

Appendix I – Environmental Justice Analysis

Definition and Guiding Principles

The U.S. EPA Office of Environmental Justice (EJ) defines EJ as “The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies.” “Fair treatment” means that “No group of people, including racial, ethnic, or socio-economic groups should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local and tribal programs and policies.”

The guiding EJ principles followed by the US Department of Transportation are briefly summarized as follows:

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

“Minority” and “Low Income” Populations

A “minority population” means any readily identifiable group or groups of minority persons who live in geographic proximity, and if circumstances warrant, geographically dispersed or transient persons such as migrant workers or Native Americans who will be similarly affected by a proposed program, policy or activity.

“Minority” includes persons who are:

- American Indian and Alaska Native
- Asian
- Black or African American
- Hispanic or Latino
- Native Hawaiian and other Pacific Islander

“Low-income” means a person whose median household income is at or below the Department of Health and Human Services (HHS) poverty guidelines. A locally developed threshold is permitted and encouraged, provided that the threshold is at least as inclusive as the HHS poverty guidelines.

A “low-income population” means any readily identifiable group of low-income persons who live in geographic proximity, and, if circumstances warrant, geographically dispersed/transient persons (such as migrant workers or Native Americans) who will be similarly affected by a proposed program, policy or activity. “Similarly affected” refers to “common conditions of environmental exposure or effect” (Center for Environmental Quality).

Adverse Effects & Benefits Definitions

Some EJ analyses examine only the adverse effects of transportation plans and projects. In fact, Executive Order 12898 also requires demonstration of equal benefits from federal transportation investments. For a metropolitan transportation system, analyses should examine how the Metropolitan Transportation Plan (MTP), the Transportation Improvement Program (TIP), and others promote the safety, mobility, economic productivity, human environment, natural environment, and other goals identified in State and local plans for all populations served by the transportation agency.

A complete EJ analysis examines both the benefits to and adverse effects (or “burdens”) of transportation plans or projects on EJ populations.

“Adverse effects” 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
- The denial of, reduction in, or significant delay in the receipt of benefits of DOT programs, policies or activities.

As an example, a transit project might have both benefits and adverse effects for an EJ community: while decreasing travel times and expanding employment opportunities, the same project could also increase air pollution and noise. A road project might improve travel times to certain destinations but also create a barrier separating an EJ population from the broader community. A good analysis accounts for both types of effects at examines the balance of a project’s impact on an EJ community.

Disproportionate Adverse Effects

It is not the purpose of an EJ analysis to simply to determine whether a plan or project will have an adverse impact on an EJ community. The purpose is to explore whether the adverse effect is “disproportionately” high. An adverse effect becomes “disproportionate” when that effect 1) is predominantly borne by an EJ population, or 2) will be suffered by the EJ population and is appreciably more severe or greater in magnitude than the adverse effect that will be suffered by the non-EJ population.

Some good standard questions to consider when determining if disproportionately high and adverse human health or environmental impacts exist include:

- Whether the adverse effects on EJ populations exceed those borne by non-EJ populations?
- Whether cumulative or indirect effects would adversely affect an EJ population?
- Whether mitigation and enhancement measures will be taken for EJ and non-EJ populations?
- Whether there are off-setting benefits to EJ populations as compared to non-EJ populations?

Determinations of disproportionately high adverse effects should take into consideration of “mitigation and enhancements measures and all offsetting benefits to the affected minority and low-income populations”. Again, whether adverse effects should be judged disproportionately high is dependent on the net results after consideration of the totality of the circumstances.

Minorities and Low Income in the Pikes Peak Region Group	White Non-Hispanic	Hispanic	African American	Asian	American Indian & Native Alaskan	Native Hawaiian, Pacific Islander	Poverty
Population	478,621	108,297	38,408	17,775	2,494	2,021	73,977

All of the projects for the TIP come from the PPACG 2045 Long Range Transportation Plan (LRTP) which contains a more extensive Environmental Justice (EJ) analysis, so that analysis can be relied on in large part for the TIP. However, some additional analysis is necessary to ensure that the subset of projects selected for the TIP are not skewed in a way that will have disproportionate negative impacts or deny the benefits of federally funded improvements to a minority population.

Analysis by Project Type

The TIP projects are concentrated in a few areas: reconstruction, replacement, or maintenance of road and bridge facilities; capacity or road widening projects; transit and high-capacity transit projects; bicycle and pedestrian facilities and crossings; other safety or accessibility improvements; and drainage and water quality improvements. Roadway reconstruction and capacity projects receive the largest portion of locally-controlled funding, with additional large amounts going to preventive maintenance surface treatments and safety improvements from other funding sources.

Roadway widening and new road construction projects

Roadway widening is a type of project that has the potential help or harm minority communities by either providing reduced travel times or bringing increased noise, pollution, and safety issues that come with increased traffic and more dangerous or stressful crossings. The widening projects in the TIP are dispersed, not extensive, and are aimed at addressing traffic “bottlenecks”. They are not likely to provide much benefit or disbenefit to minority or low-income populations. Although there is a significant portion of Hispanic and low income population in the vicinity of the Bradley Road widening project, local communities appear as likely to benefit from congestion relief as they are to be negatively affected by increased noise, pollution, and etc.

Transit projects

Low-income and minority populations should be well served by transit improvements such as waiting pads, safer crossings, better sidewalks, and improved handicap accessibility along select transit routes. These improvements will be located in areas with a high percentage of low income, Hispanic, and black residents who live in close proximity to the improved transit routes. They should benefit from increased safety and accessibility and lower stress (such as exposure to rain, snow, icy conditions, and speeding vehicles).

Roadway safety and other roadway enhancement projects

A significant amount of funding under CDOT control is dedicated to safety enhancements on major facilities in eastern Colorado Springs: State Highway 21, CO 94, and I-25. Adopting a generalized definition of “safety improvements”, and given that portions of the projects are adjacent to low-income and multiple minority population centers, there should be some safety benefit for these populations. However, the project descriptions lack sufficient detail to make an accurate determination. For example, it is unknown which travel mode(s) will receive safety improvements, and it is unknown whether “mobility” improvements will increase or decrease access to the facilities for low income or minority populations.

Bicycle and pedestrian projects

The bicycle and pedestrian projects in the TIP consist of a mix of crossing improvements and trail enhancements and extensions. These projects are geographically dispersed throughout the region and appear to neither avoid nor target areas of low income or minority populations. An identifiable area of more concentrated Hispanic population will receive little benefit, but areas of low income, black and other more dispersed minority populations are adjacent to several of the improvements and may enjoy improved safety and access to outdoor exercise and recreation opportunities as well as biking and walking as modes of transportation.

Maintenance, replacement, and reconstruction projects

There are several projects that primarily include maintenance, replacement, or reconstruction of facilities. Similar to bicycle and pedestrian projects, these projects are geographically dispersed throughout the region and appear to neither avoid nor target areas of low income or minority

populations. Low income and several minority populations are adjacent to these projects and may benefit from functional improvements and reconstruction of facilities to higher standards.

Net Effect on Populations

Examination of the projects on each of low income and minority populations individually show no net disproportionate impact and no clear pattern of denying benefits of transportation planning and programming to any of the said populations. However, future Environmental Justice analyses would benefit from clearer, more detailed project descriptions and reduced reliance on generalized terms such as “improvement”, “enhancement”, and “mobility”, that convey no information without supporting descriptions. PPACG staff is working with our partners to enhance the next round of TIP project applications to enable a more robust analysis. Additionally, future efforts would benefit from being able to list projects under more than one type or category as, for example, an “operational improvement” project may also be a “safety” project. This would aid visualization of investment patterns.