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16. Abstract This project examines smart growth principles, concepts, and sample results. There are five primary documents produced in this project: research report, primer on smart growth, workshop participants workbook, workshop presenter's guide, and a PowerPoint™ presentation to support the workshop.  The research report reviews the origins and background of smart growth development in the United States, and describes smart growth programs, practices, and applications at various levels (state, region, municipality, neighborhood, site, etc.). Case studies included in this report explore the involvement of state departments of transportation in California and Oregon, and examine a local application of smart growth in The Kentlands subdivision in Gaithersburg, Maryland.  The primer provides a basic background on smart growth and is intended to be an introduction to smart growth for transportation professionals. The primer contains much of the general material in the research report, but is intended to be a stand-alone document.  A workshop presentation on smart growth was also developed and is available as a separate resource in PowerPoint form as well as in hardcopy in a participant's workbook. A presenter's guide has also been prepared to facilitate presentation of the workshop. The workshop is intended to assist TxDOT in teaching smart growth principles, practices, and applications to state, regional, and local planners; engineers; transportation professionals; and other interested parties. To reinforce the principles of smart growth, and to introduce the smart growth design process, the workshop includes a hands-on case study to teach the practical application of smart growth in a simulated situation. Included in the workshop materials are workbooks for the instructor and workshop participants.					
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# **INTRODUCING SMART GROWTH TO TEXAS: RESEARCH REPORT**

by

Brian S. Bochner, P.E.  
Senior Research Engineer  
Texas Transportation Institute

Carol A. Lewis  
Director, Center for Transportation Training and Research  
Texas Southern University

Robin I. Rabinowitz  
Assistant Transportation Researcher  
Texas Transportation Institute

Laura L. Higgins  
Assistant Research Scientist  
Texas Transportation Institute

and

Josias Zietsman, Ph.D., P.E.  
Associate Research Scientist  
Texas Transportation Institute

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The Texas A&M University System  
College Station, Texas 77843-3135



## **DISCLAIMER**

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## CHAPTER 1. INTRODUCTION

Smart growth has arrived in Texas. Several cities among Texas' growing urbanized areas are considering use of smart growth concepts or policies.

### BACKGROUND AND SIGNIFICANCE OF WORK

Urban areas in Texas, like many of their counterparts across the United States, are suffering from increasing traffic congestion and decreasing air quality. These problems escalate as populations grow, travel demands increase, and existing roadway capacities become inadequate. The conventional method of combating higher traffic levels is to build more and wider roads. The conventional response to increasing urban populations is to build new residential and commercial areas at the periphery of the existing urban and suburban areas. Unfortunately, the travel demand generated by these new developments is quickly outpacing roadway capacity, resulting in a "renewal" of congestion. Sprawling urban areas also necessitate longer trip lengths, exacerbating traffic-related air pollution and safety hazards. Conventional street patterns make it hard for either pedestrian travel or efficient transit service, leaving most areas highly dependent on personal vehicles.

An alternative to the personal vehicle-dependent urban sprawl described above is "smart growth," also called "sustainable development," "livable communities," and "sensible growth." The term "smart growth" has been defined in numerous ways, but most definitions include some common elements:

- development that is conducive and friendly to multiple modes of transportation, including walking, bicycling, and transit;
- conservation of open space;
- compact development that makes efficient use of infrastructure and resources;
- attractive, livable neighborhoods that offer a desirable quality of life; and
- growth and development designed with long-term community goals in mind (1).

Smart growth does not and should not mean an absence of growth; rather, it is a basis for deciding where, when, and what type of growth should occur to maximize the long-term vitality of the community (2,3). Moreover, smart growth can be viewed by transportation agencies as the land-use component of a "smart" comprehensive transportation/mobility plan . . . a plan that arranges land uses to make more efficient use of transportation and improves compatibility between transportation and land use.

### TRANSPORTATION IMPACTS OF SMART GROWTH

Smart growth policies and planning impact land use and community development, and likewise effect travel and the transportation system. Smart growth has been shown to reduce per capita automobile travel through the effects of compact, mixed-use, transit-oriented development.

Vehicle travel reductions occur in several ways:

- Fewer vehicle trips are made when shorter trips can be made conveniently by foot, bicycle, or transit.
- Trip lengths are reduced when residential, retail, business, and entertainment activities are located in a compact space.
- Shorter distances between activity centers encourage walking and bicycling for some trips rather than driving.
- Clustered development promotes efficient transit service, which can shift even more trips from automobiles into alternate modes.
- Vehicle ownership lessens in dense pedestrian- and transit-friendly developments, due to the higher availability of other modes and the lower availability of parking (4).

## **SMART GROWTH AS AN ASSET TO TXDOT**

Smart growth can be an asset to TxDOT; it can promote efficiency of transportation through land use/development relationships. Smart growth includes transportation and presents opportunities to transportation agencies. Smart growth can benefit TxDOT by being a tool to improve the efficiency of transportation service by making land use/development more transportation-friendly.

## **THIS PROJECT**

This project provides material about smart growth that will introduce TxDOT and other transportation and planning professionals to the subject of smart growth. It describes relationships between land use and transportation and quantified results of both projections and results from use of smart growth. This project includes:

- a literature review;
- a survey of state and local agency experiences and approaches to smart growth, particularly their use of smart growth to improve the effectiveness of transportation plans, programs, and designs;
- case studies of one development and two state departments of transportation (DOTs) using smart growth;
- the preparation of a primer to provide readers with a basic understanding of smart growth; and
- the development of materials for a workshop to present and discuss smart growth and its value and applications for state DOTs and other agencies.

The outputs of Project 0-4238 are:

- this research report,
- a project summary report,
- a smart growth primer, and



- workshop materials:
  - PowerPoint™ slide presentation,<sup>1</sup>
  - presenter's notebook, and
  - participant's workbook.

Each of the above is a separate document or presentation.

---

<sup>1</sup> PowerPoint is a trademark of Microsoft Corporation.



## CHAPTER 2. LITERATURE REVIEW

“Smart growth” has become a popular term used to describe what many people feel is the way they want to see their community grow. To many it is a label for a living environment that is uncongested, attractive, and comfortable. It provides a desirable quality of life that will stay that way (i.e., be sustainable) over time.

Many labels have been applied to smart growth development. Some of these are sensible growth, intelligent growth, balanced growth, and sustainable growth (5). Although somewhat less comprehensive, transit-oriented design, traditional neighborhood design, and new urbanism have also been associated with smart growth terminology. The objective of smart growth development by any name is to better integrate transportation and land use to produce the desired results. Smart growth starts with consensus on objectives and land and transportation planning, but it must also include implementation through supportive policies, proper design, locally established priorities, and appropriate projects and operations.

### SMART GROWTH CONCEPTS

Two community desires have caused smart growth to gain popularity:

- to improve quality of life, and
- to do so within the limited available resources that are a reality today.

#### Quality of Life

There has been increasing concern over what is perceived to be declining quality of life, particularly in urban areas (5). This is a key reason why smart growth has come to the forefront. Included among the transportation-related reasons for concern are:

- increasing congestion and travel time,
- traffic intrusion in neighborhoods, and
- related safety hazards.

#### Limited Resources

In the past, it was possible to build basic transportation infrastructure more easily. Land was more available. A higher percentage of project funds went into implementation of the facility or service. Environmental and other constraints were fewer and less costly to address. Today, many transportation agencies’ resources are not sufficient to support desired improvement programs due to higher costs for:

- land for right-of-way,
- infrastructure (construction of expanded and new facilities, maintenance, rehabilitation, or replacement),
- enhancements to meet environmental and aesthetic needs, and
- operations and maintenance.

In addition, tendencies for development to “leapfrog” from developed areas to new territory beyond closer-in undeveloped land has caused sprawl. This requires some infrastructure to be extended through undeveloped areas to the newly developing areas. The result is increased cost for basic infrastructure and services, increasing the burden on resources.

## **DEFINING SMART GROWTH**

Smart growth is an integrated approach to development that seeks to fairly and efficiently allocate public infrastructure investments in such a way that economic, mobility, social, and environmental interests are balanced to achieve sustainable growth. Smart growth fosters the development of compact, attractive, successful communities where various transportation options, including walking, bicycling, and transit, are viable forms of transportation and where mobility needs are balanced with other objectives.

Smart growth addresses issues related to transportation — that is, the influences of transportation and land use on each other and the characteristics of transportation systems and services that can encourage and support smart growth. Land use and urban form can affect mobility and accessibility by influencing trip lengths and travel mode choices. Increasingly, efforts are underway to integrate land use and transportation planning to reduce vehicle travel and emissions.

The United States Environmental Protection Agency (EPA) identifies the following five characteristics of urban form as influences on travel and air quality (6, p. 16):

- transit accessibility,
- pedestrian-environment/urban design factors,
- regional patterns of development,
- density, and
- land-use mix.

Later sections of this document discuss each of these characteristics.

The Clean Air Act (CAA) requires state air quality agencies to prepare plans, known as State Implementation Plans (SIPs), for the implementation of actions that will improve air quality. Land-use activities that change urban form in ways that decrease motor vehicle use, and thus emissions, and encourage use of alternative forms of transportation, and thereby increase mobility, can be included in the SIP (6, p. 27). States can account for the air quality benefits of land-use activities for non-attainment and maintenance areas in one of three ways (6, p. i):

- including land-use activities in the initial forecast of future emissions in the SIP,
- including land-use activities as control strategies in the SIP, or
- including land-use activities in a conformity determination without including them in the SIP.

Land-use activities may be regulations or projects.

Planning and implementing smart growth may require more flexible development regulations and zoning ordinances to accommodate such smart growth characteristics as mixed land uses, increased densities, and more compact development (7). Non-standard transportation approaches are also often needed to achieve smart growth concepts and objectives.

## COMPONENTS OF SMART GROWTH

In 1999, the National Governors' Association (NGA) adopted a smart growth policy that is intended to provide guidance to states to help them make the best possible use of land while protecting the natural environment and encouraging sustainable growth. The policy encourages the creation of state-local partnerships to address growth issues and includes the following 10 "Principles for Better Land Use," which have been stated as principles of smart growth (8):

- mixing land uses;
- maximizing the use of existing infrastructure and resources;
- creating a range of housing opportunities;
- fostering walkable neighborhoods;
- encouraging distinctive community character, including historic preservation;
- strengthening and encouraging growth and development within existing communities;
- making development decisions predictable, fair, and cost-effective;
- preserving open space, natural beauty, farmland, and critical natural environments,
- providing a variety of transportation choices; and
- offering opportunities for citizen involvement and stakeholder participation in planning decisions.

Each of these principles has transportation-related components. Some of the transportation-related aspects of these smart growth principles are as follows:

- **Mixing land uses** – Mixing complementary land uses can reduce trip lengths by putting more origin-destination pairs in close proximity to each other (Figure 1). This pairing can also increase non-vehicular accessibility. In combination, these pairs reduce both vehicle trips and vehicle miles of travel (VMT). Having necessary retail and service-oriented businesses near employment-based developments increases the likelihood of making midday trips without the use of a car, as workers in mixed-use developments may find that they can walk to restaurants and do some errands on foot (9). The reductions in vehicle trips and increases in pedestrian activity spurred by mixed-use development will create the need to encourage and accommodate pedestrian travel and thereby affect the transportation system's design.



**Figure 1. Live-work units in a mixed-use development.**

- **Maximizing the use of existing infrastructure and resources** – Smart growth strategies prioritize investment in existing roadway infrastructure as opposed to investment to extend transportation infrastructure into outlying areas. Maximizing the use of existing roads reduces long-term transportation system maintenance costs, and improvements to existing facilities are typically less costly (when right-of-way is already available) than construction of new facilities.
- **Creating a range of housing opportunities and choices** – Providing a range of housing choices enables workers at all income levels to live close to their jobs. Balancing housing and jobs within a region or sub-region and locating a variety of housing options in close proximity to employment centers provides an opportunity to reduce work trip length and VMT, as more people will be able to live near where they work (Figure 2). Achieving a proper balance may also permit the use of alternate forms of travel, such as walking, bicycling, and transit. All of these methods can reduce the need for highway expansion and transit improvements.



**Figure 2. Residential infill development in downtown Austin helps balance housing with jobs, increases density, and maximizes use of existing infrastructure.**

- **Fostering walkable neighborhoods** – Certain characteristics of neighborhood street layout such as short block lengths, grid-patterns, connectivity, and continuity can reduce vehicle trips and encourage pedestrian and bicycle use by decreasing travel distances for local convenience trips. A properly designed street system can result in more effective transit service; fewer driving and more pedestrian, bicycle, and transit trips; reduced VMT; and improved livability. In addition to street layout, designing to facilitate bicycle and pedestrian mobility encourages these forms of travel. Providing sidewalks along streets increases pedestrian convenience and safety (Figure 3). Design features, such as increasing sidewalk width and decreasing walking distances across streets, can increase pedestrian comfort, convenience, and enjoyment, and encourage walking.



**Figure 3. Sidewalks, narrow streets, and well-delineated crosswalks make this area pedestrian-friendly.**

- **Encouraging distinctive community character, including historic preservation** – Building transportation systems within the context of their surroundings can preserve or create a distinctive community character. When rebuilding or improving streets and transportation systems, designs should be developed that meet the needs of the specific site, a concept often referred to as context-sensitive design (Figure 4). Efforts should be made to not only improve mobility but to preserve and enhance environmental and cultural factors affected by the transportation facilities. Successful efforts have been made in New York, Maryland, California, Oregon, and Texas (the reconstruction of Dallas’ North Central Expressway south of Park Lane and Ft. Worth’s I-30 downtown are examples), among others, to modify urban road improvement projects to respond to public concerns for community livability (10).



**Figure 4. Dallas’ North Central Expressway and the Staples Street Bus Station in Corpus Christi are designed in context with their surroundings.**  
**Source: Left photo – Texas Freeway ([www.texasfreeway.com](http://www.texasfreeway.com))**

- Strengthening and encouraging growth and development within existing communities** – Transportation investments can encourage economic redevelopment as well as provide access (11). Improvements and investments in existing transportation infrastructure can encourage redevelopment and infill development projects within communities (Figure 5). This type of redevelopment can lessen sprawl and reduce necessary investment in infrastructure by requiring fewer new roads, creating more compact development, increasing density, and improving transit opportunity.



**Figure 5. The old Sears building, now private residential, is an example of redevelopment spurred by the Dallas Area Rapid Transit rail line.**

- Making development decisions predictable, fair, and cost-effective** – Accessible and equitable transportation facilities are essential to creating sustainable communities (12). Smart growth encourages citizen involvement in decision-making to ensure that community concerns are addressed. Transportation officials can work with communities to accurately and fairly assess access and mobility needs. Data — used in conjunction with information on how new or proposed transportation systems will affect health, aesthetics, mobility, and noise — can influence development of a transportation system that will serve the entire community equitably (11) (Figure 6). In a smart growth transportation plan, funds should be invested in transportation services that benefit all members of the



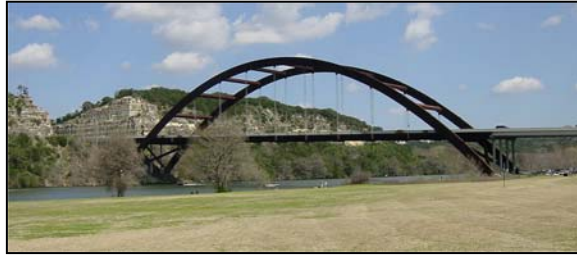
community equally. Smart growth activities should also be consistent so they can be predictable for developers and citizens of the community.



**Figure 6. The Staples Street Bus Station in Corpus Christi, a low-cost transportation project, improved access and helped revitalize the surrounding area. Source: Project for Public Spaces ([www.pps.org](http://www.pps.org))**

- **Preserving open space, natural beauty, farmland, and critical natural environments** – The extension of roads to land at the periphery of cities has enabled more people to live farther from where they work and shop. Since World War II, millions of acres of farmland, open spaces, and natural areas in the United States have been used for often fragmented development away from city centers and even beyond established suburbs — a trend known as “urban sprawl” (13). To reduce sprawl and preserve green space from development, smart growth encourages investment in the redevelopment of inner-city properties through investments in infrastructure improvements and in undeveloped infill areas before building new roads farther out.

When the construction or improvement of rural roads is necessary, smart growth encourages the use of contextual highway design, which is a collaborative, interdisciplinary approach that meets service, safety, and structural requirements while adapting the highway to its setting and preserving or enhancing the surrounding area (14). Contextual highway design considers such elements as topography, vegetation type, sensitive landforms, critical habitats, cultural and aesthetic factors, and stakeholder input in the design process to minimize the impact of transportation systems on natural and built environments (Figure 7).



**Figure 7. An aesthetically pleasing bridge blends with the natural environment. Source: Texas Freeway ([www.texasfreeway.com](http://www.texasfreeway.com))**

- **Providing a variety of transportation choices** – Multimodal transportation options are essential to a smart growth development plan...and to transportation efficiency. Transportation systems should be designed to make walking, biking, and transit viable means of transportation (Figure 8). Creating safe and continuous pathways of streets, bikeways, and pedestrian ways, as well as providing transit routes and services that meet the needs of the majority of people, will increase transportation options.



**Figure 8. Multi-modal transportation includes bike lanes on Houston streets, rail transit with pedestrian facilities in Dallas.**

- **Offering opportunities for citizen involvement and stakeholder participation in planning decisions** – Collaboration is a key characteristic of smart growth. Collaboration between public officials, developers, environmentalists, civic organizations, and citizens can identify common goals and determine the most appropriate ways to accommodate growth (3). Smart growth encourages transportation officials and planners to work with citizens in developing system and project visions before creating formal designs. Respectful communications, consensus-building and community participation, negotiation, and conflict resolution are part of the smart growth transportation planning process (Figure 9) (15).



**Figure 9. In a planning charrette stakeholders identify common goals and build consensus.**  
**Source: National Charrette Institute.**

## **ORIGINS OF SMART GROWTH**

Smart growth appears to have grown from two basic and related directions: management of urban growth and a desire for improved quality of life.

### **Growth Management**

Growth management is a term initially used in the 1960s to describe a proactive approach to shaping land-use development. Growth management was intended to guide land development for the best use of land to meet community goals and to conserve natural resources. This new approach to land-use planning shifted the local government's role in the land development process from passive to active involvement by requiring a more direct role in the planning process (16). Growth management monitors the timing, location, and character of land use and development and includes community design, economic development, environmental, housing, public facility management, and transportation elements (17).

### **Quality of Life**

Some quality of life concerns giving rise to the search for new forms of urban design are traffic congestion, time consumption, and safety. Conventional low-density urban development that segregates land uses increases the distances between housing, jobs, and daily necessities, making driving necessary. These long travel distances, combined with associated increases in traffic congestion, increase driving time and reduce the amount of free time available to spend with families and friends, and pursuing personal activities.

The desire to improve quality of life through greater convenience and walkability is a major factor in the pursuit of pedestrian-friendly, compact, high-density, mixed-use development associated with smart growth. Compactness and higher development densities decrease travel distances for better walkability and convenience, make higher levels of transit service more feasible, and require less transportation infrastructure. When combined with a complementary mix of land uses and good walking environments, compact and/or higher-density development can increase travel options, and reduce vehicle reliance and associated costs. Safety within smart

growth developments is improved, as narrower streets with pedestrian improvements tend to reduce vehicle speed creating a safer environment for pedestrians, bicyclists, and residents.

## **CHARACTERISTICS OF SMART GROWTH**

Smart growth is growth management that has evolved to include aspects of development such as quality of life, transportation efficiency, and the aesthetics of the developed environment. More importantly, smart growth emphasizes:

- developing land and transportation consistent with regional goals and objectives, and
- collaborative efforts between the public and private sectors to achieve the goals.

Smart growth can be implemented on a site, neighborhood, municipal or area, regional, or statewide basis. Smart growth characteristics include:

- compact development;
- complementary land uses within an area;
- mixed-use developments;
- higher development densities;
- priority on land redevelopment (land recycling) and infill;
- broad range of housing types;
- pedestrian- and bicycle-friendly provisions;
- interconnected street, pedestrian, and bicycle networks;
- efficient transit;
- job/work force/housing balance;
- economic vitality;
- attractive aesthetics;
- environmental sensitivity;
- building upon existing infrastructure where possible to provide sufficient but not excess capacity; and
- sustainability over time.

Smart growth includes creating compact, pedestrian- and transit-friendly developments where housing and commercial (or other complementary) establishments are mixed for maximum convenience and accessibility. Examples include integrating housing and convenience retail facilities, which can reduce auto dependence by providing the ability to walk to more destinations, housing choices, and transportation choices (3). Continuous street and sidewalk networks and pedestrian and bicycle paths make pedestrian-, bicycle-, and transit-friendly environments that are characteristic of smart growth design. Again, they provide transportation choices and make non-motorized modes more convenient. Where dead-end streets, cul-de-sacs, and excessively circuitous streets exist, walkability can be improved by creating pedestrian connections between blocks using smart growth design principles.

Smart growth also encourages land redevelopment as a means of infilling underutilized areas, increasing density, maximizing infrastructure use, and minimizing land consumption. Smart

growth incorporates a broad range of housing types and prices so that most housing needs can be met in every community, which will reduce traveling to jobs. Smart growth includes making transit feasible, available, and accessible to everyone.

## **WHAT SMART GROWTH IS NOT**

Smart growth is not “no growth.” Smart growth does not call for an end to growth, road improvements, or road building. Smart growth is not traffic calming although it may include some of the concepts involved in traffic calming. Smart growth is not intended to prevent new vehicle trips. Smart growth is not intended to hinder growth and development or impede progress.

Smart growth is merely a comprehensive way of making the best use of available resources to provide a quality of life consistent with locally developed objectives in a way that is environmentally sensitive, economically advantageous, and sustainable over time.

No-growth (or anti-growth) policy in its strictest application opposes the construction of new housing, commercial buildings, and roads. Most advocates of growth controls recognize that growth is inevitable and encourage development using smart growth principles that reduce land consumption, such as increased densities and compact development.

## **PURPORTED BENEFITS OF SMART GROWTH**

When properly implemented, smart growth creates urban form that is purported to reduce sprawl, encourage alternative forms of transportation, reduce transportation and other infrastructure requirements, conserve green space, create “livable” environments, and reduce development-related pollution (9).

Smart growth encourages urban redevelopment and infrastructure improvements, rather than the expansion of city boundaries and the construction of new roads. New roads that provide access to land on the periphery of a city encourage development in peripheral areas. VMT will increase along with such urban expansion. From 1980 to 1997, VMT in the United States increased by 63 percent, and VMT per capita grew at approximately three times that rate. About half of this VMT growth can be attributed to the expansion of the urbanized area due to increases in population and economic development. The other half may be attributable to lower densities and sprawl (9, p. 19).

Utilization of alternative forms of transportation, such as walking, bicycling, and transit, can reduce VMT. Reductions in VMT can reduce auto-related forms of pollution, such as air pollution from emissions and water pollution from road run-off (6, 18). In 2000, the National Renewable Energy Laboratory (NREL) calculated emission reductions for employees traveling to work by various means. Using 1999 average vehicle emissions calculations from the Colorado Department of Health Statistics, NREL estimated that five employees walking to work an average of 2.5 miles per round trip would produce emissions savings of 1075 pounds of carbon monoxide (CO), 155 pounds of oxides of nitrogen (NOx), and 135 pounds of volatile organic compounds (VOCs) per year (19). Many characteristics of smart growth are intended to increase the use of alternative forms of transportation and reduce VMT.



Proper (smart growth) neighborhood design can reduce automobile travel by way of improving transportation options. Design characteristics such as compact development, increased densities, mixed uses, connectivity, and networked pedestrian and bicycle pathways can create compact development with shorter trip lengths that is conducive to walking, bicycling, and transit use, particularly in regions with concentrated job centers well served by transit. Properly designed smart growth developments with networked streets, well-connected pedestrian and bicycle trails, and dense, mixed land uses improve mobility and accessibility and make walking, bicycling, and transit viable forms of transportation (20). Studies in California comparing new “traditional” neighborhoods with direct street connections to conventional suburban subdivisions with curvilinear street patterns and cul-de-sacs, estimated that daily VMT could be as much as 50 percent lower, and CO emissions more than 40 percent lower, in the new traditional design than in conventional (21). Continuity of selected streets and connectivity of streets and paths within the traditional neighborhoods also increase transit accessibility. The higher levels of transit use associated with traditional forms of neighborhood design result in a reduction of VMT and emissions.

## **SMART GROWTH TRANSPORTATION – WHO IS INVOLVED?**

Numerous agencies, organizations, governmental entities, and individuals are involved in smart growth planning. At the local level the groups that influence decisions contributing to urban form and transportation system decisions include local, county, and regional governments; transportation providers; funding agencies; metropolitan planning organizations (MPOs); regional councils of government (COGs); interested private-sector groups; utility districts; land developers; interest groups; consumers; and others. At the state level, when undertaking transportation projects in urbanized areas, state DOTs and their MPOs must, under TEA-21, consider seven factors. These factors include such smart growth elements as increasing accessibility and mobility, protecting and enhancing the environment, connecting and integrating the transportation system between modes, and promoting efficient system management and operations (22).

At the federal level, the U.S. Environmental Protection Agency, the U.S. Department of Transportation (USDOT), the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), and the American Association of State Highway and Transportation Officials (AASHTO), and other federal agencies have developed collaborative planning approaches in working with local and regional planning staffs and decision-makers to support local initiatives for improved design and operations of transit and roadways and for making better transportation and land development decisions. The EPA, AASHTO, FHWA, and FTA have published brochures, papers, and other documents to guide transportation decisions consistent with smart growth concepts (23).

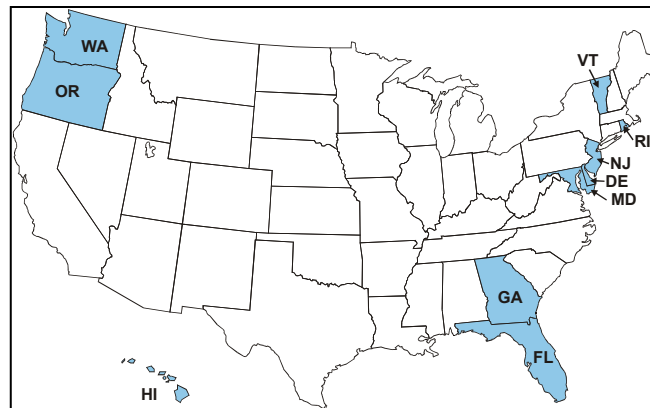
## **STATEWIDE AND REGIONAL PLANNING**

State-level and regional planning for the conservation of land and resources began in a few states as early as the 1920s. The effort intensified in 1934, when President Franklin D. Roosevelt appointed a National Planning Board that encouraged the formation of state planning boards. By 1938, 47 states had established planning agencies. World War II redirected federal funds and

attention away from the state planning effort, and most of these state agencies disappeared. The Housing Act of 1954 offered incentives for state planning and, by 1960, 39 states had state planning agencies. Comprehensive planning for urban areas was widespread during the 1960s under the Housing and Urban Development (HUD) Section 701 program. The land use-transportation relationship was an important aspect of plans prepared under this program. However, in the 1970s, federal funds were again withdrawn from this endeavor, and many of the comprehensive planning efforts went dormant (24). It was in the 1970s, however, that Florida and Oregon initiated their state planning efforts that are still being used today.

### **State-Level Growth Management and Land-Use Planning**

At least 10 states (Figure 10) have now passed legislation to initiate statewide growth management programs. Transportation is a part of many of these programs. TEA-21 requires statewide transportation plans to be developed, and these plans can become part of the growth management concept. The following discussion is a summary of several state growth management programs with statements of some of their goals.



**Figure 10. Growth management states included below.**

**Delaware's** Cabinet Committee on State Planning Issues, established in 1994, manages the "Shaping Delaware's Future Act," a statewide planning effort that was signed into law in July 1995. This act requires that counties prepare comprehensive plans that are consistent with 10 Statewide Planning Goals adopted by the committee. These goals include land protection, natural resource protection, directed state investment in community development projects, and a mobility element for the promotion of a balanced, multimodal transportation system. The mobility element of county comprehensive plans must provide for a balanced transportation system for the movement of people and goods, and must promote a "range of sustainable transportation choices for future transportation needs" (25).

**Florida**, with more than 25 years of statewide growth management, has a long tradition. Florida's most recent legislation, enacted in 1985, led to the creation of the current plan that addresses 29 statewide planning goals. The State Department of Community Affairs must review all local comprehensive plans for compliance with the State Comprehensive Plan and the Strategic Regional Policy Plan. Additional review agencies for local comprehensive plans include regional planning councils and state departments of environmental protection,

agriculture, and transportation (26). All development projects must meet the terms of the local comprehensive plans, and proposed major developments must also be analyzed to ensure that adequate public facilities, including transportation, exist so the area is adequately served (27). Local communities may grant exceptions to the transportation facilities concurrency requirement for projects designed as infill development, urban redevelopment, and downtown revitalization, or if a development supports public transportation, if these projects meet the objectives of the local comprehensive plan (28).

**Georgia's** growth management plan is in the process of being implemented on a "bottom-up" basis. Under the Georgia plan, local governments that choose to plan are required to meet "Minimum Standards and Procedures for Local Comprehensive Planning" in order to receive certain state funding. The Georgia Department of Community Affairs (GDCA) reviews comprehensive plans and amendments to make certain that they comply with these standards. When local plans were completed in 1995, work began on regional plans, which build upon the local plans (29). The Georgia plan requires that each local and regional plan include a transportation component that is specific to the area. The regional plans were completed in 2002 and will become the state's growth management plan if such a plan is adopted by legislature (telephone conversation with Mike Gleaton, director of the Office of Coordinated Planning, Georgia Department of Community Affairs, July 22, 2002).

The **Hawaii** state plan, adopted in 1978, is a statement of goals, objectives, and policies supporting the state vision. The state plan is statutory, although there is no enforcement mechanism, and includes a requirement that state transportation projects for highways, airports, and harbors be consistent with the state vision (telephone conversation with Mary Lou Kobayashi of the Hawaii State Department of Transportation, July 2002).

Hawaii was the first state to implement a State Land Use Law (Chapter 205). That law, adopted in 1961, was originally intended to protect Hawaii's limited agricultural land and to preserve the state's natural resources, and it remains among the strongest direct state implementation and review programs in the U.S. (30). The act places all land into one of four specific land-use districts: urban, rural, agricultural, or conservation. Permitted uses for each district are defined by statute. The state assumes exclusive responsibility for land-use management in the conservation districts, counties have sole responsibility for managing land uses in the urban districts, and the state and county governments share management of the rural and agricultural districts. An appointed nine-member Land Use Commission (LUC) administers the State Land Use Law to ensure that state concerns are addressed in land-use decisions, which must comply with the goals of the Hawaii state plan. The LUC is responsible for reviewing and deciding on proposed amendments to state land-use district boundaries (31).

Although **Maryland** has regulatory authority over local plans only when state laws are violated, communities that fail to meet state planning objectives may lose state funding for noncompliant projects (24). The state Smart Growth Areas Act of 1997 is an effort to coordinate the disbursement of state funds with local growth planning. This act established Priority Funding Areas (PFAs), outside which the state cannot fund growth-related projects. Additionally, the Smart Growth and Neighborhood Conservation Policy (SGNCP) was adopted by Executive Order in 1988. The SGNCP requires that state agencies consider whether the development proposed for funding supports existing communities and promotes mass transit use before



making funding decisions. Maryland has central and regional planning assistance offices to advise local governments when creating and assessing their comprehensive plans. Every six years these plans are assessed, amended, and submitted to the state to be reviewed for compliance with state law (32).

The State of **New Jersey** passed a State Planning Act, creating the State Planning Commission and Office of State Planning, in 1986. The current State Development and Redevelopment Plan, which is a composite of area plans, was adopted in 2001. It is not a regulatory document but works through capital investment incentives and disincentives for municipal compliance (33). Cooperation between levels of government and public and private sector interests is accomplished through a cross-acceptance system mediated by the counties (30). The goal of this plan is to guide urban design to accommodate growth in such a way that natural and historic resources are preserved, and existing infrastructure is used efficiently. The plan encourages infill development, such as reclamation of brownfields, and the construction of housing and businesses in close proximity to maximize the use of alternative forms of transportation. The statewide planning policy includes improving the transportation system by coordinating land use and transportation planning, integrating transportation systems, developing and enhancing alternative forms of transportation, improving management, and utilizing transportation as an economic development tool. Through this plan, the state hopes to save \$870 million in road costs by the year 2020 (34).

**Oregon** adopted a statewide growth management program in 1973. The plan addresses 19 statewide planning goals and is managed by the Department of Land Conservation and Development (DLCD). The plan requires that all local governments prepare comprehensive plans and that these plans be consistent with state goals (32). In 1992, the DLCD and the Oregon Department of Transportation (ODOT) collaborated on the Transportation and Growth Management Program (TGMP), through which transportation planning was integrated into the growth management plan. The mission of the TGMP is “to enhance Oregon’s livability, foster integrated land use and transportation planning, and encourage development that results in compact, pedestrian-, bicycle-, and transit-friendly communities” (35). (See [Oregon case study](#) in Chapter 6 of this document for details of the ODOT’s role in growth management.)

**Rhode Island’s** Comprehensive Planning and Land Use Act of 1988, amended in 2001, requires that all 39 of the state’s communities prepare comprehensive land-use plans (32). These plans must be consistent with state planning goals and must receive state approval. Plan requirements include a provision for public design and improvement standards that include specifications for rights-of-way, streets, sidewalks, lighting, and landscaping (36). Rhode Island’s Statewide Planning Program’s Transportation Planning Section (TPS) is the designated MPO for statewide transportation planning. The TPS’ efforts include environmental analysis, long-range planning, and modeling, and the state’s transportation implementation plan (TIP). Efforts to ensure that plans and programs meet the citizens’ needs include public outreach programs such as focus groups, newsletters, surveys, workshops, and monthly meetings (37).

**Vermont’s** Land Use and Development Law, Act 250, enacted in 1970 and last amended in May of 2002, is intended to protect air, soil, water, wildlife, and historic sites by ensuring that new development does not overly tax the state’s natural resources or overburden available infrastructure, including the transportation system.

The Vermont Planning and Development Act 200, enacted in 1989 and reviewed annually, was created to ensure that local and regional plans are consistent with the state's plans under Act 250. Act 200 does not require cities to plan but offers financial incentives for them to do so. Act 200 provides for technical assistance to local governments to plan in accordance with statewide goals and policies for land use, transportation, and natural and historical resource conservation, and helps coordinate land-use planning among cities, regions, and states to meet these goals (38,39).

**Washington** is a recent addition to the list of states enacting growth management legislation. The state initially enacted its Growth Management Act in 1990 and significantly amended it in 1991. As an evolving document, the act has been amended every year since 1995 (40). The act applies to counties based on a combination of population and growth. County plans are required to establish Urban Growth Areas, outside of which infrastructure expansions are prohibited until amendments are made to accommodate projected growth (can be done annually) (32). Counties not falling under mandatory growth management regulations may volunteer to participate in the program but once in cannot opt out (41). The act is administered by the Washington Department of Community Development, which reviews local plans for consistency with state policy. The state has 14 planning goals primarily pertaining to environmental protection, livable cities, and the designation of urban growth areas for efficient use of land and infrastructure. Under the Growth Management Act, counties engaged in growth management planning must establish a collaborative process for review and coordination of state and local permits and multijurisdictional approval of transportation projects that cross a city or county boundary (42).

### **Regional Growth Management and Land-Use Planning**

Transportation planning is an integral part of growth management and land development goals for smart growth. Some of the more common types of agencies involved in regional planning and their growth management and land planning roles are:

***State Departments of Transportation*** are responsible for transportation planning statewide and in areas with populations below 50,000 and for the planning, design, location, construction, and maintenance of the state's transportation system (planning and programming done cooperatively with MPOs in areas of populations over 50,000; see paragraph regarding MPOs in this section). The responsibilities of the state DOT are varied and include ensuring an appropriate statewide focus and coordination of MPO, regional, and local plans. In many states, the DOT has a major role in transportation decisions including airport, roadway, and transit projects.

***Regional Planning Councils (RPCs)***, often called ***Councils of Government***, are the most common type of regional planning agency nationally and exist in every state. COGs are usually comprised of local governmental bodies and their elected officials. The responsibilities of the COG vary and may include transportation planning for the area, including coordinating plans with the state DOT. COGs have no regulatory authority, and their decisions are not binding on member governments. In Texas, more than 2000 local governments, conservation districts, and special interests are members of the 24 Texas COGs, including all 254 Texas counties (43).

***Metropolitan Planning Organizations*** are transportation planning and programming agencies required by the Federal Aid Highway Act of 1962, for metropolitan areas with populations exceeding 50,000. MPOs are responsible for regional transportation planning, and for allocating

state and federal transportation funds within the region. MPOs are planning and advisory agencies only, as they have no power to implement plans (24). Texas has 25 MPOs, of which 12 are cities, seven are regions, and six are area committees (44).

**Regional Environmental Conservation Agencies** are federal or state chartered commissions or authorities responsible for protecting the environment. These agencies operate under inter-governmental cooperation and are often given limited power to supersede local development policies. Regional conservation agencies are often responsible for supervising and managing large-scale development activities, including transportation improvements and expansions (24). Texas has more than 50 conservation agencies currently working in cooperation with the United States Geological Survey (USGS) on conservation issues of importance to their regions (45).

**Other regional agencies involved in growth management land planning** include regional public service authorities, such as airport or transit authorities or utility districts; regional business and civic leadership groups promoting planning; ad hoc groups established by inter-jurisdictional agreements for selected purposes; consolidated city/county governments; and, in some states, county planning organizations (24).

## **ROLE OF TRANSPORTATION IN SMART GROWTH PLANNING AND DEVELOPMENT**

Transportation is often considered the force with the single greatest impact on shaping land use. An important concept is that the mode and nature of transportation available can determine the type of development of the land it serves, and that transportation can, likewise, be influenced by land use. The goal of smart growth is to make use of land use and transportation interactions to create development patterns that mix complementary land uses in a form and pattern that will encourage the use of alternative modes of transportation.

### **Transportation and Land Use**

When transportation was mainly by foot, development tended to be compact and travel distances short. As innovations in transportation made long-distance travel feasible, development began to spread out, and a greater separation of land uses resulted. Due to both ease of transportation and the evolution in zoning practices over the past 60 years or more, typical modern development patterns place trip origins and destinations (e.g., residential and commercial development) further apart, making travel by vehicle necessary for ordinary errands. During the past 20 years, nationwide growth in vehicle miles of travel was three times the growth in population (9).

### **Land Use and Transportation**

In the 1960s, transportation and land-use planners attempted to use transportation accessibility to accomplish land-use objectives. Now, as part of smart growth, planners are attempting to alter land-use patterns to achieve transportation goals. It is expected that new patterns of land-use development will change travel behavior to improve transportation efficiency (46).

Mixing complementary land uses increases non-vehicular accessibility and should reduce both vehicle trips and VMT. Research has shown that in typical single-use office parks, walking trips accounted for only 3 to 8 percent of mid-day trips, while walking increased to 20 to 30 percent of mid-day trips in pedestrian accessible mixed-use centers (20). Mixed-use development in

association with transit hubs tends to concentrate development around activity centers. This not only reduces travel distances to most attractions but also encourages transit use. A well-connected mixed-use corridor should provide access to a variety of goods, services, and recreational opportunities (47).

### **Smart Growth and Transportation**

The goal of smart growth is to create development patterns that mix complementary land uses in a compact form that will encourage the use of alternative forms of transportation other than driving personal vehicles. It is anticipated that these land-use changes will increase pedestrian, bicycle, and transit travel, and reduce VMT. For example, creation of a mixed-use transit corridor in downtown Portland, Oregon, in conjunction with a moratorium on street construction and limitations on parking, has increased transit use in the downtown area by 260 percent since 1971. The mix of uses includes housing, retail, commercial, and convenience services, all of which are easily accessible by transit. A 1984 study estimated that without the integration of land use and transportation modifications, six 42-story parking structures and two additional lanes to every highway entering the downtown area would be needed to serve demand (48).

## **SMART GROWTH TRANSPORTATION APPLICATIONS AT VARIOUS SCALES**

Smart growth concepts and principles can be applied at all levels of planning and development. Smart growth can be implemented on a single land parcel or development site or in areas as large as regions and states. At the site level, smart growth takes the form of more compact development, mixed land uses, proximity to transit, reduced parking requirements, and site design characteristics such as placing parking to the sides and rear of buildings, and creating areas that are attractive and conducive to walking and transit use.

### **Neighborhood**

Smart growth can be applied at the neighborhood level through mixing land uses, making development more compact, creating networks of streets and pedestrianways, improving transit options, and increasing amenities for pedestrians, bicyclists, and transit patrons. Additional neighborhood smart growth practices include narrower local streets, well-connected street networks with protection from through traffic, directing major traffic flows to the edges of neighborhoods and beyond, and utilizing access management techniques.

### **Municipality**

Smart growth can be employed in corridors, areas, and cities through transportation measures. Some of the ways designers can employ smart growth techniques are by:

- creating multimodal transportation options,
- establishing street hierarchies,
- giving through traffic priority on major roads but discouraging major traffic volumes on minor roads,
- utilizing context-sensitive design,
- creating joint development projects containing integrated transportation infrastructure,

- employing intelligent transportation systems (ITS), and
- involving the public in objectives and plan development.

### **Region**

Smart growth at the regional level includes corridor area features with the addition of attributes such as a jobs-housing balance, interagency coordination of goals and policies, regional integrated transportation/land-use planning, efficient multimodal connectivity between regions, and funding priorities supporting smart growth.

### **State**

At the state level, smart growth consists of the regional features mentioned above as well as policies supporting and promoting locally and regionally adopted smart growth concepts, a state growth policy, statewide multimodal plans for the movement of goods and people, policies for the protection of corridor rights-of-way, and others as can be designed and applied within the state.

### **Federal**

Smart growth has taken the form of federally sponsored initiatives and grants to states and communities. TEA-21 contains provisions for funding locally planned and implemented transit systems and grants for transit-oriented development. The Congestion Mitigation and Air Quality Improvement Program (CMAQ) and the Transportation Enhancements Program are programs through which the federal government offers support for state and local initiatives such as improving transit facilities and creating pedestrian and bicycle trails. The Transportation and Community and Systems Preservation (TCSP) pilot program provides grants to state and local planning agencies for the coordination of transportation and land-use planning, with considerations for economic development and environmental impacts (6).



## CHAPTER 3. SMART GROWTH IN OTHER STATES AND CITIES

Interviews conducted with selected state departments of transportation, metropolitan planning organizations, and local governments in December 2001 through March 2002 determined current policies and practices related to smart growth and transportation. In each case, project team members sought the most knowledgeable person within the organization to respond to the survey. The summaries that follow describe the background of the respondents' smart growth initiative, their agencies' principal objectives, the role of the State Department of Transportation, and unique features, if any. [Table 1](#) provides suggestions about what agencies would do differently if they started over. [Table 2](#) lists the agencies surveyed. [Table 3](#) shows web page addresses for survey respondent organizations.

An important and common note across the interviews is that none of the respondents expressed displeasure with their initiative. Most cited increased education of elected officials and the community as the most positive outcome of their smart growth initiatives. Many respondents reported that resident or business objections consistently involved issues of property rights and arguments that the "market" can acceptably determine a community's growth and direction.

**Table 1. Summary of Respondents' Views on Achieving Smart Growth Success.**

- Create a single definition for smart growth and describe potential outcomes.
- Increase funding levels.
- Increase education for other offices within state DOTs.
- Provide more education and training for the public, build the case solidly, focus on why the ideas are important.
- Involve a diverse community in selecting projects and gain consensus.
- Invoke more coordination with other agencies.
- Recognize that one size does not fit all.
- Recognize difference between state and local roles: states should provide guidance, technical training, and resources to local level.
- Integrate school boards into smart growth planning.
- Do not implement initiatives at state level until follow-up can occur with local governments.
- Improve public relations and working with developers.
- Create resource guides for planning around a transportation system and include examples of what has worked nationwide.
- Engage rural communities early in the process and be sensitive to the differences of their needs; smart growth may be appropriate only for urban areas.
- Spend time on details before rolling out the plan.
- Ensure sufficient planners and technical staff to work with developers and others regarding plan development and implementation.
- Examine market conditions, which must be favorable for the initiatives to work.
- Try to understand what people do not like about smart growth, acknowledge their fears, and build trust.

**Table 2. Departments of Transportation and Other Agencies Interviewed.**

<b>Organization Name</b>	<b>Respondent</b>
Arizona Department of Transportation	Marylynn Tisher, Assistant Director/ Director of Transportation Policy and Programming
City of Austin, Texas	George Adams, Principal Planner, Transportation Planning and Sustainability
San Francisco Bay Area, California Metropolitan Transportation Commission	Valerie Kneper, Associate Planner
California Department of Transportation	Ken Baxter, Community Planning Branch Chief
Colorado Department of Transportation	Jennifer Finch, Director of Transportation Development
Florida Department of Community Affairs	Maria Abadal-Cahill, Policy Administrator
Georgia – Metropolitan Atlanta Regional Transit Authority (MARTA)	Scott Pendergrast, Acting Manager of Property Development
Illinois Department of Transportation	Susan Stitt, Air Quality Manager
Iowa Department of Transportation	John Hay, Planning Director
Kansas Department of Transportation	Dave Schwartz, Long Range Planning Engineer
Maine Department of Transportation	Kathy Fuller, Assistant Director, Bureau of Transportation
Massachusetts Highway Department	Luisa Paiewonsky, Director of Transportation Planning and Development
Mississippi Department of Transportation	Vic Barber, Engineer
New Hampshire Department of Transportation	Subramanian N. Sharma, Traffic Research Engineer
New Jersey Department of Transportation	Jim Lewis, Manager of State Planning, and Susan Webber, Supervisor of Transportation Planning
New York Department of Transportation	Gayle Burgess, Assistant Director of Governmental Relations
North Carolina Department of Transportation	Lori Cove, Assistant Manager, Statewide Planning Branch
North Dakota Department of Transportation	Darcy Rosendahl, Planning and Programming Engineer
Ohio Department of Transportation	Monique Evans, Administrator, Research and Development
Oklahoma Department of Transportation	Sam Shehab, Strategic Planning Branch Manager
Oregon Department of Transportation	Craig Greenleaf, Director, and Barbara Fraser, Manager, Transportation Growth Management Prog.
City of Portland, Oregon	Amy Schwartz, Communications Manager, Bureau of Planning
City of Sarasota, Florida	Osama Freija, City Traffic Engineer
Texas Department of Transportation	Jack Foster, Director of Systems Planning
Washington Department of Transportation	Todd Carlson, Acting Planning Manager, Transportation Planning Office
Wisconsin Department of Transportation	Kassandra Walbrun, Programming and Planning Analyst, Office of Policy and Budget



**Table 3. Smart Growth Web Page Addresses Provided by Survey Respondents.**

*(Survey Question # 19)*

<i>State</i>	<i>Agency</i>	<i>Web Page Address</i>
California	Metropolitan Transportation Commission, San Francisco	<a href="http://www.mtc.ca.gov">www.mtc.ca.gov</a>
Florida	City of Sarasota	<a href="http://www.ci.sarasota.fl.us">www.ci.sarasota.fl.us</a>
Florida	Department of Community Affairs	<a href="http://www.myflorida.com">www.myflorida.com</a>
Georgia	Metropolitan Atlanta Rapid Transit Authority	<a href="http://www.atlantaregional.com">www.atlantaregional.com</a>
Maine	Maine Department of Transportation	<a href="http://www.state.me.us/spo">www.state.me.us/spo</a>
Oregon	Oregon Department of Transportation	<a href="http://www.lcd.state.or.us/pgm">www.lcd.state.or.us/pgm</a>
Oregon	City of Portland	<a href="http://www.planning.ci.portland.or.us">www.planning.ci.portland.or.us</a>
Texas	City of Austin	<a href="http://www.ci.austin.tx.us/downtown">www.ci.austin.tx.us/downtown</a> <a href="http://www.ci.austin.tx.us/smartgrowth">www.ci.austin.tx.us/smartgrowth</a> <a href="http://www.ci.austin.tx.us/mueller">www.ci.austin.tx.us/mueller</a>
Washington	Washington Department of Transportation	<a href="http://www.wsdot.wa.gov/ppsc/planning">www.wsdot.wa.gov/ppsc/planning</a>

## **STATE DEPARTMENTS OF TRANSPORTATION**

Interviews were conducted with over 20 state DOTs. In a few states the researchers were referred by the DOTs to agencies with the primary responsibility for smart growth since the DOT plays a minor or supporting role. In some cases where the DOT works closely with other agencies, interviews were also conducted with representatives of those agencies.

### **Arizona Department of Transportation**

Respondent: Marylynn Tisher, Assistant Director/Director of Transportation Policy and Programming

#### *Background*

The State of Arizona’s Growing Smarter Commission oversees implementation and makes recommendations for the state’s “Growing Smarter” initiative. Under this initiative, each city must develop growth plans as prescribed by ordinances. MPOs collect the independent plans from cities and counties and review them for consistency. There is no legislative authority overseeing implementation. The smart growth initiative enables better planning of transportation facilities. The initiative did not have a transportation focus initially but subsequently created a task force on transportation.

### *Principal Objectives*

Currently, the state is experiencing rapid growth and considers the Growing Smarter initiative a means of conserving open space, reducing land consumption, preserving the environment, improving the quality of life, and reducing traffic and congestion around the cities. The state also anticipates that smart growth will allow preservation of open space and farmland while simultaneously increasing business opportunities.

### *Participants*

The state department of commerce has the lead coordination role under the guidance of the governor. Additional groups and agencies involved include local governments, counties, businesses, universities, and environmental and water management agencies.

### *Role of the State DOT*

The state DOT plays funding and advisory roles, and oversees plans as they are developed.

### *Supplemental Comments*

Early examples of implementation include:

- Scottsdale's Open Space Plan, which resulted in land being purchased from the state land agency, and
- Tucson's Sonora Desert Plan to preserve that natural amenity.

## **California Department of Transportation**

Respondent: Ken Baxter, Community Planning Branch Chief

### *Background*

The State of California's "Transportation for Livable Communities" smart growth initiative is transportation centered. No laws, regulations, or ordinances have been enacted to support this initiative; however, a livable communities' policy statement has been issued. In response to the initiative, Caltrans, the state's department of transportation, places more emphasis on transit, bicycle, and pedestrian facilities, and there is less emphasis on new or expanded highways. Priority is given to projects in smart growth areas, and grants are available for smart growth related developments.

### *Principal Transportation-Related Objectives*

The State of California's primary reason for this initiative is to reduce traffic and congestion in and around its communities and to increase walking, bicycling, and transit use. Many areas in the state are experiencing rapid growth and development, and this plan is expected to relieve some existing and future traffic demands. The plan is also expected to bring new business opportunities, as well as preserve open space.

### *Participants*

Caltrans takes a lead role in spearheading the initiative. Other state agencies participating in the program in advisory roles are the Governor's Office of Planning and Research and the state's housing and human services departments.

### *Role of the State DOT*

Caltrans acts in advisory, implementation, and funding (grants to local communities) roles. They also implement supportive transportation improvements or policy and provide technical assistance.

### *Supplemental Comments*

- The level of interest in the Transportation for Livable Communities initiative is greater than originally anticipated and community participation is high.
- Relationships between citizens and public and private entities have improved.
- A project example is the Cutler Project in San Joaquin Valley, an unincorporated community that improved land use, transportation, and quality of life through this initiative. Other examples are included in the case study on Caltrans in [Chapter 5](#) of this report.
- The number of grant proposals submitted to the Transportation for Livable Communities Initiative increased from 25 to 75 between the initiative's first and second years, with demand for project funding exceeding fiscal capacity.

## **Colorado Department of Transportation**

Respondent: Jennifer Finch, Director of Transportation Development

### *Background*

Smart Growth Local Affairs is Colorado's smart growth program, which was pursued in response to rapid growth and sprawl. Programs are voluntary; a prior attempt to institute mandatory land-use planning regulations failed. Smart growth has resulted in less emphasis on new and expanded highways, more emphasis on pedestrian- and bicycle-friendly facilities, and more continuous streets.

### *Principal Objectives*

Colorado's major objectives were improving the quality of life, preserving and conserving open space, and making both public and private transportation more efficient.

### *Participants*

The Department of Local Affairs and the Department of Transportation coordinate and manage the program. Other participating agencies include the Colorado Municipal League and Colorado Counties, Inc.

### *Role of the State DOT*

The Colorado State Department of Transportation plays major advisory and funding roles.

### *Supplemental Comments*

- Implementing smart growth is still a top priority, although efforts to legislate smart growth failed.
- It is speculated that the voluntary process may lead to some regulation.
- One of the lessons learned is that “one size does not fit all” in coordinating planning and land use.
- The greatest benefit of smart growth to date is that communication has improved among planners, officials, and communities.

### **Florida Department of Community Affairs**

Respondent: Maria Abadal-Cahill, Policy Administrator

### *Background*

The State of Florida’s “Growth Management” smart growth program, initiated through the 1985 Growth Management Act, is managed by way of comprehensive planning, zoning, and land development regulations. The Growth Management initiative was pursued because of a need to improve the planning and implementation of infrastructure expansions and improvements, and under the program, transportation agencies must show their plans to be consistent with comprehensive plans. Planners use concurrency options allowing exceptions to standards if planning is included for urban infill, redevelopment, and downtown revitalization. The initiative allows multimodal transportation districts to be established, which give priority to pedestrians and secondary ranking to vehicles. In general, there was agreement in Florida that something needed to be done to recognize planning problems; however, there were landowner objections that prompted enactment of the Burt Harris Act, which is intended to ensure property rights.

### *Principal Objectives*

Principal objectives are environmental preservation and conservation of open space, more compact development, more efficient use of infrastructure, and the creation of pedestrian-friendly environments.

### *Participants*

The Department of Community Affairs is the lead agency implementing growth management. A variety of stakeholders are involved, but the primary participants are municipalities and councils of government. The state environmental agency participates in the program in a review role; the departments of agriculture, water management, and land acquisition have regulatory, policy, and review responsibilities.

### *Role of the State DOT*

The state DOT performs regulatory and funding roles, reviews and comments on plans and adequacy of transportation facilities, and assists local governments.

### *Supplemental Comments*

- Accountability has improved due to the statewide requirement for comprehensive planning.
- The process is structured so that in some instances priority is given to pedestrians and secondary consideration to vehicles.
- School districts are exempt from the requirements, and many stakeholders believe that development practices of the schools are contrary to the direction being pursued in comprehensive planning.
- Evaluations of environmental, land, and management growth management plans, entitled ELMS 1, ELMS 2, and ELMS 3 each resulted in incremental refinements to the laws.

## **Illinois Department of Transportation**

Respondent: Susan Stitt, Air Quality Manager

### *Background*

“Balanced Growth: Illinois Tomorrow” is the state’s smart growth initiative. Long-range transportation plans guide the initiative under the auspices of the Governor’s Balanced Growth Cabinet, which takes the lead in spearheading the plans. Some legislation has led to grant programs; 95 percent of funds are used to maintain existing urbanized areas with an emphasis on balanced growth principles. Plans now follow balanced growth guidelines, with less emphasis on new and expanded highways and more emphasis on pedestrian- and bicycle-friendly facilities and transit-oriented development.

### *Principal Objectives*

Improved quality of life is the main objective of this smart growth initiative. Environmental preservation, conservation of open space, and reduced land consumption are expected to result from better-planned communities with denser populations and economically vibrant neighborhoods. Better allocation of public resources is another stated goal.

### *Participants*

The Governor’s Balanced Growth Cabinet takes the lead in spearheading the plans. Other state agencies involved are the departments of natural resources, agriculture, housing, commerce, and community affairs and the state’s environmental protection agency. Roles are usually advisory although the housing department implements some projects.

### *Role of the State DOT*

The state DOT is actively involved in funding, advising, and implementing supportive transportation policy. The Illinois Department of Transportation (IDOT) has also sponsored some balanced growth corridor studies to develop prototype plans for balanced growth and transportation.

### *Supplemental Comments*

- Some community awards have been made to recognize early successes.
- There is better coordination and communication among State agencies.
- Consciousness levels are raised, although some segments of the community still may not understand the initiative.

### **Iowa Department of Transportation**

Respondent: John Hay, Planning Director

#### *Background*

The communities have stable growth at the present time. There is no smart growth initiative.

### **Kansas Department of Transportation**

Respondent: Dave Schwartz, Long Range Planning Engineer

#### *Background*

There is no smart growth initiative in Kansas. Some communities in the state are growing, but they prefer to address traffic, sprawl, and air quality by other means. Smart growth is being considered, but no plans are underway.

### **Maine Department of Transportation**

Respondent: Kathy Fuller, Assistant Director, Bureau of Transportation

#### *Background*

Maine calls its initiative “Smart Growth: The Competitive Advantage.” State law seeks voluntary compliance with comprehensive plans. Incentive mechanisms include (state fund allocation) bonus points for good planning; however, there is no standard system to deny funds if comprehensive plans are not followed. Certain regulatory exemptions are granted to developers who redevelop built environments instead of new locations outside existing urban areas. The Growth Management Act provides incentives for a more regional approach to planning, as opposed to a town-by-town approach. The goal is to implement a strict strategy for investing state funds.

#### *Principal Objectives*

The state pursued smart growth in order to manage public costs, to address rapid growth, development, and sprawl. The top three priorities are environmental preservation and

conservation of open space, better allocation of public resources, and more compact development.

### *Participants*

The State Planning Office oversees the initiative in funding, regulatory, and advisory capacities, and the governor created a board to develop the particulars of the program. The State Environmental Protection Agency has regulatory, funding, and advisory roles, and the State Housing Department has funding and advisory roles. The Education Department is also involved and plans the location of schools.

### *Role of the State DOT*

The state DOT's roles are regulatory, funding, and advisory. The agency also implements supportive transportation improvements or policy.

### *Supplemental Comments*

- Implementation of the program is voluntary; bonus points are provided for projects within communities that are considered well planned.
- Real estate organizations were cautiously supportive.
- Community residents and other stakeholders now understand the linkages between transportation and land use.
- Several state agencies that previously did not consider the travel demand implications of decisions are currently considering that aspect of their decisions.
- The dialog spurred by this initiative is considered a tremendous benefit.

## **Massachusetts Highway Department**

Respondent: Luisa Paiewonsky, Director of Transportation Planning and Development

### *Background*

The State of Massachusetts has taken a unique approach to smart growth. No single program is identified as being the smart growth initiative, but there is a tri-fold legislative approach:

- Community Preservation Act,
- Executive Order 418, and
- Massachusetts Environmental Policy Acts.

The Community Preservation Act sets guidelines for the state's smart growth initiative. Voters choose to increase property taxes with the state matching funds for open space preservation and affordable housing. Because of home rule, the state has no power over land use, but issued Executive Order 418 mandating that the state provide technical assistance to cities and towns for preparing community development plans. The complementary Massachusetts Environmental Policy Act triggers impact assessments based on thresholds of development. If the minimum threshold is exceeded, the project

must go through a higher level impact assessment to ensure it is not affecting sprawl and traffic.

### *Principal Objectives*

The State of Massachusetts listed rapid growth, development, and sprawl as reasons to explore smart growth concepts leading to an improved quality of life. Principal objectives of this initiative are to reduce the traffic in neighborhoods and improve the quality of life. The state is also seeking more efficient use of infrastructure and public resources.

### *Participants*

Involved agencies include the State Environmental Office, which has regulatory, funding, advisory, and policy roles, and the State Housing and Community Development Department, which has funding and policy roles.

### *Role of the State DOT*

The state DOT is involved in every aspect of this initiative including regulatory (access permits), funding, advisory, planning, and implementation roles. There is a public/private development unit within the state DOT to negotiate with developers who exceed minimum thresholds. Developers must provide mitigation such as traffic signals, turning lanes, or other amendments; monetary compensation is not acceptable.

### *Supplemental Comments*

- The agency feels it has the ability to manage growth but is seeking improvement.
- DOT investments in non-highway transportation facilities have increased, and people are asking for more of these facilities.
- There is tremendous support for bicycle and pedestrian facilities.
- Some communities opted not to increase property taxes to fund projects.
- Objections were rooted in anti-government arguments and decisions about the use of funds and potential fund distribution by non-governmental agencies.

## **Mississippi Department of Transportation**

Respondent: Vic Barber, Engineer

### *Background*

Mississippi does not have a smart growth initiative.



## **New Hampshire Department of Transportation**

Respondent: Subramanian N. Sharma, Traffic Research Engineer

### *Background*

New Hampshire is not currently implementing a smart growth initiative. The state is considering smart growth, but plans are not imminent.

## **New Jersey Department of Transportation**

Respondents: Jim Lewis, Manager of State Planning and Susan Webber, Supervisor of Transportation Planning

### *Background*

Several laws and ordinances guide New Jersey's smart growth initiative including Garden State Preservation, municipal ordinances, and building codes. Focus is on narrower streets, priority improvements for smart growth areas, and less emphasis on new or expanded roadways. Plans now follow smart growth guidelines. Transportation organizations were asked to change their goals and objectives, planning standards, and criteria.

### *Principal Objectives*

The New Jersey Department of Transportation (NJDOT) cites priorities as increased transit use, increased walking and bicycling, and more efficient use of infrastructure and resources.

### *Participants*

The State Department of Planning spearheads the State's smart growth initiative. The Department of Community Affairs assists with implementation and funding responsibilities. The State Environmental and Agricultural Departments are involved as well.

### *Role of the State DOT*

The NJDOT plays a role in implementing supportive transportation improvements or policy as well as contributing to regulating, funding, and advising.

### *Supplemental Comments*

- To increase the success of the smart growth initiative, greater collaboration should be pursued with other state agencies, particularly environmental departments.
- Objections to the plan were raised by farmers fearing diminished land areas and builders concerned about housing prices.

## **New York Department of Transportation**

Respondent: Gayle Burgess, Assistant Director of Governmental Relations

### *Background*

The State of New York initiated its Quality Communities smart growth initiative in response to rapid growth, development, and sprawl. The state's business community anticipates that the program will increase opportunities for economic development as a means of improving quality of life.

### *Principal Objectives*

The stated priority objectives are economic vitality, environmental preservation, conservation of farmland and open space, and improved quality of life.

### *Participants*

The Department of State serves as the lead agency. The state DOT and MPOs assist in managing the initiative. Numerous other state agencies are involved including departments of environment, housing, parks and recreation, historic preservation, economic development, agriculture, markets, and health.

### *Role of the State DOT*

The state DOT plays a role in planning, visioning, funding, and advising, and also implements supportive transportation improvements or policy.

### *Supplemental Comments*

- Sustainable development studies prompted the implementation of the smart growth initiative.
- Greater cooperation and coordination of state agencies occurred as the initiative proceeded.

## **North Carolina Department of Transportation**

Respondent: Lori Cove, Assistant Manager, Statewide Planning Branch

### *Background*

North Carolina's "Smart Growth Initiative" requires that land development plans be prepared prior to compiling transportation plans. This initiative was developed with the goals of relieving traffic demand, improving quality of life, preserving open space and farmland, and focusing attention on regionalism.

### *Principal Objectives*

The objectives of this plan are better allocation of public resources, more efficient use of infrastructure and resources, preserving open space and farmland, and improving the quality of life.

### *Participants*

The State Legislature oversees the initiative with participation from municipalities and community environmental groups. The Division of Community Assistance, under the Department of Commerce, has a funding and advisory role as well.

### *Role of the State DOT*

The state DOT's role is to advise and implement supportive transportation improvements and policies.

### *Supplemental Comments*

- The initiative has resulted in a 1 million acre preservation effort.
- Many people are involved in the program and opinions of opponents are changing.
- The term "Smart Growth" caused some problems, and finding a better term is recommended.
- Realtors, homebuilders, and the general public initially objected to the plans, largely due to a lack of understanding.

### **North Dakota Department of Transportation**

Respondent: Darcy Rosendahl, Planning and Programming Engineer

#### *Background*

The state of North Dakota has some growth, but prefers to address growth issues through other means.

### **Ohio Department of Transportation**

Respondent: Monique Evans, P.E., Administrator, Research and Development

#### *Background*

The State has no jurisdiction over local land-use issues or land use along state roadways. There is no smart growth program.

### **Oklahoma Department of Transportation**

Respondent: Sam Shehab, Strategic Planning Branch Manager

#### *Background*

Oklahoma does not have a smart growth initiative and prefers to address growth through other means.

## **Oregon Department of Transportation**

Respondents: Craig Greenleaf, Director, and Barbara Fraser, Manager, Transportation Growth Management Program

### *Background*

Oregon DOT's "Growth Management Program" is guided by a comprehensive plan, zoning, facilities ordinances, and other codes and policies. Senate Bill 100, passed in 1973, led to the development of community comprehensive plans that conform with statewide planning goals. Local transportation operating agencies have explicit obligations to adapt local proceedings to fit the agenda. Elements of this initiative include requirements for housing densities, faster decision-making, and expedited court review for issues that are contested. The initiative works, in part, due to a unified agenda across multiple state agencies.

### *Principal Objectives*

Major objectives are more efficient use of infrastructure and resources, environmental preservation and conservation of open space, and more compact development. (According to the respondents, the latter can only be achieved if the other two named elements are successful.)

### *Participants*

Statewide, a number of stakeholders participate in planning and implementation, including the 1000 Friends of Oregon, homebuilders' organizations, and special district associations (water, sewer, fire, etc.). The State Land Conservation Development Commission oversees the plan. Other state agencies involved are the Department of Environmental Quality, Oregon Community and Economic Development, and the Oregon Community Solutions Office, which is comprised of five state agency directors.

### *Role of the State DOT*

The state DOT has key funding and advisory roles. Oregon DOT also implements supportive transportation improvements and policy although regulatory involvement is somewhat limited and is related to access management.

### *Supplemental Comments*

- There is a great public understanding of the issues; citizenry is active and engaged, and elected officials are able to speak directly to questions of growth management.
- Plan development and adherence is difficult for smaller communities that do not have enough technical staff or the skill mix to conduct mandates
- The plan is difficult to implement in existing, built-up neighborhoods.
- Advocates underestimated working with the legislature, constituents get agitated by one case, and then the legislative debate is centered on the "worst example."
- In general, it is hard to sustain positive momentum.

- Success requires a high profile, strong supportive elected official.
- The initiative is reasonably successful with a number of transit-oriented and compact development projects.
- The state is more efficient in infrastructure issues than before.
- Retail interests objected to the initiative because of the changing character of their projects (parking and highway access and frontage were the main issues).
- Homebuilders support growth management for its clear and objective standards for review but do not like regulations that affect specific housing types.
- Property rights advocates object to program requirements.

## **Texas Department of Transportation**

Respondent: Jack Foster, Director of Systems Planning

### *Background*

Texas has no state-level initiative, but many local governments are pursuing some aspect of smart growth.

### *Principal Objectives*

Principal objectives are more compact, transit-friendly development; more efficient use of infrastructure; fewer vehicle trips; and increased non-motorized trips.

### *Participants*

Principal stakeholders are municipalities.

### *Role of the State DOT*

TxDOT contributes indirect assistance through travel demand estimations and evaluations of smart growth impacts on variations in trip levels and travel patterns.

### *Supplemental Comments*

- Some cities, coalitions, and advocacy groups are asking TxDOT to participate in local efforts.
- Some local communities have passed statutory initiatives.
- One community near Austin did not re-elect a mayor and council who advocated smart growth.
- Citizen involvement regarding this issue is high in Austin and a few other select locations but low statewide.
- Consensus must be developed. Smart growth cannot be forced.
- Business owners raised objections because they felt that economic development would be negatively affected.
- Additional objections were raised on the basis of property rights.

## **Washington Department of Transportation**

Respondent: Todd Carlson, Acting Planning Manager, Transportation Planning Office

### *Background*

The State of Washington's "Growth Management Act" was established by the 1990 act of the same name. This act has been somewhat controversial. However, implementation is progressing on the parts that work well. A monthly coordination meeting, chaired by the Office of Community Development, is attended by all state agencies and provides opportunity for input by the attendees. Policy encourages investing federal Surface Transportation Program funds in urban areas, and the Growth Management Act encourages density near transit. The state allows its gas tax to be spent only on highways and ferries, so growth management initiatives tend to not qualify for that funding source. There is less emphasis on new and expanded highways, more pedestrian and bicycle facilities, and a focus on transit links in congested corridors. Where peak hour congestion is heaviest, transit and ridesharing are popular.

### *Principal Objectives*

The major objectives of this act are to improve business and economic vitality, improve the quality of life, and preserve the environment and open space.

### *Participants*

The state's Office of Community Development oversees the project, and municipalities, counties, councils of government, and MPOs are key stakeholders. Also active are the 1000 Friends of Washington, Sierra Club, Audubon Society, associations of Washington cities and counties, and non-profit housing organizations. In addition, the state departments of ecology, fish and wildlife, and preservation are involved in the initiative. Other involved governmental agencies are the Transportation Improvement Board, created by the legislature, and Road Administration Board, which has a rural focus.

### *Role of the State DOT*

The state DOT, along with all other state agencies, acts in an advisory role as part of a committee chaired by the Office of Community Development. The state DOT also funds projects and implements supportive transportation.

### *Supplemental Comments*

- As a result of the Growth Management Act, many agency and community relationships are better, positive projects are happening, there is more compact development, and more non-motorized projects are funded.
- It is important to try to understand what people dislike about smart growth, identify and acknowledge their fears, and then build trust.
- Funding problems may be on the horizon for the growth management initiative, which may jeopardize the program.
- Opposition came from rural communities and cattle associations who complained that the mandate forced issues people did not desire.

## **Wisconsin Department of Transportation**

Respondent: Kassandra Walbrun, Programming and Planning Analyst, Office of Policy and Budget

### *Background*

Wisconsin allocated \$1 million to its smart growth program, which mandates development of a comprehensive plan. The program followed a “bottom-up” path beginning with local efforts and was initiated in the year 2000, following 1999 legislation. Realtors and environmentalists provided impetus for this smart growth program, and residents supported it.

### *Principal Objectives*

Statutory language cites 14 goals but provides no ranking. The list includes less traffic; increased walking, bicycling, and transit; improved business and economic climate; better use of resources; environmental preservation; and improved quality of life.

### *Participants*

The governor-appointed Wisconsin Land Council serves as an oversight agency. Other state agencies involved are the Department of Natural Resources, the State Housing Agency, and the Department of Administration.

### *Role of the State DOT*

The state DOT’s role is funding and advisory, and the agency sits on the Governor’s Council as well.

### *Supplemental Comments*

- The state’s grant program is very popular, and more communities than can be funded are applying for grants.
- Greater involvement from upper level decision-makers would be beneficial.

## **LOCAL AND REGIONAL AGENCIES**

Interviews were also conducted with a cross-section of local agencies to obtain a sample of the types of policies, programs, and activities they are carrying out.

### **City of Austin, Texas**

Respondent: George Adams, Principal Planner, Transportation Planning and Sustainability, City of Austin

### *Background*

Austin’s smart growth program was initiated in response to rapid growth, development, sprawl, and a desire to preserve open space and protect the environment. The City Council adopted a smart growth ordinance that focuses on traffic reductions. A number of amendments aimed at large employers will allow incentive-based developments if

located in Desired Development Zones. The MPO is managing two of those zones in an effort to minimize new roads and extensions.

### *Principal Objectives*

The initiative's principal objectives are environmental preservation and conservation of open space, more compact and transit-friendly development, reduced traffic congestion, and increased bicycling and walking.

### *Participants*

The City of Austin's Transportation Planning and Sustainability Department oversees the program. Stakeholders include the MPO, neighborhood associations, the transit agency, municipalities, community environmental groups, and the business owners. The state Housing and Human Services Agency provides some funding.

### *Role of the State DOT*

TxDOT is involved through its transportation improvements. Interest in the smart growth program has been expressed, but no formal role has been established.

### *Supplemental Comments*

- Approximately 15,000 acres of open space has been preserved.
- There have been some early successes relative to open space and downtown redevelopment, but there have been no successes in transportation and the nature of development at the city's edge.
- The initiative has stimulated greater focus on pedestrian and bicycle pathways and improved aesthetics.
- If starting over, the smart growth case should be more solid with focus on why the idea is important.
- Advocates should focus on gaining consensus.
- Some of the business community hopes smart growth will increase economic development, while others are skeptical and opposed to the initiative.
- Opposition came from neighborhood activists, anti-government coalitions, and environmentalists with a "no growth" position.

## **City of Portland, Oregon**

Respondent: Amy Schwartz, City of Portland, Communications Manager, Bureau of Planning

### *Background*

Portland's smart growth falls under "Comprehensive Planning" and is guided by the state's Land Conservation Development Commission (LCDC). Under the program, transportation agencies must establish goals and objectives, priorities, policies, and planning and evaluation standards according to the comprehensive plan prescripts. The city is in the process of implementing the comprehensive plan developed for the region. Application of plan principles has resulted in more infill development, increased areas of



mixed use, and a variety of housing types. Travel choices have increased as a result of the initiative.

#### *Principal Transportation-Related Objectives*

The principal plan objectives are more compact and transit-friendly development, more efficient use of infrastructure, and reduced traffic congestion around the city.

#### *Participants*

Participants include the state Department of Land Conservation Development (DLCD) and local transportation agencies.

#### *Role of the State DOT*

Senate Bill 100 requires that the state DOT work with communities to meet the DLCD guidelines.

#### *Supplemental Comments*

- Comprehensive planning introduced a greater variety in housing types and more mixed-use development.
- Transit has expanded with infill development, new routes have been added, and transit-oriented development is beginning to occur around transit stations.
- Objections arose from residents concerned about too much government regulation and negative economic impacts related to land and housing.
- Some expressed the belief that concentrated communities would be no better than those that are “spread-out.”
- Officials are observing that people are attracted to the mixed-use developments.

### **City of Sarasota, Florida**

Respondent: Osama Freija, City Traffic Engineer

#### *Background*

The guidelines for Sarasota’s Smart Code smart growth program are included in the city’s comprehensive plan and were developed in response to rapid growth and development. The plan includes policy recommendations only, and the county has the authority to challenge individual projects. Tools for improving transportation include narrower streets, pedestrian- and bicycle- friendly amenities, and less emphasis on parking. The city’s balanced transportation plan includes two categories of streets: “A” streets that are more pedestrian than vehicular and “B” streets that are more vehicular than pedestrian. Initial objections to the Smart Codes came from residents who felt the new code might worsen, rather than alleviate, congestion.

Sarasota’s first attempt at smart growth was the enactment of the “Downtown Code,” in the 1970s, which allowed more residential development to create mixed-use areas. This

project was also aimed at protecting vegetation and recreation space frequently threatened by wildfires, rather than at urban and transportation planning.

#### *Principal Objectives*

Priority objectives are to increase walking and bicycling, increase transit utilization, reduce traffic congestion, and balance transportation modes.

#### *Participants*

The city's Planning Department coordinates and manages the initiative through planning standards and evaluation criteria.

#### *Role of the State DOT*

The respondent stated that the state DOT has a role but was unable to be specific.

#### *Supplemental Comments*

- The key word in pursuing the program is “balance.”
- Stakeholders focus on multimodal representation in addressing travel demand.
- There is recognition of the need to accept congestion to improve pedestrian conditions, and in some cases the decision has been made to do so.
- The public likes the initiative, and there has been less opposition than expected.

### **Georgia – Metropolitan Atlanta Regional Transit Authority (MARTA)**

Respondent: Scott Pendergrast, Acting Manager of Property Development

#### *Background*

MARTA's smart growth Livable Centers Initiative is led by the Atlanta Regional Commission (the MPO). The initiative is expected to relieve some existing and future traffic demand and improve quality of life. It is also an attempt by MARTA to increase transit ridership and revenues. A regional transportation plan has been prepared, and the County Highway Department has been asked to change the way it sets project priorities and to include more bicycle and pedestrian facilities in an effort to reduce VMT.

#### *Participants*

In addition to MARTA and the MPO, business owners and the Chamber of Commerce, municipalities, and community environmental groups participate in the program. A new state environmental agency, established approximately three years ago, has a funding and advisory role.

#### *Principal Objectives*

The principal objectives are to reduce traffic; increase transit ridership, bicycling, and walking; and improve air quality by reducing vehicle miles traveled.

### *Role of the State DOT*

The state DOT does not participate in this initiative in an organized, consistent manner.

### *Supplemental Comments*

- Several town centers and transit station areas are experiencing revitalization, including some suburban locations.
- Local governments are working with private developers to implement these projects.
- Although many of the projects are small scale and modest, in the aggregate they are just as important as large projects.

### **San Francisco Bay Area Metropolitan Transportation Commission, MTC (MPO)**

Respondent: Valerie Kneper, Associate Planner

### *Background*

The bay area's Transportation for Livable Communities smart growth initiative was launched in response to rapid growth, to relieve existing and future traffic demand, and to address the public's desire to preserve open space. There were no changes in local or state ordinances or regulations connected with the initiative. Since Transportation for Livable Communities began, collaboration among stakeholders has increased, and the initiative has served as impetus to other community development.

### *Principal Objectives*

Improved aesthetics and quality of life were the major objectives for the initiative. Encouraging the use of alternative forms of transportation such as transit, walking, and bicycling was a secondary objective. A somewhat different goal of Transportation for Livable Communities was creating opportunities for affordable housing around transit stations.

### *Participants*

The San Francisco Bay Area's MTC takes a lead role in the implementation and coordination of this initiative. In addition to the MTC, stakeholders include municipalities, neighborhood groups, and the County Congestion Management Agency.

### *Role of the State DOT*

The state DOT provides grant funds involving TEA-21 resources. Caltrans oversees several individual projects. Caltrans has recommended that alternative modes be included in all new transportation facilities.

### *Supplemental Comments*

- There is a positive and strong public response and a focus for neighborhood efforts.

- A program such as this requires the involvement of a diverse cross-section of the community.
- More support may be needed for complicated projects, and consultants might be needed to communicate with citizens.
- The business community has developed expectations for increased opportunities for economic development.
- Positive response has been received from neighborhoods.
- Access to transit stations is better.
- Objections arose from some agencies that were interested in more traditional highways as a means of alleviating congestion.
- Many concerns were related to project funding.

## CHAPTER 4. CASE STUDY: THE KENTLANDS

### PURPOSE

This case study of The Kentlands subdivision in Gaithersburg, Maryland, is a review of the transportation needs and the effects of a smart growth development located along state highways and the interface between the development and adjacent highways.

This case study report briefly reviews relevant state, county, and city smart growth legislation affecting The Kentlands. It concludes with The Kentlands site evaluation and case study conclusion.

### BACKGROUND

#### Maryland

The state of Maryland's population increased by almost 11 percent between 1990 and 2000 and is projected to grow by another 13 percent by 2020 to a population of over 6 million. The state adopted a Growth Act in 1992 and initiated its Smart Growth and Neighborhood Conservation Program in 1997 in response to loss of green space resulting from rapidly expanding urban boundaries attributed to growth. Maryland's smart growth program includes several smart growth initiatives under which the Smart Growth Subcabinet, made up of 12 departments within the state government, implement the state's comprehensive smart growth development strategy (49).

Maryland has regulatory authority over local plans only when state laws are violated, and community planning is voluntary. However, communities that fail to meet state planning objectives may lose state funding for noncompliant projects (24). The state Smart Growth Areas Act of 1997 is an effort to coordinate the disbursement of state funds with local growth planning. This act established priority funding areas, outside which the state cannot fund growth-related projects.

Maryland's Governor Parris N. Glendening, is an ardent proponent of smart growth. The Governor's Office of Smart Growth (OSG), established by legislation in 2001, has stated its goals as supporting and revitalizing existing communities, preserving farmland and natural resources, and saving tax dollars on infrastructure expansion costs. The OSG created a "one-stop shop" for the state's smart growth program to advise local governments on compliance issues when creating and assessing their comprehensive plans.

#### Montgomery County

Montgomery County, Maryland, supports programs that encourage smart growth. One of these programs is Transferable Development Rights (TDRs) to encourage higher density developments while preserving farmland. The county also has a Moderately Priced Dwelling Unit (MPDU) Program that requires developers of projects in the county's

jurisdiction that are larger than 50 units to make at least 15 percent of those units available to middle- and lower-income households. This program increases in-town housing opportunities and discourages families from moving farther out to find more affordable housing in the suburbs (50). The TDR program is intended to preserve open space, reduce infrastructure needs, and lessen road congestion.

The county provides public transportation through the Ride-On Bus system. This system serves the entire county and provides free transit service on “code red” air quality days. The county is planning a Shady Grove–Clarksburg Transitway, which will include bus and light rail service to improve public transportation options within the county and its cities and will include a stop near The Kentlands (51).

### **City of Gaithersburg**

The city of Gaithersburg, Maryland, is the eighth largest city in Maryland and is the fastest growing municipality in the state. The 2000 census population of 52,613 reflects an increase of nearly 13,000 residents over the 10-year period from 1990 to 2000 (52). The city occupies roughly 10 square miles, and the unincorporated areas surrounding the city include more than 100,000 people and roughly 50 square miles of land (53). The city is in the heart of the Washington-Baltimore region, and its southeastern boundary is just 13 miles from Washington, D.C. The city is home to more than 2000 businesses, many in the field of technology and research (54).

Gaithersburg adopted a Smart Growth Policy in 1999 as an element of the city’s master plan. This Gaithersburg Smart Growth Policy complements the state’s smart growth policy, is specific to the needs of the city, and is intended to address land use, transportation, capital improvements, and funding priorities (54).

Gaithersburg is experiencing increasing traffic congestion. The city’s Smart Growth Policy acknowledges, however, that much of the traffic congestion the city experiences is a result of residential development on the periphery of the city, outside of the city limits. Commuter traffic on major routes through and adjacent to the city, such as on Interstate Highway 270, the Great Seneca Highway, Maryland Routes 117, 124, and 355, has created internal traffic congestion problems for Gaithersburg that are unrelated to growth within the city proper (50).

### **The Kentlands**

The Kentlands is a smart growth, New Urbanist development in Gaithersburg that follows and is consistent with both Maryland and Montgomery County’s smart growth policies. Although the City of Gaithersburg had no smart growth policy in effect when The Kentlands’ developer approached the planning department with a new concept for neighborhood design, the city cooperated fully. A special mixed-use zone was created, street design codes were modified, and The Kentlands was built. The city has based its Smart Growth Policy and new Thoroughfare Design Standards on their experiences with The Kentlands.

The 350-acre site of The Kentlands was a privately owned, minimally developed property when purchased by developer Joseph Alfandre in 1987. The property’s location at the

junction of two state highways made it appropriate for a new form of mixed-use development known as “Neo-Traditional” or “New Urbanist.” New Urbanism is often considered smart growth development, since it increases development density and mixes land uses with the goal of bringing retail, services, jobs, and housing closer together to reduce vehicle miles of travel and improve the opportunity for walking and bicycling. New Urbanist street designs advocate connectivity, grid or modified-grid patterned streets, on-street parking, and sidewalks on both sides of the street. These features are expected to shorten trip distance and create pedestrian- and bicycle-friendly environments that will encourage walking and bicycling trips in lieu of vehicle trips. The idea behind New Urbanism is to have all necessities within the development, and within walking or bicycling distance, to reduce trips outside of the development. Additional New Urbanist design features include small building setbacks (Figure 11), pedestrian-scaled lighting, and street furniture to improve the pedestrian environment and promote walking trips.



**Figure 11. Small setbacks in The Kentlands contribute to pedestrian friendliness.**

The Kentlands development was planned in 1987, more than 10 years before the City of Gaithersburg adopted its smart growth development policy. The city’s expectation for The Kentlands was to create a livable, aesthetically pleasing development that was well-integrated into the city and representative of the city’s character (Figure 12). This goal has been accomplished by using architectural styles that are similar to old housing, through architectural and landscape controls that enhance and preserve the development’s character, and by providing an atmosphere that attracts visitors to the businesses within the development.



**Figure 12. Single-family houses in The Kentlands with small setbacks to encourage walking and socializing with neighbors.**

According to Jennifer Russel, the Planning and Code Administration director for the City of Gaithersburg, at the time The Kentlands was planned, many elements of the plan violated city subdivision regulations. The proposed housing densities, the mix of residential and commercial uses at the site, and the street design all required special consideration and permitting. A new “mixed-use development” (MXD) zone was created to enable this new type of urban design. The MXD zone requires that the property be planned *comprehensively* for a mixture of commercial, industrial, and residential uses. Land parcels in four corners of the city are now zoned for mixed uses.

The Kentlands is the city’s first mixed-use project. Housing density in The Kentlands is six units per acre, and the development contains a mix of single- and multi-family dwellings. The residential component of this project is now complete and contains 1950 occupied units of housing, of which 27 percent are single-family detached, 20 percent are townhomes, 46 percent are multi-family, and 7 percent are urban cottages (55). There are approximately 870,000 square feet of commercial space at this time. Commercial development includes both independently owned and “chain” shops and restaurants. Although office space was not originally included in the project because of an excess of space in nearby developments, The Kentlands now has 25,000 square feet of completed space, 26,000 are currently under construction, and another 30,000 square feet are being planned. Some of this space is in the development’s 70 live-work units (Figure 13), each with about 1000 square feet of office space (telephone interview with Mike Watkins, Duany Plater-Zyberk, June 2002). The developer reports an increasing desire for more office space within or near The Kentlands (telephone conversation with William May, Great Seneca Development Corporation, June 2002).





**Figure 13. Live-work units put employment and housing together in The Kentlands.**

The street layout of The Kentlands is based on a modified grid pattern with exceptions made for topographic features. The street design required road code waivers to enable features such as reductions in center-line radius from 100 feet to 90 feet, reductions in curb radii from the city standard of 30 feet to 15 feet, (The Kentlands' developer wanted 5 feet, and as a compromise the radii were made 15 feet for vehicle maneuverability), and waivers on street widths to accommodate a New Urbanist street hierarchy that allows 10-foot driving lanes and 8-foot parking lanes. Despite extensive planning efforts, the city considers the streets in The Kentlands to be too wide and too straight (Figure 14). The 36-foot street width (the city required two moving lanes plus two parking lanes) has proved too wide for single-family, detached residential neighborhoods where few vehicles park on-street, leaving wide straight roads that encourage speeding. Street widths have been modified for the adjacent Lakelands development now being built (Personal interview with City of Gaithersburg personnel: Jennifer Russel, Planning and Code Administration director; James D. Arnoult, P.E., director of Public Works; Ivan Humberson, P.E., fire marshal; and Ollie Mumpower, Engineering Services director; June 25, 2002).



**Figure 14. Some wide, straight streets in The Kentlands contribute to speeding.**

Alley access to homes is a New Urbanist attempt at de-emphasizing the presence of the automobile in everyday life. In addition to on-street parking, homes have private garages on rear alleys (Figure 15). This concept hides garages from view and allows for

continuous sidewalks without driveway curb crossings to promote walking over driving for short trips. In a very few sites, attached garages face the street, although they are placed near the rear of the houses and are well set back from the street. In an effort to improve walkability, driveways in these areas do not slope where they cross sidewalks.



**Figure 15. Rear alley access in The Kentlands improves walkability.**

Alleys in The Kentlands are not city property, and many do not comply with city requirements for emergency vehicle access. In response to emergency agency concerns, the city requires that any housing built more than 100 feet from a main road with alley-only access (Figure 16) must have built-in fire-sprinkler systems.



**Figure 16. Houses with pedestrian-only access in The Kentlands hinder emergency access.**

The Kentlands project was the first in which the City of Gaithersburg had considered on-street parking in a development's parking requirements. Favored by New Urbanist planners for its expected ability to calm traffic and to promote pedestrian safety by acting as a buffer between pedestrians and traffic, on-street parking is used on almost every street in The Kentlands. The city learned through this project that there is a need to carefully plan where to locate parking on both sides of the street. City planners said that if faced with a similar project, they would reduce 36-foot streets to 27 feet in single-

family, detached-house areas and allow parking on only one side of the street (Figure 17). Higher density townhouse neighborhoods could have 36-foot streets with parking on both sides to better accommodate the increased traffic and parking (Personal interview with City of Gaithersburg personnel: Jennifer Russel, Planning and Code Administration director; James D. Arnoult, P.E., director of Public Works; Ivan Humberson, P.E., fire marshal; and Ollie Mumpower, Engineering Services director; June 25, 2002).



**Figure 17. Underutilized on-street parking in low-density residential areas of The Kentlands; an unnecessary investment in roadway pavement.**

New Urbanism aims to encourage walking rather than vehicle trips. This has not worked well in the retail/commercial areas of The Kentlands. The city feels that walkability has worked to an extent here but acknowledges the need to attain the right mix of features to actually generate more walking trips and fewer vehicle trips. That is, commercial and other non-residential uses need to provide for the local residents' needs. The most recently built retail area, Market Square, is not doing as well as expected. Several stores have closed, and tenant turnover is high. William May, a representative of the Great Seneca Development Corporation, stated that in hindsight he would not build the retail areas within the development until there is enough residential development to support it and would include far less retail in the project overall (telephone conversation with William May, Great Seneca Development Corporation, June 2002).

Some business failures in Market Square are attributed to the proximity of available parking, as customers complain about having to park and walk two to three blocks to businesses (Figure 18) (personal interview with City of Gaithersburg personnel: Jennifer Russel, Planning and Code Administration director; James D. Arnoult, P.E., director of Public Works; Ivan Humberson, P.E., fire marshal; and Ollie Mumpower, Engineering Services director; June 25, 2002). New Urbanism encourages people to park their cars and become pedestrians. Failure to accomplish this in the retail center is attributed to the Market Square Shopping Center being developed in a conventional style rather than under New Urbanist principles of grouped buildings, attractive building fronts, and easy pedestrian access.





**Figure 18. Conventional parking and retail development in The Kentlands.**

The economic engine for The Kentlands was to be a regional mall on the periphery of The Kentlands. However, that was changed to a local shopping center late in the development of the project due to the withdrawal of many of the expected anchor stores. These withdrawals from The Kentlands development proposal were attributed to national changes in shopping mall lease agreements and were not attributed to any factors specific to The Kentlands (telephone interview with Mike Watkins, Duany Plater-Zyberk, July 2002). Known as Kentlands' Square, the original shopping center now includes a Lowe's Home Improvement store, Giant grocery store, and Super K discount department store, as well as strips of smaller shops and restaurants. The failure to develop Kentlands' Square site as a regional mall contributed to the financial failure of the developer. (The development was taken over by Chevy Chase Bank, which created the Great Seneca Development Corporation to complete the project.)

Market Square Shopping Center, the second phase of Kentlands' Square retail development is now mostly empty. It included an Upton's (a specialty department store) and a Boston Market restaurant, both of which are closed and the properties vacant. A developer is currently working to have this site redeveloped as multi-family residences.

Transit service in The Kentlands is provided by Montgomery County's Ride-On bus system. Three routes take passengers between The Kentlands and the Rockville Metro Station and the Lake Forest Center shopping mall (each is approximately four miles from The Kentlands). The number of bus boardings in The Kentlands community of 5500 residents is estimated to be approximately 138 per weekday, although how many of these riders are residents of The Kentlands is not known (56, also telephone conversation with Phil McLaughlin of Montgomery County Transit, August 8, 2002). Transit was not included in the original plan for The Kentlands, and to avoid the problems of low ridership experienced in this development, Mike Watkins of Duany Plater-Zyberk Architects, the project designer, recommends incorporating transit (Figure 19) into a development at the onset. Watkins also recommends providing "more dignified" transit stops, such as a stop inside a store where one could have coffee while waiting for the bus. Watkins acknowledges that if provisions to encourage transit use had been included from the beginning, residents might have developed transit-commuting habits, which has not happened (telephone conversation with Mike Watkins, Duany Plater-Zyberk, June 2002).



**Figure 19. Bus stop in The Kentlands development.**

The need for flexibility in planning is a lesson learned during the development of The Kentlands. The city has made modifications to many of the streets based on resident complaints, and changes are still being made in response to residents' requests. In reference to the site's street layout, William May (Great Seneca Development Corporation) said he feels that the New Urbanist concept is a good one, but with modifications, since one has to consider the topography and context of the site. May said that what worked in Seaside, Florida, would not necessarily work in Gaithersburg, Maryland.

The Kentlands development was a learning experience for the City of Gaithersburg, as well as for the developer, and is a model for the city's new Thoroughfare Design Standards now under review. The goals of these new design standards are to:

- produce thoroughfares that enhance livability, economic opportunity, safety, and quality of life;
- develop a multimodal system that supports mode choice (there was no city bicycle plan in existence when The Kentlands was developed, and the project has only a "haphazard" bicycle system) (Personal interview with City of Gaithersburg personnel: Jennifer Russel, Planning and Code Administration director; James D. Arnoult, P.E., director of Public Works; Ivan Humberson, P.E., fire marshal; and Ollie Mumpower, Engineering Services director; June 25, 2002) and is compatible with surrounding land uses; and
- balance mobility and access needs to the function of the land uses served (57).

The city is creating a street design matrix and an entirely new set of ordinances that have yet to go to committee. These are based on the Institute of Transportation Engineers' (ITE) Best Practices, Montgomery County road code standards, and the road standards from other nearby communities (personal interview with City of Gaithersburg personnel: Jennifer Russel, Planning and Code Administration director; James D. Arnoult, P.E.,

director of Public Works; Ivan Humberson, P.E., fire marshal; and Ollie Mumpower, Engineering Services director; June 25, 2002).

### *Access to The Kentlands*

Three state highways form the outside boundaries of The Kentlands. The northwest boundary is MD 124, also known as Quince Orchard Road; the northeast boundary is MD 119, also known as the Great Seneca Highway; and the southwest boundary is MD 28, also known as Darnestown Road. The southeast boundary is Lakelands, a New Urbanist development now under construction. Four roads provide connectivity between the two developments.

MD 124 (Quince Orchard Road), the northwestern boundary of The Kentlands, is a four-lane divided highway with a grassy median. There are four access points to The Kentlands from this highway:

- Booth Street, the northernmost entrance from MD 124, is a two-lane road with access from MD 124 by way of turn lanes. Traffic entering the highway from Booth Street is controlled by a stop sign (Figure 20).



**Figure 20. A stop sign controls this intersection at Booth Street and MD 124 in The Kentlands.**

- Kentlands Boulevard is the central and main entrance to the subdivision and is a major, signal-controlled intersection at MD 124 (Figure 21). Kentlands Boulevard is a four-lane divided road that intersects with Booth Street at the Midtown Market Square retail center and continues to loop around the retail/commercial area to the northeast side of the subdivision where it intersects with MD 119 (Great Seneca Highway).



**Figure 21. Kentlands Blvd at MD 124 is a major entrance to the subdivision.**

- Little Quarry Road, the southernmost entrance from MD 124, is a two-lane road that provides neighborhood access. Turn lanes provide access to this road from MD 124, and traffic turning onto MD 124 at this intersection is controlled by a stop sign (Figure 22).



**Figure 22. A turn lane provides access to The Kentlands at MD 124 and Little Quarry Road.**

- There is a right-turn in, right-turn out from MD 124 between Booth Street and the Great Seneca Highway, but there is no median opening at this location.

MD 119 (Great Seneca Highway), the northeastern boundary of The Kentlands, is a four-lane divided highway with a grassy median. The Kentlands Boulevard entrance is the one main entrance to The Kentlands from this highway and is a major intersection controlled by traffic signals (Figure 23).



**Figure 23. Kentlands Blvd at MD 119 is a major, signal-controlled intersection.**

MD 28 (Darnestown Road), the southwest boundary of The Kentlands, is classified as a minor collector within the state. The three-mile section of MD 28 adjacent to The Kentlands, from Muddy Branch Road to the Great Seneca Highway, is currently being upgraded to a six-lane divided highway (anticipated completion date is Spring 2003) to serve this rapidly developing area of Montgomery County (58). This road widening is necessitated by regional demand and is unrelated to ingress and egress needs or traffic demand generated by The Kentlands development. Two roads provide access to The Kentlands from MD 28:

- Tschiffely Square Road is a four-lane divided road that runs from north to south through the center of the development to Kentlands Recreation Area at the northern corner. Access to this road from MD 28 is through a signal-controlled T-intersection currently undergoing construction (Figure 24).



**Figure 24. The Tschiffeley Square Road entrance to The Kentlands at MD 28 is undergoing improvements.**

- Kent Oaks Way is a neighborhood road providing access to the Gatehouse Neighborhood. It is not a through road but curves to the east and intersects with Tschiffely Square Road. Access to Kent Oaks Way from MD 28



includes a median opening and left-turn lane, and there is no traffic signal at this intersection.

## CONCLUSIONS

The Kentlands subdivision, while not the perfect smart growth development, has attributes that should work to reduce vehicle trips and highway vehicle-miles. In a true smart growth development, nearly all housing would be within 0.25 to 0.5 mile of shopping and transit, and transit would be readily accessible by foot and easy to use. This is not the case in The Kentlands; much of the development is beyond walking distance from goods and services and most residents drive, even to destinations within The Kentlands. However almost all commodities, from grocers to tailors to entertainment, can be found within the development, which reduces the need to make external trips to leave the site on state and other major roads. Although it is likely that many shopping trips within The Kentlands are made by personal vehicle, the trips are shorter and are made internal to the development. This type of trip does not contribute to highway congestion.

Traffic congestion is prompting the widening of two highways adjacent to The Kentlands. The Maryland State Highway Administration cites rapid development within Montgomery County as the reason for these improvements. The Kentlands was not credited with generating the needs for these improvements. A telephone conversation with the traffic consultant for The Kentlands development revealed that some traffic counts made during the early years of the development showed no significant trip generation difference from conventional developments (telephone conversation with Marty Wells, Wells and Associates, Alexandria, Virginia, June 2002). However, no formal analysis has been conducted to determine if The Kentlands development has actually generated a different amount of external trips than more conventional developments.

The Kentlands' New Urbanist design is only one type of plan for smart growth development. More stringent smart growth design parameters, such as more convenience to local goods and services outlets, convenient transit service within higher density development, a comprehensive system of pedestrian and bicycle paths, and narrower streets with shorter block lengths, would likely reduce both vehicle trips and vehicle-miles both within and outside the development. Smart growth development should be pursued with specific intent to change travel patterns and reduce personal vehicle use.



## **CHAPTER 5. CASE STUDY: CALIFORNIA DEPARTMENT OF TRANSPORTATION**

### **BACKGROUND**

The State of California, through the Governor's office and Caltrans, has begun to pursue smart growth, or "community-based transportation planning," on a statewide basis due to continued rapid growth in population, industry, and sprawling development. Already facing challenges in traffic congestion and air quality, the state is looking to smart growth policies and programs as one way to achieve quality of life in its communities in the future. Governor's Executive Order D-46-01, passed in October 2001, promoted smart growth planning on a statewide level. The Office of Community Planning in Caltrans was created to assist local communities with smart growth, especially as it relates to transportation planning and projects, and to integrate local community goals with Caltrans planning processes.

### **Growth and Development**

California's population, approximately 34 million as of 2002, is expected to grow to 47 million by 2020 (38 percent increase) and to 58 million by 2040 (70 percent increase). Sixty percent of this population growth is expected in the Los Angeles Basin and the San Francisco Bay Area. Other growth centers for the state are the Central Valley, Inland Empire of San Bernardino/Riverside counties, the Sierra Foothills, and San Diego (59,60,61).

Five million new jobs are expected in the state by 2020, many of these in high technology and service fields. Agriculture share is holding steady or falling in most areas (60).

### **Transportation Concerns**

- **Traffic congestion** – Los Angeles, San Francisco, San Jose, San Diego, San Bernardino, Sacramento, and Fresno are some of the cities experiencing significant delays from traffic congestion. The Los Angeles urban area tops the list in the United States for person-hours lost to traffic delays, with San Francisco second.
- **Environmental concerns** – Air quality is of prime concern, with several areas in the state in non-attainment.
- **Other transportation issues** – Transit agencies throughout the state are experiencing rising labor costs and growing service areas. Intercity bus services (as of 1993) are diminishing, necessitating other regional transportation alternatives (61). From 1990 to 2000, the state invested \$14 billion in public transit in an effort to counteract falling ridership (62).

### **Prior Smart Growth Efforts**

Growth management has been an issue in the state since the 1960s as a means of preserving environmentally sensitive areas. The Governor's Office of Planning and Research, created in 1970, expanded state involvement in local planning coordination and

environmental policy (63). More recently, the 1993 California Transportation Plan included objectives and activities aimed at tying transportation planning to community needs and development.

Some of the many local and regional smart growth and livable communities efforts include the Bay Area Transportation and Land Use Coalition, the Bay Area Alliance for Sustainable Development, the Santa Clara County/Multi-city Partnership, and the Sacramento Housing and Redevelopment Agency (64).

### **Caltrans and State Roles in Smart Growth**

Land use and development are locally controlled in California, with cities and counties making the final decisions on how development will be conducted in their jurisdictions. State agencies, including Caltrans and the Governor’s Office of Planning and Research, partner with local areas to develop land use and transportation plans that complement each other and achieve local goals.

Every city and county in California must develop a General Plan for land use and development, governed by the state’s zoning, environmental, and other land-use statutes but reflecting local goals and objectives (65). Local and regional transportation plans are also required by California statute and are based on community goals. Governor’s Executive Order D-46-01, passed in 2001, promotes smart growth goals in the context of statewide planning priorities and state-controlled properties.

### **Initiatives and Programs**

The Caltrans “Sustainable Communities Initiative” is a collection of programs and policies designed to promote sustainable development (smart growth) throughout the state. Components of this initiative are listed below and detailed in the following sections:

- policies:
  - context-sensitive solutions,
  - accommodating non-motorized travel, and
  - environmental justice.
- programs and grants:
  - safe routes to school,
  - transit-oriented development,
  - community-based transportation planning grants,
  - environmental justice grants, and
  - bicycle transportation account.

### **Community-Based Transportation Planning**

The Office of Community Planning in Caltrans administers smart growth programs and grants, provides coordination and technical assistance to local agencies, and in general acts as a resource to local communities for community and transportation planning.

Three activities within this office address different aspects of transportation and development planning:

- **Community-Based Transportation Planning** provides technical assistance, resource information, and project management/coordination assistance, and administers funding (in the form of grants) for local planning and projects having to do with livable communities. The office also provides coordination for context-sensitive solutions at the district and state levels and participates in collaborative efforts including transit-oriented developments (TODs) and alternative transportation studies.
- **Intergovernmental Review/California Environmental Quality Act (IGR/CEQA)** provides guidelines, oversight, and training related to development activities in the state that impact the state transportation system.
- **Public Participation** develops department-wide public participation programs, maintains an inventory of public participation efforts throughout Caltrans, and assists districts with public participation on a local scale. Planning Grant Workshops and other presentations by Caltrans personnel are delivered to district offices and local communities to educate them on the Caltrans policies and programs described below.

Through the programs described below, the Office of Community Planning and Caltrans work with communities to direct both land use and transportation planning to benefit community needs and goals.

## **Caltrans Policies**

### *Context-Sensitive Solutions*

This department-wide policy, implemented in November 2001, is “an approach to plan, design, construct, maintain, and operate” the Caltrans transportation system in a way that integrates and balances the goals of the statewide system with the needs and goals of the communities that it serves. Design considerations ranging from the aesthetics of a rural highway to the functionality of a highway that must also serve as a town’s main street to the effect of a project on the transportation options for an urban area are all addressed within this policy.

These considerations require extensive cooperation not only between Caltrans and local communities, but also among different Caltrans departments. Twelve Caltrans District Offices act as liaisons with local agencies and interest groups to address local concerns with state-initiated projects and to act as the first contact point for locally initiated transportation projects. Where possible, Caltrans will use flexibility within design guidelines and project planning to respond to the context of a project and to reach a compromise between Caltrans objectives for transportation safety and efficiency and local objectives (e.g., aesthetic, environmental, historical). A presentation entitled “How to Work with Your State Department of Transportation: When Main Street is a State Highway” was developed by the Caltrans District 1 director and has been presented to

numerous communities across the state as a public outreach and educational tool. A statewide steering committee is currently at work on ways to integrate context-sensitive design into all aspects of planning.

#### *Accommodating Non-Motorized Travel*

This is another department-wide policy, requiring Caltrans to consider the needs of pedestrians, bicyclists, persons with disabilities, and other non-motorized travelers when designing, operating, and maintaining transportation projects. Best practices for non-motorized transportation options are incorporated into Caltrans design practices, including the best practices contained in USDOT “Policy Statement on Integrating Bicycling and Walking into Transportation Infrastructure” (66).

#### *Environmental Justice*

The Caltrans Director’s Policy on Environmental Justice (67) and the Deputy Directive on Environmental Justice and Civil Rights in Transportation Decision-Making (68) require Caltrans to ensure that all segments of California communities receive equitable transportation services and that environmental and economic considerations are included in design decisions. The policies are intended to prevent any segment of the population from being discriminated against in the provision, cost, or impacts of transportation services and projects.

### **Programs and Grants**

#### *Transit-Oriented Development*

A statewide study on TOD was recently conducted by the Caltrans Mass Transit Division. This study, which examined the state of the practice of TODs in California and elsewhere, helped Caltrans and the state to define the potential benefits and obstacles to furthering TOD and transit ridership in California. Transportation benefits of TODs found in this study included the following:

- increase in transit ridership of 20 to 40 percent near transit stations,
- reduction in annual VMT of 20 to 40 percent near transit stations, and
- reduction of emissions by 2.5 to 3.7 tons per year per household.

A \$14 billion investment in mass transportation in California over the last decade has laid the foundation for further connections between development and transportation options. Additionally, TODs are one of the project categories eligible for funding under the Community-Based Transportation Planning Grant program described below.

#### *Community-Based Transportation Planning Grants*

Introduced for the 2000/2001 fiscal year, this grant program provides funds for selected projects that support livable communities, smart growth, and links between transportation and community development. The program emphasizes community involvement in project planning. Examples of funded projects appear in the next [section](#). Total funding

for the program was \$3 million per year for the last two fiscal years (part of the state's Local Assistance Funding), with a maximum grant of \$300,000 per project. A 20 percent local or in-kind contribution is required for a grant to be awarded.

#### *Environmental Justice Grants*

These grants are awarded to demonstration projects that develop guidelines and approaches for environmental justice in planning, decision-making, public outreach, and identification of community needs in transportation and development. As with the community-based transportation grants, proposed projects for grants under this program must have a transportation element. Examples of funded projects appear in the next [section](#). Total funding is currently \$3 million per fiscal year. The maximum grant amount per project is \$300,000 with a 10 percent local contribution to the overall project budget.

#### *Bicycle Transportation Account*

This state-funded account provides funding for projects that improve safety and convenience for bicyclists (particularly bicycle commuters) through new or improved bikeways and related facilities.

#### *Safe Routes to School*

This program provides grants for bicycle, pedestrian, and traffic calming projects around school facilities. The objectives are to improve safety for students by reducing vehicular traffic and to encourage walking and biking as transportation alternatives. Like the Bicycle Transportation Account described above, this program aims to reduce motor vehicle trips; an additional objective is to increase the physical activity and health of schoolchildren.

#### *Transportation and Community and System Preservation Pilot Grant Program*

Funded by the FHWA, this grant program is administered within California by the Office of Community Planning (OCP) and provides funding for both planning and capital projects that integrate transportation and community/system preservation.

### **PROJECT SELECTION**

Overall state priorities for transportation planning and projects include reducing traffic congestion, increasing transportation safety, integrating transportation and land use, protecting the environment, and sustaining an efficient and affordable transportation system.

As a part of **Context-Sensitive Solutions**, Caltrans will, where possible, alter plans, designs, and scheduling, and will endeavor to balance its priorities and objectives with those of local communities.

For projects submitted for **Community-Based Transportation Planning Grants**, additional criteria include the following:

- supports livable community concepts (sustainable development and economic growth, transportation choices, compact and mixed-use development, jobs/housing balance),
- offers potential for redevelopment and infill,
- addresses a deficiency or opportunity for coordinating land use and transportation, and
- provides additional community and/or regional benefits.

For projects submitted for **Environmental Justice Grants**, additional criteria include the following:

- develops practical guidelines and practices for environmental justice in planning,
- involves low-income and minority groups in planning, and
- improves mobility, economic vitality, and quality of life in affected communities.

For projects submitted for **TCSP Grants**, additional criteria include the following:

- improves efficiency of the transportation system,
- maximizes use of existing infrastructure and/or reduces infrastructure costs,
- integrates transportation with environmental and community preservation, and
- involves non-traditional partners and private sector land development (69).

## **SAMPLE PROJECTS**

*Photographs reprinted from presentations and the Caltrans website with the permission of Ken Baxter, Community Transportation Planning Office, June 27, 2002.*

### **Community-Based Transportation Planning Demonstration Grants**

*City of Palo Alto, El Camino Real (State Route 82) Corridor Study*

This study, selected for fiscal year 2001, addresses a portion of State Route 82 (El Camino Real) that passes through Palo Alto. Modifications considered include reducing traffic speeds, adding median islands for pedestrian refuges, and addressing other conditions along the street that create unsafe conditions for pedestrians, bicycles, and other non-motorized travelers. The changes to the streetscape (traffic lanes, sidewalks, landscaping, and other amenities) would be one step in developing higher-density, mixed-use neighborhoods along the corridor. This study will act as a demonstration project for dealing with the needs of urban areas that have grown up beside intercity



highways. [Figure 25](#) and [Figure 26](#) show before and (simulated) after designs for a portion of State Route 82.

*Tulare County Redevelopment Agency (TCRA) and Local Government Commission (LGC) Cutler and Orosi State Route 63 Design Charrette*

This grant funded a community-based design charrette to discuss the sections of State Route 63 passing through the towns of Cutler and Orosi. The five-day charrette included public workshops, focus groups, and design sessions for Caltrans staff and community residents to explore design solutions that will satisfy Caltrans objectives for State Route 63 while also supporting community objectives for economic development and sustainable growth. [Figure 27](#) shows a sample redesign from this charrette.

*City of Oceanside Smart Growth Planning/Transit-Oriented Development (TOD) Project*

This grant supports and expands a TOD/Smart Growth planning project by funding the production of new public outreach materials and design simulations (including the cost of imaging technology), funding environmental surveys and studies, and supporting project development processes in downtown Oceanside. Oceanside is exploring the feasibility of TODs around five future stations on the developing North County Transit District commuter rail line.



**Figure 25. State Route 82 in Palo Alto before improvements.**



**Figure 26. A simulation of State Route 82 in Palo Alto after improvements.**



**Figure 27. State Route 63 in Orosi, before and after (simulated).**

## Transportation and Community and Systems Preservation

- **San Francisco – Mission Street Corridor.** The Mission Street Corridor is one of the best-served transit corridors in the region and serves a large number of transit-dependent riders. The grant will be used to partially fund the development of a transit-oriented land-use plan for the Balboa Park Station, which is at one end of the transit corridor. The goal is to use Balboa Park as a planning model for other TODs along the Mission Street Corridor and elsewhere in the region.
- **Escalon.** The high school in the town of Escalon is also the center for numerous community activities including several senior citizen programs. Two of the major arterials through the community, State Route 120 and McHenry Avenue, are being widened. This grant will fund the creation of pedestrian and bicycle pathways along State Route 120 and along another arterial, as well as a pedestrian-activated traffic signal, providing two transportation “links” to the high school for students and other community residents (Figure 28, Figure 29).
- **Creating Transportation Options in San Joaquin Valley.** The San Joaquin Valley is a region of approximately 3 million people (including the city of Fresno) that is expected to grow to 6 million by 2020. Facing increasing problems with traffic congestion and air pollution, as well as economic difficulties, the communities have already joined together to develop a set of smart growth principles, including efficient land use and pedestrian and transit-oriented design for their region. This grant will help to fund the development of model zoning ordinances and design standards to help implement these plans for the San Joaquin Valley.



**Figure 28. Escalon before roadway improvements.**





**Figure 29. Escalon after roadway improvements.**

### **Context-Sensitive Solutions**

- **Willow Creek.** State Route 299, a two-lane undivided highway, currently widens to five lanes (two travel lanes in each direction plus a continuous center turn lane) as it passes through the town of Willow Creek. Town residents, concerned about traffic speeds and the safety hazard caused by the use of their town’s main street as a highway “passing zone,” are working in cooperation with Caltrans to redesign this section of the highway ([Figure 30](#)). In conjunction with a planned re-paving, and in preparation for future streetscape changes (not yet funded), Caltrans has restriped the former five lanes to three lanes plus two bicycle lanes. Speeds through the town have slowed and the collision rate has fallen ([Figure 31](#)).



**Figure 30. State Route 299, Willow Creek, before re-striping.**



**Figure 31. State Route 299, Willow Creek, after re-striping.**

- **El Camino Real, San Mateo.** This is another example of a city's main street that is also a section of state highway. Proposed design compromises (still under discussion) include narrowing travel lanes, moving on-street parking to off-street lots, adding landscaped medians, and installing fiber optic cables under travel lanes rather than in median areas so as not to interfere with future landscaping. San Mateo and Caltrans are continuing to work together to achieve objectives for both the city and the state highway system (70).

## SUGGESTIONS FOR TXDOT

Based on this case study, several possible actions could be taken by TxDOT to both support local smart growth-related initiatives and to enhance features of TxDOT's transportation improvements. These include:

**Promoting smart growth principles within the department of transportation.** Make sure that all divisions within the DOT are informed about smart growth concepts, policies, programs, features, and other efforts that may affect TxDOT or its projects. Help TxDOT staff understand what may be proposed or requested by other agencies and what TxDOT actions and responses will be appropriate. Consider context of transportation projects, including traffic demand, safety impacts, impacts of new projects on current travel patterns and alternate routes, and aesthetics; incorporate these considerations into the design and decision process.

**Working with local agencies.** The Office of Community Planning has representatives in each of Caltrans' 12 districts to act as a "first contact" for information and requests concerning smart growth and context-sensitive design. Where DOT and local community priorities come into conflict, these Caltrans personnel are advised to look for opportunities to resolve these issues for a "win-win" result. TxDOT could use this approach through its senior district transportation planning staff.

**Local program support.** Provide grants or staff effort to support public education, including training programs and workshops. For grants or other funding programs, clearly define the selection and evaluation criteria for project selection as well as the expectations for grant recipients. In California, the level of community support and interest for planning grants has been higher than anticipated, with the number of applications going from 25 in FY 2000 to 75 in FY 2001. Current grants range up to \$300,000 per project.

**Initial best role for state.** In a state like Texas where land-use decisions lie with local governments rather than with the state government, the state's most appropriate initial best role is to communicate, build partnerships and trust, respect community values, and try to work out any issues or conflicts with local communities. Public education, coordination and technical assistance, and funding assistance (if available) are some of the possible elements of state involvement. TxDOT also can lead the way in smart growth by including flexibility in its design and planning policies that will allow for context-sensitive solutions.

## CONCLUSIONS

Caltrans has made significant advances in supporting and promoting smart growth in California within a relatively short time, thanks to a focus on outreach, cooperation, and partnership with local communities. In a state without mandated growth planning, Caltrans is using incentives (in the form of grants) and a willingness to work with local communities to promote sustainable transportation and development.

## **CHAPTER 6. CASE STUDY: OREGON DEPARTMENT OF TRANSPORTATION**

This chapter describes the findings of a case study of the smart growth policies and programs of the Oregon Department of Transportation. This case study should be revealing because, like Texas, the state of Oregon has little role in actually implementing development under smart growth. However, its statutes, policies, and regulations support and encourage smart growth goals, principles, and concepts from both the land use and transportation perspectives.

### **BACKGROUND**

During the 1960s and early 1970s Oregon was one of the fastest growing states in this country. Oregonians worried about losing the environmental and quality of life characteristics of Oregon that they liked, and that the state could not sustain growth at such a rapid rate (71). At the same time, Oregon was enjoying the bold leadership of both the state's governor and legislature, and both responded to the concerns.

#### **Legislation**

In 1969, Senate Bill 10 (SB 10) was passed. It required preparation of comprehensive plans to guide growth. While SB 10 initiated Oregon's growth management efforts, the legislation was weak. It did not have an enforcement mechanism or funding assistance from the state to local agencies. The response from most cities was refusal to prepare the plans. However, this law initiated efforts that were solidified in subsequent legislation.

In 1973 two new statutes were enacted. SB 100 corrected many of the weaknesses of SB 10 and initiated the Oregon land-use program. It also established a commission and an agency (Department of Land Conservation and Development) to implement the growth management legislation. SB 101 enacted farmland protection and more policy framework for the state land-use program. All subsequent growth management and smart growth activity by the state results from those three pieces of legislation.

In 1996 state legislation required cities and counties to approach growth management on a regional basis and then in 1999 required that city and county plans be updated simultaneously within a region.

While the legislation did not name the Oregon Department of Transportation as an implementing agency at that time, subsequent executive orders created a partnership between ODOT and DLCDC recognizing the linkage between land use and transportation and the reality that growth management and smart growth could not succeed without both of them.

#### **Statewide Goals**

The Land Conservation and Development Commission initially established 14 statewide planning goals in 1974, which were expanded to 19 goals by 1976. Each city and county

must meet these goals. They are listed below (72, 73). Those goals that pertain to transportation and related smart growth are expanded (Item 12 shown in bold for emphasis):

- 1) citizen involvement;
- 2) land-use planning – outlined basic procedures for the statewide comprehensive planning program and implementation requirements;
- 3) agricultural lands – requires counties to inventory and preserve and maintain such lands;
- 4) forest lands – same as agricultural lands;
- 5) open spaces, scenic and historical areas, and natural resources – similar to agricultural lands;
- 6) air, water, and land resources quality – requires that local comprehensive plans and implementing measures meet state and federal regulations;
- 7) areas subject to natural disasters and hazards;
- 8) recreation needs;
- 9) economy of the state – calls for economic diversification and for cities and counties to plan for enough land to accommodate those needs;
- 10) housing – specifies that each city plan is to provide diversity of housing types;
- 11) public facilities and services – specifies that adequate public facilities be planned in accordance with the communities needs and capacities (not forced to respond to development as it occurs);
- 12) transportation – system is to provide for a “safe, convenient, economic transportation system.” The transportation plan must:**
  - a) consider all modes;**
  - b) be based on needs;**
  - c) consider social consequences;**
  - d) avoid principle reliance on any single transportation mode;**
  - e) minimize adverse environmental, social, economic impacts, and costs,**
  - f) conserve energy;**
  - g) meet needs of transportation disadvantaged;**
  - h) facilitate flow of goods and services to strengthen local economies; and**
  - i) conform with local land-use plans;**
- 13) energy – requires that land and uses be developed to conserve all forms of energy, based on sound economic principles;
- 14) urbanization – requires cities to estimate future growth and land needs, to zone enough land to accommodate those needs, and to establish urban growth boundaries (UGBs) to separate developable land from rural land; specifies seven factors that must be considered in establishing UGBs;
- 15) Willamette greenway;
- 16) estuarine resources;
- 17) coastal shorelines;
- 18) beaches and dunes; and
- 19) ocean resources.

Guidelines were subsequently developed for each goal.



## **Referendum and Court Challenges**

The 1969 and 1973 legislation was challenged with referendums in 1976, 1978, and again in 1982. In all three elections, voters upheld the legislation. Several court cases in the 1970s and 1980s challenged portions of the legislation, but none was successful (74). A limiting 2000 referendum was approved by the voters but was held to be unconstitutional. Hence, Oregon's growth management legislation has stood the test.

## **Related Executive Orders – Quality Development Objectives**

Oregon's governors have also taken leadership through issuance of executive orders. In 1997, the Oregon governor issued an executive order to encourage the use of state resources to encourage development of quality communities (75). Among the objectives to be pursued are:

- promoting compact development within UGBs to minimize cost of providing public infrastructure and to protect farm, forest, and other resource land outside UGBs;
- encouraging mixed use, energy efficient development to encourage walking, biking, and transit use; and
- supporting development that balances jobs and housing to reduce needs for long-distance commuting and corresponding commuting costs.

## **Oregon Livability Initiative**

In 1999, the governor also initiated an Oregon Livability Initiative, aimed at maintaining the Oregon quality of life (76). This initiative is to help:

- build communities that prevent sprawl,
- make wise use of existing land,
- provide transportation choices, and
- encourage economic growth for small cities.

This initiative includes a 21<sup>st</sup> Century Community Fund providing funding for:

- rural job growth – incentives, infrastructure, facilitating industrial zoning, and supporting commercial buildings and housing to encourage economic diversity in smaller cities and rural areas;
- affordable housing – establishing a housing trust fund with incentives to provide such housing;
- transportation – including access management, road improvements, incentives to encourage infill development, and possible high speed rail in the state's densest corridor;
- water;
- sewer; and
- strong downtowns – discouraging strip commercial development along state highways, providing incentives for mixed use, and supporting the strengthening of main streets as community centers.

In addition to funding, the initiative is to provide support for a Community Solutions Team made up of five state agencies that are to work together and with local agencies and businesses to meet the objectives of the initiative. The Community Solutions Team is to develop an integrated investment plan for Oregon to meet the initiative’s objectives (all of which follow the state’s 19 statewide planning goals). The team is also to encourage state and local agencies and businesses to depart from “business as usual,” something state agencies are reported to have struggled with also. The five agencies making up the Community Solutions Team are:

- ODOT,
- DLCD,
- Economic Development Department,
- Housing and Community Services Department, and
- Department of Environmental Quality.

### **Elements of the Statewide Land-Use Planning Program**

Aside from the goals mentioned above, the statewide program contains state policies aimed at helping the state aid the cities and counties to develop and implement plans that meet the statewide objectives. The program includes the following provisions and aspects:

- requirement for each city and county to have a comprehensive plan (240 municipalities, 36 counties),
- better coordination between cities and counties,
- requirement that all plans conform to the 19 goals and be officially adopted (state must also approve),
- requirement that plans be periodically reviewed and amended as needed,
- statewide goals legally enforceable by both the Land Conservation and Development Commission and by citizens (by filing complaints), and
- grants available to assist with plan preparation and updates.

### **Transportation Rule**

The Transportation Rule was first adopted as an Oregon Administrative Rule in 1991 by the Land Conservation and Development Commission with ODOT support to guide local implementation of statewide planning goal 12 (transportation) (77). The stated purpose of goal 12 is to (78, p. 1):

“Promote the development of safe, convenient, and economic transportation systems that are designed to reduce reliance on the automobile so that air pollution, traffic, and other livability problems faced by urban areas in other parts of the country might be avoided.”

The rule further explains that it aims to:

“improve the livability of urban areas by promoting changes in land-use patterns and the transportation system that make it more convenient for

people to walk, bicycle, and use transit, and to drive less to meet their daily needs.”

The transportation rule splits planning into two phases (78, p- 8-11):

- transportation system plan (TSP) – establishes land-use controls and a network of facilities and services to meet overall transportation needs, and
- transportation project development – implements the TSP by determining the precise location, alignment, and preliminary design of individual TSP improvements.

TSPs are required for each city and county. They are now to be prepared concurrently by region to ensure compatibility with each other as well as with the adopted statewide plan and goals. Conflicts between plans are to be resolved by representatives of the affected governments.

TSPs consist of:

- road plan for system of arterials and collectors, including functional classifications and layout standards; layouts and standards are to include bike and pedestrian provisions; state access management policies are to be followed in conjunction with arterials and state highways;
- intercity bus and passenger rail service, including terminals;
- (for areas with existing transit) transit routes and transitways, terminals and major transfer stations, major transit stops, and park-and-ride facilities;
- (if no transit and UGB area population is over 25,000) transit system feasibility evaluation;
- bicycle and pedestrian network plan;
- air, rail, water, and pipeline plan;
- (UGB areas over 25,000 population) transportation system management plan and travel demand reduction plan;
- (MPO areas) parking plan;
- policies and land-use regulations for implementing the TSP; and
- (UGB areas over 2,500 population) transportation financing plan.

Adoption of the TSP constitutes a land-use decision and is handled in Oregon as a land-use decision, except that the state must approve the TSP and must approve TSP amendments. Each local government is to amend its land-use regulations to implement the TSP, including (78, pp. 21-25):

- land-use regulations;
- subdivision regulations;
- access control measure standards to protect future transportation facility operations;

- process for coordinated review of land-use decisions affecting transportation; and
- (in MPO areas) adopt land use and subdivision regulations to reduce reliance on the automobile to permit:
  - transit-oriented developments,
  - demand management program,
  - parking plan that:
    - reduces parking spaces per capita by 10 percent over the planning period,
    - sets minimum and maximum parking ratios in appropriate locations (e.g., TODs, downtowns, designated regional centers), and
    - requires parking lots over 3 acres to provide street-like features along major driveways (i.e., sidewalks, curbs, street trees, or planting strips); and
  - all major developments to provide a transit stop on site or a connection to a transit stop if requested by transit operator.

The determination of transportation needs is to encourage reduced reliance on the automobile. Measures encouraged in the rule include:

- increasing residential densities within 0.25 mile of:
  - transit lines,
  - major employment areas, and
  - major retail shopping areas;
- increasing permitted densities in commercial office and retail developments;
- designating lands within convenient walking and biking distance of residential areas; and
- designating land to improve job-housing balance, such as affordable housing and housing close to employment locations.

The rule permits an estimate of lower trip generation for mixed use, TOD, and community center types of development. This rule is intended to encourage such developments.

The rule also requires a VMT reduction in all MPO areas (78, pp. 15-17)<sup>2</sup>:

- areas over 1 million population:
  - 10 percent in first 20 years following plan adoption, and
  - 5 percent more in next 10 years;
- areas under 1 million population:
  - 5 percent in first 20 years following plan adoption, and
  - 5 percent more in next 10 years.

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<sup>2</sup> Alternative standards in place of VMT reduction may be authorized by the state Transportation Commission, such as mode splits, vehicle-hours of travel, vehicle trips per capita, etc.

Local agencies are to establish standards for local streets and access ways that minimize pavement and total right-of-way consistent with the operational needs of the facility to (78, p. 26):

- reduce costs,
- provide more efficient use of urban land,
- discourage inappropriate traffic volumes and speeds,
- accommodate convenient pedestrian and bicycle circulation, and
- provide emergency vehicle access.

### **Oregon Highway Plan**

The state version of the TSP is the *Oregon Transportation Plan* (OTP). The OTP has several component pieces, including highway, aviation, bicycle/pedestrian, corridor plans, public transportation, rail freight, rail passenger, transportation safety, and Willamette Valley plans. Most of the smart growth-related provisions are in the Oregon Highway Plan (OHP). The OHP contains forecasts and needs analysis, policies, a highway system description, as well as the access management standards, and several other components (77). The OHP has several provisions that are directly related to ODOT's involvement in smart growth.

#### *State Roads Serving Other than Mobility and Local Access Functions*

ODOT classifies roads that are to be limited to serving as high-mobility, high-speed, high-volume roads as expressways regardless of number of lanes or access control. The primary function of an expressway is to provide interurban travel and connections to ports and major recreation areas. Expressways have no pedestrian facilities, and bikeways are desirably separated from the roadway. Private access is discouraged, and ODOT attempts to eliminate it over the long term. Public road intersections are very limited.

Surface roads not classified as expressways can accommodate other roles. In addition to establishing the state highway plan, the OHP contains a number of specifics that provide local agencies with opportunities to pursue smart growth involving or in the vicinity of state highways. The state highway classification system provides for differing characteristics on state highways inside specially designated areas that could be considered smart growth area cores. The three types of special areas are (77, pp. 41-42, 50-58):

- special transportation areas (STAs) – highway segment designation applied in a compact, mixed-use district with shared and/or street parking that:
  - is a downtown, business district, or community center that straddles the state highway within a UGB or an incorporated community;
  - in which local access needs outweigh highway mobility needs and convenience of movement is focused on pedestrian, bicycle, and transit modes;

- has a plan for an interconnected street network to facilitate vehicle and pedestrian circulation;
- where traffic speeds typically will not exceed 25 mph; and
- in which people once in the area find it convenient to walk between destinations;
- commercial centers (CCs) – designated area in TSP or local comprehensive plan with at least 400,000 square feet of leasable mixed-use commercial space or public buildings clustered in a small area with consolidated access to state highways. CCs must have:
  - convenient circulation (including bike and pedestrian) within the CC,
  - transit access provisions (where transit exists or is planned),
  - shared parking,
  - high level of regional accessibility by a variety or both routes and modes, and
  - compact development patterns;
- urban business areas (UBAs) – highway system segment designation for an existing or future commercial activity node where:
  - the state highway speeds should be 35 mph or less;
  - the needs for local access clearly equal or exceed the need for highway access and mobility;
  - the local system is or will be connected to a network of local streets to facilitate traffic and pedestrian circulation;
  - the area has clustered, compact development; and
  - the area is conveniently walkable for those already in the area.

The OHP provides a set of generalized strategies for making the STAs, CCs, and UBAs function successfully.

STAs, CCs, and UBAs cannot be located along an expressway. However, they may be located on any other type of surface highway.

The OHP Policy 1B (land use and transportation) recognizes that highways also serve in some places as main streets of many smaller communities and commercial and community centers. Policy 1B states (77, p. 47):

“This policy recognizes that...state and local government must work together to provide safe efficient roads for livability and economic viability for all citizens.... It is the policy of the State of Oregon to coordinate land use and transportation decisions to efficiently use public infrastructure investments to:

- Maintain the mobility and safety of the highway system.
- Foster compact development patterns in communities.
- Encourage availability and use of transportation alternatives.
- Support acknowledged regional, city and county transportation systems plans that are consistent with the (OHP).”

### *Encouraging Development To Occur Where It Is Planned*

Hence, Policy 1B can be applied in STAs, CCs, and UBAs to change the function and character of a state highway in a qualifying urban area (see below). At the same time, Policy 1B is used to encourage developers to propose compact development through exercise of ODOT's access management policy by permitting access only in appropriate development areas. ODOT is able to do this as a result of their policy of acquiring access rights along state highways, either when right-of-way is initially acquired or when an existing highway is reconstructed or upgraded. The complete control of access enables ODOT, working with DLCDC and local agencies, to encourage development to locate according to comprehensive plans. This can lead to compact development and location of specified uses in certain areas rather than sprawling out to outlying areas.

### *Converting a State Highway To More Localized Function*

Oregon has 240 municipalities. Most of these municipalities are under 25,000 in population. Many are one- and two-highway towns with the state highway also serving as one of the main streets. Often the downtown or commercial district flanks the state highway.

Under traditional operation, the state highway is a major carrier of through traffic. It also serves to provide access to local businesses, government functions, and other uses located along the highway. Often the combination of major traffic volumes and local access and circulation does not mesh well. High-volume, high-speed roads are not conducive to a more pedestrian-oriented business district. Sometimes parking is hard to find. Safety also can be an issue.

ODOT, through its OHP, can work with local government to designate portions of state highways to serve more local functions. This is done primarily through designating an area as an STA. To do this, the local agency must identify the area for which STA designation is to be requested, then apply for the designation. Normally this is done in conjunction with a proposed improvement, usually to reduce vehicular speeds, reduce pavement widths or pedestrian crossing distances, and/or provide more curb parking. Sometimes this includes diverting some traffic to other streets. All of this can be done under the following conditions:

- Local agency performs a study that includes a plan that shows intercity traffic can be satisfactorily accommodated on the selected state highway, a parallel "bypass," or in some other reasonable fashion.
- ODOT approves the plan.
- The local agency funds the improvements (locally or through a grant).

Strategies suggested by ODOT to meet the objectives of STAs include (79):

- compact, mixed-use development;
- infill and redevelopment;



- building orientation and design to accommodate pedestrian, bicycle, and transit use as well as automobile use;
- well-developed parallel and interconnected street network;
- well-developed pedestrian and bicycle facilities;
- shared parking concept where pedestrian facilities are given locational priority over parking;
- streets easily crossed by pedestrians; and
- little private access on main street/state highway.

A management plan is required. It is to include, among other items:

- STA boundaries;
- design standards to be applied in the STA;
- provisions for traffic, pedestrian, transit, and bicycle circulation networks;
- analysis of local and regional traffic and safety impacts; and
- a list of needed improvements.

Approved plans are typical “Main Street” types of projects that reduce the number of moving lanes, increase curb parking (and sometimes add angle parking), extend curbs, landscape the right-of-way, upgrade street furniture, and/or divert some traffic to other streets.

#### *Bypass Policy*

ODOT has a bypass policy. The bypass policy allows alternate streets to be used to carry traffic that otherwise would travel on state highways. Bypasses may be streets parallel and adjacent to the state highway or highway segments that skirt the urbanized area. If needed to make the local agency’s state highway modification work, a bypass has to be ready to function before the state highway is converted. Sometimes city streets serve as bypasses. In other situations, state highways are used.

#### *City/County Assumption of State Highway Maintenance*

ODOT also encourages local agencies to assume control and maintenance responsibility for roads that no longer serve inter-area or intercity mobility functions. ODOT will trade or transfer a highway to a city or county. If a city can assume responsibility for the state highway, the STA designation process may not be necessary.

#### *Access Management To Manage Land Use as Well as Access*

Part of ODOT’s smart growth approach involves use of access management to encourage development to occur where and how local plans call for. Access management is also used to protect state highways from erosion of functional traffic efficiency and safety (80). With full control of access rights along many highways, ODOT can manage development locations and access through its access permitting decisions. For example, if a major retailer proposes to locate on the edge of a town, and the city’s plans call for retail to be concentrated in the central business district, ODOT working with the local



agency can refuse access at the requested location and make it available in the city's preferred location. Similarly, if ODOT is trying to protect a highway from strip development or development of small commercial parcels near an interchange, access decisions can be effective there, too. Interviews with ODOT staff indicated that these approaches are in fact used by ODOT.

### **Joint Efforts With DLCD**

ODOT carries out several joint activities with DLCD under the Transportation Growth Management Program (TGM). It is this program that enables the two agencies to meld their inputs on land use and transportation to yield management of land use/transportation relationships. TGM's mission is to (81):

“enhance Oregon's livability by fostering integrated land use and transportation planning and development that results in compact, pedestrian, bicycle, and transit friendly communities.”

Efficient use of land use and transportation is explained as conserving supply and reducing demand.

TGM provides:

- grants to local communities to support planning and preparation for implementation – grants over the 1999 to 2001 period ranged from between about \$5,000 to over \$400,000;
- smart development program – advocacy and public education effort aimed at agencies, developers, and other organizations; and
- technical assistance to communities through three programs:
  - code assistance – to remove code barriers to smart development,
  - quick response teams – to help local communities and developers to modify development proposals to be more transportation efficient and livable, and
  - outreach and education – to provide materials that explain smart development and tools for planning and implementing it.

The quick response teams promote several design principles to pursue the statewide goals. These principles are:

- Locate urban uses in urban areas.
- Encourage a mix of uses.
- Provide accessibility for walking and biking (and transit if available).
- Develop attractive functional streets.
- Create special places.
- Ensure compatibility of complementary housing types to support the community.
- Use land and other resources wisely.
- Promote public values.
- Emphasize quality design.

## **Design Standards**

ODOT is currently revising its design standards to be more supportive of smart growth concepts in designated locations. The new standards will add urban cross-sections and accommodations for transit, pedestrians, and bicycles to what has been largely a set of rural design standards for surface highways. The option to provide narrower lanes under certain conditions is also being considered.

## **How Does It All Work?**

Promotion of smart growth is led by the governor and supported by five state departments. ODOT and DLCDC staff credit the governor's prominence for the high level of support and visibility attained for the program. A private organization called 1000 Friends of Oregon also gives smart growth a lot of public visibility and support.

The two departments that are involved in transportation-related aspects are ODOT and DLCDC. While this case study is aimed at ODOT, the two agencies truly work as a team. This may be an ideal model for other state DOTs.

The joint ODOT/DLCDC effort includes:

- outreach and education about smart growth, growth management, and the statewide goals and benefits to be realized by following them; a sample of the more relevant publications produced by TGM include:
  - “Principles of a Balanced Transportation Network,”
  - “Main Street... When a Highway Runs Through It,”
  - “Neighborhood Street Design Guidelines – An Oregon Guide for Reducing Streets Widths,”
  - “Planning for Narrow Local Streets and Planning for Sidewalks on Local Streets,”
  - “Parking Management Made Easy,”
  - “Tools of the Trade,” and
  - other publications available online at <http://www.lcd.state.or.us/tgm/publications.htm>;
- comprehensive plan support and reviews – covering all 240 cities and counties in the state; DLCDC and ODOT staff feel that some of the smallest cities probably should be exempted;
- access management policy – an effective implementation tool of ODOT;
- code assistance to local agencies – necessary to modify regulations to enable local agencies to actually implement smart growth; codes cover smart development, commercial and mixed-use development, infill and redevelopment, and even a complete model code for small communities; and
- quick response planning and design assistance – free conceptual site planning, urban design, and transportation planning assistance for districts and site developments.

However, the transportation progress is made through the comprehensive plans and TSPs developed for each area and the development review processes that involve access to state highways. These result in development that is ideally closer to smart growth than it otherwise would be. Work with local communities to designate and then achieve changes in STAs is another effort that is gaining momentum. Only a few projects have been completed to date. More STAs are being designated, and ODOT has modified its procedures to make it easier to have STA designation approved.

Enforcement to date appears to have been somewhat relaxed. All cities and counties have a comprehensive plan, but that took well beyond the initial deadline to accomplish, partly due to numbers and partly due to the newness of the program and lack of available funds in many local agencies. Enforcement is in the form of “encouragement” and turning down grant applications.

Implementation has been incremental. Agencies at both the state and local levels have had to convert from long-term ways of conducting business to some very different approaches and practices. Gaining understanding of the land use/transportation relationship has been a challenge. It has, in the words of one ODOT professional, taken a change in mindset, something not quickly accomplished. However, progress has been made and there are some very good examples of smart growth in place or coming. UGBs have become well understood and largely accepted. Development plans often comply with UGBs and other requirements but do not really follow smart growth principles.

Some highways have or will shortly undergo conversion under STA designation and “main street programs.” Access management has been under way for many years with mostly good success. ODOT generally includes acquisition of access rights in its reconstruction and upgrade projects, so management of access and development along those sections of the highway system has increased.

## **OREGON SMART GROWTH EXAMPLES**

### **Sample Smart Growth Planning and Projects in the Portland Area**

This case study included conversations with representatives of the Portland region office of ODOT as well as local representatives of DLCDD and other agencies in the Portland area involved in planning and implementing smart growth programs. It was apparent that a wide variety of agencies have been working together on common objectives and principles to try to achieve the area’s growth and quality of life objectives. The agency representatives agreed that sprawl has been reduced and that development is becoming more compact. The west light rail line, Westside MAX, built ahead of development to encourage development of community centers and focused growth, appears to be drawing the kind of results that had been desired. ODOT and other transportation agencies have realized and accepted that they cannot build their way out of congestion and are now accepting freeway congestion during peak periods. Funds for an interstate highway were transferred to a light rail project and other transit improvements in the 1980s as the first result of changed priorities. Community support has been positive, and the Portland area

has been using growth management and smart growth measures and policies for over 20 years.

The agency representatives suggested a variety of projects as examples of the range of smart growth projects that have been undertaken in the Portland area. Those described below have been selected because similar projects might be applicable in Texas.

### *Martin Luther King Boulevard Redesign*

Martin Luther King Boulevard (MLK) (Figure 32) was initially a state highway connecting the near east side of Portland to the state of Washington. It extends north from the business district east of downtown, passing through a combination of commercial and residential areas. Most buildings are over 50 years old, and the corridor has gone through economic decline. Formerly six lanes with no parking, the street was converted years ago to four lanes with a full median in hopes of helping the neighborhood stabilize. Further improvement was needed to help stimulate business, including curb parking since many businesses have no off-street parking. The street now features four lanes with curb parking and a narrow median. With the completion of the parallel interstate highway, traffic volumes decreased substantially.

During the 1980s, in an effort to revitalize businesses and improve appearance along MLK, the street was redesigned to install a full landscaped median with two lanes in each direction. The expected revitalization did not result over the next several years. Business owners claimed that the lack of curb parking was a contributing factor. Left-turn lanes are provided where major left-turn movements exist; curb parking is prohibited at such locations. The City of Portland is now in the process of changing the cross-section of MLK to a four-lane street with a narrow median and curb parking. While both curb parking and median cannot be provided throughout the length of MLK due to need for turning lanes and bus stops, the result is a prevailing condition of curb parking with a narrow median. The median is wide enough to accommodate a single line of trees.

The latest configuration of MLK is felt to be helping businesses compete more favorably. Although the latest conversion has not yet been fully completed, a new Niketown store (at right in Figure 32) has been built in the new section of MLK. Traffic conditions appear to be essentially the same as after the first redesign. Trees exist along both the sidewalks and median to provide a more attractive appearance and walking environment compared to the original six-lane street with no landscaping or parking.



**Figure 32. Improvements to Martin Luther King Boulevard in Portland, Oregon, have spurred increased business activity on this street.**

### *Sandy Boulevard Redesign*

Much like MLK, Sandy Boulevard ([Figure 33](#)) was a six-lane arterial highway heading northwest from downtown Portland. It remains a state highway, but today serves more local movements since an interstate highway serves longer trips in the same corridor. Like MLK, Sandy Boulevard passes through both residential and commercial areas that reached their peaks by the middle of the 20<sup>th</sup> century.

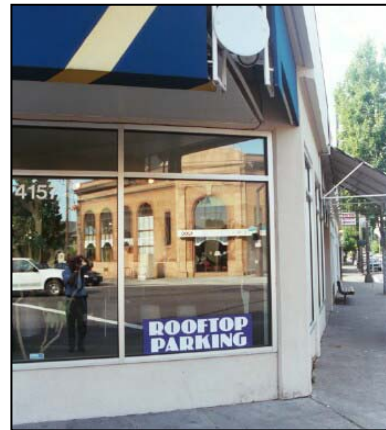
One of the districts along Sandy Boulevard is Hollywood, which was a major shopping and entertainment district prior to World War II. In the later part of the 20<sup>th</sup> century Hollywood experienced a decline. Although most buildings were maintained in good repair, the businesses struggled. Sandy Boulevard was redesigned to a prevailing section of four lanes with parking with the hope that it would help businesses revitalize. The street now has mature trees and parking on both sides throughout Hollywood. It is more pedestrian-friendly, and parking appears to be adequate with a combination of on- and off-street parking. There are still some vacancies, and some businesses appear to continue to struggle. According to city staff, the market for retail in Hollywood is not strong enough to support the size of the district and, while the street redesign has helped, demand for retail is needed to make the district successful.

The section of Sandy Boulevard (U.S. 30, Hollywood District, Portland) pictured in [Figure 33](#) was once a regional center for an eastern portion of Portland. Retail business remains active in the area and rooftop parking ([Figure 34](#)) saves ground space for development or amenities. Efforts to help revitalize the area include returning curb parking to the street, widening sidewalks in sections, and developing pedestrian amenities in areas where underutilized portions of minor intersecting streets once were ([Figure 35](#)).





**Figure 33. Sandy Boulevard in the Hollywood district of Portland has curb parking, improved pedestrian facilities, and better aesthetics.**



**Figure 34. Rooftop parking saves land for other uses.**



**Figure 35. A pedestrian plaza has replaced an acute angle intersection on Sandy Boulevard.**

### *Orenco Station Development*

Orenco Station is a multiuse suburban development located in a rapidly developing area on the west side of Portland. Orenco Station is primarily residential with its own commercial area consisting of mainly convenience retail, services, and restaurants. A major grocery store is located outside the development. The development is to have approximately 1800 dwelling units consisting of single-family homes, condominiums, and townhouses; 40,000 square feet of office space; plus about 30,000 square feet of retail on the first floor of main street buildings with two floors of residential space above. Orenco Station also has a 52-acre shopping center of conventional design east of the residential area.

Orenco Station is about two-thirds complete (the area north of Cornell Road is almost complete; the area south of Cornell has only one townhouse development complete.) Orenco Station features small lot and compact residential development with small setbacks and garages in the rear served from alleys. It has a very pedestrian-friendly atmosphere as a result of the compactness and extensive landscaping. This development does not follow the strict new urbanist rectangular grid layout but still accomplishes the feel of a compact area and walkability. The commercial area is centrally located. Curb parking is provided with additional parking in the rear of buildings. It is easily accessed by foot or bicycle.

The Westside Max light rail line has a station about 0.25 mile south of Cornell that is within walking distance of virtually all of Orenco Station. A site reconnaissance revealed many walkers going to and from both the commercial area and the Max station. Just north of Orenco Station is a major Intel plant now being expanded, which should be within walking distance (after construction is complete) from portions of Orenco Station.

This appears to be the most successful and most attractive of the smart growth residential developments in the Portland area. The retail may not have enough market yet to fully support it. However, with its location on Cornell, an arterial extending across much of

western Portland, development filling in around Orenco Station should make it more vibrant. Walking and proximity to the Max station should reduce vehicle trips below traditional levels for the Portland area suburbs.

Orenco Station is located in Hillsboro, Oregon, the fast growing part of the western Portland region. Development is primarily residential (single family, townhouse, condo, and apartments) (Figure 36) with convenience retail, restaurant, and service businesses. Orenco Station, like most Portland area residential developments, has alley access to garages (Figure 37). Orenco Station is one of the first developments inspired by the Max line built to attract more compact transit-oriented development (Figure 38). The development is very pedestrian-friendly and walkable with extensive landscaping and walkway connectivity. Off-street parking is located behind buildings to avoid interfering with pedestrianways (Figure 39). Several restaurants offer sidewalk dining (Figure 40) to attract people walking through the area.

Orenco Station is an outlying development located adjacent to the Westside Max light rail station (Figure 41). Much of the area between the commercial center and Max station is not yet developed (Figure 42), but residents of Orenco Station walk and ride bicycles to the station. Lower-price housing is being started in an adjacent development. Transit service to the Max station for those not wishing to walk is currently provided by van (Figure 43).



**Figure 36. Residential development in Orenco Station is compact and pedestrian-friendly.**





**Figure 37. Houses in Orenco Station have alley access to garages.**



**Figure 38. Commercial and residential surround a central park in Orenco Station.**



**Figure 39. Off-street parking is located behind buildings in Orenco Station.**



**Figure 40. Sidewalk dining facilities invite pedestrians in the mixed-use Orenco Station development.**



**Figure 41. This photo taken from the Max LRT station in Orenco Station shows the commercial area in mid-ground and the Intel plant in the background.**



**Figure 42. This photo shows the Max Station on the right, and a new transit-oriented development adjacent to Orenco Station on left.**



**Figure 43. For those who choose not to walk or ride bicycles, vans provide service between Orencia Station and the Max Light Rail Station.**

*Lloyd Center*

Lloyd Center in Portland (Figure 44) was started prior to construction of the Eastside Max light rail line. Lloyd center has benefited from Portland’s smart growth policies and proximity to transit. Development is primarily office, major retail (urban mall), convention center, and hotel. It is in the free fare transit zone of central Portland, so a major portion of trips is by light rail and bus. Major pedestrianways are also incorporated, and several streets have been modified to provide more pleasant environments.



**Figure 44. Lloyd Center in Portland, Oregon, is highly walkable and well served by transit.**

*Beaverton City Center*

Beaverton City Center in Portland is a mixed-use development featuring residential, ground floor retail, and offices adjacent (Figure 45) to a Westside Max light rail station. Development is well connected with pedestrianways (Figure 46) that also connect to the



rail station and adjacent development. An adjacent commercial center with flexible space provides additional opportunities to work near the transit station.



**Figure 45. Beaverton Center in Portland, Oregon, is pedestrian-friendly and includes convenience commercial adjacent to the Max station. Employment opportunities are located across the street.**



**Figure 46. Pedestrian connections in Beaverton Center make walking pleasant.**

## **Sample Smart Growth Planning and Projects in Gresham, Oregon**

### *Downtown Gresham*

Downtown Gresham is a typical commercial district of a formerly independent town that was engulfed by a larger city's growth. Many of its businesses appear to have relocated to shopping centers. Existing businesses are primarily of the specialty and service variety, and there are some institutional uses and restaurants. There are few vacancies on the main streets, but some businesses exhibit signs of a struggle to be profitable.

In an effort to add vitality to downtown, Gresham has redesigned some of the downtown streets to increase curb parking, pedestrian friendliness, and general attractiveness. Main Street is the best example. It has been reduced to two lanes with parking on both sides. Sidewalk extensions shelter the curb parking and reduce street-crossing distances for pedestrians. Street furniture and streetscaping make the sidewalks friendlier and makes the traffic and pedestrian priority of the street space more equal. Downtown Gresham now feels easier to walk than drive, mainly due to the sidewalk attractiveness.

The principal commercial section of Main Street has been converted from a four-lane street with parking and narrow sidewalks to two lanes with parking and widened sidewalks. The photo on the right-hand side of [Figure 47](#) shows the original section in the foreground and a new section in the background. Sidewalk extensions shorten pedestrian crossing distances, and angle parking is provided on modified cross streets. Sidewalks have benches, and there is some sidewalk dining, in addition to beautification features. Traffic volumes have declined on this street over time. [Figure 48](#) shows the revitalized area of Downtown Gresham.

City staff hopes a future extension of the Eastside Max will include a station close to downtown. The current stations are several blocks away due to the alignment of the rail line.



**Figure 47. Main Street was converted from four lanes with parking (left photo) to two lanes with parking and wider sidewalks (right background photo) in Gresham.**



**Figure 48. Some views of the revitalized area of downtown Gresham.**

*Gresham Division Street Redesign*

The City of Gresham is aggressively seeking to strengthen its businesses and also to capture more of the growth being experienced in other parts of the Portland area. One of the projects being undertaken is the redesign of Division Street, which is currently a six-lane street with a two-way left-turn lane. There is no parking throughout most of its length in Gresham, nor is there any significant landscaping within the right-of-way. Most of Division is flanked by commercial on both sides.

A study has been completed to develop a redesign of Division to provide bike lanes, parking, and a landscaped median. The purpose of the change is to make Division more attractive, support businesses with more parking, and convert Division from a traffic-friendly pedestrian-unfriendly street to one that is more comfortable for pedestrians and bicyclists. Curb parking has already been added to one section of Division in front of Gresham Station, a major new “big box” shopping center served by the Eastside Max light rail line (Figure 49).





**Figure 49. Division street adjacent to Gresham Station development. Max station is on other side of development.**

### *Gresham Station Shopping Center*

Gresham Station is a new, mainly “big box” shopping center located along Division Street in Gresham. It is on a large redevelopment site adjacent to city hall/civic center. Division Street is to be redesigned to be more pedestrian-friendly on its south side. The Eastside Max light rail line has a station on the northeast corner of Gresham Station (Figure 50).



**Figure 50. Eastside Max station platform adjacent to near Gresham Station Shopping Center; shopping center is in background of photo.**

In many ways, the shopping center looks like any other one in the suburbs – buildings around the perimeter and parking in the middle. However, some parking lot aisles exhibit the characteristics of local streets (as required in the Portland area as part of smart growth site design criteria). This results in mid-lot sidewalks and landscaping and, therefore, easier walking between stores that are across the lots (Figure 51). The rail station provides convenient access to the shopping center, although its location on one corner results in long walking distances to the other side.

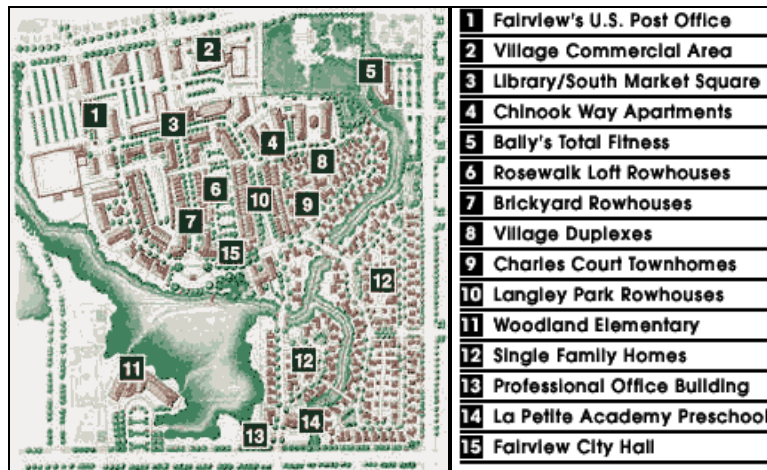


**Figure 51. Pedestrian-friendly parking lots at Gresham Station Shopping Center have internal sidewalks and street system.**

Additional stores will fill in some of the open areas that make the parking lot appear to dominate views. Multi-story residential is under construction adjacent to the shopping center, so walk-in business may soon follow. Proximity of transit and walk-in business may reduce traffic generation, as may proximity to the civic center.

*Fairview*

Fairview is a mixed-use development (Figure 52) in northern Gresham, Oregon. Fairview is mostly residential but has a commercial district that includes a new City Hall, library, post office, and major grocery store. Live-work units and City Hall front the main commercial street (Figures 53 and 54). Transit service is by bus.



**Figure 52. A site map of Fairview Village in Gresham, Oregon.**





**Figure 53. The main commercial street in Fairview has live-work units. City Hall can be seen in the background.**



**Figure 54. A closer view of the live-work units in downtown Fairview.**

## **RESULTS**

After over 25 years, extensive experience has shown that growth management and achievement of smart growth concepts are both possible. As might be expected for the state that has been the pioneer in this area, both the literature and interviews with ODOT and DLCD staff point to the success being evolutionary and full of lessons learned.

To date (71, 74):

- First round of comprehensive plans were completed about 1985, later than called for due to lack of funds and experience.
- Oregon counties have protected about 16 million acres of farmland and 9 million acres of forest land with zoning under statewide planning goals. In comparison, the land set aside for urbanization of Oregon cities is about 1.6 million acres.
- Even though growth has been planned and allowed to continue, urban sprawl is felt to have been successfully contained.
- All 240 cities have UGBs. Most UGBs have been in place for over 15 years with little land added. Some have been adjusted to accommodate more rapid growth than expected (Portland several times, although not expanding the limits very far).
- The Portland area is said to have protected about 77,000 acres of productive farmland.
- Oregon cities have changed zoning ordinances to implement the statewide goals. More efficient development patterns are now permitted, as are a greater variety of housing types. Higher densities are now permitted (e.g., Portland's zoning now permits more than twice as many units in the same land as it had previously with average lot sizes having reduced from 12,800 square feet in 1978 to 8300 in 1982; population capacity of that residentially zoned vacant land increased from 129,000 to 301,000. Meanwhile actual residential density has increased from 3412 people per square mile in 1960 to about 4000 in 2000.
- Farmland consumption has declined substantially in the greater Portland area/Willamette Valley:

<u>25-year Period</u>	<u>Population Growth</u>	<u>Farmland Consumed (acres)</u>
Before 1973	570,000	900,000
Starting 1974	670,000	105,000

- Over one quarter (29 percent) of all residential development inside the Portland UGB was infill and redevelopment compared to about 4 percent in Cleveland, Ohio, and residential property values in North Portland increased by 150 percent from 1992 to 1997.
- Public infrastructure costs for water, sewer, storm drainage, and roads have been reduced.
- Developers have benefited from more predictability and from faster decisions on development applications (state law requires decisions within 120 days).
- State investments now complement each other better.
- State investments focus on enhancing community livability and sustainability (e.g., policy is to locate state buildings in urban centers and along transit routes; state loans and other programs for new housing prioritize locations along transit routes to save residents money on transportation).

- Some state highways also functioning as community main streets now better reinforce local objectives and land uses and are safer for pedestrians.
- New land uses and access management are more compatible with preserving road capacity to lengthen the useful life of state roads.
- Land use along Portland's light rail lines are higher density/smaller lots to take advantage of easy transit access, help pay more of the system operating costs, and reduce the amount of vehicle driver trips.
- TGM has provided extensive technical assistance and grants to local agencies to help them meet smart growth objectives at both comprehensive plan and project implementation stages.
- Between 1990 and 1995, transit use increased in Portland by 4.4 percent while nationally transit ridership was down in similar size U.S. cities by an average of about 9 percent; transit use increased 20 percent more than VMT growth and nearly 150 percent faster than population growth.
- Several major smart growth projects have matured and provide examples for others. Infill and redevelopment has been very active in Portland.
- ODOT is said by staff to have improved its project selection and is making more strategic investments; agency agendas are more unified and supportive. Priorities have improved, too.

## **LESSONS LEARNED**

ODOT in partnership with DLCD presented the following “lessons learned” during individual and group conversations:

- Programs like this that require changes in direction require champions. Oregon has had several governors and legislators that have felt strongly about smart growth and growth management.
- All major changes take time and occur incrementally. Smart growth and growth management has been one of those.
- The state has to be able to offer funding assistance to local agencies if it is to have success in a statewide change like this one.
- Changes in understanding among local agencies, developers, and consultants took time but has been successful. They accept land-use/transportation relationships better, and there is better support for transit.
- Strong, precise regulations have worked best. Earlier, more general and flexible regulations were less predictable for all parties and presented more difficulty in interpretation.
- The requirement to have all municipalities prepare comprehensive plans and TSPs has been excessive. Small communities should be exempted and included in county plans.
- Plans perhaps should be less extensive and the approval process simpler. It takes too long to gain approvals.
- There has to be a way to manage and ensure implementation. Tools need to be available, such as applicable and appropriate development codes and a

comprehensive access management policy, process, and criteria for converting “main streets” into multi-functional roads.

- Access management has been a very effective tool for preserving highway capacity and safety but, at the same time, supporting local growth policies. Joint efforts by ODOT and local agencies have used the access permit process to direct development to desired locations and areas and to encourage street access to state highways to be developed as desired.
- Success depends on working closely with local agencies since they are the ones who have control over local land use and development.
- Local agencies need assistance to meet requirements and be effective.
- Know the program’s objectives and keep them in focus when developing new programs and assistance packages.
- Work with the private sector. They are the developers and financiers, and they will be listened to if they can be sold.
- Provide technical and (concept) marketing assistance.
- Redesign of state highways to make STAs friendlier to businesses and pedestrians and to make the areas more attractive work only if the businesses are viable. A “dead” area is unlikely to be revitalized solely by improving the features of the right-of-way. There has to be a market or the former “unfriendly” state highway will become only a better looking street through a struggling commercial district.
- Start small and focus efforts. It is important to show successes as smart growth implementation starts.
- Provide prototypes of good examples.
- Be entrepreneurial. Sell good ideas to local leaders and do not wait for bureaucracy to accomplish the job. Sell livability; that is popular with almost everyone.

## CHAPTER 7. ANNEXATION MECHANISMS

### ANNEXATION

Annexation is the process by which a city extends its municipal services, regulations, voting privileges, and taxing authority to new territory (82). The reasons for annexation can be summarized as follows:

- to provide urbanizing areas with municipal services;
- to exercise regulatory authority necessary to protect public health and safety;
- to ensure that communities and businesses outside a city's corporate limits who benefit from the city's facilities and services share in the tax burden associated with those facilities and services;
- to expand and protect the city's tax base; and
- to serve as a growth management technique.

Texas' annexation law is outlined in Chapter 43 of the Texas Local Government Code. This chapter was amended by State Bill 89, which was passed by the 76<sup>th</sup> Texas Legislature. The proposed changes took effect on September 1, 1999. Some of the more significant implications of the amendments are as follows (16):

- Cities are required to develop three-year annexation plans.
- Property owners and residents now have greater input into the development of annexation service plans.
- Home rule cities (there are approximately 300 home rule cities in Texas) are still allowed to annex territory on a non-consensual basis.
- The bill stresses that careful planning is an essential element in the successful implementation of an annexation program.

### EXTRATERRITORIAL JURISDICTION (ETJ)

The ETJ of a city is the contiguous unincorporated land adjacent to its corporate boundaries (82). The width of the extraterritorial jurisdiction around a city is dependant on the size of the city and varies from 0.5 mile in the case of cities with fewer than 5000 inhabitants to 5 miles in the case of cities with 100,000 or more inhabitants. From an annexation perspective, a city's ETJ serves two functions:

- There is a statutory prohibition against a municipality annexing land within another's ETJ, and this allots land to the city that the city alone can annex.
- Cities have the right to enforce their subdivision regulations within their ETJs, which is a means of ensuring that cities will not have to assume maintenance responsibilities for substandard infrastructure upon annexation.

## IMPORTANT ANNEXATION REQUIREMENTS

- A city may annex only in its ETJ unless the city owns the land.
- A large municipality may, under certain conditions, annex a small municipality.
- Current law provides for three types of annexation – areas required to be included in a three-year annexation plan, areas exempt from the requirements to be included in the plan, and interim annexations which may be carried out until December 31, 2002, under the old law.
- The total amount of land annexed in any calendar year cannot be more than 10 percent of a city's area as of January 1 of that year.
- Areas included in the three-year annexation plan can be annexed only at the end of the third year of the process.
- Chapter 43 places stringent service delivery requirements on cities proposing to annex territory.
- Cities with populations in excess of 225,000 may annex territory for limited purposes of applying planning, zoning, health, and safety ordinances to the area. Areas annexed for limited purposes must be annexed for full purposes within three years unless the landowner waives this condition.

## GROWTH MANAGEMENT AND ANNEXATION

The concept of growth management has its roots in environmental protection (24). In the late 1960s the first growth management programs were born so that growth can be limited, which in turn would improve or sustain the environment. As the concept matured over the years it became an accepted planning and administrative tool to deal with development. It can now be viewed as a positive technique to guide development rather than a negative force to inhibit it.

The Urban Land Institute has defined growth management as a dynamic process for anticipating and accommodating development needs that balances competing land-use goals and coordinates local and regional interests (24). There are in excess of 30 growth management techniques, of which annexation is one. Annexation can play an important role to increase the comprehensive plan's effectiveness in directing and controlling development.

## LAND DEVELOPMENT POWERS

Growth can be managed through land development powers enforced by the various levels of government. These powers can be grouped into the following types (83):

- **Eminent domain procedures** – The power to take private property for public use through the process of condemnation;
- **Taxation** – Various forms of taxes levied for services rendered;
- **Escheat** – A reversion of property to the state when the owner dies leaving no heirs and no will providing for the disposition of the real estate;

- **Police powers** – A right of a government (federal, state, or local) to regulate the use of real estate. These powers can take the form of zoning, deed restrictions, and various indirect land-use controls; and
- **Annexation** – The process by which a city extends its municipal services, regulations, voting privileges, and taxing authority to new territory.

The land development powers can be vested in the various levels of government:

- **Federal powers** – The following federal agencies embark upon land-use control (83): The Securities and Exchange Commission (SEC), the Department of Housing and Urban Development (HUD), the Federal Trade Commission (FTC), and the EPA.
- **State powers** – All powers not specifically delegated to the federal government are reserved for states in terms of the Tenth Amendment of the U.S. Constitution. The states, therefore, have the right to pass reasonable regulations and to exercise their police power to promote the health, safety, and welfare of the community. The state regulates land use through a number of means, which include state agencies, land management, and special purpose districts.
- **County powers** – With the exception of road construction and maintenance, Texas has not provided for county land-use controls. For example, counties have no zoning powers in Texas. In counties with a population of more than 2.2 million, or in counties that are contiguous with a county with a population of more than 2.2 million, the county can require platting of certain subdivisions.
- **Municipal powers** – The state has passed certain enabling acts that grant cities the authority to regulate land use. Examples of such powers delegated to municipalities are included in the zoning statutes, municipal enforcement of deed restrictions, indirect municipal land-use controls, and annexation. The indirect municipal land-use controls include building codes, site plan review, extension of utilities, maintenance and construction of streets, and subdivision regulations.

## APPROACHES IN OTHER STATES

Municipalities in many states are given powers to oversee development in a circumscribed area around their boundaries. These powers vary widely from state to state. The range of powers in the ETJs varies from total control over development standards to hardly any power at all (24).

Many New England, Mid-Atlantic, and Mid-Western states do not have ETJs. States such as Massachusetts, New Jersey, and Michigan have divided their entire area into towns, townships, or municipalities that can exercise planning and zoning, leaving no territory without these powers. In states like Maryland and Virginia, powerful counties can control growth management in unincorporated areas, acting much like super municipalities. In

other states such as Colorado and Texas, counties are given little authority to guide development. Most states do, however, grant zoning powers to the counties.

Examples of states that give their cities zoning powers in their ETJs are Nebraska, North Carolina, and New Mexico. Cities in California and Idaho are allowed to establish spheres of influence for future annexation. For example, Fresno, California, adopted an ordinance designating an area outside its corporate limits as an “urban growth management area.”

Texas and North Carolina require that cities commit to providing services to the area to be annexed for annexation to be approved (84). Texas is also one of only eight states that allows for non-consensual annexation. Some states take a pro-active approach to annexation. A number of cities in California, for example, prepare detailed plans and appropriate zoning that becomes applicable when annexation takes place.

## **SUGGESTED APPROACH**

To be able to adequately control growth, a city needs to use its full range of development controls. A very important element of these development controls is the power of zoning because it allows a city to control the density of proposed developments. Without such controls, development can take place in a haphazard fashion, which will make it very difficult to correct later. The current land development powers in the ETJs and beyond are too limited to adequately control growth.

The following are the recommended approaches that can be followed in Texas to obtain the required development controls in the ETJs and beyond:

### **Inside the ETJ**

- The city needs to annex the areas within its ETJ for which it would like to manage growth. The city will thereby have its full range of development controls, including the power of zoning over such an area.
- A city’s annexation plan, which includes its ETJ policies, should be included in the comprehensive plan for that city and should support the overall goals of the plan.
- Cities with populations in excess of 225,000 may annex territory in the ETJ for limited purposes. This will allow the city to apply its planning, zoning, health, and safety ordinances to the area for a maximum period of 3 years. Before this period is over, the city must annex the territory for full purposes unless the landowner waives this condition. Limited purpose annexation, therefore, provides for a transition period to full purpose annexation and allows the city to implement its zoning ordinances much quicker.
- The state may extend a city’s zoning power to land within the city’s ETJs.



### **Beyond the ETJ**

- To manage growth in areas beyond the ETJs, counties need to be granted more authority. Counties should, for example, be granted zoning authority in addition to their powers to enforce subdivision regulations. Such extensive land-use control powers will require extensive liaison and coordination with adjacent cities.



## CHAPTER 8. CONCLUSIONS

This completed project includes a variety of findings that demonstrate that smart growth concepts:

- are being used in various ways by not only local communities, but also state DOTs;
- can have an impact on travel characteristics;
- can be used in a variety of ways to productively help address transportation-related issues and needs facing TxDOT; and
- do not necessarily provide a “quick fix” for either quality of life or sustainability issues.

The following sections describe principal conclusions derived from the project findings.

### **TEXAS FACES MANY OF SAME ISSUES AS STATES USING SMART GROWTH**

The survey of a cross-section of state DOTs showed they are involved in smart growth in a variety of ways, including but not limited to growth management, context-sensitive design, planning assistance to local communities, comprehensive planning, travel demand reduction, access management, adequate facilities requirements, pedestrian/bicycle/transit improvements, pedestrian safety improvements, and street environment enhancements. The issues being addressed by those state DOTs through smart growth programs are some of the very same issues facing Texas:

- sprawl and the increasing need for roadway infrastructure in a time of tightening financial resources,
- demands for more sensitive road designs,
- increasing congestion with decreasing ability to build out of it by increasing capacity,
- need to preserve existing roadway capacity and make best use of existing infrastructure investments,
- increased environmental concerns,
- need for multimodal solutions to meet travel demands, and
- localized resistance to some transportation improvements.

### **OTHER STATE DOTs USE SMART GROWTH TO ADDRESS LONG-STANDING ISSUES**

Some state DOTs have used smart growth and its increasing popularity or appeal to address long-standing issues or try to strengthen existing programs. For example, Oregon has attached smart growth terminology to its multi-agency growth management policies and programs. Oregon and other states use access management as part of smart growth efforts. Several state DOTs are funding, supporting, or permitting local investments in improving pedestrian safety on state highways through smart growth programs. Oregon

is using comprehensive planning to consider the transportation implications of various growth and development scenarios and to help make the most effective decisions. Maryland is using its smart growth to try to concentrate state investments in areas designated for growth and reduce the need for additional state transportation investment elsewhere to reduce overall state infrastructure investment needs.

Smart growth is being used as a way to justify and explain state decisions or to assist state DOTs in addressing certain growth, transportation, and quality of life issues.

### **SMART GROWTH RESULTS IN BETTER WORKING RELATIONSHIPS**

Nearly all state DOTs contacted reported improved working relationships with local and regional agencies. This change was due in part to the DOTs and local agencies working toward more common goals under smart growth initiatives or programs.

### **TRAFFIC SAFETY CAN BENEFIT FROM SMART GROWTH**

Some initial studies have shown that some smart growth-type road treatments, such as those that reduce speeds on local streets, have reduced crash frequency and injury severity. For example, research has demonstrated that a pedestrian's chances of survival when hit by a motor vehicle is nine times higher when a vehicle travels 20 mph as when it is going 40 mph (85).

Pedestrian-oriented treatments reduce crossing distances or provide other pedestrian protection. Proper pedestrian provisions, such as sidewalks on all streets, help to separate pedestrians and vehicles. Hence, traffic safety can be improved in some areas by some smart growth types of improvements.

### **REDUCED VMT OVER LONG TERM**

The research found estimates that internal residential neighborhood VMT for a networked street system can be about half of that for conventional neighborhoods with curvilinear, cul-de-sac street systems. While not quantified, it can be reasonably expected that VMT reductions can also accrue from increased mixing of complementary uses and more compact development patterns. Hence, using smart growth street and development patterns can reduce VMT per capita over time through redevelopment, infill, and development of new areas.

### **REDUCED INFRASTRUCTURE**

With the use of infill areas and redevelopment, both smart growth concepts, the need for new infrastructure can be reduced. Both infill and redevelopment can use existing infrastructure. Even if some infrastructure renewal is needed, overall infrastructure investment can be expected to be less than for sprawling peripheral development.

## **SMART GROWTH A “LONG-TERM FIX” AT REGIONAL SCALE**

Growth occurs over time. Redevelopment occurs over time. So does enhancement of the transportation system. While smart growth can improve conditions in areas that are newly developed or subject to improvement projects, other areas that exist and are not changed or improved will not be affected by most smart growth actions. Hence, use of smart growth can produce short-term localized results and long-term city- or area-wide results.

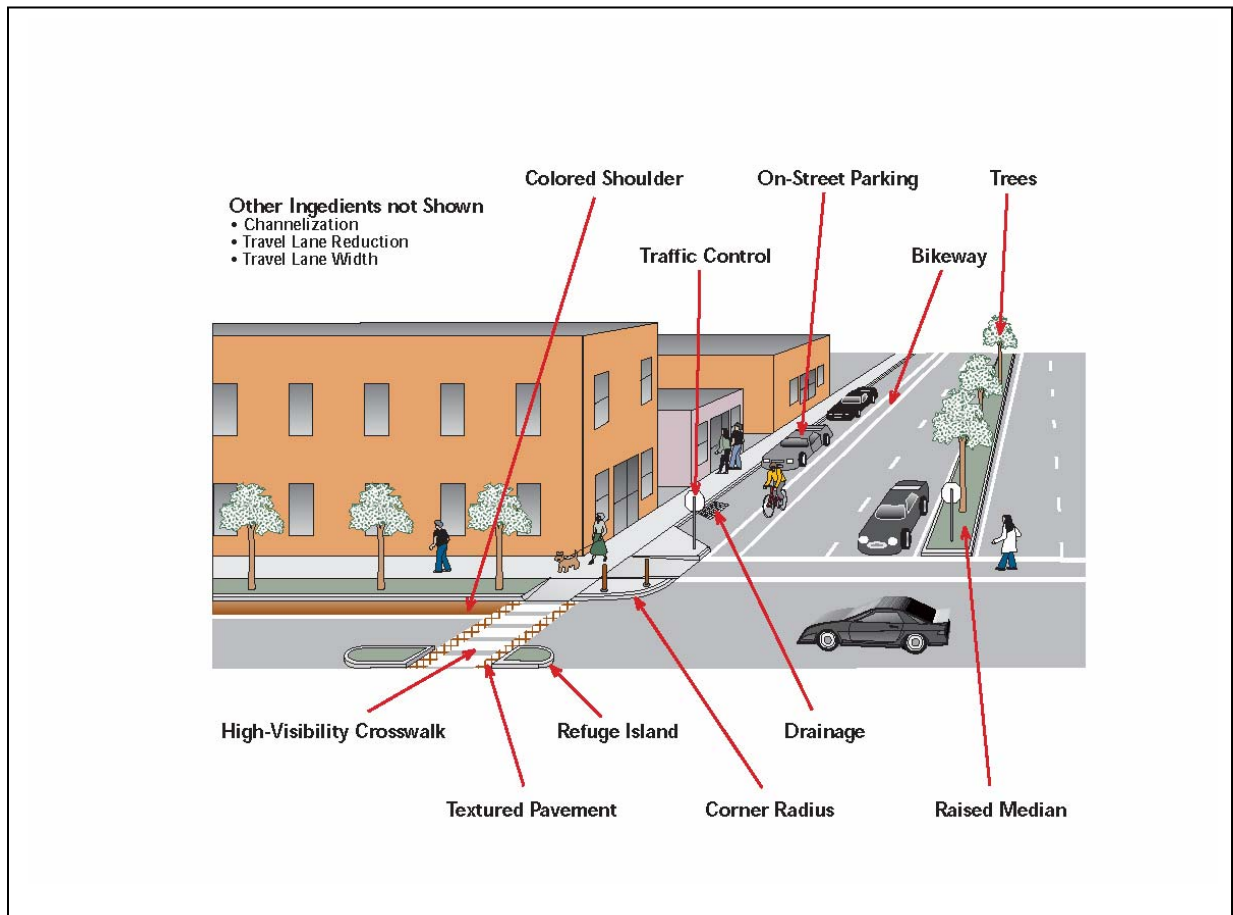
## **DOTS CAN SUPPORT SMART GROWTH WITHOUT COMPROMISING MOST OBJECTIVES**

Many smart growth concepts and programs are already parts of policies and programs of many state DOTs, including TxDOT. For example, TxDOT has already developed a comprehensive access management policy. TxDOT projects already reflect attempts to be environmentally sensitive. The TxDOT program has traditionally been consistent with local plans, and major projects or improvements are usually made subject to local concurrence. Most TxDOT objectives can be met using smart growth concepts. The same is true in other states. Hence, state DOTs can support most smart growth concepts and policies without compromising their own goals or directions.

## **SMART GROWTH WOULD BE APPLICABLE AND BENEFICIAL IN TEXAS**

Some smart growth concepts, such as designation of areas for new growth and de-emphasizing traffic movement functions of some state highways passing through business or other districts, are not currently in use by TxDOT or the State of Texas. However, the concepts and principles of smart growth are generally applicable in Texas, either local, statewide, or both. Aspects like compactness of growth, encouragement of infill and redevelopment, increasing multimodal transportation in major urban areas, access management, and use of enhancements on transportation projects are already happening or about to happen in some areas with public acceptance and support. While many of the smart growth policies and tools are not now being used in Texas, many would work even without enabling state legislation. Most could produce results beneficial to Texas and consistent with community objectives. TxDOT could support many policies and actions that result in smart growth without major policy shifts if it chose to do so.

For example, [Figure 55](#) illustrates how smart growth transportation improvements can be used to improve the compatibility of transportation and land use for mutual support. In this diagram, raised and landscaped medians and islands, curb extensions at intersections, high visibility crosswalks, colored shoulders, curb parking, and a bicycle lane all serve to support the adjacent land uses without compromising traffic operations. Well-delineated crosswalks, the refuge island, shorter crosswalks, and protection of the sidewalks behind curb parking provide a safer and more comfortable pedestrian environment. Selected treatments like these could be applied to many highway sections that serve as the main streets of communities in Texas.



**Figure 55. Smart growth treatments improve the compatibility of transportation and land use. Source: Main Street...A Handbook for Oregon Communities**

### **SMART GROWTH NEEDS CHAMPION(S) TO BE SUCCESSFUL**

Experience to date indicates that smart growth represents enough of a philosophical change that it needs champions to be broadly successful. At the state level, governors, legislators, or interest groups have raised the profile, importance, and benefits of smart growth and led efforts to have state agencies support or lead smart growth efforts. Where that has not happened, smart growth programs have originated at the local levels and moved more slowly and selectively at the state level.

Hence, it can be concluded that local smart growth programs could be supported by Texas state agencies, even without major policy shifts or legislative actions. TxDOT could initiate or strengthen some programs or practices consistent with smart growth and current policies and goals. TxDOT could even take proactive steps in some areas (e.g., project selection and prioritization, access management) to increase its support for smart growth. However, for TxDOT (and other state agencies) to become a strong leader of smart growth and to adopt a program such as those of Maryland or Oregon, there would need to be strong leadership, support, and likely legislation at the state level.

## CHAPTER 9. RECOMMENDATIONS

Based on the findings of this research project, it appears that three additional tasks would benefit TxDOT if it is to be supportive of smart growth.

### **ADDITIONAL RESEARCH – CASE STUDIES OF DOTs SUPPORTING SMART GROWTH**

This project included case studies of two state departments of transportation that are involved in smart growth. Those two states, California and Oregon, have different approaches and different programs. Oregon's programs are among the most aggressive in the country and are largely considered successful by the DOT staff we contacted. California's programs are narrower and focused primarily at supporting local initiatives. Both provide experiences and approaches that could serve and benefit TxDOT and communities within the state.

Our surveys of nearly half of state transportation agencies showed that about 60 percent of the surveyed states have some kind of smart growth program. Several are noteworthy because they differ significantly from the two already studied. Among those that could provide programs or policies that may be good examples for TxDOT to adapt are:

- **Maryland** – statewide leadership and funding priorities,
- **Florida** – growth and access management working together and adequate facilities requirement,
- **Illinois** – corridor improvements,
- **North Carolina** – road design standards, and
- **Washington** – growth management.

Case studies should review programs implemented to support or encourage smart growth as well as experiences, successes, shortcomings, and lessons learned to draw conclusions about how the findings might benefit Texas and TxDOT.

### **GUIDELINES FOR TXDOT INVOLVEMENT IN SMART GROWTH**

Support of smart growth concepts and programs could help TxDOT accomplish some of its objectives and initiate some of its programs as well as help to support local smart growth initiatives. For example, smart growth supports access management and preservation of existing roadway capacity. Both of these are already TxDOT objectives or subjects of anticipated new policy. Since smart growth and its concepts are growing in popularity in many areas, use of smart growth should facilitate and support arguments for TxDOT programs and policies.

It is suggested that guidelines or suggestions be developed for smart growth policies, programs, and related practices. The scope of such guidelines could include those that merely support existing programs, policies, and practices, or they could be broadened to support an expanded role for TxDOT in interfacing and supporting local community (or

new state) smart growth programs and initiatives. Two sample guidelines could be “prioritize urban area funding for projects that support infill development or redevelopment” and “prioritize funding for mobility improvements serving areas having adopted comprehensive land use and transportation plans and corresponding implementation regulations.” It is suggested that the guidelines include descriptions of suggested policies, programs, and other actions as well as examples and implementation tools.

## **WORKSHOPS**

This research project involved the compilation of information on smart growth concepts, principles and objectives, as well as case study examples of smart growth in action. Data obtained in the research were used to create materials for a one-day workshop to implement the research through training TxDOT district and MPO planners and other staff in the principles and applications of smart growth. It is recommended that an implementation project be established to conduct a series of at least three workshops to promote and advance the use of smart growth principles in Texas in a way that will benefit TxDOT programs.



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