

COMMUNITY IMPACT ASSESSMENT

CALTRANS
ENVIRONMENTAL HANDBOOK VOLUME 4

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PREPARED BY:

CALTRANS
ENVIRONMENTAL PROGRAM
CULTURAL STUDIES OFFICE
P.O. Box 942874, M.S. 27
Sacramento, CA 94274-0001

(916) 653-0647

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CHAPTER 1

INTRODUCTION

1.1 Content of the Volume

In meeting its responsibilities, the Caltrans Environmental Program is developing an Environmental Handbook series to assist all units within the Department to better understand our responsibility to ensure that state transportation projects are planned and developed to be consistent with the charge to be a good steward of California's resources. To assist in this objective, these volumes will provide a compendium of the most vital laws, regulations, guidelines, practices, procedures and processes that must be addressed as part of the project development and planning processes. The volumes provide guidance only. They are not a substitute for legal requirements and do not impose requirements different from or in addition to those imposed by law. These volumes are intended also to provide guidance to our local agency partners and to environmental and engineering consultants where interaction with Caltrans and the Federal Highway Administration (FHWA) is necessary in developing transportation projects.

Volume 4 of the Caltrans Environmental Handbook series focuses on community impact assessment as part of the overall project development process. It describes the methodological approaches and the variety of sources available for obtaining the information needed for the assessment process. A quick look at the Table of Contents will familiarize the reader with the arrangement of the volume. Volume 4 is organized into four main chapters and seven appendices. The first chapter introduces the policies, procedures, laws and regulations related to community impact analysis. The second chapter focuses on how the environmental planner should prepare for conducting the community impact analysis, including delineating the affected social and economic environment. The third chapter provides information on how to describe the affected environment as it relates to communities and neighborhoods and includes

sidebar boxes highlighting common data sources for the various issue areas. The fourth chapter explains how to analyze community impacts once the data has been collected and presents the appropriate technique(s) for assessing each impact. The fourth chapter also includes examples of mitigation measures designed to avoid or help offset project-related impacts. There are also a number of appendices providing supplementary material on such topics as farmland, relocation policies and public involvement.

We have attempted to write this volume of the Environmental Handbook, as much as possible, in a non-technical fashion. Most of the data collection and analysis can be carried out by persons without specialized training, although prior experience and an educational background in geography, social ecology, economics, sociology, or regional planning, to name a few of the disciplines, may be very helpful, particularly in complex situations.

1-1.1 What is Community Impact Assessment?

The term "community" encompasses a whole range of definitions, as will be described later in this volume. Listed below are some of the basic topics or subjects addressed in community impact analysis or assessment studies prepared as background technical reports for Environmental Documents:

Social Impacts:

- Relocation of Housing
- Population Characteristics
- Community Institutions
- Community Stability and Cohesion

Economic Impacts:

- Change in Employment
- Income Gains or Loss
- Tax Base Changes

Land Use and Growth

- Consistency of Projects with Local Plans
- Shift in Location Where Growth Will Occur

- Development Opportunities Enhanced

Public Services Impacts:

- Schools and Health Systems
- Police and Fire Protection
- Accessibility and Parking
- Utilities

As one can see from the above lists, community impact assessment considers how the proposed project activity will affect the people, institutions, neighborhoods, communities, organizations, and larger social and economic systems. These are sometimes collectively called socioeconomic impacts, but this is generally less regarded now as a term by FHWA's Headquarters Office of Environment and Planning, and as such, is also being substituted here by Caltrans, although the two terms are interchangeable. Many of these impacts mentioned in the above lists, of course, are not mutually exclusive. A transportation related "social" effect on the local population caused by displacement may also have an effect on the local economy, and vice-versa. For example, a project that would result in displacing a large number of residents would have more than just social effects. There are fiscal impacts because properties are removed from the local tax roll. There are also economic effects because consumers and employees in the local labor market are at the same time displaced. To give one final example, clearly a loss in parking spaces would be not just a public service impact, but likely an economic one as well.

The social and economic sections of an environmental document prepared for Caltrans should focus on important topics identified through a scoping process and a thorough public involvement effort. The environmental document sections (or the technical report backing them up) should be specifically tailored to the project. A good community impact analysis should clearly describe the relevant existing conditions, the potential impacts of the project on the community and its neighborhoods, the significance of the identified impacts, and potential solutions (or mitigation) to best avoid the adverse impacts resulting from the project.

It is important to keep in mind for many proposed transportation projects it will not be necessary to analyze each and every issue described in this volume. For example, a project to upgrade an existing highway facility in a heavily urbanized region may not be expected to contribute in any measurable way to overall growth in the community. In such a case, the project's growth impact on the capacity of public services and facilities in the community probably need not be considered in depth unless other circumstances suggest it. Similarly, consideration of neighborhood effects is not relevant for many projects situated in rural areas, though farmland issues may indeed be prominent.

Generally, community impacts are associated with the larger and more complex projects. For example, it is highly unlikely that a project involving a roadway curve correction, or an interchange improvement, or a median widening would necessitate the preparation of a specialized community impact assessment study.

In addition, even when there appears to be an outstanding community issue in need of further exploration, bear in mind that the analytical techniques sections found in this volume in many instances provide a high degree of detail. **Usually it will not be necessary to analyze every impact as rigorously as outlined in this volume.**

While no two community impact assessment reports will be exactly the same, because of differences in project characteristics and local issues, a standard methodology or use of a checklist is nevertheless useful to ensure that a complete analysis is undertaken for each project. The information presented here is designed to help the technical background study, or more commonly, specific environmental document section, focus on the appropriate issues, methodology, and data sources necessary to assess community impacts.

1-1.2 Purpose of Volume 4

The purpose of this volume is to set forth study procedures for gathering information and assessing impacts related to proposed transportation improvements on communities and neighborhoods. It is designed to provide guidelines to assist Caltrans environmental personnel, their consultants, and other transportation partners in completing community impact assessment documentation and to provide guidance on how to reduce or avoid project effects on the human environment.

To assist in this objective, this Environmental Handbook volume will provide a compendium of the most vital laws, regulations, guidelines, practices, procedures and processes that must be addressed. As stated earlier, this Handbook provides guidance only.

1-2 Laws and Regulations

Both the National Environmental Policy Act of 1969 (NEPA) and the California Environmental Quality Act of 1970 (CEQA), and the regulations and guidelines that implement these laws, require consideration of social and economic impacts of projects in the preparation of environmental documents. NEPA and CEQA policies state that consideration is to be given to qualitative factors and unquantifiable environmental amenities and values, along with economic and technical considerations in decision making that may affect the environment.

Federal and State guidelines do not specifically mandate analysis of every potential project related community impact. Caltrans, however, must be responsive to issues raised by concerned citizens, interest groups, and local agencies. Accordingly, community impacts should be clearly identified and carefully evaluated, both during the scoping process and in the preparation of the environmental document. There is additional discussion on scoping in the following chapter, as well as in Volume 1 of the Caltrans Environmental Handbook.

FHWA is stressing that state, regional and local transportation agencies such as Caltrans, the

Metropolitan Planning Organizations and Regional Transportation Planning Agencies, and local governmental agencies acting through Caltrans, use public participation as a foundation to develop viable project alternatives, as a source of information to identify and evaluate potential impacts on the communities and neighborhoods that are served, and as a method to identify acceptable ways to address impacts.

1-2.1 NEPA

The Federal Council on Environmental Quality (CEQ) regulations which resulted from the passage of NEPA specify that "effects" include social and economic effects. Section 1508.14 of the CEQ regulations states that economic or social effects are not intended by themselves to require preparation of an Environmental Impact Statement (EIS). However, it further states that when an EIS is prepared and economic or social and natural or physical environmental effects are interrelated, then the document will discuss all of these effects on the human environment.

1-2.2 CEQA

Many people in California, including some decisionmakers, harbor the general belief that CEQA addresses only purely "environmental" issues, not the social, demographic, or economic issues often raised by proposed projects. This is erroneous. This assumption, however, is understandable due to the complex linkage that must be demonstrated between the physical, social, and economic environment and the determination of "Significance." This nexus is discussed below.

The CEQA *Guidelines* make extensive reference to the relationship of socioeconomic and physical impacts. The CEQA *Guidelines* define "significant effect" as "*a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic and aesthetic significance*" (CEQA *Guidelines*, 15382). "*An ironclad definition of significant*

effect is not possible because the significance of an activity may vary with the setting. For example, an activity which may not be significant in an urban area may be significant in a rural area" (CEQA Guidelines 15064 (b)).

There are additional passages in the CEQA Guidelines that address the linkage: *"Economic and social changes resulting from a project shall not be treated as significant effects on the environment. Economic or social changes may be used, however, to determine that a physical change shall be regarded as a significant effect on the environment. Where a physical change is caused by economic or social effects of a project, the physical change may be regarded as a significant effect in the same manner as any other physical change resulting from the project. Alternatively, economic or social effects of a physical change may be used to determine that the physical change is a significant effect on the environment. If the physical change causes adverse economic or social effects on people, those adverse effects may be used as the basis for determining that the physical change is significant.*

"A social or economic change related to a physical change may be considered in determining whether physical change is significant. An economic or social change by itself shall not be considered a significant effect on the environment" (CEQA Guidelines, 15382).

"There must be a physical change resulting from the project directly or indirectly before CEQA will apply."

Clearly then, CEQA does not focus solely on physical changes in the environment. Thus, if an economic impact will cause physical change, or a physical change will cause an economic impact, then the impact should be considered. *"Economic or social effects of a project may be used to determine the significance of physical changes caused by the project. For example, if the construction of a new freeway or rail line divides an existing community, the construction would be the physical change, but the social effect would be basis for determining that the effect would be significant."* (CEQA Guidelines 15131 (b)). In

another example, a court decided that a project involving the construction of a waste-to-energy facility next to a place of religious worship constituted a social effect relevant to determining whether related physical impacts were significant under CEQA (*Christward Ministry v Superior Court*, 1986).

1-2.3 Title VI of the Civil Rights Act

Title VI of the Civil Rights Act of 1964, and related statutes, requires there be no discrimination in Federally-assisted programs on the basis of race, color, national origin, age, sex, or disability (Religion is a protected category under the Fair Housing Act of 1968.). Because much of the information needed to assess possible discrimination during project development is obtained during the study of potential community impacts, Title VI issues can logically be evaluated at the same time and covered in the section of environmental documents dealing with the social or human environment. Caltrans must act in full compliance with Title VI. The more-recent emergence of Executive Order 12898, addressing Environmental Justice in low-income and minority communities, is not technically a law, and is treated elsewhere in this volume at section 2-7.2. Essentially, the environmental justice movement is part of a larger trend towards achieving social equity in environmental planning and land use. Social equity calls for a more forward-looking and "proactive" planning approach that fully identifies community effects, considers alternatives (including avoidance), and involves the public. Planners at the State and local levels are increasingly expected to eliminate unnecessary barriers in the environment and look for ways to enhance access to the project planning process and information, and facilitate full participation in helping people to achieve sustainable communities. Appropriate implementation of Title VI and EO 12898 will be accomplished through proper implementation of the FHWA/FTA NEPA process.

1-2.4 Other Relevant Laws

There are other laws that involve community impact analysis. The **Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA)** incorporates **Sections 109(h) and 128 of Title 23 of the United States Code on Highways**, which requires that social and economic impacts of proposed federal-aid projects be determined, evaluated, and eliminated or minimized as part of environmental documentation for project development. These include "destruction or disruption of man-made and natural resources, aesthetic values, community cohesion and the availability of public facilities and services; adverse employment effects, and tax and property values losses; injurious displacement of people, businesses and farms; and disruption of desirable community and regional growth." Implementing regulations for the legislation are contained in 23 CFR 771.

The Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970, as amended in 1987, collectively known as the Uniform Act, as amended, provides for uniform and equitable treatment of persons displaced from their homes, businesses, non-profit associations, or farms by Federal and federally-assisted programs, and establishes uniform and equitable land acquisition policies. For more information on these policies, see Appendix E.

The Americans with Disabilities Act (ADA) of 1990 extends the protection of the 1964 Civil Rights Act to the disabled, prohibiting discrimination in public accommodations and transportation and other services. The ADA stipulates involving the community, particularly those with disabilities, in the development and improvement of services. For example, in rail transit projects, participation by those in the community who are disabled is essential for the development of the station plan. In planning for roadway improvements in a town, to use another example, it is important to listen to and involve the disabled community in the development of access at sidewalks and ramps, street crossings, and in parking or transit access facilities. See further discussion on public involvement in sections 2-3.2 and 2-7.2.

1-3 When Is a Technical Report Advised?

If the early Caltrans Project Development Team (PDT) meetings, or scoping meetings, indicate that there exists substantial interest in the project from a community standpoint, and an EIS/EIR is the likely Environmental Document to be prepared, it *may* be appropriate to also prepare a separate specialized Community Impact Assessment technical report or background study. Ideally, in those cases in which one is prepared, the technical report should provide brief summaries on the pertinent topics related to community impacts. These text portions then can be directly incorporated into the environmental document. The preparation of a separate technical report addressing community impacts, however, is not always necessary even when a decision to prepare an EIS/EIR has been made.

There is one major difference between the technical reports prepared for such environmental areas as cultural resources or natural resources and those prepared for addressing community issues. Resource agencies such as the State Office of Historic Preservation (within the Department of Parks and Recreation) and the California Department of Fish and Game have regulatory responsibilities to review and approve certain technical reports prepared by Caltrans for those specific areas of concern. Conversely, there is no like state agency which routinely reviews and approves community impact assessment reports. On the other hand, FHWA and FTA, as well as interested citizen groups and decision makers may well desire to see an accompanying report which explores community impacts in some degree of detail.

A community impacts technical report probably will be produced as a separate document (one that is not included directly in the federal environmental document). Most likely, it will be in the form of a report that will be made available to others upon request. If community issues are among those dominant in the environmental document (ED) however, the technical report should be a bound appendix accompanying the

ED. For further discussion, see "Questions and Answers About the NEPA Regulations", March 16, 1981, The Council on Environmental Quality, questions 25a. and 25b. and FHWA, *Community Impact Assessment: A Quick Reference for Transportation* (September 1996), pp. 36-38. For direction on CEQA documents, see the CEQA *Guidelines*, 15147. Technical reports should be adequately summarized in the environmental document.

If during scoping or with meetings involving the public and local agencies it appears that a separate technical report is not necessary, the environmental analyst may move directly to preparing brief text sections on the pertinent social, economic, and land use topics, written so as to be inserted directly into the environmental document. The content of these sections should be restricted to that which is appropriate to the setting and the expected consequences of the transportation project as revealed through a scoping effort (one that actively involved the affected community), and the use of common sense judgment. Be aware, however, when environmental justice issues might be a concern, that is, there is the presence of a minority or low-income community that will be adversely effected, there may exist a need to prepare a technical report though it was not identified early (i.e., no responses to the scoping meeting notices) due to the absence or ineffectual outreach to minority or low-income populations.

As with all environmental issues, if there is a question of whether there is a potential significant impact due to a project, then preparation of an Environmental Assessment/Initial Study (EA/IS) under NEPA/CEQA is needed. If one (or more) significant impacts is identified as a consequence of studies for the EA, or from public involvement activities, then the preparation of an EIS is appropriate; if there are no significant impacts then the EA supports a Finding of No Significant Impact (FONSI) by the federal agency. The Caltrans environmental checklist is used to scope the extent of social and economic discussion (See Caltrans' Environmental Handbook Volume 1 for further information.). Those topics related to social and economic issues should be addressed in

the responses to the standard checklist questions if it is uncertain or likely that there will be an adverse effect from the project, or if there is a considerable number of people in the community who may think so. Otherwise, the EA/IS will serve to document that the community impacts are not viewed as significant or that actions will be taken that will mitigate the project effects below the significance threshold. Under normal circumstances, a separate Community Impact Assessment report would not be prepared as a backup to an EA/IS.

1-4 Caltrans Policy

Caltrans Corporate and District Environmental Program Units are to conform to the State and Federal laws and regulations concerning community impact assessment. The practices described in this volume are to be considered standard Caltrans approaches to the analysis of community and neighborhood issues but are not mandatory or exclusionary.

The most recent (1992) Caltrans Policy Direction Statements are in the form of a series of purpose, mission, vision, and goals statements developed for the purpose of guiding the Department's future efforts in delivering quality transportation services. In part, the purpose and vision emphasize that "Caltrans promotes economic vitality and enhances the quality of life for the people of California by providing for mobility of people, goods, services and information, while protecting the environment and addressing its social needs."

THIS SPACE FOR NOTES

CHAPTER 2

PREPARATION FOR CONDUCTING COMMUNITY IMPACT ASSESSMENTS

2-1 Content of the Chapter

This chapter presents the general steps Caltrans suggests its environmental planning staff and consultants take in preparing to conduct the assessment of transportation-associated impacts on communities and neighborhoods within the overall environmental studies process.

2-2 Project Description

The staff environmental planner or consultant should begin by obtaining a good understanding of the proposed project, including alternatives and all access routes and construction staging areas. This information should be obtained from the Project Manager or leader of the Project Development Team, and may be done through personal interviews and reviewing the project plans, as well as reading drafts of the description portion of the environmental document, if available. Viable alternatives should be clearly stated and given equal treatment in the studies. Because transportation projects may evolve rapidly during the preliminary design phase, it is important to periodically check back with the Project Manager or their designee for the latest design variations.

2-3 Scoping

Particularly in the area of community impact assessment, the range and detail of topics (i.e., the scope) to be covered can be highly variable. Therefore, it is important that the scope of the analysis be defined through an organized process. For an Environmental Impact Statement, a systematic scoping process is required; this will also be beneficial for defining the work to be done

for preparing the project's environmental document. The scoping meeting assists in defining issues to be addressed. Here, the various stakeholders, interest groups and involved local governments and state and federal regulatory agencies should play a major role. Construction activities can be very disruptive to a number of diverse segments of society. Efforts to involve neighborhoods, businesses and non-profit organizations, and specific groups of people should be considered at every stage of the planning process, but perhaps no more so than early in the process. And, because every project is somewhat different, each will have different implications for the affected interests.

As a first step, a list of potential impacts should be developed as an aid to focus the impact analysis. The principle tenet is for the environmental document to focus on the important topics. Specific community, agency, and interest group concerns should be identified as part of this list of potential impacts. For example, consider such questions as these:

- Is the community concerned about population growth?
- Does the project remove low cost ("affordable") housing?
- Will there be a segmentation, or separation, of some area(s) from the existing community?
- Will the project involve a bypass of a downtown commercial retail core?
- What are the concerns of the people most likely to be affected by the proposed project?

2-3.1 Sources for Scoping

The probable issues can be identified in several ways in addition to formal scoping meeting(s):

- Use the environmental checklist, as a start.

- Discuss the proposed project with local government units, including public works and planning department staff.
- Make initial contacts with community members and key people known to be interested in or directly affected by the proposal.
- Review responses to the Notice of Preparation, if available.
- Read local newspapers and neighborhood newsletters. Consider subscribing to a clipping service for large-scale projects.

2-3.2 Role of Public Involvement

Public involvement, required under NEPA, ISTEA, and ADA, is not intended to be a separate task in the community impact assessment process but rather fully integrated within all stages of planning and project development.

Public involvement is integral to the community impact assessment process. The public should be actively involved in the development of public involvement procedures themselves in ways that extend beyond commenting on environmental drafts. The public can provide important information for the project's purpose-and-need statement and identification of alternatives. It can also be a valuable tool as it can reveal possible conflict and controversy associated with a particular transportation project. Controversy can help shed light on community values, resolve social, economic, and environmental problems and may be a reflection of a community with a high degree of cohesion. The intensity of controversy may be an indicator of potential community disruption.

Caltrans, depending on the magnitude and extent of controversy associated with a major project, may have already initiated a public involvement program. Environmental planners should work with the staff person responsible for public involvement on their project so that community input is timely, coordinated and fed back into the environmental studies and community impact

analysis. Such instances will also offer opportunities for the public to identify avoidance, minimization, mitigation, and enhancement opportunities.

Public hearings and open meetings are a prime source of information on issues of concern to many in the community, but planners should understand that many people, including people who are traditionally under-served by transportation, namely minorities and low-income, may not be interested in attending such meetings and may be skeptical about whether they can truly influence the outcome of a transportation decision. Capturing the attention of a larger, more representative group requires careful planning and often considerable effort. Yet, the commitment by FHWA, Caltrans and the Metropolitan Planning Organizations, to treat the community as a whole as an important partner in the transportation business requires feedback from the community. Therefore, it is incumbent upon transportation agencies at all levels to employ a variety of techniques for maximum effectiveness, emphasizing early and continuous involvement. An organized and well-planned outreach program is essential for successful community input (also see section 2-7.2 and Appendix G of this volume). See Section 3-70 of the Caltrans Project Development Procedures Manual (1995) for additional information on the community involvement process.

What are some examples of how the public has influenced a transportation decision? Among project changes as a result of feedback from the public ranges from alignment choices and changes in the width of a transportation facility, to modifications to planned landscaping and structure design, as well as providing access for children's school routes and scheduling construction work for off-peak shopping seasons, among many others. Chapter 4 of this volume contains other examples.

The collection of data on the community for the environmental document, the ongoing public involvement process, and the follow-up analysis by the planner should have anticipated most, if not all, of the pertinent community issues before the

draft environmental document was completed and circulated for review and comment.

2-3.3 Level of Detail in the Document

The subjects covered and the level of detail for each topic should be defined by the scoping process. Asking the following questions also will help determine the level of detail needed:

- How important are the community impacts?
- How does the type of project affect the level of detail (e.g., constructing a highway on new alignment in contrast to placing High Occupancy Vehicle lanes within an existing freeway median)?
- Who is likely to be interested in reviewing the technical report and what will they be looking for in terms of the topics and the amount of information?

The FHWA Technical Advisory (Technical Advisory T 6640.8A, October 30, 1987, "Guidance for Preparing and Processing Environmental and Section 4(f) Documents," which is included as an Appendix in the Caltrans Environmental Handbook, Vol. 1 advises: "Data analyses should be commensurate with the importance of the impact".

2-4 Delineate the Study Area

A basic first step in community impact analysis is to delineate the affected socioeconomic environment for all the proposed project alternatives. Note that in preparing an environmental document, area boundaries are likely to be drawn differently for several types of studies: community impact assessments, historic and archaeological resources, hazardous waste materials, noise, and so forth.

Delineation of the affected environment can facilitate identification and analysis of community impacts. This can be done by drawing a boundary line on an aerial photograph or a detailed map

which depicts the land, buildings, and other features that may be subject to project effects. A rigorous neighborhood boundary determination is not really necessary at this stage. The aerial photo or map should be considered a working document with the boundary lines subject to revision as more is learned about the area. Delineation of the affected social and economic environment will generally encompass community facilities, school districts, census tracts, and community planning areas.

The boundary should be drawn to include:

Buildings: Residences, businesses, schools, government offices, and public service buildings that would be made more or less accessible, or otherwise affected by the proposed project. Include structures that may be subject to removal or relocation. Coordinate with Right of Way concerning information available from the Draft Relocation Impact Statement or Report (DRIS or DRIR) prepared for the proposed project - more about this in Appendix E. The District Project Development unit can also often provide planometric drawings with building shapes depicted.

Transportation Facilities: Streets, railroad lines, bikeways, and parking facilities that may be closed or otherwise affected by the proposal. Consider pedestrian overcrossings and sidewalks also. Project Development staff can frequently provide maps with this information.

Land: Developable land areas that would become more or less accessible upon completion of the proposed project.

Neighborhood and Community Features: Communities, neighborhoods, and business centers that may be impacted. Local planning agencies may have maps or plans delineating neighborhoods or communities. When conducting a community impact assessment, it is always a good idea to contact the local agency to determine whether there is a planner with a special geographical expertise for the area.

Consideration also should be given to understanding indirect project effects. For example, a project might impact a nearby commercial area whose trade area suffers over time because of population losses due to a large number of residential displacements, but the project, per se, does not directly impact the commercial properties.

Comparing Region & Study Area

"Setting" sections for the social and economic environment often include information for both the study area and the larger region in which the action is proposed. Comparing study area data to regional data often helps the reader gain perspective by identifying similarities, differences, and relationships between the two areas.

Choosing the appropriate study and regional areas will depend on the type of project being analyzed, and where it is located. As a general rule, the region is defined as the jurisdiction that is larger than, and includes, the study area. To illustrate, if the project is exclusively located within the confines of an incorporated city, the city would be the study area and the county would represent the regional area (although local circumstances may dictate some deviations from this standard practice). The two areas also can be segregated by designating an area of primary impact and an area of secondary or indirect impact. After an area has been designated for study, an initial windshield survey of the area can be made to gain a preliminary impression of its character and needs, likely impacts and potentially affected interests. Sometimes exceptional regional qualities and focal points outside the strict study area may be relevant for discussions of growth, quality-of-life issues, and so forth.

2-5 Outline the Technical Report

Preparing an outline of the technical report or specific environmental document sections will help to ensure thoroughness, make the writing process more efficient, and identify data needs

prior to the actual or formal analysis. As discussed in Chapter 1, a decision on whether or not it is necessary to prepare a separate background community impact assessment report (versus going to work writing sections directly for inclusion in the environmental document), should be one of the results of the public involvement and scoping process if it had not been previously determined.

Topics analyzed in the technical background report or appropriate Environmental Document sections should be determined on the basis of previously-listed expected impacts and issues. Extraneous topics should not be discussed in the section (or at least minimized) if irrelevant to the project. For example, topics such as ethnic composition or the age of the population need not be discussed at length if the project is not likely to have an impact on these population characteristics, and Caltrans, the public or local decision makers have not identified such topics as project issues.

The organization of the environmental document (ED), including the social, economic, and land use sections, is governed by whether or not the document is solely a CEQA or a combined NEPA/CEQA document. Traditionally, virtually all Caltrans EDs followed the NEPA format because federal funding or federal permits were involved. This is still largely the case. However, as the local county tax measures and other alternative transportation funding programs have expanded in recent years, CEQA-only documents are more commonly being prepared. The following general outlines will help with the preparation of an appropriate outline for a particular study. Detailed lists of subjects appear later.

The standard Caltrans environmental document is prepared under the auspices of NEPA (usually a joint NEPA/CEQA document) and therefore reflects FHWA guidelines (the Technical Advisory mentioned earlier). Under NEPA, the basic EIS organization is:

Affected Environment

Environmental Consequences (and Mitigation)

Under CEQA, the basic EIR organization is:

Setting

Impacts

(Proposed) Mitigation

When a joint or combined NEPA/CEQA document is prepared, the FHWA sequence takes precedence. These basic formats are discussed further below.

2-6 Topic Sequence

The order of topics in an FHWA/Caltrans EIS may follow any of three sequences: (1) that outlined in the FHWA Technical Advisory, (2) the Caltrans environmental checklist, or (3) any sequence that may be more appropriate to the particular project (i.e., reflecting scoping and early decisions on what the significant topics may be).

In this volume, the order of topics suggested for the Community Impacts Assessment Study or for the Environmental Consequences section of the environmental document follows the FHWA Technical Advisory sequence, although this is not mandatory. The order in the Technical Advisory is:

1. Land Use Impacts
2. Farmland Impacts
3. Social Impacts
4. Relocation Impacts
5. Economic Impacts
6. Joint Development

Keep in mind the general principle that the organization of the "Affected Environment" segment of the EIS should parallel (or "track") that of the "Environmental Consequences" (that is, the sequence of topics should be same in both parts of the EIS).

The topic sequence in an Environmental Assessment generally will follow the order of the Caltrans checklist, and may be modified to combine topics that are related logically.

The growth inducement discussion will often be inserted in a different location in a CEQA document than in a NEPA document. Growth inducement, as stated in the FHWA Technical Advisory, goes in the Land Use subsection within an EIS. Under CEQA, however, growth inducement is usually a distinct subsection following at the end of the EIR's "Impacts" section. For logistical reasons, it may be preferable to include the growth analysis in the Land Use section, particularly if there is extensive data on planned land use.

2-6.1 Example Study Outline

There is no single way to prepare a community impact assessment. However, an example of a table of contents for a major transportation project prepared for Caltrans is outlined on the next page for purposes of illustration. The generic study outline chosen for the example shows a full range of issues; the report prepared by staff or consultants should reflect the nature of the specific project.

Sample Community Impact Assessment Report

INTRODUCTION

Executive Summary

Background

Project Summary Description

Study Area Definition

SETTING

1. Land Use

- a) Existing Land Use Patterns
- b) Development Trends
- c) Adopted Goals and Policies
- d) Farmland

- 2. Population and Housing
 - a) Regional Characteristics
 - b) Affected Urban Neighborhoods
 - c) Attitudes Toward the Project
- 3. Economic Conditions
 - a) Regional Economy
 - b) Employment and Income
 - c) Study Area Business Activity
 - d) Fiscal Conditions
- 4. Community Facilities and Services
 - a) Schools
 - b) Police and Fire Protection
 - c) Access and Parking

IMPACTS

Neighborhood Impacts
Household Impacts
Title VI and Environmental Justice
Regional Economic Impacts
Impacts on Local Businesses
Property Value Effects
Community Facilities and Services Impacts
Land Use Impacts
Growth Inducement
Cumulative Impacts
Secondary Impacts
Conclusions

MITIGATION

Considered draft until approved by Environmental Office Chief.

Appendices: AD 1006 Form

Caltrans Relocation Assistance
References Used and Contacts
List of Preparers

2-7 Information Sources and Methods

A variety of information sources and techniques for analyzing community impacts are available for the practitioner. However, often the lack of current demographic information and rigorous quantitative methodologies for determining "significance" complicates the area of community impact assessment. Growth forecast model data and census data regarding housing and population characteristics are the major area within community impact analysis where useful quantitative techniques are available.

2-7.1 Data Collection

The collection of data can be the most time-consuming part of studying community impacts. After public involvement activities have commenced, and feedback provided by interested parties, the analyst should review the outline of the study, noting the data needs. As much of the data as possible should be collected before beginning the formal analysis. The data sources noted on the following outlines should help. Another useful source is to check on environmental documents prepared in the not-too-distant past for other projects (including, but not limited to transportation-oriented) in the general study area. These are usually available at the larger local public libraries and nearby university libraries, as well as city and county planning departments. The community itself, as we discuss below, should be viewed as a valuable source of data. Additional information on data sources can be found in Appendix B.

2-7.2 Environmental Justice

Do people count? Yes. It is important to determine if minority, low income, disadvantaged, and low mobility groups in the affected area would be disproportionately impacted by transportation decisions and practices and to find ways to mitigate if such effects could not otherwise be avoided. In recent years the term “environmental justice” has risen to prominence, and this section briefly discusses it. Moreover, many of the aspects are aligned with the need for community participation in all phases of environmental planning; while this is not a new requirement, public agencies at all levels of government have not always actively sought out the opinions of all peoples affected by their plans and actions.

Executive Order 12898, “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,” provides that “each federal agency make achieving environmental justice part of its mission

by identifying and addressing, as appropriate, disproportionately high and adverse human health and environmental effects of its programs, policies, and activities on minority populations and low-income populations.” The Executive Order makes clear that its provisions apply fully to American Indian populations and Indian tribes.

Environmental justice refers to the fair treatment of people of all races, cultures, and income with respect to the development, implementation and enforcement of environmental laws, regulations and policies.

The Council on Environmental Quality’s *Draft Guidance for Environmental Justice* (May 24, 1996) indicates that environmental justice concerns may arise from impacts on the natural or physical environment, such as human health or ecological impacts on minority and low-income populations, or from related social or economic impacts.

To ensure that environmental justice is promoted, and see that programs and projects are implemented in a socially equitable fashion, the planner analyzing socioeconomic issues should identify ethnic and racial minority and low-income population groups in the affected community and make contacts with the leadership in an informational outreach program. It may be useful to contact such groups through social welfare organizations, local service centers, and religious institutions. Such contacts are to be integrated with the community participation program for the project. Concerns of such “grass roots” groups should be sought through public hearings and other meetings, and carefully documented. These efforts at public outreach should not be seen as a one-time solicitation of project support. Where there are non-English speaking people, the use of interpreters may be necessary to ensure an effective program.

These various community groups must be involved early during the project development process, ideally when transportation plans are being developed at the regional level, well before the official public hearings are held for specific projects as required by environmental laws. A

wide range of community participation methods have been developed. ISTEA's planning regulations specify that states and metropolitan planning organizations must demonstrate compliance with Title VI of the Civil Rights Act. Caltrans and its transportation partners need to make certain that Title VI and environmental justice concerns are included in any community participation program, including the development of appropriate project avoidance and mitigation options.

Early identification that there is no public controversy over project implementation on Title VI grounds is essential to eventual project success. Executive Order 12898 does not change the prevailing legal thresholds and statutory interpretations under NEPA and existing case law. For example, an environmental impact that is not "significant" within the meaning of NEPA would not be rendered significant simply because an *insignificant* impact had a disproportionate and adverse effect on a low-income or minority population (CEQ *Draft Guidance*).

Neither Executive Order 12898, the CEQ *Draft Guidance* (1996), the U. S. DOT's Final Environmental Justice *Strategy* (60 Fed. Reg. 33896 (1995)) or the Final DOT *Order* (62 Fed. Reg. 18377 (1997)), prescribe any specific format for examining environmental justice, such as designating a specific chapter or section in an EIS or ED on environmental justice issues. The analysis should be integrated in a manner that is "clear, concise, and comprehensible" within the general format suggested by 40 CFR 1502.10.

FHWA suggests that discussions on adverse environmental justice issues, when associated with a project, should usually be folded into the separate discussions in the ED on air quality impacts, noise impacts, exposure to hazardous materials resulting from the project, visual impacts, and impacts on cultural resources, as appropriate. In addition, the draft ED should discuss the effectiveness of proposed mitigation for each affected minority and low-income population. According to the Final DOT *Order*, mitigation and enhancement measures and all offsetting benefits to the affected minority and

low income population, as well as the design and comparative impacts, should be taken into account in making determinations regarding disproportionately high and adverse effects. It is strongly recommended that such issues be discussed as they arise with the Caltrans Headquarters Environmental Management Office, and FHWA Division or Region prior to making any commitment in a draft ED, however.

Here is suggested standard language to use in the NEPA environmental document in the section under social impacts:

This project has been developed in accordance with the Civil Rights Act of 1964, as amended, and Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations." The Executive Order requires each Federal agency (or its designee) to take the appropriate and necessary steps to identify and address 'disproportionately high and adverse' effects of federal projects on minority and low-income populations. [If there are to be displacements, the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, may be added as well.]

In addition, it is the Caltrans District Environmental Program's responsibility to include a copy of the Director's Title VI Policy Statement in the EIS. See the Caltrans Environmental Handbook Volume 1 for more details. It is on the Internet at this address:
<http://trenv.dot.ca.gov/environet/index.htm>

2-7.3 Census Bureau Data

The U. S. Census Bureau within the Department of Commerce is the basic source for demographic data. Census data provides statistics on population, housing, race, age, family composition, marital status, nativity, parentage, country of origin, school enrollment, years of school completed, birth rates, place of work, means of transportation, employment status, occupation, industry, class of worker and income.

The urbanized parts of California are divided into three types of reporting areas: Metropolitan Statistical Area (MSA), Primary Metropolitan Statistical Area (PMSA), and Consolidated Metropolitan Statistical Area (CMSA). MSAs, in turn, are further subdivided into tracts composed of approximately 4,000 people. Census information is further broken down into blocks, particularly for some urbanized parts of the state. Rural areas are designated as census "places," but the information for places is not as site specific or as comprehensive.

Census data are helpful in describing the demographic character of the Affected Environment or Setting section of the environmental document, and an especially useful tool when it relates to potentially significant impacts. For example, data indicating that within the vicinity of a proposed transportation project there is a high proportion of minority, disabled, low mobility, low income or elderly residents is important to document. Studies have shown that such population groups are typically more sensitive than other groups to relocation impacts.

The usefulness of Census Population and Housing data for socioeconomic analysis does have some limitations because: 1) it is collected only once every ten years, 2) it is not usually available until at least two years after the census is taken, and, 3) it is not updated until the new census is taken. Since California is a dynamic state, census data can, in some instances, become outdated within a few years after it is collected, depending on local circumstances and the amount of change occurring there. Local planning agencies may have more current demographic data based upon community surveys or projections of census information, but this is not always standard practice. The census information can be valuable nonetheless for indicating community characteristics because existing low income and minority areas tend to persist over the years even if specific resident individuals, families, and households shift or relocate. Much census data is now available via the Internet. Please refer to Appendix B on Data Sources.

2-7.4 Working With Right of Way Staff

Caltrans Right of Way should be involved in all projects where right of way acquisition will be required. And, for those projects in which relocation is a potential issue, the staff can be a major source for information of a social and economic nature. As the relocation process moves through a succession of stages, District Right of Way prepares a series of reports. Environmental planners performing community impact assessments should coordinate closely with the District Right of Way staff in order to avoid duplication of effort as well as better integrate information. The information from Right of Way's draft relocation studies should be used in preparing environmental documents, but the information may require some reworking or be put in a different format in order to be optimally used in environmental documents. However, do not change any of *their* report findings. Environmental staff should allow Right of Way staff to summarize their own findings for the ED or to allow them to review the summary before it becomes part of the final ED.

Several years ago, an internal Caltrans Relocation Studies Task Force was established. The informal group established guidelines for delineating research and data gathering responsibilities on housing, business, and real-estate related issues between the Right of Way and the Environmental units. For instance, it was decided by the ad-hoc Task Force that such areas as parking impact counts and the resulting proposed mitigation (if any), estimating the type and number of housing and business impacts, to name a few, are areas of data gathering best conducted by Caltrans Right of Way staff, or their consultants.

Alternatively, research and data gathering for such questions as neighborhood impacts, community cohesion, impacts of residential property and business sales tax losses on the local tax base, and identifying and analyzing impacts to low income, transit-dependent, minority, elderly, and disabled people should usually be the responsibility of the Environmental units. No mandatory Caltrans department-wide allocation of responsibilities resulted from the Relocation Studies Task Force,

however. The District Right of Way and Environmental Programs should communicate with one another to determine which unit will be responsible for the development of which information. See Appendix E for more details.

2-7.5 Other Useful Sources

The California Department of Finance's Demographic Research Unit periodically prepares a number of different reports on population projections, and other demographic data. See Appendix B for their Internet address.

Affiliated with the Demographic Research Unit are State Census Data Center Network regional offices, each which have their own web pages and supply their own census and economic data. Appendix B has a list of some of the more common sites. Local agencies can be another source of relatively current demographic information. Local and regional planning agencies, local redevelopment and local public assistance agencies compile useful data, such as statistics on low mobility residents for meeting requirements to obtain grants and to administer federal aid programs. Local chambers of commerce may also have collected such information.

Local agencies can be another source of relatively current demographic information. Local and regional planning agencies, local redevelopment and local public assistance agencies compile useful data, such as statistics on low mobility residents for meeting requirements to obtain grants and to administer federal aid programs. Local chambers of commerce may also have collected such information.

Local and regional agencies should also be relied upon for data on projected population growth. It is important to consult with these agencies and use their statistics when analyzing local and regional growth impacts. Problems may arise when the local government's growth projections differ from those of the metropolitan planning organization. In such cases, the choice should be based on the

most current information, the superior methodology, and the best match of available data to the project impact area. Caltrans District Planning units normally are tied into the regional forecasting efforts and may have the information needed. The source used should be clearly indicated.

Larger banking institutions, such as Wells Fargo and Bank of America have economic research departments and publish data booklets that have demographic and economic projections and analysis for many regions of California. Real estate and development newsletters (e.g., *Los Angeles Business Journal*) covering the major metropolitan areas are also published. Schools with business programs, such as UC-Berkeley and UCLA, also publish annual economic forecasts. The Palo Alto-based Center for Continuing Study of the California Economy also publishes many relevant forecasts for California regions.

2-7.6 Methods

The methodologies presented in this volume of the Environmental Handbook represent basic approaches to evaluating community impacts. Any number of methodologies may be available for evaluating a specific impact. A particular method may be more applicable to a given set of conditions, ranging from simple methods that produce an order-of-magnitude estimate to a complex method yielding detailed, precise estimates. The analyst preparing the community impact assessment must choose methodologies appropriate for the level of detail and accuracy determined appropriate to the study. Discussions with the community impact specialist in Caltrans Headquarters Environmental Program or the within the FHWA Office of Environment and Planning may also be fruitful if the planner needs further guidance.

The selection of methodologies should take into account the following criteria:

- **Relevancy**
- **Accuracy and completeness**

- **Acceptability and credibility**
- **Flexibility**
- **Data Requirements**
- **Cost**

While the methods presented herein are all considered satisfactory for Caltrans purposes, few are noted as being "preferred" or "selected" or "recommended" as compared to others. Until there is more experience and feedback from users of this volume of the Environmental Handbook, very few methods will be considered *the* Caltrans standard.

In some of the metropolitan areas of the State, rather sophisticated modeling efforts produce population, employment, and land use forecasts, and may be tied into traffic forecasting efforts in the region. When using such forecasts, the Caltrans environmental staff needs to approach them judiciously and to learn enough about them to resolve any concerns described below.

As social sciences literature consistently points out, by its nature community impact analysis relies more on informed but subjective judgment and experience than on rigid quantitative analytical methods. Indeed, quantitative methods or standards for precisely determining significance in the socioeconomic area are largely absent. Moreover, some models may be extremely complicated for non-specialists to understand and, as a result, are not always as well received by the public as planners might hope.

Conclusions derived from sophisticated methodologies are not necessarily automatically supported because they must usually be balanced with other factors, such as interest group influence, or what political decision makers feel is in the best interests of their constituency. This is not to say, however, that quantitative methods have no place in community impact assessment studies (for example, they are used heavily in forecasting growth).

In areas where the issues are complex, the methodology and assumptions used to prepare the impact analysis should be discussed with the District Environmental Office Chief and the general environmental document writer, if this is a different analyst than the one preparing the community impact assessment. All of these people should be involved with the choice of approaches as there are many ways to assess community impacts, some of which are presented as options in the following sections.

FHWA's Office of Environment and Planning has requested that the statistics (as well as other assumptions about the community) used in the document be subjected to what is termed "validation." In other words, the information should be checked with people at the local level for its reasonableness if there is any possibility that it will not be readily accepted. This involves more than just "circulating" the draft document: the analyst needs to go directly to informed community sources and discuss the data and conclusions with them, and, if necessary, field verify the data. This feedback loop is especially important with the increased emphasis on social equity concerns within our transportation planning processes.

2-8 Analysis and Presentation

As is true of all technical reports, the writing of a community impact assessment study should be concise and carefully organized. Tables and charts should be prepared when needed to enhance the presentation and highlight information. Many readers of environmental documents are visually oriented while others will rely more heavily upon the narrative text. Written text should accompany each table or chart to assist the reader in understanding the table or graphic. The original source for data for the compilation of charts and tables should be clearly identified.

2-9 Significance

While CEQA requires that each "significant [adverse] impact" be identified in an EIR, NEPA

does not. References to "significant impact" may be made in the environmental document to fulfill this CEQA requirement, pursuant to California law. Under NEPA, no such determination need be made for each environmental effect. The fact that a Draft EIS is required to be prepared represents FHWA's assessment that *overall* the project has a "significant impact" on the environment.

In an effort to define more specifically "significant impacts" (as used in CEQA *Guidelines*- Appendix G), the concept of "thresholds of significance" has evolved. Such thresholds can be devised in dealing with air quality, noise, water quality, and so forth when dealing with health-based standards. Unfortunately, such standards do not yet exist in the social sciences (i.e., community analysis).

As previously stated, community impact assessment is encumbered by a lack of rigorous quantitative analytical methodologies. There are few clear standards, formulas, or criteria for identifying potential impacts or for measuring their significance. The significance of a potential impact must be determined through careful judgment on a case by case basis. Much of the information on communities and neighborhoods is considered "soft data," involving such areas as people's perceptions, feelings, and attitudes. Soft data typically makes the acceptance for an analysis more difficult. The credibility of social and economic analysis can be improved, however, through clear and concise explanations as to methodology, data sources, and objectives. Some predictive tools do exist, but most, created in the 1970s, are now seldom used because of their high cost, their questionable validity, and the frequent controversy that surrounds the conclusions that are drawn from such methodologies.

The environmental regulations talk about "severity" and "context," providing a useful concept for evaluating significance. "Context" implies that the project impacts (or "severity") should be looked at within the framework of what is in the locality of the project.

Obviously, not all community impacts associated with a proposed project have the same priority for

depth of analysis. The more important impact should receive a higher priority for analysis by Caltrans staff environmental planners or consultants performing such studies under contract to Caltrans or its local agency partners. For instance, a project-related impact that seriously affects large segments of the population for a long time period is by its nature always more important than one that is not serious, affects few people, and lasts for only a short duration. With respect to social and economic or community impact assessment, it would be appropriate to expend more effort and budget more staff or contract time to analyze the probable impacts in the case of the former rather than the latter.

Also, such thresholds of impacts that are clearly established by legal mandates, or established social norms, usually at the local or regional level, and which are often tied to social or economic concerns, should also receive a higher priority for analysis. Thresholds of impacts for projects that are highly controversial, or which are sources of substantial conflict between various individuals, advocacy groups, or organizations, and which do not warrant higher priority for other reasons, should also receive a serious level of effort of analysis. A substantial community controversy could trigger a judgment that the transportation project has a significant impact.

2-9.1 Worksheet Approach

Determining the significance of impacts is ultimately a matter of judgment, but displaying the available information related to issues in the standard format of a worksheet is a way to systematize the analysis. An environmental issue probably is significant for purposes of CEQA if there is a high probability that one or more impacts are the same as those identified in the shaded box on the following page, excerpted from CEQA *Guidelines* ' Appendix G.

A list of the issues, such as that developed as a result of the scoping process, can be annotated in a tabular format (worksheet) with judgments on thresholds (of the kind suggested above) and qualitative comments about why exceeding a

particular threshold is or is not important (significant). Other criteria for evaluating an impact include uniqueness, controversy, legal standards, benefits and detriments, uncertainty and risk, setting precedent, secondary and cumulative effects, and public health and safety.

- Convert prime agricultural land to non-agricultural use or impair the agricultural productivity of prime agricultural land.
- Interfere with emergency response plans or emergency evacuation plans.

2-9.2 CEQA GUIDELINES APPENDIX G

Appendix G to the CEQA *Guidelines* serves a function similar to that served by California Public Resources Code Section 15065. While the latter describes kinds of impacts that are *always* significant, the former describes numerous kinds of impacts that the California Resources Agency has determined are "normally" considered significant. The shaded box below provides a list those relevant to community impact assessments.

SIGNIFICANT EFFECTS UNDER CEQA

Appendix G to the CEQA *Guidelines* describes numerous kinds of impacts that are normally considered significant. Culled from the list as being considered socioeconomic in nature are any effects that would:

- Disrupt or adversely affect a property of cultural significance to a community or ethnic or social group;
- Induce substantial growth or concentration of population;
- Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system;
- Displace a large number of people;
- Disrupt or divide the physical arrangement of an established community;
- Conflict with established recreational, educational, religious or scientific uses of the area;

THIS SPACE FOR NOTES

AFFECTED ENVIRONMENT

3-1 Content of the Chapter

This chapter provides more detailed information on how the Caltrans planner or consultant should prepare those sections of the Environmental Document which deal with socioeconomic topics.

The second major step in community impact assessment, that is, after preparing for the analysis (the focus of Chapter 2) is to describe the affected environment in terms of land use, planning, social, economic, and public services and facilities characteristics. Practitioners sometimes refer to this as developing the Community Profile. The characteristics of a larger jurisdiction (i.e., city or county) also should be described for comparative purposes. The information from this section of the community impact assessment study should be used, as appropriate, in the "Affected Environment" portion of the EIS.

To the extent feasible, it is desirable to put the topics in the same order as they appear in the "Environmental Consequences" section. For the "Affected Environment" portion of Environmental Assessment and Initial Study (EA/IS), a similar strategy of organization is suggested. Writing this section involves an iterative process because describing the social and economic environment associated with the proposed project can be best prepared only when some basic level of investigation has already been conducted.

3-2 Land Use Characteristics

3-2.1 Rural/Urban Land

The acreage of rural and urban land in both the affected area and the associated city, county, or region should be determined. The purpose is to convey a general understanding of the amount of

CHAPTER 3

DESCRIBING THE

developed, undeveloped, and underdeveloped land as it may relate to project associated growth impacts. This information is usually available from the land use and open space elements of the local general plan. The plan should be specifically cited because the actual acreage may have changed subsequent to publication.

3-2.2 Major Land Uses

Describe the current major land uses in both the affected area and any associated city, county, or region. This information is used to analyze any potential land use changes or land use conflicts associated with the proposed project. This information is also usually available from the land use and open space elements of the local general or community plan. If not, or if it is out-of-date, the information may be obtained by reviewing aerial photographs or up-dated through field visits with assistance from an engineer working on the project, or a District Right-of-Way staff member. Exhibits for both existing and planned land use should be used if the area is not fully built out. These exhibits should encompass the study area at a minimum and may include a larger area such as a community plan or group of planning areas. Whenever possible, the land uses should be simplified to cover the standard planning and zoning classifications (SFR, MFR, IND, COMM, INST, and PARK/REC).

3-2.3 Developable Land

All developable land areas that would be made more accessible by the proposal should be identified and described. The way in which the land is zoned should also be described. This information is used to analyze any growth inducement potential of the proposal. Such information can be obtained from aerial photos and maps available from the local planning offices.

3-2.4 Development Trends

Development trends in the affected area and the associated city, county, or region should be described. This information is used to assess the growth potential of the affected area. The housing element of the local general plan should contain information on population and employment trends, an inventory of land suitable for residential development, and community housing development goals. The land use element should contain information on the proposed general distribution and extent of uses of land for housing, business, industry, and other purposes. The local planning or community development department staff should be contacted for copies of these general plan elements and other information regarding the prospects of the approval of such development projects, to learn where they are in the “pipeline,” and so forth.

Unfortunately, in many local jurisdictions, due to funding constraints, the general plans have not been updated for many years and planned developments are not built. Other sources of information may be used to help supplement the general plans including data from local real estate boards and large-scale residential and commercial developers. District Right of Way may have information, also. For up-to-date information, most local jurisdictions possess records of the number and types of building permits issued. Too, the local council of governments may periodically publish reports containing discussions of development trends in the region.

Land Use Data Sources

In addition to general plans and land use maps, sources of land use information include local special area plans, environmental documents for other types of projects in the area, master environmental assessments, the local planning department staff themselves, the area chamber of commerce, and newspaper articles from the local

newspaper. A good local public library may have many of these references.

3-2.5 Jobs/Housing Balance

In the past decade, numerous California city and county jurisdictions have adopted policies that articulate the need for a balance between employment generating and residential land uses.

An analysis of the interrelationship of commuting patterns with the location of jobs and housing will contribute to addressing concerns about traffic congestion and air quality. Related information to include are housing price patterns, vacancy rates, job types, income levels, and existing commuting patterns.

Lengthening commute times and increasing congestion brought the concept of a "jobs/housing balance" to the forefront of some communities in the latter 1980s. In simple terms, the idea was to have people live close to where they work. In those locales where "jobs/housing" ordinances were enacted, there is a premise that commuting, the overall number of vehicle trips, and the resultant vehicle miles traveled can be reduced when sufficient jobs are available locally to balance the employment demands of the community and when commercial services are convenient to residential areas. Santa Barbara and Ventura Counties and the Southern California Association of Governments, for example, in the southern areas of the state, and Alpine and Santa Cruz Counties in the northern portion of the state have embraced job/housing balance as a weapon in the fight to promote better air quality.

Achieving a jobs/housing balance requires controlling the location, intensity, and nature of jobs and housing in order to encourage a reduction in vehicle trips and miles traveled and a corresponding increase in the use of mass transit and alternative transportation methods such as bicycles, carpools, and walking. Planning for a jobs/housing balance requires in-depth analyses of employment potential (existing and projected), housing demand (by income group and corrected for regional housing opportunities), new housing

production, and the relationship between employment opportunities and housing availability. Other factors such as housing cost and transportation systems must also be evaluated.

Jobs/housing strategies include locating higher density housing near employment centers, promoting infill development, actively recruiting businesses that will tap into the local workforce, and providing affordable housing opportunities within the community. When pursued, jobs/housing provisions most directly affect the land use, circulation, and housing aspects of the local decision-making process.

Some academic-based transportation policy researchers maintain that sub-regional imbalances caused by rapid growth tend to disappear over time and that commuting trips seem only tenuously related to such imbalances when they occur. Furthermore, the *type* of job (and resultant wage level) has often been overlooked.

As with understanding and analyzing other aspects of community planning and future development, environmental documents prepared for or by Caltrans should discuss the above local planning factors in regard to the jobs-housing balance when this subject appears to be important to the local jurisdiction. For instance, planned freeways on new alignment are likely to involve this issue.

When included in an environmental document, the discussion should go beyond simplistic assumptions that jobs-housing balance is a problem, and that it can be solved by cookbook congestion mitigation and air quality improvements, transportation system management, or transportation control measures programs.

Jobs/Housing Balance Data Sources

Commuting characteristics:

1. U.S. Census of Population and Housing
2. Caltrans District Traffic Studies Unit

3. Regional council of government's traffic model

4. Local General Plan

3-2.6 Planning

Planning and regulatory powers exist at both the state and local government level but it is more often at the local government level that most decisions concerning land use occur. In California, the power to regulate land uses is delegated to local governments. It is the county or city general plan that provides a focus and a guide for local land use decisions. Local land use plans consist of goals and policies which aim to direct the physical development of communities and depend on regulatory mechanisms to implement those policies and guide growth and development.

A General Plan includes:

- Goals and objectives for long-range land use planning.
- Specific policies to support goals and objectives.
- Seven required “elements”: land use, circulation, housing, conservation, open space, noise, and safety. The local government has the option to adopt additional separate elements if it so wishes (e.g., historical, agricultural). Also be aware that area, community, and neighborhood plans are policy instruments adopted as part of the general plan itself.

The environmental planner conducting the analysis should identify the local and/or regional plans that pertain to the affected area and the associated city, county, or region. The FHWA Technical Advisory suggests that information on the scope and status of the planning process in the area be described. Maps of the adopted land use and circulation plans would be included here. Any other specific policies that relate to the proposal should also be described. Such policies that relate to locally desired transportation

improvements are usually found in the circulation element. The land use, housing, and open space elements may contain policies on growth that could apply to the proposed project. Note also that the CEQA *Guidelines* (15125) require that the Setting section of an EIR discuss any inconsistencies between the proposed project and applicable general plans and regional plans.

3-3 Farmland

California is this nation's agricultural breadbasket with some 250 different crops marketed. Agriculture is also a dynamic economic force, and remains California's most important industry. A recent statistic illustrates the prominent nature of agriculture in the state: there were posted sales of \$12 billion in one year alone. Although Californians work but 3 percent of the total U.S. farmland, approximately fifty percent of the country's fruits, vegetables and nuts are grown here. Despite policies to conserve the state's agricultural resources, however, California's population is projected to expand in ensuing decades and conversion of agricultural land to urban uses will no doubt continue. California has some 30 million acres of farmland, so farmland losses may seem, in comparison to be insignificant. Farmland losses, however, may appear more substantial when the quality of the land affected, the location, and the impacts on local economies are taken into account.

Although no state or federal law explicitly prohibits conversion of agricultural lands to other uses, the state and federal governments as well as many local jurisdictions, have established policies and programs to maintain farmland for agricultural use.

The intent of the California Department of Transportation is to avoid, whenever practical, locating public improvements within agricultural preserves or acquiring high quality agricultural land for transportation improvements.

The majority of Caltrans projects involve minimal or no farmland. Indeed, it is highly unlikely that development of a transportation project will

reshape agricultural enterprise in the region to a significant degree. In certain cases, however, projects may have considerable farmland involvement. Past studies, for example, have shown that the construction of freeway facilities on new right-of-way may consume of upwards from 30 to 45 acres of land per mile in rural areas.

The physical effects on the environment may go beyond the farmland directly converted. For instance, agricultural land that remains in production may be severed by new construction, and the proximity of a new or expanded roadway or other facilities may have other effects on a farm or ranch so as to increase its operational costs. One example would be the construction of an expressway which would limit access from agricultural fields on either side of the transportation facility. These types of indirect farmland impacts are discussed in more detail below in the section under State policies. The federal regulatory process identified below (Farmland Protection Policy Act) provides a shorthand procedure to quantify such concerns when there is federal involvement. The environmental planner should, however, consider these issues more extensively if there is likely to be a sizable conversion of farmlands.

3-3.1 Analyzing Project-Related Impacts

Where there is substantial right-of-way take of farmland, the environmental document should include detailed information in the Environmental Setting or Affected Environment section of the document with a general discussion of the agricultural resources and character of agriculture in the project area. Such a discussion might include the amount of land under cultivation, the number of acres under Williamson Act contracts (described below), important crops, the value of agricultural production, a description of trends in farmland conversion in the particular county, and a description of applicable general plan elements, ordinances, and other policies related to agriculture in that locale. The importance of direct and indirect losses in farmland acreage, production, and revenue due to project effects

should be assessed based on comparisons with corresponding totals for the locality, county, or growing region.

3-3.2 Local Farmland Preservation Policies

Local farmland preservation policy is typically implemented through the planning policies and development regulations of local jurisdictions, and is therefore addressed in the general plan, locally adopted CEQA guidelines, and zoning ordinances. Most counties treat agricultural land protection in either the Open Space, Land Use, or Conservation elements of their general plans, though several counties have prepared or are in the process of preparing an optional Agricultural element (e.g., Stanislaus and Placer Counties).

Some local governments have adopted standards establishing when farmland conversion would constitute a significant environmental impact under CEQA, and in some instances, have gone so far as to specify mitigation measures. The ED should discuss any specific language from general plan elements or policies related to farmland preservation if a proposed project would require that farmland be taken.

Even in those jurisdictions where an Agricultural element has not been formally adopted, local governments have often achieved some protection of farmland through traditional zoning techniques, such as placing restrictions on use, imposition of minimum parcel sizes, designating spheres of influence through Local Area Formation Commissions (LAFCOs), establishing urban growth boundaries and placing limitations on residential density.

3-3.3 Projects With Federal Involvement

The National Environmental Policy Act (NEPA) and the provisions of the Farmland Protection Policy Act (FPPA, USC 4201-4209; and its regulations, 7 CFR Ch. VI Part 658) requires that before taking or approving any federal action that would result in conversion of farmland, the

federal agency must examine the effects of the action using the criteria set forth in the Act, and, if adverse effects are found, must *consider* alternatives to lessen them. Neither NEPA nor FPPA requires a project be modified solely to avoid or minimize the effects of conversion of farmland to nonagricultural uses.

A Land Evaluation and Site Assessment (LESA) is a tool for quantifying the merits of retaining in agricultural use parcels proposed for conversion. Originally developed by the USDA Natural Resource Conservation Service (NRCS, formerly the Soil Conservation Service, or SCS), the farmlands assessment process results from requirements in the FPPA of 1981, and as amended in 1984 [guidance for implementation was issued by FHWA on August 7 and October 26, 1984, and January 23, 1985], with the Final Rule issued June 17, 1994. This process requires a system of numerical weights assigned to different characteristics of affected parcels, a description and classification of affected farmlands, as well as early consultation with the U.S. Natural Resource Conservation Service within the Department of Agriculture. Processing of Form AD 1006 (Farmland Conversion Impact Rating) is also necessary (see below).

3-3.4 Categories of Farmland

The California Department of Conservation and the NRCS classify agricultural lands into four categories: **Prime Farmlands, Farmlands of Statewide Importance, Unique Farmland, and Farmland of Local Importance.** It should be noted that classification as "farmland" does not necessarily mean the land has to actually be farmed. Instead, "farmland" is a highly technical term and is rated primarily on factors such as soil type and topography.

Prime Farmland is land that has the best combination of physical and chemical characteristics for producing agricultural crops and may include land currently used as cropland, pastureland, rangeland, or forestland. It does not include land that is already in or committed to urban development.

Unique Farmland is land other than prime farmland that has lesser quality soils that are used for the production of high-value specialty crops (i.e., citrus, nuts). The Unique Farmland designation is, therefore, based on the type of crop grown as well as soil type.

Farmland of State or Local Importance are lands which do not qualify as Prime or Unique Farmlands but that are currently irrigated, are pastureland, or produce non-irrigated crops, and are important as determined by the State or local government. More detailed soil definitions are contained in Appendix C of this Environmental Handbook volume.

The ratings used in scoring NRCS's farmland assessment Form AD 1006 combine soil productivity, water conditions, proximity to other urban and rural land uses, impacts on remaining farmland after the conversion, and indirect or secondary effects of the project on agricultural and other local factors to arrive at a weighted score. If the rating exceeds a threshold score, the project agency (typically Caltrans acting for FHWA) must consider alternatives which avoid or minimize farmland impacts so as to reduce the score. These mitigation measures are discussed in more detail in Chapter 4 of this volume.

Land that is determined not to be farmland in accordance with the statutory definition is not subject to the FPPA (see section 4-5.1 on Urbanized Areas in Chapter 4). **Projects within existing right-of-way by definition do not convert farmland and thus are not subject to the Act.** Also, where the right-of-way required for a transportation project is clearly not farmland (for instance, rocky terrain, or sand dunes) and the project would not indirectly convert farmland, the FPPA does not apply. Completion and processing of Form AD 1006 is not necessary in such cases. Chapter 4 contains standard language which may be used in the ED. **Keep in mind, however, that there are no set acreage thresholds below which coordination through use of Form AD 1006 would not be required.**

Some federal agencies, including FHWA, have expressed an interest in having the NRCS exempt

from the FPPA provisions those actions that would involve expanding existing linear projects (e.g., freeway widening) and which would convert only a few acres of farmland and, in fact, are designed so as to avoid the conversion of land that would occur if a new linear project on new corridor alignment was to be constructed. The NRCS has not yet agreed to such a blanket exemption for linear projects involving minimum acreage although discussions have been held (see *Federal Register*, June 17, 1994).

Compliance with the FPPA must be part of the NEPA process (7 C.F.R. 658.4(e)). Where farmland would be significantly impacted (discussed later) by a project, the Environmental Document should contain a map showing the location of all farmlands in the project area, discuss the effects of the various alternatives, and identify measures to avoid or reduce the impacts. The ED must provide the rationale for decisions made during the farmland evaluation. It should be understood, however, that though the FPPA requires consideration of "farmland," it is not intended to be a federal agricultural lands preservation program. The site assessment process is designed to recognize farmland that has high economic potential for continued production, and to discourage development that is not contiguous to existing urbanized areas. The FPPA, however, recognizes that conversion of farmland is sometimes necessary, in balance with other societal needs.

3-3.5 California's Agricultural Policies

California has no comprehensive policy on agricultural land use. Over the past several decades, however, the State Legislature has set forth a strong expression of intent on the importance "of protecting California's agricultural land resources." State Agricultural Policy (Food and Agricultural Code, Section 801 et seq.) states that the Legislature shall provide for continuing sound, healthy, productive, and profitable agriculture in California. This policy is supported, in part, by conserving and protecting the soil, water, and air associated with farmland. In addition, the California Coastal Act also

contains policies to conserve farmland resources (not discussed in this volume). More recently, legislation was enacted that directed the California Department of Conservation to develop a model land evaluation site assessment that could be used by agencies to help determine their projects' impacts on local farmlands.

3-3.6 Farmland Mapping and Monitoring Program

The State Legislature created the Farmland Mapping and Monitoring Program within the California Department of Conservation (CDC) to track the conversion of the state's farmland, and report biennially to the Legislature. The program relies on Department of Water Resources land use maps (updated every seven years), soil surveys, aerial photography, and field checking, to compile maps. As of this writing, all or parts of 45 of California's 58 counties have been mapped. While the CDC program is involved in the compilation and provision of information, and not directly involved in policy formulation, the program's maps have been used in some locales to help in land use planning and conducting environmental assessments.

FARMLAND DATA SOURCES

The most comprehensive source for agricultural data is the agricultural census, conducted every five years by the U.S. Bureau of the Census (e.g., 1987; 1992). Agricultural census data are available in state-by-state reports in published and computerized formats at the county level. The smallest reporting unit in the agricultural census is at the county level. The agricultural census contains data on the average size farm by county.

If farmland issues may be prominent in the environmental process, consideration should be given to contacting one of several agencies, or organizations, depending on the need. The California Department of Conservation and the California Department of Food and Agriculture are the state agencies with the most expertise in

the area of agriculture and soil conservation. In particular, the Office of Land Conservation within the Department of Conservation and both the Agricultural Resources Division and the Agricultural Statistics Branch within the California Department of Food and Agriculture may be useful to contact for information.

The County Agricultural Commissioners may be contacted for information on the impacts of the project on countywide crop production or farm income. The County Farm Bureaus and the University of California Cooperative Extension Service (farm advisors) also may be contacted for certain information, if appropriate. The USDA Natural Resource Conservation Service is also a source for agricultural statistics. A private, non-profit group, the American Farmland Trust, has California field offices in Davis and Visalia. The California Institute for Rural Studies in Davis also maintains a public library with subject files on agricultural policy topics.

3-3.7 CEQA and Farmland Conversion

State CEQA *Guidelines* address farmland conversion impacts directly in two ways. First, cancellation of Williamson Act contracts for parcels exceeding 100 acres is an action considered to be "of statewide, regional, or areawide significance," and thus subject to CEQA review (see the detailed discussion in section 3-3.8 concerning the Williamson Act).

Second, Appendix G of the CEQA *Guidelines* states that a project that would "convert **prime** agricultural land to non-agricultural use or impair the agricultural productivity, would "normally have a significant effect on the environment." Note that in the second case, no set acreage threshold of prime farmland conversion has been determined by case law or regulatory framework which would constitute a significant impact. As listed in Section 51201 of the California Government Code (Williamson Act, see below) "prime agricultural lands" means any of the following:

1. Land qualifying as Class I or II in the NRCS land use capability classifications.
2. Land qualifying for rating 80 through 100 in the Storie Index Rating.
3. Land used for livestock with an annual carrying capacity of at least one animal unit per acre.
4. Land used for trees and vines which earns income during the commercial bearing period of at least \$200 per acre.
5. Land used for unprocessed agricultural products which earns at least \$200 per acre for three of the previous five years.

This definition of prime farmland varies from the one used for purposes of the Farmland Protection Policy Act (see discussion above).

Neither CEQA nor the CEQA *Guidelines* provide lead agencies with specific directions concerning the content of, or analytical approaches to be used in, assessing farmland conversion impacts as part of the environmental process. Some local jurisdictions, such as Santa Barbara County, however, have adopted their own CEQA guidelines with numerical thresholds for agricultural land conversion that, if exceeded by a proposed project, would trigger a finding of "significant environmental impact."

3-3.8 Williamson Act

The California Land Conservation Act of 1965 [Cal. Govt. Code S.51200-51295], commonly known as the Williamson Act, provides incentives, through reduced property taxes, to deter the early conversion of agricultural and open space lands. Farmland need not be considered "prime" in order to be placed under provisions of the Williamson Act. All lands defined by the state as "prime farmland," "other than prime farmland," and "open space land" are eligible for coverage by a Williamson Act contract. Land other than prime farmland and open space land can be placed under

contract if the lands are located in an area designated by the county or city as an agricultural preserve. The California Department of Conservation (CDC) estimates that more than half of the state's irrigated (mostly prime) farmland is protected by the Act.

The Act, administered by the Office of Land Conservation within the CDC, offers use-value property tax benefits to farm and open-space landowners who voluntarily enter into contracts. These contracts specify that the owners will not convert their land to nonagricultural uses for at least a ten year period. At the end of each year within the 10 year contract period, the contract is automatically renewed for an additional year, unless the landowner or the local government moves to terminate the contract. Termination can occur in one of four ways: 1) non-renewal; 2) cancellation; 3) eminent domain; or 4) city annexation under certain circumstances.

The primary advantage to a landowner for placing their property under a Williamson Act contract is that the contracted land is assessed for county property tax purposes at its agricultural value rather than its full market value (e.g., what the value of the property would be if it were otherwise available for its highest and best use). Individual landowners enter into these restrictive use agreements with cities and counties. Forty-eight of the state's counties participate in Williamson Act programs for unincorporated areas, and twenty cities. The State of California makes partial payments annually ("subvention entitlements") to local governments for lost local property tax revenues that landowners would otherwise pay if the property was taxed at its market value. Fees are charged to landowners who prematurely cancel Williamson Act contracts.

3-3.9 Timberland Productivity Act

Similar in concept to the Williamson Act, the Timberland Productivity Act of 1982 (covered in Government Code Sections 51100 et seq.) established "Timberland Production Zones" (TPZ) for the purpose of discouraging the premature

conversion of timberland to other uses. TPZs are rolling ten-year contracts providing preferential tax assessments to qualified timberlands.

Under this program, assessments on timber are based on the value of the timber at the time of harvest, rather than an annual assessment on the market value of standing timber. Land use elements of general plans are required to reflect distribution of existing TPZ zoning (if applicable) and any timberland removed from a production zone is subject to approval by the local legislative body.

Although existing state highways are exempt from provisions of the Act, the California Secretary of Resources and the local governing body should be notified in writing in the event new or additional right of way from a TPZ will be required for a transportation project. For more information, contact the Forest Practice Regulation Unit of the Resource Management Division of the California Department of Forestry and Fire Protection in Sacramento.

3-4 Social

3-4.1 Demographic Characteristics

If the proposed project or activity impacts a population, the environmental document should discuss the existing and projected population and the relevant demographic characteristics of the affected area and the associated city, county, or region. Census tract data or local planning agency (or MPO) information should be used. The demographic characteristics that should be included are ethnic group, age, income, and low mobility status (elderly and/or disabled). Include other demographic characteristics if appropriate. The level of detail should be commiserate with the importance of the relocation or community impacts.

If known, any substantial population changes that have occurred in recent decades in ethnic, elderly, poor, or other demographic groups within the affected community area should be identified. This information can be used to help determine if

a community is becoming relatively more or less cohesive and if a disproportionate number of people of any minority or low-income sub-group would be potentially affected by relocation or other transportation-related impacts. Also, the percentage of the population groups in the affected socioeconomic area should be compared with those of the larger entity (city or county) to determine whether there is a potential for disproportionate impacts (It is also often useful to provide statewide data averages as a benchmark for local data). This is especially important information for determining whether the proposed project has environmental justice and Title VI concerns. See 2-7.2 for further discussion.

Demographic data is available from the U.S. Census Bureau in published formats, CD-ROM, and via the world wide web (see Appendix B). The Census Bureau has successfully used a Geographic Information System (GIS) software program, Landview II, to graphically access and display environmental justice data sets for demonstration purposes. Displaying available data spatially through GIS can be an effective tool to help illustrate the distribution of impacts on low income and minority populations.

Household Size and Composition: The existing number of households and average household size, should be discussed in the context of how these have changed in recent years. Discuss also the composition of households in terms of number of single heads of households, female heads of households, and families.

Ethnic Mix: The ethnic composition of the existing population, as well as recent trends or changes in ethnic composition should be identified.

Age Distribution: The distribution of the population by general age groups should be discussed.

Income: The median income of the study area (and compared to the region) should be identified. The number of households with incomes below the officially-defined poverty level should also be listed.

3-4.2 Community/Neighborhood Characteristics

The planner should identify the defined communities (communities recognized by name and/or practice) in the affected area. Such information may be available from a combination of sources. These include local general plans, special area (community) plans, chambers of commerce, school districts, newspaper articles, planning department maps, and from discussions with local planning staff. Field reviews are also a necessary component.

“Immediate neighborhoods” are harder to define. They are usually sub-areas within larger communities, but they may at times span jurisdictional lines. They may be based on the individual's perception of their "immediate neighborhood," such as where the children play or mothers gather, or where people are simply comfortable walking. This may include a little section of open space, the corner mom-and-pop grocery, a laundromat, a beauty salon, or a neighborhood bar-- those seemingly ordinary places that in everyday life tie a neighborhood together or bring activity to the streets.

A planner who wishes to delineate an immediate neighborhood should compile a map which identifies local attractions or activity centers (child care centers, parks, banks, grocery stores, churches, and so forth). Those facilities which are available to the young, elderly, low-income, minority, and disabled are especially important because of the restricted mobility, and in many cases, transit-dependency of such groups.

3-4.3 Population Growth Policies

Discuss the growth policies of the local jurisdictions. Include adopted growth targets, growth management policies, or other policies relating to the location or rate of population growth. Population growth policies are included usually in the local jurisdiction's general plan. Some cities and counties have adopted growth management plans, and others have voter-

approved ordinances that limit the rate of population growth in the jurisdiction.

3-4.4 Public Services and Facilities

When it may be an issue, describe the type, size (capacity, acreage, floor space), and location of public services and facilities within the affected socioeconomic environment. These include, but are not limited to parks, schools, hospitals, day care centers, libraries, counseling facilities, alcohol and drug rehabilitation, bike paths, and emergency services.

As part of their studies, Caltrans Right of Way compiles information on the public and community service facilities affected by the proposed projects so it may be beneficial to contact them. Field surveys are also recommended.

3-4.5 Circulation/Access

The community impact assessment or the relevant section of the environmental document should briefly describe the types of transit facilities, highways, streets, and bicycle and pedestrian facilities associated with the proposal, if the proposed project will likely have an effect on such facilities. Use maps, information from the circulation element of the general plan, and field surveys. Properties that may become restricted in access or landlocked should be identified.

The existing public transit service that is available within the affected area should be briefly described in the case of major projects or that involve projects that might affect such service. Officials of the local public transit authority and/or planning agency should be interviewed.

The availability of parking facilities and any lots or parking spaces that would be affected by the transportation proposal should also be identified.

Demographic Data Sources

Household numbers and size are available from:

1. California Department of Finance, Population Research Unit, Sacramento (Summary Report E-5)
2. Local council of government
3. U. S. Census of Population and Housing

Sources (continued)

Household composition, ethnic mix, age distribution:

1. U. S. Census of Population
2. Housing Element (Updated)

Income:

1. California Department of Finance, Financial and Economic Research Unit
2. Local council of governments

In addition, population projections for California counties with age and gender detail are available from the Population Research Unit of the Department of Finance (Report Series E-150).

3-4.6 Demographic Information

Local agencies are a good source for relatively current demographic information. Local and regional planning agencies, local redevelopment, and local public assistance agencies compile useful data, including statistics on low mobility populations, to meet requirements for obtaining grants and administering Federal aid programs. Local chambers of commerce may also have collected some information.

The Caltrans District Right of Way Program is an important source of current and project relevant demographic data for affected households. Such

information is collected and analyzed by Right of Way staff in conjunction with the preparation of Draft and Final Relocation Impact Reports and Statements. A Draft Relocation Impact Study/Statement (DRIS) is prepared for all projects which displace any person, business, farm or non-profit organization. The Impact Statements are prepared for projects involving limited displacements (i.e., with few relocations), while the Impact Reports are written for projects with more complicated relocation consequences. See Appendix E for more information.

The Draft Relocation Impact Statements/Studies (DRIS) are prepared partially as input to the Draft ED. Some demographic data collected for these documents are especially useful because it may be derived directly from interviews with residents and business people subject to relocation. Early coordination with District Right of Way staff is recommended to ensure proper depth of analysis and scheduling of the DRIS (because interviews and Final Relocation Impact Studies are not normally prepared prior to the completion of a Draft ED). Consultant-prepared DRIS's should always be reviewed by the District Right of Way prior to the data being used in the ED.

3.5 Relocation of Housing and Businesses

3-5.1 Residential Characteristics

The environmental planner should provide a generalized description of the types of housing in the affected area and the associated city or county (single family, multifamily, apartments, mobile homes, owner occupied/rented, size, prices, condition, and age). This information can be useful in providing a general profile of the affected community or neighborhood. Such data may be available from the Census and Caltrans Right of Way and is most easily discerned by the environmental document reader when summarized in charts or tables.

The ED should describe the number and types of residential buildings subject to displacement. If a substantial portion of the city, county, or region's

affordable housing would be subject to displacement the issue should be specifically and extensively addressed. The Caltrans planner or consultant should coordinate with Right of Way to ascertain the percent of the community's affordable housing that potentially would be lost.

Caltrans Right of Way will also gather data to determine the number of people in the affected area who are subject to relocation, and this information should be incorporated into the ED. Estimate whether a sizable portion of the potential relocatees belong to a classified minority or are low-income. If so, generally determine if the percentage of possible relocatees belonging to that minority or low-income group substantially exceeds their representation in the surrounding region, city, or county. This is done to evaluate any potential for disproportionate relocation impacts to such groups under Title VI and Executive Order 12898.

3-5.2 Projections of Housing Stock

For a fuller understanding of the local housing market, discuss recent housing construction trends in relation to housing growth projections. Discuss also the location and amount of land available for residential development, given the existing planning, zoning, and average housing densities. Discuss the long-term supply and demand implications.

3-5.3 Housing Policies and Programs

Discuss local housing policies and programs that are relevant to the project. Housing policies are typically found in the housing element of the general plan. California law requires that the housing element incorporate an assessment of the community's housing needs, including emergency shelter and transitional housing.

Housing Data Sources

Housing stock, trends, and forecasts:

1. Local housing, community development, and planning department for the housing element (and any update reports required by California Housing and Community Development)
2. Local council of government
3. Department of Finance (Report E-5)
4. Department of Finance (Report 84 P-2)
5. U. S. Census

Persons per dwelling unit and housing stock composition:

1. Department of Finance (Summary Report E-5)
2. U. S. Census

Occupancy status:

1. U. S. Census

Vacancy rate estimates:

1. Department of Finance (Summary Report E-5)
2. U. S. Census
3. Special reports, U. S. Census
4. Newsletters and periodicals from organizations such as the Bay Area Council and local property management firms, apartment associations, and regional real estates firms, such as Coldwell Banker

Other Select Housing Data Sources

Housing Prices:

1. Local Board of Realtor's Multiple Listing Service (MLS)
2. U. S. Census (use with some caution as data is self-reported, as well as may be out of date)
3. Classified ads and real estate sections in local newspapers
4. Caltrans Right of Way studies

Housing conditions (condition, age, overcrowding):

1. U. S. Census
2. Local housing condition survey (city redevelopment or planning department)

Special Needs housing:

1. California Department of Social Services
2. California Department of Rehabilitation
3. County social service agencies, local planning agencies and non-profit housing development corporations

3-5.4 Businesses

If they are likely to be affected by the proposed project, describe the number, general size, and types of businesses within the Affected Environment section of the EIS. Indicate if they are established, new, or declining. Determine if they are likely to be highly dependent upon a highway location for profitability. Note if any businesses are highly dependent on having on/off ramps in close proximity. If freeway ramps are likely to be closed for ten days or longer, please refer to Appendix F. Describe the general

clientele served by the establishments, if it can be generally determined. For instance, do they serve primarily local customers? minority groups? senior citizens? and so forth.

3-6 Economics

Economics has been defined as the study of how the productive and distributive aspects of human life are organized. For most transportation projects, with no discernible effect on the local economy, discussion on this topic should be brief and largely extrapolated from existing documentation. However, some of the larger projects may well have important effects on the local economy of a neighborhood or community. One of the most critical yet perplexing questions the planner must address in analyzing a local economy is to identify the appropriate geographic unit or area level in which the analysis will be conducted. An inherent challenge is the usual mismatch between transportation routes and political boundaries. The range of impact of economic activity almost never coincides with the jurisdictional boundaries of political units.

It does not always make the most logical sense when studying likely economic effects to focus on a small geographical unit. For example, people often work in a different city than the one in which they live. Therefore, impacts displacing people or businesses often have these "spillover" effects.

Moreover, data availability plays into the question of how broadly one should extend the net to capture economic activity variables. The federal statistical system provides only limited coverage of geographic areas below the county level. Too, the analysis of cities is often thwarted by the limited frequency in data-gathering and level of detail of the available data series.

3-6.1 Selecting Variables and Data Elements

The regularly published federal government data that are most useful for local economic analysis covers the following variables:

- Resident labor force (unemployment)
- Employment (total and by industry)
- Earnings (total and by industry)
- Personal income
- Population
- Commuting flows
- Business establishments

The currency of the data may become problematic; two of the most valuable are only available on a five year (Economic Census) or ten year basis (Census of Population and Housing). If the locale has been experiencing relatively rapid or constant change, the data can become unreliable. The planner, therefore, must continually validate the data so that it represents fairly the current economic and business conditions of the affected area.

3-6.2 Tax Revenue

The property tax is imposed on real property and is based on the value of the property. The sales tax is imposed on retailers for the privilege of selling tangible personal property in California. The sales tax rate is a composite of various tax rates: a state rate, a 1% city-county rate, a local transportation rate, a statewide rate for local public safety services, and a statewide rate for local health and social services. Therefore, if a large number of firms or major firms may be displaced, the effect would be important to assess. The analyst would need to determine the amount of local taxes paid annually by the businesses.

The community impact analyst should also determine the amount of property tax paid annually by both the residents and the business owners who are likely to be subject to displacement. This amount is then calculated as a percentage of the city or county's total annual

property tax. The local tax assessor's office can provide the information on the total amount collected.

Tax Revenue Data Sources

The County Tax Assessor's Office or Caltrans Right of Way should be able to assist in providing this information. Taxable retail sales data may also be obtained from the California State Board of Equalization.

Potential impacts to property values of houses and commercial facilities should be estimated. Coordinate this with the Caltrans District Right of Way staff. They can also provide advice on the effect on property values based upon their experience with similar situations. A brief synthesis on property value studies is available from the Caltrans Headquarters Environmental Program.

3-6.3 Employment

Describe the number, occupational type, general length of employment, and the demographic characteristics of employees of firms slated to be displaced or are otherwise affected by the transportation project.

Employment Data Sources

City level:

1. Local chamber of commerce
2. Local council of government
3. Local planning agency or economic development office
4. U. S. Census of Population and Housing

County and Metropolitan Area level:

1. Publications from the California Employment Development Department, Sacramento, including:
 - *"Annual Planning Information"*
 - *"Projections of Employment by Industry and Occupation"*
 - *"Annual Average Wage and Salary Employment"*
2. California Board of Equalization, Business Permit data
3. U. S. Census, "County Business Patterns"
4. U. S. Economic Censuses, including Census of Industry, Census of Retail Trade, among others

3-6.4 Labor Force Characteristics

The community impact assessment technical report prepared for an EIS should identify for the region the approximate number of persons in the labor force, the number employed, and the unemployment rate. Recent trends and changes in the size of the labor force and the unemployment rate should also be discussed. Discuss the composition of the labor force in terms of such characteristics as percentage of women, percentage of skilled versus unskilled workers, and percentage of college-educated. It should be understood that the type of data listed above is most likely to be relevant for the larger-scale

transportation projects with concomitant greater community impacts.

Labor Characteristics Data Sources

1. U. S. Census of Population and Housing
2. California Employment Development Department, "*California Labor Market Bulletin.*"

3-6.5 Employment Programs and Policies

When relevant to a proposed project (e.g., a number of businesses are likely to be adversely affected), discuss the relevant employment policies and programs of the jurisdiction(s) within the study area.

Employment Policies Data Sources

Employment policies usually are found in the local general plan. If there is a redevelopment area affected by the project, employment policies may also sometimes be found in the redevelopment plan. These policies discuss the type of employment that is envisioned by the planned land use designations.

CHAPTER 4

COMMUNITY IMPACT ANALYSIS

4-1 Content of the Chapter

This chapter presents the basic analytical techniques that should be utilized by the Caltrans environmental planner or consultant to evaluate potential community impacts, including changes in land use. It also provides examples of how such impacts can be avoided, minimized, or mitigated.

After completing the first two basic tasks described in chapters 2 and 3, namely preparing to conduct the analysis (including delineating the study area and identifying the basic issues to be studied), and then describing the affected social and economic environment (completing the community profile), the planner is then ready to carry out the third major step in community impact assessment. (Of course, we are fully aware that the step-by-step approach outlined here is not as neatly accomplished as suggested; however, based upon our experiences, better results are produced from conceptualizing the process in this sequential manner).

The third major task is to **evaluate** potential impacts by using the information previously collected and selectively applying the analytical techniques described in this chapter. Some alternative methods and their application in particular situations are presented. Examples of mitigation measures for some types of community impacts are also summarized in this chapter.

The evaluation of potential impacts presented in this chapter should be used to respond to the social and economic portion of the "Environmental Significant Checklist" questions of the Caltrans Environmental Handbook, Volume 1, or the "Environmental Consequences and

Mitigation Measures" portions of environmental impact statements and environmental impact reports as outlined in the same handbook and the "Environmental Consequences" section of the 1987 FHWA *Technical Advisory T 6640. 8A*.

4-2 Land Use

Federal Guidance

The FHWA *Technical Advisory - Guidance For Preparing and Processing Environmental And Section 4(F) Documents* prepared by U.S. Department of Transportation, Federal Highway Administration, 1987, states:

This discussion [of land use] should identify the current development trends and the State and/or local government plans and policies on land use and growth in the area which will be impacted by the proposed project.

The land use discussion should assess the consistency of the alternatives with the comprehensive development plans adopted for the area and (if applicable) other plans used in the development of the transportation plan required by Section 134. The secondary social, economic, and environmental impacts of any substantial, foreseeable, induced development should be presented for each alternative, including adverse effects on existing communities. Where possible, the distinction between planned and unplanned growth should be identified.

Growth inducement, although noted, is not a topic discussed separately in the FHWA's *Technical Advisory*.

State Guidance

The CEQA *Guidelines* [15126(a)] specify that an EIR for a proposed project include a discussion of "changes induced in population distribution, population concentration, the human use of the land (including commercial and residential development), health and safety problems caused by the physical changes, and other aspects of the resource base such as water, scenic quality, and

public services. The EIR shall also analyze any significant environmental effects the project might cause by bringing development and people into the area affected." This list of topics is similar to those expressed in the FHWA *Technical Advisory*.

4-3 Growth Inducement

This chapter contains extensive discussion on the topic of growth inducement because it is usually one of the most difficult issues for both environmental staff and consultants to understand. In most cases, a community impact assessment prepared for an environmental document should discuss growth inducement, but for many transportation projects - where it is not an outstanding issue, or there is no apparent controversy - the topic is best treated briefly.

Growth inducement is defined as the relationship between the proposed transportation project and growth within the project area. This relationship is often difficult to establish with a high degree of precision. The relationship is sometimes looked at as either one of facilitating planned growth or inducing unplanned growth. Both types of growth, however, must be evaluated because they will each have varying degrees of beneficial and adverse effects.

Obviously, transportation shapes the demand for other types of land use, just as commercial and residential development require transportation infrastructure to provide needed mobility and accessibility. Many planners and decisionmakers see this transportation and land use nexus as a "chicken and egg" relationship, but at closer inspection such an analogy is overly simplistic and certainly does not characterize the issue sufficiently for legal compliance purposes under CEQA.

It is not difficult to comprehend how the construction of a road on a new alignment would likely induce some growth or development in a localized fashion, for example, such as encouraging the construction of gasoline stations, motels, and fast food restaurants at prominent

interchanges. Yet, it is commonly accepted that regional growth patterns depend on a whole range of economic forces that are local, national, and even more recently with the emergence of the Pacific Rim economy, and the passage of the North American Free Trade Agreement (NAFTA), even international in scope. Furthermore, it is admittedly difficult to assess the growth-inducing impact due to expanding existing or constructing new transportation facilities in an area already urbanized.

Unlike the issue of assessing cumulative impacts, the basic question of how growth-inducing impacts should be addressed as part of environmental studies has not itself been the subject of CEQA court rulings in the past several years. And, no universally-accepted standard analytical methods for conducting a growth inducement study have been adopted by the California Resources Agency, nor the Governor's Office of Planning and Research (OPR). Therefore, there has not developed a single way of looking at the topic. In an appendix to this volume, Caltrans provides a Growth Inducement Checklist designed to aid the environmental planner in answering how projects may or may not be growth-inducing.

The CEQA *Guidelines* [15126(g)] specify the topics that should be considered in analyzing the potential growth-inducing impact of a proposed action: "*Discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth Increases in the population may further tax existing community service facilities so consideration must be given to this impact. Also discuss the characteristic of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.*"

It is well understood that changes in land use and economic development are potentially important

environmental impacts of major transportation investments. The effects of past transportation decisions on investments are often apparent even today. For instance, historically, the compact densities of older central commercial districts (in many cases) reflect the effect of streetcar systems on development patterns. More recent examples may be found in the emerging suburban "activity centers," and business parks which reflect the ease of access for automobiles provided by their location at the intersection of major highways.

Such examples are sometimes used to support the notion that *all* transportation investments will induce and shape economic growth and land development. The reality, however, is that these complex relationships are the product of multiple social, economic, and geographic factors, none of which is perfectly understood.

A traditional shorthand way of looking at growth inducement is as the removal of obstacles to growth, and is specified as such in the CEQA *Guidelines* highlighted previously. Capacity improvements should be considered removal of transportation related obstacles to growth. By this given definition, a project to increase capacity on a highway can be understood as growth inducing. That does not make it a "bad" project, however. The conclusion sought from the analysis is whether or not the future project capacity will exceed the predicted traffic capacity as needed by the planned population of the area. The identified excess capacity is an indicator of the likely significance of the growth induced or facilitated by the project.

Another way of looking at growth is expressed in Section 15126(g) of the State CEQA *Guidelines* which requires the EIR to discuss how the project will "foster economic or population growth." The word "foster" is defined as "promoting or sustaining." The question is, will the project promote future economic or population growth?

Growth and development move forward, or are held back, mainly for economic reasons, although social, political, and environmental reasons sometimes play a part. An analysis of growth and development should explain these reasons in the

context of the proposed project and any growth that would be affected by it. The environmental document should discuss the effect each of the proposed alternatives would be expected to have on growth and development and why it is so.

The discussion should not contain value judgments about growth, such as "some see growth as good" (See extract from CEQA *Guidelines* [151269(g)] above). Because growth is by its nature mostly a future event, the conclusions will be only judgments, but they should be judgments based on a thorough consideration of the economic, social, political, and environmental factors.

If any growth is expected, the discussion must be more analytical than a statement that growth will occur anyway and local agencies have the power to control growth rates and patterns. The discussion should not be loaded down with generic explanations of the typical relationship between transportation and growth; it should be specific to the project and affected area.

The concept of "growth inducement" is, and has been for some time, controversial. So that Caltrans environmental staff and its consultants may have a framework for understanding the concept, a general canvass of the topic of growth follows below. An Appendix to this volume of the Environmental Handbook contains additional discussion on the analytical methodologies that might be employed, as well as a planner's "checklist" to aid in answering growth-related issues.

The land development market controls the rate of investment. Real estate lenders strongly influence the location of growth by determining to which builders they are willing to lend funds. It is unlikely that lenders place much conscious emphasis on highway location, per se, when making lending decisions (they are much more likely to be concerned with sewer and water availability).

Several other points may be useful in understanding growth. A transportation investment may act as a credit for a developer, in

the sense that it is a part of the development the builder will not have to pay for. This is particularly the case where the existing transportation facility would not be able to handle much growth without being improved. The builder may see development becoming cheaper and more attractive. Conversely, local governments increasingly are requiring development fees including charges for transportation facility costs, and some developers are providing interchanges or other contributions to the State highway system, such as the required right of way.

It should also be understood that there is competition as to the timing and location of development. A comparison among those sites which might be developed can be revealing. The relative advantages and disadvantages of competing developments can be powerful arguments when making findings about growth effects. This comparative information should be taken into account.

4-3.1 Growth Inducement - Placement in Document

Information about growth and the project's effects on it may be presented in one of two ways. First, it may be included in the main body of the Environmental Document, along with the discussion of the purpose and need and other land use aspects of the project's setting and consequences. If this is the format chosen, an additional section on Growth Inducement as the last topic under "Environmental Consequences" can be limited to a summary of conclusions, recommendations (if any), and text references as needed.

The second way is to make the discussion a mostly or wholly self-contained section on Growth Inducement (including setting for growth, and consequences), and place it near the back of the EIS, following the subsection on "Irreversible and Irretrievable Commitments of Resources" of the "Consequences" section and preceding the "Distribution List" section. The CEQA *Guidance* calls for the placement of the growth inducement

discussion in a separate section at the end of the Effects/Consequences" discussion, which would be appropriate for an ED prepared for a local or State funded project (without Federal involvement).

The choice between the two should be based on which way the discussion could be presented most clearly and least repetitiously, and how important the growth issue is compared to others. It is generally best to separate discussions of cumulative and secondary impacts so they will not be confused with discussion of direct project impacts.

4-3.2 Air Quality and Growth

Transportation projects must be consistent with air quality and congestion management plans as well as with regional land use plans and their incorporated population (and employment) projections. The key measurable factor is vehicle miles traveled. However, up to the present time, vehicles miles traveled (VMT) per person has been increasing at a much faster rate than population or employment, raising questions about the extent to which transportation decisions or land use planning by themselves can effectively reduce VMT.

Using the projected increases in auto travel (VMT) to evaluate whether or not a proposed highway project is growth inducing is probably not satisfactory for purposes of achieving a quality evaluation.

4-3.3 Growth Inducement - Caltrans Policies and the Planning Process

Caltrans projects are designed to facilitate planned growth in accordance with local and regional plans and policies. It is the Department's philosophy that local government should determine the extent of growth it wants. Then, Caltrans, subject to available resources and in cooperation with local and private entities, may provide transportation facilities and services needed to accommodate such growth.

Caltrans environmental planners also should be familiar with the Federally-required transportation planning process. Where a metropolitan planning process identifies the need for a project which would require that substantial transportation capacity would be added to a given corridor, or in a defined sub-area of the metropolitan area, and which may involve federal funding, a major investment study (MIS) is required. Usually prepared by the project sponsor, or their consultant, it is a collaborative process involving a host of partners: FHWA/FTA, Caltrans, the appropriate MPO, transit agencies, and other interested parties. The MIS is conducted during the planning stage and results in a decision on the transportation improvement “alternative,” set of alternatives, or package of strategies. It could also likely result in an amendment to the Regional Transportation Plan and Transportation Improvement program.

Caltrans projects are designed to accommodate existing traffic and traffic projected to be generated by planned growth. Since Caltrans projects must be cost effective, they are not designed with excess capacity that could induce unplanned growth during the twenty year period following completion. That is, an urban project is designed to achieve a certain level of service after twenty years as specified in the most recent system planning route concept report. Also, designs may anticipate median widening or other increases in capacity in future years.

Although Caltrans projects are coordinated with local and regional plans to ensure compatibility in terms of highway capacity as it may relate to population, such compatibility cannot be used to argue that the project would not be growth inducing. Past California judicial decisions involving CEQA have determined that environmental documents must contain a realistic assessment of projected population increases (growth inducement) and not illusory figures. In one case, a county argued that a new local general plan constituted a net decrease in growth inducement in comparison to the former plan because it contained a population projection figure far below that of the earlier plan. However, since

the new plan's population projection still called for a substantial increase in population above the *existing* population, the Court stated the net decrease was illusory and therefore the EIR for the plan failed as an information document.

This ruling is applicable for the growth inducing impacts of transportation proposals. In assessing growth, the benchmark should be the *existing* levels of population. The analyst should indicate the existing capacity of the facility and compare it to the capacity of the improved roadway. The analyst can describe the coordination that went into the sizing of the project.

The compatibility between the capacity of the project and the population projections of local and regional plans can then be discussed. However, the mere existence of compatibility between the proposed project and local/regional plans does not imply the absence of growth inducement. Rather, the change in capacity should be presented in the environmental document in terms of a percentage increase. The analyst should indicate to what extent the new capacity will permit the population projection level set forth in the plans to be achieved, and explain the differences between planned and unplanned growth (i.e., less public facility impacts).

4-3.4 Growth Inducement-Analytical Techniques

A number of alternative techniques are available to analyze growth inducement. We have placed these in a separate appendix. The techniques are given short descriptors: **forecasts**, **checklist**, **factors**, and **no-action**. We also call your attention to a specially developed checklist in the same appendix that should be helpful in analyzing growth inducement.

If growth inducement appears to be a very controversial issue, consideration may be given to hiring an outside consultant to prepare the study. Consultants may have the advantage of being perceived as less biased, and may have informational resources and methodologies that

are not available or familiar to Caltrans environmental planners. They may also use any of the analytical techniques described in this volume.

In addition, planners should not overlook the emerging importance of Geographic Information Systems (GIS) as an analysis and presentation tool for land use and growth issues. In some jurisdictions, GIS can help address a host of relevant questions. These include ones like: Where are the vacant parcels located next to a proposed transportation facility? What are the projected growth rates for a particular area? It is very likely that geographically-arranged data sets, including information on demographics, land parcels, and transportation, will be more commonly used to graphically-depict, for planning analysts, decisionmakers and the public, complex issues such as growth inducement.

4-3.5 Growth Inducement - Cumulative Effects

Cumulative effects of a project are discussed in a particular part of the Environmental Document as noted in the Caltrans Environmental Handbook, Volume 1. Often, the growth inducement discussion will find that growth impacts are a primary or a secondary effect, that may or may not be related to the cumulative impacts of the project. There should be an evaluation and comparison of direct and indirect impacts of growth inducement. In writing the ED, the possible need to present material dealing with growth inducement in the cumulative impacts section of the document should be kept in mind.

Cumulative effects on growth should be discussed when one or more other projects are likely to add to (or offset) the proposed project's effects on growth. Sometimes the cumulative effects of several projects can together change the situation for developers enough that a conclusion of "contributes to growth" should be made instead of "not affect growth." An example of this would be a new state highway interchange and a new locally or privately funded connecting road, which together would allow significant business or

residential development. A secondary impact from this combination could be higher traffic volumes on the state facility and the resulting need for additional improvements to increase capacity.

4-3.6 Growth Inducement - Secondary or Indirect Impact of Growth

Secondary effects from growth should be noted when the project affects growth *and* the growth's secondary effects are disproportionately significant. Growth can, for example, add traffic to arterial streets, add pupils to schools, adds to the sewage load, and may eliminate habitats for plants and animals. If these secondary effects are so great that the public would have to pay to improve arterial streets, build new schools, or expand sewage facilities, or plant and animal populations would be threatened, then these secondary effects should be reported. The audience for the environmental document needs to understand that there is a linkage, and that it is an indirect one.

Examples of indirect effects include leapfrog development, infilling of development, pressure for development on environmentally sensitive lands, increased energy consumption, changes in land prices or tax rates, and perceived changes in quality of life. All these along with many other secondary impacts may be related to land use decision making as affected by transportation projects. However, remember that there has been no methodology identified which will reliably inform decision makers about how much of the impact is exclusively due to the transportation factor as separate from all the factors affecting land use choices. It is suggested here that indirect impacts be discussed in environmental documents but in many cases only direct impacts can be quantified.

A highway improvement may influence a shift in the direction of an area's growth. One example of this would be where a new freeway interchange, on a highway serving an urban area, provides access to previously undeveloped land. However, as with growth in general, location shifts are a

result of numerous factors. For instance, if the newly accessible area has lower land costs, better proximity to customers and employees, and is otherwise competitively superior, regional development may shift away from the urbanized area.

4-3.7 Growth Inducement - Significance and Conclusions

Section 15065 of the CEQA *Guidelines* lists mandatory findings of significance which do not specifically include growth inducement. However, the Guidelines do identify "cumulatively considerable" impacts as a mandatory finding of significance. Growth may be seen to be beneficial or adverse. If adverse, it could be seen as significant or not significant. The environmental document must make the judgment clear on these two issues in the concluding discussion.

Thresholds of significance for growth inducement impacts have not yet been developed. Measurements that might be used to estimate impacts are changes in the rate of growth, in population density, and in the patterns of land use. The analyst, however, is faced with the daunting task of attempting to forecast these numbers. Without an adequate land use model, forecasting these factors would be very difficult. A comparison of total vehicle miles traveled (VMT) might be used in comparing alternatives. As noted previously in the discussion of this topic, however, in California VMT is growing at a faster pace than population and economic growth, and has proven to be somewhat independent of land development.

Due to the multitude of variables that are used in the evaluation and measurement of growth inducement, it is virtually impossible to establish threshold levels that would apply in all cases. Some threshold levels that could be used in selected projects with appropriate justification are compliance with state air quality standards, exceeding roadway capacity, levels of service, and increases (or decreases) in accessibility as measured by driving time and distances. Other

threshold levels such as percentage of population increases or percentage increases of developed land areas are possible in individual cases but not comparable to other projects. In all cases, where project planners decide upon a threshold level to be used, the justification for it should also be included in the analysis.

If growth inducement under CEQA is broadened to include not just the increase in the amount of urbanization over and above that predicted, but also a change in the *location* of new development in an area, growth inducement might be found for virtually all new highway construction in developing or previously undeveloped areas.

The section on growth should lead to a conclusion(s) about the relationship between the project and growth. Usually one of the following conclusions will fit the situation:

- **Not affect growth** - this conclusion can be made when no growth is expected, or when the project would yield no advantages that would have effects on developers' decisions.
- **Cannot determine effect on growth** - this conclusion can be appropriate when only wild guesses can be made about the likely course of growth: this is sometimes the case in rural areas, but in urban areas the analyst should be able to be more precise.
- **Hasten (or slow) growth, intensify growth, or shift growth from elsewhere in the region** - this kind of conclusion can be made when developers are expected to modify their course of development because of the project; the terms "support growth", "contribute to growth," "facilitate growth," or "respond to growth" are less precise ways of making this conclusion.
- **Induce growth** - this conclusion can be made when a larger amount of development would be expected to occur (area wide) during or after the project's construction than otherwise would have been expected in the foreseeable future.

Please Note: With respect to Caltrans-sponsored projects, any draft conclusions that a proposed project may be judged to be growth inducing must be discussed with the Environmental Office Chief and the Project Manager.

4-3.8 Infill

A project that may increase accessibility to vacant and underutilized land in an urbanized area should not normally be considered to be growth inducing. Development of such lands (infill) is generally considered to be a benefit to the community because construction on such land generally utilizes infrastructure that is already in place.

4-3.9 Growth and Agricultural Land

There are some that hold that any project that would increase accessibility to agricultural land should be considered to be growth inducing, regardless of whether local land use plans and current zoning show that the agricultural land is not proposed to be urbanized. Certainly the analysis should discuss the basic land market dynamics in the area where the project is located. If there is little pressure for urbanization, the project is unlikely to be growth inducing.

The analysis of growth should consider what local officials and planning documents say, but the conclusions should express the California Department of Transportation's own judgment based on an analysis of all the information available. Information should be quantified where it can be (with the exception that land values should not be presented in such detail so as to compromise right-of-way negotiations or damage claims), conclusions should be as clear and specific as possible, and uncertainty should be described where it needs to be. Judgments should be based on and supported by facts, not personal opinions. The conclusions should help the environmental document readers and decision-makers determine what the project's effect on growth would be and whether it would be significant in the context of the region's plans, natural setting, and growth patterns.

4-3.10 Growth Inducement - Mitigation Measures

This can be a highly debatable subject. Typically, aside from the "no build" alternative, it is hard to imagine how a transportation project can be mitigated for its growth inducement impacts. First, in many cases the growth is outside Caltrans' jurisdiction. The alternatives considered are devised to meet a need: if the need is not met, the project is deficient. Although design and location variations may reduce many other impacts, the land use impacts associated with the term "growth inducement" imply some restraint on land development which is unlikely to be the case except in a few jurisdictions with strong growth management ordinances.

There have been a some transportation projects that have been found to be growth inducing and have been approved with Statements of Overriding Considerations. Findings of growth inducement with a significant impact do have the resulting effect of requiring an EIR where otherwise a Negative Declaration might have been sufficient for CEQA compliance.

A Statement of Overriding Considerations would be filed indicating that the growth inducement aspects of the project cannot be mitigated because other benefits of the project override these concerns. Given the greater emphasis increasing the linkage between transportation and metropolitan and regional planning under ISTEA, local government must make the basic decision to include a particular highway facility in the Transportation Improvement Plan. The political majority necessary to include the project assures that there is full political consideration, even though one or more affected jurisdictions may have objections.

A decision making body cannot fulfill its CEQA duties simply by considering an EIR before approving the project. Rather, if an agency determination is to approve a project despite its significant adverse impacts, the agency must issue a set of findings. The purpose of findings is to

insure that the decision making agency actually considered alternatives and mitigation measures in its deliberations. Therefore, where significant and adverse growth inducements are found to be the direct result of a transportation project, the following findings should be made in the CEQA document:

“For each significant effect identified in the EIR, the lead agency must make one or more of the following findings: (1) that changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the effect; (2) that the lead agency lacks jurisdiction to make the change, that another agency does have such authority; and/or (3) that specific economic, social, or other considerations make infeasible the mitigation measures or project alternatives identified in the final EIR” (Remy, 1992, 138).

While the second finding cited above is usually true with respect to Caltrans and the issue of growth inducement, it is the third item cited above which is the one most likely to be used to assert that the merits of a project outweigh the negative effects of growth inducement. In cases where this approach is used, it must be remembered that these findings must be documented with factual, tangible evidence.

However, growth inducement identified in the CEQA/NEPA process should be shown to have direct, measurable and somewhat immediate effects on local environments. Speculations about regional, very long term and secondary impacts should be identified as conjecture and not be identified as mandatory findings of significance.

4-4 Consistency with Local and Regional Plans

Note that the CEQA Guidelines (15125) require that the Setting section of an EIR discuss any inconsistencies between the proposed project and applicable general plans and regional plans. A project's compatibility with local and regional plans is an important consideration, because non-compatibility can in some instances become a

controversial issue and generate local opposition. If the proposed project is not consistent with local plans, the elements in conflict should be identified. In addition, ISTEA and the Clean Air Act Amendments require consistency between the regional plans and proposed transportation projects. If a project is not compatible in terms of future development, local support for project changes could develop.

Comparison of regional forecasts with local forecasts may show that the local community may experience levels of growth that exceed its estimated capacities of developable land or the capacities of planned infrastructure. Project opponents might argue that the project not being in conformance with the local general plan is a significant growth inducing impact. In most regional plans, however, the regional predictive models take into account local socioeconomic data but they may come to a different conclusion about what will happen in the future from a regional perspective. These discrepancies should be documented. However, the finding cannot necessarily be made that there is a significant growth inducement when only one jurisdiction's plan is at variance with the regional pattern. This is to say that a state project may comply with the growth management portion of one local agency general plan and under exactly the same circumstances, may not comply with another. Where multiple agencies are involved, complete compliance of a project with planned growth policies may be impossible.

What are examples of how transportation projects might conflict with local plans? A general plan, for instance, may call for the preservation of low income or affordable housing, while construction of a proposed transportation project would remove sizable numbers of such dwellings. Highway bypasses may conflict with a city's plan to revitalize a downtown business area. A project may also divide communities, remove scenic landscaping, convert agricultural land, or have other impacts that would conflict with local goals and policies.

The goals, policies, and specific provisions contained in the various elements of local and

regional plans should be reviewed for any conflicts with potential impacts of the project.

UC-Berkeley Professor Elizabeth Deakin, a transportation planning expert, has studied how development permitted under adopted land use plans and zoning is frequently not consistent with available and planned transportation capacities. Her expository on the issue is insightful, and we quote at length:

“First, many local planning documents are so general as to make it very difficult to say how much development, and what kind, would be allowed, at a level of specificity appropriate to a transportation analysis. The same is true of some zoning, where the range of permitted uses is extremely broad. At the same time, many jurisdictions have not established standards for what constitutes an acceptable level of service for their transportation systems. Consistency in these cases can have only a very general meaning.

Even when plans are clear about the kinds and amounts of development that would be allowed, consistency in implementation could face practical problems. For example, whether such development levels would indeed materialize often is questionable. In most communities, land use plans and regulations set forth the community's long term aspirations for physical development and the housing opportunities, jobs, and tax revenues that development would imply. But because land development is overwhelmingly a private sector initiative, communities have relatively little ability to assure that their plans will be realized. Many local governments have plans and zoning that would permit development far in excess of what market forces are likely to generate, at least over a 10-20 year planning horizon. Others operate with conservative plans and zoning but repeatedly approve developers' requests for plan and zoning amendments; indeed, much of the activity of the typical planning department involves dealing with requests for plan amendments, re-zonings, and other exceptions to or modifications of the community's plans and regulations, in order to permit development that differs from that envisioned in the planning instruments. Coordinating transportation capacity with planned land uses in

either type of situation could lead to a miscalculation of transportation needs.

The impermanence of land use plans and regulations also raises practical questions for consistency in transportation implementation. Because land use plans and regulations can change so often--multiple amendments are permitted up to four times a year in California--continual revisions to transportation investment plans also might be needed to maintain consistency. While for small transportation matters this might not pose much of a problem, major transportation facilities can take 10 years or more to plan and implement, making such repeated plan and program revisions costly and difficult to accomplish.

To summarize, regional plans should be analyzed for how they handle growth. Discussions with local planning officials are useful in determining the existence and significance of any incompatibilities. Determining overall compatibility can become complicated if the proposed project is consistent with certain goals and policies and in conflict with others. Also, a project that spans several jurisdictions may be compatible with the plan of one local government and in conflict with that of another. The above critique is more important in the face of requirements under ISTEA for consistency of transportation projects with the achievement of clean air standards.

4-5 FARMLAND IMPACTS

4-5.1 Overview of Form AD-1006

The federal process to assess farmland impacts is guided by the provisions of the Farmland Protection Policy Act which calls for completing Form AD-1006. The process is an iterative one, with both the Natural Resource Conservation Service (NRCS, formerly the Soil Conservation Service, or SCS) and Caltrans, acting for FHWA, or in some instances, FTA, completing various portions of the form. The following is an overview of the process; detailed instructions for

completing the form are provided in Appendix C, along with sample exhibits.

1. Except in cases where it is obvious there is no farmland (see below), the Caltrans District Environmental Program submits Form AD-1006 to the NRCS office which handles that particular county and requests that a determination as to whether the project location has farmland that is subject to the Farmland Protection Policy Act.
2. If the NRCS determines that the project does not involve farmland the form is sent back to Caltrans to be placed in the environmental project file. No further evaluation is required. If the project location is subject to the Act, the NRCS will measure its relative value on a numerical scale. The NRCS will also include on the Form AD 1006 numerical responses for the total amount of land that can be farmed, the percent of the jurisdiction that is covered by the Act, the percent that the project would convert, and other quantifiable data.
3. After Caltrans receives back from NRCS the form with a score of each "site's" (this is equivalent to project alternatives) relative value, Caltrans will assign point values by applying the site assessment criteria as presented below. If a threshold score is reached, Caltrans will consider alternatives to avoid converting the farmland. This form should be included as an appendix within the environmental document.

Urbanized Areas With No Farmland Involvement

Any farmland (regardless of quality) which is already in or committed to urban development is by definition farmland not subject to the FPPA. Where the proposed right-of-way for a transportation project is wholly within a delineated urban area the completion and submittal of Form AD 1006 to NRCS is not necessary.

What constitutes an urban area may be determined in a number of ways. An urban area may be identified by an area shown as "urbanized area"

(UA) on the Census Bureau map, or shown as an urban tint outline or urban area map on U.S.G.S. topographical maps, or shown as urban/built-up on the USDA Important Farmlands Maps. Areas shown as white on the USDA Important Farmland Maps are not farmland and, therefore, are not subject to the Act.

The following standard statement may be used in the NEPA document:

Through coordination with the Natural Resource Conservation Service, it has been determined by Caltrans that the project area which is located in the urbanized area (Name of urbanized area) does not meet the definition of farmland as defined in 7 CFR 658. Therefore, the provisions of the Farmland Protection Policy Act of 1984 do not apply to this project.

Non-Urbanized Areas With No Farmland Involvement

The following standard statement may be used in the NEPA document:

It has been determined by the Natural Resource Conservation Service that no farmlands as defined by 7 CFR 658 are located in the project vicinity.

4-5.2 Unavoidable Conversion of Williamson Act Contract Land

Implementation of transportation projects will sometimes require Caltrans to acquire for rights-of-way purposes farmlands currently under Williamson Act contracts (see Chapter 3). The Act prohibits a public agency from acquiring prime farmland covered under the Act for the location of a public improvement if there is other land within or outside the preserve on which it is reasonably feasible to locate the public improvement. The law generally exempts existing state highways from this provision, however. Also the CEQA *Guidelines*, as stated in Chapter 3,

consider cancellation of contracts for parcels exceeding 100 acres to be of statewide significance. Solely on the question of valuation, Government Code section 51295 states that when a project would condemn or acquire only a portion of a parcel of land subject to a Williamson Act contract, the contract is deemed null and void only as to that portion of the contracted farmland taken. The remaining land continues to be subject to the contract unless it is adversely affected by the condemnation. In such cases, the contract for the remaining portion may be canceled.

Government Code Section 51291(b) requires an agency to notify the Director of the California Department of Conservation and the local governing body responsible for the administration of the preserve (usually the planning department) of Williamson Act contracted land proposed for acquisition for a public improvement project (regardless of whether it is a state or federally funded project, or the amount of total acreage involved). Such notification must occur when land enrolled in a Williamson Act contract is being *considered* for acquisition by a public agency (see Appendix C for sample letter). Within 30 days thereafter the Director of Conservation and the local governing body shall forward their comments which shall be considered by the public agency. This coordination should be mentioned in the environmental document. The notification can also occur via the process of submitting the Draft EIS/EIR to the Department of Conservation for review. Planners should also be aware that this process should be followed regardless of whether the project is covered under CEQA or NEPA; the FPPA and Williamson Act farmland policies are not mutually exclusive.

4-5.3 Farmland Impacts - Mitigation Measures

If the environmental assessment concludes that the amount or type of farmland that would be adversely affected by a transportation improvement project would constitute a significant environmental impact, measures should be considered to protect the farmland. These include alternative alignments that would

avoid farmland altogether, or that would convert fewer acres of farmland or take other farmland that has a lower relative value. The construction of bridges and widening of existing highways can be a farmland protection method, and is recognized as such by the Natural Resources Conservation Service.

Other measures to mitigate farmland impacts include minimizing shoulder width, using concrete median barriers instead of wider medians, and leasing roadside right-of-way for agricultural purposes where no immediate or near future need exists for the farmland's use for transportation. Mitigation measures might also include placing a conservation easement on alternate farmland parcels. Agricultural easements involve permanent restrictions on the use of land from more intensive purposes; the property ownership does not change. Usually administered by land trusts or other non-profit entities, easements are acquired either by purchase or as a mitigation for development approved on parcels elsewhere. Such conservation easements are increasingly being used by local governments to mitigate farmland loss, notably in Alameda, Solano, and Marin Counties. The Agricultural Land Stewardship Program, signed by Governor Wilson in 1995, established a Farmland Conservancy in the California Department of Conservation, which will acquire permanent easements over agricultural land (Public Resources Code 10200, Division 10.2). And, where fields would be severed by a project, overpasses and underpasses for livestock, machinery, and drainage have been constructed in order to provide access.

The conversion of agricultural land to other uses may be a significant impact that cannot always be mitigated. In those situations, to satisfy the findings requirement under CEQA, the decision-makers would have to conclude that social or economic factors do not make it feasible to mitigate the conversion.

4-6 Social Impacts

Frequently, the social costs of transportation projects are borne by those communities and areas lying near the highway corridor, while the benefits are shared by a larger population at the city or regional level. For this reason, analysis of social impacts is generally directed at the neighborhood level, where the majority of negative impacts are to be felt. It is probably also useful to briefly highlight the regional social benefits of the project in the Community Impacts Assessment.

4-6.1 Community Cohesion

Background

Community cohesion is the degree to which residents have a "sense of belonging" to their neighborhood, a level of commitment of the residents to the community, or a strong attachment to neighbors, groups, and institutions, usually as a result of continued association over time. Cohesion refers to the degree of interaction among the individuals, groups, and institutions that make up a community. Transportation projects impacts tend to be more disruptive to cohesive communities.

Although the term is widely used, "community" means different things to different people. Sociologists have come up with almost 100 definitions for community. A classic textbook definition of community is: a population whose members are interdependent and who perform many activities that satisfy the population's economic and social needs. In simpler terms, a community is a population rooted in one place, where the daily life of each member involves contact with and dependence on other members. It has generally been a characteristic of our society that people form relationships and establish social organizations on the basis of (1) certain distinctions they perceive about themselves and (2) spatial proximity.

The boundaries of communities or neighborhoods can often be delineated by physical barriers (highways, waterways, open spaces, etc.), by activity centers, sharply different average home

values, selected demographic characteristics (ethnic groups), and (through surveys of) resident perceptions. Reports and maps developed by local planning agencies can also help define spatial boundaries.

Cohesive communities are associated with specific social characteristics which may include long average lengths of residency, frequent personal contact, ethnic homogeneity, high levels of community activity, and shared goals. Some studies indicate that single family home ownership, working class families, ethnic group clusters, mothers working at home, and the elderly correlate with active community participation and high community cohesion. Residential stability and longevity can be a strong neighborhood link.

Generally, the effect of a transportation facility located through an older, established neighborhood is more severe than one located through an area where the housing changes ownership every three to five years. There also may be multi-family or renter-occupied areas that exhibit these same qualities (for instance, where recent immigrants or low-income people may have clustered), although these may be somewhat more difficult to detect through traditional research means. Local public officials and community leaders, such as clergy members, can provide valuable information and insight into the community's makeup and cohesiveness.

Transportation projects may divide cohesive neighborhoods when they act as physical barriers or when they are perceived as psychological barriers by the residents. For example, if a conventional two-way residential street is re-engineered to accommodate single directional traffic, nearby residents, who formerly crossed the street to visit friends or a park several blocks away, may now find it to be much less convenient or even dangerous to do so. This can reduce the number of social contacts and so divide the neighborhood. If the expressway alignment is designed to be located at an edge of a neighborhood instead, this particular impact is not as likely to occur.

A transportation project that is perceived as a physical or psychological barrier may isolate one portion of a homogeneous neighborhood. This can be a particularly sensitive issue in an ethnic community.

The facilities and services that exist in a community are often essential to large groups of people within the community, supplying needed food or shelter, or helping to improve the quality of life, such as an inner-city recreational center. The accessibility of such facilities and services helps determine community cohesiveness; a transportation project modifying, interfering with, or terminating such access needs to be analyzed from that perspective.

It is also possible, however, that a transportation improvement can increase community cohesion. For example, if a new facility diverts a substantial amount of through traffic from neighborhood streets, residents may consider walking to be a safer and more enjoyable experience than at present. Increased pedestrian traffic often creates social relationships through casual contacts, and this in turn can lead to a more cohesive neighborhood.

4-6.2 Community Cohesion - Analytical Techniques

First, the boundaries of a neighborhood should be identified through the methods explained in the "Background" above. It is recommended that the local planning agency be contacted for the availability of neighborhood maps before the other techniques are employed.

One of the traditional tools for measuring community cohesion by transportation departments across the country is by means of a "stability index" or mathematical formula with numerical variables. The stability index, a methodological approach used for more than a quarter-century, has in more recent years received criticism from some community planners for being too narrow, that "cohesiveness" is not something that can be made a part of a formula (see following discussion). Essentially, the

stability index is based on the assumption that the longer people live in a community, the more committed they become to it and the more cohesive the community. A quick snapshot of an urban community may be gained by analyzing the numerical results of the long form (a more extensive questionnaire) of the decennial U. S. Census which asks respondents if they have been in their current residence for more than five years. The long form, however, goes to less than 20% of households, so it provides merely a sample of the community. For reasons that the stability index may have some inherent biases (e.g., it may not capture tenants or renters, in California a higher percentage who tend to be minorities and low income, and who generally may be forced to move around for economic and social reasons, but who still may comprise a "cohesive" neighborhood). The stability index may be most useful when it is viewed as just a rough indicator of neighborhood stability. The index is only one tool, and the planner should never lose sight of the need to temper the index using information from those people intimately familiar with the project area. More information on the stability index can be obtained by contacting the community impact assessment specialist within the Caltrans Headquarters Environmental Program.

In any event, it is essential that *all* neighborhood and community studies be backed up with direct observation and possibly other research measures. A field trip should be conducted through the neighborhood to observe variables that may be associated with community cohesion. Look for evidence of informal social interaction and interdependence (e.g., is there a Neighborhood Watch program?), pedestrian activity (e.g., are sidewalks readily used?), children at play, predominance of single family dwellings or apartment with courtyards, shared parking lots and yards of a housing complex, condition of houses, parks and other community facilities. However, interpretations of such observations should be made with caution as these variables do not always correlate strongly with community cohesion. Wherever possible, these observations should be documented over a period of time.

Note if residents, either individually or through their representatives, express particular concern for their neighborhood at public meetings or through other forums. This is a useful measure of community cohesion, especially if such attitudes are voiced by a cross section of residents that may be affected by a proposal.

Other methods to help determine community cohesion include conducting interviews with community leaders and members of community-oriented ad hoc committees, interviewing managers of neighborhood service organizations, having discussions with planning officials, and perusing newspaper articles regarding citizens' views of their community and neighborhoods.

Another promising methodological approach to measure the psychological sense of neighborhood at the community level is the development since the 1980s of more-refined survey instruments. Although at first quite elaborate, by the middle 1990s an eleven item Likert scale that can be affordably and reliably administered assesses the cohesiveness or "sense of community" at the more immediate neighborhood level. Among items that appear on the survey include a scale to quantify these statements:

- "My friends in this neighborhood are part of my everyday activities."
- "If there were a serious problem in this neighborhood, the people here could get together and solve it."
- "Being a member of this neighborhood is like being a member of a group of friends."
- I don't care whether this neighborhood does well" (Reverse scoring is used for this item).
- "I have no friends in this neighborhood on whom I can depend" (Reverse scoring is used for this item).

Finally, we should remember that the purpose here is to analyze the proposed project's impact on the community or neighborhood, but we must know something about them first. Only then can

Caltrans determine if the proposal would or would not act as a physical or psychological barrier to continued social interaction and so as to divide, disrupt, or isolate that neighborhood.

The significance of such project impacts should be assessed as determined by assessing the various factors noted above or others that become known to the community impact assessment analyst or planner. Essentially, the basic questions are these: is there evidence that community cohesion exists, and if so, will that be damaged by the proposed project? To what extent? In many cases, trained social scientists and other consultants are best able to conduct this type of work for Caltrans or its local agency transportation partners.

4-6.3 Community Cohesion-- Mitigation Measures

Potential adverse impacts to community cohesion may be mitigated by providing access between the divided segments of the neighborhood. Structures such as pedestrian overcrossings and, when the high cost can be justified and potential air quality concerns are addressed, "cut and covers" have been successfully placed over depressed segments of interstates in cities like Seattle and Boston, and may well provide linkage that permits the resumption of social interaction needed for cohesion. In certain circumstances, facilities such as parks and activity centers that create a focal point for socialization can be developed on top of the cut and cover which itself is constructed over depressed sections of the highway. In other instances, reducing the visibility of the facility may have the effect of sustaining a sense of neighborhood aesthetics. Providing opportunities for community involvement early in the project planning stages is a critical link for successfully implementing measures that will foster sustainable communities.

LIST OF MITIGATION MEASURES

Several mitigation measures can be implemented to avoid or minimize the negative effects of a

project. The following is a partial list of potential measures to alleviate impacts on the community:

- Shift alignment
- Elevate facility
- Depress facility
- Provide cut-and-cover structure
- Reduce traffic lanes
- Reduce right-of-way width
- Provide trees and other landscaping
- Provide scenic and rest areas
- Add public artwork to a structure
- Set aside land for a park
- Phase the project to avoid disruption
- Limit ingress (temporary or permanent)
- Provide access (temporary or permanent)
- Provide for or eliminate interchanges
- Provide pedestrian/bicycle crossings or paths
- Provide for joint use development
- Provide signing
- Provide street lighting
- Provide for replacement land and facilities
- Eliminate incompatible land uses
- Erect sound or visual buffers to the facility
- Provide special amenities to a neighborhood
- Compensate properties taken (mandatory)

4-6.4 Access and Circulation

Background

While state highway projects typically improve *regional* access, they may also affect *local* access and circulation. Beneficial impacts can include an increase in accessibility and a reduction in congestion. Though transportation can play a critical role in maintaining people's independence and provide access to community-based services, there is a whole range of "side effects" that also may need to be considered. For example, the construction of a freeway or expressway can result in the closing of cross streets and the creation of cul-de-sacs. As a result, access by some local residents to businesses and public services may become less convenient. But the new facility can also have the effect of removing traffic from a neighborhood.

There are numerous examples which illustrate the importance of analyzing the effects of changes in access caused by new projects. For low-income, disabled, elderly residents, and possibly others, changes in access may become a serious problem. School attendance areas may have to be redrawn if the highway is a physical barrier for students. Local traffic may increase as residents travel longer distances on local streets to enter the freeway at the limited access points. Response times for emergency vehicles may lengthen with the closure of local cross streets and may shorten with improved highways. Pedestrian safety may also be affected, depending upon changes in traffic. For example, could a shoulder widening project eliminate sidewalks for several blocks in the vicinity of a school or along an arterial adjacent to which people walk or jog for lack of alternate access? How is transit service affected by the new freeway project? If the number of transit stops is reduced or modified, what will this do for the quality of life of older adults, low-income, and people of color who may rely on the service?

Economic losses can occur to businesses near highway connections when ramps are closed temporarily in conjunction with project construction or maintenance activities. If a project would result in a ramp closure, the potential for business losses should be assessed (See Appendix F for details on the need to consider the economic impacts from temporarily closing freeway ramp access).

Highway improvements can also improve local circulation. For example, a highway bypass can relieve congestion on city streets by rerouting through traffic away from the central business district. This may, in turn, encourage residents to patronize local businesses rather than traveling to more remote shopping centers.

A proposed project may affect residents without access to automobiles. If many residents of a neighborhood must walk to stores, a highway project that becomes a physical barrier may separate them from access to needed goods and services. A high level of pedestrian travel may be an indication of a potentially serious effect.

4-6.5 Access and Circulation Impacts - Analytical Techniques

Analysis of access and circulation impacts can be accomplished by reviewing project plans and through windshield surveys. Plan review and windshield surveys are conducted to determine if the project would:

1. Eliminate or restrict automobile or pedestrian access to stores, public services, schools, and other facilities. Pedestrian service areas are generally considered to be 1/4 to 1/2 mile in radius (roughly 1/2-1 km). Also, keep in mind that access may be temporarily hindered during construction activities.
2. Increase or decrease traffic on local streets. For instance, would a new freeway result in higher traffic on local streets that provide access to or egress from the freeway connections? Determine if other streets would have less traffic as a result of the diversion.
3. Result in more circuitous routing for emergency vehicles.
4. Result in any reduction of transit service.
5. Result in changes to popular bicycle or pedestrian routes.

Particular attention should be paid as to the presence of elderly people or children. If there are a large number of older persons, try to identify potential situations where their safety may be impacted. For example, studies have shown elderly people feel vulnerable when crossing on sidewalks next to overcrossings and bridges. Identify if the groups impacted will be users of the project.

Detailed assessment methods are extremely time-consuming and should be utilized primarily in

cases where accessibility is perceived as a major issue.

Systematic analysis techniques involve doing a small scale origin/destination (O/D) analysis within the affected communities. This level of analysis involves defining (1) community boundaries, (2) the intensity and overlap of travel patterns, and (3) the importance of the facility to users. Determining significance requires analysis of attitudes and perceptions of the affected residents on the importance of the facilities and services for social interaction as well as actual patterns of their use (service areas, frequency of use, membership, etc.). This approach requires direct interviews with community residents or representatives of local institutions and agencies.

Social interaction analysis utilizes the patterns of movement to and from community facilities or neighborhood activity centers as a gauge of social interaction. At the simplest level of analysis, data collection involves taking surveys at each community facility (grocery store, clinic, and so forth) which was found to be important.

Users of the facility can be informally questioned as they arrive and depart as to the origin and destination of their trip, frequency of use, and so forth. Shopkeepers or employees of the public facility should also be questioned to determine when various population groups use the facility. To take one example, a neighborhood grocery store may be used by a number of distinct groups which arrive at different times and have different activity patterns. School children may arrive on weekdays after school and throughout the day on weekends; elderly residents may visit infrequently, except at the time of the month when pension or Social Security checks arrive.

4-6.6 Access and Circulation Impacts - Mitigation Measures

Mitigation measures may include scheduling of construction to occur during times of low usage for seasonally-oriented businesses, scheduling construction for after-business hours, construction of frontage roads or secondary access, and

vehicular and/or pedestrian overcrossings or tunnels, blocking off residential streets, signalization, improved coordination of emergency vehicle service, expanded transit service, among others.

4-6.7 Parking Impacts

Background

Transportation improvement projects can change the number and/or location of parking spaces. These changes may be temporary, such as the removal of spaces during construction, including those used by the increased numbers of construction workers in the area. Permanent losses of parking spaces may occur when a new roadway is constructed, additional lanes are built on an existing facility, or even if there is a re-striping if it displaces on-street or off-street parking.

Loss of parking for customers and delivery trucks can affect businesses and the operation of hospitals, schools, and other public services (some businesses, such as a convenience store, are highly dependent on adjacent parking). The problem can be exacerbated when the demand for parking rises as pass-by traffic increases on the improved roadway.

The loss of business-related parking may result in vehicles being parked on residential side streets, thus limiting neighborhood parking and access, and also increasing traffic on nearby streets. The loss of parking may create the need for construction of spaces at a more remote and less convenient location, and this, in turn, could affect business sales. Thus, as in the situation outlined above, parking impacts clearly may be both social and economic in nature.

4-6.8 Parking Impacts - Analytical Techniques

Review project plans to determine the total number of parking spaces that may be removed (check with Caltrans Right-of-Way first to see

whether they will address the issue in their studies.). Survey the area to see if any business would lose a substantial portion of its customer parking spaces. Contact local merchants or the chamber of commerce regarding the effect of the potential loss of parking. Also be aware that some local jurisdictions require a set amount of parking for specific business categories. Information may well be available from a local parking agency or local planning department. Consider the effect on businesses that are highly dependent on parking spaces. Determine if a loss of parking could result in overflow parking that would cause secondary impacts. Finally, consider the effect on neighborhoods if commuter or business related parking occurs on residential streets. If eliminating parking is unavoidable, identify and include a plan of mitigation in the project developments.

4-6.9 Parking Impacts - Mitigation Measures

These mitigation measures, which require participation from the local government for implementation, include hourly parking restrictions, residential parking stickers, and the introduction of meters that would prevent business customers and/or commuters from overloading residential parking facilities, transit riders from using business or residential parking facilities, and business customers and employees from using transit parking facilities. Other measures have included construction by Caltrans of new parking facilities including multi-level garages or the use of highway right-of-way for parking.

4-7 Relocation Impacts

Background

Displacement has three aspects: (1) the number and type of families and businesses displaced; (2) the probability that comparable decent, safe, and sanitary housing relocation sites can be found for those affected; and (3) the psychological and economic impacts associated with the relocation process.

Relocation impacts are among the most sensitive of community-related effects associated with transportation improvements because they may involve modifying relationships between people and their homes and neighbors. The forced removal of families from neighborhoods, or businesses from their existing locations affects not only the relocatees themselves, but also those who remain in the affected neighborhood and those who live in the new areas where the relocatees will live.

Not all social impacts associated with displacement can be offset by financial compensation or physical relocation. The impacts to a person's social attachment to a particular community or the loss of close proximity to customary services and recreation facilities may not be duplicated in another community.

Relocation impacts should be assessed by Caltrans Environmental Planners in collaboration with Caltrans Right of Way Program staff, as these units typically collect most of the critical information needed for an analysis. Chapter 10, Section 10.05.00.00 of the Caltrans *Right of Way Procedure Handbook* is an important reference for the type of information collected by Right of Way which can be also be beneficial for the purposes of preparing a community impact assessment (see Appendix E).

4-7.1 Residential Displacement

The most obvious impact associated with relocation is the displacement of residents. The severity of displacement impacts varies greatly with the people involved, and impacts are often related to demographic characteristics. If a person is highly mobile and has had a history of changing residences frequently, the impact may be only a minor inconvenience. If on the other hand the community is stable and cohesive and residents have been in their homes for many years, many of those displaced may have a difficult time adjusting to new homes and neighborhoods

because they have a strong attachment to their existing home and neighborhood. After all, these neighborhoods often determine the type of child care and quality of schools available, the degree of personal safety, and the availability of jobs.

Improved financial assistance has helped to offset the adverse economic impacts of residential relocation. The adverse psychological and social impacts of relocation have understandably been more difficult to mitigate. Certain population groups such as senior citizens, low income residents and non-English speaking people often have strong community ties and depend upon primary social relationships and important support networks that can be severed upon relocation. Households with school age children may consider relocation especially disruptive if school transfers would be involved. Disabled people and those without automobile transportation often have special relocation problems.

4-7.2 Residential Displacement - Mobile Homes

Displacement of mobile home park residents may involve impacts not typically encountered by residents of more traditional houses or apartments. First, the term "mobile home" is now somewhat of a misnomer as most units only move from the factory to a permanent site. The term "manufactured housing" is becoming more common, especially when applied to models constructed in the past quarter-century or so. Mobile home parks often occupy an unfavorable position in community planning and zoning due to their low tax base and because conventional residential owner-occupants rarely want them to be located nearby because they feel they may affect their neighborhood's overall property values. Manufactured housing still suffers from financing and zoning barriers arising out of old attitudes towards mobile homes. Consequently, new parks that could be built to accommodate displaced mobile home owners are difficult to establish in some parts of California.

When mobile home park occupants must relocate, the mobile home is often sold in place due to the loss in value when it is not established on a pad or site and the relatively high cost of moving the home. Some parks charge a fee when a home remains, but this is usually less than the cost of transporting it. Also, an old mobile home may be considered obsolete or unattractive and so may not be allowed in other, or newer, parks. Therefore, changes in occupancy do not always result in vacant spaces, and this limits the supply of spaces available to accommodate displacees. Too, often the rental rate for the mobile home space is raised to “market levels” for a new owner.

In cases where a vacant space does become available, the space is often filled as a result of a continuing agreement between the park management and local mobile home dealers who have what is tantamount to an option on the vacant site for their customers.

Normally, new parks will accept only new or nearly-new manufactured housing units. When used units are accepted, park management often requires painting, new skirting and awnings, landscaping, and such. New parks are generally designed to accept "double wide" units (the average size of new mobile homes is 1,210 square feet). This eliminates them as a source for more affordable "single wide" units.

Because of these special characteristics, it is often difficult to locate mobile home residents near their former area or with their neighborhood friends and relatives. This exacerbates the other relocation impacts such as loss of support groups, commute time increases, and so forth.

Residents in mobile home parks often live in a “community within a community.” Many parks have organized community activities for seniors set up around a recreation center. Planners should contact the park manager to determine whether or not there are organized activities.

4-7.3 Residential Displacement - Affordable Housing

A loss of a substantial number of houses affordable to people with low and moderate incomes may have an effect on the community's stock of affordable housing. This could have the effect of increasing the demand for housing in a given sector of the market, bidding up the cost of that housing if the market supply is constrained and thereby disproportionately affecting certain income groups. The U.S. Housing and Urban Development Department (HUD) has developed methods for calculating affordability and definitions of low and moderate income households. Caltrans Right-of-Way may have this information and can provide information on the numbers of affordable houses subject to removal and the number of affordable houses in the community. Also, be aware that, in some instances, units in older motels may be leased for several months or longer and constitute regular and permanent residential units for the low-income and migrant worker families, rather than just serve overnight customers.

4-7.4 Residential Displacement - Disproportionate Impacts

In addition to affordable housing impacts, the demographic characteristics of the residents subject to relocation should be investigated to determine if any groups (low income, minority, senior citizens, disabled, etc.) would be disproportionately impacted by the proposed project. Occasionally, advocacy groups will argue that the project's proposed alignment was determined primarily on the basis of the economic (low) cost of land and housing, so it is important to document that early planning took into account and took steps to ameliorate potential impacts to the housing stock of any particular social or economic group. In analyzing impacts of relocation, it is important to identify which groups, if any, would benefit and which would be disadvantaged by a highway project. See the earlier discussion on community participation, environmental justice and Title VI considerations.

4-7.5 Residential Displacement - Senior Citizens and Disabled People

Senior citizen and physically disabled residents are typically more seriously affected by relocation than other groups. Some older people move to be closer to family and some move to a better climate, but most want to stay put. According to a telephone survey conducted by the American Association of Retired Persons, 78% of those polled indicated they do not want to leave their own homes. This makes sense. Older Americans often rely on others for emotional support, and are frequently dependent on community services and local access to stores. Look at the services older people can avail themselves to in their current residential location. Is basic convenience shopping (food, pharmacy, dry cleaning, and so forth) available nearby? Is there an emergency health care facility or full-service hospital nearby? Is the neighborhood considered safe? How close does available public transportation come? How likely is it that these amenities will change with implementation of the project? When members of these age groups are displaced, the relationships providing such assistance are often lost and not always re-established. Be aware, too, that older persons are not homogeneous. For instance, studies show that the "young" elderly, aged 65 to 74, are relatively healthy. Those aged 75 and over are more likely to be disabled.

4-7.6 Residential Displacement - Analytical Techniques

Much of the information needed for analysis of relocation impacts can be obtained from Caltrans Right of Way staff. Please refer to Chapter 10, Section 10.05.00.00 of the Caltrans Right of Way Manual noted earlier, and consult with District Right of Way on the scheduling and preparation of the Draft Relocation Impact Statement or Report. For consultant contracts, Caltrans District Right of Way should review the scope of work pertaining to relocation studies (whether the contract will be for a separate relocation study or as part of the larger environmental document) prior to issuing a request for proposals or soliciting bids. Also, remember that the District

Right of Way Program should review all relocation studies prepared by consultants to ensure compliance with the laws, proper depth of analysis and sufficient supporting documentation prior to the data being used in the environmental document.

The analyst should provide a description of the number and types of residences subject to relocation (e.g., single family, multifamily, apartments, mobile homes, owner-occupied, rented, size, price, condition, and age). Determine if a substantial portion of the city, county, or region's affordable housing would be subject to displacement. List the measures proposed under the provisions of the Uniform Relocation Act for the loss of such housing (See the section on mitigation measures below). Coordinate with Right of Way to ascertain the percent of the community's affordable housing that would be lost and whether or not the percentage may be considered a significant impact. Generally, if the proposed project would reduce the overall vacancy rate below 2 percent or if it would impact more than 5 percent of a specific type of unit, the impact would be presumed to be considered significant. However, investigation and analysis may prove otherwise; hence, "significance" can only be determined according to the particular circumstances.

The planner should determine the number of people in the affected area who are subject to relocation (usually obtained by multiplying the Census data on the average persons per household by the number of units). A determination should also be made as to whether a substantial portion of the relocatees belong to a classified minority or are low-income. If so, the planner needs to determine whether the percentage of relocatees that belong to that minority group significantly exceeds their representation in the surrounding region, city, or county. This is done to evaluate any potential for disproportionate impacts to such groups. Caltrans District Right of Way can usually help provide this information on ethnic and racial composition, as well as the percentage of low-income people.

It should be noted that although required for purposes of determining compliance with Title VI of the Civil Rights Act, concern for minorities has gained additional attention in the recent past under the heading of environmental justice. In 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, to the greatest extent allowed by law, shall 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. Further guidelines and methodological approaches to aid agencies to determining whether there may be environmental justice concerns are expected to be eventually issued by the U.S. Department of Transportation, but have not yet been made available. Inquire with the Caltrans Headquarters Environmental Program for more information.

Determine if a substantial number of transit dependent and/or physically disabled people will be subject to displacement. Coordinate with Right-of-Way to determine any measures needed to be taken to reduce the relocation impact to these groups. Public assistance agencies and Right of Way may have this information.

Effective and established techniques for assessing the severity of social and psychological impacts from residential displacement are not available. The severity of impact is related to numerous factors; the effectiveness of mitigation efforts is largely related to the amount of compensation available and the expertise and sensitivity of approach applied to relocation situations by Caltrans Right of Way personnel, but as discussed earlier, there are other situations where the social and psychological effects associated with relocating people cannot be wholly mitigated.

Finally, keep in mind that while the general attitude prevails that displacement is a negative impact, this is not always the case. In many instances, individuals and families forced to relocate due to a project do improve their quality

of living because of a better housing situation than the one they left behind.

4-7.7 Residential Displacement - Impact on School Districts

With projects that would include a sizable number of residential displacements, the planner should contact school district offices that serve the affected community area. The purpose is to gather information to determine if there would be any potential impacts associated with the reduced attendance related to projects that require many households to be displaced.

The nature of school financing in California has changed dramatically over the past several years and it is discussed briefly here because it affects the way the environmental planner should look at anticipated impacts on public schools.

In 1972, the State enacted legislation which established a system of revenue controls that limited the maximum amount of general purpose State and local revenue that a school district could receive. The revenue limit formulas include both a base revenue limit - a basic education amount per unit of average daily attendance (often abbreviated ADA, but not to be confused with the American Disabilities Act) - that has been equalized over time, and revenue limit adjustments that provide additional revenues for special needs, such as unemployment insurance.

Though the statutes remain on the books, since the passage of Proposition 13 in 1978, as well through the results of court decisions, schools are no longer largely financed through local property taxes. Currently, as a result, losses in assessed property valuations due to removing property from the tax rolls have no effect on revenues received by school districts. This is because any such reductions in local tax revenue distributed to a school district are automatically compensated by increased State aid in an equal amount. Instead, the current education financing system is driven by pupil enrollments, measured as average daily attendance. School districts have their total district

revenue limit funds calculated based on ADA of the previous year.

In other words, the question for the analyst with respect to impacts on school financing becomes not how many total properties are likely to be removed from the local tax rolls, but how many displacements are likely to involve families with school age children, and are they likely to be relocated within the same school district? On the other side of the ledger, those enrollments that are drained from one school district must be assumed to shift to other school districts, with a corresponding increase in their respective revenue limits.

By law, impacts on student enrollments *may* be mitigated through "Severance Aid" (Education Code Article 16, section 41960 extract in Caltrans Statutes).

4-7.8 Business Displacement - Background

An important aspect of business displacement is the availability of land to which the firm(s) can relocate and remain economically viable. While vacant land with proper zoning may be available, its location may not meet the specific needs of the particular business. Large-scale widening projects often displace highway dependent firms such as gas stations and fast food restaurants. If these firms cannot find another location along a busy roadway, they may not be able to attract enough customers to remain profitable.

One study, conducted in Texas, found that the rate of "non-survival" for businesses displaced by transportation construction projects was 23%, but there has been no known recent research conducted on this topic. In any event, in such cases, displacement results in a direct loss of local income. In most instances, the business volume is quickly absorbed by other firms offering similar services and products in the region. Thus, there is a redistribution rather than a real loss in net

business activity. Individual businesses, however, may experience severe gains or losses, and although the precise impacts might not be known, efforts to characterize these possible effects should be made by the planner preparing the community impacts assessment.

4-7.9 Business Displacement - Employment Impacts

Relocation of business firms and industries can result in unemployment and associated financial impacts. If the firms relocate within the community and remain viable, the unemployment effect will be temporary. A more serious impact will occur if the firms cannot relocate or do so outside the region. The size of the firm may determine the importance of the employment impact to the community. The physical removal of a city's major employer could well be a significant impact under CEQA, and it could result in multiplier effects to related businesses. The loss of a small business, however, is likely to have a lesser effect on employment in the community because of the fewer numbers of households affected. Employment impacts are less severe when the employer has sufficient lead time to become established at a new location, prior to closing the existing facility.

Loss of key employees may occur when some businesses are displaced and workers are not willing to relocate or travel to the new area. This could affect the firm's ability to re-establish itself in the new location. The severity of this impact varies with the type of business, the distance to and attractiveness of the new location, as well as the employees' interest in continued employment with the firm. As with many of the areas of concern within the broad area related to community impact assessment, it would not be expected that this issue would be relevant to most of Caltrans' projects.

4-7.10 Business Displacement - Loss of Clientele

Often firms are profitable because they have built up a loyal clientele over time. Relocation to a new area may require time to re-establish customers. This time period may be short for well known firms such as nation-wide fast food franchises or service stations. The time period, however, may be long enough to affect the economic survival of those without national or regional name recognition.

Local residents may be dependent on certain firms for needed goods and services. People without automobile transportation may be affected if a nearby grocery store or senior citizens' center is moved out of the neighborhood. Analysis of relocated businesses should, therefore, include an assessment of any special characteristics of their clientele.

4-7.11 Business Displacement - Analytical Techniques

Determine if there are appropriate relocation sites available for the displaced businesses. Caltrans Right of Way may have looked into this; check with them *first*. Often redevelopment agencies will develop plans for relocating displaced firms and these can be useful in determining the severity of relocation impacts.

Describe the size (in square footage if possible) and types of businesses (i.e., retail, wholesale, manufacturing, service, government, or non-profit) subject to relocation. Determine the percentage of the city, county, or region's businesses that are subject to relocation. Estimate the number of years such firms have been in operation. (Caltrans architectural historians should be able to help in this regard). Determine if the businesses are established, declining, or new. Use this information to analyze the ability of the firms to economically survive a relocation. If appropriate, an analysis of relocation impacts should include an assessment of the potential for businesses to relocate to economically viable areas. Availability of relocation sites will be affected by zoning restrictions, property values, accessibility or other special requirements of the

business (e.g., a dog kennel, print shop, auto dismantling). Some may be non-conforming land uses.

Describe whether the businesses subject to relocation serve primarily through traffic or local customers. Determine if the displaced firms will suffer a loss of clientele upon relocation. Firms catering primarily to through traffic, if relocated along a highway with adequate access, are typically less affected than those which serve a local clientele which has been built up over many years.

Determine the number and type (professional, skilled or unskilled labor, etc.) of employees working for the firms subject to displacement. Make an assessment of the opportunity for the employees to continue to work for the relocated firms. Note whether or not the firms will likely have to relocate to a distant location that may require the employees to relocate or travel long distances to work. If it has been determined that any businesses will close rather than relocate, this impact should be mentioned. Indicate if any of the displaced firms is a major employer in the community and discuss the potential for substantial layoffs. If people are employed with firms that would close and their skill is one with limited job opportunities, this should be indicated.

In some instances, certain institutions and organizations serving special groups may have difficulty in finding a nearby replacement site, and thereby no longer be convenient to the people who most need their services, such as a health care facility for the elderly or a substance abuse treatment center that is forced to move. But there are other land uses which on the surface would not be expected to have a tough time making a go of it. For example, there have been situations in California where neighbors did not want a church to move into a building. In some neighborhoods, churches are viewed as nuisances that will cause noise, parking hassles and traffic jams and, because of their tax-exempt status, not contribute to the tax rolls. In other neighborhoods, they are viewed as stabilizing forces, and would be welcome with open arms.

4-7.12 Compensation for Displacements

Coordinate with Right-of-Way and/or local agencies as to potential mitigation measures for impacts considered to be significant under CEQA. Such measures may include the establishment of special financial and/or advisory services through Right-of-Way programs, buy and lease back programs for businesses subject to displacement, Caltrans funding of additional mobile home units, last resort housing, special transit (e.g., dial-a-ride) services, and local plans for relocating firms to economically viable locations.

The Department's Relocation Assistance Program (RAP), as established by Federal and State law, provides help to individuals, families, businesses, and others that are required to relocate as a result of a public improvement project. Its primary objective is to assist all project displacees so that they do not suffer disproportionate injury as a result of projects constructed for the benefit of the public.

Federal and State Laws (The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 Public Law 91- 646, as Amended April 2, 1987, and California Government Code, Chapter 16, Section 7260, et seq., or often just called the Uniform Relocation Act, in shorthand) require that relocation assistance be provided to any person, business, farm or nonprofit operation displaced because of the acquisition of real property by a public entity for public use. Compliance with the Federal Act is required by any public agency where Federal funds are to be used in the acquisition or construction of the proposed project. It is not considered mitigation, *per se*, but an entitlement because compensation is required by other than environmental laws, and is, of course, provided regardless of magnitude of impact.

The Relocation Assistance Program specifies that before any project may be undertaken which involves the displacement of people, a Replacement Housing Study (final relocation impact document) must be completed to determine

the needs of relocatees and the availability of replacement housing. These studies serve to assure that orderly relocation can be accomplished and that realistic and adequate plans are developed for the relocation of all displaced persons. The information contained in these studies can also assist the environmental planner in determining whether under CEQA the social impacts are significant.

The Federal Uniform Relocation Assistance Act of 1970 (as amended) and the California Relocation Assistance Act (Govt. Code Section 7260 et seq.) both require that, within a reasonable period of time prior to displacement, comparable replacement housing will be available or provided for each displaced person. Such assurance is part of the RAP Study process and must be specifically given on every project requiring residential displacement.

A standard paragraph statement such as the following model should be included in all federal environmental documents for projects with relocations:

Relocation assistance payments and counseling will be provided to persons and businesses in accordance with the Federal Uniform Relocation Assistance and Real Properties Acquisition Policies Act, as Amended, to ensure adequate relocation and a decent, safe, and sanitary home for displaced residents. All eligible displacees will be entitled to moving expenses. All benefits and services will be provided equitably to all residential and business relocatees without regard to race, color, religion, age, national origins and disability as specified under Title VI of the Civil Rights Act of 1964.

Please refer to Appendix E for more detailed information on Relocation Assistance.

4-8 ECONOMIC IMPACTS

Also see discussions under Business Impacts

4-8.1 Local Tax Revenue

Background

Removal of residences and businesses for a project results in an initial loss of property and sales tax revenue. These fiscal impacts are projected only to the local jurisdictions. In most cases, the amount of tax revenue lost will be an insignificant percentage of total revenue. For instance, in the early 1990s, *statewide* only about 20% of local government's total general revenue derived from property taxes. Also, the loss is often only temporary as displaced homeowners and businesses will resume payment of property-related taxes upon relocation. However, the original taxed property is permanently taken off the tax rolls and not necessarily replaced by new construction if the stock of housing is sufficient. There may be a more important impact if most of the displaced relocate outside the original taxing jurisdiction or if businesses cease operations altogether.

If a project facilitates a substantial amount of growth, property and other tax revenues may increase. In many cases, this could more than offset any revenue losses associated with relocation.

4-8.2 Local Tax Revenue - Analytical Techniques

An analysis of the impact on local tax revenue, both property and sales taxes, should be done, if a sizable portion of a community's residences and/or businesses may be removed. The tax revenue lost should be calculated as a percentage of total local tax revenue and not just presented as a total amount. Property tax information can be obtained from the county tax assessor offices. Sales tax information can be obtained from the California State Board of Equalization. If most of the residents and businesses will be relocated in the community, however, the tax loss should be described as minor and temporary only, and a calculation of the property and sales tax changes need not be done.

4-8.3 Local Tax Revenue - Mitigation Measures

Loss of revenue may be compensated for, at least in part, by several methods. These include relocation assistance that moves businesses elsewhere in the community, by the short term boost to the local economy that stems from construction expenditures (contact the community impact assessment specialist within the Caltrans Environmental Program in Sacramento for more information on this), and from long term effects of improving access to businesses which results in higher income and tax revenues. Right of way compensation also may return in the form of reinvestment elsewhere in the community.

4-8.4 Bypasses and Roadside Business Impacts

When a highway bypass project is proposed as a solution to transportation problems, typically, one of the main concerns is what the effect will have on local businesses. Because, by definition, a bypass implies the city's main street no longer carries through traffic, businesses which cater primarily to through traffic may suffer financially more than those serving local needs. Studies have shown, however, that frequently businesses will relocate along the highway bypass and remain profitable. Also, businesses serving local needs may enjoy more patronage because the downtown shopping area is perceived to be more attractive and safe because the bypass has diverted traffic, noise and congestion away from the former state highway and adjacent local streets. In general, then, bypasses tend to have a beneficial impact on the social aspects of a community (no disruption of cohesive aspects; few or no direct relocations, improved pedestrian safety, etc.), and may or may not have a beneficial impact on the economy of the town or city to be bypassed. As is true of so many community impacts, the effect varies with each project.

The planner preparing the community impact assessment should discuss any likely effects to

downtown businesses and related employment that may be associated with a highway bypass proposal. Determine if the downtown businesses bypassed serve primarily local customers or if they are dependent on through-highway traffic. Discuss the potential for any businesses to relocate to economically viable sites along the new bypass. Determine, also, if there are businesses serving primarily local customers will be better off because by reducing congestion and noise and improving parking following construction of the bypass, downtown may well be made more pedestrian-friendly.

The following factors are important in the initial assessment of potential economic effects to communities due to bypasses:

- population of the community
- nature of local economic base
- type/location of businesses
- % of traffic-dependent retail
- type of existing highway
- average daily traffic (ADT)
- origin/destination of traffic
- distance to other cities and towns

Analysis variables may include interregional traffic volumes and patterns, future growth (existing and proposed land use and development) trends, traveler spending potential, distance from the existing to the proposed facility.

The analyst will probably find some business operations easy to determine as to the extent their operations depend on pass-by traffic. The two headings below offer some illustrations:

Typically Traffic Dependent

- Restaurant/Lounge

- Gas station
- Ice cream store
- Roadside vegetable stand

Typically Not Traffic Dependent

- Bank
- Industrial
- Realty
- Laundry
- Insurance
- Law firm
- Mortuary
- Appliance repair
- Veterinary
- New auto sales
- Computer sales

There are other classes of operations (depending on local circumstances) which by their nature are not so clearly defined as to the degree they rely on traffic to sustain their business:

Variable Traffic Dependency

- Flea market
- Antique store
- Garden center
- Hardware
- Miniature golf/amusement center
- Grocery store

Studies conducted around the nation by various state's Departments of Transportation generally indicate the following:

1. The size of community influenced the intensity of the economic impacts.

Generally a larger town has a larger economic base, and will continue to draw more people to purchase goods and services there. Some studies have shown that towns with less than a population of 5,000 are harder hit; others have used 500 as a bottom-line population.

2. The effects of a bypass on towns with tourist-based or service-oriented economies may be less than other towns.

A decrease in truck traffic and auto congestion can actually enhance pedestrian safety in a CBD and make the local residents more willing to go downtown because of an environment made more conducive to shopping.

3. A new highway bypass built a mile away (or closer) from the existing roadway experiences less of a drop in sales volumes.

Studies have shown travelers do not generally perceive a mile (or thereabouts) to be so great an inconvenience when in need of services such as gas and food.

4. Some highway-oriented businesses were able to overcome losses in revenue through creative means.

Changes in business practices to serve more local demand; expand advertising to local clientele, and so forth have counteracted the effects of a drop off of drive-by traffic.

It should be remembered that these summaries are provided as a rule of thumb only; specific bypass studies should be consulted to determine the extent to which the various methodologies and factors identified above can be duplicated in a different bypass experience.

A publication prepared for the U.S. Economic Development Administration, *Understanding Your Economy: Using Analysis to Guide Local Strategic Planning* (1991) outlined key location and economic function considerations of cities relative to larger regional economic forces. These may be useful for understanding the effects of highway bypasses:

Areas in close proximity exchange significant flows of goods, services, people, and income. Geographic patterns of development and trade within and around the study area can be examined to identify the function of the local economy

within the regional economy. Other things to consider include:

- Population characteristics and trends and implications for population-support functions (e.g., housing, retail trade)
- Location of employment centers and policy implications of community patterns
- Special regional functions (e.g., airports, universities, recreation facilities)

Adjacent communities often compete with the study area for consumer and producer markets in the region. At the same time, adjacent communities are potential consumers of goods and services produced locally.

Finally, it should be noted that circuitry of travel and alternative access issues are non-compensable under Federal law. While the previous analysis and discussion is appropriate for the environmental document for a bypass project, this should be made clear so as to not mislead the public or decisionmakers into thinking bypassed businesses located on old routes would be eligible for loss of goodwill payments and other benefits. Only properties with actual physical takings are eligible for acquisition and relocation benefits (i.e., compensation).

4-8.5 Parking Loss Impacts

Please refer to the discussion under Social Impacts ([Section 4-6.7](#)).

4-8.6 Joint Development

In developing a project, there may arise an opportunity to utilize public lands (right-of-way) for more than just transportation purposes. Joint development involves integrating transportation infrastructure and non-highway uses into a single environment and functional whole. Since they are usually developed independently, it requires considerable coordination to achieve mutual goals. Highway projects can be integrated with

the development of bikeways, public buildings, apartments, parks, and other public or private undertakings, and may fit better into the overall fabric of the community than if they were developed separately. For example, in some project locations (thus far, all outside California), a commercial development has been successfully built on a cut and cover deck above the highway improvement so as to help replace commercial buildings displaced by the highway project. Too, public parking may be made available to a city by the space created underneath a new elevated structure.

When appropriate, the ED should discuss how the implementation of joint development projects will preserve or enhance the community's social, economic, environmental, and visual values. This discussion should include information on commercial and residential opportunities, conservation and preservation opportunities, and opportunities for increasing community accessibility and retail sales.

4-8.7 Secondary and Indirect Impacts

The NEPA Implementing Regulations (40 CFR 1502.16), the FHWA Technical Advisory and CEQA *Guidelines* S(15126 (G)) all require that secondary (or indirect) consequences be included as part of the environmental review process. Direct effects and indirect effects of a project both are "caused by an action." Direct effects "occur at the same time and place," while indirect effects "are later in time or farther removed in distance, but are still reasonably foreseeable."

There are a variety of secondary or indirect community impacts that may be associated with major transportation projects. For instance, a large project's physical removal of many homes, leading to a reduction in a small community's housing supply, could have secondary effects on the existing housing market by creating an increased sales price for the available homes. Other examples include the ability of an area's economy to survive the removal of a large number of houses, businesses, and community services, the loss of sales due to construction or changes in

traffic patterns, a community's ability to absorb relocated residents, changes in property value due to the construction of a project, increased commuting time to drivers, belated relocation due to loss of job, and increased costs of doing business, to name but a few of the consequences that may result from project implementation (see section 4-3.6 also). To some extent, such impacts are tied to understanding the cause and effect relationships of the social and economic system, which we have been identifying throughout this volume. Understandably, indirect effects are not easy to measure. This is not to suggest that these community impacts are not real; they should be presented in the ED so that they might be considered in the decision-making process. And in this regard, when large numbers of system variables are involved, diagrams and matrices may provide a clear illustration to the reader.

The degree of confidence planners have in predicting indirect or secondary effects of a project will be based on a combination of sources, including published research results, observations from other like-projects, and professional judgment supported by education and experience.

Another question planners confront: if a proposed action is determined to cause secondary or indirect effects, what can and should be done to mitigate the adverse impacts? Consistent with existing FHWA regulations, mitigation proposals must be both reasonable and have an identified relationship to project impacts. Opportunities for incorporating environmental enhancement activities into project features are now expanding our traditional view of mitigation. It is especially important to work with local public agencies and organizations to seek ways to better integrate the transportation facility into the surrounding community fabric.

APPENDICES

APPENDIX A

REFERENCES

The following general list of books, reports and articles should prove useful for community impact assessments in conjunction with the various suggestions provided in this volume.

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APPENDIX B

DATA SOURCES

An Overview on Research Strategies

This Appendix is intended to help environmental planners and others concerned with community impact assessment issues collect the needed information. It concentrates on basic informational sources and publications covering a wide area, with a specific focus on the federal census and state agencies. It also provides several rules of thumb. For some experienced environmental planners, the discussion below will not contribute greatly to their knowledge on how to go about gathering and critically using information and data. On the other hand, some environmental planners have educational backgrounds in vastly different areas than those in which they work and may find this guidance to be useful. No attempt is made here to cover each potential issue area completely, but the Appendix introduces a number of the sources that we have found valuable to other planners working in the social and economic area.

The nature of research, data sources, and their strength and weaknesses are included in the discussion. As was pointed out in Chapter 1 of this volume, the federal and state environmental guidelines call for a level of detail of data collection and analysis consistent with the expected magnitudes of the impacts of the proposed project. When undertaking a search of information on a topic, if your need seems to be a simple one, you may want to start with one or more of the comprehensive publications listed in the bibliography (Appendix A). The research methodologies described in the chapters of this handbook also should be consulted.

The first question everyone should ask when pursuing information is, "Who already knows what I need to know?" In many cases, in-house staff might have the expertise. For example, the Economic Analysis Unit in the Caltrans Headquarters Transportation Planning Program may well be able to point the environmental

planner in the direction of certain broad-coverage economic data and information, depending on the nature of the question. The Caltrans Headquarters Transportation System Information Program has expertise on use of the U.S. Census. Find a well-informed, helpful reference librarian (including the staff of the California State Library Government Section, or the Caltrans Headquarters Transportation Library (916/654-4601 CALNET 464) who can assist you in tracking down documents, telephone numbers, and personal contacts. The community impact specialist within the Environmental Program may also be of some assistance (916/653-0647 CALNET 453). The main library in the town in which the project is located should always be visited by the planner for any projects in which community and land use issues may be prominent. Not only will such libraries usually have within their holdings important local planning documents, but they will often have newspaper clippings on various community issues as well. The *Los Angeles Times* and the *San Francisco Chronicle* have been indexed for the past twenty years; many of the larger libraries have these indexed volumes and the newspapers on microfilm. Don't overlook other popular literature abstracts and bibliographies to provide contextual information. Among the most useful in the area of social and economic topics are the: *Readers Guide to Periodical Literature*, *Social Sciences Index*, and *Public Affairs Information Service*, to name a few.

Government agencies, both federal and state, have resident experts on just about every subject imaginable, so a related question to ask is, to which agency might this information be important, and who might have collected such data? An example where concerned local officials questioned Caltrans environmental staff about the economic effects (job losses) of a major project with extensive farmland conversion (due to right of way acquisition) on local seasonal laborers. The question led to a call to the state's Employment Development Department which revealed they had recently had produced a major economic study on essentially the topic of acreage and seasonal labor.

This notion of contacting potentially useful governmental agencies, of course, holds true for locally-generated information and data as well. When searching for information on extant mobile home parks in a community, for instance, one might find the needed information at the local health department, the planning department, or the tax assessor's office. Many of these local governmental agencies already may have gathered extensive community data, as Chapter 2 in this Handbook indicates.

The most recent data should be used for all analyses. If the only available data is not current, it should be statistically updated using clearly stated assumptions and methodologies. Read the technical documentation that accompanies each data source. This background material explains how the data was collected and provides definitions of terms used and often reprints the questionnaire used to collect the data.

Sources often have biases that must be understood and evaluated when considering the data. Be sure to understand the reason data is collected, combined and/or compared. For instance, the planner should be aware that a city might project its growth differently than the regional council of government; an apartment-owners association might tally up a different total of available apartment units than the county planners. Perhaps, the least unbiased statistical data on social and economic topics are provided by the Federal Government (this notion is challenged in Alonso and Starr's book, *The Politics of Numbers*. See Appendix A for full citation). Nevertheless, it is very likely that the planner will be required to link together data from different sources to obtain an integrated picture of the community.

Many social and economic impacts are difficult to quantify. In many cases, random sample surveys (interviews or questionnaires) are the most viable method available to gather these data, although they can become expensive tools. Because surveys can be unintentionally biased (e.g., based upon the wording in the question, the answers available, when and where the response is gathered), only professionals experienced in

designing and implementing the survey should be used to assure statistical validity and reliability. There are several good secondary books on survey research methods. Another option when quantifiable data is scarce is to use the Delphi Technique; that is, form a panel of experts with some knowledge on the subject and have them brainstorm the topic at length. Combine that with a judicious use of the secondary literature. It is important to stress that these techniques are called for only with complex projects.

Publications from the American Planning Association (312/955-9100), Lincoln Institute of Land Policy (800/848-7236), Urban Land Institute (800/321-5011), and International City Managers Association (202) 962-3620 may be particularly useful in many of these areas.

BY THE NUMBERS

When quantification is possible, numbers may bestow credibility and authority on an issue by pinning down what otherwise might seem a vague generality or unsubstantiated personal opinion. Putting numbers into studies is a two-part task. Obviously you must obtain the numbers, then you must present them in the clearest and simplest way possible. Governments-- local, state and federal-- are the largest collector and disseminator of statistical data. Associations and institutions covering every imaginable type of activity also generate numbers. These groups are usually more than happy to give the planner help. To get the numbers from these sources, just pick up the phone. If that person does not know, they can often direct you to one that does.

After you gather the information, you must add value to them. This simply means that you interpret the numbers and reorganize them as necessary, making comparisons or doing additional calculations so that the material can be presented as clearly as possible to the readers. Comparing values at different points in time is one way to gain perspective. Another is to compare the local area to that of another nearby, and usually to the state as a whole. As an example, between 1982 and 1988, statistics

indicate that the city of Palo Alto's sales tax revenue climbed 29%. That sounds like a lot -- until compared to the county average, which was 48% during the same time span, or neighboring Sunnyvale, which saw a 66% sales tax revenue jump.

Also, when gathering, analyzing, and presenting numerical data, planners must recall the differences between *median* and *average*. The median is that number at the midpoint in a list of ranked numbers. For example, in comparing 11 items ranked smallest to largest, the sixth item is the median, even if the actual value of that number is not halfway between the highest and the lowest. The average or mean on the other hand is the sum of all divided by the number of observations. In measurement statistics, when data are highly skewed, median is a better statistic to use. *Percent-change* expresses a ratio between two numbers and gives readers a way to make comparisons. Percentages, however, can be deceiving. If you start with a small base number, small actual gains can produce deceptively large percentage gains. In such cases, the actual numbers should also be given so readers can judge for themselves, or the readers should be told that a particularly large percent increase resulted from a very small base.

The following list of sources of information can be used in either the primary or secondary information gathering process as appropriate to the subject:

U. S. GOVERNMENT

Department of Commerce- Bureau of Census

A census of the United States is conducted every ten years by the Bureau of the Census (Department of Commerce). Census information is available through State Census Data Center (SCDC) Networks, most with their own Web sites that contain census population and economic information (see listing below under Regional and Local), and at various public and university libraries throughout the State. Hard copy census material is usually available at federal depository libraries, such as the California State Library and the Los Angeles Public Library and at the State

Census Data Center Network. In addition, most of the Census material is now available on CD-ROM and computer diskette from the Department of Commerce (301) 763-4100; however, check with the Caltrans Census Data unit in the HQ Transportation System Information Program to see whether the Department already has the data you need.

There are three main components to the census structure; tract, block group, and block. The census tract is a portion of a city area and is designated by a one- to four-digit number followed in some cases by a two digit suffix, e.g., 5678.62. A tract generally consists of about 4,000 people, so physical size can vary a great deal depending on the density level. The block group is a breakdown of the tract area, which can be further broken down into the block. The block is the smallest geographic census area, typically an ordinary city block, and bounded by visible features. The average population within a "block" is 100, but this number can range from zero to 1000+, depending on the area.

Information for every city in California is available (population and housing units) in the tract census; however, not every tract has a corresponding "block" or detailed breakdown because of the need to suppress certain kinds of information (not breach confidentiality) as well as keep costs down.

The 1990 short form contained questions about:

POPULATION	HOUSING
Name	Number of units in structure
Household relationship	Number of rooms in unit
Sex	Tenure (owned or rented)
Age	Value of home or monthly rent
Marital status	Congregate housing
Race	Vacancy characteristics
Hispanic origin	

The 1990 long form (which went to about 17% of the total households) contained questions about:

POPULATION

Social characteristics:
Education- enrollment and attainment
Place of birth, citizenship, and year of entry
Ancestry

Language spoken at home
Migration
Disability
Fertility
Veteran status

Economic characteristics

Employment and unemployment
Occupation, industry and class of worker
Place of work and commuting to work
Work experience and income in 1989

HOUSING

Year moved into residence
Number of bedrooms
Plumbing
Kitchen facilities
Telephone
Autos, light trucks, and vans
Heating fuel, water source, sewage disposal
Year structure built
Condominium status
Farm residence
Shelter costs, including utilities

Keep in mind two facts when choosing among files and data. First, data in 100% reports are more accurate than data in sample reports. Second, remember the hierarchy principle. More detailed data are reported for areas higher in the geographic hierarchy, such as counties and large cities, rather than small cities, census tracts, and blocks. Comparing raw data from 1980 and 1990 allows you to measure trends. Make sure, however, that the boundaries and definitions are consistent.

Although the Census Bureau is best known for its surveys in years ending in zero, be aware that they frequently prepare studies throughout the decade. For instance, a 260 page report, on housing and household characteristics in the Riverside-San Bernardino-Ontario Area in 1986 included not only the traditional information on housing and income captured in the decennial census, but on more detailed items as mortgage, lot size and square footage.

The Census Bureau's Economic Census (conducted in years ending in 2 and 7, e.g., 1992) reports for California offer detailed information about the state's business and industrial activity. They cover retail trade, wholesale trade, service industries, transportation, manufactures, mineral

industries, construction industries, and several related programs, including statistics on minority- and women-owned businesses.

The "geographic area series" features general statistics such as the number of establishments, the number of employees, payroll, gross values of firms, and sales or other measures of revenue, for the State, Metropolitan Statistical Areas, counties, places, and zip codes.

County Business Patterns is an annual series that presents state and county-level employment, annual payrolls, total number of establishments, and number of employees in broad sectors. See Exhibits.

Another source of information for analysis, especially in the area of economic descriptors and land use, is the "Standard Industrial Classification Manual" which is generally used in conjunction with land use planning maps and text. The "SIC" manual covers and measures economic activity in the economic and related censuses and includes company business patterns and selected current survey reports. These types of publications focus on establishments, geography, and products.

STATE OF CALIFORNIA

California Resources Agency

The Land Use Planning Information Network (LUPIN) was developed by the State of California Resources Agency to address and support California's land use planning information needs. A project of CERES (California Environmental Resources Evaluation System), LUPIN utilizes the World Wide Web to disseminate information relevant to land use and environmental planning. Both CERES and LUPIN are programs created in cooperation with local, State, and Federal government agencies, academic institutions, and community groups. LUPIN includes: planning-related reports from federal and State agencies, County and City General Plans, Environmental Documents, legal references, and maps, among other on-line materials Their website address is: <http://ceres.ca.gov/planning/>

State Controller

- Annual Report of Financial Transactions Concerning Cities and Counties of California.

State Board of Equalization

- Information on taxable sales. The State Board of Equalization (SBE) will provide you with the name of the owner of a business, its location, the type of business, and starting date (and closing date if it is no longer in business). Another SBE publication, *Taxable Sales in California*, reports sales per capita, and by type of store.

Employment Development Department

- Information on employment, unemployment, hours and earnings, and various special studies. The California Employment Development Department makes county- and regional-level estimates and projections of employment by industry and occupation for all of California. Also, when such issues arise, planners may find it useful to contact the Department's labor market specialist (Labor Market Information Analyst) which there is for each California county.

Department of Finance

- DOF has many useful publications for demographic and economic research. As of Fall 1996, their Internet address: <http://www.dof.ca.gov>

University of California- Berkeley, UC Data Archive and Technical Assistance

- Information on statewide academic research, Asian and Latino Demographic Data Books, and 1990 Census data. Their website (Fall 1996):
<http://www.ucaccess.org/rescenters/ber/dataarch.html>.

Department of Housing & Community Development

- Information on housing elements and other issues, such as affordable housing, mobile homes, etc.

Department of Industrial Relations

- Information on the California consumer price index.

Department of Rehabilitation

- Statistical information on disabled Californians.

Other California Agencies and Departments can be a helpful source, depending on the type of impacts to be studied. Examples include the California Department of Aging, California Department of Commerce, Office of Planning and Research, California Air Resources Board,

REGIONAL and LOCAL

The State Census Data Center (SCDC) Network and many of their affiliates have their own websites that provide a wide range of useful information, including census and economic data. The following can be accessed online at the given address as of fall 1996.

Association of Bay Area Governments (ABAG):
<http://www.abag.ca.gov/index.html>

San Diego Association of Governments (SANDAG) <http://www.sandag.cog.ca.us>.

Southern California Association of Governments (SCAG) <http://www.scag.ca.gov/>.

Sacramento Area Council of Government (SACOG) <http://www.sacog.org/>.

Other regional offices and affiliates can be reached through the following website:
<http://www.dof.ca.gov/html/Demograp/othdata.htm>.

Other helpful local sources of information:

- Association of Realtors (Local)
- Churches and Synagogues
- City and County Tax Assessors office
- Chambers of commerce
- Police and fire departments
- Public utility companies
- Real estate journals
- School district business office

APPENDIX C

FARMLAND

INSTRUCTIONS FOR COMPLETING THE FORM AD-1006

The initial evaluation consists of Caltrans completing Parts I and III of Form AD-1006 as described below.

PART I

Name of Project:

Provide the District/County/Route Designation and local name of project (e.g., 3-Pla-65, Lincoln Bypass)

Proposed Land Use:

Identify the primary land uses shown on the proposed local land use map adjacent to the project area (e.g., residential, agriculture).

Date of Land Evaluation Request:

Provide the date when Parts I and III are completed.

Federal Agency Involved:

Enter: Federal Highway Administration, or if appropriate, the Federal Transit Agency.

County and State:

Enter: County of project location.

PART III

A. Total Acres To Be Converted Directly:

Provide an estimate of the number of acres of additional right-of-way required for each project alternative.

B. Total Acres to Be Converted Indirectly

Provide the estimated number of acres for each alternative that would be unusable for farmland due to access restriction.

C. Total Acres In Site:

Provide an estimate of the total number of acres of existing plus additional right-of-way required for each alternative. Site A would be one alternative, Site B would be another alternative, and so forth. Do not include the No Project alternative.

Upon completion of Parts I and III, the District forwards this form and a map exhibit showing project location to the local NRCS field office. The maps which accompany the form should be as detailed as possible. General location maps are not sufficient. A USGS quad map is acceptable.

NRCS has 45 calendar days to return the form to Caltrans. NRCS will either mark **NO** in Part II, indicating that no farmlands are involved, or complete Parts II, IV, and V (Part V will contain a value rating of between 0 and 100 with the higher the rating the higher the impact). If farmland involvement is indicated on the form, then the evaluation process is continued as outlined below.

PART VI

Part VI contains the federal site assessment criteria which are to be completed by Caltrans. The criteria are to be used to assess the impact of each project alternative on farmlands. These numbers are then added to the rating score provided by NRCS in Part V of the form.

The criteria to be assessed are outlined in 7 CFR 658.5 Weighted scores, to be entered by Caltrans, will range from 0 to some maximum number (which varies by category); the higher the number, the greater the magnitude of the project's impacts on farmland.

The following questions frame the criteria to be applied to obtain scores for the form. Remember that the term "site" used below refers to the farmland that would be converted by the action. Scores should be made within the context of the surrounding area, and the programs and policies of the state and local jurisdictions where the project is proposed.

1. Area In Nonurban Use: How much land is designated as non-urban relative to other uses within a radius of 1 mile along the proposed location of the project?

Greater than 90% ----- 15 points
 90%-20% ----- 1 to 14 points
 Less than 20% ----- 0 points

2. Perimeter In Nonurban Use: How much of the perimeter of the site borders on land in non-urban use?

Greater than 90% ----- 10 points
 90%-20% ----- 1 to 9 points
 Less than 20% ----- 0 points

3. Percent Of Site Being Farmed: How much of site has been farmed (or managed for a scheduled harvest or timber activity) more than five of the past ten years?

Greater than 90% ----- 20 points
 90%-20% ----- 1 to 19 points
 Less than 20% ----- 0 points

4. Protection Provided By State And Local Government: Is the site subject to state or local government policies or programs or private programs to protect farmland?

If yes ----- 20 points
 If no ----- 0 points

5. Distance From Urban Built-up Area: *Usually leave blank. This is not assessed for linear or corridor-type projects, including highways.*

6. Distance To Urban Support Services: *Usually leave blank. This is not assessed for linear or corridor-type projects, including highways.*

7. Size Of Present Farm Unit Compared To Average: Is the farm unit(s) containing the site (before the project) as large as the average-size farming unit in the county? (Data on average farm sizes in each county are available from the NRCS field offices having jurisdictions over the county in question. This data is based on the latest available census of agriculture acreage of farm units in operation with \$1,000 or more in annual sales).

As large or larger ----- 10 points
 Below average ----- 0-9 points; *deduct 1 point for each 5% increment below the average to a minimum of 0 points if 50% or more is below the average.*

8. Creation Of Non-farmable Farmland: What percent of the total farmable land will become converted to non-farmable land by each alternative?

25% of the total - ---- 25 points
 5% to 25% of the total ----- 1 to 24 points
 Less than 5% of the total --- -- 0 points

9. Availability of Farm Support Services: Do farmland site(s) have available an adequate supply of farm support services and markets (e.g., farm suppliers, equipment dealers, processing and storage facilities, and farmers markets)?

All required services are available ----- 5 points
 Some required services are available ----- 1 to 4 points
 No required services are available ----- 0 points

10. On-Farm Investments: Does the site(s) have substantial and well-maintained on-farm investments such as barns, other storage buildings, fruit trees and vines, field terraces, drainage system, irrigation waterways, or other soil and water conservation measures?

High amount of on-farm investment ----- 20 points
 Moderate amount of on-farm investment ----- 1 to 19 points
 Low amount of on-farm investment ----- 0 points

11. Effects Of Conversion On Farm Support Services: Would the project at this site, by converting farmland to non-agricultural use, reduce the demand for farm support services so as to jeopardize the continued existence of these support services and, thus, the viability of the farm's remaining area?

Substantial reduction of demand for support services ----- 25 points
 Some reduction of demand for support services ----- 1 to 24 points
 No reduction of demand for support services ----- 0 points

12. Compatibility With Existing Agricultural Use: Is the project anticipated to conflict with, or encourage conversion of, surrounding farmland to non-agricultural use? If so, then is it incompatible with agricultural use?

- Proposed project is incompatible
----- 10 points
- Proposed project is tolerable
----- 1 to 9 points
- Proposed project is compatible
----- 0 points

Upon completion of all 12 blocks, add the points and write the total in the row with the heading: **TOTAL SITE ASSESSMENT POINTS.**

PART VII

Relative Value Of Farmland (from Part V):

Enter the relative value of farmland to be converted indicated in Part V.

After the above coordination is completed, a determination should be made on whether or not to proceed with farmland conversion. The decision shall consider the impacts of farmland conversion along with other environmental considerations and project needs. The final decision on alternative analyses and mitigation shall be coordinated by the District with FHWA California Division.

Total Site Assessment:

Enter the total points from Part VI.

The total number of points indicated in Part VII is used to determine the level of significance given minimized farmland involvement as stated below:

A. Sites (or in most cases, as we mean them here, project alternatives) receiving a total score of less than 160 points shall be given minimal level of consideration for protection and no further alternative analysis need be evaluated for farmland issues under the FPPA.

B. Sites receiving a total score of 160 points or greater shall be given stronger consideration for protection. The following must be considered:

- Use of existing facilities and structures or using land that is not farmland.
- Alternate sites, locations, and designs that would serve the proposed purpose but convert either fewer acres of farmland or other farmland that has a relative lower value.

See the discussion at 4-1.3 for other mitigation measures associated with reducing project impacts on farmland.

The maximum score that can be assigned to the land evaluation (Part V) is 100 points. Therefore, where the site assessment (Part VI) is less than 60 points, the total score (Parts V and VI) will necessarily be less than 160 points. The NRCS sees no benefit in submitting Form AD 1006 to its field offices for coordination in such cases.

In an attempt to curtail unnecessary paperwork, the SCS advises that Form AD 1006 need not be submitted to them in cases where the site assessment criteria (Part VI) score is less than 60 points for each project alternative. The rationale is based on its regulation (7 CFR 658.4) which provides that "Sites receiving a total score of less than 160 points be given a minimal level of consideration for protection and no additional sites be evaluated." To document compliance with the SCS regulation, Caltrans need only complete Parts I, III, V (assign 100 points), and VI and place the completed form in the project files. The environmental document should summarize the steps taken to identify and evaluate farmland impacts and comply with the FPPA.

Caltrans experience has been that NRCS has responded in a timely manner to requests for completing their portion of the form. In accordance with the NRCS regulation implementing the FPPA, it should be noted that the NRCS must provide a complete response to Form AD 1006 within 45 calendar days of its receipt. Where the NRCS fails to provide the necessary information within 45 days, the proposed project can proceed as though the FPPA requirements did not apply.

In these cases, however, it is still necessary to consider impacts to farmland in order to comply with NEPA requirements. The project environmental document should identify the farmland impacts and mitigation measures, if applicable, and summarize the coordination undertaken with the NRCS. The environmental document should also include a statement that (1) the NRCS failed to provide the land evaluation information within 45 days, and (2) therefore, in accordance with the NRCS regulation (7 CFR 658,4(a)), the FPPA does not apply.

[Sample AD1006 Form on this page]
Currently not available in electronic form

AGRICULTURAL LAND CLASSIFICATIONS

These definitions, unless otherwise noted, have been excerpted from the California Department of Conservation's Office of Land Conservation, *A Guide to the Farmland Mapping and Monitoring Program*, 1992. Publication Number FM-92-01.

PRIME FARMLAND:

is land which has the best combination of physical and chemical characteristics for the production of crops. It has the soil quality, growing season and moisture supply needed to produce sustained high yields of crops when treated and managed, including water management, according to current farming methods. Prime Farmland must have been used for the production of irrigated crops at some time during the two update cycles prior to the mapping date. It does not include publicly owned lands for which there is an adopted policy preventing agricultural use.

PRIME AGRICULTURAL FARMLAND:

means any of the following:

- (1) all land which qualifies for rating as class I or class II in the Natural Resource Conservation Service land use capability classifications.
- (2) land which qualifies for rating 80 through 100 in the Storie Index Rating.
- (3) land which supports livestock used for the production of food and fiber and which has an annual carrying capacity equivalent to at least one animal unit per acre as defined by the U.S. Department of Agriculture.
- (4) land planted with fruit- or nut-bearing trees, vines, bushes or crops which have a nonbearing period of less than five years and which will normally return during the commercial bearing period on an annual basis from the production of unprocessed agricultural plant production not less than two hundred dollars (\$200) per acre.

(5) land which has returned from the production of unprocessed agricultural plant products an annual gross value of the previous five years.

From: California Government Code Section 51201(c) (The Williamson Act).

FARMLAND OF STATEWIDE IMPORTANCE:

is land other than Prime Farmland which has a good combination of physical and chemical characteristics for the production of crops. It must have been used for the production of irrigated crops within the last three years. It does not include publicly owned lands for which there is an adopted policy preventing agricultural use.

UNIQUE FARMLAND:

is land which does not meet the criteria for Prime Farmland or Farmland of Statewide Importance, that is currently used for the production of specific high economic value crops (as listed in the last three years of *California Agriculture* produced by the California Department of Food and Agriculture). It has the special combination of soil quality, location, growing season and moisture supply needed to produce sustained high quality or high yields of a specific crop when treated and managed according to current farming methods. Examples of such crops may include oranges, olives, avocados, rice, grapes, and cut flowers. It does not include publicly owned lands for which there is an adopted policy preventing agriculture use.

FARMLAND OF LOCAL IMPORTANCE:

is either currently producing crops, or has the capability of production. Farmland of Local Importance is land other than Prime Farmland, Farmland of Statewide Importance, or Unique Farmland. This land may be important to the local economy due to its productivity. It does not include publicly owned lands for which there is an adopted policy preventing agricultural use.

GRAZING LAND:

is land on which the existing vegetation, whether grown naturally or through management, is suitable for grazing or browsing of livestock. The minimum mapping unit for Grazing Land is 40 acres.

AGRICULTURE PRESERVE:

means an area devoted to either agricultural use, as defined in subdivision (b), recreational use as defined in subdivision (n), or open space use as defined in subdivision (o), or any combination of such uses and which is established in accordance with the provisions of this chapter.

From: California Government Code Section 51201 (d) (The Williamson Act).

URBAN AND BUILT-UP LAND:

is used for residential, industrial, commercial, construction, institutional, public administrative process, railroad yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment plants, water control structures, and other development purposes. Highways, railroads, and other transportation facilities are mapped as a part of Urban and Built-up Land, even though they are associated with agriculture.

Urban and built-up Land does not include strip mines, borrow pits, gravel pits, farmsteads, ranch headquarters, commercial feedlots, greenhouses, poultry facilities, and road systems for freeway interchanges outside of areas classified as Urban and Built-up Land areas. These lands are considered Other Lands.

SAMPLE

State of California

Business, Transportation and Housing Agency

M e m o r a n d u m

TO: _____, Director
Department of Conservation
801 K Street, MS 24-01
Sacramento, CA 95814
File No.: 03-PLA-43

Date : 09/06/01

0.0/3.3
03123-123123

From: **DEPARTMENT OF TRANSPORTATION**
DISTRICT 3 P.O. Box 911 Marysville, CA. 95901

Subject: SAMPLE NOTIFICATION MEMO

In accordance with Government Code Section 51291(b), this letter is to serve as notification of the possible acquisition of Williamson Act contracted land for a proposed highway improvement project in Placer County. The project proposes to rehabilitate a portion of State Route 123 from post mile 0.0 to 3.3. This is the portion of the highway which runs from the junction of Routes 123 and 65 in Lincoln to just east of Sierra College Boulevard. The rehabilitation will include repairing and widening the roadbed, overlaying the roadbed with asphalt concrete pavement, and improving sight distance.

The attached maps delineate the general project location and the limits of the proposed project. The final map is a portion of the Williamson Act Agricultural Preserves map depicting the three participating parcels and the strips of land adjacent to the existing highway being considered for acquisition. The total proposed acquisition of Williamson Act contracted land is approximately 6 acres. According to the Placer County Assessors Office, this land is not considered to be prime agricultural land. The remaining area surrounding the project is zoned as agricultural residential with ten to twenty acre minimum parcels.

If we have not been contacted by your office within 30 days, we will assume you have no comments or concerns regarding this proposed acquisition.

Please contact Robert Jones at (916) 555-9876 if you have any questions.

Sincerely,

Edna Waters, Chief
Environmental Branch

Enclosures

THIS SPACE IS FOR NOTES

APPENDIX D

GROWTH INDUCEMENT

Growth inducement as it is usually presented in manuals, guidelines, and other reference documents is not measured on a numerical scale. Rather it is viewed as an off-on switch: it exists or it does not. It is seen to exist when the project is predicted to result in various demographic, economic and environmental effects. Only primary effects can be measured reliably and many of these primary effects are only partially related to growth inducing aspects of development projects.

There is no single method for analysis of growth inducement under all situations and circumstances. The analytical techniques presented in this Appendix are based largely on the traditional transportation planning methodology of estimating need for a transportation project based on projected new population or economic activity.

All the analyses prepared should include absolute and percent increase in all impact indicators.

Analytical Techniques - Forecast Methodology

Of the analytical techniques described below, the forecast methodology for assessing growth inducement is preferred because it is the most quantitative and least speculative procedure available. This method is basic to other techniques as it supplies information needed. However, if a traffic forecast cannot be obtained or another method appears justified because of specific circumstances (for instance, the project involves constructing a commuter rail line), the alternative methodologies described below may be used by the analyst.

The forecast method used to assess growth inducement involves summarizing the transportation planning and traffic engineering process by which the size and type of the proposed project (and alternatives) were

developed. The summary is then used to illustrate the relationship of the proposal's capacity and the amount of planned growth anticipated in the area over a twenty year period with the objective of addressing the level of growth inducement. Land use and resulting traffic forecasting drives the environmental analysis of transportation projects, not the other way around.

There is a basic problem of "lumpiness" with highways because a half a lane cannot be built to match a demand that is less than a full lane. Caltrans designs projects for twenty years in terms of matching capacity with demand. Many new facilities *are* reduced in capacity to match traffic demand twenty years out (design year) but with a design which allows for future increases later (after twenty years). For example, Caltrans may only construct four lanes initially, but the project is designed and right of way is already purchased and set aside for ultimately six or eight lanes. Or, six lanes of conventional freeway are opened now, but the project included a design for High Occupancy Vehicle (HOV) lanes or transit in the median to be opened later. In part, this reflects the problem that the "useful" life of pavement is rather short (twenty years or less).

A major highway structure (e.g., Benicia-Martinez bridge) poses a somewhat different problem in that one cannot easily go back and merely widen such structures. Therefore, in such cases, the structure tends to have some excessive capacity in the short term and sometimes even beyond a twenty year projection. It is not altogether unusual, on the other hand, that standard concrete bridges, such as those at interchanges, are widened when the demand reaches high levels.

The forecast methodology is based upon the results of a traffic forecast developed by Caltrans District planners and project engineers. The forecast is used by Caltrans to determine the type and size of a transportation proposal. For proposals for urban settings, it is the output derived from a transportation model. The transportation model uses locally and/or regionally derived information as input. This information includes local/regional socioeconomic data, growth policies, land use development

policies, planning goals, and development constraints. Each metropolitan planning organization has a transportation model. In developing a traffic forecast Caltrans either conducts the entire modeling effort (e.g., LARTS in Los Angeles) or participates in it. Therefore, traffic forecasts are based on local/regional data but are not solely a product of the local/regional government.

A traffic forecast for an interurban/rural project is developed by projecting past growth trends for a twenty year period. A transportation model is not used. Variations to a simple "straight line" projection are made when corrective factors such as major growth generators (new business centers, military migration, significant changes in employment rates, family size, etc.) have occurred.

The summary of the traffic forecast effort should include:

1. A brief and understandable discussion of how the forecast process (model or simple projection) works.
2. The information employed as input for the model or projection including the locally generated data. Origin and destination data within the study area as provided in the traffic model may be useful as well.
3. The change in capacity expressed as a percentage.
4. A discussion of the relationship between the capacity of the proposed project and the local/regional growth policies upon which the traffic forecast is based. (Most specifically, an indication of the extent the new capacity will permit the population projection level set forth in the plans.)
5. A discussion of the coordination that occurred between Caltrans and local/regional government in the proposal's design.

The information needed for this summary is available from the offices within the appropriate Caltrans District that handles transportation planning data.

Analytical Techniques - Use of a Checklist

One way to address the problem of identifying growth inducement impacts is to use the checklist developed for Caltrans (see next page). In using the checklist, if an effect warrants a "yes" answer, it is a growth inducing impact. A checklist response of "yes," however, does not necessarily indicate an effect which should be deemed significant.

As is true of other CEQA checklists, the identification of even one item as significantly growth inducing constitutes a significant adverse impact that must be mitigated if the impact is within the agency's control or justified in a statement of overriding considerations in an EIR and in project planning. However, not all growth inducing impacts are necessarily significant. Also, understand that a effect that is perceived as negative to some (e.g., increased housing demand) may be positive for others (e.g., increased sales tax revenues).

The checklist can be easily formatted as if it were an Appendix to the *CEQA Guidelines*. However, it could also be used as an outline format for a freestanding growth technical study for a proposed project.

Respond **YES** or **NO** to each question. If one or more questions are answered **YES** then there is some potential for growth inducement due to the development of new infrastructure (such as highways or roads). Each question answered **YES** should be discussed in the Initial Study and/or Draft Environmental Impact Report prepared for the project. Many of the questions refer to growth-related information or policies in local planning documents. If the community's general plan or other local planning documents do not address the questions posed here or do not supply the factual information that will answer them, then the question should be answered **YES**.

Otherwise, a **NO** answer that is based on other sources of information should be defensible. Note that some of the following questions require information derived from traffic forecasts: thus this approach depends at least in part on the Forecast Methodology (see above).

Measurement and evaluation of growth inducement should be considered in three parts [steps] including: the amount of growth inducement created by the action over other project alternatives including the no-project alternative, the level of significance of the action, and the level of adverse consequences of the action. For example, a finding of growth inducement may be identified but the results of the action may be economically positive without negative effects on the environment or the negative effects on the environment may be mitigated by others.

Even though local plans and policies can be changed at the discretion of legislative bodies and even though the effects of transportation improvements may not be seen for decades after construction, the most common and most measurable indicator of a significant adverse growth inducing impact is a project's lack of conformance to local and regional growth plans.

A very common but less measurable indicator of growth inducement is in the identification of cumulative impacts resulting from infrastructure projects. In many cases, it is nearly impossible to distinguish between these forms of impacts. Nevertheless, it is very important to provide an accurate representation of growth influences under the Secondary/Cumulative Impacts section because of the factors that are beyond the control of Caltrans.

GROWTH INDUCEMENT CHECKLIST

1. a) Will the project attract more residential development or new population into the community or planning area? b) If yes, would it be higher than is projected in the local general plan?

2. a) Will the project encourage the development of more acreage of employment generating land uses in the area (such as commercial, industrial or office)? b) If yes, would it be beyond that which is designated in the current local general plan?

3. a) Will the project lead to the increase of roadway, intersection, sewer, water supply, or drainage capacity? b) If yes, would it be beyond that projected or planned for in the local general plan?

4. Will the project encourage the rezoning or reclassification of lands in the community general plan from agriculture, open space or low density residential to a more intensive land use?

5. Is the project not in conformance with the growth related policies, goals or objectives of the local general plan or the area growth management plan? Or, is it in conflict with implementation measures contained in the area's growth management plan?

6. Will the project lead to the intensification of development densities or accelerate the schedule for development or will it facilitate actions by private interests to redevelop properties within two miles of an existing or future major arterial roadway or within four miles of a limited access highway interchange?

7. Will the project measurably and significantly decrease home to work commuter travel times to and from or within the project area (more than 10% overall reduction or five minutes or more in commute time savings)?

8. Is the project directly related to the generation of cumulative effects as defined by CEQA guidelines?

A Guide for Using the Preceding Checklist

Question 1.a) above asks a very direct question that should be quantitatively answerable by any city or county. If the answer to subpart b) is *yes* then the proposed project is not only ringing the growth inducement alarm button, it is probably not in conformance with the community housing

element and possibly other elements of the general plan as well. A comparison with regional plans would be the next step taken by the planner analyst.

Question 2 is a parallel question directed to non-residential or mixed land use projects. The follow-up questions would likewise be similar such as whether or not the trip generation resulting from these proposed land uses would be greater than that anticipated in the circulation element of the general plan and how do the resulting traffic volumes compare with the regional transportation plan.

Question 3 relates to the planned capacities of capital facilities. Although public facilities elements in general plans are desirable, only about seventy cities and counties (out of a total of over 500 jurisdictions) in California have them. Fortunately, however, most do have some other institutional mechanism for taking into account capital facilities that should be consulted. The office of the city manager or chief administrative officer might be contacted for such information.

Question 4 is similar to questions 1 and 2 in that it deals with the project's effects on local land use planning. It may be possible to answer this question before specific planning required to answer questions 1 or 2 is carried out.

Question 5 suggests a search for conflicts in expressed goals or policies an agency may exhibit. However, not all jurisdictions have specific growth related policies in their general plans. Likewise, growth management plans are optional to local and regional jurisdictions. Therefore, this question may not apply to all actions under consideration. If a local jurisdiction does not express growth-related policies in its planning documents then the appropriate regional plan should be consulted.

Question 6 addresses the second cost consideration. The circulation or public facilities element of a general plan may include costs and anticipated funding for new roadways and mass transit systems. If the project in question would reduce or remove costs to public agencies for new

infrastructure or would reduce costs for development of nearby private or publicly owned land, then the effect is growth inducing (although it may not necessarily be significant). Such potential impacts are quite quantifiable and are usually a required part of project planning anyway.

Question 6 specifically tries to identify negative proximity impacts. It asks how the project being evaluated will affect related and/or nearby land development densities and scheduling. Does it provide a windfall or investment incentive for the affected development interests? The selection of a two mile proximity threshold for measurement of impacts from new or improved arterials and four miles for interchanges is based on nationwide studies of transportation related impacts on land values and development potential. Local conditions, of course, may warrant changes in these standard threshold distances.

With regard to whether or not a project will accelerate growth in the project area it should be noted that at least sixty cities and twelve counties in California utilize general plan diagrams (maps) which illustrate growth phases. Most communities include population projections and goals that may be referenced in the housing element. Information on planned development densities are most often located in the land use elements of the general plans and/or on the general plan diagram itself. If the action for development of new infrastructure includes a general plan amendment that will allow accelerated timing or increased development densities, then it may be considered growth inducing (although again we emphasize not necessarily creating a significant adverse impact).

Question 7 (evaluation of changes in commute times) will, in most cases, be directly related to the action under study, i.e., the project. However, secondary effects of the project such as off-site commute patterns should not be overlooked. While a reduction in commuter time and vehicle miles traveled (VMT) is generally a positive effect, such a reduction can also encourage more drivers on the route, considered a growth inducing impact. An increase in commute time or VMT

not directly caused by population or economic growth as a result of project implementation may also be recognized as a significant adverse impact but not a growth inducing one. A greater than ten percent reduction in commute time due to the project should usually be considered significant and a ten percent reduction or less should normally be considered insignificant. Measured another way, one recent study found that in California increased highway capacity leading to five minutes or more time savings causes increased trips and vehicle miles traveled (Dowling 1994). *Significance* may be based generally on the likelihood that a commuter would change routes, trip frequency, the time of day trips are made, mode choice, residences or workplace locations as a result of implementation of the transportation project.

Question 8 is a link to a closely-related impact category. Here the question is whether the effects of the cumulative development in the planning area exceed the planned limits for growth in the local community plan. Cumulative development should be measured in the same units for which standards are set in the community plan such as housing units, square footage of non-residential development, population, jobs, vehicle trips per day, vehicles per hour at selected intersections, or acres of urbanized land.

Analytical Techniques - Factor Analysis Alternative:

The Factor Analysis Alternative involves identifying the various factors that may promote or restrain growth in an area subject to the influence of a transportation proposal. The following factors affecting growth in a project area may be analyzed: land cost, public attitudes, planning policies, natural environment, land use, travel times, infrastructure, economics. This alternative approach to studying potential growth inducement is useful only when the growth factors in sum would clearly promote or restrict growth. The factors are evaluated for their cumulative effect on promoting or restraining growth.

The assessment of which factors are stimulating growth (land use development or urbanization) cannot be precise and mathematical because the state-of-the-art has not yet been developed. The reliability of such assessments is limited. A good description of what is going on in urbanization in the portion of the region being studied is probably the best that can be accomplished. A review of the literature has clearly shown that no agreement exists among development experts on how these variables may be compared and contrasted for decision making. All these factors may promote or restrain growth but they probably will never have equal or an absolute weight in the analysis.

Some of these factors may be secondary or indirect impacts. Many of them are also identified in a FHWA guidance memorandum on secondary impacts (see Appendix B, Bibliography). Consistency of projects with regional and local plans and accessibility as measured by increases or decreases in travel time should be the primary measurement tools for identifying significant impacts. Increases or decreases in project related vehicle miles traveled is another criteria that may be measurable if such forecasts are available for the project. All other factors should be clearly identified as subordinate, either in their importance or because of the state-of-the-art methodologies available in measuring them.

The factors to be used are:

Cost of Land: Is the cost of land in the affected area high, average, or low (as compared to the county or statewide figures)?

Local Government Plans and Policies: Do local government plans and policies support or restrict growth in the affected area?

Articulated Public Attitudes: Does public opinion as articulated in public meetings, the political process or the media, support or oppose growth in the affected area?

Terrain and Land Use: Is the terrain of the affected area suitable for development? Are existing land uses in the affected area conducive

to or would they conflict with new residential/retail/office/industrial growth?

Cost and Labor Pool: Are the cost, availability, and skills of the labor pool in the affected area conducive or restrictive to employment growth?

Commute Time: How would commute times to the affected area be changed?

Access: Location may also be a factor, including the spacing of interchanges. If there is a several mile stretch of new facility without interchanges, it is logical to assume that growth inducement would be reduced. Local planning agencies may request that interchanges not be constructed in order to reduce the pressure for local development (although given taxing policies this is likely to be a rare situation, and even so, subject to later policy changes). This factor is independent of the factor of reduced driving time: if there is no access to adjacent land, accessibility has not been improved in such a way to facilitate growth.

A way to address this factor is to compare the capacity of the project interchanges with local trip generation, projected volume and capacity on the intersecting routes at interchanges, and local transportation plans. Presumably, ramp volume projections are used in designing the interchange and these estimates should be available to the environmental planner.

Infrastructure: Is the existing infrastructure, (e.g. local roads, water and sewage facilities, schools, and community facilities) adequate or inadequate to handle growth? Would the local economy support construction of new facilities?

Constraints: Are there any features on the highway that could constrain the new capacity of the transportation improvement? For example, if a section of two-lane road is expanded to four lanes, the actual capacity of the four-lane section may be constrained by the unimproved two-lane segments at each end of the four-lane improvement.

Occupancy rates, population densities, and various other environmental constraints might be

added to the list of factors to be compared if pertinent to the project setting.

The following process may be used for analyzing growth inducement under the Factor Analysis Alternative:

1. Collect information pertaining to the growth factors identified above that apply to the affected area. The amount of uncertainty associated with a project may in itself be valuable decision-making information.
2. Provide a summary that describes the extent to which each factor may promote or restrict growth if the proposed project is constructed. If it is clear that the factors cumulatively either could act to promote growth or restrict it, such a finding should be stated.

If the factors influencing growth in the affected area can be compared to similar growth factors at alternative locations that may have a potential for development in a region, they may be addressed on a comparative basis. The purpose is to show that the affected area is more or less subject to growth inducement than other areas. This comparative analysis is most appropriate when there is local concern for growth at one location along a highway corridor and other locations more favorable for potential growth can be identified.

An example of this would be a proposal to construct an interchange on an existing freeway where the land is undeveloped. If local opposition to growth surfaced and/or other factors were negative toward new growth, the likelihood of development occurring at the project area could be compared to the likelihood of such development at other locations along the corridor. If the growth factors in the project area appeared to be constrained in comparison to alternative locations, the analysis could show that the project may not promote a substantial amount of new development.

Analytical Techniques - The No-Action Alternative

This method uses the No-Action Alternative as a basis for comparison. This approach involves discussing the growth that would occur both with and without the proposed project. (This method is easier to employ when the local or regional planning agency has conducted a growth study for scenarios with and without the proposed project.)

The document should discuss the growth that may occur with the proposal based upon policies and projections available in local and regional plans. The anticipated growth in terms of acreage subject to development, number of residences, new households, businesses, employees, trips generated, and any other appropriate measures available from the local or regional agency should also be described.

Discuss the growth that may occur if the project is not approved. Assume that no other highway improvements will be constructed in lieu of the proposal. This is best done by describing the constraints to growth that may exist in the absence of the proposed project. Constraints include a limited supply of developable land with convenient/economical access, a limited infrastructure, and the availability of alternative locations for growth on the same or connecting highways in the region. Use the same measures employed for the discussion of anticipated growth associated with the proposed project.

Compare the levels of anticipated growth with and without the proposal to determine the growth inducement potential of the project. This method works best when the proposed project would provide access or significant new highway capacity to a large amount of undeveloped but developable land. An example would be a new highway through undeveloped land that parallels an existing highway traversing a built-up area.

An objection to the No Action Alternative (comparison of the "no project" alternative with other build alternatives) has been raised by some on the grounds that, in urban areas, the method usually demonstrates that the growth is expected to occur in the project area with or without the project, albeit perhaps at a different rate. This is

precisely the point: growth reflects the market, not the project. While the project removes travel constraints, it is not the primary factor in growth. Another objection is that the no project alternative is often the most air polluting alternative. This finding makes the no-project alternative a "straw man" in that it is not realistic to assume it would ever be approved because it would be in violation of the Clean Air Acts.

Growth Inducement - References

For additional information on means of assessing growth potential, consult the list of references in Appendix A

Additional Discussion

The balance of this Appendix looks at growth inducement theory in further detail.

With respect to the linkage between transportation, land use, air quality, the research is frequently incomplete, and there are large gaps in the available data. By their nature, case studies often provide anecdotal evidence from which it is difficult to make valid generalizations.

Many people who debate transportation, land use, and air quality issues believe that a low density single-family residential environment and dependence on the automobile is inherently wasteful of energy and resources.

The question of the extent to which the expansion of transportation capacity can help alleviate air pollution and the extent to which new capacity might aggravate the problem is a thorny one. On the one hand, transportation engineers have customarily held the view that constructing new roads and opening transit lines satisfies growing travel demand more efficiently, and the resultant reduction of congestion translates to less pollution. Others say that more capacity actually induces land development which in turn increases travel demand. The end result is the production of additional pollutants.

Recent research studies on the effects of highway investments on land development have been

spurred largely by the interest in using highways as instruments of economic development. However, most such studies have concluded that highway investments are only one factor in a larger growth and development equation and in areas with weak markets for development highways in and of themselves will not turn a local economy around. Other studies involving projects which have seen a large amount of private development suggest there had been previously a pent-up demand that the transportation system was now releasing. However, many that have associated the new "growth" in an area to a highway project have been criticized by other transportation economists because they failed to account for the likelihood that development would have occurred as a matter of course elsewhere in the region had the highway not been developed. In other words, the region has experienced a shift and not an increase in totals..

Some have argued that it is precisely this shift that is of concern. This is especially true if the development that is induced by transportation improvements causes drivers to make more trips, make longer trips, or shift modes by relocating from high-density areas where many trips would be made by foot or transit to low-density areas which tend to be heavily dependent on cars.

The linkage between transportation and land use change has been frequently discussed in transportation planning literature. While there is a general perception that transportation just doesn't serve growth, but creates it, the assertion is unsupported by empirical data. For instance, University of Southern California transportation research specialist, Dr. Genevieve Giuliano, expressed in her article, "New Directions for Understanding Transportation and Land Use" (1989) that recent studies show no consistent relationship between highway improvements and changes in land-use. Instead, her study of the literature found that land-use impacts were largely dependent upon four factors: overall local economic conditions, access to medium-income or high-income residential areas, availability of developable land, and favorable zoning policies.

The balance of this discussion looks at growth inducement theory; the discussion is drawn largely from the views expressed by Dr. Genevieve Giuliano, University of Southern California, in correspondence from 1992. The letters are on file in the Caltrans Headquarters Environmental Program. Her statements are shown in italics below:

...Once population and employment have been allocated to specific locations within the region, these infrastructure requirements are fixed. Thus, the traditional planning process is "top-down," and growth inducement becomes an irrelevant concept. How can transportation infrastructure investment induce growth, when we use expected investment as the basis for justifying the investment in the first place? It is important to note that the standard four-step [Urban Transportation Model System] compliments [sic] this top-down approach. Population and employment distributions are the initial model inputs, and trip generation rates are derived directly from them.

... The standard regional planning process begins with assumptions regarding expected population and employment growth over a specified planning horizon. These regional plan projections are derived from state and national economic growth forecasts, past growth trends, etc. Once these regional totals are established, the growth is allocated to local jurisdictions. By state law, local plans must be equated to regional plans, so the total projections of local jurisdictions must be equated with the regional totals.

Heretofore, regional and local forecasts have often been developed independently. ISTEA and the Clean Air Act of 1990 mandate conformity between the MPO's transportation improvement program and the Caltrans STIP, changing the situation in ways that are beginning to emerge.

In estimating a metropolitan region's transportation infrastructure needs, such as freeways, major arterials or transit, the usual procedure has been to derive data directly generated from these population and employment projections, as well as other socioeconomic input variables, such as vehicle availability, household

income and household size. Larger Metropolitan Planning Organizations (MPOs), such as the Southern California Association of Governments and the Association of Bay Area Governments develop their own sophisticated analytical methods and periodically generate updates on these forecasts.

There are now several more sophisticated models available (one being used in the San Francisco Bay area) but almost none have undergone vigorous testing. The 1000 Friends of Oregon's two-volume report (Cambridge Systematics, 1991) contains a summary of currently available interactive transportation and land use modeling systems, a survey of the current state of practice in transportation and land use forecasting at the metropolitan level in the United States, and a detailed look at the forecasting system being used in the Portland area. The study states that the *"transportation models do not have any means of showing how future transportation systems impact the distribution of land use. Rather, land use data is incorporated as an input to the first step in the traditional four step transportation process. The only means by which any feedback occurs from transportation to land use is through the updating of the regional transportation forecasts and plans, which occurs in regions at five or ten year intervals."*

And while the traffic forecast models of the sort developed in conjunction with regional agency projections allow for cumulative, area-wide analysis, the level of detail needed for most project-level environmental impact assessment is often missing, or is at too aggregate a level to be useful for addressing local concerns. The Caltrans environmental planner or consultant analyzing growth is advised to couple the methodological approaches suggested in this Volume with a look at the various factors influencing growth at that location, including local market conditions, public attitudes towards growth, other infrastructure constraints, and large development proposals in the planning pipeline, to name but a few. There is no known scientific methodology for isolating the influence of each of these factors that may affect growth, and the use of computer technology to handle the accounting does not change this fact.

Growth inducement studies prepared by Caltrans or its consultants rarely use computer modeling. Qualitative and subjective approaches weighing and comparing variables appear to be generally preferred by those who analyze potential growth associated with a transportation improvement for environmental document purposes.

A study done as a technical background document for an environmental document in District 6 (Fresno) looked at the effects of highway projects on residential development at selected locations in Fresno and Madera Counties. The study, "Fresno Area Growth Inducement Study of the Effects of Highway Network Improvements on Residential Developments," used a gravity model to produce quantitative measures of the growth pressures and relative attractiveness of each residential location in the context of regional and local plans vis-a-vis the roadway network. The gravity model was supplemented with opinions on likely land use changes made by an expert panel.

The typical outcome of growth inducement analysis for Caltrans environmental documents has been, as expressed by Dr. Giuliano, *...that the project will facilitate planned growth and any inducement effect will be local (e.g., a redistribution of expected growth). This conclusion is inevitable if we take expected (planned) growth as a given and plan transportation facilities to service that growth. Furthermore, the conclusion that growth will occur whether or not the facility is built is also a direct result of our initial planning assumptions.*

... We know from historical experience that our ability to forecast growth is limited, and that our ability to control growth is limited as well. Studies of growth controls show that their effect is primarily one of redistribution when demand for the growth exists: growth deterred in one city goes to its closest neighbors.... It is also worth noting that growth inducement is not an issue if one believes that land use can be controlled.

The relationship between transportation and land use is difficult to determine.

In a couple of my papers I made the point the relationship between transportation and land use

is not fixed. The transportation system is very flexible, and economic activity can take place under varied circumstances. Rather than a fixed relationship, we might think about upper and lower bounds. Certainly, some quantity of transportation infrastructure must be available, but we really can't say how much is appropriate or adequate. Moreover, at some point the lack of supply should hinder further economic activity, but we don't know where that point is. Places like the Bay Area and LA have grown rapidly over the last decade, despite the almost total absence of new transportation facilities and rising congestion. Places like Denver have languished, despite rather rich transportation resources. If the system is so flexible, it is clearly difficult at best to identify induced growth.

. . . Even when significant land use changes occur in conjunction with transportation investments, there is no way to determine whether the investment caused these changes, or whether the changes created the demand for the transportation improvement. The fact that the development community is an active proponent of transportation investments, and in recent years has become an increasingly important financial contributor to such investments, lends credence to the latter interpretation. In any event, land use and transportation decisions are so closely tied together that it has been impossible so far to separate their effects.

There are several aspects of the context of urban highway investments that can affect the extent of land use impacts. First, it is important to realize that any single highway investment is but a part of a much larger urban transportation system. Highway improvements are marginal: they add some increment of accessibility to the area. In an area that already enjoys a high level of accessibility, we would not expect a new investment to have much of an impact. In an area with limited accessibility, the same investment would be expected to have a much greater impact. Most U.S. urban areas fall into the former category, however.

Second, the availability of developable land must be a key consideration. Land use change is more likely to occur in the form of new construction

rather than reconstruction because of the high cost and longevity of most residential and commercial infrastructure. . . .

Local zoning is a third critical factor in impact assessment, because land use change cannot occur unless local zoning permits it. Consequently, transportation investments may not result in significant land use changes if there is strong local opposition to such changes. Major transportation investment decisions are generally made at the regional level, and local constituencies may not support these decisions.

A fourth factor to consider in studying land use impacts is the state of the regional economy. . . .

Finally, the scale of analysis must be considered. It is relatively straightforward to determine whether highway investments have an impact within their immediate vicinity. . . . The question is more complicated if the region as a whole is of interest. Regional impacts are more difficult to observe because transportation investments are incremental.

General economic conditions in the nation and the region determine regional population and employment growth. The evidence on regional development indicates that regions such as the Rustbelt can't stimulate much growth even with aggressive economic development programs.

. . . the extent of development that occurred in each area seemed to be largely a function of the rate of economic growth of the area. The study authors (see Payne-Maxie Consultants, 1980) conclude that the extent of land use impacts is determined largely by market conditions. When conditions are favorable, land use change will occur; when conditions are not favorable, impacts are unlikely.

Given the high level of accessibility that exists in U.S. urban areas, the impact of any single facility will be marginal. In most urban areas the supply of accessible, developable land is relatively plentiful

*.
Any new transportation facility provides new capacity, but new capacity by itself does not*

generate travel demand. If I build a new highway in a stagnant area (say Detroit) will I increase traffic in Detroit? Supply is already more than adequate, thus there is no latent demand. If the Century Freeway in Los Angeles opened tomorrow, will traffic increase in LA? Yes, because the demand for travel so exceeds the current supply that latent demand is extensive, and the added capacity would rapidly be utilized. Did the Freeway induce these trips? No. The new trips are the outcome of supply availability and a given level of demand: the level of demand is determined in turn by the level of population and employment activity.

The question of growth inducement is whether the Century Freeway would generate even more growth; that is, more growth than would have occurred without the freeway. The complimentary [sic] question for Detroit is whether building a new highway will generate new growth. My answer is the same in both cases. New or induced growth would occur only if the project significantly increased the propensity for economic growth of the region. Otherwise, any observed growth associated with the facility would be the result of a redistribution of growth within the region e.g. growth that would have occurred somewhere in the region whether or not the project existed.

Measurement of such growth is virtually impossible. No model system exists today with the sophistication to perform such an analysis.

THIS SPACE FOR NOTES

RELOCATIONS

Environmental Planners and consultants who prepare community impact assessment studies for Caltrans should have a basic understanding of the relocation laws and provisions with which the Department works. It should be understood at the outset that Relocation Assistance is fairly complex. This Appendix is general in nature and is not intended to be a complete statement of federal and state relocation laws and regulations. Any questions concerning relocation should be addressed to Caltrans Right of Way.

This section provides some general descriptive information on Public Law (PL) 91-646, the "Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970" (and as Amended by PL 100-17, 1987). This is often referred to simply as the "Uniform Act." The information in this Appendix is provided only as background and is not intended as a complete statement of all the State or Federal laws and regulations; for specific details the planner should contact the appropriate Caltrans District Right of Way Relocation Branch. After presenting an outline of the basic legal foundation for relocation policy, the Appendix looks at important relocation assistance information, including advisory services and the payment program. Additionally, an Exhibit to this Appendix includes a portion of the language from the Caltrans Right of Way Manual Chapter 10, Section 10.05.00.00 on Relocation Impact Documents because they often contain information relevant to community impact assessment issues considered as part of the overall environmental evaluation process.

APPENDIX E

DECLARATION OF POLICY

"The purpose of this title is to establish a *uniform policy for fair and equitable treatment* of persons displaced as a result of federal and federally assisted programs in order that such persons *shall*

not suffer disproportionate injuries as a result of programs designed for the benefit of the public as a whole."

The Fifth Amendment to the U.S. Constitution states, "No Person shall...be deprived of life, liberty, or property, without due process of law, nor shall private property be taken for public use without just compensation."

The Uniform Act sets forth in statute the due process that must be followed in Real Property acquisitions involving federal funds. Supplementing the Uniform Act is the government-wide single rule for all agencies to follow, set forth in 49 Code of Federal Regulations, Part 24.

Displaced individuals, families, businesses, farms, and nonprofit organizations may be eligible for relocation advisory services and payments, as discussed below.

FAIR HOUSING

The Fair Housing Law (Title VIII of the Civil Rights Act of 1968) sets forth the policy of the United States to provide, within constitutional limitations, for fair housing. This Act, and as amended, make discriminatory practices in the purchase and rental of most residential units illegal. Whenever possible, minority persons shall be given reasonable opportunities to relocate to any available housing regardless of neighborhood, as long as the replacement dwellings are decent, safe, and sanitary and that are within their financial means. This policy, however, does not require Caltrans to provide a person a larger payment than is necessary to enable a person to relocate to a comparable replacement dwelling.

Any persons to be displaced will be assigned to a relocation advisor, who will work closely with each displacee in order to see that all payments and benefits are fully utilized, and that all regulations are observed, thereby avoiding the possibility of displacees jeopardizing or forfeiting any of their benefits or payments. At the time of the first written offer to purchase, owner-

occupants are given a detailed explanation of the state's relocation services. Tenant occupants of properties to be acquired are contacted soon after the first written offer to purchase, and also are given a detailed explanation of the Caltrans Relocation Program. To avoid loss of possible benefits, no individual, family, business, farm, or nonprofit organization should commit to purchase or rent a replacement property without first contacting a Caltrans relocation advisor.

RELOCATION ASSISTANCE ADVISORY SERVICES

In accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, Caltrans will provide relocation advisory assistance to any person, business, farm or nonprofit organization displaced as a result of the acquisition of real property for public use. Caltrans will assist displacees in obtaining comparable replacement housing by providing current and continuing information on the availability and prices of both houses for sale and rental units that are "decent, safe and sanitary." Nonresidential displacees will receive information on comparable properties for lease or purchase (For business, farm and nonprofit organization relocation services, see below).

Residential replacement dwellings will be in equal or better neighborhoods at rents or prices within the financial ability of the individuals and families displaced, and reasonably accessible to their places of employment. Before any displacement occurs, comparable replacement dwellings will be offered to displacees that are open to all persons regardless of race, color, religion, sex, national origin, and consistent with the requirements of Title VIII of the Civil Rights Act of 1968. This assistance will also include the supplying of information concerning Federal and State assisted housing programs, and any other known services being offered by public and private agencies in the area.

Persons who are eligible for relocation payments and who are legally occupying the property required for the project will not be asked to move without first being given at least 90 days written

notice. Occupants eligible for relocation payment(s) will not be required to move unless at least one comparable “decent, safe and sanitary” replacement residence, available on the market, is offered to them by Caltrans.

RESIDENTIAL RELOCATION PAYMENTS PROGRAM

The Relocation Payment Program will help eligible residential occupants by paying certain costs and expenses. These costs are limited to those necessary for or incidental to the purchase or rental of the replacement dwellings and actual reasonable moving expenses to a new location within 50 miles of the displacement property. Any actual moving costs in excess of the 50 miles are the responsibility of the displacee. The Residential Relocation Program can be summarized as follows:

Moving Costs

Any displaced person, who lawfully occupied the acquired property, regardless of the length of occupancy in the property acquired, will be eligible for reimbursement of moving costs. Displacees will receive either the actual reasonable costs involved in moving themselves and personal property up to a maximum of 50 miles, or a fixed payment based on a fixed moving cost schedule.

Purchase Supplement

In addition to moving and related expense payments, fully eligible homeowners may be entitled to payments for increased costs of replacement housing.

Homeowners who have owned and occupied their property for 180 days or more prior to the date of the first written offer to purchase the property, may qualify to receive a price differential payment and may qualify to receive reimbursement for certain nonrecurring costs incidental to the purchase of the replacement property. An interest differential payment is also available if the interest rate for the loan on the

replacement dwelling is higher than the loan rate on the displacement dwelling, subject to certain limitations on reimbursement based upon the replacement property interest rate. The maximum combination of these three supplemental payments that the owner-occupant can receive is \$22,500. If the total entitlement (without the moving payments) is in excess of \$22,500, the Last Resort Housing Program will be used (See the explanation of the Last Resort Housing Program below).

Rental Supplement

Tenants who have occupied the property to be acquired by Caltrans for 90-179 days prior to the date of the first written offer to purchase may qualify to receive a rental differential payment. This payment is made when Caltrans determines that the cost to rent a comparable “decent, safe and sanitary” replacement dwelling will be more than the present rent of the displacement dwelling. As an alternative, the tenant may qualify for a down payment benefit designed to assist in the purchase of a replacement property and the payment of certain costs incidental to the purchase, subject to certain limitations noted under the Down Payment section below. The maximum amount payable to any tenant of 90 days or more and any own-occupant of 90-179 days, in addition to moving expenses, is \$5,250. If the total entitlement for rental supplement exceeds \$5,250, the Last Resort Housing Program will be used.

In addition to the occupancy requirements, in order to receive any relocation benefits the displaced person must buy or rent and occupy a “decent, safe, and sanitary” replacement dwelling within one year from the date the Department takes legal possession of the property, or from the date the displacee vacates the displacement property, whichever is later.

Down Payment

The down payment option has been designed to aid owner occupants of 90-179 days and tenants with no less than 90 days of continuous occupancy prior to Caltrans first written offer.

The down payment and incidental expenses cannot exceed the maximum payment of \$5,250. The one year eligibility period in which to purchase and occupy a “decent, safe and sanitary” replacement dwelling will apply.

Last Resort Housing

Federal regulations (49 CFR 24) contain the policy and procedure for implementing the Last Resort Housing Program on federal-aid projects. Last Resort Housing benefits are, except for the amounts of payments and the methods in making them, the same as those benefits for standard residential relocation as explained above. Last Resort Housing has been designed primarily to cover situations where a displacee cannot be relocated because of lack of available comparable replacement housing, or when the anticipated replacement housing payments exceed the \$5,250 and \$22,500 limits of the standard relocation procedure, because either the displacee lacks the financial ability or other valid circumstances. In certain exceptional situations, Last Resort Housing may also be used for tenants of less than 90 days.

After the first written offer to acquire the property has been made, Caltrans will within a reasonable length of time, personally contact the displaces to gather important information, including the following:

- preferences in area of relocation;
- Number of people to be displaced and the distribution of adults and children according to age and sex;
- Location of school and employment;
- Specific arrangements needed to accommodate any family member(s) special needs;
- Financial ability to relocate into comparable replacement dwelling which will adequately house all members of the family.

NONRESIDENTIAL RELOCATION ASSISTANCE PROGRAM

The Nonresidential Relocation assistance Program provides assistance to businesses, farms and nonprofit organizations in locating suitable replacement property, and reimbursement for certain costs involved in relocation. The Relocation Advisory Assistance Program will provide current lists of properties offered for sale or rent, suitable for a particular business’s specific relocation needs. The types of payments available to eligible businesses, farms and nonprofit organizations are searching and moving expenses, and possibly reestablishment expenses or a fixed in lieu payment instead of any moving, searching and reestablishment expenses. The payments types can be summarized as follows:

Moving Expenses

Moving expenses may include the following actual, reasonable costs:

- The moving of inventory, machinery, equipment and similar business-related property dismantling, disconnecting, crating, packing, loading, insuring, transporting, unloading, unpacking, and reconnecting of personal property.
- Loss of tangible personal property provides payment for actual, direct loss of personal property that the owner is permitted not to move.
- Expenses related to searching for a new business site, up to \$1,000 for reasonable expenses actually incurred.

Reestablishment Expenses

Reestablishment expenses related to the operation of the business at the new location, up to \$10,000 for reasonable expenses actually incurred.

Fixed In Lieu Payment

A fixed payment in lieu of moving and searching payments, and reestablishment payment may be

available to businesses which meet certain eligibility requirements. This payment is an amount equal to the average annual net earnings for the last two taxable years prior to the relocation and may not be less than \$1,000 nor more than \$20,000.

ADDITIONAL INFORMATION

Reimbursement for moving costs and replacement housing payments are not considered income for the purpose of the Internal Revenue Code of 1954, or resources for the purpose of determining the extent of eligibility of a displacee for assistance under the Social Security Act, local "Section 8" Housing Programs, or other Federal assistance programs.

Any person, business, farm or nonprofit organization which has been refused a relocation payment by the Caltrans relocation advisor or believes that the payment(s) offered by the agency are inadequate, may appeal for a special hearing of the complaint. No legal assistance is required. Information about the appeal procedure is available from the relocation advisor.

California law allows for the payment for lost goodwill that arises from the displacement for a public project. A list of ineligible expenses can be obtained from Caltrans Right of Way. California's law and the federal regulations covering relocation assistance provide that no payment shall be duplicated by other payments being made by the displacing agency.

THIS SPACE FOR NOTES

EXHIBIT E-1

EXCERPTS FROM CHAPTER 10, CALTRANS RIGHT OF WAY MANUAL RELOCATION IMPACT DOCUMENTS

This attachment contains brief portions of Chapter 10 of the Caltrans Right of Way Manual that may be relevant to understand how relocation issues are addressed by Right of Way.

The following addresses the minimum requirements, procedures and optional format to provide necessary relocation impact information to the District for Right of Way planning purposes and to the District Environmental Assessment Branch for input into Draft and final environmental documents.

The degree and range of use of the two studies described herein may vary widely among the Regions and Districts.

The objective of impact considerations is to supply the Right of Way organization with the scope of relocation requirements in a single project or a number of alternative projects. Special problems, timing considerations, relocation phasing and general relocation alternatives are to be included when appropriate.

The statements or reports are to be provided to the project planners and environmental study units. It should be recognized that Right of Way studies relate to who must be displaced, what problems must be solved by the Relocation Assistance Program. It is not the purpose of these reports to evaluate the broad impact of the Relocation Assistance Program as it affects the community but only to provide data to the impact analysis team.

Types and Timing of Reports

Draft Relocation Impact Statement

There are two basic types of relocation impact documents: 1.) Relocation impact statements for uncomplicated projects, and 2.) Relocation impact reports for complicated projects and/or special problems. These reports are referred to as draft reports or the final impact reports. These two documents describe the impact of Right of Way displacement of a project or project alternative. They differ, however, in terms of scope and depth of analysis. The depth of analysis and scope of report should reflect the needs of both the District Right of Way and Environmental Branches.

Relocation Impact Documents are made at two intervals during the planning stage of a project: prior to the draft environmental document and prior to any route selection or acquisition activities. Both documents will, at a minimum, address the following: 1.) Amount and types of residential and nonresidential displacement. 2) Current and anticipated availability of relocation resources. 3.) any specific relocation problems.

Draft Relocation Impact Statements (Draft)

Relocation Impact Statements (memorandum format) will be prepared for projects involving minimal or uncomplicated relocation work and can be used as input to environmental documents. Such statements are most appropriately used when there will be few or routine displacements, adequate replacement resources exist, and no unusual relocation situations are anticipated in relation to the community residential or nonresidential resources.

Relocation Impact Reports (Draft).

Relocation impact reports will be prepared for route selection purposes as input to the draft environmental documents. Each design alternative will be discussed in general terms referenced with the three basic requirements noted above. Information should be completed in a timely manner to allow its presentation at a corridor and/or public hearings.

Final Relocation Impact Document (Statement-Report)

A final relocation impact document will be prepared once a final alignment has been determined. The document should be completed in time as input to the final ED. It differs from the draft relocation impact statement or draft impact report in that only the selected alignment will be discussed in depth. Certain specific recommendations are also to be included, as indicated below. The final relocation impact document will be completed and approved prior to any appraisal or acquisition activity. If it is not feasible to complete the document, an update of the draft relocation impact statement or the draft relocation impact report should be used as input to the final environmental document.

Relocation Impact Documents

Minimum Requirements

All Relocation Impact Reports should consider the following items as appropriate (see Section 10.05.00.00 for complete listings). The items with an asterisk are considered basic report items.

- * Project Location Map
 - Project Limits Map
 - Project Alignment Map
- * Summary & Project Data Sheet
 - Appraisal/Acquisition Priorities
- * Basis of Findings
- * Number of Displacement units
- * Type of units displaced (SFR, Apt, etc.)
 - Characteristics of units
 - Est. Value of units to be displaced
- * Owner/Renter Mix
- * Effect on Business
 - Age and Condition of units affected
 - Survey of displacees (Data Analysis)
- * Residential/non-residential units
- * Arrayed by price/bedroom
- * Arrayed against needs
- * Concurrent displacement
- * Availability analysis
 - Market Trends
 - Subsidized Housing
- * Relocation Plan
 - Identification of special problems
 - Proposed solutions for noted problems
 - Appendix: Back up availability data
 - Appendix: Typical Photos
 - Appendix: Census/Population data

Depth of Analysis

The depth of discussion in the Relocation Impact Documents should be sufficient to: 1.) Satisfy the needs of the Caltrans District's Environmental, Project Development, Design, and other project team members, and 2.) Satisfy the internal needs of Right of Way. The degree of analysis depends on the complexity of the relocation effort and the relocation problems involved. The District should carefully choose which style of document and what depth of analysis best suits their needs. In complex projects, a full narrative report will be prepared. This full report may include a more extensive "needs vs. availability" analysis and other appropriate documentation to present discussion or data on special situations or needs.

A summary of effects and alternative actions will be submitted for possible inclusion in the Final Relocation Impact Document. Understand that relocation is an entitlement guaranteed by law, not an arbitrary option to mediate damages to the effects of the housing environment. The District Environmental Branch planner (or consultant) may summarize the effects of the loss of housing on the study area's housing environment and may include a discussion of the effects, if any, on the environment which may result from changes in the community's housing stock (e.g., effect on the community where replacement housing is to be provided, increase or decrease in property tax revenue, etc.). The Environmental Planner, however, should allow the Right of Way staff who prepared the Relocation Impact Study to review the summary so as to assure that it accurately reflects what the study showed and data concluded.

THIS SPACE IS FOR NOTES

The purpose of this Appendix is to present the Department's procedures for conducting an impact study on potential adverse impacts to businesses (and other services) dependent on access resulting from the temporary closure of freeway on and off ramps.

(The basic discussion expressed below has evolved from the former Caltrans Policy & Procedure 82-6, which is replaced by this discussion. These methodologies may also be helpful in conducting analyses of other types of transportation-related economic impacts, although they will no doubt need to be tailored to meet the needs of the user.)

To the extent feasible, construction projects on freeways which will require the closing of ramps should be identified and analyzed during the planning and design stages by the environmental planning unit to which a study request is made.

If there are no other socioeconomic issues, the report should be focused only on the issue of the ramp closure. The study need not be long; see the example at the end of this section. The results of this analytical report should be summarized in the environmental document prepared for the project.

It is recognized that despite best efforts to anticipate ramp modifications, the specific details on prolonged closures cannot always be formally studied in the planning or design phase when environmental studies are being conducted. Thus sometimes such analysis is handled in a later stage. It is not necessary to restudy other socioeconomic impacts previously studied during planning and design unless significant new commercial development has occurred in the area in the interim.

When is a study needed?

First, wherever it is possible, the prolonged closure (generally considered to be 10 consecutive days) of freeway ramps when the closure may have an adverse impact on local businesses should be avoided. The procedures below provide a framework for addressing such impacts. Ramp

APPENDIX F

RAMP CLOSURE STUDIES

closures cannot always be avoided however; there are often other factors that influence the final decision, including those involving travel costs, and delay and safety concerns.

For temporary ramp closures of short duration, 10 consecutive days or less, where there is an indication of adverse impacts or there is sufficient public concern to identify impacts on adjacent businesses, an impact study may be necessary.

Ramp closures need not be studied for emergencies or short-term planned closures (less than 10 consecutive days) which include, but are not limited to:

- peak hour traffic management;
- routine maintenance;
- special events;
- law enforcement purposes;
- work by local jurisdictions on local streets carrying traffic to or from the ramp.

Study Procedures

(1) For a project proposing a prolonged ramp closure, determine the degree to which businesses are dependent on freeway access (% of highway-oriented customers). *Trip Generation* (5th edition, 1990), a publication by the Institute of Transportation Engineers (ITE), contains useful data that can be extrapolated for a number of purposes in this regard. The manual gives trip generation rates for over 100 different land uses based on data from nearly 3000 trip generation studies and updated information on multiple-use projects and pass-by trips, including such land uses as fast food restaurants and service stations with convenience stores. Such data may be useful for understanding the percentage of patronage which is from pass-by traffic for certain types of business when changing access or re-routing traffic. Obviously, these factors are highly affected by the local market, adjacent land uses, and local traffic patterns. This data should be

combined with information from Caltrans Traffic Operations or the local public works agency to better understand the likely changed traffic levels on the roadway.

Examine the following interrelated factors:

- type of business?
- trade or service area?
- seasonal (or peak hour) characteristics?
- concentrated business area?
- are emergency services affected?
- alternative access available?

Some of the data sources listed in Appendix B may be useful in compiling information. The geographical scope of study should generally be limited to businesses within one-half mile of the ramp unless compelling reasons for a larger study are evident. The level of detail of information required will be only that needed to provide reasonable confidence in the conclusions.

(2) Determine the travel costs, delay and safety impacts due to the proposed prolong ramp closure.

(3) Estimate cost of any mitigation measures.

(4) Incorporate study results in the environmental document; if the environmental document has already been completed, the Environmental Office Chief should furnish the results of the study to the Deputy District Director for Design or Construction, depending on the circumstances.

It may be a good idea to conduct a field survey of businesses in collaboration with local representatives and persons familiar with the project area; the results of the survey should be included in the study.

The capacity of a business to withstand a disruption to its operations depends on the types of goods and services they provide and the resources of the business and its cash flow. Generally, large businesses, and those that serve a

large regional market area are more likely to be able to afford a temporary interruption in existing access. However, some businesses, especially small ones, may not be in a position to be able to sustain a loss of access for more than a short period of time if sales drop dramatically. Obviously retail businesses are more directly affected in changes in the transportation network than commercial offices and manufacturing firms.

In many instances, the assessment procedures indicate the use of personal judgment will be required in making a determination as to the extent of an economic impact. In addition, consultation with local officials and persons familiar with the project area should provide additional information to make these necessary judgments.

The affected local agency should be notified of any decision, and local businesses that may be affected should be included in the public distribution of the environmental document and notified of any public hearing.

MITIGATION MEASURES

Mitigation measures such as the use of staging, expediting construction, building temporary ramps and detours, signing and closely working with businesses should be considered to minimize or avoid the impacts on local businesses. The estimated cost of any appropriate measure should be included in the analysis. It is the responsibility of the project development unit to see that the mitigation measures accepted by the Project Development Team are incorporated into the plans, specifications and estimates (PS&E), or any special environmental provisions. The results of the ramp closure study shall be weighed by the decision maker.

It should also be noted that only properties with actual physical takings are eligible for acquisition and relocation benefits (i.e., compensation). Circuity of travel and alternative access is non-compensable under Federal law.

THIS SPACE FOR NOTES

Exhibit F-1

RAMP CLOSURE STUDY
(EXAMPLE)

The following serves as an example of a requisite study that was prepared to address temporary ramp closures. The identity of true place names have been omitted. Exhibits which accompanied the original report, depicting specific project configuration details and minutes of a meeting between the hospital and Caltrans staff, are not reproduced here. This sample was adopted from a study report prepared by Mr. Cleve Govan, Senior Environmental Planner, Caltrans

This report was prepared to address the impacts of temporarily closing on and off-ramps along I-222. These ramp closings are necessitated by the proposed project which requires the widening of the I-222 freeway in the vicinity of O'Brien Street. In order to prevent the purchase of additional right-of-way, the construction of many retaining walls are required as the new ramps are built using the location of the old ramps. Consequently, it is not feasible to stage the work allowing the old ramps to remain in operation while the new ramps are constructed. The new O'Brien Street Park-and-Ride lot will be constructed on the west side of the I-222 freeway, north of O'Brien Street, at the site of the Egyptian Restaurant.

The existing ramp system provides direct access to and from O'Brien Street for southbound freeway vehicles. Northbound freeway access to and from O'Brien Street is provided via Letterman Avenue. The on-ramps will be closed for a period of two years and the off-ramps closed for a duration of 6 to 9 months.

A brief description of the project area is as follows: The immediate project vicinity is the commercial area along O'Brien Street to the east and west of I-222, roughly between Letterman Avenue and Leno Boulevard. Letterman Avenue and Leno Boulevard are north-south arterials paralleling the I-222 freeway to the east and west, respectively. The portions of these arterials between 14th and 20th Streets are also considered part of the immediate project vicinity.

Typical businesses along O'Brien Street include service stations, fast food restaurants, mini-malls, small private business establishments (including a thrift store and real estate office), and professional buildings. Land use along Letterman Avenue ranges from a liquor store and a veterinary facility to apartments, condominiums, single-family dwellings, and convalescent hospitals. Land use along Leno Boulevard is more of a light-industrial nature, with a car wash, lumber company, light manufacturing facilities, a vacant nursery, a Chinese restaurant, and several convalescent hospitals. The Twinkle Star Trailer Court is on the east side of Leno Boulevard, extending along the north side of 20th Street and abutting the freeway right-of-way, and paralleling the west side of the freeway north to O'Brien Street. But perhaps the most sensitive land use in the project area is the Lucky Clover Medical Center at the southwest quadrant of O'Brien Street and Leno Blvd. The main building of the facility dates to 1962, although other structures were built as early as 1943.

The County of Los Angeles/City of Chester corporate boundary traverses the project area in a north-south bound fashion parallel to, and just east of, I-222. The Lucky Clover Medical Center is west of the corporate boundary in the unincorporated county area. The Medical Center is a major provider of health care in the area. It also provides emergency services, and potential impacts on emergency vehicle access to the health facility was one of Caltrans' major concerns.

All of the businesses and non-profit organizations in the project area, including the Lucky Clover Medical Center, have a portion of their respective patrons that arrive and exit by the O'Brien Street on and off-ramps from I-222. These ramps also serve the nearby residential areas, as previously noted, as well as the more distant communities of Brookfall and Eagles Nest.

Patrons seeking access from I-222 freeway to the business establishments in the project area will need to find alternative routes. Fortunately, such alternative routes do exist. I-222 south-bound traffic to O'Brien Street would exit the off-ramp at 23rd Street (.5 mile, or less than 1 km to the south), and backtrack to O'Brien Street along Letterman Avenue or Leno Blvd.; or exit at Java Road (.8 mile, or slightly more than one km to the north) via Tea Avenue to proceed to the project area. Likewise, I-222 northbound off-ramp traffic to O'Brien Street would exit at Rodeo Street (1.7 miles, or 2.7 km to the south), and proceed to the project area along Letterman Avenue or Leno Blvd.; or, exit at Java Road via Letterman Avenue or Leno Blvd. Southbound and northbound on-ramps from O'Brien Street will be closed, with alternate freeway access from 23rd Street or Java Road via Tea Avenue, and Rodeo St. or Java Road via Letterman Avenue, respectively.

Because there are viable alternative routes to and from the commercial area along O'Brien Street and Letterman Avenue and Leno Blvd., it appears that potential business patrons would have adequate access to the project area during the ramp closure period. Likewise, access to residences in the project area or more distant residential communities would not be adversely impacted. However, due to the emergency access needs of the Lucky Clover Medical Center, Caltrans prepared an access time analysis to determine the additional time required for emergency vehicles to access the Medical Center when using the previously discussed alternative routes. In addition, Caltrans met with Medical Center staff to discuss the ramp closures and identify any of their concerns. The staff indicated that with advance notification and coordination the emergency drivers will be able to cope with the construction schedules. Caltrans resident engineers will work closely with the medical staff.

The access time analysis indicates the extra time required to access the hospital via alternative routes is not inordinate. It takes 1 minute and 22 seconds (on the average) to access the Medical Center from the southbound freeway off-ramp to O'Brien Street. Using this as the base condition, the access times of the alternative routes can be compared. Utilizing the 23rd Street southbound off-ramp route requires 49 additional seconds, while utilizing the Java Road southbound off-ramp requires an additional 1 minute, 14 seconds. Likewise, using the I-222 northbound off-ramp to O'Brien Street takes an average of 3 minutes, 4 seconds to access the Medical Center. Using this as the base condition, it takes 13 seconds longer to access the hospital utilizing the northbound off-ramp to Rodeo Street route, while utilizing the Java Road northbound off-ramp route requires an additional 1 minute, 24 seconds to access the Medical Center.

On September 14, 1994, Caltrans and Lucky Clover Medical Center staffs met at the hospital to allow Caltrans an opportunity to identify any concerns that the institution may have regarding access impacts due to temporarily closing the O'Brien Street ramps.

For northbound motorists, freeway access is provided at Java Road or Rodeo Street. For southbound motorists, freeway access is provided at Rodeo Street, 23rd Street, or Java Road.

As mitigation for the long-term closure of the off-ramps, particularly with regards to emergency vehicle access, Caltrans will require the contractor to complete the off-ramps as a first order of work to insure that the new off-ramps will be in service as soon as possible. The on-ramps would be closed for the duration of the contract.

Because there are viable alternative routes to the project area and access time to the area via these alternative routes is not inordinate, it is concluded that the various businesses and non-profit organizations would not suffer adverse patronage losses during closure of the I-222 freeway on and off-ramps from and to O'Brien Street. This conclusion is further reinforced by the results of the meeting with the Lucky Clover Medical Center staff as previously discussed.

As demonstrated by the access time analysis, the previously described alternative routes are sufficiently close to O'Brien Street that any driving time adjustments would be less than two minutes. Any inconvenience due to extra driving time would be marginal. Likewise, because driving time adjustments would be minimal, no appreciable increase in energy consumption would result.

Even though the O'Brien Street ramp closures do not pose an adverse impact on the businesses in the project area, or surrounding residential communities, the following measures are suggested:

1. Notify the local business and commercial concerns of the temporary closure of these ramps and alternative routes.
2. Notify emergency public services, such as the Medical Center, fire departments, and local ambulance services.
3. Inform the California Highway Patrol and other appropriate law enforcement agencies of the proposed action.
4. Notify the County Supervisor's Office and the City in which the ramps are located to discuss the proposal with them.
5. If the Supervisor's Office and/or the City deems it worthy, conduct an open house (s) to discuss the proposal for closing the ramps with the public.
6. Keep the County and affected City Traffic Engineer apprised.
7. Before closing the ramps, mail out informational notices, issue press releases, and make public service radio announcements to inform the public in advance of the closures.

THIS SPACE IS FOR NOTES

APPENDIX G

PUBLIC INVOLVEMENT

Public involvement requirements have been established by statute, as in NEPA and CEQA, ISTEA, and by regulations and guidance issued by federal and state agencies. According to the American Association of State Highway and Transportation Officials, “Constructive public participation should be continually sought and encouraged by responsive governmental agencies throughout the transportation planning and development process. The emphasis should be on commencing this participation as early in the planning process as possible, and in all cases prior to major decisionmaking points.”

State and local transportation agencies have a wide range of available options and good models to choose from to solicit feedback from the community, resolve differences among competing interests, and integrate the results into the planning and project development process. Yet, traditional public involvement methods, such as public meetings and hearings interest only a small fraction of the potentially interested population. Often, an initial list of invited participants unintentionally omits important segments of the population and the mere insertion of a public notice advertisement in the local, English-speaking newspaper, may not have the desired results of reaching out to a broad segment of the affected audience. This includes involving people who have a stake in transportation decisions, yet are not usually well-represented in the process. Included in this group are ethnic minorities, people with low incomes, those who are poorly educated, single parents, and people with disabilities.

Capturing the attention of a larger, more representative group requires careful planning and, in many cases, a more substantial effort than was paid in the past to such concerns. To be most effective, outreach techniques may need to be altered or augmented, because styles of

communication and behavior patterns differ from culture to culture. Early, informal consultation with members of target groups about what structural and institutional barriers to participation may exist (or be perceived to exist), and how the transportation agency may work to overcome them, is an essential component. Experience indicates that planners, engineers and others involved in the process may face misgivings about extending “special treatment” to some public members or groups that have not historically been involved. It is important to keep in mind, however, that techniques tailored to involve special segments of the public (such as business concerns) have long been a part of public involvement programs by transportation agencies. On the other hand, feedback from traditionally under-served groups is not “separate” from other input or given more weight, but rather, to be most useful, is integrated with, and balanced by, the needs and concerns of all societal interests.

When launching a public involvement effort, it is important to pursue a systematic process based on 5 fundamental guidelines, as spelled out in a recent U.S. DOT publication on public involvement, cited at the end of this Appendix.

1.) Public involvement is more than simply following legislation and regulations. In a democratic society, people have basic opportunities to debate issues, frame alternative solutions, and affect final decisions in ways that respect the role of the decision-makers. Knowledge is the core of such participation. The public needs to know details about a plan or project to evaluate its importance or anticipated costs and benefits. Agency goals should reflect community goals. Through continued interaction with the entire community, agencies build community support and, more importantly, assure that the public has the opportunity to help shape the substance of plans and projects. In summary, public agencies should act as public servants.

2.) Public involvement is really about continuous contact between agency and non-agency people throughout the transportation decision-making process, from the earliest stages, as one or more transportation problems are identified, through the

definition of purpose and need, through the development of a range of potential solutions, and up to the decision to implement a particular solution.

3.) Public involvement will usually necessitate the use of a variety of techniques that target different groups or individuals in different ways or target the same groups or individuals in different ways. A single, one-size-fits all approach usually results in missing many people and thus runs counter to basic democratic principles. Effective involvement processes should be custom-tailored to local conditions.

4.) Active outreach to the public means agencies must search out the public and work hard to elicit response. It is true that resources are limited, and agencies cannot force anyone to participate. Transportation agencies, however, have repeatedly found that actively seeking out the public and abandoning unsuccessful approaches bring greater results.

5.) Public participation should focus on the importance of shared decision-making rather than on conducting participation exercises merely because they are legally required. Decisions include both the continuous stream of informal decisions made by agency staff and lower-level management and the less frequent formal decisions made by decision-makers. Timely agency response to ideas from the public and integration of their ideas into decisions shows the public that participation is worthwhile. A focus on the wide range of possible decisions gets agencies past simply offering the public passive opportunities to comment on proposed projects just before formal decision-making.

What are some examples of State and local agencies in California that have demonstrated innovative approaches to enlist public input into the process? During a transportation corridor study in East Los Angeles, Spanish-speaking staff of the Metropolitan Transportation Authority walked through the neighborhoods, personally inviting people they met to attend a future meeting. A high turnout resulted. Caltrans District 3 (Marysville) desired to learn the

opinions of the tightly-knit Hmong community living near a project area. Caltrans contacted the group's church leaders, worked with them to write notices in their native Laotian language, and then provided copies for students to take home to their parents. The flyers noted that translators and child care arrangements would be made for those present at the public meeting. The attendance went beyond all expectations. The Sacramento Regional Transit District featured an interview and call-in show on a Spanish radio station to better understand the needs of the Latino community.

Public involvement techniques include public meetings, planning charrettes, informal workshops, tours and site visits, project newsletters, focus groups, citizen advisory committees, local cable access shows, interactive video displays and kiosks, world wide web sites, questionnaires and surveys, and transportation fairs. For more information on these and other techniques, please refer to the publication, *Public Involvement Techniques for Transportation Decision-making*, jointly prepared for the U.S. Department of Transportation, FHWA and FTA (September 1996). Another useful publication is, *Improving the Effectiveness of Public Meetings and Hearings*, a workbook prepared by the National Highway Institute (November 1996). For more information, you may also want to contact the public involvement specialist in the FHWA Headquarters Office of Environment and Planning, Washington, D.C.: (202) 366-0106.