CHAPTER 1

Introduction

This report provides an overview of land use activities of state departments of transportation. Such activities occur in various states and along a continuum ranging from passive to active in six major categories: land use/transportation planning; state land use planning capabilities; education/technical assistance; access management; land use controls; and economic development. This report addresses each of these categories in detail.

The report discusses how states incorporate land use issues into their statewide transportation planning and policy efforts. Also examined are the direct role the state DOTs have in land use and their role in the local and regional land use decision-making.

Chapter 2 is an overview of the interaction between land use, transportation and economic development. This chapter identifies major land use concerns and emerging approaches to economic development. In addition, this chapter presents a chart to graphically illustrate how state actions range from passive to very active. The intensity of activity is illustrated with examples from a hypothetical state.

Chapter 3 focuses on states’ planning activities. These activities are subdivided into four major topics along the passive to active continuum: state funded regional and local planning, state mandated local planning, state approved land use planning and state planning of land use. It also describes a variety of state land use planning technical capabilities: data collection for the local government;
GIS assistance; research; economic forecasting; state land use models; and basic research. Land use models for statewide planning are also described in this chapter.

Chapter 4 deals with states’ educational and technical assistance activities, including reaction to local requests to state guidelines, oversight committees, conferences, training sessions, newsletters, hotline/webpage, public education, one-to-one assistance and circuit riders.

Chapter 5 concerns access management. This chapter is divided into four major subsections, which range from passive to active: driveway permit guidelines; comprehensive access management; access regulation; and limits on capacity expansion. Access management programs in several states are described.

Chapter 6 explains the range of land use control programs for state DOTs. Topics included in this chapter are: environmental impact statements; project level control of environmental impacts; general controls in environmentally sensitive areas; smart growth; scenic easements; agricultural and open space preservation; growth management; development of regional impact control; and state land use control. This chapter describes land use programs implemented by the states of Maryland, Florida, Oregon, New Jersey and Wisconsin in the forms of smart growth, growth management programs, and control of developments of regional impact.

Chapter 7 deals with economic development activities of state DOTs. These activities can be in the form of special project designs to assist local businesses, state infrastructure banks (such as those piloted by Florida and Ohio), basic employment development funding programs (like the RISE and TEA programs in Iowa and Wisconsin, respectively), and industrial roads and road grant programs (in the states of New York and Mississippi).

While writing this report the authors attempted to contact all state DOTs to determine what each is doing regarding land use and economic development. This report is a compilation of much of the information found, but it is not intended to be exhaustive. Furthermore, the role of the state DOTs in land use and economic development is continuously evolving. This report is intended to discuss the range of activities rather than all possible activities.
Local versus Statewide Roles in Land Use Decisions

In most states land use decisions are made locally by governmental review boards and elected officials. State DOTs typically defer to local governments on land use issues. However, DOTs may have review authority when the development involves access to a state highway or causes traffic impacts on a state highway. By providing transportation facilities and services – whether it is through building highways, providing grants for local transportation improvements, or providing assistance to transit services – a state DOT affects land use patterns in many different ways. Similarly, all development and land use decisions will ultimately affect travel patterns and, thus, influence the decisions made by state transportation officials regarding project planning and programming. Transportation is irrevocably tied to land use and land development.

Even in states where the DOT feels it has no role in land use decisions, its staff members may still find themselves heavily involved in land use concerns. These involvements occur through the environmental review process, by issuing permits and by deciding where, when and how to expand highway capacity.

Many other state agencies and local interest groups take prominent roles in decisions that directly or indirectly affect land use. Increasingly, coordinated efforts are being made by states to integrate programs and policies, serving to promote transportation options that can minimize harm to the environment, preserve sensitive lands and encourage economic development. The state DOT is only one of many agencies taking part in these coordinated efforts. The level of support garnered from various state agencies and groups in working together on transportation and land use topics depends largely upon the individual state’s political climate, history and local issues. Hot issues in one area of the country or in a particular state may not be salient in others. A wide variety of factors must be taken into account when comparing various state DOT actions.

Legislative Framework

There is an increasing awareness of the value of land as a resource (similar to air or water) and the need to protect this resource from pollution and misuse. A number of regulations have been implemented by federal and state governments
to protect land. This section provides a brief overview of the legal framework that regulates statewide transportation planning and policy implementation.¹

**Applicable Federal Legislation**

**ISTEA**

In 1991, Congress passed the Intermodal Surface Transportation Efficiency Act (ISTEA), which required all state DOTs to develop state transportation plans. This plan was meant to identify statewide growth patterns and the need for transportation improvements in the long term (ten to twenty years). ISTEA provided a framework to incorporate broad and open-ended requirements, including land use and transportation planning practices, in each state’s adopted transportation plan. ISTEA also provided a list of 23 factors that should be considered in the development of a statewide transportation plan.

Several of these factors relate directly to land use. The transportation plan must specifically address the interaction between transportation and economic development statewide, as well as the link between transportation and land use and land development. The state transportation plan can, through extensive public involvement efforts, develop action steps to successfully implement transportation objectives seeking to improve the positive link between transportation, land development and economic development.

The following is a list of the ISTEA statewide planning factors. Particular attention should be paid to factor number 14.

*Each State shall, at a minimum, explicitly consider, analyze as appropriate and reflect in planning process products the following factors in conducting its continuing statewide transportation planning process:*

1. The transportation needs (strategies and other results) identified through the management systems required by 23 U.S.C. 303;
2. Any Federal, State, or local energy goals, objectives, programs or requirements.
3. Strategies for incorporating bicycle transportation facilities and pedestrian walkways in projects where appropriate throughout the State;

4. International border crossings and access to ports, airports, intermodal transportation facilities, major freight distribution routes, national parks, recreation and scenic areas, monuments and historic sites, and military installations;

5. The transportation needs of nonmetropolitan areas (areas outside of MPO planning boundaries) through a process that includes consultation with local elected officials with jurisdiction over transportation;


7. Connectivity between metropolitan areas within the State and with any metropolitan planning areas in other States;

8. Recreational travel and tourism;

9. Any State plan developed pursuant to the Federal Water Pollution Control Act, 33 U.S.C. 1251 et seq (and in addition to plans pursuant to the Coastal Zone Management Act);

10. Transportation system management and investment strategies designed to make the most efficient use of existing transportation facilities (including consideration of all transportation modes).

11. The overall social, economic, energy, and environmental effects of transportation decisions (including housing and community development effects and effects on the human, natural and manmade environments);

12. Methods to reduce traffic congestion and to prevent traffic congestion from developing in areas where it does not yet occur, including methods which reduce motor vehicle travel, particularly single-occupant motor vehicle travel;

13. Methods to expand and enhance appropriate transit services and to increase the use of such services (including commuter rail);

14. The effect of transportation decisions on land use and land development, including the need for consistency between transportation decision making and the provisions of all applicable short-range and long-range land use and development plans (analysis should include projections of economic, demographic, environmental protection, growth management and land use activities consistent with development goals and transportation demand projections.

15. Strategies for identifying and implementing transportation enhancements where appropriate throughout the State;

16. Where appropriate, the use of innovative mechanisms for financing projects, including value capture pricing, tolls, and congestion pricing;

17. Preservation of rights-of-way for construction of future transportation projects, including identification of unused rights-of-way which may be needed for future transportation corridors, and identification of those corridors for which action is most needed to prevent destruction or loss (including strategies for preventing loss of rights-of-way);

18. Long-range needs of the State transportation system for movement of persons and goods;

19. Methods to enhance the efficient movement of commercial motor vehicles.
20. The use of life-cycle costs in the design and engineering of bridges, tunnels or pavements;
21. The coordination of transportation plans and programs developed for metropolitan planning areas under 23 U.S.C. 134 and section 8 of the Federal Transit Act with statewide plans and programs developed under this subpart, and the reconciliation of such plans and programs as necessary to ensure connectivity within transportation systems;
22. Investment strategies to improve adjoining state and local roads that support rural economic growth and tourism development, Federal Agency renewable resources management, and multipurpose land management practices, including recreation development; and
23. The concerns of Indian tribal governments having jurisdiction over lands within the boundaries of the State.¹

ISTEA also explains how the factors should be interpreted: “The degree of consideration and analysis of the factors should be based on the scale and complexity of many issues, including transportation problems, land use, employment, economic development, environmental and housing and community development objectives, the extent of overlap between factors and other circumstances statewide or in subareas within the State.”²

TEA 21
The Transportation Equity Act for the 21st Century (TEA 21) simplifies the list of planning factors into seven general considerations. Land use is not specifically mentioned, but is inherent in many of the factors, especially factor (d). These factors are given in Sec 1204 of the act.

Each State shall carry out a transportation planning process that provides for consideration of projects and strategies that will:

(a) Support the economic vitality of the United States, the States, and metropolitan areas, especially by enabling global competitiveness, productivity, and efficiency;
(b) Increase the safety and security of the transportation system for motorized and non-motorized users;
(c) Increase the accessibility and mobility options available to people and for freight;
(d) Protect and enhance the environment, promote energy conservation, and improve quality of life;
(e) Enhance the integration and connectivity of the transportation system, across and between modes throughout the State for people and freight;
(f) Promote efficient system management and operation; and

(g) Emphasize the preservation of the existing transportation system."

**Clean Air Act Amendments (CAAA)**

The Clean Air Act Amendments (CAAA) of 1990 require states and localities to integrate their transportation and clean air planning processes. Transportation legislation such as ISTEA and TEA 21 reinforce these requirements. The Clean Air Act establishes standards for air quality. In order to achieve these standards, transportation officials must participate in comprehensive and coordinated air quality planning in much the same way as land use and transportation planning must be coordinated. Conformity requirements under these laws address concerns arising from new transportation projects, which may increase vehicle travel and jeopardize the progress made in reducing emissions. Air quality issues may be viewed in light of comprehensive land use and transportation planning, as well. Transportation policies relating to economic development and urban growth have a strong indirect influence on air quality concerns.²

**NEPA-National Environmental Policy Act, 1969**

The National Environmental Policy Act (NEPA) of 1969 instructs all federal agencies to use a systematic, interdisciplinary approach during the various planning stages for any project that is likely to have a significant impact on the environment. The most important objective of NEPA is to direct agencies to assess any possible adverse environmental effects, alternatives to the proposed action, local short-term uses of the man’s environment, the maintenance and enhancement of long-term productivity and any irreversible and irretrievable commitments of resources. Evaluation efforts are documented in an environmental impact statement (EIS) or possibly in an environmental assessment (EA), which constitutes a less involved effort.

NEPA created the Council on Environmental Quality to set policies for and administer the environmental impact assessment process. Much of the environmental impact assessment process is defined by the CEQ Regulations, found in the Code of Federal Regulations (CFR) part 1500.

Because many state transportation projects involve federal funds, state DOTs actively participate in the NEPA process. NEPA involves the state departments of transportation directly in land use issues as many land use effects are considered to be significant impacts. Particularly, highways use land directly and change the pattern of accessibility to land.

The Environmental Impact Analysis Handbook defines environmental impact as, “an environmental impact is any alteration of environmental conditions or creation of a new set of environmental conditions, adverse or beneficial, caused or

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¹ Transportation Equity Act for the 21st Century (TEA 21), section 1204 as downloaded from: [http://www.fhwa.dot.gov/tea21/h2400.htm](http://www.fhwa.dot.gov/tea21/h2400.htm)

induced by the action or set of actions under consideration.” The extent of the impact is determined by the extent of the project and the environment likely to be affected, such as land, air or water. Environmental impacts can either be primary or secondary. Primary impacts are the direct impacts of a new or proposed project. Secondary impacts, on the other hand, occur as a result of other events that derive from the project. For example, land development that follows a highway project may have adverse impacts on natural areas, even though the highway itself avoids those areas. The secondary impacts can be more significant than the primary impacts and are often more difficult to measure.

Other Federal Statutes Related to Environmental Protection

In addition to general requirements of environmental impact statements, there is a large body of legislation and regulations that deal with related issues and their land use consequences. Some of the relevant federal statutes in this context are the Archeological and Historic Preservation Act of 1980, the Endangered Species Act of 1973, the Federal Highway Administration Wetland Policy of 1977, the Floodplain Management Program and the Rustic Roads Act. Appendix A provides a list of other federal statutes pertaining to environmental protection and land use.

Federal Requirements

Transportation Plans and Improvement Programs

Transportation Planning Regulations issued by FHWA and FTA require that all regions consider effects of transportation investments on land use and economic development. In addition these regulations require that metropolitan transportation plans and transportation improvement programs (TIPs) be consistent with state transportation planning objectives and products (statewide plans and state transportation improvement programs, or STIPs).

Better integration of state and local land use and transportation planning has been the subject of many debates across the US in response to federal requirements. By improving cooperation and information sharing, transportation planning can result in better information for decision-makers when considering where to make transportation investments and their effects on land use and economic development.

Transportation Planning Regulations

Transportation Planning Regulations also require analysis of land use impacts of transportation investment decisions at the project level. These regulations represent the most far-reaching call for coordinated land use and transportation planning. However, no specification is given as to how to analyze land use impacts of transportation investments or how land use characteristics or

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development policies should be integrated into the transportation planning process.

State agencies may find themselves taking leading roles in developing coordinated programs and in bringing people together to ensure that transportation decisions consider the effects on land use and economic development. Some examples can be seen in the case studies given in this report.