

# Guidance on Environmental Justice for Toll Roads

Environmental Affairs Division  
Texas Department of Transportation  
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# Guidance on the Environmental Justice/Title VI Considerations for Toll Roads

## Introduction

This guidance is provided to assist in determining the potential environmental justice (EJ)/Title VI impacts in the development of toll projects in Texas.

In addition to projects undertaken by TxDOT, other entities such as Regional Mobility Authorities (RMAs), private developers, Counties, and Regional Toll Authorities, may also be involved in the development of toll projects. The rules governing these projects can be found in 43 TAC chapters 26 and 27. This guidance will focus on TxDOT toll projects.

The following consists of general guidance for district environmental staff and consultants responsible for satisfying the requirements of Executive Order 12898 concerning environmental justice, Title VI of the 1964 Act; Civil Rights Restoration Act of 1987 and 23 USC 109 (h). For project-specific environmental justice (EJ) issues consult with the Environmental Affairs Division (ENV).

At the start of the planning process, planners must determine whether Environmental Justice issues exist and use data and other information to: (1) determine benefits to and potential negative impacts on minority populations and low-income populations from proposed investments or actions; (2) quantify expected effects (total, positive and negative) and disproportionately high and adverse

effects on minority populations and low-income populations; and (3) determine the appropriate course of action, whether avoidance, minimization, or mitigation. If issues are not addressed at the planning stage, they may arise during project development, or later when they could be more difficult to mitigate and may delay the project.

Environmental Justice is an important part of the planning process and must be considered in all phases of planning. This includes all public-involvement plans and activities, the development of Regional Transportation Plans (RTP's), Transportation Improvement Programs (TIP's), Statewide Transportation Improvement Programs (STIP's), and work programs (such as the Unified Planning Work Programs (UPWP's). A truly integrated and effective planning process actively considers and promotes environmental justice within projects and groups of projects, across the total plan, and in policy decisions.

([WWW.FHWA.DOT.GOV/EJ](http://WWW.FHWA.DOT.GOV/EJ))

## Applicable Guidance:

Executive Order 12898

1964 Civil Rights Act – Title VI

Civil Rights Restoration Act of 1987

FHWA Technical Advisory 6640.8A

FHWA Technical Advisory 6640.23

23 USC 109 (h)

CEQ, 40 CFR 1508.27 (B) (4)

CEQ Guidance on Environmental Justice  
(12/10/97)

CEQ Guidance for Considering  
Cumulative Effects under NEPA  
(January 1997)

## Definitions

**Executive Order 12898 (1994) on Environmental Justice:** Directs that programs, policies, and activities not have a disproportionately high and adverse human health and environmental effect on minority and low-income populations.

**Title VI of the 1964 Civil Rights Act and 1987 Civil Rights Restoration Act:** Assures that individuals are not excluded from participation in, or denied the benefit of, or subjected to discrimination on the basis of Race, Color, National Origin, Age, Sex, Disability or Religion.

**Community Impact Assessment (23 USC 109 (h)):** A process to evaluate the effects of a transportation action on a community and its quality of life. The assessment should include all items of importance to people, such as mobility, safety, employment effects, relocation, isolation, and other community issues.

**Electronic Toll Collection (ETC):** Account information on an electronic tag installed in your car and read by a receiving antenna at the toll plaza or on a toll gantry. Toll is deducted from drivers' prepaid account or drivers are sent a bill.

**HOT lanes.** "HOT" is the acronym for "High Occupancy Toll lanes." On HOT lanes, low occupancy vehicles are charged a toll, while High-Occupancy

Vehicles (HOVs) are allowed to use the lanes free or at a discounted toll rate. HOT lanes create an additional category of eligibility for people wanting to use HOV lanes. People can either meet the minimum vehicle passenger requirement, or they can choose to pay a toll to gain access to the HOV lane. The toll can vary by time of day or level of congestion.

**Managed lanes** are a term used to refer to a facility that increases freeway efficiency by packaging various operational and design actions. Lane management operations may be adjusted at any time to maximize person moving capacity, optimize vehicle carrying capacity, provide travel options and increase flexibility, and achieve community and corridor goals.

**Variable tolls** (also known as dynamic tolls, value pricing, or congestion pricing): Tolls may vary by day of week, time of day, or level of congestion, to encourage travelers to use the roadway during less congested periods, to shift to another mode of transportation, or to change routes. With fewer people and vehicles traveling during congested periods, the remaining peak period travelers will have fewer delays. To be eligible for the variable toll programs, vehicles must use electronic toll collection.

## **Toll Road Scenarios**

This guidance discusses the following scenarios:

### **I. System Level Analysis**

### **II. Project Level Analysis**

- 1. Toll road on New Location**
- 2. Added capacity projects**
- 3. Toll Conversion**
- 4. Managed Lanes**

Potential issues that could apply to multiple scenarios:

- Are non-toll facilities available?
- Are there adequate north/south and east/west corridors to serve as alternate routes?
- Is the non-toll alternative equitable in terms of travel time or distance?
- How will tolling affect transit?
- How much will the toll be?
- Will it be 100% Electronic tolling? If yes, what will the financial burden of enrolling be in addition to the actual toll? (Credit card, minimum balance, automatic recharge, monthly service fee, etc).
- If not ETC, where are the toll booths in relation to identified low income and minority areas.
- Will there be a no-pay or discount option for low-income drivers?
- What are the income levels of users?
- Diversion of traffic through neighborhoods
- Increased air quality/noise issues in neighborhoods
- Access to businesses
- Impact to businesses

- Denial of benefits or disproportionate impacts to low-income drivers

### **I. System Level Analysis**

Metropolitan Planning Organizations (MPO's) are responsible for coordination and implementation of transportation planning efforts for their MPO boundary which includes updating a 20-year area wide transportation plan; conducting regional travel surveys; and programming all Federal transportation funds for the area. This may include approving a system of toll roads in a metropolitan area. Where the local plan is changed or approved to include an interconnected network of toll roads, the EJ/Title VI impacts need to be analyzed not only for the individual toll facilities, but also cumulatively for the entire system. Origin and destination (OD) studies used in conjunction with census data, MPO travel demand models and 2000 Census data available in the software program titled Census Transportation Planning Package (CTPP) are possible analysis tools that may be used to in this analysis. These tools should be available as the Department has sponsored O-D studies in all the MPOs over the last decade, performs the travel demand modeling for most of the MPOs and has purchased the CTPP for use by the department and MPO.

Development of toll road systems by TxDOT, Counties, toll authorities or RMA's may also occur outside of the MPO boundaries. The analysis of these systems,

as with the MPO's system, needs to consider potential environmental justice and Title VI issues. The following are examples of information that may be used in the evaluation:

- potential users of the toll facility,
- income level of users
- alternative routes
- distance and travel time associated with alternative routes

Figure 1 represents a mature local transportation network. When a single toll facility or a system of toll roads are placed within this system, the potential for disproportionate user impacts appear to be less than those for Figure 2 due to the multiple alternative routes for those unable or unwilling to pay the toll.

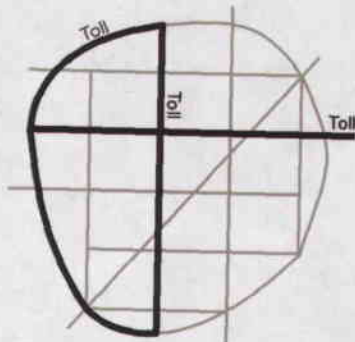


Figure 1

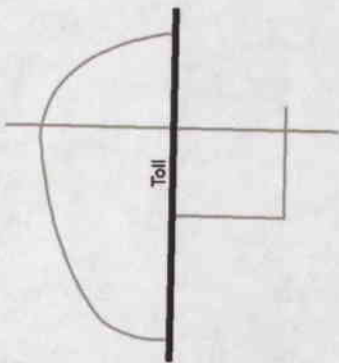


Figure 2

Figure 2 represents a less developed transportation network. The non-toll

alternatives available for those who are unable to pay are limited. The users who are able to pay will not bear as much of the toll burden as the low-income population. Potential issues to evaluate are;

- Are there adequate north/south and east/west corridors?
- Do low-income users have to travel a greater distance by using the free alternative?
- Is the increased travel time substantially greater?
- Is the available funding for transportation projects being distributed equally between toll and non-toll facilities

These questions may assist in determining the potential for disproportionate impacts (EJ) or denial of benefits (Title VI).

For a system level analysis, the public involvement phase will need to consider information obtained from the origin and destination studies, CTPP software, etc, to develop strategies for identifying communities that would not normally be considered part of a project's affected area. Again, this analysis is concerned with the regional user impacts, not project specific impacts.

## II. Project Level Analysis

While the build impacts of any facility (toll and non-toll) may impact EJ communities directly, tolling may impact low income and minority individuals as user impacts. Populations which are identified under Executive Order 12898, Title VI and 23 USC 109(h) need to be addressed in the environmental document and the possible mitigation options discussed (reduced or free tolls, bus passes, etc) for low-income/EJ

communities or users who could be seen as being disproportionately impacted or denied the benefit of this facility. The community impact assessment phase of the NEPA analysis, covered by 23 USC 109(h), should be completed as with a non-tolled facility, taking into account the potential impacts due to tolling. Issues evaluated at a system level are also appropriate at the project level. Data collection and extensive public involvement will need to be an integral part of the analysis. Using tolling as a funding source to provide accelerated project delivery may provide benefits such as congestion relief on non-toll facilities in adjacent EJ communities and on local arterials sooner than through traditional funding methods. This issue should be discussed.

### **1. Development of a toll road project on new location**

This scenario should follow the same evaluation and analysis for EJ and Community Impact Assessment as a non-toll facility, but with the added analysis of tolling impacts on potential users of the facility. Potential EJ communities within the area/region the facility anticipates serving should be identified. Origin/destination studies and the CTPP can help to identify low income and minority users who may reside in other parts of town but will need to use the facility to travel to and from work or other necessary locations. Please refer to the list of potential toll issues on page 3.

### **2. Added Capacity Projects**

There could be numerous combinations of toll and non-toll lanes as part of these facility improvements.

- Constructing main lanes for tolling in the center median and the existing main lanes and frontage roads continuing as non-toll;

- Re-striping to create additional lanes that could be tolled
- The existing lanes converted to non-toll frontage roads and constructing main lanes for tolling in the center median.

In these scenario's, a probable benefit is that some of the traffic currently using the non-toll lanes will choose to use the center toll lanes, possibility freeing up capacity on the non-tolled lanes. However, as traffic demand increases, the non-toll lanes and/or frontage roads may exceed capacity. In this situation, are the EJ communities, business districts or users of the non-toll facility being disproportionately impacted by the toll facility?

Impacts on businesses as a result of access changes and issues such as altered bus routes/stops, traffic diversion through neighborhoods, and increased traffic on frontage roads as a result of tolling need to be addressed. Please refer to the list of potential toll issues on page 3.

### **3. Conversion of an existing highway under traffic**

The potential EJ, Title VI and community impacts for this scenario have the potential to be more complex and controversial than the previous scenarios. For example, constructing frontage roads as the non-toll alternative and tolling the existing lanes, traffic not choosing or able to pay the tolls will be diverted onto the frontage roads and neighborhoods. This increased congestion could affect business access and create safety and congestion issues for local neighborhoods. In addition, traffic control devices and longer commutes could be

considered a disproportionate impact or denial of benefits.

The data collection and public involvement effort will need to determine current user origin and destination information as a basis for the subsequent EJ/Title VI analysis. In addition, CEQ Regulation 40 CFR 1508.27 (B) (4) which addresses "significance" may need to be reviewed if the project is highly controversial. Please refer to the list of potential toll issues on page 3.

#### **4. Managed Lanes**

Managed lanes can be operated to ensure a pre-determined LOS. Access/LOS is managed throughout the day by changing the required occupancy of HOV's, or raising or lowering the toll. Issues such as public transportation having to pay tolls or being excluded from toll lanes to increase LOS could be examples of a potential disproportionate impact on low-income populations. Variable toll operations which increase the toll during rush hour commutes or require the use of electronic toll tags and pre-established accounts may also be perceived as inequitable treatment by the low-income population. The exact type of managed lane under consideration, the potential impacts, and possible mitigation measures will need to be considered on a project by project basis. The potential impacts and any proposed mitigation measures should be disclosed and discussed in the environmental document. MPO's should be contacted to identify, fund and implement mitigation where appropriate.

Please refer to the list of potential toll issues on page 3.

Mitigation options include but are not limited to;

#### **Project level**

- Increased public transit (headways, routes, fare subsidies)
- Increased ridesharing efforts
- Transportation System Management (signal timing, left /right turn bays, bus bays, etc.)
- Subsidies for use of toll lanes based on economic criteria
- Traffic calming techniques to keep diverted traffic out of neighborhoods
- Funding of alternative transportation infrastructure (rail, pedestrian, bicycle)

#### **System Level**

- Increased public transit (headways, routes, fare subsidies)
- Increased efforts to promote ridesharing, vanpooling
- Subsidies for use of toll lanes based on economic criteria
- Funding of non-toll projects within the current plans which will decrease travel time/distance etc. (added capacity without toll)
- Funding of alternative transportation infrastructure (rail, pedestrian, bicycle)

#### **Toll System Policies**

The evaluation of potential EJ/Title VI impacts of a toll system or individual projects should also include the toll policies for that particular system. For example, policies that require public transportation companies, including their special needs/mobility challenged customers, to pay tolls may be seen as disproportionately impacting the populations who depend on these services. If disproportionate impacts or a possible denial of benefits are identified, a mitigation plan should be included in your environmental document describing the impacts, and the process for effected individuals/communities to access the mitigation measures.

Evaluation and analysis of potential EJ/Title VI issues during the development of toll systems or individual projects may require various research methods, public involvement and numerous data sets. The information presented in this guidance is a sample of possible scenarios and potential issues. Users should continue to review latest sources and contact ENV for project specific issues.