Status and Impacts of DRCOG Transportation Planning and Programming with Environmental Justice

2040 Metro Vision Regional Transportation Plan and 2018-2021 Transportation Improvement Program

June 2018

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Preparation of this report has been financed in part through grants from the U.S. Department of Transportation, Federal Transit Administration, and Federal Highway Administration.
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Chapter I – Background and Overview

Introduction
This report describes how the Denver Regional Council of Governments (DRCOG) addresses the principles of environmental justice (EJ) in its long and short range planning activities, with an emphasis on the 2040 Metro Vision Regional Transportation Plan (2040 MVRTP) and the 2018-2021 Transportation Improvement Program (2018-2021 TIP). It includes definitions of the geographic concentrations of minority and low-income populations and their demographic and travel characteristics.

About DRCOG
The Denver Regional Council of Governments is a planning organization where local governments collaborate to establish guidelines, set policy, and allocate funding in the areas of:

- Transportation and Personal Mobility
- Growth and Development
- Aging and Disability Resources

DRCOG has served as the Metropolitan Planning Organization (MPO) for the Denver region since 1977, acting as a forum for a collaborative transportation planning and decision-making process. DRCOG has been involved in the region's transportation planning since 1955.

Today, through DRCOG, more than 50 local governments are represented in a continuing, cooperative and comprehensive transportation planning process for all modes of transportation in the region along with the Colorado Department of Transportation (CDOT), the Regional Transportation District (RTD), the Regional Air Quality Council (RAQC), and many other stakeholders.

Environmental Justice Background
Executive Order 12898, Environmental Actions to Address Environmental Justice in Minority and Low-Income Populations, was signed by President Clinton on February 11, 1994. The Executive Order (EO) and accompanying memorandum reinforced the requirements of Title VI of the Civil Rights Act of 1964 (Title VI) that focuses federal attention on the environmental and human health condition in minority and low-income communities’ access to public information and an opportunity to participate in matters relating to the environment. EJ is a federal requirement of all federal, state, and local agencies and has legal basis in Title VI, the EO, and the National Environmental Policy Act (NEPA). These regulations require that all agencies receiving federal assistance demonstrate compliance with related laws so that all populations the agency serves enjoy the same benefits of federal investments, bear the same burdens resulting from the federal projects, and have equal participation in the transportation planning process.

The U.S. Department of Transportation Order on Environmental Justice, issued to comply with the EO, defines minority as a person who is:

- Black (a person having origins in any of the black racial groups of Africa);
- Hispanic (a person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race);
• Asian American (a person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands); or
• American Indian and Alaskan Native (a person having origins in any of the original people of North America and who maintains cultural identification through tribal affiliation or community recognition).

A low-income person means a person whose median household income is at or below the Department of Health and Human Services (HHS) poverty guidelines. For 2014 (the latest data available when the 2040 MVRTP and 2018-2021 TIP were prepared), the poverty threshold guideline for a family of four was $23,850.

**Title VI of the Civil Rights Act**

Two key federal actions provide the basis for the civil protections addressed in this EJ report:

1. Title VI (nondiscrimination)
2. Executive Order 12898 (environmental justice)

Title VI establishes the prohibition of discrimination “on the basis of race, color or national origin” in any “program or activity receiving federal financial assistance.” Subsequent legislation has extended the protection to include gender, disability, age, and income, and has broadened the application of the protection to all activities of federal aid recipients, sub-recipients, and contractors regardless of whether a particular activity is receiving federal funding.

Executive Order 12898 (EO) focused attention on Title VI by providing that “each federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations.”

The three fundamental principles of environmental justice set forth by Title VI and the EO are:

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

Of focus is public participation—to ensure that protected populations have meaningful and equitable opportunity to participate in the regional transportation planning process. As the MPO for the Denver Region, DRCOG is responsible for leading the regional transportation planning process, and is required to comply with this law. Several notations expand on the authority, requirements, and standards of the 1964 Act. These notations are included in the Appendix.

**DRCOG’s Commitment to Environmental Justice**

DRCOG adheres to Title VI of the Civil Rights Act of 1964, a nondiscrimination law which provides that no person shall, on the basis 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. DRCOG’s adherence to Title VI extends to the Executive Orders that reinforce it, including Environmental Justice. DRCOG has a Title VI Plan. DRCOG also has a webpage devoted to Title VI (https://drcog.org/civil-rights%E2%80%94title-vi) with information and links about public accommodations and accessibility, complaint procedures, environmental justice, and Limited English Proficiency (LEP), including DRCOG’s LEP Plan.
Chapter II – Analysis of Environmental Justice Communities

Geographic Concentrations of EJ Communities

The first step in the environmental justice evaluation process is to identify geographic concentrations of minority and low-income populations. These geographic EJ areas are used as the basis for calculating certain measures presented in this document. There is no prescribed procedure for MPOs to define EJ geographies or what thresholds to use. DRCOG uses Transportation Analysis Zones (TAZs) as the geographic basis for defining EJ areas. Historically, DRCOG has defined EJ areas as TAZs above the regional average for either minority persons or persons living in poverty status. For the entire DRCOG region, the percent of minority population is 33 percent, and the percent of households in federally defined poverty status is 11 percent. It should be noted there are also EJ households located in areas not designated as EJ, just as there are non-EJ households located in EJ TAZs.

Geographic EJ Zone Thresholds

Of the 2,815 TAZs in the DRCOG region, 958 are classified as EJ zones by containing greater than the regional average of minority or low-income populations. These EJ TAZs represent about 46 percent of the total regional household population. Sixty-eight percent of the region’s minority population lives within these environmental justice area TAZs. Fifty-four percent of the regional low-income households are located within these environmental justice area TAZs.

Minority Population

Figure 1 shows the concentrations of minority populations by TAZs based on 2010 census data. TAZs with fewer than 20 households are not shown since they distort the visual representation of the results. The map shows the TAZs where the percent of minority population is at or above the regional minority percentage of 33 percent.
Figure 1: Minority Population Areas
Low-Income Households

Low income geographies were defined based on the percentage of households in each TAZ that have incomes under the Department of Health and Human Services’ poverty guidelines, by household size using 2014 data (Table 1).

<table>
<thead>
<tr>
<th>Household Size</th>
<th>Poverty Guideline</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$ 11,670</td>
</tr>
<tr>
<td>2</td>
<td>$ 15,730</td>
</tr>
<tr>
<td>3</td>
<td>$ 19,790</td>
</tr>
<tr>
<td>4</td>
<td>$ 23,850</td>
</tr>
<tr>
<td>5</td>
<td>$ 27,910</td>
</tr>
<tr>
<td>6</td>
<td>$ 31,970</td>
</tr>
<tr>
<td>7</td>
<td>$ 36,030</td>
</tr>
<tr>
<td>8</td>
<td>$ 40,090</td>
</tr>
</tbody>
</table>

Figure 2 displays the 2006-2010 geographic concentrations of low-income households in the DRCOG region based on the most recent (2010) Census Transportation Planning Package (CTPP) data. The map shows the TAZs where, based on the 2010 Census data, the percentage of households, by number of people, with a household income at or below the Health and Human Services poverty guidelines, is at or above the regional average of 11 percent.
Figure 2: Low Income Household Areas
Demographic Characteristics of EJ Populations

Minority Population

The Denver region’s largest minority group is the Hispanic population. About 22 percent (approximately 628,000) of the Denver region’s population identified themselves as Hispanic in the 2010 Census, up from 18 percent (approximately 432,000) in 2000. According to the state demographer, the Hispanic population is expected to continue growing significantly by 2040. Figures 3 and 4 show the current and anticipated future shares of minority populations in the DRCOG region.

Figure 3: 2010 DRCOG Minority Populations

Figure 4: 2040 Forecasted DRCOG Minority Populations

Source for Figures 3 and 4: Colorado Demography Office
Low-Income Population

The current population estimate of individuals living in households below the poverty level (as defined by the guidelines in Table 1) is 363,000, or about 13 percent of the total regional population. If the same proportion exists in 2040, there would be approximately 546,000 persons living in low-income households in the Denver region (Figure 5).

![Figure 5: Population in Poverty in the DRCOG Region](source: US Census; proportional increase to 2040)

Travel Characteristics of EJ Persons and the General Population

Minority Population

Table 2 shows travel mode to work data for the DRCOG region from the 2011-2015 American Community Survey Five-Year Estimates, the most recent data available in the CTPP. Minority workers were more likely to carpool, take transit, and walk to work than the general population. However, like non-minorities, over 70 percent of minorities drive alone to work.

<table>
<thead>
<tr>
<th>Workers</th>
<th>Drove Alone</th>
<th>Carpoled</th>
<th>Transit</th>
<th>Walked</th>
<th>Taxi, Motorcycle, Bicycle or Other Means</th>
<th>Worked at Home</th>
<th>Regional Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Total</td>
<td>%</td>
<td>Total</td>
<td>%</td>
<td>Total</td>
<td>%</td>
</tr>
<tr>
<td>White, Non-Hispanic or Latino</td>
<td>844,565</td>
<td>74,169</td>
<td>6.7%</td>
<td>39,342</td>
<td>3.6%</td>
<td>26,577</td>
<td>2.4%</td>
</tr>
<tr>
<td>Minority</td>
<td>382,580</td>
<td>72,644</td>
<td>13.7%</td>
<td>33,714</td>
<td>6.3%</td>
<td>8,886</td>
<td>1.7%</td>
</tr>
<tr>
<td>Total</td>
<td>1,227,145</td>
<td>146,813</td>
<td>9.0%</td>
<td>73,056</td>
<td>4.5%</td>
<td>36,463</td>
<td>2.5%</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates (B08105 tables)
Minority Ridership on RTD

RTD conducted a transit ridership demographic comparison for its Regional Transportation District 2013-2015 Title VI Program Update (March 14, 2013). Figure 6, adapted from RTD’s report, compares the minority/non-white population with all others for RTD’s bus service categories. RTD condensed the minority definitions used for this specific analysis from the definitions the Census uses. For the entire system, minority ridership is slightly higher than their proportion of the region’s total population.

Figure 6: 2015 RTD Minority/Caucasian Ridership


Low-Income Population

Table 3 shows 2011-2015 American Community Survey estimates of travel mode to work in the DRCOG region by worker earning categories. While workers with higher incomes are more likely to drive alone to work than households with lower incomes, a significant majority of all workers, regardless of income, drive alone to work. Also, workers with the lowest incomes use transit at a rate almost double that of workers with the highest incomes.

Table 3: Means of Transportation to Work by Worker Earnings

<table>
<thead>
<tr>
<th>Worker Earnings</th>
<th>Drove Alone</th>
<th>Carpoled</th>
<th>Transit</th>
<th>Walked</th>
<th>Taxi, Motorcycle, Bicycle, or Other Means</th>
<th>Worked at Home</th>
<th>Regional Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>$34,999 and under</td>
<td>488,170</td>
<td>75,876</td>
<td>39,560</td>
<td>24,265</td>
<td>16,992</td>
<td>44,073</td>
<td>688,938</td>
</tr>
<tr>
<td>$35,000 to $49,999</td>
<td>203,770</td>
<td>21,161</td>
<td>9,383</td>
<td>4,197</td>
<td>4,486</td>
<td>12,319</td>
<td>265,316</td>
</tr>
<tr>
<td>$50,000 to $74,999</td>
<td>221,334</td>
<td>20,175</td>
<td>9,471</td>
<td>4,617</td>
<td>5,320</td>
<td>17,392</td>
<td>278,309</td>
</tr>
<tr>
<td>$75,000 or more</td>
<td>259,338</td>
<td>17,827</td>
<td>10,145</td>
<td>4,873</td>
<td>8,456</td>
<td>36,435</td>
<td>337,074</td>
</tr>
<tr>
<td>Total</td>
<td>1,172,612</td>
<td>135,039</td>
<td>68,559</td>
<td>37,952</td>
<td>35,254</td>
<td>110,219</td>
<td>1,559,635</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates (B08119 table)
Households without a motor vehicle (automobile) are strongly correlated to low-income households. About 70,000 households in the DRCOG region do not have an automobile available. Some people with sufficient income, of course, also choose to live a car-free lifestyle. People without access to an automobile often travel by public transit, walk, bicycle, or as a car passenger. While some households do not have an automobile by choice, for many, income or health is often the primary determinant. In addition, many more families may not be able to afford a second car to better meet their transportation needs.

**Figure 7** displays the 2010 geographic concentrations of zero-auto households by TAZ from the Census Transportation Planning Package (CTPP). To focus on low-income households without an automobile, only TAZs with an annual household income of $20,000 and/or where at least 20 percent of households do not have an automobile were included. In 2010, the median annual income for households in the Denver region without an automobile was $16,461. The median income was $37,054 for owners of a single vehicle, $77,087 for two vehicles, $94,263 for three vehicles and $103,719 for more than three-vehicle households.
Figure 7: Concentrations of Low-Income and/or Households without a Motor Vehicle
Transit Accessibility

One of the most important EJ mobility measures is accessibility to employment by transit. Table 4 compares the percent of population in 2015 and 2040 fiscally constrained RTP transportation networks and the percentage of population that meet DRCOG’s “good transit-job accessibility” criteria (can reach 100,000 jobs within a 45-minute trip) for each network. The 45-minute timeframe includes all time, door to door, associated with the trip. Accordingly, it includes walk time to and from a transit stop, though it does not include drive-access trips (such as driving to a park-and-ride). It shows the share of population within EJ zones meeting the accessibility criteria in 2015 (63 percent) will increase to 73 percent in 2040 with the fiscally constrained multimodal transportation network. Transit accessibility to jobs will improve significantly as the FasTracks system is built out, other multimodal improvements are made, and a greater number of people and jobs locate near transit over time.

Table 4 also indicates that EJ areas will significantly benefit from the region’s transit investments, as their accessibility share has a larger increase and a higher total by 2040 as compared to the total population.

Table 4: Percent of Population with Good Transit Accessibility

<table>
<thead>
<tr>
<th>Estimate Year</th>
<th>Share of Total Population with Good Transit–Job Accessibility</th>
<th>Share of Population in Low-Income or Minority Areas with Good Transit-Job Accessibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>46%</td>
<td>53%</td>
</tr>
<tr>
<td>2040 Fiscally Constrained</td>
<td>63%</td>
<td>73%</td>
</tr>
</tbody>
</table>

(1) Source: DRCOG Travel Models RTP 2040 2015 Base Year, MVRTP 2040 Year 2040
(2) Good accessibility = 100,000+ jobs within a 45-minute transit trip.

Figures 8 and 9 depict transit accessibility using the same criteria described above. The maps show this analysis for 2015 and 2040. Figure 8 compares how much of the region’s population has access to 100,000 jobs in 45 minutes via transit in 2015 versus 2040. In 2015, 46 percent of the region’s household population has access to 100,000 jobs in 45 minutes via transit. In 2040, 53 percent of the total population will have good transit-jobs accessibility in 2040. In comparison, 63 percent of EJ areas have the same accessibility in 2015, and 73 percent will in 2040 (both 2015 and 2040 are depicted in Figure 9).
Figure 8: Transit Accessibility – 2015-2040

Transit Accessibility 2015-2040
(45-minute Transit Commute to > 100,000 Jobs)

2015
Residential locations (TAzs) that have
>100,000 jobs within a 45-minute
Transit Commute (does not include
Drive Access Trips)
2015: 1,438,127 people
46% Population

2040
Residential locations (TAzs) that have
>100,000 jobs within a 45-minute
Transit Commute (does not include
Drive Access Trips)
2040: 2,290,492 people
53% Population

* Based on 2006-2010 Census CFTP
Figure 9: Transit Accessibility- Environmental Justice Areas (2015 and 2040)

2015 & 2040 Transit Accessibility and EJ Areas
(45-minute Transit Commute to > 100,000 Jobs)

EJ Areas with a 45-minute Transit Commute to>100,000 Jobs
(does not include drive access trips)
2015: 956, 606 people
63% Population

EJ Areas with a 45-minute Transit Commute to>100,000 Jobs
(does not include drive access trips)
73% Population

* Based on 2000-2010 Census CTPP
Access to Services

The Denver Regional Equity Atlas

The Denver Regional Equity Atlas provides users with the ability to create maps that depict the region’s major origins and destinations in relation to the current and future transit network, and generate reports on demographic, economic and other data of the region or communities. The Atlas emphasizes the need to ensure access to opportunity for everyone in the region, especially improving connections for the region’s most economically disadvantaged residents. The Equity Atlas is available at [http://denverregionalequityatlas.org/](http://denverregionalequityatlas.org/). Funding for the interactive version of the Denver Regional Equity Atlas was provided from DRCOG’s Sustainable Communities Initiative (SCI). The original version was funded by Mile High Connects philanthropic partners. This project was a collaborative effort by DRCOG, the Colorado Data Engine, and Mile High Connects.

Transportation Information Dissemination

One key barrier that limits access to transportation for EJ and disadvantaged populations, including older adults, individuals with disabilities, and people with low-incomes, is lack of information about available transportation options (or how to access such information). The Denver Regional Mobility and Access Council (DRMAC) provides information and referral services about transportation options through a published guide, an online resource, and a call center. DRMAC regularly publishes the *Getting There Guide*, a resource guide that helps Denver area residents identify a variety of transportation options. DRMAC also maintains an online database called *Transit Options* that helps individuals find the transportation options that are right for them. In addition to the two guides, DRMAC also operates an information and referral call center that assists individuals to find the best transportation options for them.

DRCOG’s Area Agency on Aging maintains the Aging and Disability Resources Center for Colorado (ADRC). The ADRC is for older adults (60+) and adults with disabilities (18+) to get streamlined access to long-term services and support to remain independent in the community, including information about transportation options.
Chapter III- Environmental Justice in DRCOG’s Major Planning Activities

Introduction

Environmental Justice is an important factor in the development of DRCOG’s Metro Vision Regional Transportation Plan (MV RTP) and Transportation Improvement Program (TIP). The 2040 MV RTP contains an EJ analysis at the regional level focusing on benefits of the 2040 MV RTP’s fiscally constrained transportation plan on EJ populations, such as improved transit accessibility to jobs and ensuring no disproportionate impacts to EJ populations. At the MV RTP level, the EJ analysis is plan-based, not project-based. For the TIP, DRCOG incorporates EJ into the criteria used to determine which projects are funded.

An important consideration for the MV RTP is its potential benefits to, and impacts on, the minority and low-income populations within the Denver region, as well as in comparison to benefits and impacts to the region as a whole. Guidance for evaluating these benefits and impacts is derived from the Executive Order and other federal guidance discussed in Chapter 1.

Public Involvement and Decision-Making Process

The framework for involving the public in the MV RTP and 2040 FCRTP process is defined by Public Involvement in Regional Transportation Planning, adopted by the DRCOG Board in 2010. Public participation has been encouraged throughout the development of DRCOG’s 2040 MV RTP, 2018-2021 TIP, and DRCOG’s other major plans, such as the Metro Vision Plan. It is also supported by the activities documented in DRCOG’s Limited English Proficiency (LEP) Plan (last adopted in 2013 and currently being updated). DRCOG held numerous workshops, stakeholder meetings, interactive online forums (such as MindMixer), and other public participation events. The public and stakeholders provided input towards developing the 2040 MV RTP through the following example activities:

- Notification of events and review documents via the DRCOG website;
- Scenario planning workshop and plans update kickoff (June 2012);
- DRCOG Listening Tour (Spring 2012);
- CDOT Telephone Town Hall meetings (May 2014);
- DRCOG/Denver Regional Mobility and Access Council (DRMAC) Transit Forum (May 2014);
- Citizens Advisory Committee (13 meetings from April 2013 to December 2014)
- Metro Vision Planning Advisory Committee (21 meetings from January 2013 to December 2014)
- CDOT/DRCOG Transit Open House (May 2014);
- CDOT Statewide Freight Advisory Council (July, September, and November 2015);
- More than 25 DRCOG Board and committee meetings covered transportation topics, and
Transportation issues and topics were also a focus of numerous activities of DRCOG’s Sustainable Communities Initiative, such as corridor working groups and committees, neighborhood focus groups, and others.

Events were advertised through the DRCOG website and other publications, news releases to the local media, including minority publications and radio stations, postcards, and public hearings. Summaries of testimony received at the public hearings are available at DRCOG.

**2040 Metro Vision Regional Transportation Plan (2040 MVRTP)**

**Geographic Concentrations of Environmental Justice Communities**

The first step in the environmental justice evaluation process for the 2040 MVRTP was to identify geographic concentrations of minority and low-income populations. The transportation analysis zones identified with concentrations of either minority individuals or low-income households make up the environmental justice areas of the region. Figure 10 shows the EJ transportation analysis zones overlaid with the locations of regionally funded roadway and rapid transit capacity projects.

**Benefits of the Metro Vision 2040 RTP in EJ Communities**

The 2040 MVRTP includes many projects, services, and policies that will improve transportation for people living in these communities and especially for those unable to use an automobile to travel. It will also provide a system that connects people with a greater number of job opportunities via convenient commuting trips.

In addition to the regionally-funded roadway and rapid transit capacity projects shown in Figure 10, many other smaller-scale projects and services will be provided through future TIPs that will also benefit EJ areas. It should also be noted that many future road projects will include multimodal elements that will benefit non-drivers.

More than half of the anticipated 2040 MVRTP regional system expenditures will be for public transit and other non-roadway projects and services. Several additional rapid transit rail lines and extensions will be completed by RTD as part of its FasTracks Plan. BRT/HOV/HOT lanes will be added to US-36. Bus service will increase by about 30 percent through 2040. The Fiscally Constrained Rapid Transit System, shown in Figure 10, is displayed in relationship to environmental justice areas.

Other beneficial components of the 2040 MVRTP include extensive additions to the bicycle and pedestrian system, expansion of demand-responsive transit service, and further outreach by the DRCOG carpool and vanpool matching service. This is very beneficial in helping find transportation for persons without access to an automobile, for example, if residents have common workplaces or school destinations. Road capacity projects that reduce congestion will benefit most of the people that travel by car to work, including minority persons.

In addition to the extensive transit system that is being planned by RTD, the 2040 MVRTP provides additional funding sources to serve the needs of low-income and minority populations. For example, the Federal Transit Administration (FTA) has grant programs that provide potential benefits to environmental justice communities (although they do not specifically address minority populations).
These grant programs allow, but do not require, expenditures towards developing new transportation options for welfare recipients and other low-income individuals to access employment and job training. They also provide funding to increase transportation options for older adults and individuals with disabilities.
Figure 10: 2040 Fiscally Constrained Regionally Funded Projects and Environmental Justice Areas
Potential Impacts of the 2040 MVRTP on EJ communities

The recommendations contained within the 2040 FCRTP should not have disproportionate adverse impacts on the low-income or minority communities. Negative impacts of the transportation system, such as air pollution, excessive noise, and crashes would be distributed throughout the region. Similarly, negative impacts of transportation projects, such as construction effects and right-of-way acquisitions, would be associated with the improvements shown in **Figure 11** and are not disproportionately located in low-income or minority communities.

The 2040 FCRTP does not reflect final alignments, design attributes, or approvals for projects that are identified. National Environmental Protection Act (NEPA) studies must be conducted before any transportation project involving federal funds or actions can be constructed. NEPA studies must define impact avoidance mitigation, minimization, or abatement strategies that address the following example environmental topics:

- Noise levels
- Right-of-way and property takings
- Water quality
- Parks
- Site-specific air quality
- Fish and wildlife
- Social, community and economic impact
- Wetlands
- Hazardous materials

**Transportation Improvement Program (TIP)**

The 2040 MVRTP and Fiscally Constrained RTP are implemented through DRCOG’s TIP. The TIP identifies all current federally funded transportation projects to be completed in the Denver region over a six-year period.

Environmental Justice is considered in the scoring and selection of individual projects and is evaluated overall for the entire TIP. The project development phase, NEPA which includes more detailed analyses, typically occurs after projects are identified for funding in the TIP and sponsors enter into contracts with CDOT or RTD.

DRCOG’s selection criteria for projects that receive DRCOG-controlled federal funds include EJ principles. Projects are awarded points if they are located within and provide benefits to defined “EJ zones” and/or if they are located in EJ areas and job growth areas. Project sponsors are required to include justification of benefit to the EJ community. The [Policy on Transportation Improvement Program (TIP) Preparation](#) provides more details.

**2018-2021 TIP Projects**

Since DRCOG did not conduct a call for projects for the 2018-2021 TIP, it is a subset of projects yet to be completed from the 2016-2021 TIP.
The 2018-2021 TIP contains a total of 116 projects depicted in three maps (Figures 11, 12, and 13). These 116 projects also include projects selected by other agencies such as CDOT and RTD. Of those, 41 projects, or 35 percent, touch an Environmental Justice area. The 41 projects that touch an EJ area have a total investment of just under $700 million. This is about a third of the total for all 116 projects (about $2.4 billion).

Some projects types are not included. Regional projects and programs including transportation demand management marketing programs, air quality outreach programs, Way to Go (e.g., van pool and car pool, etc.), and 5310 transit projects for older adults and individuals with disabilities are not site specific but often provide benefit to EJ communities. Projects such as bus procurements are excluded because they are not specific to a geographic location or corridor. Also, while some studies are depicted on the maps, others do not have a well enough defined location or scope to be depicted accurately.

**Roadway Projects**

*Figure 11* shows all roadway projects listed in the TIP (2018-2021). Twenty-five roadway projects touch an Environmental Justice area, which represents 30 percent of all roadway projects.

**Transit Projects**

*Figure 12* shows all transit projects listed in the TIP (2018-2021). Transit investments targeted to the needs of older adults and individuals with disabilities through programs like FTA 5310 and the Older Americans and Older Coloradoans Act also provide additional mobility options for the EJ community but are excluded. Twelve transit projects touch an Environmental Justice area, which represents 80 percent of all transit projects. Since minority ridership on RTD is slightly higher than their proportion of the region’s total population and minority and low-income populations take transit to work at a higher rate than the general public having 80 percent of TIP transit projects touching an EJ area can be considered a benefit for the EJ population.

**Bicycle and Pedestrian Projects**

*Figure 13* shows all transit projects listed in the TIP (2018-2021). Four bicycle and pedestrian projects touch an Environmental Justice area which represents 24 percent of all bicycle and pedestrian projects.
Figure 11: 2016-2021 Roadway TIP Projects
Figure 12: 2018-2021 Transit TIP Projects
Figure 13: 2018-2021 Bicycle and Pedestrian TIP Projects
Potential Benefits and Impacts of the TIP on Environmental Justice Communities

The projects funded through the 2018-2021 TIP will improve personal mobility for all persons in the Denver region, including minority and low income persons. These projects will provide benefits such as more opportunities to walk, bike, or take transit. Also, there will be safer roads with less congestion for all users.

Transit, walking, and bicycling provide alternatives to the automobile. While there are many in the community who choose these alternatives, for many in the EJ community they can be a lifeline, especially for those who do not own an automobile. Populations within the EJ community make up a significant portion of transit ridership in the DRCOG region. Transit offers access to jobs and other important destinations in the region. Bicycle and pedestrian projects can benefit the EJ community by providing additional transportation options. Walking and bicycling are affordable forms of transportation. When safe facilities are provided for pedestrians and bicyclists, people can walk and ride more and spend less on transportation.

A key benefit from these projects for EJ communities can be better access to jobs and activities of daily living. Although a slightly smaller share of people in low-income and minority communities drive to work (either alone or in a carpool) than other areas, a significant majority (over 75 percent) travel to work in a car either as a driver or passenger as their primary travel mode to work. Further, most of RTD ridership is on RTD buses which travel on roadways. Accordingly, roadway projects that improve pavement and reduce congestion are of benefit to all transportation users. Most roadway projects also include improvements that benefit walking, biking, and transit.

Regional-level analysis indicates a similar distribution of projects within EJ areas as compared to the entire MPO area. The spatial analysis conducted for the TIP does not directly assess benefits and impacts related to outcomes of specific projects or programs. All projects selected for funding in the TIP must go through further NEPA environmental analysis and public involvement prior to construction. Final alignments, design attributes, multimodal treatments, and federal approvals for projects are finalized at that time. The analyses must define impact avoidance mitigation, minimization, or abatement strategies that address environmental justice topics.
Chapter IV- Conclusion

Executive Order 12898, Environmental Actions to Address Environmental Justice in Minority and Low-Income Populations, was signed by President Clinton on February 11, 1994. The Executive Order (EO) and accompanying memorandum reinforced the requirements of Title VI of the Civil Rights Act of 1964 (Title VI) that focuses federal attention on the environmental and human health condition in minority and low-income communities. EJ is a federal requirement of all federal, state, and local agencies and has legal basis in Title VI, the EO, and the NEPA. These regulations require that all agencies receiving federal assistance demonstrate compliance with related laws so that all populations the agency serves enjoy the same benefits of the federal investments, bear the same burdens from the federal projects, and have equal participation.

This report provides a description of how the DRCOG addresses the principles of environmental justice in the long and short range planning process with a specific emphasis on the RTP and the TIP. It includes definitions of the geographic concentrations of minority and low-income populations and their demographic and travel characteristics (map(s) included). The projects, programs, and services contained in the 2040 Metro Vision Regional Transportation Plan and 2018-2021 Transportation Improvement Program are proportionally beneficial, and do not disproportionally impact, environmental justice areas as compared to the entire region based on analyses conducted for this report.
Appendix

Notations that expand on the authority of Title VI of the Civil Rights Act

- The Federal Aid Highway Act of 1973 (23 USC 324) established the prohibition of discrimination based on gender.

- The Civil Rights Act of 1987 broadened the scope of Title VI coverage by expanding the definitions of “programs or activities” to include all programs or activities of Federal Aid recipients, sub-recipients and contractors, regardless of whether the programs and activities are federally assisted (Public Law 100259 {S. 557}, March 22, 1988).

- The Americans with Disabilities Act of 1990 (42 USC 12101 et seq. and 49 CFR Parts 27, 37 and 38) and The Rehabilitation Act of 1973, Section 504, (29 USC 794) extended the protections under Title VI of the Civil Rights Act of 1964 to prohibit discrimination of persons with disabilities; and in Title II requires that public transit be accessible to persons with disabilities. The Act states that all new transit vehicles must be made accessible to persons with disabilities, and that paratransit can be used to complement existing fixed-route service.

- The Age Discrimination Act of 1975 prohibits discrimination based on age (42 USC 6101).

- Executive Order 12250 (28 CFR Part 41) requires consistent and effective implementation of various laws prohibiting discriminatory practices in programs receiving federal funding assistance, including Title VI of the Civil Rights Act of 1964.

- Executive Order 12898 (28 CFR 50) from 1994 directs federal agencies to evaluate impacts on low-income and minority populations and ensure that there are not disproportionately adverse environmental, social, and economic impacts on communities, specifically low-income and minority populations. This order also directs federal agencies to provide enhanced public participation where programs may affect such populations.

- USDOT Order on Environmental Justice (DOT Order 5610.2) from 1997 describes how the principles in the Executive Order are to be incorporated into programs and activities. The Order states that the USDOT will not carry out any program, policy or activity that will have a disproportionately high and adverse effect on minority or low-income populations unless mitigation measures or alternatives that would avoid the adverse impacts are not practicable.

- Federal Highway Administration (FHWA) Order 6640.23 from 1998 contains policies and procedures for the FHWA to use in complying with Executive Order 12898.

- Executive Order 13166 intends to improve access to federally conducted and assisted programs and activities for those who because of national origin have limited English language proficiency (LEP). The Order requires federal agencies to review services, identify any needed services and develop and implement a program so that LEP populations have meaningful access.
• LEP guidance from the US Department of Justice sets compliance standards that federal fund recipients must follow to ensure that programs and services provided in English are accessible to LEP individuals, and thereby do not discriminate on the basis of national origin (protection afforded under the 1964 Civil Rights Act, Title VI).


• FHWA and Federal Transit Administration (FTA Memorandum on Title VI Requirements (October 7, 1999) clarifies Title VI requirements in metropolitan and statewide planning. The memorandum provides division FHWA and FTA staff a list of proposed review questions to assess Title VI capability and provides guidance in assessing Title VI capability. Failure to comply can lead to a corrective action being issued by FTA and/or FHWA, and failure to address the corrective action can affect continued federal funding.

• Administrative Regulations, 23 CFR 200 and 49 CFR 21 from Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) set requirements for state transportation departments to implement Title VI policies and procedures at the state and local levels.

• USDOT Planning Assistance and Standards for Metropolitan Planning require MPOs to seek out and consider “the needs of those traditionally underserved by existing transportation systems, such as low income and minority households, who may face challenges accessing employment and other services” (23 CFR 450.316). Additional staff guidance from FHWA and FTA provides direction for assessing an MPO’s level of compliance with Title VI, and establishes a corrective process that can affect federal funding.