

ENVIRONMENTAL JUSTICE TECHNICAL MEMORANDUM



April 2014



EB I-70 Peak Period Shoulder Lane

CATEGORICAL EXCLUSION



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Acronyms and Abbreviations

AMI	Area Median Income
CatEx	Categorical Exclusion
CDOT	Colorado Department of Transportation
CSS	Context Sensitive Solutions
DLD	Downieville, Lawson, Dumont
DOT	Department of Transportation
EA	Environmental Assessment
EO	Executive Order
FHWA	Federal Highway Administration
HUD	U.S. Department of Housing and Urban Development
MP	mile post
NEPA	National Environmental Policy Act
PEIS	I-70 Mountain Corridor Programmatic Environment Impact Statement
PPSL	Peak Period Shoulder Lane
ROD	Record of Decision
SWEEP	Stream and Wetland Ecological Enhancement Program

Definitions

Census Block Group: The census block group is a cluster of census blocks within a census tract (or groups of blocks). Block groups generally contain between 600 and 3,000 people, with an optimum size of 1,500 people.

Census Block: The census block is the smallest geographic unit for which the U.S. Census Bureau tabulates 100 percent data. It is the smallest subdivision of a census tract. Census blocks are typically small and, in urban areas, often correspond to city blocks. In less populated areas, census blocks may extend for miles and have irregular boundaries.

Minority: According to FHWA Order 6640.23, a minority is a person who is Black, Hispanic, Asian American, American Indian, or Alaska Native.

Minority Population: A minority population is any readily identifiable group of minority persons who live in a geographic proximity and, if circumstances warrant, geographically dispersed/transient persons (such as migrant workers or Native Americans) who will be similarly affected by a proposed FHWA program, policy, or activity (FHWA Order 6640.23). In this study, minority populations are identified in census blocks where the proportion of minority persons exceeds that of the county. The proportion of minority persons in Clear Creek County is 8 percent.

Low-Income: Low-income is defined using a combination of the U.S. Census average household size data and the income limits set annually by the U.S. Department of Housing and Urban Development (HUD) for identifying housing needs. This study uses income limits set at 30 percent of the Area Median Income (AMI) and adjusts them for household size within the study area (CDOT, 2005). Using this approach defines low-income as households earning less than \$20,000 per year.

Low-Income Population: Low-income population means any readily identifiable group of low-income persons who live in a 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 (FHWA Order 6640.32). In this study, low-income populations are identified in census block groups where the proportion of low-income households exceeds the threshold defined by the area of comparison, meaning the low-income population is at or above county levels (13 percent).

Adverse Effect: Adverse effect means the totality of significant individual or cumulative human health or environmental effects, including interrelated social and economic effects, which may include, but are not limited to: bodily impairment, infirmity, illness or death; air, noise, and water pollution and soil contamination; destruction or disruption of man-made or natural resources; destruction or diminution of aesthetic values; destruction or disruption of community cohesion or a community's economic vitality; destruction or disruption of the availability of public and private facilities and services; vibration; adverse employment effects; displacement of persons, businesses, farms, or nonprofit organizations; increased traffic congestion, isolation, exclusion or separation of minority or low-income individuals within a given community or from the broader community; and the denial of, reduction in, or significant delay in the receipt of, benefits of FHWA programs, policies, or activities (FHWA Order 6640.23).

Disproportionately High and Adverse Effect on Minority and Low-Income Populations means that: (1) is predominately borne by a minority population and/or a low-income population; or (2) will 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 will be suffered by the non-minority population and/or non-low-income population (FHWA Order 6640.23).



Section 1. Purpose of the Memorandum

1.1 Introduction

The Federal Highway Administration (FHWA), in cooperation with the Colorado Department of Transportation (CDOT), is preparing a Categorical Exclusion (CatEx) for proposed changes to the eastbound lanes of I-70 between approximately milepost (MP) 230 and MP 243, in Clear Creek County, Colorado. The proposed changes would improve operations and travel time reliability in the eastbound direction of I-70 in the study area. Additionally, the improvements would be consistent with the decisions and commitments documented in the *I-70 Mountain Corridor Record of Decision (ROD)* (CDOT, 2011). The Proposed Action fits within the definition of “expanded use of existing transportation infrastructure in and adjacent to the corridor” as an element of the Preferred Alternative Minimum Program, as identified in the *I-70 Mountain Corridor ROD* (CDOT, 2011).

This technical memorandum discusses the regulatory setting and describes the affected environment and the impacts of the No Action Alternative and Proposed Action on minority and low-income populations within the identified study area. This memorandum also documents mitigation measures, including applicable measures identified in the *I-70 Mountain Corridor Programmatic Environmental Impact Statement (PEIS)*, which would reduce any impacts during construction and operation. The I-70 PEIS identified comprehensive improvements for the corridor. The Proposed Action would immediately address mobility and operations in the eastbound direction between Empire Junction and east Idaho Springs, but would not address all of the transportation needs in this area. The Proposed Action would not preclude other improvements needed and approved by the I-70 PEIS ROD.

Section 2. How Does the Analysis Relate to the Tier 1 PEIS?

The Tier 1 PEIS and associated *I-70 Mountain Corridor PEIS Environmental Justice Technical Report* (CDOT, March 2011) provided an overview of environmental justice issues from a Corridor perspective. The environmental justice analysis conducted for the Peak Period Shoulder Lane (PPSL) is developed to evaluate the specific improvements identified between MP 230 and MP 243. It uses the most current data and guidance, including updated demographics from the 2010 U.S. Census.

The Tier 1 PEIS included a full public and agency information and involvement program. A specific public and agency involvement program has been developed to provide information, gather input, and address concerns regarding the specific improvements being evaluated in the PPSL CatEx. This program includes efforts to ensure full and fair participation by all potentially affected communities in the transportation decision making process.

During development of the PEIS, CDOT contacted local planners, housing authorities, health and human services, and school superintendents throughout the corridor to identify “pockets” of low-income and minority individuals who may be overlooked by reviewing aggregated U.S. Census data solely. Additional identification of and outreach to minority and low-income populations was conducted during the public review and comment period for the Draft PEIS.

The PEIS outreach efforts identified two low-income and minority communities in Idaho Springs within one mile of I-70 (CDOT 2011):

- The Cottonwood Mobile Home Park
- The Mountain Mobile Home Park

Both of these communities are considered low-income and have large concentrations of Spanish-speaking members.

This analysis includes updated U.S. Census data to further identify neighborhoods or other subgroups of minority or low-income populations within the study area to determine the potential for effects of specific improvements on these groups.

Section 3. Process Used to Analyze Environmental Justice

The project team prepared the environmental justice analysis for CDOT in accordance with *FHWA Guidance on Environmental Justice and NEPA* (December 16, 2011), and *CDOT's National Environmental Policy Act Manual, Version 3* (CDOT, 2013) to evaluate:

- The distribution of minority and low-income populations within the study area.
- The issues, impacts, and benefits associated with the Proposed Action.
- Whether or not the Proposed Action would result in disproportionately high and adverse human health and environmental impacts.
- Mitigation, as applicable.

Public involvement and the need for specialized outreach were considered throughout the analysis to ensure full and fair participation by all potentially affected communities in the transportation decision making process.

3.1 Methodology

The environmental justice evaluation process included defining the area of potential impact which includes blocks and/or block groups within 0.5-mile to the north and south of I-70, between MP 230 and MP 243. This study area was chosen because the greatest effects resulting from the Proposed Action would occur adjacent to the I-70 alignment. Once the study area was defined, the presence of minority and low-income populations were identified and mapped. Impacts from the Proposed Action were then evaluated to determine whether the effects to minority and low-income populations were disproportionately high and adverse.

As defined by FHWA Order 6640.23, a disproportionately high and adverse effect is:

1. Predominantly borne by a minority and/or low-income population, or
2. Suffered by the minority and/or low-income population and is appreciably more severe or greater in magnitude than the adverse effect that will be suffered by the non-minority/non-low income population.

Minority Populations

A minority population is any readily identifiable group of minority persons who live in a geographic proximity and, if circumstances warrant, geographically dispersed/transient persons

(such as migrant workers or Native Americans) who will be similarly affected by a proposed FHWA program, policy, or activity. A minority is a person who is Black, Hispanic, Asian American, American Indian or Alaska Native (FHWA Order 6640.23). Hispanic or Latino heritage is considered an ethnicity rather than a racial category in census data; therefore, the minority population is calculated by subtracting persons who are White only (not Hispanic) from the total population to avoid double counting.

Minority populations are identified in census blocks¹ where the proportion of minority persons exceeds the threshold defined by the area of comparison (Clear Creek County). The proportion of the minority population within Clear Creek County is 8 percent; therefore, this analysis is focused on census blocks where the minority population is at or above 8 percent.

The analysis considers the impacts regardless of where they occur; projects can impact services that are important to minority and/or low-income populations even in areas that do not exceed the established threshold.

Low-Income Populations

Low-income populations were identified in census block groups² where the proportion of low-income households exceeded the threshold defined by the area of comparison (Clear Creek County). Economic data is not available at the block level, so census block groups are used to determine the presence of low-income populations.

For this analysis, a combination of 2010 U.S. Census average household size data and 2011 income limits set by the U.S. Department of Housing and Urban Development (HUD) were used. HUD income limits were used because, unlike poverty thresholds provided by the U.S. Census Bureau, they are specific to a geographic region and, consequently, adjust for cost of living. HUD defines low-income as individuals or households earning less than 30 percent of the area median income (AMI) of a community; therefore, an income limit of 30 percent with an adjusted household size was used in this analysis. The average household size for Clear Creek County is 2.14, so this was adjusted as follows:

1. The 2011 HUD Income Limit for a 2 person household (\$18,800) was subtracted from the 2011 HUD Income Limit for a 3 person household (\$21,150).
 $\$21,150 - \$18,800 = \$2,350$
2. The difference from step 1 (\$2,350) was multiplied by the amount that household size exceeds a whole number (0.14).
 $\$2,350 \times 0.14 = \329
3. The value calculated in step 2 was added to the 2011 HUD Income Limit for a 2-person household to determine income limit for Clear Creek County with a household size of 2.14.
 $\$18,800 + \$329 = \$19,129$

Income data from the U.S. Census Bureau is provided in \$5,000 increments; therefore, **the low-income threshold for Clear Creek is \$20,000 per year**. The proportion of households within Clear Creek County that are below \$20,000 is **15.13 percent; therefore, this analysis is**

¹ The census block is the smallest geographic unit for which the U.S. Census Bureau tabulates 100 percent data. It is the smallest subdivision of a census tract. Census blocks are typically small and often correspond to city blocks in urban areas. In rural areas, census blocks may include several miles.

² The census block group is a cluster of census blocks within a census tract (or groups of blocks). Block groups generally contain from 600 to 3,000 people; optimally they contain approximately 1,500 people.

focused on census block groups where the proportion of low-income households is at or above 15 percent.

Census blocks or block groups with minority or low-income populations that exceed county levels were mapped to show those areas within the study area with concentrations of low-income and minority populations.

3.2 Study Area

The environmental justice evaluation process included defining the area of potential impact, which includes blocks and/or block groups within 0.5-mile to the north and south of I-70, between MP 230 and MP 243. This study area was chosen because the greatest effects resulting from the Proposed Action would occur adjacent to the I-70 alignment. All census blocks or block groups within this study area were reviewed to determine the presence of minority and low-income populations, as described above.

3.3 Data Sources

The following data sources support the environmental justice analysis:

- Colorado Department of Local Affairs: provides demographic data and future population estimates for counties and towns in Colorado
- U.S. Census Bureau, 2010 Summary File: provides income, race, and ethnicity data at the census block level for Clear Creek County
- U.S. Department of Housing and Urban Development: Provides 2011 income limits for housing assistance programs
- Colorado Office of Economic Development and International Trade, Minority Business Office online database identifies registered minority and women-owned businesses throughout Colorado.

3.4 Regulations

This section identifies the relevant federal, state, regional, and local regulations, guidelines, and/or laws that apply to environmental justice.

Federal

- **Title VI of the Civil Rights Act of 1964, as amended, states:** “No person in the U.S. shall, on the ground of race, color, or national origin be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance.” Title VI authorizes and requires federal agencies to issue rules, regulations, or orders to implement environmental justice in its programs and activities.
- **Executive Order (EO) 12898 Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations**, signed on February 11, 1994, directs federal agencies to identify and address disproportionately high and adverse effects of federal projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law.
- **U.S. DOT Order 5610.2 Department of Transportation Actions to Address Environmental Justice in Minority Populations and Low-Income Populations**, signed on February 2, 1997, describes the process that the Office of the Secretary and each Operating Administration will use to incorporate the principles outlined in EO 12898 into existing programs, policies, and activities. Formal definitions for minority and low-income populations, adverse effects, and

disproportionately high and adverse effects are also provided.

- **FHWA Order 6640.23 FHWA Actions to Address Environmental Justice in Minority Populations and Low-Income Populations**, signed on December 2, 1998, establishes policies and procedures for FHWA to comply with EO 12898. The order provides direction on how to determine whether federal actions would result in disproportionately high and adverse effects on minority and low-income populations.
- **FHWA Guidance on Environmental Justice and NEPA**, signed on December 16, 2011, supplements FHWA Technical Advisory 6640.8A, and provides guidance on the process for addressing environmental justice. This guidance includes the documentation requirements for NEPA studies and directs the analysis to consider only those adverse effects that remain after mitigation is considered when evaluating disproportionately high and adverse effects.

Additional federal laws and regulations also affect environmental justice considerations, such as: the Clean Air Act of 1990; Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended; the Americans with Disabilities Act of 1990, as amended; and the Intermodal Surface Transportation Efficiency Act of 1991. These regulations identify specific requirements for the treatment of protected populations and the rules surrounding particular mitigation strategies (such as property acquisition).

State

CDOT's *National Environmental Policy Act Manual* (March, 2013) establishes a detailed methodology for the identification of minority and low-income populations, the determination of effects to protected populations, mitigation strategies, and public involvement.

Local and Regional

No local or regional environmental justice regulations or guidelines were identified. The laws, regulations, and guidelines previously described are used for this environmental justice analysis.

3.5 Public Involvement

A public involvement plan was developed to provide information about the project and ensure public participation. In November 2013 an announcement (both electronic and direct mail formats) was sent to residents in the project corridor introducing the project. An online open house was held to solicit public feedback and comments.

Follow up mailings were sent to those residents who indicated that as their preferred method of communication regarding the project. In addition, the project team contacted local organizations that cater to low-income populations, providing project information and handouts to be distributed prior to the April 14, 2014, public meeting.

3.6 Agency Coordination Conducted

The project team coordinated with county and municipal staff to collect information and concerns regarding minority and low-income populations within the study area. Potential impacts to these populations were discussed at Technical Team meetings, which included representatives from Clear Creek County and Idaho Springs, throughout the life of the project, as well as within the Issues Task Force meetings. Topics discussed included noise and visual impacts, temporary construction impacts, and access needs.

Local agency and technical team meetings were held regularly that included stakeholders,

agency representatives, elected officials, and City and County staff who provided input on the locations of possible EJ communities. In addition, through this coordination, the project team added possible impacts to low-income and minority populations as one of the standard evaluation criteria used to evaluate all design options.

There will be a public notice and a public comment period in May 2014 as part of the Clear Creek County and City of Idaho Springs 1041 permit application processes.

In the Section 106 Issues Task Force meetings that were held, concerns about noise impacts to the low-income community in Lawson were discussed.

Section 4. Description of the Proposed Action

The purpose of the I-70 PPSL project is to provide short-term eastbound operational improvements to relieve traffic congestion during periods when traffic volumes are highest. This segment is the most congested stretch of the entire I-70 Mountain Corridor. During both the summer and winter peak season, traffic volumes are highest on weekends when recreational travelers comprise more than 90 percent of traffic. In 2010 drivers experienced speeds of less than 20 miles per hour for 35 percent of the time on Sundays, which have the highest volume. Some motorists divert to the frontage road along I-70, which affects its ability to function as a local access county road.

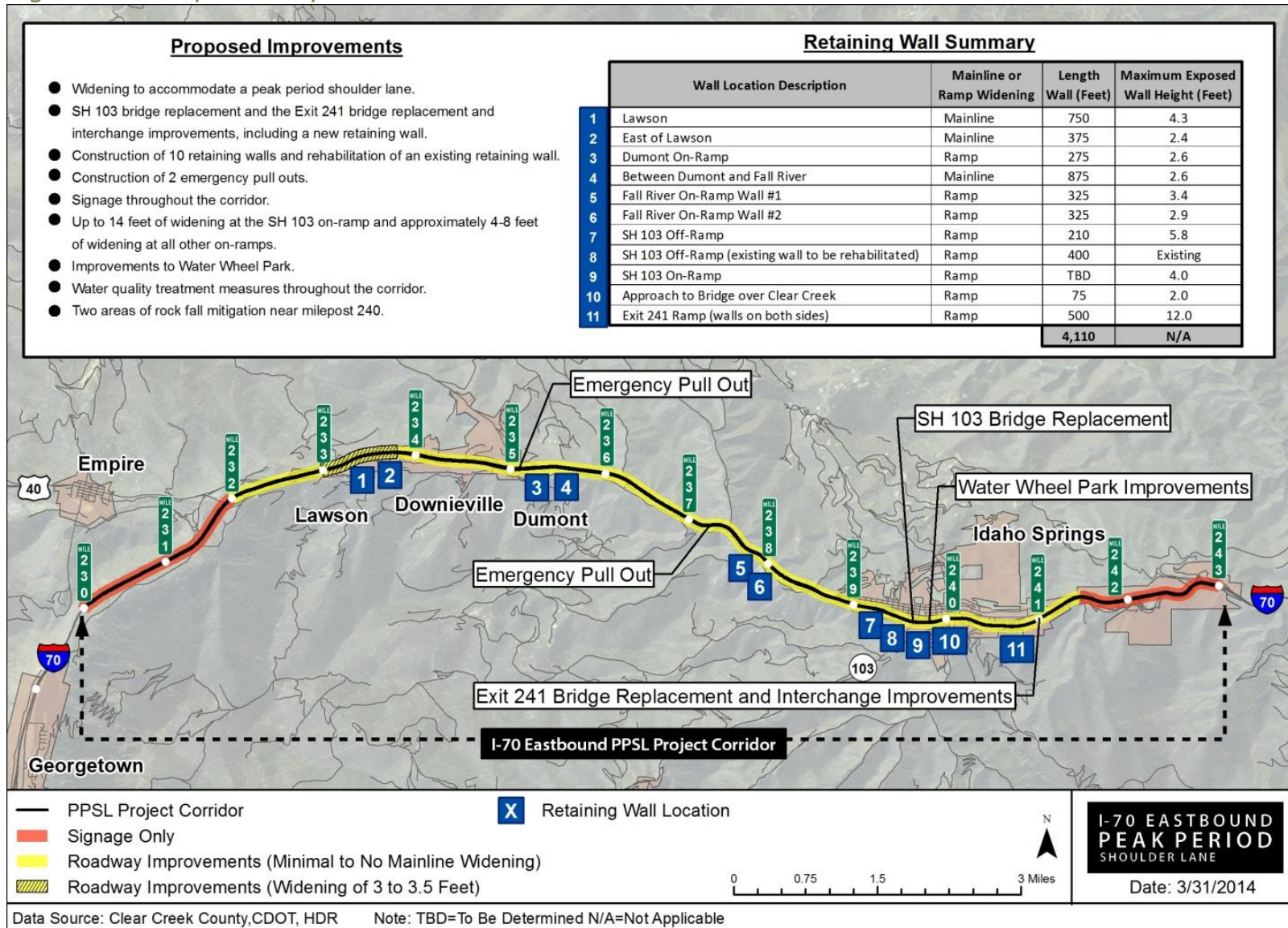
The Proposed Action would add a peak period shoulder lane between the US 40/I-70 interchange and east Idaho Springs. This managed lane would be used during peak periods, defined as Saturdays, Sundays, and holidays, improving travel times and operations. The project extends from MP 230 to MP 243, with improvements proposed as follows:

- MP 230 to MP 232: signage improvements only. Signage would notify motorists of the status of the managed lane, entrance and exit points, and cost.
- MP 232 to MP 242: roadway improvements, including up to 3.5 feet of widening in select areas to accommodate the managed lane, up to 14 feet of widening at the SH 103 on ramp and 4 feet to 8 feet of widening at all other on-ramps in the corridor; replacement of the existing SH 103 bridge; bridge replacement and interchange improvements at Exit 241; improvements to Water Wheel Park; signage; rock fall mitigation in two locations; and construction of 11 retaining walls.
- MP 242 to MP 243: signage improvements only.

The managed lane, which would be tolled, would operate up to, but not exceed, 20 percent of the annual days or 7.5 percent of the time, and connect to the three-lane section provided by the Twin Tunnels project, east of Idaho Springs, thereby capitalizing on that investment.

The improvements will be consistent with the *I-70 Mountain Corridor Programmatic Environmental Impact Statement (PEIS) Record of Decision (ROD)*, I-70 Mountain Corridor Context Sensitive Solutions process, and other commitments of the PEIS. The Proposed Action fits within the definition of “expanded use of existing transportation infrastructure in and adjacent to the corridor” as an element of the Preferred Alternative Minimum Program. See Figure 1 for an overview of the proposed improvements.

Figure 1. Proposed Improvements



Section 5. What Are the Current and Future Demographic Conditions in the Study Area?

5.1 Current Conditions

I-70 is the main travel corridor from Denver, a major metropolitan area, to the ski resorts to the west. The 2030 Clear Creek Master Plan has designated Clear Creek Valley (from Twin Tunnels to Empire) as a significant area. Issues and opportunities for this segment include separating local trips from regional trips and promoting smooth, safe, and efficient multi-modal transportation.

Idaho Springs is located approximately 40 miles from the Denver metropolitan area and many residents of Clear Creek County commute to Denver for work. Because of this, a large portion of Clear Creek County's economic base is generated outside of the County.

During the 10-year period from 2000 to 2010, the population in the state of Colorado rose 17 percent and the towns of Downieville, Lawson, Dumont (DLD) combined experienced a 63 percent rise in population. During this same period, Clear Creek County, Empire, and Idaho Springs experienced a decline in population (see Table 1).

Table 1. Population Data

	2000	2010	Percent Change
State of Colorado	4,301,261	5,029,196	+17%
Clear Creek County	9,322	9,088	-3%
Empire	355	282	-21%
Downieville-Lawson-Dumont	364	594	+63%
Idaho Springs	1,889	1,717	-9%

The racial composition of residents in Clear Creek County, Empire, DLD, and Idaho Springs is similar in that the majority of the population (greater than 90 percent) is white and less than 10 percent of the population is Hispanic. The population in State of Colorado is 88 percent white, with a Hispanic population of approximately 21 percent (see Table 2).

Table 2. Ethnicity and Race, 2010

	State of Colorado	Clear Creek County	Empire	Downieville-Lawson-Dumont	Idaho Springs
White	88.30%	95.30%	94.30%	93.80%	95.00%
Black	4.30%	0.60%	1.80%	0.80%	0.40%
American Indian/ Alaska Native	1.60%	0.80%	0.35%	1.50%	0.008%
Asian	2.90%	0.60%	0%	0%	0.50%
Native Hawaiian and Pacific Islander	0.20%	0%	0%	0.20%	0%
Hispanic or Latino	20.90%	4.70%	3.90%	9.10%	6.00%
White, not Hispanic	69.70%	92.10%	96%	90.90%	94.00%
Persons Reporting Two or More Races	2.70%	1.70%	1.10%	1.90%	1.90%

Source: U.S. Census Bureau, 2010.

The minority proportion for Clear Creek County and the block groups in the study area are presented in Table 3 and are shown on Figure 2. Of the five block groups located in the study area, four contain a minority proportion that is greater than Clear Creek County, which has a minority proportion of 8 percent).

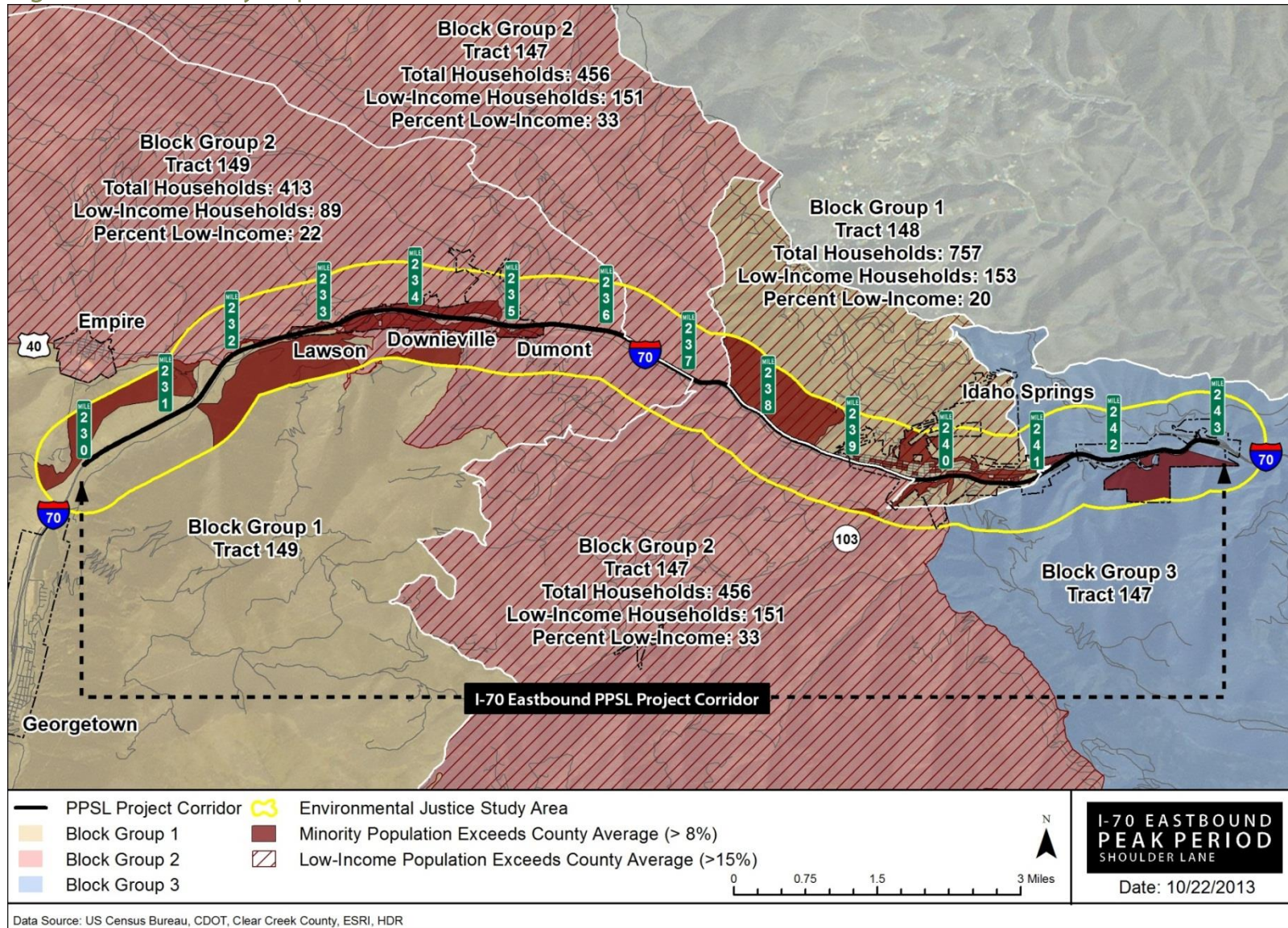
Table 3. Minority Populations

Geography	Total Population 2010	Not Hispanic, White Alone	Minority	Percent Minority	Exceeds Threshold?
Clear Creek County	9,088	8,371	717	7.89%	N/A
Census Tract 147, Block Group 2	410	388	22	5.37%	No
Census Tract 147, Block Group 3	196	174	22	11.22%	Yes
Census Tract 148, Block Group 1	1,604	1,472	132	8.23%	Yes
Census Tract 149, Block Group 1	98	89	9	9.18%	Yes
Census Tract 149, Block Group 2	690	618	72	10.43%	Yes

Source: U.S. Census Bureau, 2010; U.S. Department of Housing and Urban Development, Federal Year 2011 Income Limits.

*Census Tract 149, Block Group 1 has no populations in the study area.

Figure 2. Minority Populations



Minority data at the block level was also used in the analysis. Of the 167 blocks in the study area that contain residents, 53 of these blocks have a proportion of minority residents that exceeds Clear Creek County (see Table 4, Figure 3 and Figure 4).

Table 4. Blocks in the Study Area with a Higher Proportion of Minority Residents than Clear Creek County

Geography	Total Population	Not Hispanic, White Alone	Minority	Percent Minority
Block 1000, Tract 148, Block Group 1	13	12	1	8
Block 1023, Tract 148, Block Group 1	111	102	9	8
Block 1027, Tract 148, Block Group 1	9	5	4	44
Block 1037, Tract 148, Block Group 1	38	26	12	32
Block 1050, Tract 148, Block Group 1	8	7	1	13
Block 1053, Tract 148, Block Group 1	11	10	1	9
Block 1056, Tract 148, Block Group 1	63	54	9	14
Block 1061, Tract 148, Block Group 1	30	15	15	50
Block 1066, Tract 148, Block Group 1	10	8	2	20
Block 1068, Tract 148, Block Group 1	28	21	7	25
Block 1070, Tract 148, Block Group 1	106	98	8	8
Block 1071, Tract 148, Block Group 1	12	10	2	17
Block 1072, Tract 148, Block Group 1	19	16	3	16
Block 1073, Tract 148, Block Group 1	8	6	2	25
Block 1074, Tract 148, Block Group 1	3	2	1	33
Block 1079, Tract 148, Block Group 1	34	31	3	9
Block 1084, Tract 148, Block Group 1	10	9	1	10
Block 1085, Tract 148, Block Group 1	16	14	2	13
Block 1086, Tract 148, Block Group 1	20	16	4	20
Block 1100, Tract 148, Block Group 1	12	9	3	25
Block 1102, Tract 148, Block Group 1	8	7	1	13
Block 1107, Tract 148, Block Group 1	29	25	4	14
Block 1109, Tract 148, Block Group 1	21	18	3	14
Block 1112, Tract 148, Block Group 1	16	12	4	25
Block 1113, Tract 148, Block Group 1	8	7	1	13
Block 1121, Tract 148, Block Group 1	2	1	1	50
Block 1124, Tract 148, Block Group 1	20	18	2	10
Block 1132, Tract 148, Block Group 1	11	10	1	9
Block 1134, Tract 148, Block Group 1	13	10	3	23
Block 1142, Tract 148, Block Group 1	17	15	2	12
Block 1155, Tract 148, Block Group 1	7	6	1	14
Block 1165, Tract 148, Block Group 1	16	12	4	25
Block 2159, Tract 147, Block Group 2	76	64	12	16
Block 3035, Tract 147, Block Group 3	35	32	3	9
Block 3135, Tract 147, Block Group 3	8	5	3	38
Block 3203, Tract 147, Block Group 2	3	2	1	33
Block 3265, Tract 147, Block Group 3	98	83	15	15
Block 1002, Tract 149, Block Group 1	6	5	1	17
Block 1038, Tract 149, Block Group 1	24	18	6	25
Block 1049, Tract 149, Block Group 1	10	9	1	10
Block 2029, Tract 149, Block Group 2	50	43	7	14
Block 2099, Tract 149, Block Group 2	6	4	2	33
Block 2102, Tract 149, Block Group 2	5	4	1	20
Block 2110, Tract 149, Block Group 2	42	32	10	24
Block 2116, Tract 149, Block Group 2	113	101	12	11

Table 4. Blocks in the Study Area with a Higher Proportion of Minority Residents than Clear Creek County

Geography	Total Population	Not Hispanic, White Alone	Minority	Percent Minority
Block 2118, Tract 149, Block Group 2	10	7	3	30
Block 2121, Tract 149, Block Group 2	26	24	2	8
Block 2125, Tract 149, Block Group 2	98	89	9	9
Block 2131, Tract 149, Block Group 2	35	31	4	11
Block 2137, Tract 149, Block Group 2	13	12	1	8
Block 2161, Tract 149, Block Group 2	22	19	3	14
Block 2170, Tract 149, Block Group 2	73	59	14	19
Block 2172, Tract 149, Block Group 2	11	9	2	18

Source: US Census Bureau, CDOT, Clear Creek County, ESRI, HDR

Figure 3. Blocks in the Study Area with a Higher Proportion of Minority Residents than Clear Creek County

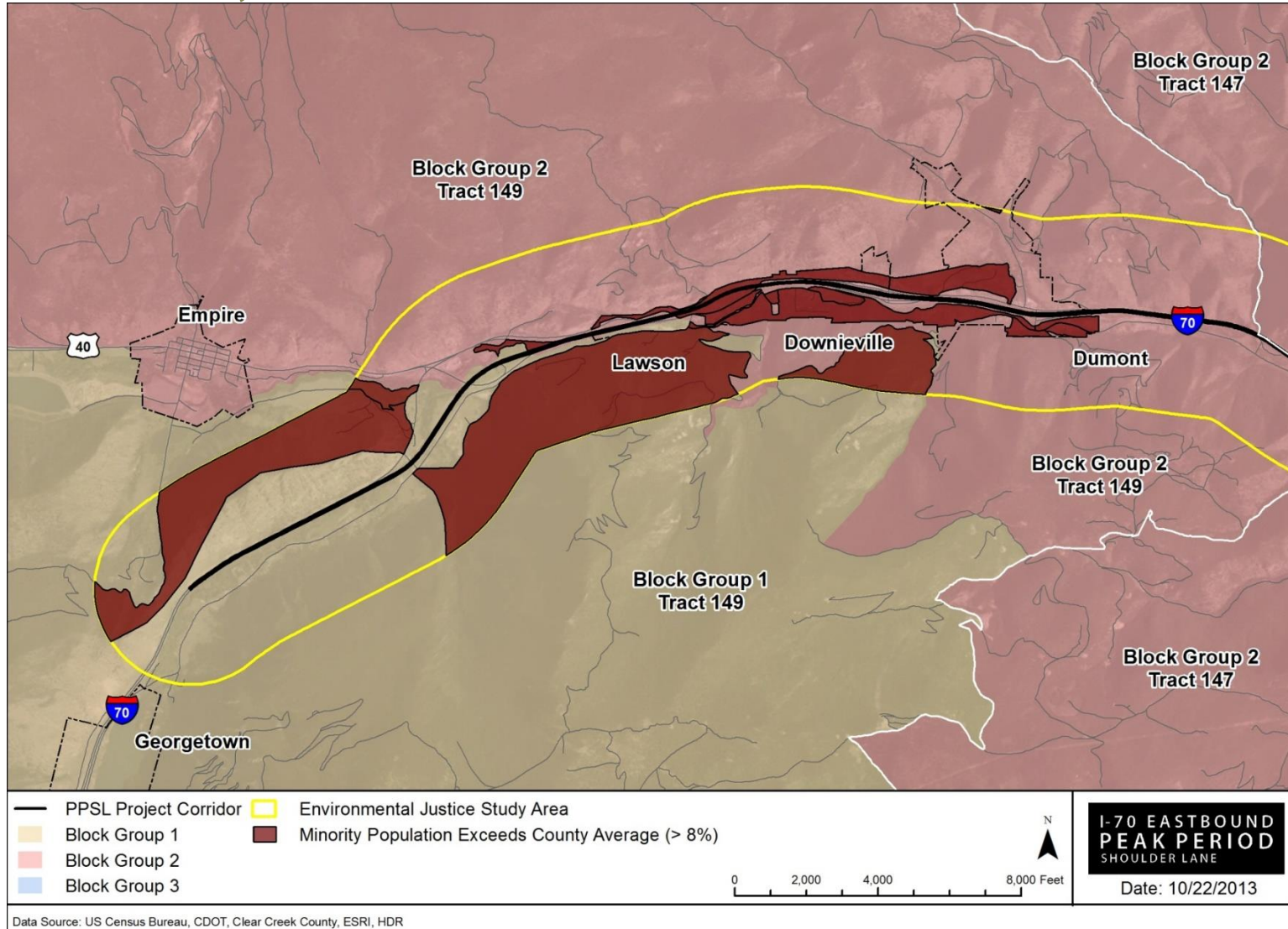
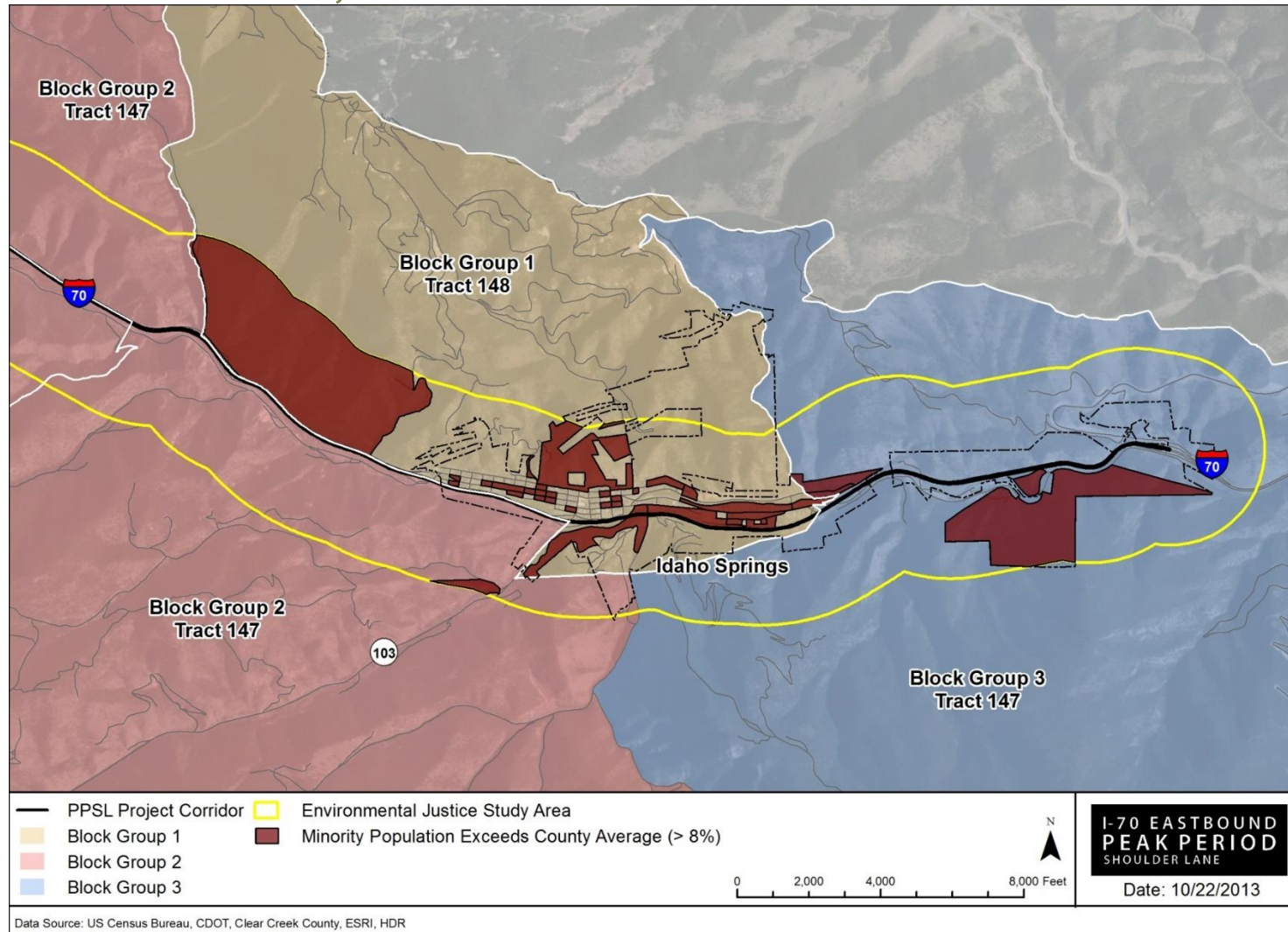


Figure 4. Blocks in the Study Area with a Higher Proportion of Minority Residents than Clear Creek County



The project team also accessed the Colorado Office of Economic Development and International Trade, Minority Business Office database on November 7, 2013, to identify any registered minority and women-owned businesses in the study area. The database identified one minority-owned business in the 80436 zip code, located approximately 400 feet south of the study area.

The proportion of low-income households for block groups within the study area is presented in Table 5, Figure 5 and Figure 6. Of the five block groups located in the study area, three contain a proportion of low-income households that is greater than Clear Creek County (which has a low-income household proportion of 15 percent).

Table 5. Low-Income Households

Geography	Total Households	Low-Income Households	Percent Low-Income	Exceeds Threshold?
Clear Creek County	4,031	610	15.13%	N/A
Census Tract 147, Block Group 2	456	151	33.11%	Yes
Census Tract 147, Block Group 3	1,202	89	7.40%	No
Census Tract 148, Block Group 1	757	153	20.21%	Yes
Census Tract 149, Block Group 1	650	75	11.54%	No
Census Tract 149, Block Group 2	413	89	21.55%	Yes

Source: U.S. Census Bureau, 2010; U.S. Department of Housing and Urban Development, *Federal Year 2011 Income Limits*.

*Census Tract 149, Block Group 1 has no populations in the study area.

Community Facilities

The project team solicited input from county and municipal staff in order to identify businesses or community facilities in the study area that provide services of unique importance to minority or low-income populations. Two community service organizations are located south of the project area on Chicago Creek Road (SH 103) approximately 1/3-mile south of I-70: the food bank Loaves and Fishes, and the Clear Creek Rock House for Kids. The Rock House for Kids, which provides mentoring and a safe gathering place for teens, is the only non-profit youth outreach facility in Clear Creek County. Loaves and Fishes is a food pantry that provides hot meals and groceries to area residents in need. Many youth walk to the Rock House from Idaho Springs (traveling from north of I-70 to south of I-70). The majority of motorists and pedestrians access these facilities via the bridge at SH 103.

The Clear Creek County Department of Health and Human Services, located at 16th Avenue and Colorado Boulevard in Idaho Springs, provides numerous health and mental health services for various residents, including low-income and at-risk populations.

Figure 5. Low-Income Households in the Study Area

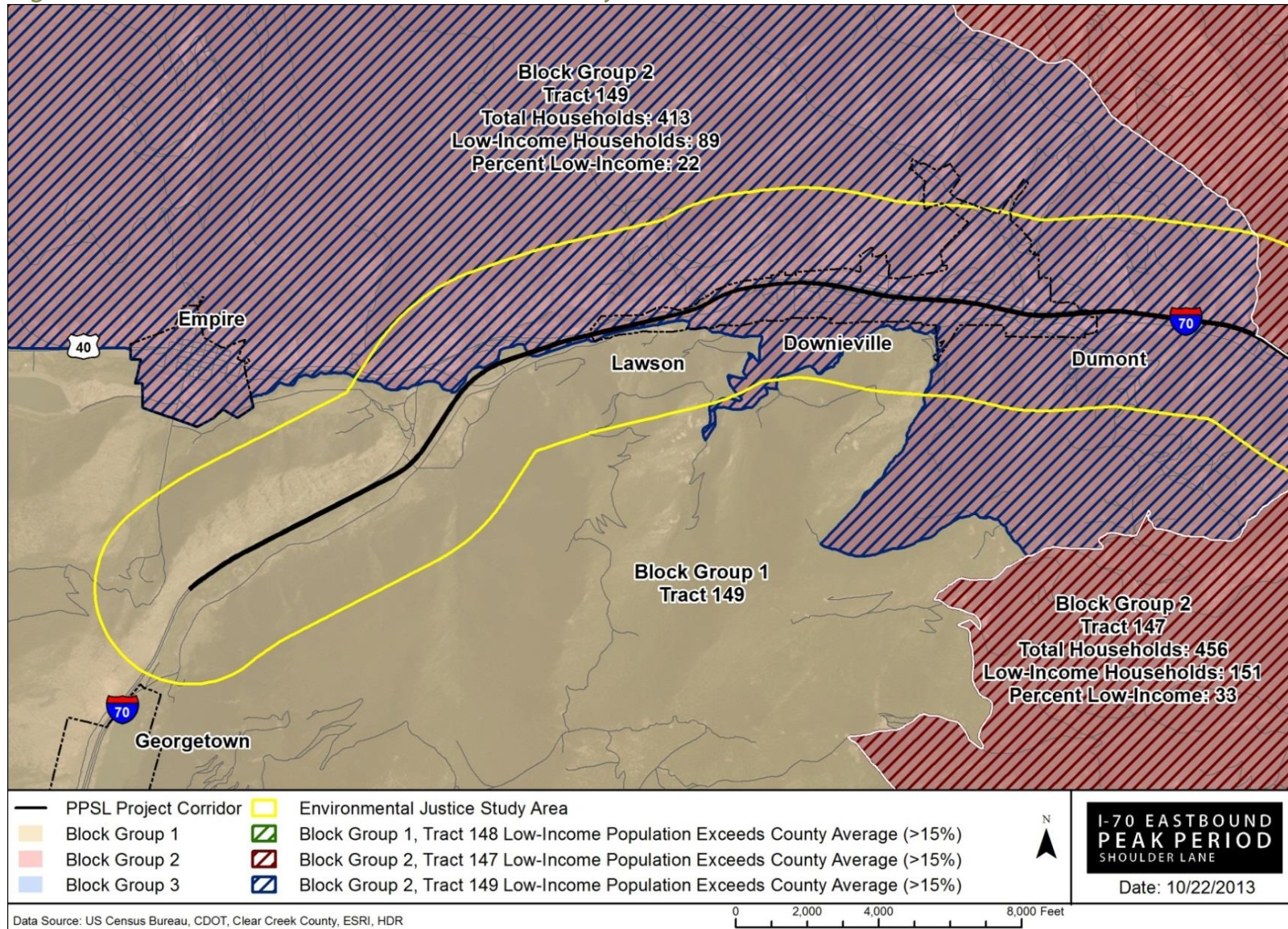
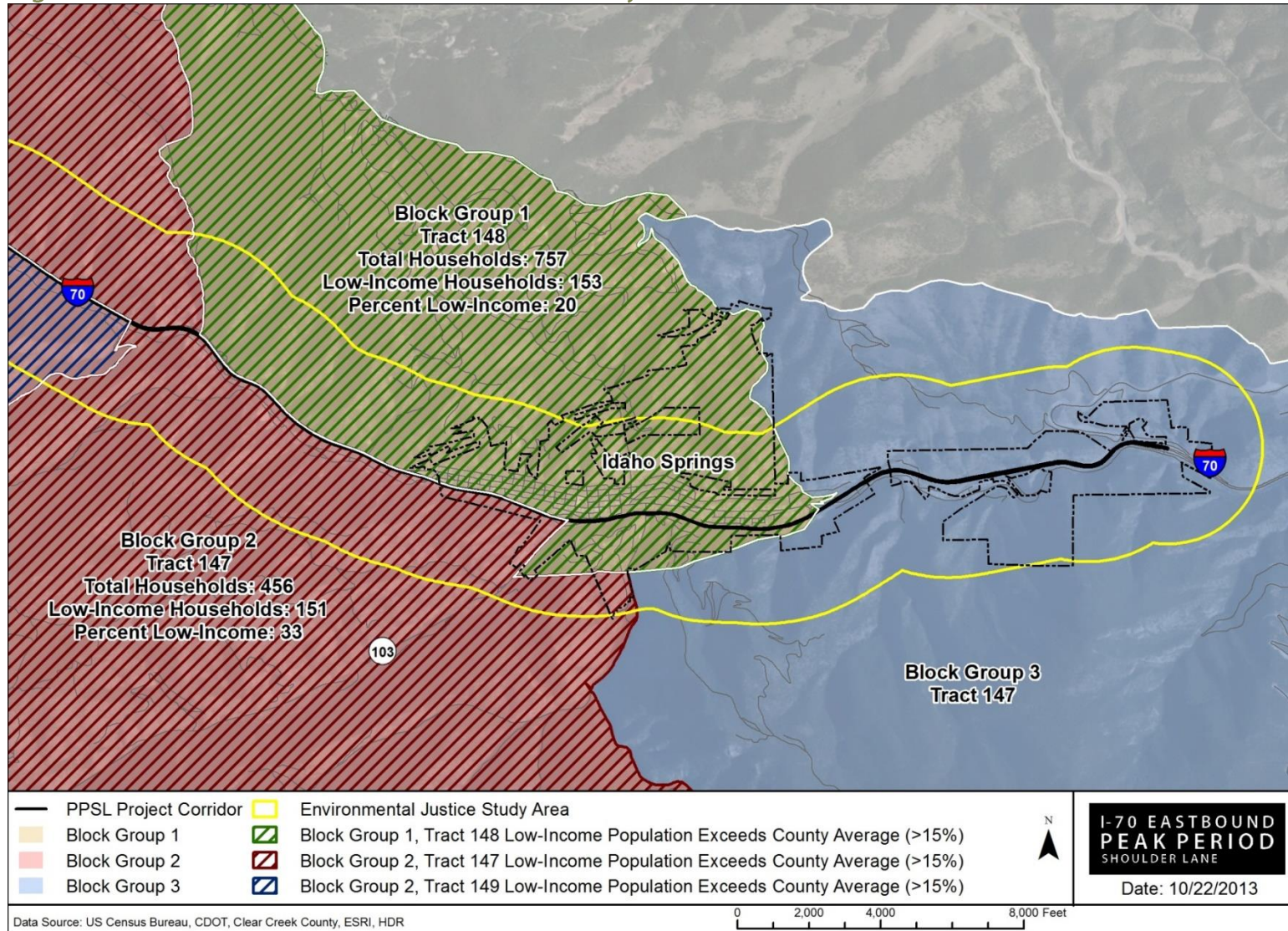


Figure 6. Low-Income Households in the Study Area



5.2 Future Conditions

The population trends are similar for both the State of Colorado and for Clear Creek County; both are expected to increase by more than 50 percent of 2010 levels by 2040 (see Table 6).

Table 6. Current and Future Population Estimates in Clear Creek County

Geography	2010	2020	2030	2040	Percent Increase 2010-2040
State of Colorado	5,049,717	5,915,922	6,888,181	7,749,477	54%
Clear Creek County	9,108	9,877	12,074	14,293	57%

Source: Colorado Department of Local Affairs (DOLA), Population Projections 2010 to 2040.

Section 6. Environmental Consequences

6.1 How Does the No Action Alternative Affect Minority and Low-Income Populations?

Existing traffic conditions in the study area would continue to worsen, with unacceptable traffic condition continuing to deteriorate during peak periods. Based upon currently available data, traffic within the study area is expected to increase an average of 38% by 2035. As traffic conditions worsen, visual impacts from increased traffic would likewise worsen, air quality would be adversely affected, and travel times (including emergency response times) would lengthen.

The effects of the No Action Alternative would not be borne by any particular segment of the population and both minority and low-income and non-minority and non-low-income populations would be affected to the same extent. Therefore, the No Action Alternative would not cause disproportionately high and adverse effects on any minority or low-income populations.

6.2 How Does the Proposed Action Affect Minority and Low-Income Populations?

In order to determine whether there would be disproportionately high and adverse effects, it is important to look at both the benefits and the impacts of the Proposed Action and to determine whether the impacts are predominantly borne by low-income or minority populations.

The Proposed Action would improve traffic operations and safety conditions when compared to the No Action Alternative. Traffic congestion along I-70 would be reduced, and the traffic volumes on the Frontage Road would be reduced, which would improve air quality and local accessibility in the area.

In at least two locations, the effects of the Proposed Action would be beneficial to residents and recreational users. In Lawson, the retaining wall is predicted to lower existing noise levels by 2 decibels to 4 decibels. At the Water Wheel Park, planned improvements would substantially improve the user experience for all users.

The two existing general purpose lanes would continue to be available to all drivers at all times and would provide some travel time savings over the No Action Alternative because drivers using the managed lane would no longer drive in the general purpose lanes. The general purpose lane volumes would be reduced by an average of 13 percent during the peak period as a result of the

managed lane. Benefits would be distributed across all segments of the population.

The Proposed Action would not result in any residential or commercial acquisitions. No low-income or minority residents would be displaced by the Proposed Action. The study area already contains a major roadway and there would not be any effects to community or neighborhood cohesion as a result of the Proposed Action. Impacts to the visual character within the study area include the addition of signage, new guardrails, and the addition of retaining walls that are between 2 and 3.8 feet in height. Noise, visual, and access impacts to businesses, residences, recreational and community facilities would occur during construction. These impacts are expected to be short-term and minor.

Although the Proposed Action with mitigation is not anticipated to result in adverse effects to the general population, including minority and low-income populations, tolling and congestion pricing programs are often perceived as inequitable to lower-income populations. Managed lanes may be more of a financial burden for lower-income commuters than for higher-income commuters. Not all motorists will have the financial resources to use the managed lane. The benefits of the managed lane include reduced congestion in the general purpose lanes; so motorists who cannot or choose not to use the managed lane, would receive the benefit of decreased congestion and increased safety. In addition, residents along the frontage road, which includes environmental justice populations, would benefit from the reduction in traffic volumes on local roads as I-70 would provide a more reliable travel time.

As with other managed lanes in Colorado, customer accounts are handled by the tolling authority. The tolling authority will work with customers to establish and maintain accounts. Accounts may be created by phone, online, or in person at a number of retail locations, such as grocery stores. Account information will be sent to the customer's legal or registered Denver of Motor Vehicle address. Payments may currently be made by mail, phone, online, or in person at a customer service center. CDOT will work with the local communities to identify whether alternative customer service and account policies and processes are needed to accommodate users.

None of these impacts would meet the threshold of high and adverse, nor would they be appreciably more severe or of a greater magnitude for low-income or minority populations when compared to the general population or any other segment of the population. In addition, the effects of the Proposed Action would not be borne by any particular segment of the population and both minority and low-income and non-minority and non-low-income populations would be affected to the same extent. Finally, there are measurable benefits to minority and low-income populations due to the decreased traffic congestion on I-70 and the Frontage Road, and due to reduced noise levels in Lawson, and improved conditions at the Water Wheel Park.

6.3 What Indirect Effects Are Anticipated?

No indirect effects to minority or low-income populations within the study area are anticipated.

6.4 What Effects Occur During Construction?

During construction, increased traffic volumes moving through the study area would result in an increase in dust and particulate matter; however, these increases would not exceed air quality standards. Temporary (construction related) impacts include increased emissions and fugitive dust, and increased noise. These would be short-term and minor. Air quality impacts would be distributed across all segments of the population.

There would be decreased access to businesses, residences, community facilities, and recreational activities in and around the study area during construction. Affected community facilities include the Loaves and Fishes food bank and the Rock House for Kids, discussed in Section 5.1, Community Facilities. Both of these facilities are accessed by not only motorists but a large number of pedestrians. Replacement of the bridge of I-70 at SH 103 would result in approximately four miles of out of direction travel for motorists traveling across I-70 at SH 103. Pedestrians and bicyclist movement would be redirected on a bike path east of this location and would require approximately one mile of out-of-direction travel. These temporary conditions would be in place for approximately 8 weeks to 10weeks.

Additional temporary (construction-related) effects include visible construction equipment and workers, material stockpiles, additional signs, high visibility fencing, and staging areas. These impacts would be minor, and short-term. Congestion-related impacts would not be high and adverse after mitigation and would be distributed across all segments of the population.

Section 7. What Mitigation Is Needed?

Since the Proposed Action would not cause disproportionately high and adverse effects on any minority or low-income populations, no mitigation measures specific to environmental justice are needed.

The environmental justice analysis for the Proposed Action has addressed the applicable commitments identified in the Tier 1 PEIS as follows:

- **Develop specific and more detailed mitigation strategies and measures for localized noise, air quality, or shading impacts, property acquisition, changes in access, or impacts to community cohesion:** Resource-specific mitigation measures have been developed to address impacts from the Proposed Action. Since the Proposed Action would not cause disproportionately high and adverse effects on any minority or low-income populations, additional mitigation measures are not needed.
- **Adhering to any new laws and regulations:** FHWA's Guidance on Environmental Justice and NEPA, released in December of 2011, has been reviewed and relevant portions have been incorporated into the analysis.
- **Coordinating with local governments, social service agencies, and the Colorado Minority Business Office:** The project team coordinated with county and municipal staff to collect information and concerns regarding minority and low-income populations within the study area. Potential impacts to these populations were discussed at Technical Team meetings, which included representatives from Clear Creek County and Idaho Springs, throughout the life of the project, as well within the Issues Task Force meetings. Topics discussed included noise and visual impacts, temporary construction impacts, and access needs. The project team also accessed the Colorado Office of Economic Development and International Trade, Minority Business Office database on November 7, 2013, to identify any registered minority and women-owned businesses in the study area.
- **Developing project-specific best management practices:** Best management practices will be implemented to manage risks to the natural and human environment. These practices are described in the supporting documentation and resource-specific technical memoranda prepared for the PPSL CatEx.

Section 8. References

2013. CDOT (Colorado Department of Transportation). National Environmental Policy Act Manual, Version 3.
- 2010-2040. DOLA. (Colorado Department of Local Affairs). Population Projections 2010 to 2040. Colorado Office of Economic Development and International Trade, Minority Business Office.
2011. FHWA (Federal Highway Administration). FHWA Guidance on Environmental Justice and NEPA. December 16, 2011.
2010. U.S. Census Bureau, 2010 Summary File.
2011. U.S. Department of Housing and Urban Development, *Federal Year 2011 Income Limits*.