Technical	l Report Docu	umentati	on Page		
1. Report No.	2. Govern	ment	3. Recipient's Catalog No.		
FHWA/TX-05/0-4609-1	Accession	ı No.			
4. Title and Subtitle			5. Report Date		
Options for Outsourcing Outdoor Advertising Control in Tex		Texas	August 2005		
		-	6. Performing Organization Code		
7. Author(s)			8. Performing Organization Report No.		
David Luskin and Nathan Hutson			0-4609-1		
9. Performing Organization Name and Address			10. Work Unit No. (TRAIS)		
Center for Transportation Research			11. Contract or Grant No.		
The University of Texas at Austin			0-4609		
3208 Red River, Suite 200 Austin, TX 78705-2650					
12. Sponsoring Agency Name and Address			13. Type of Report and Period Covered		
Texas Department of Transportation			Technical Report		
Research and Technology Implementation Office			September 2003-August 2004		
P.O. Box 5080 Austin, TX 78763-5080			14. Sponsoring Agency Code		
Federal Highway Administration. Project Ti Outdoor Advertising Regulations. 16. Abstract	itle: The Feas	ibility of	Partial Privatization in the Enforce	ment of	
To preserve the scenic value and attractivene dimensions of outdoor advertisements. The enforces these regulations except in certain of Department is interested, however, in the op The researchers evaluated several of these op suitable for outsourcing. The basic option, to cost to TxDOT of at least \$178,000 and poss evaluating permit applications for new signs that were suggested for TxDOT's considerat	Texas Depart cities that hav tions for outs ptions and co o outsource of sibly as much s would add b	ment of ve been d sourcing oncluded nly the ta as \$476 between \$	Transportation (TxDOT) administer lelegated to assume these responsibilities to the pro- that outdoor advertising control is an aking of sign inventory, would have 5,000. Outsourcing the responsibility 579,000 and \$149,000 to this cost. O	s and lities. The ivate sector. n activity an annual for ther options	
17. Key Words 18. D		8. Distri	Distribution Statement		
Outsourcing, Privatization, Outdoor Advertising, Billboards, Highway Beautification, Contracting Out			No restrictions. This document is available to the public through the National Technical Information Service, Springfield, Virginia 22161; www.ntis.gov.		
19. Security Classif. (of report) 20. Security C Unclassified Un	Classif. (of thi classified				

Technical Report Documentation Page

Form DOT F 1700.7 (8-72) Reproduction of completed page authorized



Options for Outsourcing Outdoor Advertising Control in Texas

David Luskin Nathan Hutson

CTR Research Report: Report Date: Research Project: Research Project Title 0-4609-1 August 2005 0-4609 The Feasibility of Partial Privatization in the Enforcement of Outdoor Advertising Regulations Center for Transportation Research The University of Texas at Austin 3208 Red River Austin, TX 78705

www.utexas.edu/research/ctr

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Acknowledgments

The authors wish to thank Tim Anderson (Project Director), and the other members of the TxDOT Project Monitoring Committee - Carlton Bernhard and Kristy Gardner - for their assistance on this project. We also wish to express our appreciation to our informants from other state DOTs, especially Juanice Hagan (Florida), Seema Taneja and Rob Beckon (Michigan), Mitch Surrett (Oklahoma), and Jim Aube (Georgia). Others who provided information for our project are too numerous to thank individually, and we trust that they will not mistake this omission for lack of gratitude.

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Chapter 1. Introduction

The Highway Beautification Act, passed under President Johnson in 1965, represented a paradigm shift in government thinking with regard to the conservation of the natural environment. While many presidential administrations in the twentieth century had set aside pristine areas for conservation purposes and to preserve the country's natural beauty, the Highway Beautification Act (HBA) expanded government conservation responsibility to include not only exceptional areas of beauty which Americans may choose to visit, but also the mundane yet familiar places where most Americans spend a great deal of their lives. In this sense, the Act recognized the fondness Americans felt for their indigenous landscapes even if such views were not always 'beautiful' in the classical sense. Lady Bird Johnson, the primary force behind the effort, was both passionate and convincing in her argument that the simple aesthetics of traditional American life deserved protection in the face of rapid modernization. In citing the need to protect landscapes from billboards and junkyards, the HBA does not purport that any billboard creates blight, but promotes the more reasonable prescription for moderation-that billboards should be part of the landscape, yet they should not be the landscape. Instead of banning billboards outright, as some activists had sought prior to the HBA's passage, the Act set out reasonable uniform guidelines regulating where billboards could be located and how many could be located on any one stretch of road.

In the four decades since the original act's passage, the billboard industry has grown substantially. Billboards placed in strategic locations can generate tremendous amounts of revenue. Yet, the success of the industry depends partly on effective regulation as embodied in the 1965 federal law and the subsequent state laws. By inhibiting the proliferation of new billboards, this regulation makes the existing billboards more profitable in two ways. First, as with any tradable physical asset, a restriction on supply boosts the price—in this case, the rent on a billboard—even without any change in the asset's productivity. Second, a reduction in the number of billboards on a stretch of road can make each remaining billboard more productive. The human brain can focus only on a limited number of distractions at a time, especially while driving. So with fewer nearby billboards competing for attention, any particular billboard will be noticed more by the passing motorists.

For these reasons, ensuring effective enforcement of laws restricting excessive billboard construction is in the long-term interest of the billboard industry as well as the public interest. Yet, effective enforcement is lacking today in many areas of the country. Even though excessive billboard construction drives down the value of all billboards, at an individual level, the construction of signs in non-permitted locations can be a highly lucrative activity. Therefore, the incentive to violate the law if enforcement or punishment is lax can be overwhelming. Effective enforcement is not easy. It requires substantial coordination between federal, state, and local governments, significant personnel and equipment, and an effective strategy for finding and punishing violators. In Texas, as in many other states, this may mean re-thinking the way in which HBA obligations have been met. The Texas Department of Transportation (TxDOT) has taken the step of suggesting that enforcement of HBA be privatized so as to relieve TxDOT of an administrative burden while enhancing the level of specialization in the use of personnel and equipment. Given the size of the Texas transportation network, this is a daunting task. For this reason, the Center for Transportation Research has examined options for outsourcing HBA functions with regard to the legal status of a privatized enforcement unit, capital and labor requirements and the appropriate role for the outsourced company under TxDOT. The rest of this chapter discusses the legal background behind the HBA law and power-sharing between federal, state, and local authorities functions in Texas.

1.1. History of the Federal Highway Beautification Act

The Highway Beautification Act of 1965¹ (HBA) formalized the results of many years of debate that began with the first Federal-Aid Highway Acts of the 1920s regarding whether and how advertising should be controlled under this system of governance and funding for highway construction. While many states had laws for controlling outdoor advertising along their highways, this was the first step taken by the federal government to control outdoor advertising in a uniform fashion along both the interstate and the primary systems of highways within the United States.

The Federal-Aid Highway Act of 1958 initiated the first steps towards federal control of billboards on the interstate systems. The preamble to the act recited that

the congress hereby finds and declares that the erection and maintenance of outdoor advertising signs, displays, and devices in areas adjacent to the Interstate

¹ Pub L. No 89-285, 29 Stat. 1028 (codified as amended in scattered sections of 23 U.S.C)

System and the primary system should be controlled in order to protect the public investment in such highways, to promote the safety and recreational value of public travel, and to preserve natural beauty.²

This Act established a bonus program that provided an incentive of one-half of one percent of a state's construction cost for those sections that met criteria set out in the national standards. Twenty-five states (not including Texas) initially signed up for this program but Georgia and North Dakota eventually withdrew after a court decision and legislative act, respectively. The Act laid out requirements to control advertising within 660 feet of the interstate only. Exemptions were allowed for directional and official signs and various other categories. The Act required no compensation and states and localities were able to remove signs by exercising their police powers of land use control and amortization under zoning ordinances or by using the right of eminent domain.

The 1965 Highway Beautification Act (Public Law 89-285 codified under 23. U.S. §131) was a significant departure from the bonus system of the 1958 Federal-Aid Highway Act. The HBA required the states to exercise "effective control" of signs within 660 feet of the right-of-way of an interstate or primary system highway, subject to penalty of up to 10 percent of a state's highway apportionment from the federal government. "Effective control" meant that as of 1968, signs would be limited to certain exempt categories:

- Directional and official signs (for example, signs with directions to scenic and historical attractions)
- On-property signs for sale, lease, or activity of the property
- On-premise signs advertising activities of the business on the premises
- Historic landmark signs
- Signs advertising the distribution of free coffee by nonprofit organizations.

Importantly, the Act also included an exception to allow signs to be constructed or maintained in areas that are commercial or industrial, either zoned as such or determined to be "unzoned" commercial or industrial according to the criteria specified in federal-state agreements. To qualify for the exception, such signs must also be within certain limits on size, lighting and spacing that are set in these same agreements. The limits vary among states and are required by the HBA to be consistent with "customary use."

² Pub. L. No 85-767, §1, 72 Stat. 885, 904 (1958) (enacting 23 U.S.C. §131(a) (amended 1965)

Over the four decades since its enactment, probably the most contentious aspect of the HBA has been the provisions for "nonconforming" signs. These are signs that are not in conformance with the provisions of the HBA, but that were lawfully erected, including many signs erected before the law's enactment. The Act required payment of "just compensation" for the removal of such signs pursuant to the Act or the state's legislative directions, and stipulated that compensation would be federally funded at 75 percent out of the General Fund.

The HBA also controlled junkyards adjacent to the interstate and primary highways, including those located outside of industrial areas and within 1,000 feet of controlled highways. The most popular part of the Act provided for landscaping and scenic enhancement with 100 percent federal funding for this activity. In our experience, this landscaping provision is what most people outside the industry think of when they hear the term "Highway Beautification Act."

Since 1965 the HBA has been amended numerous times:

- In 1968, it was amended to require acceptance of state and local determinations of 'customary use' with regards to the size, lighting and spacing of outdoor advertising signs in commercial or industrial areas. Nonconforming signs were no longer required to be removed unless there were federal funds available for participation. Many organizations concerned with billboard proliferation, such as Scenic America, view this provision as a turning point in which the Highway Beautification Act no longer possessed the teeth necessary to fulfill its legislative mandate.³ This is because federal funds for removal of nonconforming signs were not made available until the early 1990s, and states were given the option of using these funds for purposes other than outdoor advertising control without being sanctioned for not exercising "effective control."
- In 1970, a Highway Beautification Commission was created to study highway beautification programs and make recommendations for change.
- In 1974, the area of control originally set at 660 feet from the right-of-way was extended to encompass all signs outside of urban areas that were visible from the main-traveled way with the purpose of their message being read from the controlled highway.

³ "The Highway Beautification Act: A Broken Law", Report by Scenic America, 1997

 A 1976 amendment allowed the Secretary of the U.S. Department of Transportation to approve exemption from removal for signs in a defined area if a substantial economic hardship could be proved. The amendment also *required* the Secretary to encourage states to adopt programs to ensure that the removal of certain signs—those providing directional information in the interest of the traveling public—was deferred until *all other non-conforming signs* were removed. Financial assistance was also provided at 100 percent to assist in the relocation of signs that had been relocated prior to the 1974 amendments but which had to removed again as a consequence of those amendments. This amendment also eliminated the landscaping and scenic enhancement program by eliminating its federal funding.

The Surface Transportation Assistance Act of 1978 amended the HBA in three main areas:

- Required payment of just compensation for the removal of nonconforming signs, regardless whether they are removed pursuant to the HBA. The requirement covered signs that were in existence on or after November 6, 1978, and signs removed prior to November 6, 1978 but were the subject of litigation as of that date. Removal of signs due to localities enacting more restrictive controls is subject to this requirement, which overrides the traditional practice of amortization in zoning and land use control. Under amortization, a local government would phase out a nonconforming billboard or other structure by allowing it to remain for a specified period of time—typically 7, 9, or 11 years—during which the sign would either depreciate in value and/or earn enough profit to at least allow the owner to recapture his or her original investment.
- 2. Extended the exemption for on-premise signs to those with messages that are changed "at reasonable intervals" by electronic process or remote control.
- 3. Created a new category of exempt signs that advertise free coffee offered by nonprofit organizations.

In 1991, the Intermodal Surface Transportation Efficiency Act (ISTEA) amended the HBA by authorizing states to use their allocations from the Federal Highway Trust Fund for the

removal of nonconforming signs. The following year, however, the Dire Emergency Supplemental Appropriations Act of 1992 added an amendment that made such use of these funding entirely discretionary with the states. This meant that a state may use federal aid funds to acquire nonconforming signs, but if it chooses not to do so, there is no risk of penalty.

ISTEA also redefined the "primary system" of highways to allow for the changes in highway system classifications used by the federal aid purposes. The scope of control under the HBA was changed to include the interstate highways, the old Federal-Aid-Primary system as it existed on June 1, 1991, and roads added to the newly designated National Highway System. Other ISTEA amendments prohibited any new signs on designated scenic byways. Lastly, this amendment required removal of illegal signs by owners within 90 days of enactment, or by the state if the owner does not comply. Costs were to be paid by the owner.

1.2. Texas Regulation of Outdoor Advertising

Texas has two separate laws controlling outdoor advertising along highways, one that implements the requirements of the federal HBA, and another that regulates signs along rural roads not controlled by the HBA.

1.2.1. Interstate and Primary System Roads

The state of Texas enacted the Highway Beautification Act under a Statement dated May 2, 1972 and filed with the Federal Highway Authority. *Highway Beautification on Interstate and Primary Systems and Certain Roads* was codified under Texas Transportation Code, Chapter 391, in September 1995. Under this legislation TxDOT regulates signs along interstate and primary roads that are erected or constructed within 660 feet of the highway right-of-way or, outside urban areas, that are visible from and erected for the purpose of being viewed from this main right-of-way. The regulated network basically consists of all roads in Texas that are subject to the requirements of the Federal Highway Beautification Act. These are referred to as "HBA-controlled" or, more simply, "controlled" roads.

Some types of signs—for example, directional signs, or outdoor advertising for sale/lease of property—are exempted from the regulations and can be erected or maintained (Texas Administrative Code §391.031(b)). Other exempted signs include outdoor advertising located within 660 feet of an area in which the land use is commercial or industrial (whether by designation or established by consistency of such use). However under §391.032 the Texas

Transportation Commission can by rule regulate the orderly and effective display of outdoor advertising consistent with customary use of outdoor use in an area in which the land use if designated industrial or commercial or is not designated but where land use is consistent with areas so designated. The commission is granted authority to remove outdoor advertising that 1) is erected or maintained in violation of the chapter, 2) may endanger public health, safety, welfare, morals, convenience and enjoyment in the interstate and primary highways, or 3) constitutes a public nuisance. Costs in such exercises will be borne by the owner and the state is entitled to recover any fees incurred in such removal.

The Role of Cities

Texas is among the minority of states where cities can be certified to regulate signs on interstate and primary highways within their corporate limits. Texas has approximately 50 certified cities, including Dallas, Fort Worth, Houston and El Paso; Austin was decertified some years ago when TxDOT found its enforcement to be inadequate. The certified cities can set their own standards for sign size, lighting, and spacing; these standards must be at least as strict as those in the previously-referenced 1972 agreement between Texas and the federal government. However, the standards in this agreement are in some respects laxer than those set under current Texas law (Chapter 391). In these respects, therefore, a certified city may adopt standards that are either stricter or somewhat laxer than the current state standards. In practice, however, the certified cities generally adopt stricter standards; indeed, many of them have partial or nearly total bans on the construction of new off-premise signs.

Owners of signs on interstate/primary highways must obtaining outdoor advertising licenses from TxDOT. In addition, for each such sign, Texas law requires the owner to obtain an annual permit from TxDOT or, for signs in certified cities, from the relevant city agency. TxDOT issues permits for about 15,000 signs annually, and the certified cities issue permits for approximately 8,000 more. Cities that are not certified can control outdoor advertising in both their corporate limits and in the extraterritorial jurisdiction. In these areas, a sign owner may have to obtain separate permits from the city government and from TxDOT.

The preceding description of the allocation of the power among federal, state, and local governments to regulate outdoor advertising covers only the basic points most relevant to this study. The appendix to this report provides additional discussion of this complicated topic; readers may find of particular interest the legal battles over Houston's attempts to apply the

amortization provisions of its sign code to signs controlled by the Texas Highway Beautification Act.

For this study, TxDOT requested that the researchers focus on the enforcement of state outdoor advertising regulations outside the certified cities. TxDOT also recognized, however, that privatization of some of the enforcement activities it currently conducts directly could have ramifications for enforcement within the certified cities. Thus, TxDOT requested the researchers to consider these implications to the extent feasible within the resources for this study.

Off-Premise Signs

For off-premise signs, the Texas Administrative Code (TAC) §21.152 (a) sets maximum dimensions that are inclusive of border and trim but not the sign structure. The limits are 672 square feet for the sign face, 25 feet for height, and 60 feet for length. Temporary protrusions, also known as cutouts, may not exceed 20% of the area indicated on the sign permit and may not bring the total area of the sign (face plus cutout) to more than 807 square feet. In general, alterations to a sign that make the sign's description on its permit inaccurate or no longer current require the issuance of a new permit. This could result from changes to the sign dimensions, location, illumination, type of structure, etc. An exception under TAC §21.152 (f) allows for permanent enlargement of the sign face by up to 10% of the size shown on the permit without the necessity of obtaining a new permit (provided that the new dimensions do not exceed the allowed maximums). If a sign is built with a smaller face than the size shown on the permit or if the face is reduced in size after it is built, a new permit will be required to increase the size of the face beyond the allowed 10%.

According to TxDOT staff interviewed for this study, determining whether a sign should be designated as on- or off-premise can be difficult. To qualify for the on-premise exemption, a sign cannot advertise items or services not sold on the premises or that are only "incidental" to the business activity. For example, the sign cannot even list the telephone number for an off-site business premise of the same company. Apart from such clear-cut cases, however, the definition of "incidental" varies among TxDOT districts and is confusing to business owners. The point at which a sales item is deemed incidental to a business is often blurred, especially in cases when the business is using its advertising space to advertise a loss leader not intended to generate significant revenue directly. Adding to the difficulties of enforcement are the frequent changes of message on many signs.

For non-conforming signs to be maintained and their permits continued, the signs must have existed at the time pertinent legislative changes were made, been lawful on the date they became subject to TxDOT's control, and remain substantially the same as they were on that date.

Signs can be repaired and maintained and do not require the issuance of a new permit for the repair and maintenance as long as the basic design or structure of the sign is not altered and materials of the same type are used. Poles can be replaced as long as no more than one-half of them are replaced within any 12 month period and these must be replaced with the same type of material. Substantial changes that would require a new permit include:

- Adding lights to an unilluminated sign, whether or not they are attached to the sign structure
- Changing the size beyond limitations already established
- Changing the number of poles in a structure, unless the number of poles is being reduced to accommodate a reduction in size
- Replacing more than one-half of the poles in any 12-month period
- Changing the materials used in the construction of the sign; for example, replacing wooden materials with metal materials
- Adding faces or changing the sign configuration
- Increasing the height of the sign from the height designated on the permit
- Making repairs that exceed 60% of the cost to erect a new sign of the same type at the same location.

Once again, there is significant room for interpretation as to how much repair is acceptable before a grandfathered sign should need re-permitting. Some districts have been vigilant in preventing sign companies from fully replacing signs through a series of partial repairs. Other districts simply do not have the resources to perform the level of inspection necessary to catch such violations. The situation is analogous to problems experienced recently by the Texas Commission for Environmental Quality (formerly TNRCC) in preventing grandfathered facilities exempt from the Clean Air Act laws from expanding their capacity under the guise of routine maintenance.⁴ In both cases, some policymakers believe that the administrative costs involved in catching violators are too high for the expected benefits.

⁴ "Pollution regulators investigating Alcoa", Randy Lee Loftus, *The Dallas Morning News*, 05/16/01

Determination of Areas as Commercial or Industrial

The federal government accepts the zoning designations of state and local governments for HBA purposes, except for designations with the purpose of circumventing the Act. Attempts at circumvention are not uncommon, and may take the form of "strip" or "spot" zoning. One problem with enforcing provisions against strip zoning is that it is difficult to prove. The accuser has to prove that the local governing body that enacted the zoning change never had any intention of developing the land commercially. In some cases, the zoning of land as commercial is based on hopes or expectations of growth patterns that would make the land commercially viable but these patterns do not materialize within the time horizon envisaged; outdoor advertising may then be the only commercial activity that proves profitable.

For TxDOT, however, the validity of zoning designations is less of an issue than for many other state departments of transportation (DOTs) for two reasons. First, state and local governments in Texas have comparatively unrestrictive polices on land use—there is no statewide zoning and Houston does not even have a zoning system. Second, in Texas, only cities have the power to zone, and a large proportion of outdoor advertising signs are in certified cities, where TxDOT's responsibility for enforcement of outdoor advertising regulations is limited to oversight of what the cities are doing.

Conversely, the issues concerning the determination of unzoned commercial and industrial areas are more important in Texas than many other states. For a positive determination, Texas requires that an area not be used predominantly for residential purposes and be sufficiently proximate to at least two adjacent qualifying businesses. The required proximity is 800 feet, measured along the edge of the same side of the highway as the principal part of the qualifying businesses. The two businesses must be sufficiently close to the highway (within 200 feet) and must qualify as commercial or industrial activities. The qualification criteria exclude agriculture as well as activities that are not sufficiently substantial, regular, or established. The criteria relate to the presence of staff, hours and length of operation, characteristics of the buildings in which the activities are conducted, etc. According to TxDOT staff, the requirement that a building have an indoor restroom accounts for many of the rejections of the nominated businesses, some of which are merely sham businesses created to obtain the outdoor advertising permit.

1.2.2. Rural Roads

Legislation governing rural roads was codified under Texas Transportation Code, Chapter 394 in September 1995. The road sections under this chapter are those that are not covered by the Highway Beautification Act (i.e., other than interstate and primary highways), on the TxDOT-maintained network (i.e., not the responsibility of local governments), and in unincorporated areas. On these "rural roads," the visibility test for determining whether a sign is subject to regulation is the same as for signs outside urban areas on interstate and primary highways. For each regulated sign, the owner is required to obtain an annual permit from TxDOT. Notwithstanding the commonalities, such as an exemption for on-premise signs, the exemptions and standards for signs on rural roads differ substantially from those that apply to the interstate and primary highway signs.

The rural roads account for only about 5 percent of the outdoor advertising signs for which TxDOT issues permits. For this reason, and because the outdoor advertising regulations differ for rural roads, TxDOT requested the researchers to focus primarily on the HBA-controlled roads.

Chapter 2. Current Enforcement Practices In Texas Outdoor Advertising Controls

The researchers' approach for this study was to define and characterize the major stakeholders in outdoor advertising (ODA) and understand how their interests could be effectively balanced in a new, partially privatized system of enforcing ODA control. The new system must fully comply with federal law and should also result in more efficient interaction among the various players and stakeholders, including TxDOT, sign companies, land owners, and citizens' groups. The initial tasks were to form an overview of how the current system operates, including its strengths and weaknesses, and to obtain participants' views on options for outsourcing some enforcement tasks.

2.1. The Outdoor Advertising Industry

The outdoor advertising industry is characterized by a high degree of revenue concentration among a small number of large companies. The degree of concentration varies by state, with the top ten companies often holding approximately 75-80 percent of the market share. According to Myron Laible, the Director of Regulatory Affairs and Operations at the OAAA (Outdoor Advertising Association of America), the degree of concentration in Texas is relatively high. In addition to Mr. Laible, the researchers interviewed William Vela, Director of Public and Regulatory Affairs with Clear Channel Outdoor Communications in Houston, as well as a few representatives from the outdoor advertising industry in other states. Mr. Vela named his company plus three others as the largest outdoor advertising companies in Texas: Viacom, Lamar, and Reagan Outdoor (which is concentrated in Austin). Overall, representatives of the outdoor advertising industry proved hard to contact for this study, but the consistency of the views expressed by those interviewed suggests that their views are likely to be representative of the industry overall.

Industry members interviewed generally believed any new enforcement system should reduce avoidable delays in the processing of documents and lessen confusion in regulatory interpretation. This attitude was expressed not only in Texas but also in states such as Oklahoma, where recent improvements in the regulatory process had been made at the behest of the outdoor advertising industry. The desired improvements would reduce the amount of enforcement-related

litigation and improve economic efficiency in the industry. Delays in the processing of documents, such as new permit applications, can delay the accrual of advertising revenues and impose other costs on businesses. Confusion in regulatory interpretation works in favor of companies that seek to take advantage of improper precedents, which could lower the ethical bar for the industry as a whole.

Furthermore, all parties involved benefit when decisions are made correctly in the first analysis, and not second-guessed by other levels of government. This is especially vital in the permitting of new sign locations. In the past, outdoor advertising signs were feeble structures made of wooden posts and plywood that could be relatively easily moved. Today, however, the installation of lighted steel monopoles is a major financial undertaking. For this reason, a new sign for which a state DOT (or other issuing agency) has issued a permit erroneously is normally treated as legal even after the error is discovered, provided that the error did not stem from errors or omissions in the information submitted by the permit applicant. The DOTs as well as the courts have generally considered that forced removal of such signs would place an unreasonable burden on blameless parties. The end result is a sign inconsistent with community standards for outdoor advertising that remains in place for many years.

2.2. TxDOT's Current Practices in Outdoor Advertising Control

This chapter's examination of TxDOT's current practices in outdoor advertising control underpins the recommendations for change and the cost estimation presented in subsequent chapters. In addition, the documentation of these practices provides a benchmark for future assessments of the success of partial privatization or other possible changes to the TxDOT's practices in this area. Such documentation enjoys greater credence when prepared, as in this case, by an independent research organization rather than by the organization whose practices are being described.

At the start of this study, the researchers came to appreciate that TxDOT has been meeting at least certain minimum standards for ODA control, since the federal government has not sanctioned Texas for failing to exercise "effective control." It was also clear that, like any program, TxDOT's program of outdoor advertising control has shortcomings. The question was whether these shortcomings make the ODA control program a good candidate for partial privatization, and more so than other TxDOT programs.

Something else that became apparent early in this study was the prevailing view among those engaged in ODA control that this activity gets a low priority from state governments. Generally, the reference was to the priorities of the state's DOT, which is normally the agency running the program. With almost monotonous frequency, the staff of ODA programs around the country, including in Texas, remarked to the researchers that their DOT neglected these programs in favor of the more mainstream activities of building and maintaining highways, etc. As we shall explain later in this report, this perception has contributed to the interest in outsourcing.

Information and views about the practice and reality of ODA control in Texas were obtained from one-on-one interviews as well as from a questionnaire survey sent to each of TxDOT's 25 regional district offices. A helpful resource for comparing Texas practices with other states' and for designing the questionnaire was a 2001 study by the Federal Highway Administration that examined the variation among states in HBA-related practices. The responses to the questionnaire survey in the federal study showed this variation be considerable on matters such as the frequency with which inventory is taken (annually, biannually, biennially, etc.) and the automation of data collection systems. The questionnaire used for the survey mailed to the TxDOT Districts is provided as Figure 2-1.

Between the interviews and the questionnaires, the researchers collected information relating to the following activities performed by the TxDOT District offices for ODA control:

- Conducting periodic inventories of structures subject to ODA control, including signs lacking the required permits
- Processing applications for sign permits, new as well as renewals
- Providing customer service—answering queries from the public regarding ODA control rules and procedures
- Conducting site inspections at the proposed locations of new signs
- Carrying out enforcement actions pursuant to identified violations
- Coordinating enforcement efforts with cities and other governmental units
- Reporting information on ODA control activities to TxDOT headquarters.

2.2.1. Inventory and Enforcement Practices across Districts

Heterogeneity in enforcement is found not only between states but within them as well. Texas, with an enforcement system that is highly decentralized among the 25 regional districts, is certainly no exception. To some extent, enforcement practices depend on the size of the HBA enforcement task, which varies considerably among Districts (see Table 2-1). Districts that face a smaller task tend to address their HBA duties on a more ad hoc basis, while larger districts usually devote at least one full time staff member to focus on beautification efforts. The use of full time staff dedicated to HBA was one of the strongest predictors of effective enforcement. Also important is the ability to retain staff in HBA enforcement positions for long periods of time. Long-term HBA staff often spoke of the "mental map" they have fashioned over a period of years which allows them to know instantly during a routine drive-by where permitted signs should be located and whether modifications to the sign structure have been made. The addition of Global Positioning System (GPS) or RFID technology will make the process of locating signs simpler, yet the evidence suggests that there is still no perfect substitute for experience. An analogous case in point would be cab drivers in London, who must undergo three to four years of training to learn every street and intersection in the city before earning their license, despite the fact that all cabs have been equipped with GPS. Even HBA staff who had worked in the field for a year or more referred to themselves as beginners.

Figure 2-1. Questionnaire for June 2004 Survey of Outdoor Advertising Control Practices by TxDOT Districts

OUTDOOR ADVERTISING QUESTIONNANIRE

INTRODUCTION:

This questionnaire is about the control of outdoor advertisements under the *Texas Transportation Code* and accompanying regulations.

Section 1 is about the control of outdoor advertisements along the interstate and primary highways pursuant to the *Texas Transportation Code, Chapter 391* and the federal *Highway Beautification Act* of 1965.

Section 2 is about control of outdoor advertisements along rural roads pursuant to the *Texas Transportation Code, Chapter 394*.

SECTION 1: Interstate and Primary Highways

- 1) How many miles of controlled roads are in your district?
- 2) What is your best estimate of the current number of illegal signs in your district?
- 3) In the following statement, please fill in the blanks with your best estimates:

With 90% certainty, the current number of illegal signs is at least _____ but not more than _____.

- 4) What is the total number of legal, permitted signs within your district? _____
- 5) Approximately what is the percentage of signs in your district that have up-to-date photos on file?
- 6) Excluding driving time, how many minutes does it take you on average to perform a site inspection for a new permit?
- 7) When was the last time your district completed a full inventory?

- 8) At the sign site, how many minutes does it take on average to inspect a sign for inventory purposes? Please provide separate estimates for:
 - a. A sign that has never been inventoried before _____
 - b. A sign that is already in the inventory _____
- 9) How do you conduct field measurements of new signs?
- 10) How often do you need a vehicle with high ground clearance in order to perform inventory?

a) almost never b) occasionally c) often d) almost always

SECTION 2: Rural Roads

- 11) How many miles of rural (non-HBA controlled) roads are in your district?
- 12) What is your best estimate of the current number of illegal signs on the rural road system? _____
- 13) In the following statement, please fill in the blanks with your best estimates:

With 90% certainty, the current number of illegal signs on the rural road network is at least ______ but not more than ______.

SECTION 3: Comments/Information

Please use the space below to add any comments or other information that you wish to share with us.

		Number of illegal signs on controlled roads			Number of
Indicator/ corresponding question in Fig. 1	Miles of controlled roads (Q6)	Best estimate (Q2)	Lower bound estimate (Q3)	Upper bound estimate (Q3)	legal, permitted signs (Q4)
Abilene	850	49	40	60	520
Amarillo	1,702	46	46	50	712
Atlanta	700	35	30	50	739
Austin	1,400	50	26	60	950
Beaumont	1,100	48	60	125	507
Brownwood	1,570	12	12	20	271
Bryan	1,350	93	93	105	450
Childress	524	10	3	15	120
Corpus	900	25			375
Dallas	1,355	35	35	60	943
El Paso	511	0	1	10	128
Fort Worth	971	11	11	20	575
Houston	675	30	25	50	2,080
Laredo	1,100	25			450
Lubbock	1,000	47	44	50	425
Lufkin	698	75	27	100	369
Odessa	1,000	15	10	20	174
Paris	541	200	100	300	300
Pharr	1,200	100	115	172	574
San Angelo	1,000	8	8	10	201
San Antonio	1,017	120	75	120	1,464
Tyler	1,051	15	15	25	806
Waco	1,500	76	72	80	960
Wichita Falls	799	5	5	7	348
Yoakum	898	38	35	40	503
SUM	25,412	1,168	888	1,549	14,944
AVERAGE	1,016	47	39	67	598

 Table 2-1. Indicators of the Size of the HBA Enforcement Task as of June 2004

Note: Figures in italics are CTR estimates based on demographic and geographic characteristics of the Districts. The other figures are the District responses to the CTR survey (Figure 2-1).

Comparative Capital Endowments

Districts with relatively large HBA operations can more easily justify the acquisition of vehicles and equipment specifically for HBA purposes. These capital assets can include some that are specialized to HBA enforcement, in that they have little use in other District activities. In

contrast, the Districts with relatively small HBA operations tend to conduct these operations with vehicles and equipment originally acquired for other purposes. Because of the reliance on these "hand-me-downs," such Districts are less able to modernize their HBA operations. Also, the sharing of equipment between HBA and other functions makes precise record keeping and the costing of services in such districts harder and complicates the estimation of the cost of an eventual outsourcing arrangement. This does not imply that the smaller districts were incapable of keeping good records or adequately fulfilling their HBA obligations. On the contrary, some small districts such as Wichita Falls had advanced record systems while some large districts were found lacking in record keeping practices, equipment, and personnel. In the survey results shown in Table 2-2, district officers were asked what equipment they currently use to identify signs and measure their dimensions—a critical task for determining whether signs have exceeded their permitted size limit. Four districts stated that they used laser guns, the technology that would likely be adopted in an outsourced arrangement. Most other districts used distance measuring devices (DMIs) to match signs with their permits, and wheels or tape measure to measure the dimensions of signs.

Indicator/ Corresponding question in Fig. 1	Date of last full inventory (Q7)	Frequency of need for vehicle with high ground clearance (Q10)	Equipment used to take measurements (Q9)
Abilene	2001	Almost never	Таре
Amarillo	1999	Regularly	DMI and wheel
Atlanta	N/A	N/A	N/A
Austin	NA	Occasionally	DMI
Beaumont	1995	Almost never	DMI
Brownwood	N/A	N/A	N/A
Bryan	2002	Often	N/A
Childress	1999	Almost always	Eyeball
Corpus	N/A	N/A	N/A
Dallas	2002	Almost always	Laser, DMI
El Paso	N/A	Occasionally	Wheel, tape
Fort Worth	2004	Often	Eyeball
Houston	2002	Almost always	Eyeball
Laredo	N/A	N/A	N/A
Lubbock	2004	Occasionally	Pole and wheel
Lufkin	1992	Occasionally	Eyeball
Odessa	2004	Occasionally	Laser
Paris	45	Almost always	Wheel
Pharr	2000	Occasionally	DMI
San Angelo	2004	Often	DMI, wheel, pacing
San Antonio	1999	N/A	N/A
Tyler	2003	Almost always	DMI, wheel
Waco		Rarely	DMI,
Wichita Falls	N/A	Never	Laser
Yoakum	2003	Almost never	Laser

Table 2-2. Indicators of HBA Enforcement Practices

Training

The extent to which TxDOT employees received training specific to HBA is also far from uniform and may explain many of the distinctions in interpretation that were found among district officials. Some HBA officials, for example John Baxter in the Fort Worth District, reported they had relied much less on formal training than on self-instruction and on-the-job learning. The lack of a standardized training regimen is certainly one reason why distinctions in interpretation currently exist. Most of the distinctions in interpretation found were relatively minor. One example would be the question of whether signs that advertise the sign company itself count as unoccupied—some districts stated this was a legitimate use of the sign face and some said it was not. Still, relatively minor distinctions in enforcement can lead to major problems if they are exploited, i.e., if sign companies collect precedent cases of the loosest regulatory practices and attempt to lower the overall bar. It is clear that if a new, outsourced system is to be an improvement over the current system, it must include a more centralized form of training. Handing over power to one centralized company will not necessarily be sufficient. Other measures that could keep the practices of different players in line with each other include the preparation of a training video that would instruct all new employees in the preferred definitions of such categories as conforming versus non-conforming, occupied versus unoccupied, or the proper definition of unzoned commercial and industrial. For continuing education, an interagency list-serve for announcing policy changes or airing of questions of interpretation and or a continuously updated Web site would be advantageous in facilitating better communication.

2.3. Case Studies of Districts

In addition to the survey that was e-mailed to all Districts, the researchers conducted in person or phone interviews with representatives from selected districts. Below are summaries of findings from five district case studies which we believe serve as an illustrative proxy for Texas as a whole with regard to the current strengths and deficiencies of TxDOT practices. We have included opinions and advice from each district representative regarding TxDOT's options for outsourcing.

2.3.1. Houston

Enforcement in the Houston district is not without problems. The city of Houston has had a longstanding moratorium on billboards since the early 1980s and has planned to amortize existing billboards to make the city billboard free in the next decade. This legal action has greatly constrained the supply of available sites for outdoor advertising in the Houston district and has made available remaining sites—for example, those outside of the Houston extraterritorial jurisdiction yet strategically located next to satellite cities—extremely valuable.

Inventory and Enforcement Practices

The Houston district office is understaffed and lacks the necessary technology to enable personnel to complete their tasks in the same way as their colleagues in Dallas. Three individuals from the district work on HBA enforcement: two field staff and one manager. One of the field

staff estimated that to fully comply with the state mandate on HBA enforcement, four full time positions would be needed. He recommended designating one person to exclusively work on illegal signs since currently the staff lacks the time to pursue illegal signs as aggressively as needed. This task, the staff member believed, was more specialized than general inventory and therefore required a specialist.

There is no access to GPS within the office. Field staff do not carry laser guns, trimbles, laptops, or even digital cameras. District staff do not typically measure the dimensions of signs. They make visual inspections in order to roughly judge whether a sign is within the specified limits. If a sign is suspicious, HBA staff will ask a survey crew to go out and measure it.

The enforcement within the six counties for which the Houston office is responsible has weakened in recent years due to a sharp spike in new permit applications. The district office is also responsible for filing quarterly reports on the status of the 12 certified cities in the district. The rash of new activity is tied to exploding development in Houston suburbs and the fact that new billboards are banned within the city itself. Customer service duties have also spiked recently as staff must answer a constant stream of queries from landowners and sign companies.

One result of these circumstances has been added pressure from the industry on the District office to allow signs that they otherwise would not be asked to permit. In late 2003, the Houston office issued permits for 22 signs to RTM Media that were erected over the Christmas holiday in the extraterritorial jurisdiction (ETJ) of the City of Houston, an area that had been off limits to new signs since the billboard ban became law in the 1980s. When officials in the City of Houston found out about the signs they imposed heavy fines on RTM Media, which responded by showing the city that valid permits had been issued by TxDOT. In reality, obtaining a TxDOT permit for a sign in the extraterritorial jurisdiction of a city does not preclude additional requirements imposed by the city itself, a fact that RTM Media apparently ignored. The City of Houston has shown frustration with the TxDOT district office for not checking with the city before issuing permits within the Houston ETJ. If RTM Media is eventually found guilty in this ongoing litigation, the company may be liable for hundreds of thousands of dollars in fines. This case is illustrative of the kinds of challenges that emerge from power sharing between state and local governments in the current system. Outsourcing in itself could not be expected to solve such impasses, yet it would provide an opportunity to analyze the current relationships and preempt areas of confusion before they result in crisis.

Advice Regarding Outsourcing

In the opinion of district personnel, the Houston office is currently in over its head and would appreciate assistance in any form, be it additional help from TxDOT or from a private company. One source of the Houston district office frustration is the fact that the city of Houston, which dominates the area, is better equipped in terms of equipment and personnel to handle sign enforcement even though most of the new sign construction is occurring outside the city limits.

2.3.2. Dallas

The HBA staff in Dallas have a better handle on their enforcement duties than do their Houston counterparts. Importantly, the Dallas personnel appear to have made full use of the database designed by TxDOT for record keeping. They have used this database as a template to recently complete a comprehensive inventory. The HBA staff include three individuals fully or primarily dedicated to beautification. All the staff help out with field work, including the permitting of new billboards.

Inventory and Enforcement Practices

The Dallas District office has made several improvements in recent years in its methods of data collection and has the most advanced database observed of any of the TxDOT districts. However, while the district stands behind their inventory of federal aid primary highways, they admittedly place little emphasis on keeping track of signs on rural roads. In their words, they keep a "mental inventory" from their familiarity and long experience in traveling these roads. Although a formal inventory of rural roads has never been performed, the Dallas office has some of the information to create one should the resources become available. For example, the District could generate a file from all the active permits for rural signs to seed a formal electronic inventory. Part of the enforcement on rural roads currently comes from residents who phone in complaints. There is also ad hoc enforcement on rural roads during times when the officials are already in the field en route to conduct a sign inspection or inventory along a controlled section of road. Most of the signs that are illegal along rural roads are small signs. The Dallas office reported having found only two monopoles without permits on rural roads, but more may appear as the urban growth encroaches on rural land.

According to the Dallas District's interpretation of the Highway Beautification Act, the state does not require inventory to be performed yearly so long as it is performed consistently. An annual inventory was seen as excessive because existing signs rarely change in ways that

produce violations, and only about 40 signs are added to the system each year. It took Dallas two and one-half years to perform their latest inventory, which was the first to make use of GPS.

General frustration was heard from Dallas officials about the unwillingness of certified cities, including Dallas, to adequately police their own signs. No cities do routine surveillance and some have refused requests to answer survey data from the district. In the major cities, sign policy is often politicized to a disturbing extent.

Communication between the district and certified cities is inadequate and has waned. The TxDOT office often has to take it upon itself to find out when sign ordinances or city limits change within certified cities.

Dallas District staff reported many cases of sham businesses intending to qualify the area around a proposed new sign as unzoned commercial or industrial. Some of these "businesses" even had fake restrooms to meet the requirement under Texas HBA regulations that a qualifying business have a restroom. Texas also requires that permit applications for new signs include zoning maps if the proposed site is within the limits of a city; in such cases, the Dallas staff often take the extra precaution of obtaining zoning maps directly from the city concerned.

Advice Regarding Outsourcing

The Dallas team was generally ambivalent as to the merits of outsourcing. They favored outsourcing the enforcement actions against illegal signs, excluding the final actions against repeatedly non-cooperative sign owners (whom TxDOT would deal with directly). The representatives also saw some merit in outsourcing inventory and new site inspection, but they believed that if the system was outsourced, then the contractor should take over more functions than routine inventory. The creation of an outsourced system that would be responsible solely for inventory purposes struck officials at the Dallas office as inefficient because inventory taking can be combined with other field activities. Other tasks, such as answering routine phone inquiries, were perceived by Dallas staff as more tedious than the inventory itself.

2.3.3. Tyler

The Tyler district is a rural district with a generally well-run office. The HBA requirements necessitate almost one full time employee equivalent. The inventory is conducted in the traditional manner with milepost readings taken with a DMI. Digital photographs have been used in recent years. Signs are rarely measured as a matter of course. A significant

percentage of the signs in the region surrounding Tyler are nonconforming signs built prior to the institution of the Highway Beautification Act. For this reason it is important to monitor the particulars of each sign to ensure that no major upgrades have been made.

Inventory and Enforcement Practices

Several external factors complicate the enforcement efforts. According to district personnel, more advanced technologies need to be deployed to expedite the inventory process yet there is currently no budget to acquire them. In addition, time is sometimes wasted deciphering the digits of rusted permit markings or locating permit tags that have not been properly posted. Relations with local sign companies were described as generally cordial, though several companies have reportedly been ruthless in their attempts to undermine the District's HBA enforcement efforts and find loopholes in the law. District personnel blamed some of the problems on alleged contradictions in the instruction manual and overly legalistic language.

Several of the problems Tyler experienced could be ameliorated through the purchase of GPS technology and the issuance of more durable identification plates. The size and quality of the plates is clearly inadequate, and several districts complained about the time complications in enforcement associated with illegible plates.

Tyler was one of several districts that expressed frustration in delineating authority to certified cities and adequately coordinating the district's efforts with those of the cities. According to Tyler, several small cities perform HBA enforcement unevenly and are sometimes even unaware that they have HBA responsibilities. This is an area of concern for TxDOT as it is ultimately responsible for enforcement even in the certified cities. If outsourcing is restricted to areas outside certified cities, the problems of spotty and inconsistent enforcement in the certified cities will remain. One possibility would be for TxDOT to request that certain certified cities defacto decertify themselves and hand over responsibilities to the contractor.

Advice Regarding Outsourcing

The district officer in charge of HBA enforcement showed a genuine concern for ensuring that her region remained free of unpermitted billboards and was willing to embrace any change that would bring with it new funding and new manpower, outsourcing included. She also stated that representatives from the private sector may have greater success in communicating with sign companies than do representatives of the state.

2.3.4. Laredo

The Laredo District shares some characteristics with the Houston district in that it is completely dominated by the certified City of Laredo, where the sign standards differ in some significant ways from those of TxDOT. One example is that within the city, signs are required to be at least 1,000 feet apart, rather than the usual 300 feet. Some of the smaller cities in the District have their own policies as well. Del Rio has had a moratorium on any new signs for over a year. Small cities find non-conforming locations too difficult to handle and enforce. For example, the city of Cotulla actually gave up their certification responsibilities because of these difficulties.

Two individuals run the HBA activities in the District, including almost all of the outdoor advertising administration and enforcement. TxDOT maintenance staff provide the right-of-way (ROW) group with some assistance in HBA enforcement, occasionally by responding to requests, but mainly by volunteering information about problems they happen to notice. Sometimes maintenance staff will take photographs to help the ROW group decide what action is needed. They stated that with such a large district, they have to rely on some help from maintenance staff with intelligence gathering. This type of ad hoc relationship was also present in Tyler.

Neither individual is devoted to HBA activities full time. Their main work is on ROW matters, especially land purchase and utility coordination. HBA activities account for less than one day of work a week, although staff indicated that this allotment should be increased. Apparently this office had more people in the past and the HBA activities are now under some degree of stress due to inability to bring on new FTEs and a lack of office personnel that can help with all the related HBA matters.

Inventory and Enforcement Practices

The ROW staff tries to maintain an annual inventory cycle. Currently, there are 458 legal signs permitted in the Laredo District and on the TxDOT HBA electronic database. Inventory is generally performed in a piecemeal fashion rather than conducted consistently at one particular time of the year. The group is under continuous pressure from other obligations and this prevents them being able to dedicate a substantial period of their schedule to conducting a thorough and systematic annual inventory of the signs.

Laredo ranked the tasks in the following manner for time-consuming activities.

- (1) Enforcement actions
- (2) Inventory
- (3) Other surveillance
- (4) New permit applications and renewals

Around six new signs per month are approved for the District but renewals have recently taken up a larger amount of work. In order to encourage timely renewals, in the late 1990s TxDOT sent out a reminder notices to all permit holders. With the reduction of personnel at the District this practice has now been dropped. It is not a legal requirement and was done as a courtesy. As in other Districts, the most common type of violation is the lack of a required sign permit.

Advice Regarding Outsourcing

The main recommendation was for increasing staff at TxDOT so long as enforcement of the HBA remains a TxDOT activity. If the system is outsourced, they recommended that a "hybrid" form of assistance could be undertaken by privatizing the taking of inventory—one of the more time-consuming tasks. If a private company could undertake the inventory and recording of the signs, the Laredo staff felt they could then handle the rest of the administration, including attending to the illegal ones and issuing permits.

2.3.5. San Antonio

The San Antonio District, while lacking the advanced technology used in Dallas, nevertheless appears to be reasonably vigilant in enforcing outdoor advertising regulations. Enforcement occupies one person full-time, another part-time on clerical tasks, and a temporary hire for the inventory conducted each summer. Enforcement has reportedly tightened over the past several years, following a period when the District neglected outdoor advertising in favor of other right-of-way responsibilities.

Inventory and Enforcement Practices

Enforcement on HBA-controlled roads is the priority because of the potential for federal sanctions. For rural roads, the District will process applications for sign permits, but undertakes no active enforcement efforts. Enforcement in rural roads would require a major increase in resources, partly because of their remoteness and many lane miles, and the high proportion of signs that are illegal. District staff also noted rules for rural road signs that make field checks

more time consuming than for signs subject to the HBA. An example is the exemption for small signs that provide directions to a business without including other advertising content; according to the District HBA officer, difficulties would often arise both in determining what counts as advertising and in "eyeballing" from the road whether the sign is sufficiently small (under 32 square feet).

When conducting the annual inventory, the officer who works full-time on outdoor advertising is accompanied by the temporary summer worker. For safety reasons, this officer may also bring along a colleague on special field reviews, such as new sign inspections, when heavy traffic is expected.

The inventory inspection relies on comparison between what the inspector sees in the field and the file record and photograph. When the comparison suggests an actionable discrepancy in sign dimensions or location, the inspector requests the District's maintenance division to take measurements. The data on sign location do not include the coordinates that are measurable with GPS, which the District has yet to incorporate into its system of outdoor advertising enforcement. The District's inventory of signs has many missing values for such fields as type of illumination, number of poles, and height above roadway. In part, this resulted from the changeover to the new database that TxDOT launched in 1999 and introduced to the districts in 2000; some of the fields were new, and data for some other fields failed to migrate from the old to new database.

Difficulties in viewing permit plates from the road lead to occasional errors and lapses in enforcement. The inspector may fail to see a plate and mistakenly send a violation notice to the sign owner, who may opt to simply get another plate rather than dispute the notice—hence, the number of signs with two plates affixed.⁵ When the inspector finds that traffic conditions and shoulder availability preclude reading the plate number under safe conditions, the check of the plate is limited to its presence. In extreme cases, the check of the plate is entirely dispensed with.

Enforcement actions against violators and the review/issuance of new permits take up most of the time devoted to the outdoor advertising control. The most common form of violation is maintaining an illegal sign (without a permit), and the vast majority of violators are small players, many of whom may own just one sign. Sham businesses (aimed at qualifying the area

⁵ When the recipient of a violation notice for a missing plate informs the District that the plate is really there, and the records show a currently valid permit, the District takes no immediate action. Instead, the District waits until the next annual inventory for another check.

around a proposed sign site as unzoned commercial or industrial) are "not a minor problem, but they are just too hard to fight." Some uncertainty was expressed about TxDOT's authority to enter the premises of a business to check whether it qualifies as commercial or industrial activity, and an instance was recalled when the owner of a business warned the TxDOT inspector that she was illegally trespassing. Evidently, this concern is partly why the District resorts to phoning the owners of the two nearby businesses listed on the permit application, and going through the list of questions to determine whether the business represents a commercial or industrial activity. In actuality, TxDOT staff do have the authority to enter the premises of a business to perform the qualifying businesses test for issuance of a permit.

The District uses discretion in picking its battles with sign owners, and opts for nonenforcement of some minor rules that would be too costly to enforce. Examples provided concerned church signs too large to be exempt from regulation, and on-premise signs that include phone numbers to off-premise sites.

Advice Regarding Outsourcing

The principal outdoor advertising officer in the San Antonio District favored outsourcing the inventory and possibly some other "surveillance" activities. She was wary, however, of outsourcing the activities entailed in reviewing new permit applications, including the field inspection of the proposed sign site. Her concern was that permits erroneously issued cannot be revoked, and that the contractor may be less accountable than a TxDOT employee for erroneous decisions.

Chapter 3. Survey of Outdoor Advertising Practices in Other States

Regulation of billboards and other forms of outdoor advertising is common to all states. At present, several states—Alaska, Maine, Vermont, Rhode Island and Hawaii—have enacted comprehensive bans on the construction of any new billboards. In most states, the responsibility for enforcing outdoor advertising regulations still falls to the state department of transportation. Legal billboards must be constructed beyond the right of way; therefore it is not obvious which functional area of a state DOT should handle their regulation and control. The responsibility devolves to the maintenance division in some states, but more often to the right of way division.

At present, three states have fully or partially privatized their systems of outdoor advertising control. Florida stands out among these states for the scope and technological sophistication of the privatized operation. Michigan has privatized to a similar extent, but the contractors there makes less use of advanced technology. Oklahoma's privatized operation uses technology comparable to Florida's, but is narrower in scope. In addition to presenting case studies of the systems in these three states, this chapter also discusses the situation in Georgia, which is currently working toward implementing a privatized system.

3.1. Case Study: Oklahoma

Geographic area (square miles)	68,679
Outdoor advertising structures with permits (number)	7,190
Miles of controlled roadways (number)	6,500

Contacts: Mitch Surrett, Legal Counsel at ODOT Montie Smith, HBA Coordinator at ODOT Preston Stinson, Director of Operations at Site Info Mark Caywood, Legal Counsel at Site Info

3.1.1. Overview

The Oklahoma Department of Transportation (ODOT) employs two major contractors for HBA-related services. Site Info, a subsidiary of Smith-Roberts Corporation formed for the express purpose of providing these services, completes the requisite biennial inventory of all outdoor advertising structures and enters them into a database. Site Info currently receives approximately \$200,000 per year for its work. The level of compensation was greater in the first two years of the contract when the company was responsible for eliminating ODOT's inventory backlog. The precise level of compensation is re-negotiated each year.

The database was created and is overseen by a company called Database Management headed by Skip Brooks, a long-term associate of Mitch Surrett, the chief legal counsel in Oklahoma,. This contract is also worth between \$150-\$200,000 per year. Other contractors include six law firms that together provide ODOT with some \$300,000 a year in legal services, including some field research on illegal signs. A separate contract to a company called Graphic Imaging was used to transfer Oklahoma's paper files to digital format. The Oklahoma DOT still relies on in-house staff to perform the site inspections for proposed new signs as well as many of the post-construction inspections.

3.1.2. Background and Impetus for Outsourcing

Oklahoma is similar to much of Texas geographically and in some ways had a similar program of outdoor advertising control. Like Texas, Oklahoma has a high number of outdoor advertising structures given its low overall population density. Neither state has the intricate system of zoning and comprehensive planning found, for example, in Florida. On the other hand, Oklahoma and Texas differ significantly in certain respects relevant to a comparison of their ODA control programs. Unlike Texas, Oklahoma does not certify cities to do their own HBA enforcement. In addition, in contrast with Texas's decentralization of ODA control across 25 Districts, Oklahoma has a centralized system with only one office, making inputs and outputs relatively easy to study. Mr. Surrett continues to play a major role in the process. He saw the privatization through from its inception and still maintains control of the contracting process, which is renegotiated each year.

Oklahoma's inventory prior to privatization was so incomplete that Mr. Surrett believed the state would run the risk of disciplinary action by the federal government if it did not enhance HBA enforcement. Prior to the 1990s, inventory was not performed on a regular basis. Responsibility for inventorying signs was given to the division engineer in each of the eight district offices.

The ODOT office responsible for HBA enforcement is headed by Montie Smith, who has worked there since 1993; this office was previously headed by Mr. Surrett. In 1996, Oklahoma

began a biennial inventory with the partial assistance of an outside contractor. The purpose of this first contract was to assist ODOT in inventorying legal nonconforming signs, which are more time consuming to inventory. From the success of this initial experiment, Mr. Surrett decided that an outsourced arrangement could work on a broader, statewide scale. Skip Brooks, who now heads Database Management, was initially hired on a six-month contract to gather data regarding employee practices at ODOT to prepare the system for outsourcing. He worked with Mr. Surrett in reviewing the current HBA practices and estimating how much outsourcing would cost; they produced a report in 1997 that was the basis for the current system, which was initiated in 2001.

3.1.3. Oklahoma Contracting Process

Oklahoma has preferred to keep its contracting process flexible. For this reason, the contracts with Site Info and Database Management are re-negotiated every year. Small changes are made to the scope and the compensation. The initial contract was designed with only one bidder in mind, and there has never been any serious competition for the contract from competing companies. Both parties have remained committed to using short-term contracts in part because a longer contract would trigger a requirement in Oklahoma law for competitive bidding. Contractors receive a flat yearly fee and are responsible for covering their own expenses. Site Info is given the right to use certain capital assets of ODOT such as its library of aerial photographs, which Site Info uses routinely in its inspections. The Oklahoma contract specifies that all signs must be measured, photographed from more than one angle to give appropriate context, and that all information must be entered in digital format. Although the contract does not specifically require a two-person crew for sign inventory, this has become standard practice. In addition to recording the physical location and characteristics of signs, Site Info is responsible for determining the classification of the sign, such as whether it is exempt or nonconforming. Many of the nonconforming signs were erected prior to the first incarnation of the Oklahoma HBA and do not need to be located in a commercial or industrial area. The other major class of non-conforming sign comprises those that were initially constructed in line with HBA provisions but that later became non-conforming due to an increase in spacing requirements.

Mr. Surrett decided to use a pilot program to test the viability of outsourcing before the current contract came into existence. Rather than designating one area of the state to be privatized, as occurred in Michigan, Oklahoma elected to have the contractor inventory only nonconforming signs. These signs typically take longer to inventory because they are not standardized in construction the way modern signs are; therefore, more rigorous checks are required to ensure that they have not been modified. Mr. Surrett believed that if a private contractor could effectively inventory these signs, they could inventory any of the signs. The initial pilot program began in 1996 and taught ODOT a number of lessons it applied in 2000, when a more comprehensive contract for privatization was drawn up. While some of the specific provisions of the contract have changed in recent years—for example, Site Info's compensation for completing inventory was lowered after it completed the first inventory—the structure and scope of the contract has remained stable since 2001.

3.1.4. Funding Structure

The fees that Oklahoma collects for licenses and renewals (Table 3-1) do not come close to covering all of the expenses of ODOT's outdoor advertising control program, even without considering payments to the contractors. Fees were last increased in 1993 and new penalties for non-payment were recently added. As a condition for raising the fees, ODOT promised the sign companies to be more efficient in issuing new permits. Several sign companies in Oklahoma have actually lobbied for further increases in fees to generate the funding needed for more timely regulatory decisions. Such an increase in fees may also benefit these companies by inhibiting the growth of competition from smaller companies whose small profit margins render them more vulnerable to fee increases. Typically, large sign companies have favored increasing license fees in lieu of permit or renewal fees since this change would favor companies that own many signs. Mr. Surrett has resisted this change and has instead suggested creating a two-tiered license system that would charge small businesses—those with up to ten signs—significantly less than larger businesses. Even if the two-tiered system is adopted, the majority of revenue is expected to come from permit and renewal fees. Only 180-200 licenses are extant at any one time, compared to an average of 8 permits that ODOT processes each week (albeit not all are approved). A progressively tiered schedule of license fees has the potential advantage of creating conditions for easier entry of new companies into the outdoor advertising business. If the level and progressiveness of commercial license rise high enough, however, sign companies will attempt to avoid higher tier fees fee by starting small affiliates.

Task	Cost
Sign permit application	\$100
Renewal	\$20
Outdoor advertising license	\$400
Annual license renewal	\$200
Penalty for late renewal (per month)	\$50
Replacement title	\$25
Replacement tag	\$25
Title transfer	\$25

 Table 3-1. Oklahoma Fees for Outdoor Advertisers

Transportation Enhancement funds provide the lion's share of funds used to compensate Site Info, Graphic Imaging, and other contractors. About 80-90% of expenditures on these contracts are eligible for federal reimbursement under the Enhancement program. Toll credits also serve as a potential source of HBA funding.⁶

3.1.5. Fieldwork

Once the inspector arrives at the location, recording the appropriate data usually takes between 5 to 10 minutes, sometimes longer for nonconforming signs. Every sign will be inventoried at least once during a two-year period. For modern signs, the time required for an inspection depends on the context and condition of the sign. Deteriorated identification plates are a problem, but the Oklahoma plates seem to be more durable and less susceptible to corrosion than the ones that the researchers encountered in Texas. Signs located along roads with high traffic require that the worker pulls farther off the road. Rural roads present a safer situation for inventorying, yet most have no paved shoulders. For this reason, the easiest highways to inventory are the rural interstates that have low traffic volume and broad shoulders.

The technology deployed in the Oklahoma fieldwork has continued to improve since outsourcing commenced in 2001. Site Info recently upgraded its vehicles and auxiliary equipment at an average cost of \$15,000-20,000 per vehicle. Of this amount, \$10,000-12,000

⁶ When ODOT increases its contribution to a highway project above the required federal match, it gets a credit that can be applied to its required contribution for other projects. The contributions that earn credits are often obtained through toll revenues.

was for an upgrade to the GPS system for more accurate field measurements. The system formerly used, "backpack GPS," was accurate to within three meters, whereas the new *Lyca* system is accurate within one meter. Using the new system, measurements are taken using special binoculars that, by hooking into the GPS, allow measurement of sign dimensions.

Of the states we studied, Oklahoma is the only one that makes extensive use of aerial photos in addition to GPS. The primary purpose of the aerials is to assist workers in keeping their bearings and cross checking the accuracy of the GPS readings. The use of aerials does present some complications. Site Info resorts to minivans to store and transport a rack of three-foot long aerial photographs, but regular vehicles will be adequate once the company switches to digital photos. All informants we spoke with in Oklahoma believed that aerial photographs were a highly useful tool in their operation and should be included in the future Texas system.

Site Info's Preston Stinson and his assistant Rob drive approximately 30,000 miles a year and inventory approximately half of Oklahoma's 72 counties. The inventory process is usually done one county, and one side of the road, at a time. In Oklahoma, inventorying both sides of the road at the same time would be quite difficult because most of the inventoried roads are separated highways. As a result, Mr. Stinson drives almost 10 miles for every mile of road he actually inventories. ODOT does not adhere rigidly to the goal of inventorying half of Oklahoma's signs each year. From April 2003 to April 2004, Site Info spent five and one-half months performing inventory approximately three days a week. The rest of the time was spent on other related projects, and only 2,000 of the 7,190 total signs were actually inventoried. For the subsequent 12 months, however, ODOT planned to have the contractors work almost entirely on inventory. This type of flexibility is one reason why Site Info and ODOT have thus far preferred annual contracts and why ODOT has preferred biennial inventory.

3.1.6. Database Construction

An important feature of the Oklahoma system is the functional specialization among multiple contractors involved with outdoor advertising control. One aspect of this specialization is the use of one contractor to inventory and another to create and oversee the sign database. Mr. Surrett considered this separation logical because creation and operation of the sign database demands rather different skills and capabilities than does inventorying. In general, this is a sound argument for having different parties undertake these functions when states opt to partially privatize their program of outdoor advertising control. The database is the fulcrum on which the success of the entire program depends. Such a critical task should be entrusted to businesses (or units within government agencies) that have a proven track record of concentrating on similar work. In Georgia as well, the sign database has been established independently of the (future) contract for undertaking ODA control operations.

Development of a new ODOT database to replace the mainframe commenced 6-7 years ago. The current system is accessible only to ODOT and Site Info, while the new Web-based system will be accessible in part by the public and in full by paid subscribers. A Web-based system is relatively inexpensive and has the advantage of providing on-line access to sign companies and other parties, including law firms doing business for ODOT. The finished system was expected to be fully operational sometime in late 2004; however, the public section of the Web site was still not online as of March 2005.⁷ ODOT expects that the greater access to information under the Web-based system will reduce the number of phone inquiries ODOT receives.

3.1.7. Other Recommendations

The researchers conducted a follow-up interview with Skip Brooks of Database Management in September 2004 to further explore the implications of past privatization experience for the possible implementation of a partially privatized system of ODA control in Texas. Mr. Brooks recommended that TxDOT focus on developing a solid database structure as a vital first step, and that the structure contain the necessary segregation to allow the set of accessible information to differ among stakeholder categories such as sign owners, the contractor(s), and TxDOT. Mr. Brooks also recommended that TxDOT consider taking short video clips with digital cameras at sign sites, as opposed to still photos only, for the purpose of adding context and spoken commentary. This would reduce the number of occasions on which times inspectors would have to return to a site to obtain additional information.

The researchers also sought Mr. Brooks's views on whether TxDOT should purchase an existing database or build its own. He mentioned that Florida has been attempting to market its sign database system to other states, but that system does not accommodate a detailed sign history for each structure. The result of this limitation is a risk that one party may unintentionally overwrite the information another party has entered.

⁷ <u>http://www.okbillboards.com/</u> Accessed March 16, 2005

3.2. Case Study: Florida

Geographic area (square miles)	53,927
Outdoor advertising structures with permits (number)	15,900
Miles of controlled roadways (number)	11,500

Contacts:

Juanice Hagan, Deputy State ROW Manager- Outdoor Advertising Susan Rosetti, Outdoor Advertising Manager, TBE Group Richard Doyle, Senior VP, TBE Group Cheryl Malin, Realty Specialist, FHWA Florida Office

3.2.1. Overview

In September 2001, the Florida Department of Transportation (FDOT) entered into a tenyear contract with the TBE Group, which agreed to responsibility for certain fieldwork activities in the enforcement of state ODA regulations. The contracted activities included a complete inventory over the first two years and annually thereafter, plus field reviews requested by the FDOT's contract manager, Juanice Hagan. The field reviews are conducted principally for:

- processing new permit applications
- checking on compliance with orders for sign removal or other corrective action
- checking that signs have been erected within 270 days of permit issuance, and to add the data on these signs to the inventory

During all field activities, the contractor is responsible for reporting to FDOT any observed instances of possible noncompliance. Other responsibilities of the contractor are the provision of litigation support—documentation and attendance at hearings and depositions—and removal of illegal signs when the owner fails to comply with a removal order. The contract is written in such a way that the consultant's exposure to risk is limited:

- If the consultant has to attend hearings or depositions on more than forty days, FDOT will be billed on a per diem basis for each additional day.
- If the quantity of structures subject to inventory increases more than 5 percent during the term of the contract, the amount of the contract will be adjusted. TBE does not expect this provision to become effective.

• Whenever the average price of gasoline in Florida exceeds \$1.541, the contractor will be reimbursed for the excess fuel costs. TBE had sought a broader cost escalator provision, but FDOT consented only to this provision for gasoline prices. By mid-May 2005, the average gasoline price in Florida had risen to over \$2.20 per gallon.⁸

FDOT's remaining responsibilities for outdoor advertising enforcement include administration of the contract with TBE, maintenance of the FDOT outdoor advertising database, administrative and enforcement actions such as decisions on permit applications and cancellations, and handling inquiries from the public. These activities are centralized at FDOT's main office in Tallahassee, where five employees work on the outdoor advertising program three are senior employees and two are clerical.

On occasion, FDOT will undertake special fieldwork outside the scope of the TBE contract, such as affixing a violation notice to an illegal sign when the owner is not contactable. Inspections for sign damage after a natural disaster also fall into this category, although this is a low priority because sign owners can usually manage to stay within the allowable limits on repair. FDOT has a number of regional inspectors in their right-of-way division whose primary responsibility is the removal of illegal signs from the highway right-of-way. Occasionally, one of these inspectors will report to FDOT an illegal sign that is outside the right-of-way, and FDOT then requests that TBE go out to the sign location for an inspection.

FDOT seldom goes into the field to verify TBE's data, at most a couple of days in a month. However, the contract specifies quality control procedures for TBE to follow, and these include spot checks of TBE's own work. For the activities in the outdoor advertising program that FDOT conducts in-house, the total annual cost is about \$1.3 million.

3.2.2. Legal and regulatory framework

Florida's laws and regulatory practices in the area of outdoor advertising control differ from those of Texas in several respects worth noting:

- 1. The state does not delegate HBA responsibilities to "certified" cities.
- 2. Florida issues permits for the sign face rather than the structure: there are 23,100 permitted sign faces, or about 1.5 per sign structure.

⁸ See the Daily Fuel Gauge Report of the American Automobile Association at <u>http://198.6.95.31/sbsavg.asp</u>.

- Both states regulate outdoor advertisements on "rural roads" (i.e., those outside cities and not subject to the HBA). The Florida regulations, however, are laxer and narrower in scope. Although they require a permit for each sign, they do not restrict sign location or dimensions.
- 4. FDOT will not issue a permit unless the sign complies with all local government requirements, and the application form contains a section with instruction on how to submit proof of compliance. The application form for a TxDOT sign permit, by contrast, only warns the applicant of the need to comply with local government standards.⁹ TxDOT does not require the applicant to submit proof of such compliance and does not check for it when processing the application.
- 5. Florida conducts field reviews at the sites of approved new signs within 270 days of permit issuance. This is to ensure that the sign conforms to the conditions of the permit, including the requirement that the sign be erected within the allowed 270 days. TxDOT considers that conducting an annual inventory makes such field reviews generally unnecessary, since violations of the permit conditions will be detected during the inventory.

3.2.3. Decision to Outsource

The decision to outsource stemmed mainly from a state government directive that state agencies undertake efforts to partially privatize their functions and reduce their workforces. Under these guidelines, the FDOT Outdoor Advertising program was perceived as a good candidate for outsourcing. One perception was that the workers in a privatized operation would be more productive than FDOT's workforce. In preparing its bid price, the winning contractor (TBE) assumed that this would be the case.

3.2.4. Inventory Before Outsourcing

TBE was aware before entering the contract that some counties had not been inventoried for 15 years, but was unprepared for the number of erroneous records. Accuracy problems were greatest in particular FDOT districts and counties. As an example, Susan Rosetti from TBE mentioned that the data for Escambia County, where US 98 runs east-west, contained many

⁹ The opening paragraph of the permit application concludes with the following sentence in bold font: "TxDOT, by issuance of this permit, does not represent that the sign or location thereof meets city, county, and/or local government laws, orders, ordinances and/or other regulations."

errors, often including the wrong section and milepost. Ms. Rosetti had to sort through a stack of permit applications to match the structures in the field to those described in the applications, and had to turn to the sign companies for help.

The database that existed before outsourcing was also many missing photos. FDOT had informed TBE that its database contained 80% of the required photos, but TBE found the percentage to be lower. Part of the problem was that FDOT kept changing its database with the end result that the photos became detached from the records. For these records, it was clear that a photo had been taken, but the compute screen was blank where the photo should have appeared. On one section of road, TBE had to take 150 photos.

3.2.5. Contracting Process

FDOT informed bidders on the contract that the payment for work performed during the first fiscal year of the contract would be \$570,000. The contract was originally to commence at the start of the fiscal year (July 1, 2001), but a delay pushed the starting date to September. As a result, the Florida Legislature prorated the funding for the first fiscal year of the contract (2001-02) down from the original 12-month amount to \$570,000 for the remaining nine months.

Thus, negotiations with bidders for the contract concerned the amount for the second and subsequent years. FDOT received six proposals that ranged from \$900,000 to \$1.1 million. FDOT pared down the list and some companies dropped out, reducing the field to three companies. FDOT then focused on KCA (Kissinger Campo Associates) and TBE, which bid \$800,000 and \$758,000 respectively. The legislature later appropriated only \$738,000, so the scope of services had to be narrowed by negotiation.

FDOT agreed to a contract duration of ten years to allow sufficient time for the contractor to recoup the initial sunk costs of investment. Such costs can arise from the contractor's need to acquire capital assets for use in the outsourced operations. For each of its six regional inspectors, TBE needed to provide a vehicle along with equipment such as distance measuring instruments and laser guns. Our assessment, however, is that only a small portion of the cost of the vehicle can qualify as a sunk cost, since a vehicle used for ODA-related travel can be used for other travel. TBE spent about \$60,000 upfront for equipment as shown in Table 3-2, but even this expenditure only partly constitutes a sunk cost. Laser guns can be used for tasks other than outdoor advertising enforcement, and even equipment that is specific to outdoor advertising enforcement can be used for that purpose in various states, not just Florida. Moreover, even if

TBE's upfront expenditure on equipment were entirely a sunk cost, the total amount of that expenditure, \$60,000, is sufficiently modest relative to the contract price (over \$700,000 per year) to call into serious question FDOT's rationale for a contract of ten years' duration.

Equipment	Cost per unit	Cost for six vehicles			
Distance Measuring	650	3,900			
Instruments					
Trimbles ^a	3600	21,600			
Modification of vehicles for	500 (battery and	3,000			
equipment to run off	installation)				
cigarette lighter					
Laser Guns		26,000			
Laptops	1600	9,600			

Table 3-2. TBE Upfront Costs for Major Equipment Used in OutdoorAdvertising Control under Contract with FDOT

^{a)}Devices mounted on roof of vehicle to pick up satellite signal for GPS Source: Information supplied to CTR by Susan Rosetti and Richard Doyle of TBE

Consideration of other upfront costs does not alter this conclusion. While there are sunk costs in recruiting and training a new workforce, most of TBE's hires for outdoor advertising were ex-FDOT employees with experience in that line of work. Even for employees without previous experience, the training required to use the field equipment would, on TBE's own reckoning, be minimal. Other upfront, and partly sunk, costs would have been incurred in the purchase of a computer server and setup of a database management system. These costs were said to be substantial, but do not strike us as large enough to alter our conclusion that a contract duration of less than ten years would have been more appropriate.

3.3. Case Study: Georgia

Geographic area (square miles)	59,441
Outdoor advertising structures with permits (number)	10,031
Miles of controlled roadways (number)	13,000

3.3.1. Background and Impetus for Outsourcing

Georgia has been weighing partial privatization among alternative options for making its ODA control operations more efficient. Although no fundamental changes have been decided on so far, a brief discussion of the options that have been mooted may assist other states, including Texas, with their own deliberations.

Until recently, the person overseeing ODA control operations at the Georgia Department of Transportation (GDOT) was Mr. Jim Aube, with whom the researchers had several discussions. At the time of the first discussion, held in September 2003, Mr. Aube was leaning toward internal restructure rather than outsourcing. The system then in place in Georgia resembled that of Texas in its high degree of decentralization, with the attendant risks of inconsistency in practice and in the priority accorded to ODA control. The restructure that Mr. Aube had in mind would have placed GDOT staff conducting ODA control, particularly the inventory, under the centralized command of a statewide office.

By February 2004, however, the course being planned for GDOT had shifted toward partial privatization. Mr. Aube had decided to implement a system of ODA control that would borrow many features from Florida's system, including the use of a single state-wide contractor for most of the field work. The preliminary contract that he drew up delegated to the contractor (yet to be determined) the tasks of annual inventory, new site inspections, illegal sign removal, and legal support services. Mr. Aube consulted closely with FDOT and its contractor TBE, and was examining the possibility of expanding the contract to include some non-HBA responsibilities such as land surveying. As Mr. Aube explained it, the primary motivation for outsourcing HBA field work was for GDOT to: (1) acquire from the contractor the technological expertise needed to perform a thorough inventory, and (2) garner sufficient resources to complete the formidable work of completing an initial, thorough inventory while simultaneously handling the bureaucratic obstacles of the transition.

3.3.2. Proposed Timeline and Methodology

The contract that Mr. Aube drew up was a compromise between privatization and his earlier idea of keeping the ODA control operations within GDOT. Operations at GDOT would, under this compromise, be largely privatized sometime within a year. GDOT would allow the contractor two years to clean up the existing inventory and bring it up to date, and would pay the contractor to maintain the inventory for one year afterward. Mr. Aube estimated the future value of the contract at \$1,500,000 for the two years it would take to complete the initial inventory and \$800,000 for the following year.

The element of compromise was that at the conclusion of the contract, most responsibilities would revert to GDOT. Mr. Aube's thinking was that once the problems with the

existing inventory were worked out by the contractor, GDOT would find it relatively easy to maintaining the inventory with the assistance of advanced technology. The researchers heard a similar view from the HBA staff in the Dallas District, who believed that the case for outsourcing would be much weaker in regions that had already had inventories in solid shape. To allow GDOT to resume responsibilities upon termination of the contract, Mr. Aube included a provision for transfer to GDOT of all equipment, including vehicles, used by the contractor for the inventory task.

Georgia has followed the strategy of developing a solid structure for the sign database before moving to outsource. In Oklahoma and Florida, several of those involved with outsourcing these states' ODA control operations emphasized the importance of this first step. GDOT recently developed in-house a computer database with *Oasis* software for use by any future consultant.

Bringing GDOT costs in line with revenues was apparently not a high priority for Georgia. License and permit renewal fees have been fixed for thirty years at \$50 and \$25 respectively. Because Georgia has 13,000 signs, permit renewal fees amount to only \$325,000 a year. The state has no legislative requirement that revenues must equal costs.

3.3.3. Contract Structure

A working version of the Georgia contract was obtained from Mr. Aube in early May 2004. It includes definitions of objectives, scope, and compliance. The scope of services related to the sign inventory is similar to the other cases studied. A "physical inventory" of all controlled roads is to be required every year. Digital time-stamped photographs will be taken of signs "if none has been previously acquired." The Georgia contract would not require a new photo to be taken each year unless a suspected unauthorized change has been made to the sign.

The contract specifies the error tolerances for measurement of sign dimensions or locations to ensure a level of precision that is adequate without being excessive. The tolerances are plus or minus five percent for sign dimensions and within eight feet for latitude and longitude. These tolerances apply to both inventory taking and other field inspections, such as site inspections for new permits, of which GDOT currently issues about 500 per year. If information cannot be collected at the site or at least is not obvious, the contract specifies a protocol for the consultant to resolve the matter by cell phone without leaving the site. If this is not possible, the consultant will report the problem to the Contract Manager at GDOT within ten

days. The contract specifies that new site inspections shall be performed within thirty days after receiving a request from the contract manager. The contract lists several other possible causes for field reviews, such as follow-up inspections on violations and verification of changes in the jurisdictional designations of highways.

Beyond inventory and site inspections, the responsibilities of the consultant also extend to assisting with the preparation of administrative hearings, the removal of illegal signs at the request of GDOT, and special inspections—for example, inspections following storms that may have damaged signs.

The final section of the contract includes requirements for reporting, including how the consultant will quantify their tasks and what information is to be included in weekly, monthly, and annual reports. Despite Mr. Aube's efforts, however, the contract was still not active when the researchers last checked with him in March 2005. All functions within Georgia were still performed in-house. Mr. Aube is no longer with GDOT and his replacement, Kevin Vinson, was not aware of any plan to outsource.

3.4. Case Study: Michigan

Geographic area (square miles)	96,810
Outdoor advertising structures with permits (number)	14,000
Miles of controlled roadways (number)	13,000

Contacts:

Seema Taneja, Contract Manager, MDOT Rob Beckon, Supervising Engineer, Real Estate Support Area, MDOT Randy Alpin, Bay Region Consultant, Spicer Group, Inc. John Lansky, Former contract manager, University Region; currently with TBE

3.4.1. Overview

Many aspects of the Michigan system will not be applicable to the system adopted by TxDOT. Unlike any of the other states studied, Michigan elected not to use one contractor for the entire state but instead has contracted out regions of the state to five different consultants. This process was implemented in stages one region at a time. Contracts are renewed yearly. The system does not require a computerized database, only the recording of information by pencil and paper. Consultants do not make use of advanced data gathering techniques like laser guns or

GPS. Dimensions of signs are not routinely checked. Each contractor has a liaison in the local MDOT office; however, the contractors rarely consult with each other. All actions are coordinated by the central MDOT office. The most innovative aspect of the Michigan system is their compensation system which is broken down into the following categories

- Permit applications (pay by unit)
- Annual re-inventory (pay by mile)
- Illegal sign enforcement (pay by hour)
- Miscellaneous work (pay by hour)
- Preparation for administrative hearing (pay by unit)

The Michigan system's use of multiple short-term contractors and an explicit unit price system for compensation is in contrast with the systems in Florida and Oklahoma. To some extent, the Michigan system injects into the bidding process an element of competition that is lacking in the systems of Florida and Oklahoma. TBE had to competitively bid against a limited field of rivals to secure the FDOT contract, but the ten-year duration of the contract has rendered TBE relatively safe from competition for a long time. In Oklahoma, despite the contract being negotiated yearly, Site Info is in no real danger of losing their position barring a major infraction. One of the ways Michigan has encouraged competition for contracts is to allow bidding from companies that specialize in other fields. In the Bay Region of Michigan, for example, a land survey company has been given responsibility for overseeing 3,000 miles of controlled roadway. Therefore, a company does not need to create an outdoor advertising enforcement subsidiary to apply. None of the individuals who work in the Bay Region office do ODA-related duties on a full time basis. Interestingly, TBE is active in Michigan and is seeking to win contracts in two regions, Metro and Grand Region, when their contracts expire.

3.4.2. Scope of Services

Randy Alpin is the head of Spicer Group, the consultant responsible for Michigan's Bay Region. The company was initially hired on a three-year contract, which was continuing on a one-year extension when the researchers interviewed Mr. Alpin in early 2004. ODA control duties are only one of the company's functions, and none of the staff perform them on a full time basis. The company's other areas of work are civil engineering and surveying.

Inventory is performed on a yearly basis in the winter. They usually begin in early to mid January and finish in a couple of months. In other regions as well, the work tends to be concentrated in the winter, when the weather precludes many other types of road-related work from being performed. The seasonality factor in Michigan and other cold-weather states makes winter opportunities for road-related work, such as outdoor advertising control, more attractive to potential contractors. This factor, which would tend to reduce bid prices, is generally not relevant in Texas.

The surveyors have to do multiple checks on the legality of each sign. In addition to examining the physical location of the sign and its distance from the highway and qualifying businesses, they have to perform zoning checks to see whether it is within a municipality. Surveyors usually carry DOT maps with them for this purpose.

The contractor has no authority to issues letters of violation or any other official memoranda. The contractor can, however, prepare for MDOT's signature such correspondence as it deems appropriate based on the information obtained—e.g., a letter approving a permit application. They are given MDOT letterhead for this purpose. When the contractor does sign letters they always do so as "Spicer Group," not as MDOT representatives.

In the Bay Region, performing annual inventory takes 18-23 days of work for 3,000 miles and 3,200 faces. This means that, on average, inventorying takes about fifteen minutes per sign including drive time. This amount of time can rise to 30 minutes if information about the sign is missing or the sign is in some way noncompliant. At any one time, 10-20% of signs are illegal. According to Mr. Alpin, his office has attempted, largely unsuccessfully thus far, to interest MDOT in incorporating use of GPS into the protocol for the contractor.

3.4.3. Legal Assistance and Enforcement

Spicer Group also assists MDOT with legal actions against illegal signs, which generate 50-60 violation letters from MDOT per year. Only about 6-12 of these letters result in administrative hearing, for which Spicer Group prepares evidentiary packets for MDOT. The compensation for preparing a hearing packet is a flat fee, although until recently it was an hourly rate. So far, most of the administrative hearings have been settled out of court. Other policing duties performed by Spicer Group include tracking down the sign owners when their names are not marked on the sign.

3.4.4. Performance-Based Aspects of the Michigan Contract

The outsourcing arrangements in Michigan impose certain standards of performance on the contractors, yet leave the contractors with considerable latitude in determining exactly how to meet those standards. In this respect, the system is somewhat more performance-based than the outsourcing arrangements in Florida and Oklahoma, where the DOTs are more prescriptive.¹⁰

The Michigan system also stands apart from the others in its compensation scheme. For three of the five categories of outsourced work, MDOT pays per unit of work output—e.g. per sign inventoried. For the other two categories—illegal sign enforcement and "miscellaneous work—MDOT reimburses the contractor on the basis of hours worked, contrary to performancebased contracting. These two tasks account for only a small share of the total payments to the contractors, however, and MDOT plans to find ways of compensating for these tasks on the basis of output measures akin to those used for the other three categories of tasks.

Thus, overall, the compensation scheme in use and being planned in Michigan qualifies as more performance-based than the systems in the other states we have considered. Although the Florida and Oklahoma systems include some elements of such "piecework" arrangements, they are basically fixed-price contacts. Of course, even under a fixed price arrangement, a per unit costing of services will always factor, implicitly or explicitly, into the estimation of total contract cost. The only scientific way to determine an estimate for compensation is to attach a value to each unit of work and then estimate how many units of work will be required.

That said, adopting per-unit compensation rather than a fixed-price arrangement has two material consequences. First, the more detailed cost accounting that the contractor supplies makes it easier for the client agency to detect cost padding and inefficiencies. Second, the financial risk associated with the unpredictability of the scale of the needed work—e.g., how many new site inspections will need to be performed—shifts from the contractor to the client agency. From the perspective of the client agency, the ability to assume this risk depends on the funding arrangements for the contract. Specifically, the agency needs to be confident that it will have sufficient funds to fully pay the contractor should the amount of work that needs to be performed exceed expectations.

¹⁰ "Performance-based service contracting (PBSC) emphasizes that all aspects of an acquisition be structured around the purpose of the work to be performed as opposed to the manner in which the work is to be performed or broad, imprecise statements of work which preclude an objective assessment of contractor performance. It is designed to ensure that contractors are given freedom to determine how to meet the Government's performance objectives, that

In states such as Texas and Michigan, where the ODA control system is supposed to be self-funding, the option of increasing permit or license fees provides, in principle, a reasonable degree of confidence of ability to pay. Oklahoma, on the other hand, funds its contract mainly from federal transportation enhancement funds. The federal government gives a fixed amount to the ODOT each year which Mitch Surrett, the chief legal counsel, then distributes to the various contractors retained by ODOT. Since this amount is fixed, ODOT would not be well positioned to offer the contractors a per unit compensation scheme in place of the current fixed fee. Oklahoma does receive permit and license fees from sign companies, but this revenue flows into a general fund rather than a fund earmarked for ODA control.

Another performance-based arrangement that sometimes warrant consideration is the 'cost plus incentive' contract. Such a contract divides compensation between a fixed component and a variable component that rewards the contractor for premium service. To create this type of contract, the client agency would have to be able to specify clear and objective criteria for determining whether premium service had been provided.

Interpretation of the observed unit prices

The researchers obtained from MDOT the unit prices in the current contracts, thinking that these data would help estimate the cost to TxDOT of outsourcing ODA control. The cost to TxDOT will equal the cost to the contractor plus a margin for profit.

As Table 3-3 shows, however, the unit prices in the Michigan contracts are not believable indications of the contractor's cost plus profit. The prices for a given category of task differ dramatically across regions, far more than could be plausibly attributed to actual differences in cost plus reasonable allowance for profit. For example, the price for evaluating a new permit application is \$313.55 in the Bay Region and \$65.50 in the University Region. According to Randy Alpin of the Spicer Group, the bid of \$313.55 for the Bay Region was premised on a new site evaluation taking 4-6 hours to complete. The rate is somewhat higher than the simple product of labor hours due to other capital inputs needed such as vehicle wear and tear or gasoline. In reality, however, such evaluations do not take as long as was originally envisioned and Spicer Group makes a solid profit off of this particular task.

appropriate performance quality levels are achieved, and that payment is made only for services that meet these levels." http://www.arnet.gov/Library/OFPP/BestPractices/PPBSC/BestPPBSC.html

The amounts charged for annual re-inventory in some regions also seem out of line with cost/profit. According to Randy Alpin of Spicer Group, re-inventorying a sign normally only takes about a minute at the site, as the inspector verifies the information in the existing inventory. Similarly, Mr. Rob Beckon of MDOT, who has overseen the contracts since their inception, described a typical re-inventory of a sign as "rolling stop" of the inspector's vehicle. In view of this rapid pace, some of the charges for re-inventory are surprisingly large. In Florida, where the average time spent for re-inventory at the sign site is significantly longer, Susan Rosetti (TBE) estimated that each inspector can inventory between 45-50 miles of roadway per day given a sign density of 5 signs per mile. If inspectors in Michigan could inventory this many miles of roadway per day, then based on what MDOT pays per mile re-inventoried (Table 3-3), the inspectors could bring in \$600 of revenue per day in University Region and \$800 per day in the Grand Region. Since the actual sign densities in these regions are much lower than the 5 signs per mile assumed—in fact less than 2.0 in each—these estimates of the potential revenue from a day's work could even be conservative. In the Bay Region, the \$5.03 paid per mile would seem more in line with contractor's cost than the much higher amounts paid in the University and Grand Regions, especially considering that the Bay Region has a relatively high sign density (3,200 signs on 2,000 miles of controlled roads).

	Basis of charge	Grand Region	Metro Region	University Region	Bay Region	Superior Region	North Region
Evaluation of	8	8				0	
New Permit	per						
Applications	application	\$200.00	\$210.00	\$65.50	\$313.55	\$147.29	\$115.00
	per mile of						
Annual Re-	roadway re-						
Inventory	inventoried	\$17.50	\$9.00	\$13.00	\$5.03	\$11.72	\$9.25
Illegal Sign	per hour						
Enforcement	worked	\$80.00	\$65.00	\$40.50	\$49.00	\$29.97	\$45.00
Miscellaneous	per hour						
Work	worked	\$80.00	\$65.00	\$40.50	\$49.00	\$29.97	\$45.00
Hearing Package	per package	\$320.00	\$165.00	N/A	\$344.88	\$300.00	\$90.00

Table 3-3. Breakdown of Michigan Unit Prices for Outdoor Advertising Control Services

When the researchers queried Mr. Beckon as to the possible causes of these anomalies, he replied that MDOT has no guidelines for determining what a realistic range of per unit charges would be.¹¹ He thought that some of the patterns the researchers were concerned with could have been part of contractor strategies for maximizing their revenues. ¹² Although he did not elaborate, one could imagine situations in which the anomalous patterns are strategic. One possibility is that incentives to overcharge are greater for the bigger-revenue tasks (as stated earlier, these are generally the evaluation of new permit applications, the annual re-inventory, and the preparation of hearing packages). Since the relative scale of the tasks varies by region, however (for example, due to differences in the rates of sign proliferation), this could produce differences among regions in the unit bid process for a given task.

When one company is the contractor for more than one region, opportunities exist to differentiate pricing strategies in order both to maximize revenue and minimize risk. The contractor can set rates higher for one task in one region and for an alternative task in a different region. Such is the case with Five Star Development, a company headed by a former MDOT employee that oversees the Grand, Metro and University Regions. While the researchers do not presume to know the precise rationale for Five Star Development's particular pricing strategy, risk diversification is a logical possibility. In this way, whichever pricing strategy turns out to be more profitable, at least one business unit within the company will be able to capitalize on it.

Lessons for Texas

Given the revenue maximizing/risk minimizing strategies employed by Michigan contractors, Texas can draw a few pertinent lessons. If a unit price system is to be used in the eventual contract, guidelines must be adopted to ensure that the quotes reflect an objective reality of cost plus profit. Contractors should not be permitted to cross-subsidize different services by performing some at a loss while earning unjustified levels of profit for others. They also should not be permitted to earn a significantly higher profit margin for one region than they do in others. Such practices open the door to corruption and serve as barriers to market entry.

The second lesson to be learned is that contractors view the ability to perform a variety of services as a means to mitigate risk. Tasks which are cyclical in nature, such as new site inspections, can be balanced against tasks which are reliable such as inventory. Furthermore, if

¹¹ From interview with Rob Becken of MDOT, August 18th 2004

¹² Ibid

the contractor is given a variety of tasks, they are less likely to be injured by one overly optimistic cost-estimation during the bidding process. Therefore, if TxDOT chooses to outsource HBA responsibilities one function at a time or assign different functions to different contractors, it should be prepared to pay a risk premium above what it would pay if companies were allowed to perform multiple functions concurrently.

Lastly, TxDOT should also be cautious about paying contractors on the basis of hours worked, as MDOT currently does this for the categories of "illegal sign enforcement" and "miscellaneous work." Such an arrangement creates some risk that the contractor will overbill or fail to make efficient use of the hours billed, and reducing this risk to acceptable levels may require costly oversight by the client agency. Presumably, this is part of MDOT's motivation for planning to switch to output-based compensation for these two tasks.

Chapter 4. Ascertaining the Appropriateness of HBA Enforcement for Privatization

Outsourcing services has become a common practice for the Texas Department of Transportation. TxDOT currently outsources approximately 68% of its design and planning work to private firms. TxDOT also contracts out over 50% of its maintenance duties, including full asset management contracts for sections of IH-35. Private sector involvement in the development of the Texas transportation system was expanded to new levels recently with the proposed private financing of the Trans Texas Corridor.

Several factors have driven TxDOT to rely more heavily on the private sector in recent years (Figure 4-1). TxDOT currently has a cap on the number of full time equivalent (FTE) staff it can directly employ, a constraint that acts as an incentive for TxDOT to outsource non-essential staff.¹³ Another factor that has led TxDOT towards outsourcing is the difficulty in retaining highly qualified non-managerial staff, who often have strong incentives to take positions in the private sector. TxDOT's mission appears to be in transition from acting as an agency that directly provides the infrastructure necessary for Texas mobility to an agency responsible for ensuring that such infrastructure is provided.

Given the incentives TxDOT has had for many years to privatize programs, it is a reasonable assumption that the low hanging fruit, i.e., programs that lend themselves naturally to privatization, has already been picked. Therefore, costs and benefits of future privatizations are likely to be, on average, less clear-cut.

¹³ The Legislative Budget Board has recommended that TxDOT's FTE cap for FY 2005 stand at 14,812.

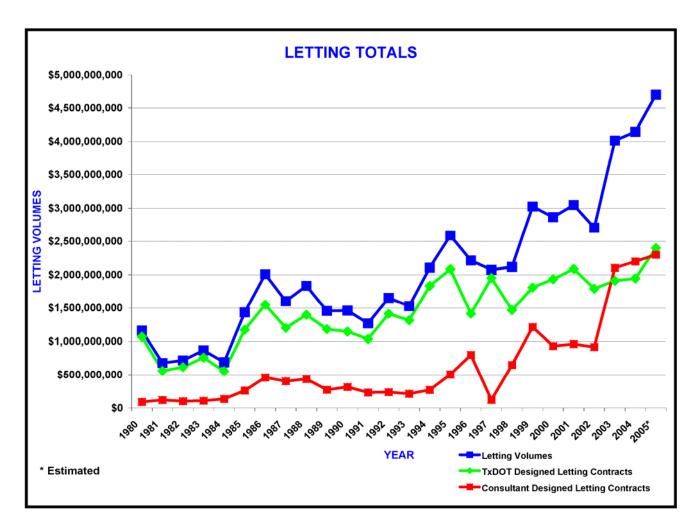


Figure 4-1. Letting Totals for Outsourced Contracts by the Texas Department of Transportation, 1980-2005.

Source: Presentation by Amadeo Saenz to the Texas Transportation Commission, February 24, 2005.

When deciding whether or not a particular government program is an appropriate candidate for privatization, several characteristics of the program must be considered. For the purposes of simplicity, we established 15 criteria that tend to make a program a good candidate for privatization (Table 4-1). We then rated the ODA control program on a scale of +5 to -5 for each criterion. A score of +5 means that the program comes close to fully satisfying the criterion and is a strong candidate for privatization in this particular respect. A score of -5 would mean that the program does not meet this criterion and therefore provides a strong rationale against privatization. As Table 4-1 shows, the ODA control program has various characteristics that would make outsourcing worthwhile. Although few of these characteristics argue strongly for outsourcing, none argue strongly against.

Criterion Number	Criterion Description	Rating: ODA control	Criterion Number	Criterion Description
1	Skills required for the task are beyond the expertise currently possessed by TxDOT.	1	8	Economic gains from greater specialization of capital can be realized.
2	The program requires high capital investment that would be beyond the range of TxDOT's traditional revenue sources.	1	9	An adequate level of competition can be achieved during the contracting process.
3	The program chronically suffers from excessive cost overruns.	2	10	The responsibilities of the contractor can be unambiguously specified.
4	The task involves low skill or time intensive work not conducive to TxDOT's skill set and FTE cap.	4	11	The client agency can effectively monitor the contractor's performance at relatively low cost.
5	Superior internal economies of scale, leading to a lower overall cost, can be realized.	3	12	The client agency has options for effectively dealing with substandard performance by the contractor.
6	Superior external economies of scale, leading to a lower overall cost, can be realized.	-1	13	The activity does not involve the use of sensitive or personal information that should not be divulged to the public.
7	Economic gains through greater specialization of labor can be realized.	5	14	The task does not involve services that are critical to public safety.

 Table 4-1. Evaluation of Suitability of Outdoor Advertising Control Activities for Outsourcing

Rating: ODA control

3

2

-1

-1

2

-1

4.1. Explanation of Scoring by Criterion

(1) Skills required for the task are beyond the expertise currently possessed by TxDOT. Score: 1. The initial contractor for ODA control will start off knowing less about ODA activities than do current TxDOT staff. The contractor is likely, however, to employ ex-TxDOT staff with experience in this line of work, so that the difference in knowledge may not be that significant, and as outsourcing continues, a private-sector pool of workers with experience in ODA control will develop. Moreover, even at the outset, the contractor may know more than do the current TxDOT staff about advanced technologies for ODA control, such as GPS and Web-based databases.

(2) The program requires high capital investment that would be beyond the range of **TxDOT's traditional revenue sources. Score: 1**. TxDOT's decision to use private finance for the construction of the Trans Texas Corridor was based substantially on the opportunity to attract private equity to this enormous project. In contrast, the capital costs associated with ODA control are minor. Moreover, for the HBA-covered network of highways, ODA control has its own dedicated source of funding from fees for sign permits and ODA licenses. Politically, increases in user fees tend to meet with less resistance than increases in taxes, or even than diversions of general government revenues from other functions to ODA control. In this respect as well, ODA control would not appear to be among the government functions that are prime candidates for outsourcing. On the other hand, even increases in user fees can generate stiff opposition from those affected, and politically this may become more likely under privatization. The ODA industry may have greater confidence in the performance of private contractors than of government agencies.

(3) **The program chronically suffers from excessive cost overruns. Score: 2.** The HBA program in Texas has consistently exhausted its dedicated funds and has had to write off expenses on other accounts. The extent to which this reflects program inefficiency versus funding inadequacy is difficult to determine at present, but the answer would become clearer after privatization.

(4) The task involves low skill or time intensive work not conducive to TxDOT's skill set and FTE cap. Score: 4. The basic task of inventorying signs can be tedious and generally does not rank as a preferred task among staff in state DOTs. Several advocates within TxDOT have expressed an interest in divorcing the department from this particular skill set.

(5) Superior internal economies of scale, leading to a lower overall cost, can be realized. Score: 3. Internal economies of scale are created when one large firm can deliver a product or service more efficiently than can several small firms. This was a primary consideration when deciding to recommend use of a single statewide contractor as opposed to several regional contractors. Compared to the current decentralized system of ODA control involving the 25 TxDOT Districts, centralization under a single contractor could avoid much duplication of equipment and acquisition of legal knowledge. The importance of this source of savings is somewhat limited, however, given the small share of capital costs in the overall costs of ODA control.

(6) **Superior external economies of scale, leading to a lower overall cost, can be realized. Score: -1.** External economies of scale result when many firms derive benefits from operating within the same market, due in part the informal diffusion of knowledge and ideas, e.g., Silicon Valley.¹⁴ The same principal applies to government agencies. In TxDOT, the ability of the different districts to communicate with each other regarding problemsolving techniques, strategies, or interpretation of policy can lead to dynamic improvements within the agency as a whole. A private company, while it could certainly communicate with TxDOT districts, would have no direct counterparts with which to liaison. Therefore, external economies of scale are probably higher under the state-controlled system.

(7) Economic gains through greater specialization of labor can be realized. Score: 5. Specialization of labor is one of the bedrock principals of economic efficiency and is arguably the most compelling economic consideration in favor of privatizing the enforcement of outdoor advertising control. Under the current arrangement, most HBA staff in TxDOT perform their duties on a part time basis and must juggle their HBA work with a host of other functions. Labor specialization will result in increased worker efficiency.

(8) Economic gains from greater specialization of capital can be realized. Score: **3.** Currently, HBA staff in many districts rely on capital equipment that was originally purchased for other purposes. If the service is outsourced, decisions regarding capital acquisitions would become more streamlined and specific to the requirements of outdoor advertising. A contractor operating statewide might acquire certain assets not currently used by TxDOT Districts, which within their own boundaries may have insufficient use for these

¹⁴ Singh, Jasjit. Innovation and Knowledge Diffusion in the Global Economy, Harvard University

assets to justify the expenditure. One such asset could be a vehicle with relatively high ground clearance, for use on trips to sign sites where the vehicle must go off-road.

(9) An adequate level of competition can be achieved during the contracting process. Score: 2. In examining whether adequate competition can be generated to create an efficient outcome for TxDOT, we need to examine potential barriers to attracting an adequate number of total bidders. The privatization of HBA would create a new industry within Texas, ceding what was a government monopoly. Therefore, it is difficult to predict the number of firms that would likely be interested in bidding on such work. Still, we can assume that given the size of the state, the low capital startup requirements and relatively non-specialized skill set, a large number of potential bidders may come to light. The experience of other states that have outsourced ODA control, Florida and Michigan, is encouraging in this regard.

(10) **The responsibilities of the contractor can be unambiguously specified. Score: -1.** For the most part, the contractor's responsibilities for ODA control can be specified quite clearly, leaving little room for contractual dispute. There are nevertheless some grey areas. One example is the investigation of questionable on-premise signs: cost-efficient pursuit of this task will require an element of judgment regarding to what lengths the investigation should proceed, and which signs are sufficiently suspicious to warrant investigation.

(11) The client agency can effectively monitor the contractor's performance at relatively low cost. Score: -1. The researchers perceive some challenges for TxDOT in monitoring the contractor's performance. TxDOT could duplicate a percentage of the contractor's work to inspect it, for example, to ensure that measurements are taken correctly. This could be quite time-consuming, however, especially for tasks such as the investigation of questionable on-premise signs. To reduce the time involved, TxDOT may want to consider initially withholding some of its existing data on sign measurements from the contractor to provide a baseline by which to observe whether the contractor's measurements are accurate. Of course, the frequency of successful challenges to the contractor's data from sign owners provides one indication of the contractor's performance.

(12) The client agency has options for effectively dealing with substandard performance by the contractor. Score: 2. Compared to the ten-year duration of the Florida

contract for ODA control, the three-to-five-year duration that this report recommends would reduce the risk to TxDOT of being stuck with a poorly performing contractor. In addition, escape clauses in the contract would allow TxDOT with further protection. Although building such rights into the contract and exercising them will entail costs (analogous to buying insurance and making a claim), such costs would probably be less significant for ODA control than for many functions that TxDOT currently outsources. For example, changing contractors in midstream on a design-build contract for a highway could be extremely difficult.

(13) The activity does not involve the use of sensitive or personal information that should not be divulged to the public. Score: -1. There are certain privacy concerns endemic to this type of privatization. It is necessary, in order for the contractor to properly perform their job, for TxDOT to transfer to the contractor's database some sensitive information regarding the sign owners and the land on which the signs are constructed. This information cannot usually be dubbed highly sensitive. It would, however, be of great value to sign companies.

(14) The task does not involve services that are critical to public safety. Score: 4. TxDOT's mission has evolved in recent years to include far more than building and maintaining roads. The medical transportation program, for example, was transferred in 2004 from the Texas Department of Health to TxDOT, which partners for this program with Southwest Airlines and Greyhound Bus lines. If TxDOT can entrust medical-related services to the private sector, it should be able to outsource much less critical services such as ODA control without much worry about liability issues.

Chapter 5. The Way Ahead: Researchers' Recommendations

Once the strategic decision has been made to outsource some components of outdoor advertising enforcement, several critical questions arise:

- (1) Which combination of functions should be outsourced and which should be retained in house?
- (2) On what scale should the outsourced functions be conducted—for example, how often should a complete sign inventory be taken?
- (3) How quickly and in what sequence should these functions be outsourced? Is it more efficient to outsource everything at once or should an incremental approach be used?
- (4) If an incremental approach is chosen, should one pilot region be outsourced prior to the rest of the state?
- (5) What should be the contract duration?

5.1. The Critical First Component: Data Storage and Management

A phased implementation begins with creating a sign database that is user-friendly and Web-based. Before embarking on a vast data gathering mission, it is essential to first establish a solid template in which the data can be stored and manipulated. The stored data should be accessible on demand and easy to interpret. Many TxDOT Districts that have been diligent in gathering data have lacked a database system that would permit the most effective use of the data collected. Examples of ineffective data storage include the use of mainframe computers with limited accessibility, data stored on Excel spreadsheets in which old values were accidentally replaced by new values, or data stored in non-searchable format such as paper files or imaged PDFs.

Over the past decade, TxDOT has invested copious resources in the development of a mainframe database for organizing and centralizing data storage. Yet, rather than serving as an interactive system, the current TxDOT program has become a data dumping ground. Districts periodically transfer the data to Austin for storage, but do not make sufficient use of the database as a reference source. This causes unnecessary duplication of effort.

A Web-based system has overwhelming advantages when attempting to tie together the various parties involved in the outsourced system. For example, such a system would facilitate easier communication with sign owners when questions arise regarding the ownership or legality of a particular sign. It would also make the system more transparent to the public. Passwords would be provided to give users differential access.

The biggest risk inherent in establishing a Web-based system is security. If a rogue sign company were to gain access to portions of the database reserved for TxDOT personnel, the consequences could be serious. In addition to potentially exposing confidential information on thousands of land owners, the hacker could undermine TxDOT's enforcement strategy by, for example, finding out when different stretches of roadway would be inspected.

To design a system that meets the security and other requirements of the sign database, TxDOT should engage the services of an outside consultant. A number of companies could bring more expertise to this task than TxDOT could readily summon in-house. As was mentioned earlier in this report, these services should be contracted separately from the ODA control activities that would be subsequently outsourced.

5.2. The Second Component: Biennial Inventory

Whether TxDOT should test privatization in one region of the state prior to a statewide implementation is a question that TxDOT will need to decide. Such a test could prove useful. Whether TxDOT would be able to conduct a pilot program prior to full implementation will depend on the political and budgetary constraints it faces at the time. Rather than speculate about potential scenarios, we have premised the following discussion on the assumption that outsourcing will be statewide from the start. The functional scope of the outsourced services will, however, broaden as the contract matures, starting with the taking of inventory.

The preceding chapter argued for the use of a single statewide contractor to conduct inventory and other ODA control tasks apart from those of database construction and management. This arrangement would allow the realization of scale economies, including a reduction in TxDOT's administrative burden, because it would have only one contractor to deal with. In the remainder of this report's discussion and analysis, we shall assume that a single statewide contractor will be used.

The researchers consulted on the appropriate periodicity of inventory with Tim Anderson of TxDOT's Right-of-Way Division. As TxDOT's legal expert on ODA control issues, Mr.

Anderson also served as the Project Director on this research project. Mr. Anderson agreed with the advice we received from ODA control staff in the Dallas District, which was that taking a complete inventory every year would be excessive (see chapter 2). The researchers concurred with Mr. Anderson that a biennial inventory cycle would be sufficient for maintaining the "effective control" required under the federal Highway Beautification Act.

The primary goal of the first biennial inventory would be to gather information that is complete and uniform in quality. Ultimately, the contractor would be responsible for structuring this operation. For the purposes of preparing cost estimates and recommendations for TxDOT, however, the researchers undertook to ascertain what an efficient structure would look like.

The structure that the researchers envisage would entail four full-time staff operating out of separate offices, one of which would be the main office in Austin. The other three regional offices would likely partition responsibilities geographically as follows: West Texas and the Panhandle, the South and Southeast, and the North and Northeast. Ideally the offices would be located in cities where TxDOT has a district office, to allow one employee from that TxDOT district to serve as a liaison and mentor. The contractor's office in Austin would be the base of operations for the in-house manager of the contract, who would also handle responsibilities for the Central Texas region and assist colleagues in the regional offices as needed.

According to our calculations, the biennial inventory alone would be insufficient to occupy the contractor's team of the four individuals full-time on an ongoing basis. Included in these calculations is the time required for detecting and documenting illegal signs, which would be part of the inventory task. If inventory were the team's only responsibility—a situation which could not provide permanent full time employment—it would be extremely difficult to have the same individuals conduct successive inventories. Continuity of staff is highly desirable, however, to reduce training costs and to maintain efficiency. Even with enhanced technology, there is simply no substitute for individuals who have a mental map of the network and understand the local geography and politics of the regions for which they are responsible. By politics, we refer both to the relations between the certified cities and the DOT and the comparative market share and business practices of the most important commercial players. It is far more likely that staff will be retained for a number of years if they are given a guarantee of *ongoing full time* employment. Reduced turnover also has the benefit that fewer of the contractor's staff will leave to take up employment with a sign company; this type of movement is quite common in the

outdoor advertising industry and can result in leakage of sensitive information about ODA control strategies and procedures.

Consideration of labor turnover thus points to a need to include in the ODA control contract other field tasks in addition to inventory. The scope of these additional tasks will need to broaden after the first two-year inventory, which will be far more labor intensive than subsequent inventories. The labor requirements of the initial cycle will be greater because it will entail substantial remedying of deficiencies in the most recent inventory that the contractor obtains from TxDOT. This will necessitate locating most signs with the use of DMIs, a substantial amount of documentation—including taking digital photographs/video clips with relevant audio commentary—and the preparation of reports detailing signs with infractions. After the initial two-year trial period, the contractor's team will have more free time to take on non-inventory functions, such as new site inspections.

5.3. Selecting a Contractor

The launching of this contract will create a new industry in Texas of outdoor advertising control operations. What types of companies would operate most efficiently in this new industry, taking into account their other operations and experience, and how can TxDOT structure the outsourcing process to attract these companies? To get a handle on these important questions, the researchers consulted with many informants over the course of the study.

One possibility we investigated is that the field work for ODA control is complementary with highway maintenance activities. For one thing, there may be appreciable overlap between these activities in the needed skills and equipment. TxDOT would want to take potential overlap into account when evaluating the experience of companies bidding for an ODA control contract. Another source of complementarity is that both highway maintenance and ODA control activities involve extensive travel over the state-maintained road network. Such travel may afford opportunities to undertake both of these activities on the same trip and thereby save on travel costs. As was observed in Chapters 2 and 3, highway maintenance crews do sometimes help out with ODA control activities in certain TxDOT Districts and other states.

To learn more about these complementary relationships, the researchers consulted with VMS, an asset management firm that pioneered large-scale outsourcing of highway maintenance functions in Virginia. Although VMS does not currently undertake ODA control work, a spokesperson for the company thought that VMS could be interested in undertaking such work in

Texas. Overall, however, the spokesperson was quite tentative, which may be partly due to TxDOT's current lack of a statewide outsourcing contract for highway maintenance work. Unless this changes, a statewide contractor for ODA control in Texas would have limited opportunities to combine this work with highway maintenance responsibilities.

At Scenic Texas—a non-profit organization dedicated to the preservation and enhancement of the visual environment in Texas—our informants emphasized the relationship between law enforcement, including the interpretation of laws and regulations, and the ODA control activities that could be outsourced. As well, many of the TxDOT staff who we interviewed about their current performance of these activities said that legal interpretation was often the most challenging part of their job. Thus, experience in law enforcement should receive some weight in the selection of contractor.

To find a contractor with the right skills, TxDOT should avoid assigning too much weight to actual experience in ODA control as opposed to demonstrated capabilities. An important qualification should be demonstrated ability to adapt to change and to work with a wide variety of actors. The contractor will be an interlocutor between the public and private sectors and must feel comfortable in dealing with public sector demands and private sector pressures.

To obtain the best possible service at the lowest overall cost, TxDOT should write an RFP (Request for Proposals) that will encourage bidding by many competing companies. Mainly, this means that the RFP should avoid limiting the contractor's flexibility unnecessarily. The goals set in the proposal should be performance-based as much as possible as opposed to strict prescriptions of method. In addition, the need for the contactor to incur large upfront expenditures should be minimized to facilitate competition from smaller companies. Starting off with a separate contract for the development of the sign database would help significantly in this regard. In addition, with the parameters of the database firmly set before the main contract's RFP is issued, bidders will have the advantage of greater certainty. They will have a much more realistic idea of what the job will entail and be better placed to provide TxDOT with a coherent strategy for reaching the performance goals outlined in the contract.

5.4. Contract Duration

Changes of contractor can entail some loss of experience as one team replaces another, and this might seem to argue for longer-term contracts. One should keep in mind, however, that

retaining personnel and retaining a particular company are not one and the same. In Florida, many of the contractor's workers had come directly from FDOT's ODA control department. In Michigan as well, several of the contractors employed workers who had either retired or resigned from jobs in ODA control with the state DOT. Similarly, when a DOT changes its choice of contractor, some of the former contractor's employees may move over to the succeeding company.

Florida's ten-year contract with TBE was justified largely on the grounds of sunk costs. As was discussed in Chapter 3, the sunk costs incurred by the contractor, TBE, did not seem large enough to justify a contract duration as long as ten years. Although the client agency also incurs sunk costs in engaging a new contractor, such as the time involved in developing a working relationship, this factor does not alter our assessment that ten years would be too long for an ODA control contract. This would be particularly true when the DOT has already developed the integrated Web-based database for the contractor's use that we are proposing for Texas. In Florida, some of TBE's sunk costs were in purchasing a computer server and setting up a database management system.

The shortest contract duration we found was in Oklahoma, where contracts are renewed yearly but without competitive bidding. The specific terms and compensation levels are renegotiated each year with the incumbent contractor, Site Info.

In the researchers' view, the non-competitive arrangement in Oklahoma is not a desirable model for outsourcing ODA control. Particularly for contracts having the scale and importance of ODA control, it is incumbent on government agencies to award contracts through a process that avoids any impression of favoritism or corruption. Contracts should be awarded and renewed through a legitimate and open bidding process. Although impractical on an annual basis, competitive bidding for contracts of between three and five years' duration is entirely feasible. That duration is long enough to allow the contractor to recoup startup capital expenses, which are relatively small in any event; these costs are also in large part variable rather than "sunk," since many of the assets are highly transferable between ODA control and other uses. The recommended duration is also long enough to allow the contractor to make midcourse adjustments as necessary to establish a well functioning system. Yet it is also short enough to allow market testing with reasonable frequency.

The general method of outsourcing in Texas is likely to undergo significant revisions. During the current legislative session, issues relating to inequities in outsourcing of services have

been featured prominently in Texas legislative hearings and have received particularly extensive treatment from the Texas Transportation Commission during monthly public hearings. In particular, Commissioners have expressed concerns that it is too difficult for small companies to win their fair share of contracts as prime contractors, noting that 89% of contracts by value go to 22 firms.¹⁵ With these concerns in mind, it is even more important that TxDOT takes the appropriate steps to ensure that it structures the proposal in a way that small firms have are fully considered.

5.5. Proposal for Rural Road Enforcement

In our study, we examined the feasibility of performing inventory on the rural road network as well as the HBA-controlled network. The rural road network in Texas is too vast, and the signs on the network too rare, to justify performing a comprehensive inventory of the rural network akin to what will be performed on the controlled network. Still, with the population of Texas growing exponentially and the subsequent increase of advertising on the rural network, it would seem shortsighted to propose no possible solution for keeping a better eye on rural road signage. In our survey, nine districts were unable to provide even rough estimates of the number of illegal signs on their rural roads. Of the fourteen districts which did report the number of rural signs, low and high estimates of the total number of signs ranged between 544 and 896 (90% confidence interval). If enforcement on the controlled network is tightened or if fees for erecting and maintaining signs are increased, a greater number of signs may migrate to roads which are not closely monitored.

As an optional service for inventorying outdoor advertising signs along the rural road network, we propose that the contractor receive a "finder's fee," yet to be determined, for each illegal sign identified and documented, excluding those that would be legal but for lack of a permit and those of which TxDOT was already aware. Providing an economic incentive for documenting illegal signs on the rural network may be quite effective in identifying a substantial percentage of the non-permitted signs on rural roads. The contractor would be free to determine the most efficient way to do this, which may include some form of outreach to volunteers in local communities.

¹⁵ Presentation by Amadaeo Saenz to the Texas Transportation Commission, February 24, 2005

5.6. Costing Additional Services

TxDOT will need to decide on the extent to which it wants to outsource ODA control functions other than the inventory task, including the evaluation of permit applications for new signs and investigations of illegal signs.

New site inspections

In Florida and Michigan, the contractors assist the DOT with the evaluation of permit applications for new signs. In Florida, the assistance is limited to the site inspection, whereas the Michigan contractors perform all the evaluation checks and make a preliminary recommendation to MDOT as to the disposition of the application. Because correct decisions on permit applications are so important, TxDOT should approach outsourcing of the associated responsibilities with caution. Our recommendation is that such outsourcing be trialed during the initial two-year inventory period. The trial would include site inspections as well as the other tasks involved in evaluating the application.

Geographic constraints may factor in the cost effectiveness of new site inspections. While the contractor would have significant latitude in deciding when the currently existing signs will be inspected, new site inspections must be performed within a narrow window of time. Because the contractor's offices will be fewer, and hence less geographically dispersed, than the TxDOT district offices, access to new site locations will often be much more convenient for TxDOT's personnel than for the contractor's. For this reason, we envision the establishment of a hybrid system in which the contractor could choose to perform the inspections that are attractive from an economic and logistical perspective while leaving the other inspections to TxDOT. During the initial two-year cycle, new site inspections should be incidental to the contractor's overall work, which will be focused overwhelmingly on inventory. Giving the contractor the option of performing limited inspections during this transitional period would serve three main purposes: 1) it would allow TxDOT to observe the contractor and make an informed decision as to whether or not this service should be expanded; 2) it would ensure that the contractor had sufficient work to retain full time staff even if the inventory process is finished ahead of schedule; and 3) it would provide valuable training for the contracted staff, the benefits of which would carry over into other areas of fieldwork.

5.6.1. Investigations and Enforcement Actions for Illegal Signs

The contractor will be responsible for identifying illegal and incorrectly permitted signs in the course of the biennial inventory. The question remains, however, as to the degree to which to contractor will follow up on signs identified as unacceptable. Illegal sign enforcement is a slow and tedious process that often turns into a war of attrition in which the DOT is not well positioned to win given its time constraints. There are several concerns, however, about the potential efficacy of a private contractor in actively enforcing the law against violators. First, it is not clear that sign companies will recognize an entity acting as a proxy for the state as a legitimate authority. Second, cases against illegal signs often drag on for years, and it may be difficult to determine when the contractor's obligations in a particular case cease. Third, specification of the basis for billing is problematic: if the contractor bills TxDOT on an hourly basis, verification of the time spent on each case becomes an issue, while billing on a per unit basis can present problems in defining the unit of work. Finally, there may be legal issues related to privacy that prevent TxDOT from releasing all of the records the contractor would need to perform proper legal research. The contractor's participation in illegal sign investigations will probably consist of paralegal services such as the compilation of needed documentation, much as contractors in Florida and Michigan prepare hearing packages.

5.7. Estimating the Cost of Fieldwork

The contracted work will resemble a pyramid of services, with the higher-level activities being contingent on the successful completion of lower-level activities. The researchers approached the cost estimation by establishing a baseline for the most basic elements of service and then building upon that foundation.

All miles of the non-contiguous state controlled network will need to be physically driven once every two years. This is, in itself, an enormous task given the physical characteristics of the state. Our model starts with an assumption of an idealized situation and then factors in real-world circumstances that increase the capital and labor costs of this inventory task. Some of these circumstances will be alterable with future changes in resources and technology; others are physical constraints that will be fixed for the foreseeable future.

5.7.1. Deadheading ratio

For a complete sign inventory, the number of vehicle-miles driven will be a multiple of the number of highway miles on the controlled network. The multiple, which we term the "deadheading ratio," will be higher in regions where the connectivity of the highway network is lower. In a region with low connectivity, an inventory inspector will have to backtrack more often to move on to the next section of highway to be inventoried. The deadheading ratio also reflects the need of inspectors to return periodically to their base of operations. In Florida, the TBE inspectors generally return to their home base daily, in which case the miles driven to reach an inventoried section in the morning and to return to the home base in the evening enter the deadheading ratio. Occasionally, the inspectors stay away on business overnight to reduce, without eliminating such deadheading time.

Based on discussions with various contractors and state DOT officials, we assume that the outsourced operation in Texas will have an average deadheading ratio of three miles driven per mile of road inventoried. In selecting this figure, we have taken into account the number of offices (four) out of which we envision that the contractor will operate. Maintaining a larger number of offices would result in a smaller deadheading ratio, but additional labor and capital expense.

5.7.2. Costs: Biennial Inventory

Table 5-1 presents the calculations underlying our estimates of the costs of outsourcing. For many of the cost elements, we present an upper-bound estimate along with our best-guess estimate.

Basic Inventory: Operating Costs

The estimates in Table 5-1 represent the operating costs of performing inventory only, split into various categories. The first several categories cover the vehicle operating and labor costs of the basic inventory (checking each sign once every two years). Based on the assumed deadheading ratio, driving the network of controlled roads on a biennial basis would entail 55,000 vehicle-miles per year. Vehicle operating costs, estimated at 40 cents per mile, would therefore cost \$20,812 per year (row 6).

	Variable/Category	Best Estimate	Upper Bound Estimate
1	Total highway center-line miles	12,706	14,413
2	Multiplier for one sided inventory	1.3	1.7
3	Multiplier for deadheading	3	4.2
4	Total miles to be driven	49,553	102,909
5	Vehicle operating cost/ mile	\$0.42	\$0.45
6	Total vehicle operating cost	\$20,812	\$46,309
7	Average Driving Speed (MPH)	40	35
8	Hours to drive controlled	1,101	2,287
9	OA technician base Labor rate	\$15/hour	\$22/hour
10	Labor overhead multiplier	1.45	1.5
11	Total Labor Rate	\$21.75/hour	\$33/hour
12	Multiplier for double occupancy	1.1	1.5
13	Labor cost for driving network	\$26,345	\$75,466
	Legal Signs		
14	Number of legal signs to be inventoried	7,472	8,200
15	Inspection time per sign at site (minutes)	16.5	18
16	Time savings from new technology	6	5
17	Adjusted time to verify each sign	10.5	13
18	Time to verify all inventoried signs (minutes)	78,456	106,600
19	Time to verify all inventoried signs (hours)	1,307.6	1,776.6
20	Subtotal: Legal Signs	\$28,440.30	\$58,630
	Illegal Signs		
21	Number of illegal signs to be inventoried	598	774.5
22	Time to verify illegal signs (minutes)	20	25
23	Time to verify all illegal signs (hours)	199.3	322.73
24	Subtotal: Illegal Signs	\$4,336	\$7,019
	Photographing costs		
25	Number of signs needing photographs	2,942.5	3,200
26	Time required to photograph sign (minutes)	5	7
27	Time required to photograph all signs (hours)	245	373
28	Cost to photograph all signs	\$5,333	\$8,120
29	Subtotal: Basic Inventory	\$85,267	\$195,544

 Table 5-1. Estimation of Contract Costs to TxDOT for Sign Inventory: Operating Costs^a

20	for Sign Inventory: Ope	rating Costs [*]	
30	Special Inventory (SI)—i.e., spot checks	1.071	1 4 4 1
31	Miles to be inventoried for SI	1,271	1,441
32	Multiplier for one sided inventory	1.3	1.7
33	Total Miles driven for SI	5,616	10,290
34	Vehicle operating cost/mile	\$0.40	\$0.45
35	Total vehicle operating cost	\$2,246	\$4,630
36	Average speed for SI	40 MPH	35 MPH
37	Time required to perform spot check	140	294
38	Multiplier for double occupancy	1.1	1.5
39	Total labor hours	154	441
40	Labor rate	\$21.75	33
41	Total labor cost	\$3,359	\$14,554
42	Subtotal: Special Inventory	\$5,605	\$19,185
	Quality Check (manager)		
43	Miles to be inventoried	635	720
44	Multiplier for one sided inventory	1.3	1.7
45	Total miles with deadheading allowance	2,808	10,291
46	Vehicle operating cost/mile	\$0.35	\$0.45
47	Total vehicle operating cost	\$983	\$4,631
48	Time to perform quality check (hrs)	70	147
49	Labor rate (manager)	\$30/hour	\$30/hour
50	Labor cost for quality check	\$2,106	\$4,410
51	Total cost for quality check	\$5,346	\$9,346
	Motel Costs		
52	Allowance for overnight stay	\$100/night	\$100/night
53	Nights/year	45	45
54	Motel cost	\$4,500	\$4,500
	Administrative costs		
55	Hours for administration	713	1,190
56	Cost of administration	\$13,119	\$39,266
57	Total attributable costs	\$112,847	\$275,673
58	Overhead Multiplier	1.4	1.5
59	Profit Multiplier	1.13	1.15
Total		\$178,524	\$475,536
60	Total Cost to Contractor per Highway Mile	\$5.07	\$11.75

 Table 5-1 (continued). Estimation of Contract Costs to TxDOT for Sign Inventory: Operating Costs^a

^a The capital costs of the motor vehicles used for the inventory operation are included here in operating costs (rows 5 and 6). Other capital costs allocable to the inventory are itemized in Table 5-3.

The estimation of the labor costs for the basic inventory was more complicated. The number of labor hours required depends on the:

- Percentage of the network that will be inventoried one side at a time (rather than doing both sides while traveling in the same direction).
- Average driving speed excluding stops to inspect signs. Taking into account that most of the controlled miles of road are in rural areas, this is set in our calculations at 40 MPH.
- The average time required to inspect each sign at the sign site. From the responses to our survey of the TxDOT Districts, we took the median of the estimates of the required time (Figure 2-1, Question 8). The median was then adjusted downward to allow for the time savings that the contractor would likely realize from using more advanced technology than is currently used in most TxDOT Districts. We also allowed for illegal signs to take somewhat longer to inventory.

We estimate that the four full time inspectors (including the contract supervisor) would need to spend 3,000 hours gathering data for the basic inventory in the field. This will include 1,100 hours spent driving, 1,300 hours spent inventorying legal signs, 200-300 hours spent documenting illegal signs, and 250 hours taking digital photographs. To the estimate of the required field time, we have added an additional amount for administrative tasks back at the office.

The hourly cost of the required labor input may include an implicit premium for somewhat difficult working conditions. To engage in field work for ODA control, individuals must be prepared to work alone, driving eight to ten hours a day, three to four days a week. In addition, they may have to spend a significant number of nights away from home. The work can at times be physically demanding and/or hazardous. All of these factors should be taken into account when determining the appropriate level of compensation for hiring and retaining staff.

The rate of employee compensation for ODA control work would also depend on the required skills. To perform the field work well, an employee must be comfortable with computers and rudimentary database management. Training for the other specialized field equipment can be provided on the job. Trimble, for example, provides training with the purchase of its GPS systems. By far, the most intricate knowledge needed for ODA control work is

regulatory. For this reason, the contractor would want to recruit individuals with experience in ODA regulation, most of whom would be current or former employees of TxDOT.

Based on these considerations, our estimate of the base rate of pay for the contractor's field staff is \$15/hour. Factoring in the costs of payroll taxes and benefits brings the estimate of the cost per staff hour up to \$21.75. The Austin-based contract supervisor has a total assumed compensated rate of around \$30/hour.

Combining the estimates of required hours and cost per hour, our estimate of the labor cost for the basic inventory reaches \$85,267/year (row 29). Given the number of parameters in our calculation, and the range of uncertainty regarding their values, the total cost could conceivably be much larger in reality. In a hypothetical worst-case scenario, where all inputs are significantly higher than estimated, the cost for this portion of the contract is estimated at \$195,544. The most difficult variable to estimate is the deadheading ratio. Interview data from Florida and Oklahoma indicates a higher rate of deadheading than we considered likely for Texas. A more precise measurement could be acquired through the use of TransCad modeling software and the appropriate GIS maps.

Special Inventory: Operating Costs

The researchers recommend that TxDOT supplement the basic inventory with a special inventory of road sections that are particularly susceptible to infringements of the Highway Beautification Act. Spot checking is also necessary to prevent sign companies from placing temporary structures on roads known to be recently inventoried. In total, spot checking will involve re-inventorying 10% of the network each year. This also may include sections of the rural road network that are not directly governed by the HBA but are known to be hotbeds of illegal sign activity. The time required to perform this supplemental check will be approximately 154 hours or \$3,359 for labor and \$2,246 for vehicle operating costs.

Quality Control Checks

The other inventory task we have costed is a quality control check of the field inventory, modeled after the arrangement in Florida. This task would likely consume 80 hours each year of the Austin-based contract supervisor's time, which has a cost of \$30/hr.

Miscellaneous Costs, Overhead and Profit

Our calculations also include rough allowances for costs associated with overnight stays in the course of field work and for administrative costs that are attributable to the inventoryrelated tasks. Such administrative costs could stem, for example, from the time spent in meetings between the contract supervisor and TxDOT, or between the contract supervisor and the regional field staff.

Overhead costs allow for certain cost items that are difficult to attribute to specific activities that the company undertakes. In a company that undertakes various functions in addition to ODA control, it would be a very challenging accounting exercise to determine, for example, what percentage of the costs of the human resource office could be attributed to the outdoor advertising work. The standard practice in government contracting is to allow companies to charge a certain overhead rate subject to auditing. The assumed rates of 40% for overhead and 13% for profit were based on information obtained from TxDOT staff who oversee contracts for engineering and surveying services, and from consultants who undertake highway-related projects.

5.7.3. Costs: New Site Inspections

Table 5-2 presents our estimation of the costs that the contractor would incur for new site inspections should they be among the contactor's responsibilities. Based on recent data, we assume that 900 such inspections would need to be performed annually. As was explained earlier, this task would be outsourced only on a trial basis during the initial inventory period. Our estimate of cost applies to the subsequent periods on the assumption that the trial leads to full-scale outsourcing of this activity. Due to lack of sufficient data, we have not estimated the cost of outsourcing any other tasks, apart from the site inspection, that are entailed in processing permit applications for new signs. For new site inspections, we have used a slightly higher labor rate (\$25/hour) than was assumed for inventory work because of the higher degree of technical and legal expertise required.

	Best Estimate	Upper Bound
Labor rate	\$25	\$33
Total time per		
inspection (hours)	3.5	5
Compensation per		
inspection	\$88	\$165
Number of		
inspections year	900	900
	\$78,750	\$148,500

Table 5-2. Estimation of Costs to TxDOT for Outsourced New Site Inspections

5.7.4. Capital Costs

Motor vehicles will account for most of the capital costs of an outsourced operation. The capital costs of the motor vehicles were already subsumed, however, within the comprehensive estimate we used for the per mile cost of vehicle travel. That estimate, 42 cents/mile, included the capital costs along with the costs of fuel, maintenance, insurance, etc. Therefore, the itemized breakdown of capital costs in Table 5-3 does not include an entry for vehicle costs. Also omitted from this breakdown is the cost for database development, which will be completed under a separate contract before the commencement of the main contract under discussion.

The capital costs that are itemized in Table 5-3 include those of the GPS unit and associated software with which each vehicle will be equipped. We believe the most appropriate choice for the parameters of this project is the Trimble Geo XT equipped with TerraSync Pathfinder software. This unit was chosen because it is precise enough for TxDOT's needs, compact, and easy to operate. Four units would need to be purchased at a total cost of \$24,000. In addition, each vehicle should be equipped with a standard Distance Measuring Device. The DMI is the primary tool currently for most TxDOT HBA field staff in locating signs. Once GPS recordings of signs have been made, the DMI will be used primarily for verification or as a backup method. Each unit costs approximately \$500. Finally, each vehicle would be equipped with a laptop computer and a digital camera. The total initial capital budget for field staff is thereby estimated at \$33,400.

Although it would be possible to annualize the capital costs and add them to annual operating costs, there is some uncertainty as to whether TxDOT will supply the contractors with the capital items itemized in Table 5-3 or whether the contractor will need to obtain them independently. If TxDOT were to lend them to the contractor, then the contract would be

somewhat more likely to attract bids from small companies. Because of this uncertainty, we have left the capital costs expressed as upfront amounts.

Capital Item	Unit Cost	Cost for Four Units
Trimble Geo XT	\$3,865	\$15,460
TerraSync Professional with GPS Pathfinder	\$2,245	\$8,980
Distance Measuring Instrument	\$500	\$2,000
Laptop computer	\$1,500	\$6,000
Digital Camera	\$250	\$1,000
Total capital cost	\$8,360	\$33,440

 Table 5-3. Estimated Capital Costs for Outsourced ODA Control Activities

5.7.5. Estimated Total Cost of Outsourcing to TxDOT

Table 5-4 summarizes the cost estimates presented in the preceding tables. The resulting estimates of total annual cost to TxDOT, excluding the capital costs itemized separately, are approximately \$255,000 (best-guess) and \$520,000 (upper bound). The itemized capital costs for equipment that would be installed on or taken with an inspector's vehicle add another \$33,000 in upfront cost. A small caveat is that the estimated inventory costs pertain to the first outsourced inventory, which would require more photographing of signs than would the subsequent inventories. Further, illegal signs, which take longer to document, could be slightly less common in the subsequent inventories, assuming that first inventory leads to discovery and prompt removal of some of these signs. In light of this, the costs for subsequent inventories could be somewhat lower than what has been estimated here for the initial inventory. The difference would be small, however, since the time cost of photographing signs and documenting illegal signs are not substantial components of total inventory cost.

	Annual (ongoing) cost		Upfront Cost
Inventory	Best estimate	Upper bound	
Basic inventory	\$85,267	\$195,544	
Special Inventory	\$5,605	\$19,185	
Quality Control	\$5,346	\$9,347	
Miscellaneous costs	\$17,619	\$51,597	\$33,440
Overhead & profits	\$64,940	\$185,481	
Total Inventory Cost	\$178,524	\$475,536	
New Site Inspection Cost	\$78,750	\$148,500	
Total	\$257,274	\$623,536	

Table 5-4. Summary of Estimated Costs to TxDOT for Outsourced ODA Control Activities

Appendix 1. Power Sharing among Federal, State, and Local Governments in the Regulation of Outdoor Advertising

The allocation of powers among federal, state, and local governments remains in some respects a contentious issue in the United States. To understand the allocation of such powers in one particular area of governance, in this case the regulation of outdoor advertising, readers may benefit from enriching their understanding of the broader picture. The first part of this Appendix is devoted to readers who are seeking this general background on the division of powers among levels of government. Readers who feel that their background in this topic is largely sufficient may skip to the second part of this appendix, which examines the allocation of powers in outdoor advertising.

Allocation of Powers among Levels of Government in the United States

In reviewing the roles, responsibilities and duties for power sharing in the United States, one must first look to the body of constitutional law developed since the constitution was enacted in the United States.

American government is limited government.¹ The national government has only those powers as are granted to it, either explicitly or implicitly, by the people through the constitutional text and amendments. Powers not delegated are retained by the states and the people under the Tenth Amendment to the Constitution. Thus a federal system means that the national government and the government of each of the states coexist. Federalism—or the power sharing between the federal, state and local government—relies upon two distinct principles of American constitutionalism: separation of powers and division of powers. These checks and balances are not only limited to the national arena; they also apply to the division of powers between the national and state governments. Federalism is also underpinned by a foundation of limited government. The separation of powers and division of powers (federalism) were deemed by the founding fathers to serve the cause of liberty by diffusing and limiting governmental power. Federalism, it is said, "embodies an effort to achieve national unity while preserving some degree of local autonomy."²

National Legislative Power

The scope of the national legislative power is granted under Article I § 8 of the Constitution. Under this section, a variety of powers is granted to Congress, including the power to regulate commerce with foreign nations and among the several states; to lay and collect taxes to pay the debts and provide for defense and the general welfare of the United States.

Article I § 8 not only expressly grants specific powers to Congress but also provides Congress under Article I §8 (18) the power "to make all laws which shall be necessary and proper for carrying into Execution the foregoing Powers, and all other Powers vested by this Constitution in the Government of the United States, or in any Department or Officer thereof." This necessary and proper clause of Article I § 8 ensures that Congress can enact laws that are reasonably designed to achieve its delegated powers. *McCulloch v. Maryland* (1819) developed a rationally related test to be used to determine whether the activity being undertaken was legitimate. Justice Marshall argued "Let the end be legitimate, within the scope of the constitution, and all means which are appropriate, which are plainly adapted to that end, which are not prohibited, but which consist with the letter and spirit of the Constitution, are constitutional."³

Congress has no inherent domestic legislative powers; see *Kansas, State of v. State of Colorado* $(1907)^4$. Under the Tenth Amendment those powers that were previously exercised by the states and were not delegated are retained by the states or the people. There has been substantial controversy over whether the Tenth Amendment is a substantive limitation on Congress's authority to legislate as to private parties and the States. It is generally held, though, that there is no general federal police power to intervene to regulate for the health, safety or general welfare of the citizenry.

However, because Congress has the power to regulate interstate commerce (Article I § (3)), in some instances this has provided a basis for congressional regulation of local intrastate activities. The Congressional power to regulate the channels and instrumentalities of interstate commerce and persons and things within interstate commerce is a plenary power. This permits it to prescribe rules for the protection of commerce between the states and within the United States. The commerce clause serves two distinction functions. Firstly, it acts as a source of congressional authority; secondly, it acts implicitly as a limitation on state legislative power. The limitations on Congress's authority to regulate under the commerce clause were initially broadly viewed so that in *Gibbons v. Ogden* (1824), Congress could regulate all commerce

which concerns more states than one.⁵ However, after this case the Supreme Court adopted a stricter affectation doctrine which stipulated that such local activities can be regulated if they are part of the 'stream' of interstate commerce; see *Stafford v. Wallace* (1922).⁶ Congress's plenary power to regulate and protect interstate commerce also extends to local activities that threaten the instrumentalities of interstate commerce and persons and things in interstate commerce; see Houston, E. & W. Texas Ry. V. United States (The Shreveport Rate Cases) (1914).⁷ Under this doctrine and using the necessary and proper clause, the Court held that Congress could regulate local activities if it could rationally conclude that this activity has a 'substantial' effect on interstate commerce. In assessing this effect Congress is allowed to consider cumulative or aggregate impacts of all regulated activities; see *Wickard v. Filburn* (1942).⁸ The Supreme Court's review of economic regulatory laws during the period from 1880 to 1937 is characterized by the notion of dual federalism. The Tenth Amendment brake provided for some areas of economic life to be non-overlapping so that they were either an area for state or congressional regulation, but not both. Then, in 1937, President Roosevelt's New Deal legislation was threatened by a series of decisions that declared, for example, the National Industrial Recovery Act unconstitutional. In response the President launched a counter-attack known as the courtpacking plan. This proposed to appoint additional federal judges for every judge over 70 who had served on a court for ten years. With a Supreme Court that had six justices over the age of 70, the stage was set for a political showdown. While the court-packing plan was defeated in mid-1937, the Supreme Court had, in essence, materially reformed itself: Justice Van Devanter retired and a new majority in NLRB v Jones & Laughlin (1937) held in favor of the validity of New Deal legislation. This 'modern trend' on the validity of congressional regulation under the commerce-based laws basically holds that the court will uphold commerce-based laws if the Court is convinced that the activity being regulated 'substantially affects' interstate commerce.

The limits to congressional use of the commerce power stayed much the same for some sixty years but a 1995 case has put this congressional power into question; see *United States v*. *Lopez* (1995).⁹ The court in Lopez invalidated a federal statute on the grounds that it was beyond Congress's Commerce power. The majority justices in this case concluded that possession of guns in schools was not itself a commercial activity. They further held that the requisite effect was not present and that possession of guns in schools had not been demonstrated to substantially affect interstate commerce. The court held that there was no jurisdictional element limiting the reach of the statute and the Court rejected the government's claims that a causal

chain could be relied upon to uphold the Act in question. In holding the Act to be unconstitutional, the Court noted limits to the congressional use of the Commerce Power. In his dissent, however, Justice Breyer noted that the majority was unwise to 'threaten...legal uncertainty in an area of law that, until this case, seemed reasonably well settled.'¹⁰

Another aspect of the commerce clause that requires review is the pre-emption doctrine. This concerns the extent to which the valid exercise of a power by Congress restricts what states can regulate. Under the Supremacy Clause, if a direct and obvious conflict arises between a federal and state statute, the Constitution under Article VI makes clear that the state statute is invalid. The state law must yield to, and thus is said to have been preempted by, the federal law. But some cases are less clear-cut because of ambiguities relating to the conflict that arises or to whether the federal and state regulations govern an identical subject matter. Again the Supreme Court has applied a number of general principles to determine if the Supremacy Clause is relevant.

- 1. Actual Conflict
 - In some instances it may be impossible to obey the state and federal regulations simultaneously—in these cases the state regulation must fall away.¹¹
 - If the federal and state regulations do not conflict on their face, compliance with both is not impossible. However, if there are conflicting objectives behind the federal and state regulations (such that compliance with both is impossible) then the state regulation will fall away.
 - Even if a federal and state regulation is pursuing a similar or common objective, if the tactics employed are sufficiently conflicting (for example, states might use a blunter and less-calibrated method) then the state regulation will fall away.
- 2. Federal Occupation of the Field
 - If Congress occupies the field for the federal government, or if Congress has made a decision to occupy the field, then the state regulation will fail no matter how well it agrees with the federal action and policies. The test for preemption developed by the Supreme Court is that Congress will be deemed to have preempted an area only where either its intent is unmistakable or where the nature of the regulated subject matter permits no other consideration.¹²

- If there is existing federal regulation of an area that is broad and covers most of the subject area, the Court will more likely find for federal preemption than if the federal scheme is less comprehensive.
- Areas that are traditionally left to the states will be less likely to be found to have been preempted. This is especially the case in health and safety regulations.

It should also be noted that the federal government can affirmatively consent to state action in what would otherwise be a state encroachment on the Congressional Commerce Power.¹³

While there is no inherent national police power, it is accepted today that Congress can achieve social welfare objectives through regulating interstate commerce. If Congress chooses to exercise its delegated powers, it can regulate matters that have been traditionally regulated by the states. When Congress does regulate private action, the Tenth Amendment is not a substantive limitation on Congress's power to regulate private activities; see *United States v. Darby* (1941).¹⁴ However, state sovereignty and the Tenth Amendment do significantly limit Congress's power to regulate the states' officers or those of their political subdivisions; see *Printz v. United States* (1997).¹⁵ The Darby decision has been placed into some disquiet due to *United States v Lopez* (1995), where the Supreme Court for the first time in sixty years invalidated a federal statute on the grounds that it was beyond Congress's Commerce Power.

State Power in America Federalism

States have broad police powers to legislate on behalf of the health, morals and wellbeing of their citizens. This state action is also subject to constitutional limitations that arise from either specific guarantees or from constitutional division of powers between the federal and state governments. Therefore, powers that are exclusively national in character cannot be pre-empted by the states themselves.

Issues that arise in context of federal-state constitutional conflicts often reside around the extent of the power of the states and whether they have all the powers that the Constitution does not withhold from them. The reserved powers of the states under the Tenth Amendment, for example, were considered to only refer to the powers that the states had prior to ratification of the Constitution. In *U.S. Term Limits v. Thornton* (1995),¹⁶ the Supreme Court held that

constitutional text, history and structure combined to implicitly deny the states the power to add or to alter the qualifications for Congress set forth in Article I, Sections 2 and 3.¹⁷

Local Government Jurisdiction and Powers

The extra-constitutional doctrine of 'inherent home rule' stated that "quite apart from any constitutional or statutory provisions allowing home rule to cities that are granted their own charter, a city has a natural inherent right to govern its own affairs where purely local matters are concerned."¹⁸ Although this doctrine enjoyed some currency for many years, the current legal consensus is that municipalities in the Unites States are subject to the complete control of the states in which they are located. This control is limited, however, to the constitutional provisions of each state constitution.¹⁹ This general rule of complete state control is a plenary power. The municipalities are considered political sub-divisions of the state and the state can take away the powers of municipalities,²⁰ transfer their functions to other governmental units, and turn their property over to other governmental entities without paying compensation.²¹ The contract clause of the United States Constitution has also been held to accord a municipality no protection against repeal or amendment of its governing charter by the state.²² Similarly the Privileges and Immunities Clause, the Equal Protection Clause and the Due Process Clause of the Constitution have also been held to not apply to state action affecting municipalities. Therefore, any protection that a city or town has against state action must be derived from the specific restrictions found in state constitutions that are aimed at state control of municipalities. These fall into six broad categories, of which the most relevant to billboard regulation is the prohibition of state interference with local streets. Improvement of city streets is a power that is readily inferred in favor of the cities, and is considered exclusive in a city that has a home-rule charter.²³ Nevertheless, municipalities do not usually hold full fee title to the public streets, but rather an easement for limited purposes, which is often considered a trust for public use. In addition, the city's interest in streets is held subject to state supervision, and limited by specific constitutional restrictions on the state power.²⁴

So what protection does constitutional and statutory home rule provide to cities and municipalities? Under the doctrine that home rule is granted not as an inherent right but by constitution and or statute, the home rule codification serves as a grant of power to cities and as a limitation on state control of these cities.²⁵ Home rule arrangements, while differing from state to state, are posited on constitutional or statutory language that grants powers of local self-

government. This has been judicially interpreted to grant sufficient power of municipal laws prevailing over state laws on matters that fall within the purview of purely municipal concern (and not statewide concern). The biggest hurdle is determining whether a matter is subject to state or to local regulation. Again, the answer to this question will vary among states and municipalities, and according to Osborne, those variances will be attributable more to the "state of mind of local officials than according to differences in the form of state authorization of home rule."²⁶ Home rule within the counties, for example, has also been argued to change their traditional status as little more than sub-agencies of the states, and it may aggravate problems of overlapping governments and division of authority.²⁷ In effect, a home rule charter (whether obtained constitutionally or legislatively) generally transfers from the state to the city six powers:

- 1. The constitution itself grants the locality all necessary powers for the government and administration of local affairs.
- 2. The cities can legislate on matters of general or statewide concern unless specifically forbidden by state law or the localities own charter.
- Under legislative home-rule the city has such powers as are included in its charter and authorized by state statutes.
- 4. Under either form of home rule, state legislative acts must yield to local laws when those acts deal with local concerns and are in conflict with laws of the municipality.
- 5. In a few states, home rule is deemed to terminate all state control over municipal affairs, and state laws on these matters become inapplicable to home-rule cities even if there is no conflict with local law, or there is no local law concerning the same matter.
- 6. In a few states, the state legislature retains limited power to pass local laws, but only if those cities consent to or approve of such legislation.

Most of the litigation that has surrounded home rule has centered on conflicts between state and city law. If the situation is of statewide concern, generally state law will prevail to the extent of the conflict. In cases of local concern, the city law will prevail. The courts have attempted to develop tests and rules-of-thumb, but these have proved to be of limited use because the cases are decided on an ad-hoc basis and usually center on specific facts-in-issue.²⁸

So can home-rule cities exercise any use of the police powers? Generally the response to this is no because of the 'clear effect' that conditions in one city have on the rest of the state.

Therefore, any police powers that are delegated by the state are severely curtailed and restricted as to their use and coverage. In a few states, however, traffic regulations applying to a city's own streets are characterized of local concern. Also zoning restrictions on very specific matters, even if enacted partially for safety reasons can be classified as a purely local concern.²⁹

Extra territorial power outside a city's limits is considered to be exceptional and limited. To distinguish between matters of statewide concern and those of purely municipal concern, the courts have relied on four broad types of tests:

- 1. If uniform regulation throughout the state appears necessary or desirable, the matter is likely to be classified of statewide concern.
- 2. Courts are likely to look somewhat to the roles that have been traditionally played and undertaken, and the services traditionally furnished by the respective governments.
- 3. The effect of the particular matter on those outside the municipality
- 4. Where cooperation between locality and state, or among governmental units within the state, is needed, the matter is generally classified as of statewide concern.

The courts will also look at whether the state has preempted certain fields. If a state has by legislation pre-empted (or occupied) a certain field, then the city cannot create any law on this matter, regardless of whether it has home rule. So any city legislation will be considered to be in conflict even if the usual tests for conflict are not met, and state law will prevail. Under the preemption doctrine, the state law will not only prevail to the extent of the conflicting jurisdiction with the city law, but it will completely wipe out any city law. Because pre-emption is not often expressly stated in legislation, the courts use two general considerations in determining whether pre-emption has occurred. Firstly, the comprehensiveness and pervasiveness of the state regulation—i.e., whether it thoroughly covered all likely activities and objects or regulation within the subject matter. Secondly, is there a need for uniform treatment within the state? If statutes contain exceptions, the courts look to the intent of the state legislature, along with other factors that will be weighed to ascertain the intent.

The relationship between municipalities and the federal government has grown over time due to the great variety of programs and activities that the federal government has promulgated. In many instances, federal aid has often been necessary to undertake the activity or program with any level of success, and the aid has been sought by localities willing to accept the associated

conditions or limitations.³⁰ However, the courts have held that these conditions must be reasonable and limited.³¹ The debate that raged over whether the federal government could regulate relations between state and local governments was finally settled in Garcia v. San Antonio Metropolitan Transit Authority (1985).³² Here the Supreme Court upheld application of the minimum-wage and overtime requirements of the Fair Labor Standards Act to local government employees. The court noted that the commerce power is not exceeded unless a law is destructive of state sovereignty or violative of another constitutional provision.³³ The assertion of eminent domain (police power) has also arisen in connection with federal-local relations. For example, if a power of eminent domain is delegated to the municipalities, can the municipality use this delegated power against its parent state? In some instances, this power has been upheld (Washington Department of Game v. Federal Power Commission, 1953).³⁴ It should be noted, however, that each case is decided on the merits, but in most cases greater judicial scrutiny does occur on the necessity of the taking. The Supreme Court, for example, noted in Citizens to Preserve Overton Park, Inc. v. Volpe (1971) that the Secretary of Transportation was prohibited from authorizing use of federal funds to construct a road through park lands unless there was no feasible alternative route.³⁵ On the other hand, if a city or state operation comes within the scope of federal powers, the supremacy of the federal government over state and local governments regarding eminent domain and police powers is clear: the federal government can apply its standards.³⁶ Similarly, if the federal government has pre-empted a field, local regulation of this field will be impossible. Under a three-fold test created by the Supreme Court, however, congressional intent to pre-empt will not be assumed unless one of the three conditions are met, namely: 1) express legislative provision, 2) a scheme of federal legislation so pervasive so as to lead to reasonable inference that Congress left no room for additional legislation, or 3) congressional legislation touches in a field in which federal interest is so dominant that the federal system is assumed to preclude state/local law on the subject. Lastly, it should always be remembered that even if Congress has not pre-empted a field of law, a state or local law can always be invalidated under the Supremacy clause—Article 6, clause 2 of the U.S. Constitution-if it is in conflict with federal law or stands as an obstacle to accomplishment of Congressional objectives.³⁷

While one might expect federalism—the relationship between the federal government, state government and local government—to have been relatively settled by now, this arena of

constitutional law is by no means dormant or closed. Lopez, as noted earlier, changed the playing field after a long period of jurisprudential consensus.

Power Sharing in the Regulation of Outdoor Advertising

Power sharing among the federal state and local authorities with regard to HBA enforcement is often precarious. Some legal analysts have argued that the Act is an unlawful infringement on intrastate commerce and therefore unconstitutional. Furthermore, enforcement of the Act, whether by the federal or state government, is often attacked on free speech grounds.³⁸ The desire of cities to control their own OA provisions within their borders as well as within their extraterritorial jurisdiction will likely lead to heightened tension with TxDOT as the amount of urbanized land in the state increases. Adding another actor to this mix in the form of a private contractor may increase tensions if it is felt that the contractor is usurping authority that belongs to the government. For this reason, we have prepared a thorough discussion of the constitutional justifications of power sharing as related to the Highway Beautification Act.

The constitutional controversies and subsequent court cases that have arisen due to the enactment of the Highway Beautification Act have centered around three main themes:

- 1. The First Amendment to the Constitution: Freedom of Speech
- 2. The extent to which the local jurisdictions were able to control billboards within their jurisdictions and their Extra Territorial Jurisdiction (ETJ).
- 3. The use of former police powers of amortization and eminent domain to affect a 'taking' of a billboard if it was non-compliant, or illegal.

Cases

State of South Dakota v. Volpe (1973) 353 F. Supp. 335. 1973 U.S. Dist.

In 1973 the Secretary of State for Transportation notified South Dakota that it had not provided 'effective control' under the terms of the Highway Beautification Act 23 U.S.C.A. sec. 131 (b), and therefore was not in compliance; the Secretary was proposing to withhold ten percent of the state's fiscal 1973 apportionment. The Secretary contended that South Dakota had effected legislation that provided only for commercial zones, disregarding normal zoning concepts and under its legislation had created a result inconsistent with true zoning. Furthermore, strip-zoning provisions had been countermanded by a county zoning provision which resulted in two zoning authorities over the same territory. The District Court, while acknowledging that its

review of the administrative decision was limited in scope, noted that the Secretary's decision had a rational basis and was not unreasonable. The Court held that the Secretary had acted within the parameters of the legislation and urged the South Dakota Legislature to initiate steps for appropriate legislation to correct the objectionable provisions.

Lamar Corporation v. City of Mandeville, et al. (1995) 1995 U.S. Dist LEXIS 14762

A special committee was created in 1985 by Mandeville City Council to study the effects of signs and billboards on the community and to determine what legislation was necessary. The resulting Sign Code regulated size, height, location, construction and content of signs and billboards. Lamar Corporations billboards didn't meet the size requirements and they qualified as non-conforming. Under the code they were to remain in place for seven years under an amortization provision, after which time they would be removed. The Court held that Mandeville lacked authority to require removal of lawfully erected off-premises advertising signs without paying just compensation; amortization did not amount to just compensation. The sign code was also held to be 'plainly inconsistent' with the just compensation mandate of the Louisiana Highway Beautification Act and was therefore preempted by state law.

<u>City of Houston, et al., v. Harris County Outdoor Advertising Association, et al. 732 S.W.2d 42;</u> 1987 Tex. App. LEXIS 7245

This appeal from a declaratory judgment affecting the regulation of billboards around the city of Houston concerned two main issues. First, the interpretation of the federal and state statute, and the local sign code; second, the constitutionality of a portion of the state's sign statute.

Facts and history leading up to this case

The City of Houston adopted its sign code in 1980. This code regulated the erection and maintenance of different types of outdoor advertising. The code also regulated the height, size and location of billboards. Existing signs that did not conform were provided a six-year amortization period to allow these signs to come into compliance. The city also adopted the state's spacing regulations but in essence applied the provisions of the sign code to those signs in the federal corridors. The result was that it exempted any federal corridor billboard from removal under the six-year amortization rule because HBA required payment for removal. However,

those billboards that were within federal corridors and could conform to the ordinance without being removed were subject to the modification provisions to meet height and size requirements at the end of the six-year amortization period. This code was attacked for its constitutionality in 1980 and was held to be constitutional. The sign code was also found to not conflict with the Texas Highway Beautification Act (coded as part of the TLAA) and the HBA.

After this setback the billboard industry proceeded to urge bills to nullify the amortization provisions within the sign code. H.B. 1330 was passed in 1985 as a compromise by the Texas Legislature. Here the use of methods other than cash compensation for removal of non-conforming signs was limited to cities that had sign ordinances already enacted and the signs were to be placed into two groups. The first group included signs that could be brought into compliance with the local ordinance at a cost of 15 percent or less of the signs values. Lists of such signs were required to be submitted by their owners to the municipal sign board that was created under H.B. 1330. The Municipal Sign Board can then require that one half of these 15 percent of signs be brought into compliance, five each year from 1986-88. The other one half of these signs will be permitted to remain unaltered as grandfathered non-conforming signs.

The second group of signs are those that cannot be brought into compliance at a cost of 15 percent or less or their total value. The Board will determine their useful life and an amortization period. Cities were also given the right to extend their sign control ordinances into the areas of extra-territorial jurisdiction. The city of Houston immediately adopted the provision of H.B. 1330 and its Sign Board immediately requested from billboard owners a list of non-conforming signs within the City and their ETJ that could be brought into compliance at 15 percent or less than their value. The list was submitted and this included signs on federal corridors. The Board also determined the useful life of the second group (over 15 percent signs), as 17 years for wooden pole signs and 21 ½ years for steep pole signs.

The local billboard industry filed suit in the District Court of Harris County for declaratory relief. This District Court held that the Houston Sign Code was inapplicable to signs located adjacent to the federal interstate and primary highways. Texas had a non-delegable duty to regulate these types of signs. The court further held that the amortization procedure was inapplicable to federal corridors. The term "useful life" under the amortization procedure was void for vagueness. Certain interpretations by the City's administrators of the Sign Code were invalid. Plaintiffs were entitled to bring *all* their signs which fail to comply with the size and cutout provisions of the code into conformance according to H.B. 1330's amortization

procedures and not those of the city which required immediate conformation. The Houston Ordinance adopted by the City Council to extend Houston's ETJ was void ab initio because it was adopted too soon.

The Texas Court of Appeal noted, however, that because Houston was a home rule city it derived its powers not from the legislature but from Article XI, Section 5 of the Texas Constitution. Therefore it was not necessary to look at acts of the legislature for grants of power to home rule cities but to limitations on their powers. The Court reasoned that according to Article 1176, the enumerations of powers of Article 1175 may never be construed as an implied limitation on the exercise by a home rule city of all powers incident to the enjoyment of local self-government. Therefore the city may enact any ordinance which is not inconsistent with the constitution of laws of Texas. The state regulations, the Court concluded, allow political subdivision of the state to exercise control over outdoor advertising signs. Texas Revised Civic Statutes Annotated also specifically authorizes home rules cities to 'license, regulate, control or prohibit erections of signs or bill boards as may be provided by the charter or ordinance." Sign Code 4604(c)(6) also specifically authorizes the sign administrator to enforce the TLAA (the agreement between the United States Department of Transportation and the Texas Department of Highways). The HBA and TLAA establish minimum regulations for outdoor advertising but together they do not prevent, but 'rather leave the door open' and encourage stricter regulation by other governmental agencies in the lawful exercise of their power. The Appeals Court held that in the absence of express limitations there is nothing that prevents a city from enacting an ordinance covering the same subject as federal or state regulations.

The Court of Appeal then turned to the Board's decision to include signs within the federal corridors that would be subject to the amortization provisions. The court held that it did not agree that the city is powerless to regulate the federal highway signs in any manner unless it paid cash compensation. The court reasoned that the HBA expressly authorizes states to impose stricter regulations on signs in the federal corridors and H.B. 1330 attempts to accomplish this purpose. The Court ruled that while, as the appelants had argued, H.B. 1330 art.1 § 6 requires cash compensation for the removal of a billboard in a federal corridor, this does not preclude the Board from initiating actions that were 'not tantamount to removal.' So actions requiring size or height reduction and not removal, or designating federal corridor signs in the one-half of the 15 percent or less signs allowed to remain, did not violate the just compensation requirement of the HBA. They further noted that Texas could use amortization as a valid exercise of municipal

police power to terminate non-conforming property uses. Under use of police powers, the court held, municipalities could require the removal of signs not in the federal corridors. When the court then turned to the constitutionality of the statute with regards to the term 'useful life' the court again held that the term did not violate due produces grounds by being unconstitutionally vague. The court held that there were opportunities for appeal to both the Sign Board upon determination of useful life and of course to the district court by writ of certiorari. According to the court, this not only provides for the decision to be made by a board composed of extremely qualified persons, but assures the right of appeal to further guarantee uniformity. The last major issue to be determined was whether the city was incorrectly interpreting certain sections of the Sign Code. The court held that they did not agree with this conclusion 'in view of the plain meaning of various sections.' The court held that the sign code was not ambiguous, and that the trial court erred in classifying as nonconforming signs with cutouts which caused the sign to exceed the stated size conditions.

Texas Department of Transportation, et al., v. Pat Barber 111 S.W.3d 86; 2003 Tex. LEXIS 107; 46 Tex. Sup. J 916

This case involved the constitutionality of the Texas Highway Beautification Act, and specifically the portion that precluded Pat Barber from displaying a billboard on his nonresidential property. The Court of Appeals held that the Act violated Barber's rights under the Unites States Constitution as applied to his expression of noncommercial ideological speech. The State Supreme Court concluded that because the Act was content neutral and constitutes a valid time, place and manner restriction as applied to Barber's billboard, it did not violate Barber's federal guarantee of free speech.

Lubbock Poster Company v. The City of Lubbock Texas, et al. 569 S.W.2d935; 1978 Tex. App. LEXIS 3525

This case again turned on the constitutionality of certain provisions of a city ordinance regarding zoning and amortization. The District Court declared void only the nonconforming use and amortization provisions and enjoined the enforcement of these provisions. The Court of Appeals, however, held that the ordinance reasonably afforded Lubbock Poster Company an opportunity to recoup or recover its investment under the amortization provisions of the

ordinance. The Court of Appeal further held that the challenged provisions of the ordinance were reasonable, bore a fair and substantial relation to the objective of the ordinance and therefore did not violate the equal protection or due process clauses of the constitution. The Court of Appeal further held that the ordinance merely sought to regulate time, place and manner of the outdoor advertising rather than the content of the speech itself. Finally, the Court of Appeal held that the challenged provisions of the ordinance constituted a constitutionally valid exercise of the city of Lubbock's police power.

Paradigm Media Group Inc, v. City of Irving 2002 US. Dist LEXIS 14133

This case alleged that the city's sign ordinance was unconstitutional under the First Amendment, First and Fourteenth Amendments and Section 1983. The city adopted a new zoning ordinance prohibiting new billboards; however, it only applied to commercial signs and did not apply to non-commercial signs. The ordinance also noted, however, that non-commercial signs had to comply with the same time, place and manner regulations as other signs. The preexisting boards were not prohibited under the sign ordinance but they had to comply with the provisions governing non-conforming signs, including the amortization provision of thirty years for destruction of signs and compensation provisions consistent with state law. The District Court held that the test for a First Amendment claim had been laid down in Metromedia, 453 U.S. at 407, and that the city's sign ordinance was not unconstitutional under that test. The ordinance directly advanced a substantial government interest. The Court further held that a city did not reach further than necessary to achieve this interest. As to the Section 1983 claims, the Court held that the plaintiff had to show that the City of Irving, acting under color of state law, has through official policy or custom proximately caused the deprivation of a constitutional or statutory right. In this case, the plaintiff failed to show a cognizable deprivation of its rights to freedom of expression under the First and Fourteenth Amendments.

¹ Bartron, J.T., and Dienes, C.T. "Constitutional Law." Sixth Ed., 2003. Black Letter Series. West Publishing: MN p 102

² Barron, J.A., and Dienes, C.T, "Constitutional Law." (2003) In a Nutshell Series. West Publishing: MN, p 2 ³ Id. at 421

⁴ Kansas, State of v. State of Colorado, 206 U.S. 46, 27 S.Ct. 655, 51 L.Ed. 956 (1907) 103

⁵ Gibbons v. Ogden, 9 Wheat. 1 (1824)

⁶ Stafford v. Wallace, 258 U.S. 495, 42 S.Ct. 397, 66 L.Ed. 735 91922), 106

⁷ Houston, E.&W.T.R. Co. v. United States (Shreveport Cases), 234 U.S. 342, 34 S.Ct. 833, 58 L.Ed. 1341 (1914), 106

¹² Florida Lime & Avacado Growers v. Paul, 373 U.S. 132 (1963)

¹³ Tribe, L. American Constitutional Law (Foundation Press, 2nd Ed. 1988) p 524-525

¹⁴ United States v. Darby, 312 U.S. 100 (1941)

¹⁵ Printz v. United States, 521 U.S. 898, 117 S. Ct. 2365, 138 L.Ed 2d 914 (1997). 103, 117,118

¹⁶ United States Term Limits, Inc. v. Thornton, 514 U.S. 779, 115 S.Ct. 1842, 131 L.Ed 2d 881 (1995), 103, 123

¹⁷ This case had a vigorous dissent, authored by Justice Thomas which argued that the silence of the Constitution on the issues of terms limits was an argument for term limits. Clarence contends that where the Constitution does not speak either expressly or by necessary implication—the Federal Government lacks that power and the States enjoy it.

¹⁸ McBain, The Doctrine of an Inherent Right of Local Self-Government, 16 Col. Law. Rev. 190,299 (1916)

¹⁹ Barnes v. District of Columbia, 91 U.S. 540, 23 L.Ed. 440 (1876)

²⁰ Becker v. Adams, 27 N.JK. 337, 181 A.2d 349 (1962)

²¹ Higginson v. Treasurer, 212 Mass. 583, 99 N.E. 523 (1912)

²² Hunter v. Pittsburgh, 207 U.S. 161, 28 S.Ct. 40, 52 L.Ed. 151 (1907)

²³ Blake v. City of Eureka, 201 Cal. 643, 258 P. 832 (1910)

²⁴ People v. Kerr, 27 N.Y. 188 (1863)

²⁵ See 1 Antieau, Municipal Corporation Law §§ 3.00 (1998)

²⁶ Osborn, M. Reynolds, Jr., Local Government Law, (2nd Ed, 2001) West Group, St Paul, Mn. Pp 107, also

Vanlandingham, Muncipal Home Rule in the United States, 10 Wm. & Mary L.Rev. 269, 191-2 (1968)

²⁷ See Fordham, Local Government Law 101 (2nd rev. ed. 1986). Cf. City of West Allis v. County of Milwaukee, 29 Wis. 2d 356, 159 N.W. 2d 35 (1968), cert. denied 393 U.S. 1064, 89 S.Ct. 171, 21 L.Ed. 2d 707.

²⁸ See Ruud, Legislative Jurisdiction of Texas Home Rules Cities, 37 Tex.L.Rev. 682, 687n. 24 (1959). Cf. Ex parte Hitchcock, 34 Cal. App. 11, 166 P. 849 (Dist.Ct. 1917).

²⁹ Ekern v. City of Milwaukee, 190 Wis. 633, 208 N.W. 860 (1926)

³⁰ On changes in the balance of power between federal and local governments, see Griffith (ed.,), Federalism—The Shifting Balance (American Bar Associations 1989)

³¹ Bidlingmeyer v. City of Deer Lodge, 128 Mont. 292, 274 P.2d 821 (1954)

³² Garcia v. San Antonio Metropolitan Transit Authority, 469 U.S. 528, 105 S.Ct. 1005, 83 L.Ed.2d 1016 (1985)

³³ Garcia v. San Antonio Metropolitan Transit Authority, 469 U.S. 528, 105 S.Ct. 1005, 83 L.Ed.2d 1016 (1985)

³⁴ Washington Department of Game v. Federal Power Commission, 207 F2d 391 (9th Cir.1953), cert. denied 347 U.S. 936, 74 S.Ct. 626, 98 L.Ed. 1087.

³⁵ Citizens to Preserve Overton Park, Inc. v. Volpe, 401 U.S. 402, 91 S.Ct. 814, 18L.Ed2d 136 (1971)

³⁶ United States v. California, 297 U.S. 175, 56 S.Ct. 421, 80 K,/ed 567 (1936)

³⁷ Lawrence County v. Lead-Deadwood School District., 469 U.S. 256, 105 S.Ct. 695, 82 L.Ed 2d 635 (1985)

³⁸ "Texas Supreme Court Upholds Texas Highway Beautification Act: Texas Department of Transportation v. Barber", *The Houston Lawyer*, Oct 2003, http://www.thehoustonlawyer.com/aa_sep03/aa_depart/page47/page47.htm

⁸ Wickard v Filburn, 317 U.S. 111, 63 S.Ct. 82, 87 L.Ed. 122 (1942), 107, 109

⁹ United States v. Lopez, 514 U.S. 549, 115 S.Ct. 1624, 131 L.Ed 2d 626 (1995), 106, 108. 109

¹⁰ Id at 109

¹¹ McDermott v. Wisconsin, 228 U.S. 115 (1913)