9%	87.8%
Percent Vacant	13.9%	12.8%	10.7%	12.1%	12.2%
Owner-Occupied	42.8%	45.8%	54.7%	64.8%	66.6%
Renter-Occupied	57.2%	54.2%	45.3%	35.2%	33.4%

Source: U.S. Census Bureau 2010b.

1.1.2 Environmental Justice and Protection of Children

1.1.2.1 Minority Status

Race and Ethnicity

As shown in Table 6, in 2010, the population in the ROI consisted of 41.0 % white, 33.6% Black or African American, and 46% Hispanic or Latino. Only a small proportion of the population of the ROI was comprised of American Indian and Native Alaskans, Asians, and Native Hawaiian and other Pacific Islanders or some other race (20.63%). The population in the ROI consisted of less White, more Black or African American, and more Hispanic or Latino than each of the other regions presented in Table G-6. In general, in 2010, the ROI had a relatively high proportion of minority residents than the City of Dallas, Dallas County, and the U.S.

Table 6. Race and Ethnicity, 2010

<i>Race/Ethnicity</i>	<i>ROI</i>	<i>City of Dallas</i>	<i>Dallas County</i>	<i>Texas</i>	<i>U.S.</i>
White	41.0%	50.7%	53.5%	70.4%	72.4%
Black or African American	33.6%	25.0%	22.3%	11.8	12.6%
American Indian and Alaska Native	0.7%	0.7%	0.7%	0.7%	0.9%
Asian	2.2%	2.9%	5.0%	3.8%	4.8%
Native Hawaiian and Other Pacific Islander	0.03%	0.0%	0.1%	0.1%	0.2%
Some other race	19.9%	18.1%	15.5%	10.5%	6.2%
Two or more races	2.5%	2.6%	2.8%	2.7%	2.9
Hispanic or Latino ¹	46%	42.4%	38.8%	37.6%	16.3%
Total Population	272,761	1,197,816	2,368,139	25,145,561	308,745,538

Notes: ¹ Race and ethnicity are considered separate and distinct identities in the U.S. Census, with Hispanic or Latino origin asked as a separate question. Thus, numbers for Hispanic and Latino are in addition to other categories presented in the table.

Source: U.S. Census Bureau 2010a.

Minority Population Areas

Figure 2 displays census block groups in the ROI that are considered environmental justice minority population areas. A census block group is considered an environmental justice minority population area if 50% or more of the residents are Black or African American, Asian, American Indian or Native Alaskan, Native Hawaiian or Other Pacific Islander, or Hispanic or Latino (CEQ 1997). As noted in Section 3.9, *Socioeconomics*, 75 census block groups within the ROI have minority populations that represent 50% or more of the total resident population. Table 7 shows each of the Census Block Groups in the ROI, the percentage of the residents in each census block group that have minority status, and the determination for each census block group as to whether it is considered an environmental justice minority area.

Table 7. Environmental Justice Minority and Low-Income Areas by Census Block Group, 2010

<i>Block Group ID Code</i>	<i>Minority Populations</i>		<i>Low-Income Populations</i>	
	<i>% of Block Group that is Minority</i>	<i>Environmental Justice Minority Population Area?</i>	<i>% of Block Group that is Low-income</i>	<i>Environmental Justice Low-income Population Area?</i>
481130004011	48.0%	No	0%	No
481130004012	59.6%	Yes	44%	Yes
481130004013	66.5%	Yes	14%	No
481130004063	15.8%	No	26%	Yes
481130004064	5.2%	No	21%	Yes
481130004065	12.8%	No	3%	No
481130005002	8.6%	No	0%	No
481130006052	0.0%	No	7%	No
481130016001	0.0%	No	0%	No
481130017011	15.8%	No	0%	No
481130017032	0.8%	No	0%	No
481130017042	15.5%	No	0%	No
481130018002	3.8%	No	0%	No

Table 7. Environmental Justice Minority and Low-Income Areas by Census Block Group, 2010

<i>Block Group ID Code</i>	<i>Minority Populations</i>		<i>Low-Income Populations</i>	
	<i>% of Block Group that is Minority</i>	<i>Environmental Justice Minority Population Area?</i>	<i>% of Block Group that is Low-income</i>	<i>Environmental Justice Low-income Population Area?</i>
481130019001	16.7%	No	8%	No
481130019002	42.0%	No	30%	Yes
481130020001	78.5%	Yes	7%	No
481130020002	87.2%	Yes	42%	Yes
481130020003	88.2%	Yes	15%	No
481130020004	10.4%	No	37%	Yes
481130020005	94.5%	Yes	44%	Yes
481130021001	47.2%	No	0%	No
481130021002	36.5%	No	0%	No
481130022001	0.0%	No	22%	Yes
481130027011	0.1%	No	62%	Yes
481130027022	0.4%	No	28%	Yes
481130031011	32.7%	No	0%	No
481130031012	30.6%	No	29%	Yes
481130034001	97.2%	Yes	36%	Yes
481130034002	78.5%	Yes	23%	Yes
481130037002	59.0%	Yes	41%	Yes
481130037003	7.1%	No	0%	No
481130037004	99.4%	Yes	37%	Yes
481130038001	98.6%	Yes	44%	Yes
481130038002	99.0%	Yes	7%	No
481130038003	78.3%	Yes	0%	No
481130039011	98.5%	Yes	46%	Yes
481130039012	99.4%	Yes	52%	Yes
481130039021	98.5%	Yes	42%	Yes
481130039022	98.9%	Yes	39%	Yes
481130040001	99.2%	Yes	30%	Yes
481130040002	99.6%	Yes	0%	No
481130041001	98.7%	Yes	77%	Yes
481130041002	98.5%	Yes	30%	Yes
481130042011	5.8%	No	0%	No
481130042013	38.5%	No	26%	Yes
481130042014	0.5%	No	0%	No
481130043001	81.7%	Yes	65%	Yes
481130043002	98.6%	Yes	14%	No
481130043003	32.9%	No	25%	Yes

Table 7. Environmental Justice Minority and Low-Income Areas by Census Block Group, 2010

<i>Block Group ID Code</i>	<i>Minority Populations</i>		<i>Low-Income Populations</i>	
	<i>% of Block Group that is Minority</i>	<i>Environmental Justice Minority Population Area?</i>	<i>% of Block Group that is Low-income</i>	<i>Environmental Justice Low-income Population Area?</i>
481130044002	0.5%	No	0%	No
481130048001	13.8%	No	5%	No
481130048004	0.2%	No	22%	Yes
481130049002	98.3%	Yes	26%	Yes
481130049003	0.8%	No	45%	Yes
481130054001	5.1%	No	21%	Yes
481130055001	97.7%	Yes	0%	No
481130055002	95.2%	Yes	8%	No
481130055004	0.1%	No	51%	Yes
481130072014	66.7%	Yes	48%	Yes
481130072015	0.1%	No	38%	Yes
481130084001	1.8%	No	26%	Yes
481130084003	0.8%	No	20%	Yes
481130084004	0.8%	No	45%	Yes
481130084006	2.7%	No	22%	Yes
481130086031	98.4%	Yes	55%	Yes
481130086032	97.7%	Yes	20%	No
481130086041	61.0%	Yes	42%	Yes
481130086042	98.8%	Yes	68%	Yes
481130087011	10.6%	No	92%	Yes
481130087012	16.4%	No	38%	Yes
481130087014	2.9%	No	5%	No
481130087015	38.3%	No	38%	Yes
481130088011	97.8%	Yes	16%	No
481130088012	0.2%	No	11%	No
481130088021	0.0%	No	0%	No
481130089001	98.8%	Yes	39%	Yes
481130089002	98.4%	Yes	39%	Yes
481130089003	97.7%	Yes	56%	Yes
481130091011	22.2%	No	7%	No
481130091012	19.2%	No	6%	No
481130091031	94.5%	Yes	10%	No
481130091032	95.0%	Yes	38%	Yes
481130091041	0.1%	No	33%	Yes
481130091051	0.0%	No	5%	No
481130093011	6.3%	No	35%	Yes

Table 7. Environmental Justice Minority and Low-Income Areas by Census Block Group, 2010

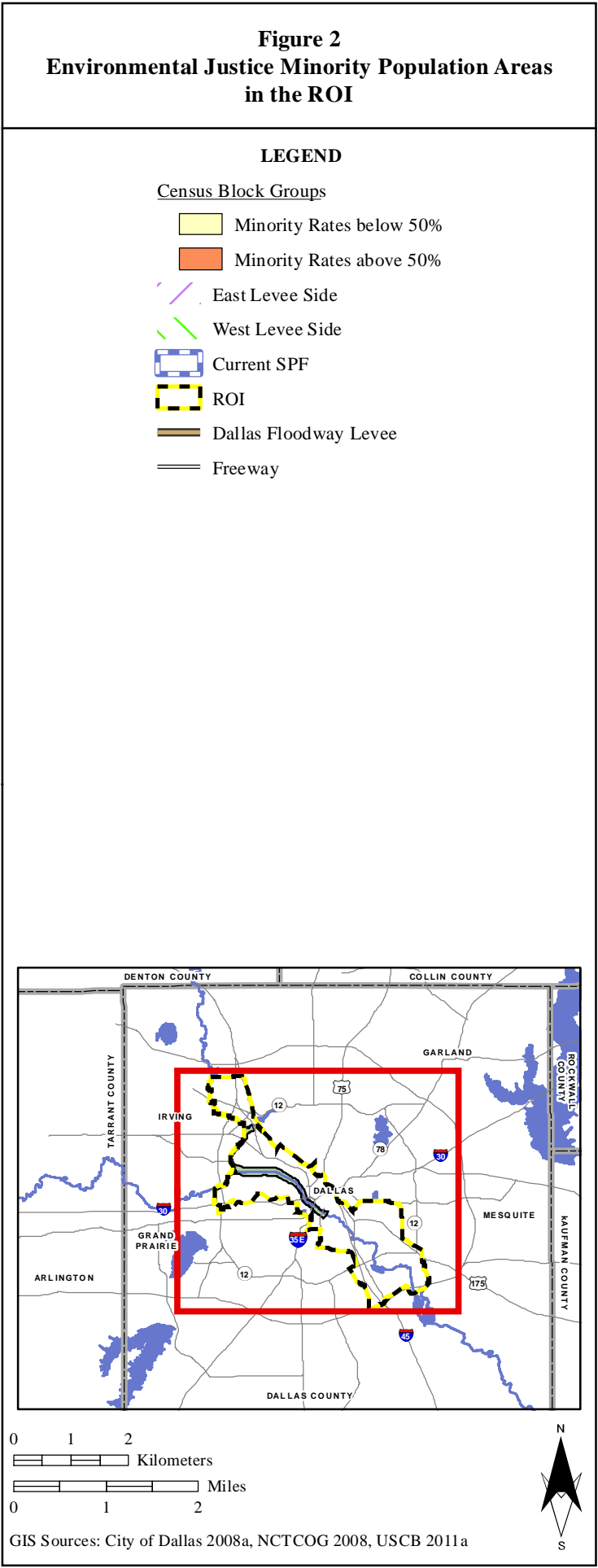
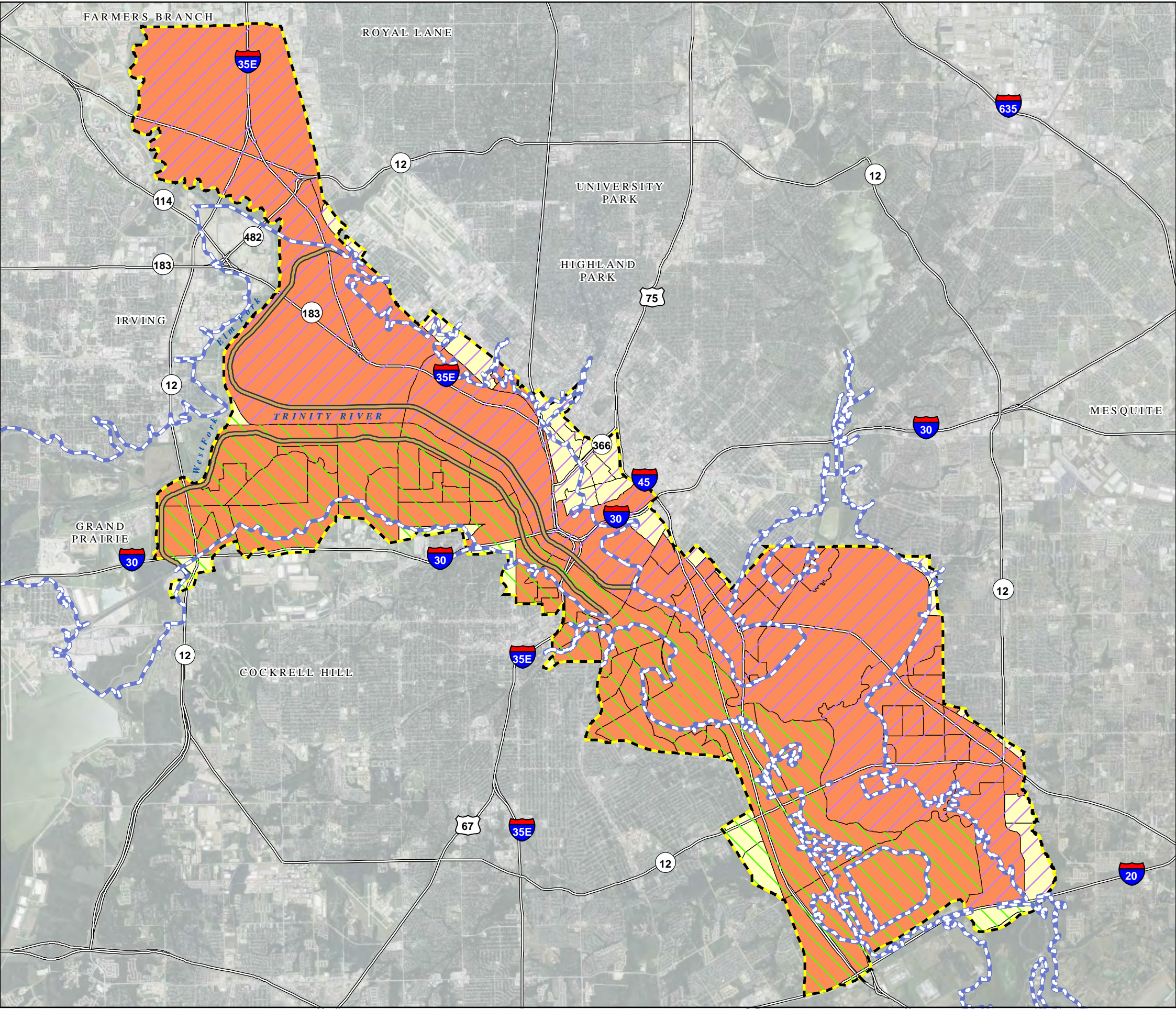
<i>Block Group ID Code</i>	<i>Minority Populations</i>		<i>Low-Income Populations</i>	
	<i>% of Block Group that is Minority</i>	<i>Environmental Justice Minority Population Area?</i>	<i>% of Block Group that is Low-income</i>	<i>Environmental Justice Low-income Population Area?</i>
481130093012	10.8%	No	18%	No
481130093013	54.3%	Yes	34%	Yes
481130093031	97.8%	Yes	28%	Yes
481130093032	94.8%	Yes	26%	Yes
481130093033	97.0%	Yes	33%	Yes
481130093041	93.5%	Yes	51%	Yes
481130093042	98.7%	Yes	64%	Yes
481130093043	99.1%	Yes	56%	Yes
481130093044	98.9%	Yes	39%	Yes
481130099002	72.4%	Yes	13%	No
481130100001	65.6%	Yes	0%	No
481130100002	85.4%	Yes	12%	No
481130101011	97.4%	Yes	37%	Yes
481130101012	99.8%	Yes	43%	Yes
481130101013	99.4%	Yes	23%	Yes
481130101021	97.6%	Yes	16%	No
481130101022	98.9%	Yes	26%	Yes
481130101023	97.8%	Yes	36%	Yes
481130105001	99.4%	Yes	19%	No
481130105002	91.4%	Yes	23%	Yes
481130106011	98.0%	Yes	18%	No
481130106012	96.5%	Yes	27%	Yes
481130106013	97.8%	Yes	13%	No
481130106021	90.6%	Yes	17%	No
481130106022	98.1%	Yes	75%	Yes
481130107011	8.2%	No	23%	Yes
481130114011	31.3%	No	49%	Yes
481130115001	98.6%	Yes	61%	Yes
481130115002	99.2%	Yes	53%	Yes
481130115003	99.2%	Yes	50%	Yes
481130115004	99.2%	Yes	52%	Yes
481130116011	97.0%	Yes	28%	Yes
481130116012	87.3%	Yes	31%	Yes
481130116013	98.3%	Yes	19%	No
481130116021	35.6%	No	27%	Yes
481130116022	30.1%	No	14%	No

Table 7. Environmental Justice Minority and Low-Income Areas by Census Block Group, 2010

<i>Block Group ID Code</i>	<i>Minority Populations</i>		<i>Low-Income Populations</i>	
	<i>% of Block Group that is Minority</i>	<i>Environmental Justice Minority Population Area?</i>	<i>% of Block Group that is Low-income</i>	<i>Environmental Justice Low-income Population Area?</i>
481130116024	50.2%	Yes	18%	No
481130117013	6.5%	No	20%	Yes
481130141381	2.1%	No	0%	No
481130142041	0.0%	No	38%	Yes
481130142064	1.0%	No	0%	No
481130158001	0.0%	No	24%	Yes
481130167031	0.0%	No	25%	Yes
481130169021	1.1%	No	9%	No
481130171022	2.0%	No	19%	No
481130201001	0.5%	No	42%	Yes
481130201002	3.4%	No	9%	No
481130202001	98.4%	Yes	0%	No
481130202003	80.7%	Yes	24%	Yes
481130203001	1.3%	No	55%	Yes
481130203002	0.2%	No	45%	Yes
481130203003	34.0%	No	38%	Yes
481130204001	51.1%	Yes	2%	No
481130204002	17.9%	No	43%	Yes
481130204003	54.9%	Yes	0%	No
481130205001	61.0%	Yes	53%	Yes
481130205002	97.4%	Yes	56%	Yes

Source: U.S. Census Bureau 2010b.

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1.1.2.2 Low Income Status

Household Income

As shown in Table 8, in 2010, households in the ROI generally had lower incomes as compared to the City of Dallas, Dallas County, the State of Texas, and the U.S. As a proportion of total households, more households in the ROI had annual incomes below \$10,000 (13.9%), between \$10,000 and \$24,999 (23.4%), and between \$25,000 and \$49,999 (29%) than any other region. Also, as a proportion of total households, the ROI had fewer households with annual incomes between \$50,000 and \$74,999 (14.5%), between \$75,000 and \$149,999 (14.3%), and \$150,000 or more (4.8%) than any other region.

Table 8. Household Income (2010 Inflation-Adjusted Dollars)

<i>Household Income</i>	<i>ROI</i>	<i>City of Dallas</i>	<i>Dallas County</i>	<i>Texas</i>	<i>U.S.</i>
Less than \$10,000	13.9%	9.3%	7.2%	7.7%	7.2%
\$10,000 to \$24,999	23.4%	19.7%	17.2%	17.1%	16.3%
\$25,000 to \$49,999	29.0%	28.5%	27.5%	25.5%	24.7%
\$50,000 to \$74,999	14.5%	16.3%	18.3%	18.1%	18.6%
\$75,000 to \$149,999	14.3%	17.4%	21.3%	23.4%	24.7%
\$150,000 or more	4.8%	8.8%	8.6%	8.2%	8.6%
Median Income	NA¹	\$41,682	\$47,974	\$49,646	\$51,914

Notes: ¹ Data unavailable to determine ROI median income at census tract level. NA = not available.

Source: U.S. Census Bureau 2010b.

Low Income Population Areas

Figure 3 displays census block groups in the ROI that are considered environmental justice low-income population areas. A census block group is considered an environmental justice low-income area if 20% or more of the residents have incomes that place them below the poverty line (U.S. Census Bureau 2011). The poverty line is determined by the U.S. Census and is not equivalent to a singular level of median income; rather it varies based on things such as age and family size. As noted in Section 3.9, *Socioeconomics*, 86 census block groups within the ROI have low-income populations that represent 20% or more of the total resident population. Table 7 shows each of the Census Block Groups in the ROI, the percentage of the residents in each census block group that have low-income status, and the determination for each census block group as to whether it is considered an environmental justice low-income area.

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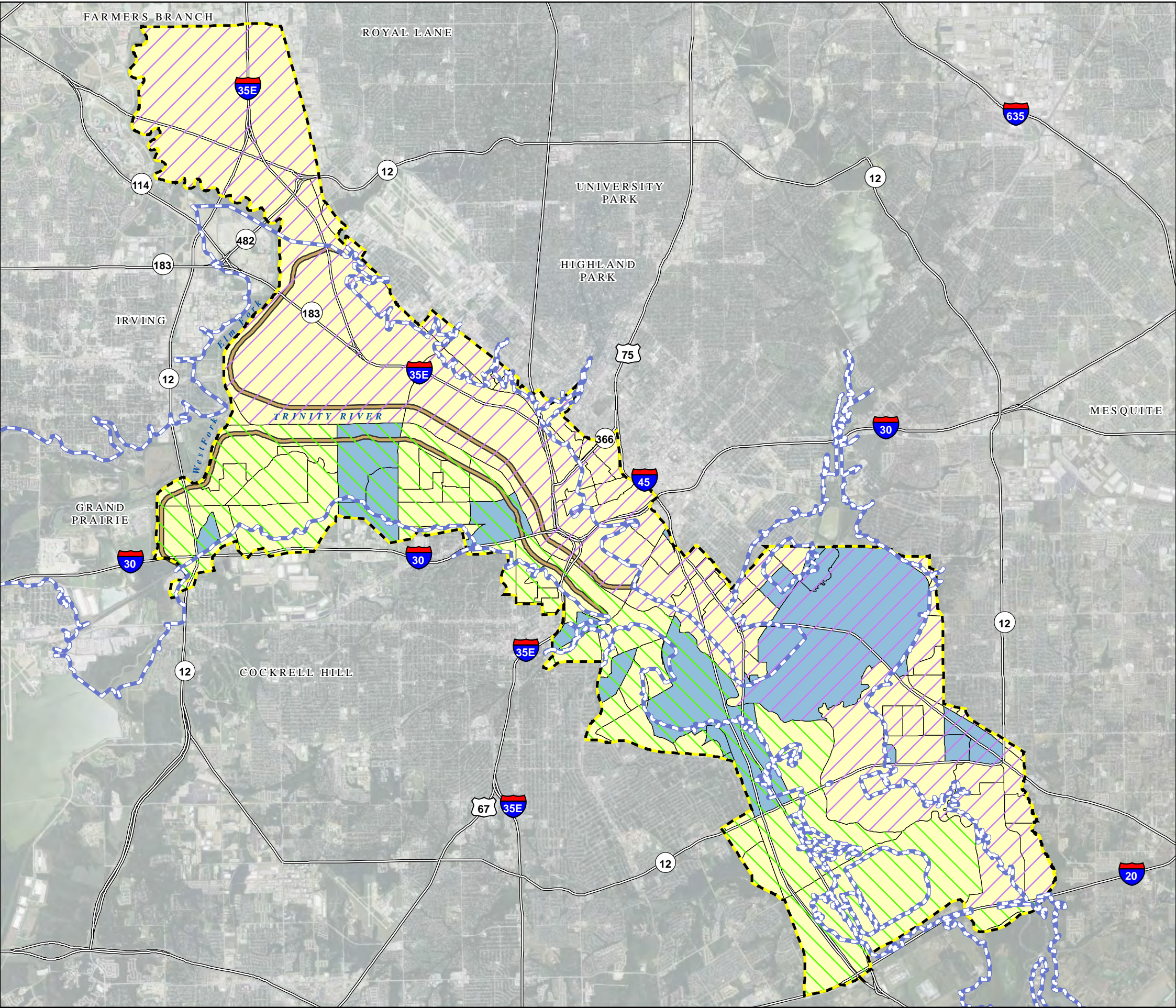
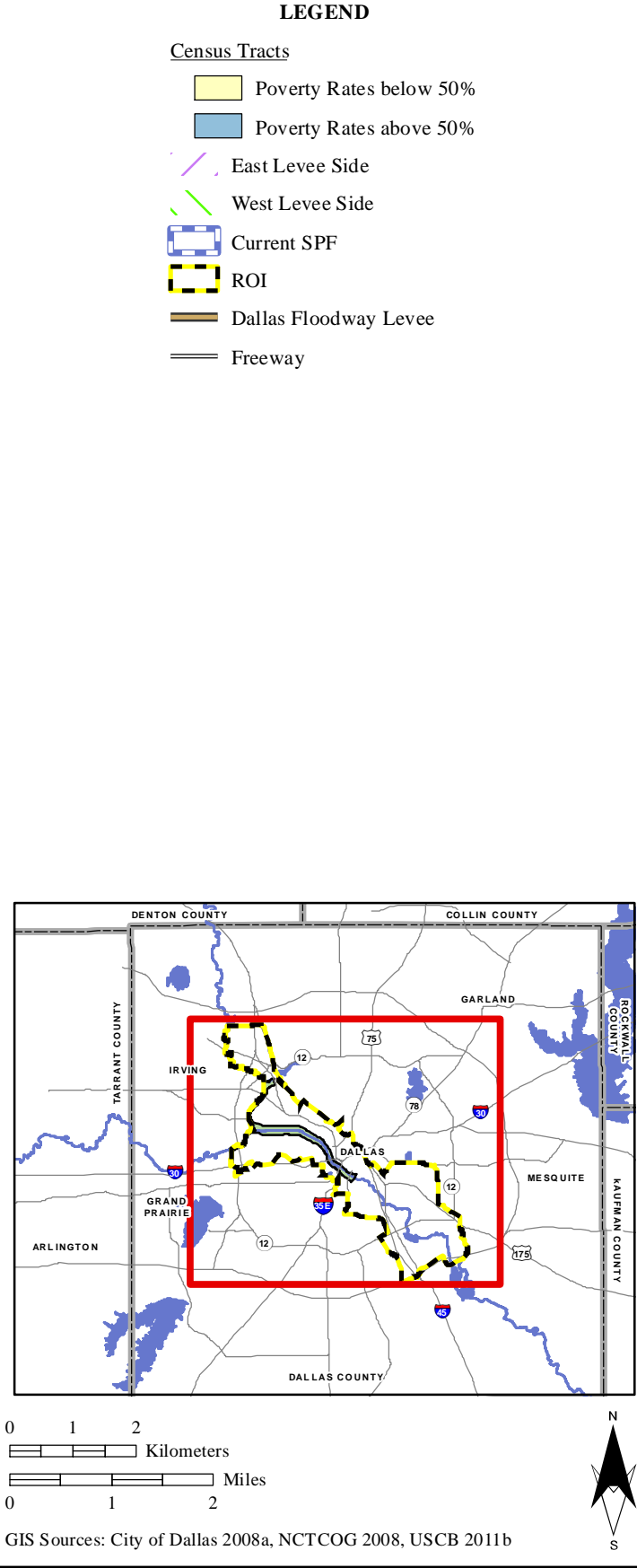


Figure 3
Environmental Justice Low-Income Population Areas
in the ROI



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1.1.2.3 Protection of Children

As shown in Table 9, the percent of population less than 18 years old in the ROI was 24.8% in 2010. The largest age group among children in the ROI was 5 years old to 9 years old (7.6% of total population). As shown in Table 9, the age group distribution for children was generally consistent between each region.

**Table 9. Percentage of Population Less Than 18 Years Old,
by Age Group, 2010**

<i>Age Group</i>	<i>ROI</i>	<i>City of Dallas</i>	<i>Dallas County</i>	<i>Texas</i>	<i>U.S.</i>
Under 1 Year to Under 5 Years	6.6%	8.6%	8.1%	7.7%	6.5%
5 Years to 9 Years	7.6%	7.5%	7.7%	7.7%	6.6%
10 Years to 14 Years	6.6%	6.5%	7.3%	7.5%	6.7%
15 Years to 17 Years	4.0%	3.9%	4.4%	4.5	4.2%
Total Less than 18 Years	24.8%	26.5%	27.6%	27.3%	24.0%

Source: U.S. Census Bureau 2010a.

1.2. REFERENCES

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