

Fresno County Environmental Justice Plan

May 2009

Council of Fresno County Governments

2035 Tulare Street, Ste. 201

Fresno, CA 93721

(559) 233-4148

This report was funded in part through grant[s] from the Federal Highway Administration [and Federal Transit Administration], U.S. Department of Transportation. The views and opinions of Fresno COG expressed herein do not necessarily state or reflect those of the U. S. Department of Transportation.

Table of Contents

	<u>Page</u>
Section 1 Introduction and Background	
Introduction	4
Environmental Justice Background	5
Section 2 - Public Involvement Procedures	
Public Involvement Procedures	7
Section 3 - Fresno COG Environmental Justice Process	
Fresno COG Environmental Justice Process	9
Population Concentrations	10
Farm workers	11
Section 4 - Transportation System Criteria	
Transportation system Goals and Measures	13
Section 5 - Modeling Results	
Introduction	18
Modeling Results	18
Accessibility and Mobility	19
Cost-Effectiveness	22
Equity	22
Reliability	23
Consumer Satisfaction	23
Safety	24
Section 6 Conclusion	
Conclusions, updates and recommendations	26

Environmental Justice Maps

<u>Map</u>	<u>Description</u>	<u>Page</u>
1	Poverty Population 60% Above County Average – Fresno County	29
2	Poverty Population 60% Above County Average – Fresno-Clovis Metro SOI ...	30
3	Minority Population 60% Above County Average – Fresno County.....	31
4	Minority Population 60% Above County Average – Fresno-Clovis Metro SOI..	32
5	Elderly Population 60% Above County Average – Fresno County	33
6	Elderly Population 60% Above County Average – Fresno-Clovis Metro SOI....	34
7	Disabled Population 60% Above County Average – Fresno County.....	35
8	Disabled Population 60% Above County Average – Fresno-Clovis Metro SOI..	36
9	Fresno County Environmental Justice Population by TAZ – Map 1	37
10	Fresno Clovis Metro SOI Environmental Justice Population by TAZ – Map 2...	38
11	Fresno County Environmental Justice Population by TAZ – Map 2.....	39
12	Fresno Clovis Metro SOI Environmental Justice Population by TAZ – Map 2...	40

Appendix

<u>Appendix</u>	<u>Description</u>	<u>Page</u>
A	List of references / subject matter experts consulted.....	41
B	Invitation List for Environmental Justice Population.....	42
C	List of Acronyms used in the Fresno COG Environmental Justice Plan	46
D	Comments Received during the Public Comment Process	47

Section 1

Introduction

In the wake of federal guidelines for environmental justice based on Title VI of the Civil Rights act, growing attention has been placed on the need to incorporate environmental justice principles into the processes and products of transportation planning. In response to this challenge, Metropolitan Planning Organizations (MPO's) around the country have developed methods to assess the impacts of their transportation plans and planning processes on low-income and minority populations. The Council of Fresno County Governments is the MPO for Fresno County and through this document examines the process of transportation planning within the context of environmental justice principles.

Recognizing that no two regions are identical, the FHWA (Federal Highway Administration) and the FTA (Federal Transit Administration) have granted considerable latitude to MPOs such as the Fresno COG regarding implementation of environmental justice principles into the planning process. In preparation for the completing the Fresno County Environmental Justice Plan, a task force was convened to complete four key steps:

- Identify and map locations of low-income and minority populations.
- Review existing COG processes for identifying needs of environmental justice populations
- Document and evaluate the agency's public involvement process.
- Quantitatively assess benefits and burdens of transportation plans with respect to target populations

To identify and map locations of low-income, elderly, disabled and minority populations, Fresno COG used Geographic Information Systems (GIS) mapping to locate low-income and minority populations within the Fresno County area. This information was incorporated into a travel-demand forecasting model to assess the benefits and burdens of existing and planned transportation system investments on target populations.

Fresno COG took significant steps to publicize its efforts and involve the public. When the EJ Task Force was first created, invitations were sent out to every group and committee associated with COG. This number represents literally hundreds of invitations sent out over several meetings. Interested parties were also encouraged to provide names of people who may be interested in the activities of the EJ Task Force. Fresno COG's reach for participation in the EJ Task Force was very broad and represented a large number of segments making up the community. The list of groups whose members received invitations to participate in the Task Force can be found in Appendix C of this document. Those people who expressed an interest in environmental justice and who made the time commitment subsequently became part of the Task Force.

The Fresno COG Environmental Justice Task Force was made up of participants representing public, private, and non-profit sectors that met on an ongoing basis over the course of a year.

The group oversaw the entire development process and provided guidance and direction to Fresno COG staff in the creation of this plan. Broad demographic and socio-economic representation was achieved on the EJ Task Force.

The Fresno COG Environmental Justice Task Force also reviewed existing COG processes for identifying the needs of environmental justice populations on the transportation planning process. The Task Force also held two meetings to review the Regional Transportation Plan, performance measures and the Unmet Transit Needs process.

This report provides a short history of the environmental justice movement. It also addresses Fresno COG's process in developing its environmental justice policies, procedures and evaluation techniques; demographic issues; the transportation model analysis and recommendations for the future.

Environmental Justice Background

The legal basis for environmental justice is rooted "in both the Constitution of the United States – notably the Equal Protection Clause of the Fourteenth Amendment – and U.S. civil rights laws. A brief summary discussing the legal basis of environmental justice to transportation planning is outlined below:

Title VI of the Civil Rights Act of 1964 and Environmental Justice (EJ)

Under Title VI and related statutes, each Federal agency is required to ensure that no person is excluded from participation in, denied the benefit of, or subjected to discrimination under any program or activity receiving Federal financial assistance on the basis of race, color, national origin, age, sex, disability, or religion. The [Civil Rights Restoration Act of 1987](#) clarified the intent of Title VI to include all program and activities of Federal-aid recipients, sub recipients and contractors whether those programs and activities are federally funded or not.

The National Environmental Policy Act of 1969 ([NEPA](#)) stressed the importance of providing for "all Americans safe, healthful, productive, and esthetically pleasing surroundings", and provided a requirement for taking a "systematic, interdisciplinary approach" to aid in considering environmental and community factors in decision-making.

This approach was further emphasized in the Federal-aid Highway Act of 1970: [23 United States Code 109\(h\)](#) established further basis for equitable treatment of communities being affected by transportation projects. It requires consideration of the anticipated effects of proposed transportation projects upon residences, businesses, farms, accessibility of public facilities, tax base, and other community resources.

On February 11, 1994, President Clinton signed [Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations](#). The Executive Order requires that each Federal agency shall, to the greatest extent allowed by law, administer and implement its programs, policies, and activities that affect human health or the environment so as to identify and avoid "disproportionately high and adverse" effects on minority and low-income populations, as well as Federally Recognized Tribal Governments.

In April 1997, the U.S. Department of Transportation (DOT) issued the [DOT Order on Environmental Justice to Address Environmental Justice in Minority Populations and Low-Income Populations \(DOT Order 5610.2\)](#) to summarize and expand upon the requirements of

Executive Order 12898 on Environmental Justice. The Order generally describes the process for incorporating Environmental Justice principles into all DOT existing programs, policies, and activities.

In December 1998, the Federal Highway Administration (FHWA) issued [FHWA Actions to Address Environmental Justice in Minority Populations and Low-Income Populations \(DOT Order 6640.23\)](#) that requires the FHWA to implement the principles of the DOT Order 5610.2 and E.O. 12898 by incorporating Environmental Justice principles in all FHWA programs, policies and activities.

The FHWA and the Federal Transit Administration (FTA) issued a memorandum [Implementing Title VI Requirements in Metropolitan and Statewide Planning](#) on October 7, 1999. The memorandum provides clarification for field offices on how to ensure that Environmental Justice is considered during current and future planning certification reviews.

Enacted in 2005, the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) placed additional emphasis on environmental stewardship, the consideration of environmental issues as a part of metropolitan and statewide transportation planning, and the linking of planning and the environmental assessment process. Each of these aspects strengthens the linkages between planning and environment and creates opportunities to examine the potential for environmental justice issues early on and throughout the project delivery process.

Federal guidelines have repeatedly expressed that there is no single correct way to pursue environmental justice requirements. Regulators have established a generic implementation structure that calls for project-specific impacts to be assessed for social and economic burdens and benefits. Once questions are answered about project costs, who will pay, who will reap the benefits, and who suffers the burdens, projects can be designed to promote environmental justice in three different ways by:

- Influencing who benefits from them;
- Influencing who bears the burdens from them, and;
- Influencing who pays for them.

Whether using one or all three of these measures, in order to ensure that the needs of the disadvantaged are protected, specific requirements must be addressed.

Section 2

Fresno COG Public Involvement Procedures

Public Involvement Procedures are a means of helping to achieve the Environmental Justice principles, through outreach activities that make the transportation-planning program responsive to the needs of disadvantaged communities. For example, outreach activities included in the Public Involvement Procedures are provisions for additional public notification tools, such as culturally adapted community flyers, radio advertising, direct mail, and notices in non-English language publications, to complement traditional public and legal notices, display ads and workshops. A translator/interpreter for non-English speaking individuals will be available if requested at least 3 working days in advance. Staff will also provide appropriate assistance, auxiliary aids and/or services when necessary to afford disabled individuals an equal opportunity at public meetings and workshops if requested at least 3 days in advance. Staff will obtain a language line as needed for day-to-day public inquiries and all public meetings will be held in locations that can be accessed by public transportation for the transit dependent. By including these outreach activities in the Public Involvement Procedures, Fresno COG is enhancing the public involvement processes to eliminate participation barriers and encourage minority and low-income populations in transportation decision-making, which is consistent with state and federal guidelines.

As a Metropolitan Planning Organization and Regional Transportation Planning Agency, implementing and integrating the principles of Environmental Justice into the transportation planning process involves enhancing public participation in the planning and development process, and insuring that the benefits and burdens of transportation investments have been distributed fairly. To assist in this effort, an Environmental Justice Task Force is assembled with transportation planners, community leaders, and representatives of low-income and minority populations participating. The primary goal of the Environmental Justice Task Force is to develop a process with which to assess and ensure compliance of Fresno COG's transportation planning efforts with Environmental Justice requirements, Title VI, and related statutes. The Task Force played a key role in defining the target population, identifying the needs of the target population and developing appropriate measures for gauging the regional burden and benefits of transportation system investments on the target population.

Fresno COG considers all of its plans and programs including the Regional Transportation Plan, the Regional Transportation Improvement Program, and the Federal Transportation Improvement Program when evaluating whether a particular segment of the population are receiving an inordinate number of government-funded projects that negatively impact their particular neighborhoods or regions and evaluating whether they are receiving their fair share of projects resulting in positive impacts.

As a minority group, Native Americans are also protected under Title VI and Environmental Justice laws and outreach efforts to the Tribes is considered to be an important part of a comprehensive public involvement plan. Indian Tribal Governments must be consulted and their interests considered during the development of transportation plans and programs. In order to solicit from Tribes on Fresno COG's activities, they must first have access to the applicable

information. Fresno COG has developed a government-to-government working relationship with the federally recognized tribes in Fresno County to assist in this effort. This is consistent with Presidential Executive Order 13175 (November 6, 2000), which directs agencies receiving federal funds to establish regular and meaningful consultation and collaboration with tribal officials from federally recognized tribes in the development of policies and programs that have tribal implications and to strengthen the government-to-government relationships with Indian tribes. Accordingly, staff has developed regular contact methods, which include the Tribes receiving monthly meeting agendas for the Transportation Technical Committee, Policy Advisory Committee and the Policy Board meetings, as well as annual reports, regional directories, and transportation guides. The Tribes also receive early notification of federal and state grants that they are eligible to receive. They are also given prior notification for public workshops and hearings being held in the planning region. In addition, COG makes an effort to communicate with the tribes to discuss agency matters that may affect them and to solicit their input tribal needs when developing transportation plans and programs.

As part of the Environmental Justice process for Fresno County, the Environmental Justice Task Force documented and evaluated the Fresno COG Public Involvement Procedures. Feedback was provided to Fresno COG staff to incorporate into the public outreach process.

As part of the public review process for this plan, Fresno COG received some very good feedback that can only improve our outreach to all of the different groups within Fresno County. Suggestions include:

- An environmental justice carnival event for community members to engage with local officials and gain education on environmental justice issues affecting their area.
- Availability of translators and interpreters for non-English speakers and appropriate assistance for disabled individuals should be better emphasized in outreach materials and presentations. Fresno COG already has processes and procedures in place to address the unique needs of these individuals and we are always open to suggestions on how to improve our service levels.

Below is a list of types of organizations that Fresno COG has made contact with.

- | | |
|--|--|
| ○ Elected officials | ○ Agencies, organizations and |
| ○ Business and Industry | neighborhood associations that serve |
| ○ Academic and scientific communities | low-income, elderly, mobility |
| ○ Environmental organizations | impaired, minority groups, and limited |
| ○ Service organizations | English proficiency. |
| ○ Youth service groups | ○ Operators and major modes of |
| ○ Recreation groups | transportation |
| ○ Health and handicapped organizations | ○ Senior citizen groups |
| ○ Operators of major modes of | ○ Appropriate private transportation |
| transportation | providers |
| ○ Local public and private transit | ○ Minority and ethnic groups |
| operators communities and | ○ Local, State, and federal agencies. |
| organizations | ○ Traffic, ridesharing, parking, and |
| ○ Airport authorities | enforcement agencies |

Section 3

FRESNO COG ENVIRONMENTAL JUSTICE PROCESS

Fresno COG understands the importance of integrating Title VI and Environmental Justice principles into its mission. COG is identifying and addressing the effects of programs, policies, activities and investment decisions on low-income, minority, disabled, elderly, and other underrepresented populations in Fresno County. To assist in these efforts, Fresno COG will consult the Caltrans Desk Guide on Environmental Justice in Transportation Planning and Investments as well as reconvene the Environmental Justice Task Force on a periodic basis.

Released in 2003, the Environmental Justice Desk Guide was developed to provide guidance and background information to planners on the principles and best practices in environmental justice and Context-sensitive Planning. The EJ Desk Guide can be accessed online through the link below:

http://www.dot.ca.gov/hq/tpp/offices/opar/ejandtitlevi_files/EJDeskGuideJan03.pdf

As part of the Environmental Justice planning process, Fresno COG established an Environmental Justice Task Force that is made up of transportation planners, community leaders, and representatives from Environmental Justice and Title VI populations. The EJ Task Force serves a couple of purposes including to define and prioritize issues of concern and provide guidance and direction to Fresno COG as to how to address such issues of concern.

To meet their defined purpose, the EJ Task Force developed a process by which to assess and ensure compliance of Fresno COG's transportation planning efforts with Environmental Justice requirements of Title VI. The Task force played a key role by:

- Evaluating current environmental justice and public participation efforts to provide guidance on how to achieve the desired results
- Defining the environmental justice populations within Fresno County
- Reviewing existing COG processes for identifying needs of environmental justice populations for providing adequate feedback, and
- Developing appropriate performance measures for gauging the burdens/benefits of Fresno COG's transportation system investments in any Environmental Justice populations

Task force members identified performance measures such as mobility, accessibility, environment, cost effectiveness, reliability, safety, customer satisfaction, etc. to provide a broader analytical framework for decision makers.

For quantitative analysis of the Fresno COG Environmental Justice process, staff used Geographical Information System (GIS) mapping software and census data to determine the location of environmental justice populations within Fresno County and to provide visual

representation of these locations. Staff incorporated the benefits and burdens of existing and planned transportation system investments on target populations across traffic analysis zones.

The Environmental Justice Task Force met several times from March 2004 to February 2005 to oversee the development of this plan. The initial meeting consisted of an orientation and introduction to environmental justice. Fresno COG staff established a work schedule and timeline that outlined the development of transportation system criteria in 2004. Dowling and Associates was retained as a consultant to incorporate the Environmental Justice transportation system criteria approved by the EJ task force into the existing Fresno COG transportation model. Dowling and Associates completed the task in May 2007 to incorporate the criteria set forth by the EJ Task Force. A preliminary draft of the Fresno COG Environmental Justice Report was completed in June 2008 and submitted to EJ Task Force members for review and comment.

Population Concentrations

In preparing the Fresno COG Environmental Justice Plan, the Environmental Justice Task Force identified all populations within the Fresno region that qualified as ‘traditionally disadvantaged’ without resorting to redundant classifications that would result in the double counting. Because Fresno County is a rural as well as urban county, it was important to select ‘disadvantaged populations’ that were equally represented in both environments. The Task Force ultimately settled on focusing on four ‘disadvantaged populations’ within Fresno County: low-income, non-white, senior, and the transit disabled. ‘Disadvantaged populations’ for the purposes of this study are defined as population groups meeting any of the criteria defined as low income, non-white, senior, and transit disabled households.

Population concentrations of traditionally disadvantaged groups were presented by Traffic Analysis Zone (TAZ). TAZ’s were established to better focus on particular neighborhoods rather than attempting to look at the entire county. The Census defines a TAZ as a statistical entity delineated by state or local transportation officials for tabulating traffic-related census data. Data includes journey-to-work and place-of-work statistics from the Census Transportation Planning Package distributed by the Federal Bureau of Transportation Statistics.

Low-income: TAZs with a percentage of the population in poverty 60% higher than the county percentage. Federal poverty levels were used in the calculation of low income TAZs provided by the US Census Bureau.

Non-white: This term applies to people categorized by race as everything other than ‘white, non-hispanic’. The criteria for the EJ plan was TAZs with a percentage of minority or ‘non-white’ population 60% higher than the county percentage, specifically African-Americans, Latinos, Asians and Southeast Asians, Pacific Islanders and Native Americans.

Seniors: This term applies to people who are age 65 and older. The criteria for the EJ Plan was TAZs with a percentage of elderly population 60% or higher than the county percentage

Disabled: This term applies to persons 5 years of age and older with at least one long-lasting physical, mental, or emotional condition that makes it difficult for the person to do activities such as walking, climbing stairs, dressing, bathing, learning, and remembering. The criteria for the EJ Plan TAZs with a percentage of disabled population 60% higher than the county percentage.

The data used to represent the population concentrations of traditionally disadvantaged groups in the Fresno COG Environmental Justice plan was broken down by traffic analysis zone (TAZ). The United States Census Bureau provides 2000 census data for the traditionally disadvantaged groups used in this study broken down by TAZ. No modification is needed on the part of the Fresno COG staff in order to apply this data.

The Environmental Justice Task Force spent considerable time discussing the merits of including specific demographic groups such as farm-workers in the plan. The group made the decision to focus only on those ‘disadvantaged populations’ for which there was data available by TAZ. Using any other form of data (manufactured, combined or otherwise) would have greatly diluted the value of the findings of this study.

The EJ Task Force ultimately defined an environmental justice traffic analysis zone (TAZ) as a neighborhood that contained 60% of county averages of any of the criteria used to identify a population concentration. To determine the percent value that best showed the results, the EJ Task Force tested other percent values such as 50% and 70% to in order to find the ideal ‘threshold’. A threshold of 50% showed almost all of the TAZs in the study area as containing at least one ‘disadvantaged populations’ at that threshold. Meanwhile, at a 70% threshold, only a small group of TAZs were shown to contain at least one ‘disadvantaged populations’ at threshold or greater. The Task Force determined that a threshold of 60% provided the best representation of the underlying data for the disadvantaged populations.

Farm Workers

The Task Force met several times during planning evaluation process, from February 2004 to March 2005. One of the topics discussed extensively pertained to whether or not farm-workers should be segmented into a ‘stand-alone’ population concentration or be classified as a separate ‘disadvantaged population’ in this study. The four ‘disadvantaged populations’ in this process were minority, elderly, disabled, and low income populations.

Several task force members sought to ensure that the transportation needs of the farm-worker population were adequately addressed in the transportation planning process. Participants argued that while the farm worker population shared several characteristics with other ‘disadvantaged populations’, the group possessed unique characteristics that justified it being classified as its own stand alone group.

The EJ Task Force looked into the feasibility of establishing farm workers as its own ‘disadvantaged population’ for the purposes of this study. After extensive research into the matter, Fresno COG staff concluded that classifying farm workers as a fifth ‘disadvantaged population’ was not feasible. The main reason being TAZ data for farm-workers is not available and would need to ‘manufactured’. Taking such an approach regarding the data would have resulted in incompatible data and would have greatly compromised the validity of the plan. With this in mind, the Fresno County Environmental Justice Task Force did not have sufficient data to include ‘farm workers’ as a stand alone disadvantaged population within this initial analysis. It should be noted that the Fresno County Environmental Justice Task Force wanted to incorporate farm workers as a stand-alone TAZ for the purposes of the study but did not just because there was not suitable data. Should TAZ data emerge for ‘farm-workers’ in Fresno County, the EJ Task Force may choose to revisit the analysis making up the Fresno County Environmental Justice Plan.

Since the Fresno County Environmental Justice Plan was first started a couple of years ago, programs have been developed to specifically address the transportation needs of the farm-worker population. The reauthorization of Measure “C” in 2007 allocates approximately .6% of funds for carpool and vanpool subsidy programs originating in Fresno County. The total amount that is expected to go to fund farm-worker vanpools is approximately \$500,000 per year.

Section 4

TRANSPORTATION SYSTEM CRITERIA

Working from case studies detailed in FHWA's publication titled "Transportation & Environmental Justice Case Studies," the Environmental Justice Task Force looked at several potential transportation system criteria from other regional examples including Kern Council of Governments, the Metropolitan Transportation Commission in the San Francisco Bay Area, Southern California Association of Governments, and the Mid-Ohio Region Council of Governments.

In the September, 2004 meeting, the EJ Task Force considered several possible criteria and what those criteria seek to measure. Definitions include:

Accessibility

The ease of reaching destinations as measured by the percent of commuters who can get to work within a given period of time.

Mobility

The ability to move throughout the region and the time it takes to reach desired destinations within a reasonable amount of time.

Cost effectiveness

Maximized return on transportation investment.

Equity

Equitable distribution of transportation investment benefits (as a share of benefits).

Reliability

Percentage of on-time arrivals by transit and highways

Consumer satisfaction

The condition where consumers can largely agree that their transportation needs are being met in a safe, reliable, efficient and cost-effective manner.

Safety

Minimal risk of accident or injury as measured by reduced accidents.

Transportation System Goals and Measures

At the March 30, 2003 meeting, the EJ working group considered a set of proposed goals for the transportation system to meet. The intent was to develop measurable, definitive outputs that endures over time and provides transportation benefits to all populations, without consistently burdening any single group.

The seven criteria that the EJ Task Force selected to define system goals and measures are accessibility, mobility, cost-effectiveness, equity, reliability, consumer satisfaction, and safety. Measures of the seven system criteria are as follows:

Accessibility:

Measures commuter trip times to major job centers using roads and transit to ensure that commuters in EJ TAZs throughout the county have average trip times that are shorter, or at least no longer, than the county as a whole (measure base year, 2030 w/RTP projects, and 2030 No Build)

Mobility:

Calculate peak highway and transit trip periods (morning and evening) to all trips to ensure that EJ TAZs perform better, or at least no worse, than the countywide average (measure base year, 2030 w/RTP projects, and 2030 No Build).

Cost-effectiveness:

Measure the Average Daily Investment per passenger mile traveled on the transportation network, both inside and outside EJ TAZs (measure through 2030 w/RTP projects)

Equity:

Compare the total investment in roads and transit through the RTP planning period with total passenger miles traveled on the transportation network, both inside and outside EJ TAZs (measure through 2030 w/RTP projects).

Reliability:

Measure the percentage of on-time arrivals for both transit and highway trips. For roadways this is measured by the # of hours daily passengers spent in congestion. For transit, reliability is judged by the percent of on-time arrivals for each transit operator (measure base year and through 2030 w/RTP projects).

Consumer Satisfaction:

Measure the daily amount of trip delay in hours. On roadways, trip delay is the difference between the time a trip should take and the time it actually requires or the difference between uncongested traffic (free flow) and some level of congestion (measure base year and through 2030 w/RTP projects).

Safety:

Measure annualized accident statistics (property damage, injury, fatal) based on annual average daily traffic. Compare base year statistics to future year statistics at end of RTP planning period.

The goal for the seven system criteria are as follows:

Accessibility:

Bring services for environmental justice populations up to countywide average. If already maintaining countywide average, accessibility should show no degradation of service.

Mobility:

Bring services for environmental justice populations up to countywide average. If already maintaining countywide average, show no degradation of service.

Cost-effectiveness:

In EJ TAZs, show an average cost per passenger mile for both auto and transit that is no less than the countywide average.

Equity:

Accounting for context-sensitive design factors, show an equitable distribution of transportation expenditures, inside and outside EJ TAZs.

Reliability:

85 percent on-time arrivals (transit). EJ TAZs will suffer the same or less congestion in vehicle hours traveled as the county as a whole (auto)

Consumer Satisfaction:

Delay time for EJ TAZs is less than or meets the countywide average.

Safety:

On new facilities inside EJ TAZs, demonstrate no more accidents than countywide average

To develop measures that could determine whether or not Fresno COG was meeting its environmental justice goals, the EJ Task Force used the existing transportation model as a base from which to develop a model that incorporated the environmental justice criteria. Modifications to the existing transportation model were completed at a cost of \$50,000 between July 2005 and March 2007. The modifications to the Fresno COG transportation model sought to accurately measure transit trip plans and lengths, as well as compare trip times and lengths between metropolitan Fresno / Clovis and rural areas of the county.

For criteria whose goals the model was not able to quantify – such as reliability, equity and safety – the EJ Task Force developed other measures based on Census and accident data. Staff also relied on Fresno COG's own Regional Transportation Planned and Federal Transportation Improvement Plan, which chart short-term and long- term transportation capital expenditures. Measures of the seven criteria include:

Accessibility

1. Average automobile trip time to major job centers. (From target urban neighborhoods to major job centers)
2. Average transit travel time to major job centers. (From target urban neighborhoods to major job centers.)
3. Average automobile trip time to major job centers. (From target rural neighborhoods to major job centers)
4. Average transit travel time to major job centers. (From target rural neighborhoods to major job centers.)

Mobility

1. Average travel time for all trips by automobile (urban).
2. Average travel time for all trips by transit (urban).
3. Average travel time for all trips by automobile (rural).
4. Average travel time for all trips by transit (rural).
5. Average travel time for all trips by automobile (countywide).
6. Average travel time for all trips by transit (countywide).

Cost-effectiveness

1. Average cost per passenger mile (urban, auto, countywide)
2. Average cost per transit trip mile (urban, transit, countywide)
3. Average cost per passenger mile (urban, auto, environmental justice target areas)
4. Average cost per transit trip mile (urban, transit, environmental justice target areas)
5. Average cost per passenger mile (rural, auto, environmental justice target areas)
6. Average cost per transit trip mile (rural, transit, environmental justice target areas)

Equity

1. Investment comparisons across modes of transportation, including livable and/or walkable communities.
2. Distribution of planned transportation expenditures inside and outside of target - communities/neighborhoods.

Reliability

1. Reasonably dependable levels of service as measured by percent of on-time arrivals.
2. Reasonably dependable levels of service as measured by congestion on highways.

Consumer Satisfaction

1. Average trip delay time (urban, auto, countywide)
2. Average trip delay time (rural, auto, countywide)
3. Average trip delay time (urban, auto, environmental justice area)
4. Average trip delay time (rural, auto, environmental justice area)
5. Average trip delay time (urban, transit, countywide)
6. Levels of service on roads countywide (A-F)
7. Levels of service on roads in environmental justice target areas (A-F)

Safety

1. Number of high crash locations improved.

Level of Service (LOS) is the ‘yardstick’ in standard use to categorize the flow, or efficiency, of highways, roads, and intersections. (This term is also used in most other infrastructures descriptions, but the “yardstick” or units of measurement vary depending upon the specific type of infrastructure: Examples include water, sewer, power, etc.,)

Figure 1

<i>LOS A</i>	Free flow traffic conditions, with minimal delay to stopped vehicles (no vehicle is delayed longer than one cycle at signalized intersection).
<i>LOS B</i>	Generally stable traffic flow conditions.
<i>LOS C</i>	Occasional back-ups may develop, but delay to vehicles is short-term and still tolerable.
<i>LOS D</i>	During short periods of the peak hour, delays to approaching vehicles may be substantial but are tolerable during times of less demand (i.e., vehicle delayed one cycle or less at signal).
<i>LOS E</i>	Intersections operate at or near capacity, with long queues developing on all approaches and long delays.
<i>LOS F</i>	Jammed conditions on all approaches with excessively long delays and vehicles unable to move at times.

Section 5

MODELING RESULTS

Introduction

The purpose of this project is to develop and test definitive, measurable criteria that can be used to ensure that transportation system investments benefit all population without consistently burdening any single group.

Target environmental justice TAZs (Traffic Analysis Zone, an analysis unit in Fresno COG's travel demand model) were identified by the Fresno COG based on four criteria. TAZs that satisfy one of the 4 criteria qualify as an environmental justice TAZ. In addition, each environmental justice TAZ had to have population density of at least 5 persons per square mile. The Fresno COG used detailed data from the Census 2000 CTPP for TAZ level identification. The four criteria included:

- 1) TAZs with a percentage of minority population 60% higher than the county percentage
- 2) TAZs with a percentage of poverty population 60% higher than the county percentage
- 3) TAZs with a percentage of elderly population 60% higher than the county percentage
- 4) TAZs with a percentage of disabled population 60% higher than the county percentage

The model also stratified its numbers into six categories for results: All of the Fresno-Clovis sphere of influence (SOI), the remaining county, countywide, and environmental justice zones in each of these categories.

The 2030 scenario assumes all projects included in the Financially Constrained project list for 2005 June Conformity (coded by Fresno COG staff as listed in Appendix G of *Fresno COG 2005 June Air Quality Conformity Determination*) will have been completed, whereas the no-build scenario assumes 2030 traffic on the same network used in 1998.

Modeling Results

Fresno COG staff identified the transportation analysis zones that correspond to environmental justice target areas, as defined above. For measures of accessibility, major job centers were also identified. Major job centers are defined as those TAZs with 200 or more jobs with a job density of at least 2 jobs per acre. Most of the job centers are in the Fresno-Clovis metro area, and clustered along Blackstone Avenue, Shaw Avenue, Fresno State University, and Fresno Downtown areas. There are a couple of major job centers in the small cities. This information was incorporated into the node attribute data in the master network for the Fresno COG model so that subsequent analyses can "batch out" the TAZ identification information from the network for use in the calculations.

Once the target areas were identified, Dowling Associates prepared and tested TP+ scripts to report out appropriate data from the travel demand model including: transit trip hours, transit trip distance and miles of congested facilities for 1998 (base year), 2030 and the 2030 no-build scenarios.

The following performance measures were used in Fresno COG's Environmental Justice analysis:

Accessibility – Calculate average AM peak period (work) trip time by mode (auto & transit) from the Fresno-Clovis SOI, the remaining county and countywide to Major Job Centers as well as from EJ target TAZs in these areas to Major Job Centers.

Mobility – Calculate average PM peak period trip time by mode (auto and transit) from the Fresno-Clovis SOI, the remaining county, and countywide to all TAZs in Fresno County and compare with trip times from the EJ target TAZs in the Fresno-Clovis SOI, the remaining county and countywide to all TAZs in the county.

Cost-effectiveness – Calculate the additional person-miles traveled (served) on roadway and transit projects per \$1,000 of project investment inside EJ TAZs versus all TAZs in the Fresno-Clovis SOI, the remaining county and countywide.

Equity – Calculate and compare percentages of person-miles of travel with percentages of transportation investment for the EJ target areas versus all TAZs in the Fresno-Clovis SOI, the remaining county and countywide. The service area for transit projects will be defined as areas within $\frac{3}{4}$ miles of a transit line, although currently no transit projects have been defined.

Reliability – Calculate the percent of total VMT operating at level of service E or worse on links inside EJ TAZs versus all TAZs in the Fresno-Clovis SOI, the remaining county and countywide for 2030 build and no build conditions.

Consumer satisfaction – Calculate the percent changes between 1998 and 2030 in average trip delay on roadway projects after feedback between constrained and unconstrained roadways on links inside EJ TAZs and compare with all TAZs in the Fresno-Clovis SOI, the remaining county and countywide¹.

Safety – Calculate the percentage increase between property damage, injury and fatal accident rates between base year 1998 and 2030 on road and transit projects inside EJ TAZs versus all TAZs in the Fresno-Clovis SOI, the remaining county and countywide.

Accessibility and Mobility

Accessibility and mobility are defined as the ability to move throughout the region, and the time it takes to reach desired destinations from specific origins. The criterion is measured by calculating average travel times during the base year 1998, in 2030 when all RTP projects are completed, and in a 2030 no-build scenario where none of the RTP projects are completed.

¹ Delay refers to the amount of additional time a vehicle spends on the road because of congestion. Constrained and unconstrained roads refer to those streets, highways or freeways where congestion is either typical or atypical.

Specifically, accessibility is defined as the ease of reaching destinations as measured by the average AM peak commuter trip times to the defined major job centers. Mobility looks at PM peak average travel times on highway and transits to demonstrate the worst possible scenario.

The goal for both accessibility and mobility is to ensure that the EJ TAZs throughout the county have average trip times comparable to the county as a whole.

In general under build conditions EJ TAZs have average travel times to major job centers comparable or shorter than the travel times from non-EJ TAZs for all modes of travel (drive alone, carpool and transit) in the Fresno-Clovis SOI, the remainder of the county, as well as countywide.

In terms of overall mobility, EJ TAZs also perform well compared with their counter parts in the Fresno-Clovis SOI, the remainder of the county, as well as countywide.

Accessibility (AM Peak Period Average Travel Times in Minutes) to Major Job Centers

	1998 Base		2030 Build		2030 No Build	
	All TAZs	EJ TAZs	All TAZs	EJ TAZs	All TAZs	EJ TAZs
Fresno-Clovis SOI						
Drive Alone	8	8	9	9	11	11
Carpool	7	7	7	7	8	9
Transit	47	46	47	46	47	45
Remainder of the County						
Drive Alone	13	12	15	15	21	21
Carpool	11	11	13	13	18	18
Transit	50	49	52	51	52	50
Countywide						
Drive Alone	11	10	13	13	17	17
Carpool	9	9	10	10	13	14
Transit	48	47	49	48	49	48

Metropolitan Fresno Clovis average travel time in 1998 for single drivers and carpools were the same at 8 minutes for 'drive alone' and 7 minutes for 'carpool'. Transit for EJ TAZ in 1998 is slightly better at 46 minutes compared to 47 minutes for all TAZs in metropolitan Fresno. In 2030 under a build scenario, 'drive alone' accessibility increases to 9 minutes for all TAZs and EJ TAZs but yet remains the same at 7 minutes for 'carpool' accessibility for all TAZs and EJ TAZs. 'Transit' in 2030 under a build scenario remains the same as 1998 at 47 minutes for all TAZs and 46 minutes for EJ TAZs. In 2030 under a no build scenario, 'drive alone' increased to 11 minutes for all TAZs and EJ TAZs. EJ TAZs for 'carpools' were longer at 9 minutes versus 8 minutes for all TAZs and 'transit' was just the opposite with EJ TAZs having a shorter average travel time of 45 minutes versus 47 minutes for all TAZs.

In 1998, EJ TAZs had shorter average travel times for 'drive alone' of 12 minutes versus 13 minutes for all TAZs. EJ TAZs also had shorter average travel times for 'transit' at 49 minutes versus 50 minutes for all TAZs while both EJ TAZs and all TAZs had the same average travel times of 11 minutes for 'carpools'.

In 2030 under both build and no build scenarios, the results are very similar. In a build scenario, all TAZs and EJ TAZs are the same for 'drive alone' at 15 minutes and 'carpool' at 13 minutes. In a no build scenario, all TAZs and EJ TAZs are the same for 'drive alone' at 21 minutes and 'carpool' at 18 minutes. 'Transit' benefits EJ TAZs to a greater degree than all TAZs under a no build scenario with a two minute shorter average travel time for EJ TAZs at 50 minutes versus 52 minutes for all TAZs. Under a build scenario, average travel time for EJ TAZs is 51 minutes versus 52 minutes for all TAZs.

Countywide, average travel times for EJ TAZs were equal to or less than all TAZs in terms of average travel times for all scenarios. The only exception is 'carpools' in 2030 in a no build scenario. In this case, EJ TAZs have a longer average travel time by one minute than all TAZs. EJ TAZs come in at a 14 minute average travel time versus 13 minutes for all TAZs.

Countywide, all TAZs and EJ TAZs were the same for 'drive alone' in 2030 in a build and no build scenario at 13 minutes and 17 minutes, respectively. In 1998, EJ TAZ was slightly better at a 10 minute average travel time versus 11 minutes for all TAZs. For 'carpool', EJ TAZs and all TAZs were the same for both the 1998 base and 2030 build scenarios at 9 minutes and 10 minutes, respectively. For 'transit', EJ TAZs fared better across all scenarios with an average travel time one minute less than all TAZs at 47 minutes for 1998 base and 48 minutes for both the 2030 build and no build scenarios. All TAZs for 'transit' came in at 48 minutes for the 1998 base year and 49 minutes for both the 2030 build and no build scenarios.

As a whole, Fresno-Clovis SOI had shorter average travel times than the Remainder of the County and Countywide. This was to be expected as metropolitan commutes are shorter than rural commutes. Considering that countywide is a combination of both rural and urban commutes, one would expect that Fresno-Clovis SOI would have the shortest commute times and Remainder of the County would have the largest times, with Countywide right in the middle.

EJ TAZs had equal to or shorter average travel times than all TAZs in all instances except one, 'carpools' countywide under a 2030 No Build scenario.

Mobility (PM Peak Period Average Travel Times)

	1998 Base		2030 Build		2030 No Build	
	All TAZs	EJ TAZs	All TAZs	EJ TAZs	All TAZs	EJ TAZs
Fresno-Clovis SOI						
Drive Alone	10	10	11	11	15	15
Carpool	8	8	9	9	12	12
Transit	49	48	50	49	50	49
Remainder of the County						
Drive Alone	12	12	12	12	15	14
Carpool	10	10	10	10	12	12
Transit	52	51	55	54	55	54
Countywide						
Drive Alone	11	11	12	12	15	15
Carpool	9	9	10	10	12	12
Transit	49	49	51	50	51	50

Cost-effectiveness

Cost-effectiveness is measured by maximized returns on transportation investments. This measure is estimated by dividing the new added average number of daily passenger miles traveled (PMT) served by RTP projects in the full project list from 1998 to 2030 by the total \$1,000s of investment inside and outside of EJ TAZs. Because the cost-effectiveness criterion assumes that RTP projects will be built, the no-build scenario is not displayed.

The PMT served per \$1,000 invested is higher for the EJ TAZs than overall in all TAZs in the Fresno-Clovis SOI, the remainder of the County as well as countywide.

To summarize, in Fresno-Clovis SOI, the average additional daily passenger mile traveled amounts to 1.31 PMT for all TAZs and 1.60 PMT for EJ TAZs. In rural areas outside of the Fresno-Clovis SOI, the PMT is 1.79 for all TAZs versus 1.99 for EJ TAZs. Countywide, all TAZs have a 0.58 PMT whereas EJ TAZs have a 0.93 PMT. These numbers indicate that higher returns are realized for transportation investments in EJ TAZs within Fresno-Clovis SOI, rural areas, and countywide than all TAZs when looking at average additional daily passenger mile traveled per \$1,000 investment dollars.

Average additional daily passenger mile traveled (PMT) per \$1,000 investment dollars

	All TAZs	EJ TAZs
Fresno-Clovis SOI	1.31	1.60
Remainder of County	1.79	1.99
Countywide	0.58	0.93

Equity

Equity is defined as an equitable distribution of transportation investment benefits based on the share of person miles traveled. Fresno COG took a similar approach to equity as with cost-effectiveness, comparing the total investment in roads and transit through 2030 with total

passenger miles traveled in the Fresno-Clovis SOI, rural areas and the county as a whole. All numbers were converted to percentages for simplicity.

Percent of passenger miles traveled & expenditures

	Fresno-Clovis SOI	Remainder of County	Countywide
2030 PMT	27,757,967	17,846,483	45,604,450
Investment	\$1,623,926,462	\$1,058,006,007	\$2,681,932,469
Expenditure/PMT	\$58.50	\$59.28	\$58.81
2030 PMT in EJ	13,406,593	7,353,904	20,760,498
Investment in EJ	\$879,698,745	\$471,225,693	\$1,350,924,437
Expenditure in EJ	\$65.62	\$64.08	\$65.07
2030 PMT (% EJ)	48.3%	41.2%	45.5%
Investment (% EJ)	54.2%	44.5%	50.4%

Under 2030 build conditions which includes projects through 2030, EJ TAZs will receive higher expenditure to PMT ratios than their non-EJ counterparts. Fresno-Clovis SOI EJ TAZs will account for over 48 percent of all passenger miles traveled in that sub-region and over 54 percent of transportation expenditures will go directly into the Fresno-Clovis SOI EJ TAZs. In the remaining county areas, EJ TAZs account for just over 41 percent of the PMT and over 45% of the expenditures will go to those EJ TAZs. Overall, EJ TAZs represent over 46% of countywide PMT and over 50 percent of all transportation funding will be spent in those areas.

Reliability

Reliability is estimated as a percent of level of service E or worse VMT inside the EJ target TAZs as well as for the County. Under 2030 build conditions, all EJ TAZs in the Fresno-Clovis SOI, the remaining county and countywide have a lower percentage of overall VMT operating at level of service E or worse when compared with all TAZs.

Percent average daily vehicle miles traveled (VMT) LOS E or worse conditions

	1998 Conditions		2030 Conditions		2030 No Build Conditions	
	All TAZs	EJ TAZs	All TAZs	EJ TAZs	All TAZs	EJ TAZs
Average daily vehicle miles traveled (VMT)						
Fresno-Clovis SOI	9,055,314	4,065,740	20,684,101	10,008,218	19,556,953	8,828,286
Remainder of County	7,278,306	2,957,644	13,350,491	5,516,580	13,518,558	5,537,287
Countywide	16,333,620	7,023,384	34,034,592	15,524,798	33,075,511	14,365,572
Average VMT LOS E or worse						
Fresno-Clovis SOI	67,080	17,684	702,575	300,472	4,103,240	1,676,824
Remainder of County	0	0	2,733	0	176,847	60,419
Countywide	67,080	17,684	705,307	300,472	4,280,087	1,737,244
Percent Average VMT LOS E or worse						
Fresno-Clovis SOI	0.7%	0.4%	3.4%	3.0%	21.0%	19.0%
Remainder of County	0.0%	0.0%	0.0%	0.0%	1.3%	1.1%
Countywide	0.4%	0.3%	2.1%	1.9%	12.9%	12.1%

Consumer Satisfaction

Consumer satisfaction is defined as the condition where consumers can largely agree that their transportation needs are being met in a safe, reliable, efficient and cost-effective manner. The criterion is estimated by the percent change between 1998 and 2030 in the daily amount of trip

delay in hours on roadway and transit projects. On roadways, trip delay refers the difference between the time a trip should take and the time it actually requires, or the difference between uncongested traffic (free flow) and some level of congestion.

For example, between 1998 and a 2030 build scenario, Fresno COGs traffic model estimates the number of daily trip delay hours to rise from 9,662 to 42,126 – a 336% increase for all TAZs within the Fresno-Clovis SOI. However, for EJ TAZs, the number of daily trip delay hours in the Fresno-Clovis SOI is expected to rise from 6,629 to 26,230 – a 296% increase. While neither scenario is desirable, EJ TAZs with the Fresno-Clovis SOI perform better than the area as a whole. The same situation is found in the rural TAZs where daily trip delay hours rise from 7,485 to 36,189 – a 383% increase for all TAZs and from 4,890 to 21,351 – a 337% increase.

Under a ‘no build’ scenario, the percent increases for daily trip delay hours are even larger. Between 1998 and a 2030 no build scenario, the Fresno-Clovis SOI rises from 9,662 to 175,715 – a 1,719% increase for all TAZs and from 6,629 to 107,404 – a 1,520% increase within EJ TAZs. In rural or remaining TAZs, the percent increase is even more drastic at 7,485 to 162,370 – a 2,069% increase for all TAZs and 4,890 to 99,592 – a 1,937% increase for EJ TAZs.

Total Trip Delay Time (hours)

	1998 Base		2030 Build		2030 No Build		Build vs. Base		No Build. Vs. Base	
	All TAZS	EJ TAZS	All TAZS	EJ TAZS	All TAZS	EJ TAZS	All TAZS	EJ TAZS	All TAZS	EJ TAZS
Fresno-Clovis SOI	9,662	6,629	42,126	26,230	175,715	107,404	336%	296%	1719%	1520%
Reminder of County	7,485	4,890	36,189	21,351	162,370	99,592	383%	337%	2069%	1937%
Countywide	17,147	11,519	78,315	47,581	338,085	206,996	357%	313%	1872%	1697%

Safety

For Fresno COG's environmental justice policy purposes, safety is considered to be the minimal risk of accident or injury as measured by reduced collisions/incidents. This criterion is measured by calculating the percentage increase between property damage, injury and fatal accident rates between base year 1998 and 2030 on road and transit projects. Using this criterion for a build vs. base comparison, it is estimated that the change in annualized collisions/incidents is lower in EJ TAZs than all TAZs in the Fresno-Clovis SOI and the remainder of the County, as well as countywide.

Despite the model's inability to predict accident rates on specific projects, it does provide an aggregate look at annual accidents in 1998 to 2030 build and no build scenarios. Results show that injury accidents will rise throughout the Fresno-Clovis SOI from 1,011.4 to 2,315 – a 129% increase as a whole for all TAZs and from 933.0 to 2,014.6 – a 116% increase for EJ TAZs. In a 'no build' scenario, the percent increases for all TAZs and EJ TAZs were less than under a build scenario across the board, so to speak. All TAZs in the Fresno-Clovis SOI under a no build scenario rose from 1,011.4 to 1,901.9 – an increase of 88% while EJ TAZs rose from 933.0 to 1,743.5 – an increase of 87%.

Rural areas or areas in the remainder of the County fared much worse. In a build scenario, all TAZs rose from 1,097.7 to 5,028.9 – a 358% increase while EJ TAZs rose from 872.3 to 3,876.5 – a 344% increase as a whole. In a 'no build' scenario, all TAZs rose from 1,097.7 to 2,518.5 – a 129% increase while EJ TAZs rose from 872.3 to 1,964.9 – a 125%. While rural EJ TAZs fared better than all TAZs, the difference in fatalities under both the 'build' and 'no build' scenarios are particularly striking.

Annualized Collision/Incident Statistics for Roadways with Improvements (based on Caltrans collision rates for Fresno County)

Annualized Collisions/Incidents

	1998 Base		2030 Build		2030 No Build		Build vs. Base		No Build vs. Base	
	All TAZs	EJ TAZs	All TAZs	EJ TAZs	All TAZs	EJ TAZs	All TAZs	EJ TAZs	All TAZs	EJ TAZs
Fresno-Clovis SOI	1011.4	933.0	2315.0	2014.6	1901.9	1743.5	129%	116%	88%	87%
Fatality	27.5	26.8	25.9	24.0	51.2	49.4	-6%	-11%	86%	84%
Injury	435.9	406.0	1179.5	1019.6	825.6	762.3	171%	151%	89%	88%
Property	548.0	500.2	1109.6	971.0	1025.1	931.8	102%	94%	87%	86%
Remainder of County	1097.7	872.3	5028.9	3876.5	2518.5	1964.9	358%	344%	129%	125%
Fatality	0.5	0.3	17.6	11.1	1.7	1.1	3815%	3616%	288%	281%
Injury	392.9	309.3	1860.9	1391.5	918.0	712.0	374%	350%	134%	130%
Property	704.3	562.6	3150.4	2473.8	1598.8	1251.7	347%	340%	127%	122%
Countywide	2109.2	1805.2	7343.9	5891.0	4420.4	3708.4	248%	226%	110%	105%
Fatality	28.0	27.0	43.5	35.1	53.0	50.6	55%	30%	89%	87%
Injury	828.8	715.3	3040.4	2411.1	1743.6	1474.3	267%	237%	110%	106%
Property	1252.4	1062.9	4260.0	3444.8	2623.9	2183.5	240%	224%	110%	105%

Section 6

SECTION 6: CONCLUSIONS, UPDATES AND RECOMMENDATIONS

The purpose of this project is to evaluate whether transportation system investments in Fresno County benefits the entire population without consistently burdening any single group, in particular those people residing in the areas with higher percentages of minority, poor, elderly and/or disabled populations. Areas meeting these criteria are defined as environmental justice traffic analysis zones (ENVIRONMENTAL JUSTICE TAZs). Modeling analyses indicate that programmed transportation investments in Fresno County result in fair distribution of impacts and benefits relating to accessibility, mobility, cost-effectiveness, equity, reliability, consumer satisfaction and safety when comparing environmental justice TAZs and non-environmental justice TAZs in Fresno County.

Update

As Fresno COG and the EJ Task Force conclude the Fresno County Environmental Justice Plan, other organizations have begun looking into the transportation-related issues upon the environmental justice populations analyzed here. The U.S. Department of Housing & Urban Development (HUD), Policy Link and California Rural Legal Assistance (CRLA) have been conducting work related to “colonias” within unincorporated communities throughout Fresno County and the San Joaquin Valley. Efforts have thus far been about addressing environmental justice issues, specifically the lack of infrastructure investments within these communities. That is not to say that steps cannot be taken to ensuring that the transportation needs of environmental justice populations in Fresno County can be improved upon. Two years ago, Fresno County in addition to the remaining seven counties making up the San Joaquin Valley embarked on a massive regional planning exercise called the San Joaquin Valley Blueprint. The San Joaquin Valley Blueprint is intended to develop a comprehensive regional transportation and land use vision for the San Joaquin Valley through to the year 2050.

Passed by voters in November 2006, Measure provides funding for programs designed to improve transportation services to environmental justice populations in Fresno County.

Administered by Fresno COG, the ADA/Seniors/Paratransit Program using Measure C funds provides a subsidy to reduce the cost of taxi service for seniors aged 70 and older. As of June 2008, \$427,683.07 dollars had been allocated to Fresno COG to assist seniors in Fresno County. Taxi scrip went on sale on July 1, 2008 and each user receives a user ID when their application is approved. As of September 31, 2008, 499 seniors had enrolled in the Taxi Scrip program. Community outreach about the program is in the form of mass mailings, newspaper articles, community events and presentations to seniors and senior groups. Public response to the program has exceeded expectations.

A second program funded by Measure C and administered by Fresno COG intended to address transportation needs of environmental justice populations is the Farmworker/Carpool/Vanpools Program. As of June 2008, over \$313,000 has been allocated to Farmworker Vanpools in addition to funds carried over from last year. The Farmworker Vanpool offers vouchers of \$10 per week up to \$40 per month per rider. As of September 31, 2008, 654 farm-workers had been

approved to participate in the Farmworker transportation program. Interestingly enough, only 243 farmworkers had redeemed their vouchers, meaning that 411 individuals had not yet been utilized the service that they had been approved for. Most applications were awarded starting at the end of the August 2008. Fresno COG staff is looking as to why more people are not using their farmworker vanpool vouchers.

There are other exciting environmental justice-related activities taking place within other COGs throughout the San Joaquin Valley. Kern Council of Governments applied for and was awarded a \$250,000 Caltans Environmental Justice Grant on behalf of the Eight-county region to partner with the Native American communities in the San Joaquin Valley. The purpose of the project is to promote greater involvement in the Blueprint and Partnership process by the Tribes, and to help comply with the new SAFETEA-LU requirements. Fresno COG is participating in this grant with Kern COG, the lead agency and is contributing \$5,000 in-kind.

In the spring of 2007, California Rural Legal Assistance (CRLA) and PolicyLink embarked on a year-long effort to work with local residents, advocates, and leaders of community-based organizations to find new strategies for addressing the challenges faced by unincorporated communities in the San Joaquin Valley. With funding from the California Endowment and the James Irvine Foundation, CRLA and PolicyLink brought together over 100 stakeholders on November 27, 2007 that included resident-leaders, policy researchers, legal advocates, community organizations, local government representatives and more to discuss the challenges facing unincorporated communities. The result of this meeting was valuable information about the composition of unincorporated communities in the San Joaquin Valley and the definition of next steps that will be undertaken by stakeholders who attended the November 27th 2008 meeting.

Recommendations

All of the activities mentioned complement the Fresno County environmental justice planning process. The Fresno COG Environmental Justice Task Force should monitor these programs as well as continue to search for other environmental justice opportunities that could provide valuable information that could be incorporated into the Fresno COG environmental justice process. One recommendation cited by a couple of EJ Task Force members is to convene the task force on a periodic basis to review and discuss transportation-related matters of importance to EJ populations in Fresno County. The frequency of such meetings may be determined on an ‘as-needed’ basis to be determined by the leadership of the Fresno COG Environmental Justice Task Force.

The issue of how to handle ‘farm-worker’ populations for the purpose of this study was not able to be addressed at the time that this plan was in development to the satisfaction of all of the members of the Fresno COG Environmental Justice Task Force. Data for farm-workers for Fresno County was not available in a suitable format that would have worked for at the time that the Fresno COG Environmental Justice plan was written. With that said, it is the recommendation of the Fresno COG Environmental Justice Task Force that Fresno COG work to develop accurate data on Farmworkers as it relates to transportation planning within Fresno County.

Since the Fresno COG Environmental Justice Plan was written, several programs and projects have started that seek to study and address the many needs of farmworker population in Fresno County and the San Joaquin Valley. One such project between California Rural Legal Assistance (CRLA) and PolicyLink seeks to work with members of the community to find new strategies for

addressing the challenges faced by unincorporated communities in the San Joaquin Valley. It is recommended by the Fresno COG Environmental Justice Task Force that Fresno COG work with CRLA and PolicyLink as strategies are developed for ‘colonias’ within the unincorporated communities of Fresno County. New information developed by CRLA and PolicyLink can be incorporated into the Fresno COG environmental justice process when appropriate. Fresno COG can in turn provide information and assistance to CRLA and PolicyLink to assist them in obtaining funding grants for projects that they may pursue on behalf of ‘colonias’ in Fresno County.

Throughout the Fresno County Environmental Justice Planning process, the question of affordable and obtainable transportation within the Fresno COG transportation planning process has come up time and time again. Fresno COG staff will take the issue of adding representation of environmental justice populations to the Fresno COG Transportation Technical Committee. This will give environmental justice representation a voice in all transportation planning items that come before the Fresno COG Policy Board. The specific details of what this representation will look like will be left to the Fresno COG Transportation Technical Committee to define. The Fresno COG Environmental Justice Task Force will continue to look for ways to address the question of affordable and obtainable transportation within the Fresno COG transportation planning process.

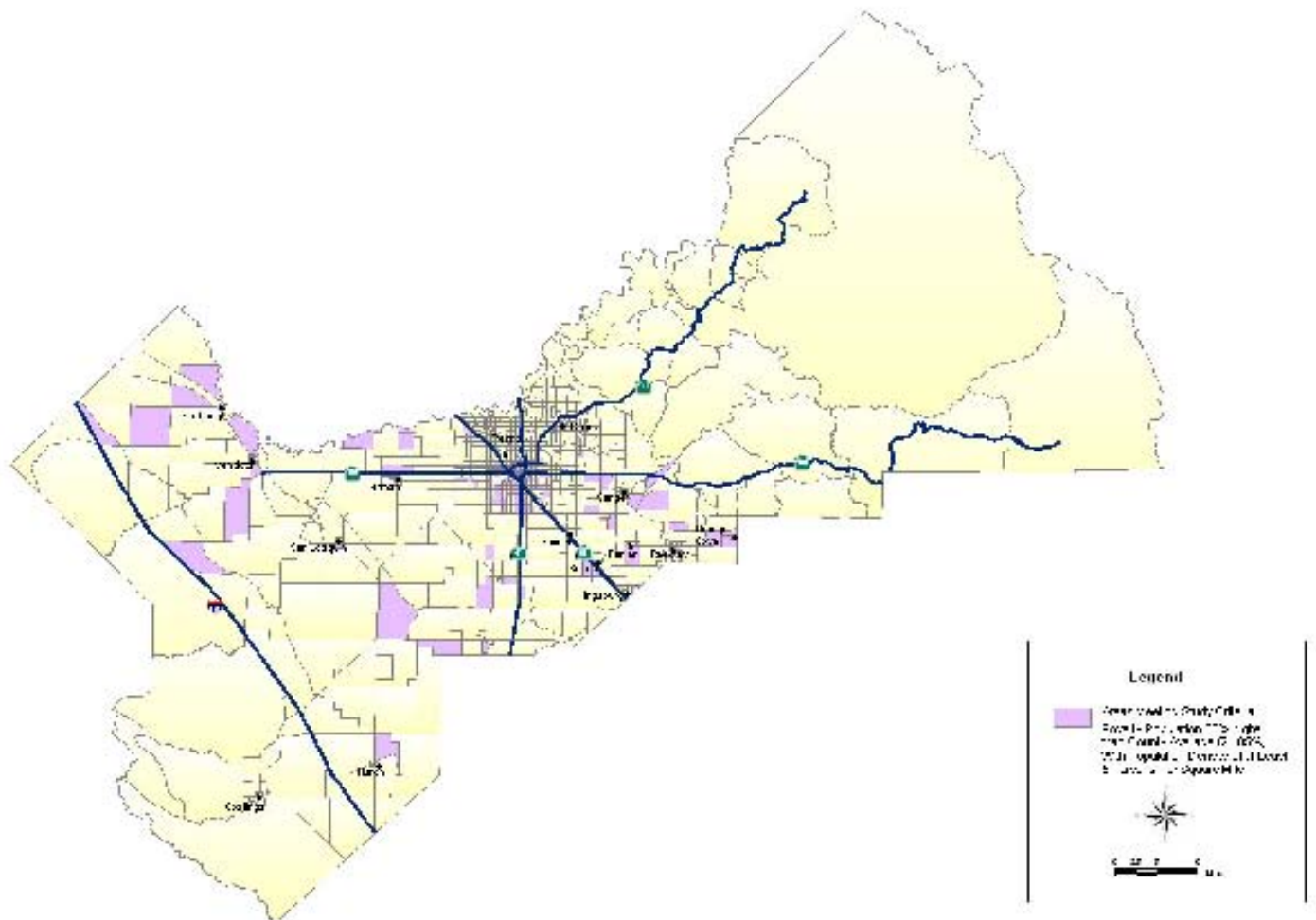
Disadvantaged populations in Fresno County suffer their share of health-related challenges. These challenges may or may not be as a result of lifestyle choices. Regardless, obesity tends to plague the disadvantaged populations in any community in disproportionate numbers. There are institutions in Fresno County that are seeking to address the health-related challenges pertaining to obesity amongst disadvantaged populations. One such organization is the Central California Regional Obesity Prevention Program (CCROPP). CCROPP is a three year initiative to reduce disparities in obesity and diabetes in the San Joaquin Valley. Fresno COG will work with CCROPP in coordinating their efforts to support healthier communities in Fresno County through transportation planning.

In recent months, Fresno COG has made inroads into the different Indian groups in Fresno County through the Kern COG Environmental Justice grant to partner with Native American populations in the San Joaquin Valley. Fresno COG will continue to participate with such programs and find ways to further establish relations with the federally recognized and unrecognized tribes in Fresno County.

Environmental Justice Maps

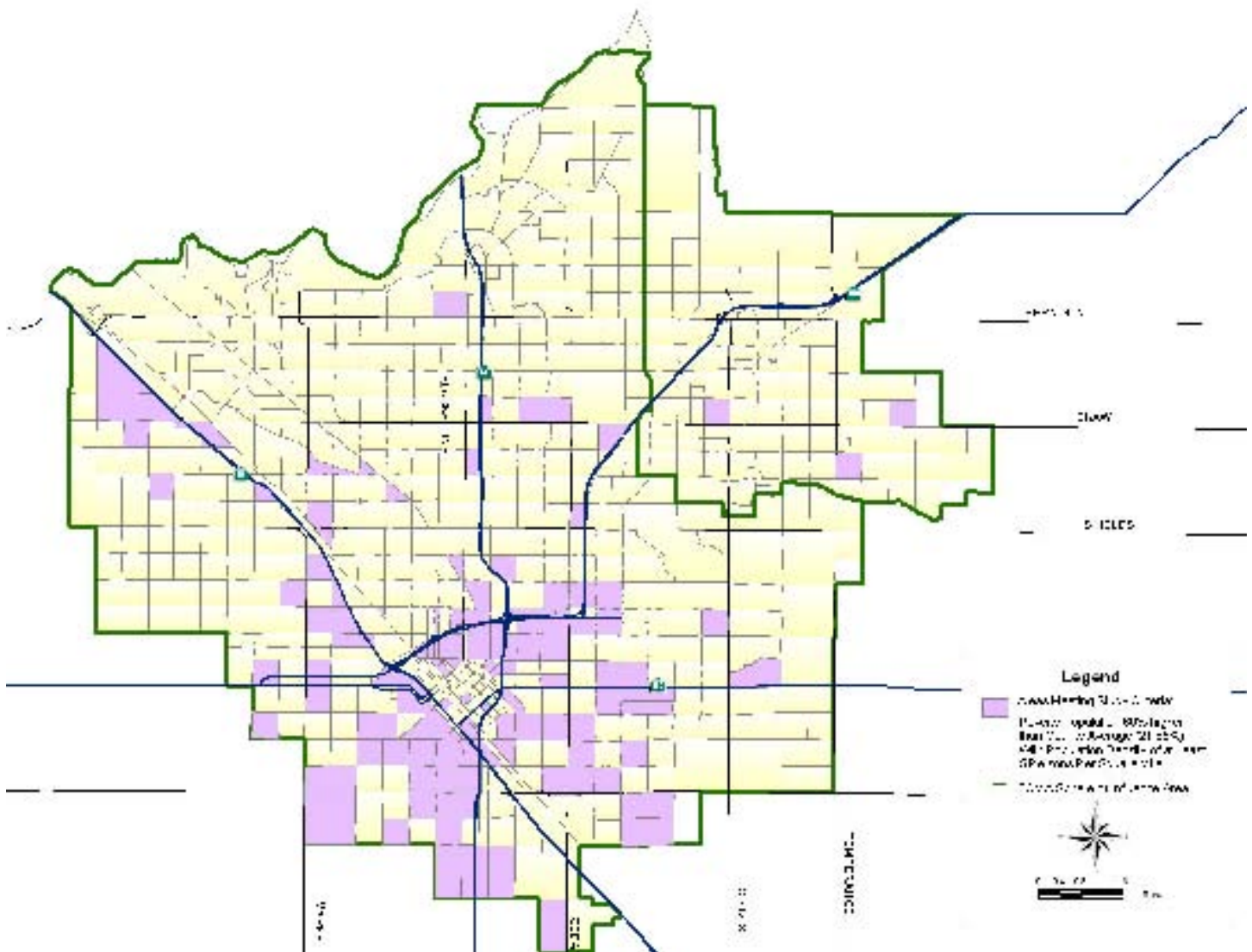
Map 1

**Fresno County Environmental Justice Population
by Traffic Analysis Zone**
Poverty Population 60% above County Average



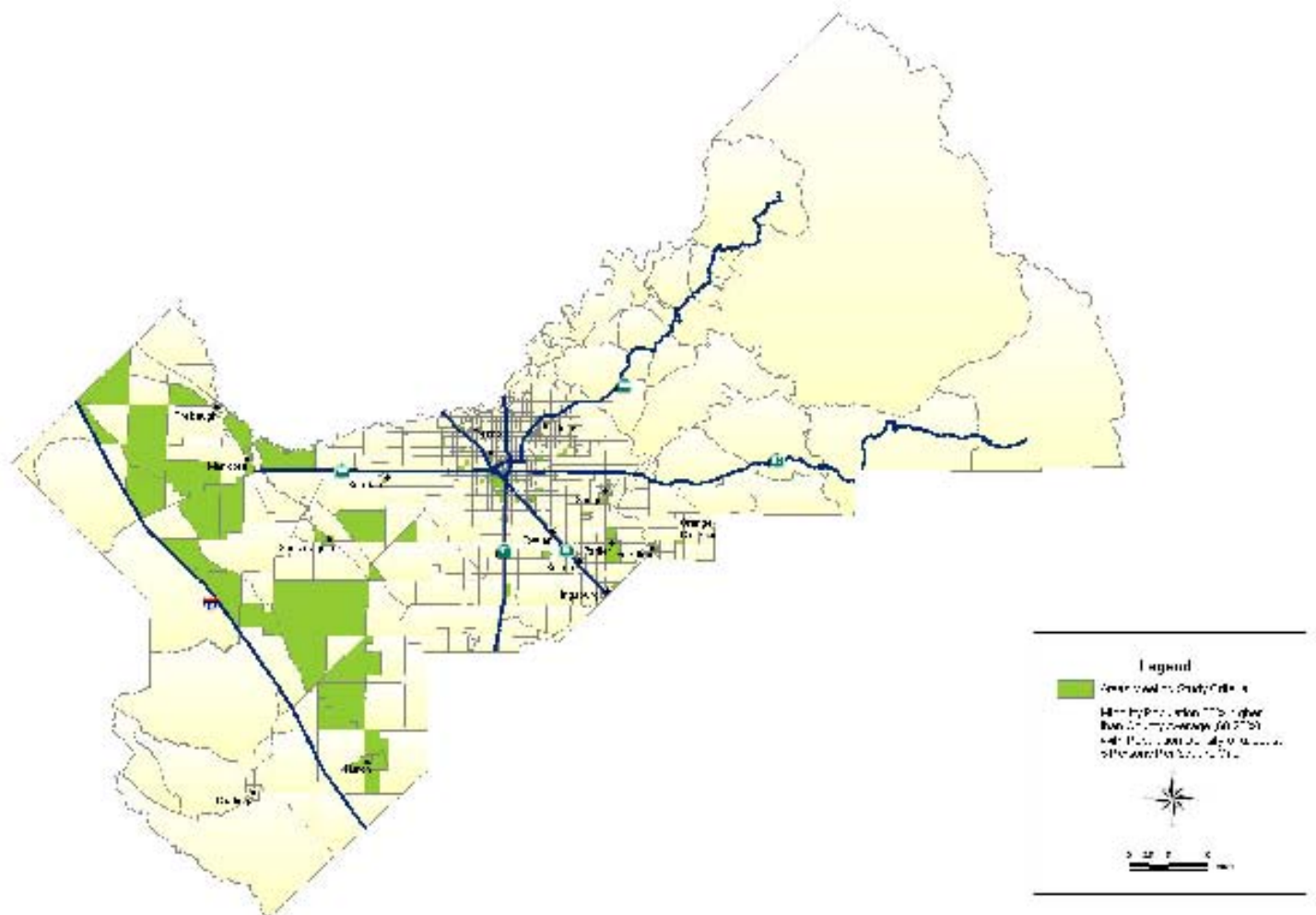
Map 2

Fresno-Clovis Metro Sphere of Influence Area
Environmental Justice Population by Traffic Analysis Zone
Poverty Population 60% above County Average



Map 3

**Fresno County Environmental Justice Population
by Traffic Analysis Zone**
Minority Population 60% above County Average

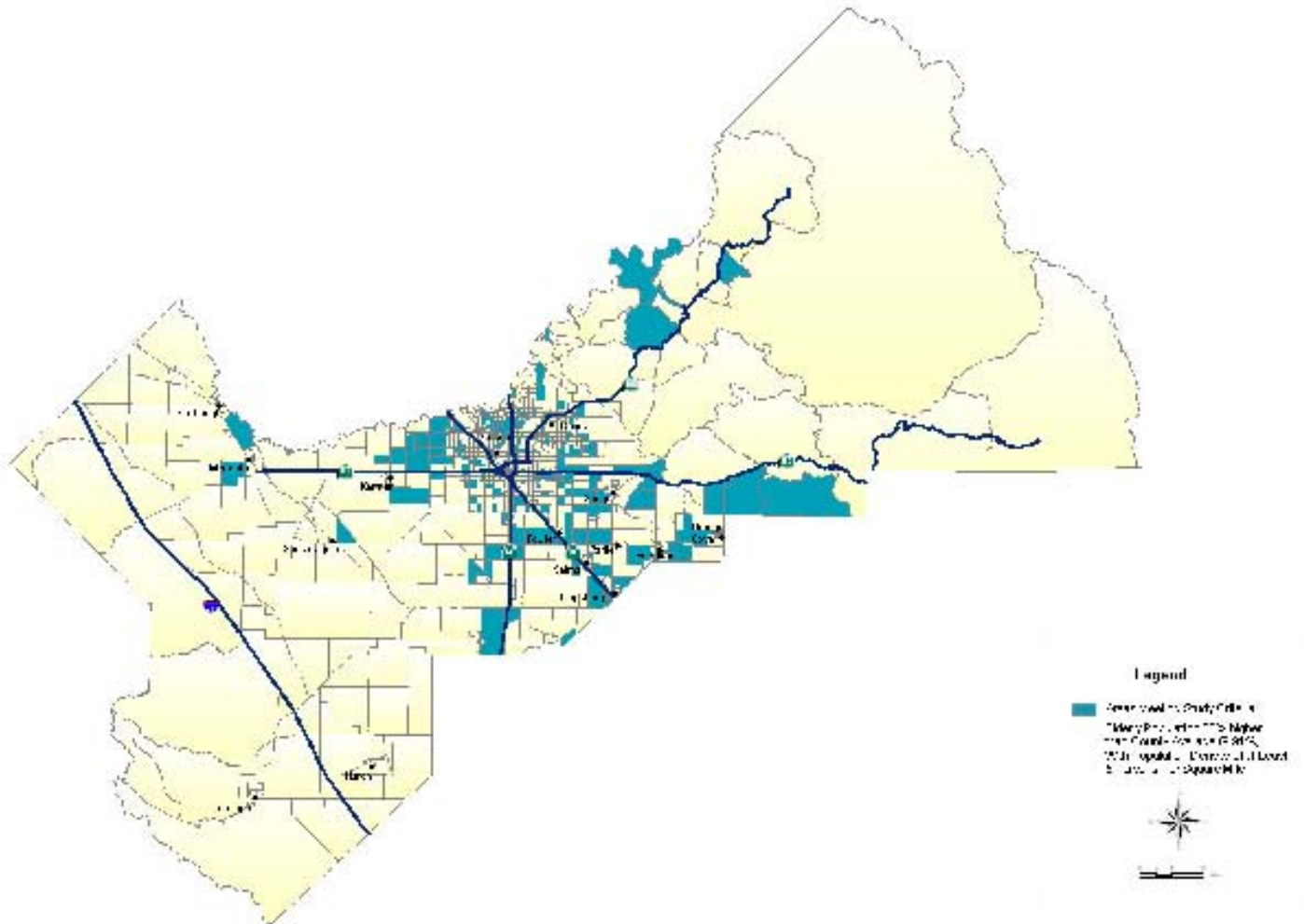


**Fresno-Clovis Metro Sphere of Influence Area
Environmental Justice Population by Traffic Analysis Zone
Minority Population 60% above County Average**



Map 5

**Fresno County Environmental Justice Population
by Traffic Analysis Zone**
Elderly Population 60% above County Average



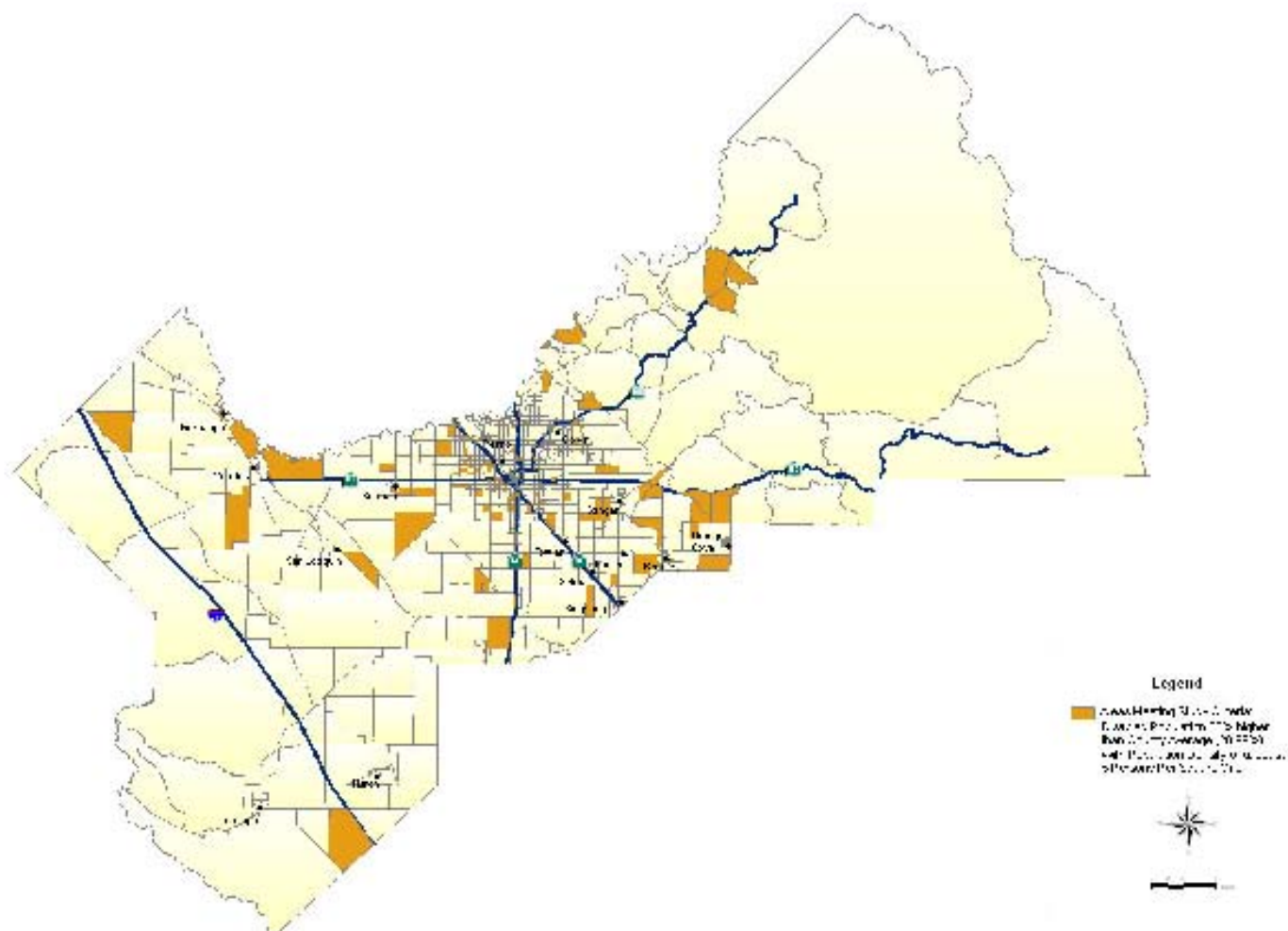
**Fresno-Clovis Metro Sphere of Influence Area
Environmental Justice Population by Traffic Analysis Zone
Elderly Population 60% above County Average**



Map 7

**Fresno County Environmental Justice Population
by Traffic Analysis Zone**

Disabled Population 60% above County Average



Fresno-Clovis Metro Sphere of Influence Area
Environmental Justice Population by Traffic Analysis Zone
Disabled Population 60% above County Average



Fresno County Environmental Justice Population by Traffic Analysis Zone



**Fresno-Clovis Metro Sphere of Influence Area
Environmental Justice Population by Traffic Analysis Zone**

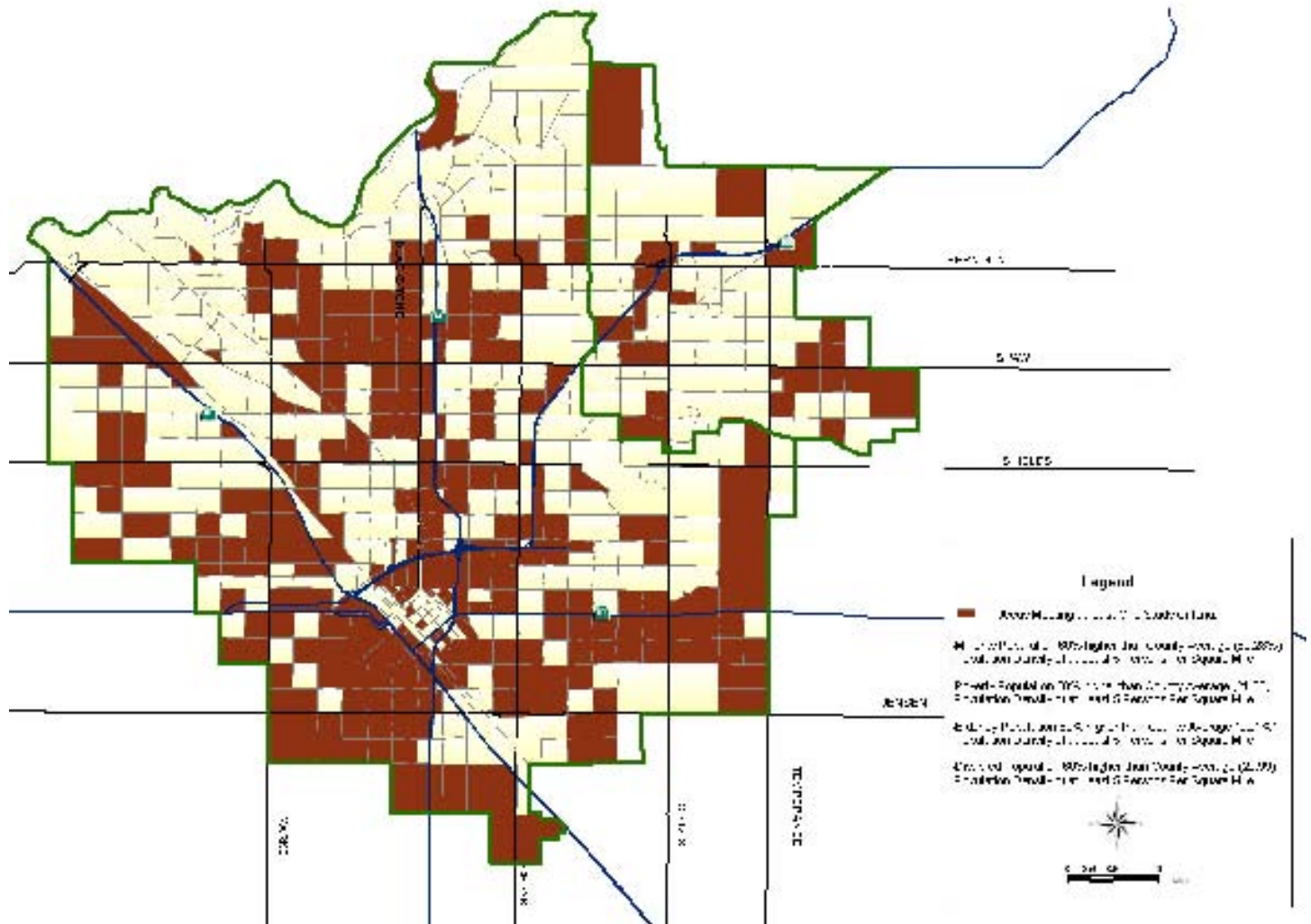


Fresno County Environmental Justice Population by Traffic Analysis Zone



Map 12

**Fresno-Clovis Metro Sphere of Influence Area
Environmental Justice Population by Traffic Analysis Zone**



Appendix A

List of agencies and resources consulted to determine the number of farm workers in Fresno County

Organizations

California Rural Legal Assistance
California Department of Transportation – CALTRANS
California Employment Department
California Employment Development Department, Labor Market Information Division
California Economic Opportunities Commission
California Institute of Rural Studies
Fresno County Department of Public Health
Fresno County Department of Children's and Family Services
Fresno County Housing Authority
Migrant Health Program, Bureau of Primary Health Care, Health Resources and Services Administration
National Farm Workers Service Center
Proteus, Inc.,
United Farm Workers
University of California, Davis, Department of Agricultural and Resource Economics
United States Census Bureau
United States Bureau of Labor Statistics
United States Department of Housing and Urban Development
United States Department of Agriculture, Rural Development Department

Literature

California State Justice Plan 2001, California Legal Services Coordinating Committee, Public Interest Clearinghouse

Counting the Uncountable, Immigrant and Migrant, Documented and Undocumented Farm Workers in California: Results From An Alternative Enumeration in a Mexican and Mexican-American Farm Worker Community in California and Ethnographic Evaluation of the Behavioral Causes of Undercount, by Victor Garcia

Department of Agricultural and Resource Economics, University of California, Davis, June 2000

Farm Employment, Immigration, and Poverty: A Vicious Circle?, Philip L. Martin and J. Edward Taylor,

Farm Workers: Their contributions to the California Economy, Phillip Martini and Mark Madamba, July 6, 2000

Appendix B

Many members and agencies were invited to participate in the environmental justice process. Please find below the list of organizations that were invited to participate in the Environmental Justice Task Force meeting process.

Environmental Justice Task Force Invitation List

Airport Land Use Commission	Big Sandy Rancheria of Mono Indians of CA
Building Industry Association	California Data Researchers
California High-Speed Rail Authority	California Air Resources Board
California Highway Patrol	California Public Utilities Commission
California Regional Water Quality Control board	CALTRANS, District 6
California Trucking Association	Central Valley Ridesharing
Calwa Recreation and Park District	City of Clovis
City of Coalinga	City of Firebaugh
City of Fowler	City of Fresno
City of Huron	City of Kerman
City of Kingsburg	City of Mendota
City of Orange Cove	City of Parlier
City of Reedley	City of Sanger
City of San Joaquin	City of Selma
Clovis Transit	Cold Springs Tribe
Consolidated Transportation Service Agency	County of Fresno COG
Economic Opportunities Commission	Federal Highway Administration
Federal Transit Administration	Five Cities Economic Development Authority
Fresno Area Citizens for Effective Transportation	Fresno County Economic Development Corporation
Fresno Area Express	Fresno County Rural Transit Agency
Fresno Area Residents for Rail Consolidation	Fresno Cycling Club
Fresno Area Workforce Investment Council	Metropolitan Flood Control District
Fresno County/City Chamber of Commerce	High Speed Rail Authority
Fresno County Community Health Department	KFSN-TV Channel 30
Fresno County Economic Opportunity Commission	KGPE- TV channel 47
Fresno County Farm Bureau	KSEE-TV Channel 24
Fresno County Transportation Authority	League of Women Voters
Fresno County Bicycle Coalition	Federation of the Blind
Fresno-Madera Area Agency on Aging	Picayune Rancheria
Fresno Work Force Investment Corporation	Table Mountain Rancheria Band of Indians
I-5 Business Development Corridor	A Recovery Center for Chemical Dependency
KFTV Channel 21	Alcoholism and Drug Abuse Council
KMPH-TV Channel 26	American Lung Association of Central CA
Latino Issues Forum	American Red Cross
Local Agency Formation Commission	Association for Retarded Citizens
North Fork Rancheria	Bella Vida Group Home
San Joaquin Valley Air Pollution Control District	Big Brothers, Big Sisters
Sierra Club	Burlington Northern Santa Fe Railroad
1000 Friends of Fresno COG	California Conservation Corps

Adult Protective Services Alzheimer's Disease and RDA American Protective Services Asian Interpreting Services Balderas Elementary School Bible Truth Ministries Boys and Girls Clubs of Fresno California Armenian Home Catholic Charities, Diocese of Fresno California Department of Rehabilitation CSUF (Several Departments) Central Community Church Central Valley Regional Center Central Valley Indian Health Center Children of Family Services Civil Air Patrol Clovis Unified School District Coalinga-Huron Recreation and Parks Community Food Bank Deaf and Hard of Hearing Service East Fresno Baptist Church Employment Development Department Evangelicals for Social Action/LOVE, Inc., Family Communications Center Firebaugh Community Health Center Fresno Air National Guard Fresno Bee Fresno County Adult Protective Services Fresno County Hispanic Commission on Alcohol Fresno county Info. & Referral Network Fresno County Office of Education Fresno Fire Department Fresno Metro Ministry Fresno Pacific University Fresno Rescue Mission Fresno West Economic Development Corporation Friendship Center for the Blind F.X. Singleton Emergency Food Governor's Office of Emergency Services Highway City Foundation Hinton Center Hmong American Women Associates Hospice of Fresno, CA Hy-Pana Convalescent Hospital Interdenominational Refugee Ministries Kingsburg Office of Emergency Services Laidlaw Transit Lao Family Community Las Casitas Village Sr. Nutrition Med Stat Medical Services Mosqueda Center, Senior Nutrition Nekkei Service Center, Senior Nutrition Older Adult Social Services Parlier Senior Services Poverello House Reedley Chamber of Commerce	California Department of Fish and Game California Detoxification Corp., Baart Clinic Cambodian Community Association Central Valley Aids Center for Independent Living Centro La Familia Children's Services Network Clovis Chamber of Commerce Coalinga Senior Center Coalition for Community Trails Comprehensive Youth Services Delano Terrace Elderly Housing Easter Seal Society of Southern California EOC Local Conservation Corps Exceptional Parents Unlimited Fowler Chamber of Commerce Frente Indigenia Oaxaqueno Binacional Fresno Association of Realtors Fresno County Adult Services Fresno County Fire Protection District Fresno County Sherriff's Office Fresno Food Bank Fresno Neighborhood Alliance Fresno Police Department Fresno Unified School District Friant Area Association Glen Agnes Center, Senior Nutrition Golden Valley Girl Scouts Habitat for Humanity Highway City Thrift Center Hmong-American Advisory Holiday Gardens Retirement Housing Authority I-5 Social Services Corporation, Inc., Kerman Senior Center Kingsburg Senior Center Lao Buddist Temple Lao Veterans of America Malaga Community Center Mennonite Disaster Services New United Way North-Central Fire Department Opportunities Plus People First Proteus Reedley Senior Services Salvation Army San Joaquin River Parkway Trust Selma Senior Center Senior Compassion Program Sierra National Forest Sierra Tribal Consortium, Turtle Lodge SPCA Ted C. Willis Center, Blind Handicapped The Senior Guidebook United Hmong Federation
---	---

Romain Center San Joaquin River Conservancy San Joaquin Senior Center Senior Citizen's Village SER-Jobs for Progress, Inc., Sierra Oaks Senior Center Southern Baptist Convention State Center Community College District Ted C. Willis Center, Senior Nutrition United Cerebral Palsy of Central CA United Way of Fresno Co. Valley Advocacy & Communications Center Victory Christian Fellowship WAVE Program Woodward Park Mobile Homeowner's Association Young Men's Christian Association	USDA Forest Service Valley Caregivers Resource Center Volunteer Bureau Winners on Wheels World Relief Refugee Services Young Women's Christian Association
List from Odyssey Community Transit Project Outreach American Lung Association Bus Riders Union Ca. State Department of Rehabilitation Center on Race, Poverty and the Environment Central Ca Legal Services Chicano Youth Center County of Fresno/Probation Education & Employment Program Economic Development Department, City of Fresno El Dorado Housing Association CSU Fresno County Green Family Fresno Area Congregations Together Fresno Area Hispanic Chamber of Commerce Fresno Barrios Unidos Fresno Center for New Americans Fresno County Department of Social Services Fresno County Transportation and Land-Use Coalition Fresno Regional Foundation Fresno West Coalition for Economic Development Goodwill Industries of San Joaquin Valley, Inc House of Hope for Youth, Inc. Khmer Society Huntington Boulevard Historical Homeowners Association Leadership Fresno Legal Aid for Seniors Lowell/Jefferson Neighborhood Association Medical Alliance for Healthy Air of Fresno Mexican American Political Association- Fresno Chapter Pinedale C.A.R.E.S. Radio Bilingue Retired and Senior Volunteer Program Rural Youth Centers Council of Fresno County SEIU Local 250 Health Care Workers Union Senior Companion Program	

Sequoia Community Health Foundation
Southeast Asian Labor Services
State of California Employment Dev. Dept.
Stone Soup

Appendix C

List of Acronyms used within the Fresno County Environmental Justice Plan.

COG – Council of Governments

CRLA – California Rural Legal Assistance

EJ – Environmental Justice

EJ TAZ – Environmental Justice Traffic Analysis Zone

DOT – Department of Transportation

FHWA – Federal Highways Administration

GIS – Geographical Information System

HUD – United States Department of Housing and Urban Development

LOS – Level of Service

MPO – Metropolitan Planning Organization

NEPA – National Environmental Policy Act of 1969

PMT – Passenger Miles Travelled

RTP – Regional Transportation Plan

SAFETEA-LU – Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users

SOI – Sphere of Influence

TAZ – Traffic Analysis Zone

VMT – Vehicle Miles Travelled

Appendix D

Comments received during public review of the Fresno County Environmental Justice Plan. Our response to comments received are noted in italics

- The Caltrans Desk Guide on Environmental Justice In Transportation Planning and Investments dated January 2003 should be referenced. The document can be accessed at the website:

http://www.dot.calgov/hq/tpp/offices/opar/ejandtitlevi_files/EJDeskGuidejan03.pdf

Comment noted with reference to the above document made in the body of the Fresno County Environmental Justice Plan.

- The Draft EJ Plan needs to define the role of the EJ Task Force. One of the responsibilities should be to define and prioritize issues of concern. The Task Force should also provide guidance and direction to Fresno COG as to how to address these issues of concern such as helping to define the EJ Task Force's role in the Blueprint Planning process.

Comment noted with suggestion added to the Fresno County Environmental Justice Plan.

- Page 9, Populations concentrations: The last sentence in the section on Non-white: should read, "The criteria for the EJ Plan was TAZs with a percentage of minority or 'non-white' population 60% higher than the county percentage, specifically African-Americans, Latinos, Asians and Southeast Asians, Pacific Islanders and Native Americans"

Comment noted with suggestion added to the Fresno County Environmental Justice Plan.

- Page 10, Migrant Farm Workers: The term 'migrant' should be deleted from this section to refer to farmworkers on a general and broader scope rather than to limit discussion to only "migrant farmworkers."

Comment noted with suggestion incorporated into the Fresno County Environmental Justice Plan.

- Page 10, Migrant Farm Workers, Third Paragraph: This paragraph discusses the conclusion by the E.J. Task Force that classifying farmworkers as a fifth 'disadvantaged population' was not feasible. It should be clear that Fresno COG made the decision and not the E. J. Task Force. This paragraph should be revised since the E. J. Task Force was not in agreement with this decision.

The Caltrans Environmental Justice Grant should be considered for a study to address the lack of accurate data on farmworkers within Fresno County.

Comment noted with suggestion incorporated into the Fresno County Environmental Justice Task Force. Fresno COG staff spent several months looking for a suitable way to create migrant farm worker data in TAZ format. Along the same lines, Fresno COG way sought to define a way to integrate assembled migrant farm worker TAZ data into the TAZ data provided by the U.S. Census Bureau for minority, low-income, elderly, and disabled disadvantaged populations within Fresno County. After extensive review, it was determined by Fresno COG staff that assembled data could not be integrated with calculated data provided by the U.S Census Bureau without greatly sacrificing the integrity of the study/plan. This is of course assuming that data could even be assembled for migrant farm workers by TAZ.

- Page 10, Migrant Farm Workers, Last Paragraph: The total amount for farm worker transportation funded by Measure C is approximately \$500,000 per year rather than \$1,000,000. Half of the yearly funds go to commuter vanpools.

Comment noted with correction already having been made to the Fresno County Environmental Justice Plan.

- The U. S. Department of Housing & Urban Development (HUD), Policy Link and California Rural Legal Assistance (CRLA) have been conducting work related to "colonias" within unincorporated communities throughout the San Joaquin Valley. The efforts have been about addressing Environmental Justice issues, specifically the lack of infrastructure investments, within these communities. One of the documents put together by Policy Link and CRLA is "Unincorporated Communities in the San Joaquin Valley: A Convening of Resident Leaders, Researchers, Legal Advocates, Community Organizations, Philanthropy, and Local Government Representatives," (April 2008) which serves as a summary of the first colonias meeting on November 2007. There is also another document that was prepared before the November 7, 2007, event. The work to develop the E. J. Plan should review this work and discussions should be made with Policy Link and CRLA before finalizing the report.

Comment noted. Fresno COG staff will look into this suggestion prior to finalizing the Fresno County Environmental Justice Plan.

- The question of affordable or obtainable transportation is an issue that has come up in the efforts of the Governor's Partnership for the San Joaquin Valley, the San Joaquin Valley Regional Blueprint and previous discussions of the Fresno COG Environmental Justice Task Force. The Environmental Justice Plan needs to address the question of affordable and obtainable transportation.

Comment noted. Fresno COG staff will look into this suggestion prior to finalizing the Fresno County Environmental Justice Plan.

- The EJ Plan needs a section on recommendations. This section could include recommendations such as the following:

The Environmental Justice Task Force needs to meet on periodic basis as a way for Fresno COG to consistently have input about issues of importance to the EJ communities. A recommendation could be for the EJ Task Force to meet on a quarterly basis to seek input and offer solutions.

Fresno COG needs to provide accurate data on farmworkers living in Fresno County. The Caltrans EJ Grants should be considered as a way to fund a study to address the lack of accurate data.

Comments noted with a section created called “Recommendations” to the Fresno County Environmental Justice Plan.

Section 1: Introduction and Background, Introduction, Page 3

- It is stated that Fresno COG “took significant steps to publicize its efforts and involve the public. “Please explain further on what steps and efforts were made to involve the community. Who is community defined as in this case?

Comments noted with further explanation provided within the Fresno County Environmental Justice Plan.

- Who makes up the Fresno COG Environmental Justice Task Force? A general overview of these participants is presented, but there is no clear identification of who these representatives are. How did Fresno COG choose these representatives? And do these representatives reflect their respective communities’ race, gender, and socio-economic demographics

Comment noted. Additional information was added to the Fresno County Environmental Justice Plan that sought to address these questions.

Section 1: Introduction and Background, Environmental Justice Background, Page 5

- Three different ways to promote environmental justice should be assessed and integrated in to all transportation projects. All three “ways” should be considered and not just one or two when confronted with plans for a new project. Each project should be analyzed with the scope of (1) Who will benefit from the project? (2) Who bears the burden of this project? And (3) Who will pay for the project?

Comment noted.

Section 2: Public Involvement Procedures, Fresno COG Public Involvement Procedures, Page 6/Paragraph 1

- Another possible outreach mechanism could be an Environmental Justice Carnival/Event for community members to engage with local officials and gain education on environmental justice issues affecting their area.

Comment noted with your suggestion passed on to Fresno COG staff responsible for the Public Involvement Procedures.

- Availability of translators/interpreters for non English speakers and appropriate assistance for disabled individuals should be emphasized in outreach material and presentations. Research and include an appropriate logo for handicapped and language accessibility.

Comment noted. The following message is located at the top of every agenda that goes out of the Fresno COG.

***“Americans with Disabilities Act (ADA) Accommodations.** The Fresno COG offices and restrooms are ADA accessible. Representatives or individuals with disabilities should contact Fresno COG at (559) 233-4148, at least three days in advance, to request auxiliary aids and/or translation services necessary to participate in the public meeting / public hearing. If Fresno COG is unable to accommodate an auxiliary aid or translation request for a public hearing, after receiving proper notice, the hearing will be continued on a specified date when accommodations are available.”*

- Public meetings should be open to community dialogue to ensure community concerns are effectively voiced.

Comment noted. All three committee meetings overseeing Fresno COG opens with an item called Public Presentations. This item gives persons wishing to address the respective committee the opportunity to address them on an item within the committee’s jurisdiction that is not on the agenda. Persons are given three minutes in which to address the respective committee.

In other meetings associated with the Fresno COG, persons are given the opportunity to comment or provide feedback on the matter being addressed. This normally takes place at the end of the meeting in question and can be called several things including ‘participant feedback’, ‘open session’ and so on.

Section 2: Public Involvement Procedures, Fresno COG Public Involvement Procedures, Page 6/Paragraph 3

- Outreach materials to federally recognized tribal communities should be culturally sensitive/applicable not only verbally/physically accessible.

Comment noted. Fresno COG staff needs to look into how, if possible this suggestion can be implemented.

Section 2: Public Involvement Procedures, Fresno COG Public Involvement Procedures, Page 7

- Add reference to Appendix C

Section 3: Fresno COG Environmental Justice Process, Page 9

- Definitions and Criteria of the ‘disadvantaged populations’.

Comment noted. Definition added to the Fresno County Environmental Justice Plan.

- Low income: Are you referring the federal poverty rate? If so, please clarify?

Comment noted. Federal poverty rates are used in the calculation of low-income TAZs in Fresno County.

Section 3: Migrant Farm Workers, Page 10/Paragraph 3

- “The main reason being TAZ data for migrant farm workers is not available and would need to be manufactured.” It would be good to continuously revisit and identify current researchers that have relevant data, i.e., UC Davis’ Community Development and Regional Change Institute.

Comment noted. Should Fresno COG staff revisit enumerations studies and methodologies to manufacture TAZ data for migrant farm workers, funding sources may need to be addressed in order to pay for such activities if there are costs involved.

Section 5: Modeling Results, Page 19/Paragraph 3

- Define Sphere of Influence. It would be helpful to add an appendix with acronyms used.

Comment noted. Appendix with acronyms added.

- Are we taking into consideration travel time for EJ TAZ communities to and from home, universities, clinics/hospitals, social services, parks, and shopping centers?

The transportation model only calculates trips between home and places of employment. If a household in the model works at a university, hospital, social services agency, park, or shopping zone, travel times to these different institutions are considered within the model. Travel time or trips for anything other than work related purposes are not considered.

Section 5: Modeling Results, Page 20 – Definition of Equity

- It was difficult to comprehend the definition of equity. Please acknowledge your source/s for the definition of “equity”.

Overall Recommendations

- Please work to reconvene the EJ Task Force as soon as possible.
- Due to the fact that it has been a long while since we have discussed these issues, it would be helpful to have a briefing/recap on this valuable information. Also, it would benefit the community to have a public presentation of this information when we initiate the EJ Task Force meeting.
- The Environmental Justice Task Force needs to meet periodically to keep Fresno COG informed regarding transportation planning issues of importance to EJ communities

- Fresno COG should work to develop accurate data on Farmworkers as it relates to transportation planning within Fresno County.
- Fresno COG should work to develop partnerships with California Rural Legal Assistance and Policy Link as the Strategies Plan is developed for ‘colonias’ within the unincorporated communities of Fresno County.
- Fresno COG should address the question of affordable and obtainable transportation process within the Fresno COG transportation process.

Fresno COG should work with the Central California Regional Obesity Prevention Program (CCROPP) in coordinating their efforts to support healthier communities in Fresno County through transportation planning.