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16. Abstract

Rest area facilities are an integral part of the Texas state highway system. In recent years, the Texas Department of Transportation (TxDOT) has become concerned about the physical condition and appearance of some of its rest area sites, and mounting costs of construction, rehabilitation, and maintenance. The feasibility of rest area commercialization is explored. A 2-tiered analysis is presented—*Tier 1:* examining policy development issues and *Tier 2:* examining policy implementation issues. Based on a review of privatization literature, there is strong conceptual support for commercialization. Moreover, all state barriers have been removed, permitting commercial activities on state-owned right-of-way (ROW). The federal government, however, still restricts commercial use of interstate ROW, although this is expected to change in the next few years. Existing ROW should accommodate most plans for commercial services and provide a new revenue base, though small, to the State Highway Fund. Provision of rest area services could change from a TxDOT cost source to a revenue source, if commercialization were pursued. Public rest area user surveys reveal a desire for commercial services at rest areas. TxDOT should pursue commercialization of rest areas, initially, through a pilot program. There are several sites on U.S. highways that appear feasible.

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FEASIBILITY OF SAFETY REST AREA COMMERCIALIZATION IN TEXAS

by

Mark A. Euritt
Robert Harrison
Susan Grant

Research Report Number 1269-1F

Research Project 3-18-91/2-1269

Feasibility of Safety Rest Area Commercialization in Texas

conducted for the

Texas Department of Transportation

in cooperation with the

U.S. Department of Transportation
Federal Highway Administration

by the

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THE UNIVERSITY OF TEXAS AT AUSTIN

November 1992

IMPLEMENTATION STATEMENT

This report provides the basis for developing a commercial rest area services program in Texas utilizing the private sector as the service provider. Specific sites for a pilot program are presented in Chapter 7, along with important issues guiding implementation. Large-scale implementation of a commercialized rest area program could reduce annualized TxDOT rest area costs by 55 percent. Moreover, when the federal restriction is lifted, commercialization could change the total rest area program into a source of revenue producing annual revenues valued at about $229,117 per rest area site.

DISCLAIMER

The contents of this report reflect the views of the authors, who are responsible for the facts and the accuracy of the data presented herein. The contents do not necessarily reflect the official views or policies of the Federal Highway Administration or the Texas Department of Transportation. This report does not constitute a standard, specification, or regulation.

There was no invention or discovery conceived or first actually reduced to practice in the course of or under this contract, including art, method, process, machine, manufacture, design or composition of matter, or any new and useful improvement thereof, or any variety of plant which is or may be patentable under the patent laws of the United States of America or any foreign country.

ACKNOWLEDGEMENTS

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NOT INTENDED FOR CONSTRUCTION,
PERMIT OR BIDDING PURPOSES

Mark A. Euritt
Robert Harrison

Study Supervisors

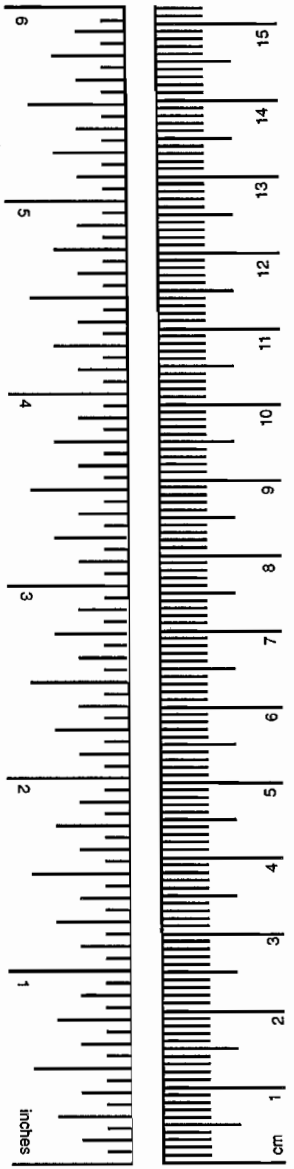
METRIC (SI*) CONVERSION FACTORS

APPROXIMATE CONVERSIONS TO SI UNITS

Symbol	When You Know	Multiply by	To Find	Symbol
		LENGTH		
in	inches	2.54	centimeters	cm
ft	feet	0.3048	meters	m
yd	yards	0.914	meters	m
mi	miles	1.61	kilometers	km
		AREA		
in^2	square inches	645.2	millimeters squared	mm^2
ft^2	square feet	0.0929	meters squared	m^2
yd^2	square yards	0.836	meters squared	m^2
mi^2	square miles	2.59	kilometers squared	km^2
ac	acres	0.395	hectares	ha
		MASS (weight)		
oz	ounces	28.35	grams	g
lb	pounds	0.454	kilograms	kg
T	short tons (2,000 lb)	0.907	megagrams	Mg
		VOLUME		
fl oz	fluid ounces	29.57	milliliters	mL
gal	gallons	3.785	liters	L
ft^3	cubic feet	0.0328	meters cubed	m^3
yd^3	cubic yards	0.0765	meters cubed	m^3

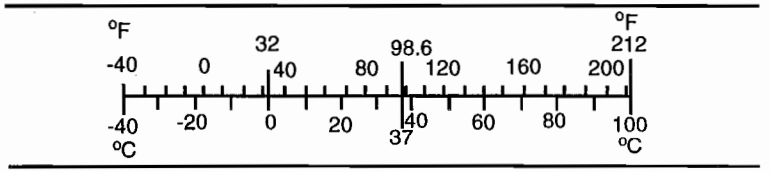
NOTE: Volumes greater than 1,000 L shall be shown in m^3.

		TEMPERATURE (exact)		
°F	Fahrenheit temperature	5/9 (after subtracting 32)	Celsius temperature	°C



APPROXIMATE CONVERSIONS FROM SI UNITS

Symbol	When You Know	Multiply by	To Find	Symbol
		LENGTH		
mm	millimeters	0.039	inches	in
m	meters	3.28	feet	ft
m	meters	1.09	yards	yd
km	kilometers	0.621	miles	mi
		AREA		
mm^2	millimeters squared	0.0016	square inches	in^2
m^2	meters squared	10.764	square feet	ft^2
m^2	meters squared	1.20	square yards	yd^2
km^2	kilometers squared	0.39	square miles	mi^2
ha	hectares (10,000 m^2)	2.53	acres	ac
		MASS (weight)		
g	grams	0.0353	ounces	oz
kg	kilograms	2.205	pounds	lb
Mg	megagrams (1,000 kg)	1.103	short tons	T
		VOLUME		
mL	milliliters	0.034	fluid ounces	fl oz
L	liters	0.264	gallons	gal
m^3	meters cubed	35.315	cubic feet	ft^3
m^3	meters cubed	1.308	cubic yards	yd^3
		TEMPERATURE (exact)		
°C	Celsius temperature	9/5 (then add 32)	Fahrenheit temperature	°F



These factors conform to the requirement of FHWA Order 5190.1A.

* SI is the symbol for the International System of Measurements

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SUMMARY

This report analyzes the feasibility of rest area commercialization in Texas. The feasibility analysis is based on a 2-tiered approach examining policy development and implementation issues. The policy development tier examines a conceptual basis for privatization and the legal/institutional issues affecting the development of a commercialization policy. The policy implementation tier examines the facility and property requirements, financial and economic implications, and public attitudes. Combined with a review of experiences in other states, recommendations for a pilot commercialization project are made.

CHAPTER 1. INTRODUCTION

OVERVIEW

Rest area facilities are an integral part of the Texas state highway system, providing a range of services for highway users, including recreational vehicle owners and inter-city truck operators. The State has a long-standing tradition of providing quality rest area facilities, as well as to the motoring public. In recent years, the Texas Department of Transportation (TxDOT) has become concerned about the physical condition and appearance of some of its facilities, and the mounting costs of site construction, maintenance and rehabilitation. In addition, the number and the capacities of rest area sites has not kept pace with the growth in vehicle numbers and miles of travel. This may have serious consequences in the long term, for rest areas provide services which are critical both to users' comfort and to their safety. In order to continue a quality level of service, the State has begun to explore various avenues of funding and support. The involvement of the private sector in rest area operations is a new source of capital and could assist TxDOT in providing rest area services and facilities to the motoring public.

Each year TxDOT spends over $9 million to maintain rest area facilities, and this figure is expected to increase dramatically during this decade. The need for new sites, or for significantly expanding capacity at existing sites, is becoming pressing as traffic use grows. For example, in the last decade, truck numbers have increased by 24 percent, and their annual vehicle miles of travel by 27 percent. In an effort to meet this demand, a number of states have tapped the resources of the private sector through a number of privatization strategies. Privatization strategies range from a contract with a private company to clean and maintain rest area stations, to joint use of the rest area by the state and a private business, to complete privatization of the right-of-way for rest area operations. An important barrier to these efforts has been the number of legal impediments to private facilities on federal and state right-of-way. The U.S. Department of Transportation's national transport policy includes efforts "to minimize legal and regulatory barriers to private participation in owning, planning, financing, building, maintaining, and managing transportation facilities and services" (Ref 1, p 37). Given this environment, TxDOT began to seriously explore private sector participation in the provision of rest area facilities.

REPORT OUTLINE

The purpose of this report is to present the research findings of Project 1269, "Feasibility of Safety Rest Area Commercialization in Texas." The objective of this research effort is to determine whether commercialized rest areas can assist TxDOT in providing quality rest areas at lower cost.

A 2-tiered analysis is used to evaluate the feasibility of rest area privatization. As illustrated in Figure 1.1, the first tier examines the question from a policy development perspective: specifically, what are the theoretical underpinnings of rest area privatization, and what legal and/or institutional issues affect development of appropriate policies for commercializing rest areas. These topics are examined in more detail in Chapters 2 and 3. The second tier examines the issues relating to implementation of a rest area privatization policy. This requires a thorough analysis of the facility and property requirements of rest area development and an analysis of the financial costs or benefits resulting from such a policy. These topics are explored in Chapters 4 and 5. Also related to implementation are public needs and attitudes. As part of this research project, a survey of rest area users was conducted. The findings of this survey are presented in Chapter 6.

Chapter 7 reviews other state experiences with rest area commercialization and summarizes the 2-tiered analysis. Specific recommendations for rest area commercialization in Texas are given. Taken as a whole, this report provides a basis for determining the appropriateness of a Texas policy for rest area commercialization.

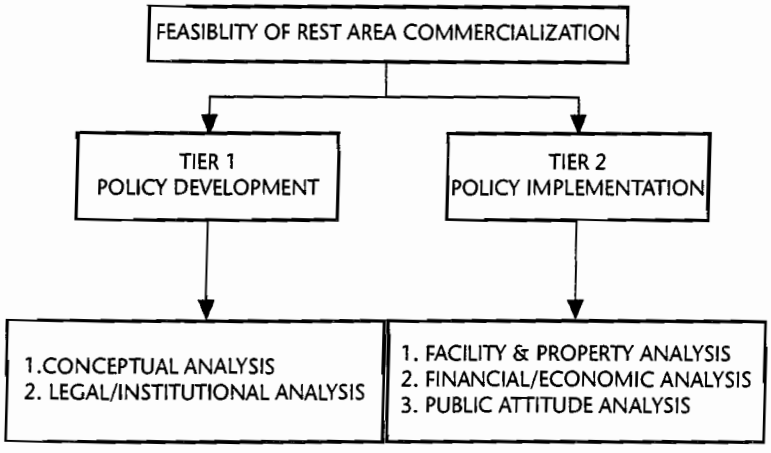


Figure 1.1 Feasilbility of rest area commercialization

CHAPTER 2. CONCEPTUAL ANALYSIS

The first step in analyzing the feasibility of rest area commercialization is the development of a conceptual understanding of privatization. This will provide some basic guidelines for the formulation of the privatization process and alert the planner to some possible pitfalls. It should be noted at the outset that most of the literature on privatization more or less advocates the process. This means that a less-than-objective view of privatization is given, owing to the lack of sources presenting an opposing opinion. One reason for this dearth of anti-privatization literature is that the privatization process is still in the experimental stage. More time is needed to draw conclusions about whether or not privatization is a workable approach to budget and efficiency shortfalls.

Importantly, the information presented in this chapter represents a review of the literature on privatization and not necessarily the attitudes or opinions of the authors. The information is presented in order to develop a sound conceptual basis for developing future privatization strategies consistent with the mission and objectives of various public agencies.

PRIVATIZATION DEFINED

To begin with, what is privatization? Kent defines privatization as the "...transfer of functions previously performed exclusively by government, usually at zero or below full-cost prices, to the private sector at prices that clear the market and reflect the full costs of production" (Ref 2, p 4). In other words, the private sector produces the good or service at unsubsidized prices at a market rate of return.

It is also important to recognize the two components associated with privatization. Government has two separate functions which can be privatized. The first area is the provision of a service. This reflects the basic policy to actually provide a service. The second area, production, is the act of administering or providing the service (Ref 3). Either, or both, of these functions can be privatized. This is illustrated by Kolderie through the use of security services as shown in Table 2.1 (Ref 3).

This research project focuses on public provision, as defined by Kolderie, of rest area services. It is TxDOT policy to make provision for rest areas on state-owned right-of-way. The question now is whether the "production" of the rest area is to be public or private. This report seeks to determine if the private "production" of state-sponsored rest areas is cost-effective. The private sector also provides motorist services at key intersections off public-owned right-of-way (ROW). However, given the current structure of public-owned highway infrastructure, the third and fourth elements of Kolderie's taxonomy are less relevant and fall outside the scope of this study.

Table 2.1 Kolderie's taxonomy of privatization

Provision	Production	Illustration
Public	Public	City Police Force Provides Night-Time Foot Patrol in the Central Business District.
Public	Private	The City is Responsible for Providing Security at Sports Activities at the City Arena and Contracts With a Local Company to Provide Guards.
Private	Public	A Local Sports Team Wants Security at its Practices and Contracts with the City Police to Provide it.
Private	Private	A Department Store wants Uniformed Security and Employs its Own Guards.

REASONS FOR PRIVATIZATION

In this day of $3 trillion dollar federal deficits and recessions, costs have become an overriding interest of the government and elected officials. Efficient government is often equated with cost-conscious government. Public provision of a good or service seems to go against the theory of market-driven economies. In a sense, this is true. Often, the public provision of a good or service costs more than it would if it came from the private sector, because the provider is sheltered from market forces which would presumably drive costs down. This is the reasoning behind the privatization process. Advocates hope that once exposed to the market, formerly public programs will provide better and more efficient goods and services.

As mentioned before, one of the main reasons for privatization is to achieve full-cost pricing. In a competitive environment, this means that the cost of provision and production of a good or service is reflected in its price. This suggests that government services may be underpriced, resulting in taxpayer subsidization of the difference. (Inefficient prices, high or low, can be overpriced or more commonly subsidized. This leads to monopoly pricing.) Kent notes several reasons for this inequity of provision and payment. For one, "current government accounting systems do not adequately assign the cost of capital to government functions" (Ref 2, p 10). Private entities must incorporate the costs of financing their operations into the fees charged, something the government rarely does. Secondly, overhead costs are not allocated to specific functions or departments. The government tends to charge overhead costs as general expenses, thereby not tying specific costs to specific activities. Finally, the government monopoly shields the provision of services from market demand signals. The lack of competition prevents the occurrence of a "price signal," which would inform the bureaucrat about the consumers' demands for the good or service. All of this leads to underpricing (Ref 2, p 10).

Competition is another reason for privatization. In the private sector, many alternatives for goods and services exist from which the consumer can choose based on price and quality. Private companies operate on the profit principle. This works to ensure that if a company produces high-quality goods as inexpensively as possible, it will have a competitive edge over other companies. In the public sector, the government has a monopoly over a certain sector. No alternatives exist from which the consumer may choose. This leads to inefficient production of the good or service, because the government entity's existence is ensured by the taxpayers against "going out of business." So while the government underprices its services, it also produces them more expensively than is otherwise possible. This sort of activity results in large deficits. Also, the lack of competition discourages the introduction of new technology. The monopoly entity has little incentive to become more efficient, since it has no rivals.

Public production of goods and services does not take into account the consumer's desires. The market is designed to accommodate a variety of tastes and quality, while public production is not. Therefore, the consumer may be dissatisfied with government products, but the government may be unaware of this fact as a result of the lack of information vehicles that competition provides. Monopolies also discourage the innovative spirit of entrepreneurs. The private entity is not allowed to see if it could in fact provide the good or service more efficiently (Ref 2, pp 10-12).

Waters addresses the issue of defining ownership when dealing with public enterprises. He believes that limiting or attenuating ownership only reduces the value of that asset.

> Where ownership is ill-defined, assets will be undervalued. The implications for the private sector should be obvious: poor maintenance and under-use of assets that are owned by everyone and therefore by no one (Ref 4, p 37).

Waters sees this lack of ownership translating into a lack of responsibility for what the entity achieves. The situation provides little incentive for the public manager to closely monitor the use or the production of those public assets, because the manager has no personal stake in the outcome. Undervaluation of the asset leads to poor maintenance and under-use, which only perpetuates the cycle of undervaluation.

Privatization of public enterprises could help the government financially by providing new sources of revenues. For instance, in the area of highways, the government could convert free roads into toll roads. This would encourage more efficient use of the roads and would pay for their upkeep. On existing toll roads, the tolls could be raised to cover the costs of construction and maintenance. Finally, the private sector could build and operate the toll roads themselves. This would relieve the government of all but oversight responsibilities. These are just some examples of possible alternatives to public financing that would address the problems of underpricing, under-use, and quality control raised by privatization advocates.

ARGUMENTS AGAINST PRIVATIZATION

If privatization is such a wonderful approach to the production of goods and services, then why are there public entities? Waters addresses the rationale behind what he calls "the attenuation of ownership" and gives six reasons for its occurrence. First, the government sees the redistribution of wealth as a primary function of its "patrimonial" role. According to Waters, the elite do not believe the economically disadvantaged are capable of making rational financial decisions. So instead of just giving cash, the government must produce the supply for the "perceived" need. The more successful governments have opted to contract out production of the good or service and pay for the provision.

The existence of natural monopolies is the second argument for public ownership. In economic theory, a long-range declining cost curve puts a company at an unassailable advantage over any rival that would like to enter the market. The original company may be able to underprice its competitor and drive them out of business. Waters questions the existence of monopolies because they are derived from the theory of perfect competition, which he also questions. Waters finds it unlikely that natural monopolies can be diagnosed accurately, given the rapidly changing nature of technology. Furthermore, natural monopolies appear to need the protective legislation and subsidies they receive, so maybe they are a fabrication.

Third, the state may justify monopolies for reasons of national interests. Often, this is a purely political maneuver to rid the industry of a foreign influence deemed a menace to national sovereignty. The difference between a state monopoly and a private monopoly is that state monopolies survive, whereas private monopolies, unless protected by the government, do not.

Fourth, the existence of externalities necessitates public ownership. Externalities result when the costs or benefits of a certain activity fall upon those not involved in the decision-making or provision of goods or services. Government ownership would presumably protect against externalities. However, Waters believes the government would be better served by utilizing taxation and regulation to control externalities rather than ownership of the entity.

A fifth argument for public ownership is the lack of entrepreneurs and managerial talent. In other words, the government is more capable of performing those functions. This may be true, but such a policy only perpetuates the lack of skill and entrepreneurial spirit. A better approach would be for the government to encourage private enterprise to get involved so that the necessary skills can be acquired.

Finally, the ultimate argument for public provision is for a "public good." Such goods are both nonexcludable and nonrival. In other words, their use cannot be restricted or used up by one person. Since the private sector cannot charge for the use of a public good, the private sector has no incentive to produce the good. Waters acknowledges the existence of private goods, but thinks the term is overused. Waters advocates careful identification of public goods and then rigorous analysis of how to most economically produce them, which may or may not be by the public sector (Ref 4, pp 38-42).

Some of these six rationales for public ownership of the production of certain goods and services are very obvious; others are less so. Obviously, Waters strongly advocates the privatization approach for economic and efficiency reasons. For the most part, he sees the advocates of public production as utilizing morality arguments for their position because they cannot argue it economically. Despite Waters' definite slant, his listing of the rationale behind the "attenuation" of ownership proves helpful in understanding the arguments against privatization.

WHAT TO PRIVATIZE

Waters' examination of public ownership and privatization leads to a discussion of determining what to privatize. Are there certain qualities that would seem to encourage such activity? Shubnell gives a very concentrated prescription of entities he believes would respond positively to the privatization process. He suggests that the project to be privatized be service oriented in nature, requiring manpower and equipment. A multiple-user facility that is equipment intensive is also recommended. Preferably, both management and operation will be under private control through the use of a public service contract (Ref 5).

Shubnell also advises that a project requiring new construction would be less complicated than one that did not. Existing structures can be encumbered by public asset transfers and leases that may compromise the whole privatization process. Finally, financing tends to be easier with projects whose essentiality of service is unmistakable; the same is true with projects containing track record technology. New technology projects may be easier to privatize, because the technology developer may be the private entity who will provide performance guarantees (Ref 5, p 85). These are

just some of the possible guidelines that can assist a decision-maker in choosing appropriate projects or services to privatize.

PRIVATIZATION OPTIONS

Privatization comes in various forms that can be used to accommodate unique situations. From an extreme position, Kent argues that the best form of privatization is to not let government produce goods or services from the beginning. He does, however, acknowledge the need for public provision of "public goods," as in cases when strong external benefits go to some groups, such as education. Table 2.2 summarizes the types of privatization discussed and relates the various forms to the strategies from the Kolderie Taxonomy.

In its most literal form, privatization may entail the outright sale of government enterprises. This could be achieved in two ways. The government could sell all or part of the enterprise to an outside organization. A partial sale, i.e., the controlling interest, would allow private entities to enter the transaction with a smaller initial investment. This would enable smaller businesses with less capital to benefit from the opportunity, as well. Or, the government could sell off certain aspects of a particular industry to achieve the same goal of equal opportunity for large and small investors. The government could also sell the enterprise to the employees. This has been tried in England and has worked well in most cases.

A less extreme move is to utilize contracting. This, too, could be divided into sections. The government could contract for specific components, like maintenance, or for the entire operation, depending on the circumstances. Kent is much more cautious about the use of contracting as a form of privatization. He believes that contracting advocates tend to oversell the utility of this sort of privatization. He also thinks that exclusive contracts should be avoided because they have just traded a public monopoly for a private one. "If exclusive franchises are granted, they should be for short periods with an open bidding system for future contracts being ensured. Thus, competition over time becomes the regulating force" (Ref 5, p 14).

TxDOT has experience with contracting for maintenance duties. According to the *Rest Area Task Force Final Report* of June 1990, there have been numerous complaints about contracted maintenance for the State's rest areas:

> Over 92 percent of Texas rest areas are staffed by either private contractors or "set-aside" contractors. Most of these attendants are very conscientious and hard working. However, some attendants are assigned to rest areas and are given little or no guidance as to how to perform their duties. A few attendants are simply lazy and seem to work as little as possible (Ref 6, p 20).

This is just an example of evidence that would seem to state that sometimes contracting can have undesirable effects and cause more problems than it solves. The Rest Area Task Force recommended hiring rest area managers to give the attendants more guidance and to, hopefully, improve the maintenance of the facilities, albeit at an added expense to TxDOT.

Another possible method is private payment. In this situation, the government provides the service and the public pays the full cost through user fees. Toll roads are an example of this sort of financing. However, user fees do not necessarily ensure efficiency in production or provision.

Opening the system to competition without doing away with the government could also bring about greater efficiency. For instance, the private sector and the public sector could both produce the good or service, leaving the consumer to decide between them. This would satisfy the consumer's desire for choice and hopefully generate efficiency in both the private and public entities. Along the same lines, the government could allow other government entities to join in the process of open bidding for government contracts. This

Table 2.2 Privatization strategies

Type of Privatization	Production	Provision
1. Sale of Government Enterprises	Private	Private
2. Contracting	Private	Public
3. Private Payment - User Fees	Public	Private
4. Competition	Public/Private	Private
5. Reimbursement	Private	Public

method, too, would encourage government enterprises to be competitive in their production.

Finally, the government could fund the provision of private services. The consumer could buy from the private sector and be reimbursed by the public sector. This would allow the consumer all the choices available in the market, presumably within a certain price range, from which to make a decision. This approach counters the major objections to privatization, fairness to the lower-income groups. By instituting a voucher system, the lower-income groups would have more freedom in choosing the good or service that would best met their need. In addition, the problem of the overuse of "free" services, simply because they are free, would be addressed (Ref 2, pp 12-17).

This list is not all-inclusive and should not be viewed as such. Rather, it is illustrative of the kinds of strategies that can be used for privatizing public sector activities. The key is for the public sector agency to develop a strategy which ensures that the public interest is served.

PRIVATIZATION PROCESS

Waters provides some very explicit guidelines for determining the privatization method and process:

> The basic issue is quite simple: the product or service provided. If the output of the state entity can be better and more economical if provided by the competitive private sector, and there is no way that the company could possibly compete, then it is better for society and the government if the state entity is terminated and its assets put on the block. The rule dictating whether to sell or dismember is this: if estimates of the present value of future net cash flows are consistently negative under differing but realistic scenarios, the state entity should be shut down at once (Ref 4, p 51).

If disposal is chosen, Waters suggests some factors to consider when estimating the disposal value of the state entity. The state entity's assets must be systematically catalogued and appraised at the market value. This can be a rather unpopular process, because often the expensively acquired government assets have little value on the open market. Next, the government must estimate the full cost of disposing of the governmental function or entity. Implicit and explicit contracts with management and employees, suppliers, contractors, and interest groups complicate the process considerably, since all must be accommodated to some extent.

The government must also consider the timing of anticipated cash flows. This includes the possible sources of future credit and the resulting tax implications of the private entity's capital structure. Waters acknowledges the advantages of government credit such as lower-than-market interest rates but warns against potentially "entangling alliances."

> ...most forms of official funding provide a competitive and operating advantage for the new firm. The disadvantages arise from the inevitable political intervention that will follow and the loss to society of competitive benefits—the fundamental reasons for privatization in the first place (Ref 4, p 54).

Other financial concerns include the new capital structure and the implementation of that restructuring. The new financial structure will differ according to specific situations, but Waters recommends that at first the new entity adopt a policy similar to those of its competitors and that, over time, a unique capital structure will develop. He also encourages the use of local financial agents and funding on a competitive basis. In analyzing the whole restructuring process, Waters suggests using modern management tools including the critical path method (CPM) and the performance evaluation and review technique (PERT).

Ultimately, the true test of the success of a newly privatized entity will be in the preconditions for ownership.

> If a financially restructured state entity is to be successful in the competitive private sector and truly separate from the government, assurance of ownership must be clear and definite. The new owners must have credible guarantees of the right to alter the product and its price as they see fit in response to competitive conditions, and freedom to restructure the new firm in any way they feel is appropriate (Ref 4, p 56).

Waters sees government regulation as an element of ownership. This is not to say that all government restrictions on a specific industry are wrong; rather, that it is inappropriate for regulations to single out one firm or parts of an industry. Waters emphasizes ownership, because he sees it as the critical point that determines whether or not a firm can develop a business strategy, account for risk, and market itself.

Developing a business strategy requires the definition of the business's role. Once this definition is achieved, the business needs a strategic plan of action to implement this perceived role in society. Often this requires the services of a professional consulting firm which will be able to work well with local businesses. Finally, the new private entity must account for risk in every decision, principally through reduction of future cash flow estimates. Since estimated cash flow determines the chosen financial structure of the business, a reduced estimate would presumably provide a buffer to encompass any risk (Ref 4, pp 51-59).

POTENTIAL PROBLEMS WITH PRIVATIZATION

Wilson presents three fundamental questions regarding the nature of privatization:

1. Are there circumstances in which efficiency is not the appropriate evaluative criterion?
2. Does competition always lead to increased quality in the provision of goods and services?
3. Are there limits to the "types" of services that can be provided through use of private firms? (Ref 7, p 62)

Wilson touches on a facet of the issue none of the others emphasize. Privatization is not necessarily a panacea. Wilson points out that not all provision-oriented legislation is intended to be efficient in nature; it may be just one of many objectives. For instance, politicians often design "pork barrel" legislation to stimulate a local economy or assist a special interest rather than be an example of efficiency. Reducing politics to the efficient provision of goods and services happens because analysts use private-market criteria to assess public-sector activity.

Privatization also has other potential problems. Organized labor opposes privatization because it can lead to job loss if the public entity over-employs. In an environment of rising unemployment, privatization may become politically infeasible. To combat this opposition, the government could require the buyer to hire existing public employees, or at least give them preferential treatment in the hiring procedure. However, any sort of stipulation on the buyer may lead to attenuating ownership problems warned against by Waters. Another option would be for the government to encourage its current employees to become the entrepreneurs who take over the public operation. This would satisfy both the labor and privatization needs.

Privatization does not necessarily guarantee lower prices. If the government has been providing a service below the market price or for free, then the price of the good will necessarily increase. Advocates for the economically disadvantaged would view this sort of privatization as unfair to the very people it is intended to help, those who cannot pay. Therefore, privatization would have to include provisions for vouchers in order to ensure social equity and political feasibility. Contracting, as a form of privatization, can prove to be dangerous if it only serves to strengthen special interest access to the policy process at the expense of taxpayers. Efficiency may be improved, but the costs may be higher unless adequate competition is incorporated into the system.

Finally, there is the question of whether the private sector has the capital to take on public entities and, once gained, if the loss of control will be too great. Only those governments with strong financial sectors will be able to consider selling off government entities. This severely limits the applicability of the privatization solution to budget shortfalls. Also, opponents of privatization claim that selling off government entities will cut responsible political control of that entity. That is not necessarily true. If the government decides to continue to provide a good or service, whether or not the government produces that good or service will not matter. The political control will remain with the decision to provide, not necessarily produce (Ref 2, pp 17-19).

These are but some of the possible problems privatization presents to the policy maker; all of which need to be dealt with. Not surprisingly, the solutions to many of the problems suggested violate Alan Waters' maxim about privatization: no attenuation of ownership by government. This seems to be an impasse that will have to be dealt with case by case. However, it seems that most privatization projects take a less "laissez-faire" approach to their projects than Waters suggests, so reconciliation may not be so difficult. Once again, the problems and solutions presented will differ in every case.

Much of the privatization that has been described in this chapter pertains to large scale, potentially profit-making entities. Our concern is rest areas, a relatively small-scale operation with decidedly limited profit-making possibilities.

SUMMARY

Privatization can be a viable strategy for providing traditionally public-sector services. On

economic grounds, market strategies promote more efficient solutions and better allocation of public resources. Care must be taken to ensure that the public interest is maintained. Where the private sector can provide services more efficiently, the government should work to that end. Ultimately, the public sector is responsible for that determination on cost-benefit principles.

This chapter provides background information relative to the conceptual development of privatization strategies. This should assist policy-makers in determining the appropriateness of rest area commercialization. The following chapter completes the first-tier analysis by examining the legal/institutional issues affecting the development of a rest area commercialization policy.

CHAPTER 3. LEGAL/INSTITUTIONAL ANALYSIS

OVERVIEW

The second part of the policy development tier (see Figure 1.1) is an analysis of legal and institutional issues. There are a number of such issues that affect the formulation of a rest area commercialization policy. Most significantly, federal law prohibits commercial activities on federally-supported right-of-way (ROW), unless the commercial enterprise falls under the protected status of the Randolph-Sheppard Act. Similarly, there have been a number of state restrictions on commercial use of public ROW.

Much has changed since the inception of this research project. President Bush's transportation reauthorization bill (H.R. 1351) included language permitting rest area commercialization. However, amid the complex and uncertain political environment, the language was excluded from the adopted Intermodal Surface Transportation Efficiency Act (ISTEA). (A number of sources involved in the development of ISTEA, suggest that this issue will surface again in the near future. It is only a matter of time before the federal prohibition of commercial use of ROW is eliminated.) Therefore, all federal restrictions remain. At the state level, the opposite is true. As part of the Texas Performance Review process, a number of revenue enhancement strategies for state agencies were identified. Included in this group was commercialization of public ROW. Subsequently, the State Legislature passed initiatives allowing for commercialization of state-owned ROW.

The remainder of this chapter will identify the various federal and state laws and regulations related to rest area commercialization. Identification of these restrictions is essential in developing a range of options available to TxDOT for rest area commercialization.

FEDERAL LEGISLATION

United States Code Annotated: Title 23, Section 111 - Agreements Relating to the Use and Access to ROW — Interstate System

This section is divided into two parts: (a) the general discussion and (b) vending machines. Part (a) prohibits the building of additional ramps on and off the Interstate without prior approval of the Secretary of Transportation. This approval is subject to the State's agreeing not to allow commercial services for motorists on interstate ROW. However, it does allow the State to permit the use of the airspace above and below the grade line of the pavement, as long as it does not interfere with traffic safety or give additional access to the main lanes of traffic. Part (a) provides exclusions for existing establishments. Part (a) restrictions cannot discontinue, obstruct, or remove any establishments that serve motorists on highways that were or will be a part of the Interstate System:

(1) if such establishment
- was in existence before January 1, 1960;
- is owned by a State; and
- is operated through concessionaires or otherwise; and

(2) if all access to, and exits from, such establishment conform to the standards established for such a highway under this title.

This is the clause that allows commercial enterprises on former turnpikes to remain in business after they become part of the Interstate system, something which has occurred on the east coast.

Part (b) of Section 111 deals with vending machines. The code allows states to permit the

placement of vending machines in safety rest areas on the Interstate System. However, the machines may dispense only food, drink, and those items deemed appropriate by the State Transportation Department. These machines may be operated only by the State, which will give priority to vending machines operated by the State licensing agency according to the Randolph-Sheppard Act (20 USC 107a (a)(5)) of June 20, 1936.

The Randolph-Sheppard Act sets aside special privileges for organizations designated as the State licensing agency. In Texas, this agency is the Commission for the Blind. The Texas Commission for the Blind wields a great deal of power in determining who will be allowed to operate vending facilities on State property. Chapter 94 of the Texas Code Annotated delineates the vending power of the Texas Commission for the Blind. Section 94.002 states that only those people licensed by the Commission may operate vending facilities on state property. This creates a potential problem for rest area privatization.

Code of Federal Regulations: Title 23, Section 1.23 - ROW

This section is divided into three parts: (a) interest to be acquired, (b) use for highway purposes, and (c) other use or occupancy. Part (a) merely requires the State to purchase sufficient ROW to ensure the appropriate construction, operation, and maintenance of a highway project.

Part (b) delineates the legal uses of the ROW. It states that all uses of the ROW are exclusively for public highway purposes. All proposed projects must meet this requirement before being accepted. The State Transportation Department will be held responsible for maintaining ROW free from all public or private encroachments, except 1) those coming under part (c) of this section, 2) those the Administrator approves as part of the highway or necessary for its operation, and 3) those that provide information services and are operated under section 1.35 of the regulations.

Part (c) states that other uses of the ROW are subject to 23 U.S.C. 111. Temporary or permanent use of ROW for non-highway purposes may be approved by the Federal Highway Administrator if it is determined that such use is in the public interest and will not interfere with the flow of traffic. This is an important section, because it provides the option that with the approval of the Administrator, the ROW may be used for non-highway purposes if they are deemed to be in the public's interest. The important caveat is to prove that expanded services at rest areas, provided by the private sector, are in the public's interest and will not interfere with the flow of traffic on the highway.

Code of Federal Regulations, Section 752.5 - Safety Rest Areas

This section regulates the manner in which safety rest areas are operated, including the placement of vending machines. Safety rest areas are designed to enhance the comfort and convenience of the motorist as much as possible, with equal access for the handicapped. If needed, caretakers' quarters can be provided on the site.

The State may allow the placement of vending machines at new or existing rest areas located on interstate ROW. The machines may dispense food, drink, and other appropriate items determined by the State, except for petroleum products (This excludes the operation of gas stations at rest areas along the Interstate System.) and motor vehicle replacement parts. The State may operate the vending machines or contract with a vendor to install, operate, and maintain the machines. However, in choosing an operator, the State must give priority to the State licensing agency according to section 2(a)(5) of the Randolph-Sheppard Act, U.S.C. 107(a)(5).

Access from a safety rest area to an adjacent recreation or conservation area is permitted, provided that there is no other access to these areas except through the rest area, and that the usage of the other areas would not adversely affect the safety rest area.

In selecting a site, its scenic quality, accessibility, and adaptability and availability of utilities are most important. The state should develop and maintain a safety rest area system plan, using priorities to determine the most needed sites. Any proposal for safety rest areas on Federal-aid highways in suburban or urban areas requires special authorization by the FHWA Regional Administrator.

The facilities in new safety rest areas should meet the forecast needs of the design year. Older safety rest areas that do not meet the needs of the public should be considered for expansion and modernization. All services provided at safety rest areas must be free to the public, except for the use of telephone and vending machines.

Code of Federal Regulations: Title 23, Section 752.7 - Information Centers and Systems

Section 752.7 allows the State to establish information centers at safety rest areas for the purpose of providing the traveling public with

additional information regarding services, places of interest, etc. The State has some flexibility in the construction and operation of the center. It may construct and operate the center itself, construct the facility itself and lease the operation of the center to another enterprise, or it may lease both the construction and operation of the center to another entity.

There are important restrictions on advertising in the area. If the facility is in an enclosed area, the identification of the operator and any advertising must be kept to the interior of the building. If the information is on a bulletin board display, the operator's trade symbols cannot be visible from the roadway.

The State may create or allow information systems within federally funded ROW, subject to FHWA approval. If this is allowed, the information must be of interest to the traveling public and cannot intrude upon the main lanes of the highway in a way that violates 23 U.S.C. 131 and other applicable local, State, and Federal laws.

This legislation is included because it is possible that local communities could object to commercializing rest areas for fear they will lose the business of highway travelers, and they may attempt to use this law to impede rest area commercialization. This legislation may have to be altered if it is interpreted liberally, giving localities greater control over commercialized activities. However, it should be applicable only to rest area sites in close proximity to a community.

Code of Federal Regulations: Title 23, Section 752.8 - Privately Operated Information Centers and Systems

Upon the FHWA Regional Administrator's approval, the State may permit privately operated information centers as long as they conform to the stipulations of this directive. These centers shall not violate the control of access or adversely affect the flow of main lane traffic. The agreement between the State and private operator shall provide that:

1) The State will retain the title to the information center upon completion of construction or expiration of the lease.
2) Any advertising permitted at the information center must pertain to the traveling public.
3) All advertisers considered qualified by the State must have equal access at reasonable rates.
4) Of all the information provided, both audible and display, 40 percent or more must be provided free of charge.
5) The center may not charge for any services except telephone and vending machines.
6) Only advertisers who provide their services regardless of race, color, or national origin shall be allowed to advertise.
7) The center shall be adequately maintained and kept clean.
8) The State may establish other rules that govern the information centers for the benefit of the public.
9) The State may terminate the lease for violations of these terms or other causes.

Surface Transportation Act of 1991 (H.R. 1351), Section 306 - ROW Agreements

Part (a) of this bill repeats the stipulations 23 U.S.C.A. 111 concerning the restrictions on building additional points of access to or exits from the National Highway System and the use of airspace ROW. Part (b) deals with the commercial use of rest areas, and part (c) covers vending machines. The final part, (d), concerns income from airspace ROW.

Part (b), Commercial Use of Rest Areas, is divided into three sections: (1) Lease Agreements, (2) Rest Area Management, and (3) Eligible Federal Costs. Under Lease Agreements, a State may lease a rest area on the National Highway System to providers of food and gas services, excluding major repair services, lodging, or other motorist-oriented activities. The State shall charge, at a minimum, a fair market price for the lease of the property and shall use a percentage of these revenues to fund National Highway Program projects eligible under this title.

As for management of the area, only main lane access to and from the National Highway System is permitted. The selected rest areas will be operated to fulfill their original purposes as rest areas, with all the typical facilities, independent of the commercial services. All the commercial structures will be built and maintained according to the State and local laws, in such a way as not to interfere with the operation of the rest area. The commercial facilities must comply with the Uniform Federal Accessibility Standards. Maintenance shall be the State's responsibility, although contracting for this service is permitted. All services shall be provided on a 24-hour basis, 365 days a year. Importantly, alterations to the rest area for accommodating commercial enterprises are not eligible for Federal assistance.

With respect to vending machines, this bill makes no changes to current laws and requirements.

The final section concerns income from the use of airspace ROW. The State shall charge fair market value, at a minimum, for the use, sale, or lease of airspace ROW purchased with Federal assistance money, provided the State allows governmental use without charge. Such usage could entail public or private high-speed rail, transit or utility use, or other eligible transportation projects. The Secretary can grant exceptions to the fair market value rate for social, environmental, and economic mitigation purposes. This subsection applies to all airspace agreements reached after April 2, 1987. Of the revenue earned from the usage of airspace ROW, an amount equal to the percentage of the Federal funds used on the project will be used by the State for projects eligible under this title.

As stated previously, this entire section was removed from the adopted ISTEA, and so the question of commercialization of Interstate rest areas becomes moot for the time being. Despite this turn of events, the State of Texas moved forward on its own, adopting legislation to facilitate commercial use of public ROW.

STATE LEGISLATION

Constitution of the State of Texas: Article 3, Section 51 - Grants of Public Money Prohibited; Exceptions

The Texas Constitution prohibits the Legislature from making or authorizing grants of public money to any individual, association of individuals, municipal, or other corporation. However, the Legislature may grant aid to indigent and disabled Confederate military men or their widows, according to the regulations and limitations deemed expedient by the Legislature. This does not preclude the granting of aid in cases of public calamity. This constitutional enactment notes that public money shall not be used for private purposes.

General Appropriation Bill for 1990-91 Fiscal Year: Section 88 - State Property Use for State Purposes Required

State property shall be used for state purposes only. State property shall not be entrusted to any state official or employee.

Revised Civil Statutes of the State of Texas: Article 6673a-3 - Lease of State-Owned Property by Department

Provided the area is not needed for other purposes, TxDOT may lease any part of the ROW or the airspace above or below the road surface along the state highway system. The department may determine the terms and duration of the lease. However, the department may not turn over the title or remove from the real property any permanent improvements on the area while leased under this act. All money received from these transactions is remitted to the state treasurer for deposit in the state treasury and credited to the State Highway Fund. In the past, the revenues associated with these lease agreements have been limited.

Texas Administrative Code: Title 43, Section 21.6 - Leasing of Highway ROW

Highway ROW not being utilized by the department may be leased. These sections detail the requirements and procedures of the leasing process. This law applies only to leasing of ROW, not to the concepts of licenses or permits. The TxDOT districts are responsible for administering ROW leases in their area.

Any part of the ROW on the state highway system may be leased at the discretion of the TxDOT Commission, provided it meets the following criteria:

1) the area is not needed by the department during the lease period;
2) usage of the ROW is consistent with the beautification, safety, maintenance, and operation of the highway;
3) the lease is economically beneficial to the department; and
4) the lease complies with all state and federal laws. (We interpret the federal law to restrict only the leasing of Interstate ROW, and not other highways.)

The awarding of leases is done on a sealed bid basis with the department retaining the right to reject all bids. The best bid will be accepted provided it is consistent with the property rights of those other than the state. At a minimum, the department will set a fair market value to be charged on all leases of highway ROW. In preparing to lease a section of ROW, the department must place an advertisement in a paper with a general circulation in the county in which the proposed site lies. This advertisement must run for three consecutive weeks (no less than 20 days) prior to the day of the lease sale. The advertisement must contain bid proposals determined by the Deputy Director of design and construction for TxDOT.

The lease must be a written agreement between the lessee and the Deputy, who is responsible for determining the form. At a minimum, the lease must contain the following provisions:

1) information needed for contacting the entity responsible for developing the ROW;
2) the specifics of the lease, such as lease amount, length of lease, and method of payment;
3) statement authorizing the usage of the ROW;
4) statement restricting any change in the usage of the ROW subject to prior written approval by the department;
5) detailed description of the portion of the ROW to be used, three-dimensional if vertical limits are needed;
6) the general design of the project to be placed on the ROW, including any proposed improvements or maps necessary to describe the site's relationship to the highway ROW;
7) statement requiring prior department authorization if any significant revisions in the design of improvements detailed in paragraph (4) are proposed;
8) statement giving the department the right to approve all construction plans on leased ROW;
9) for the purposes of inspection, maintenance, reconstruction of the facility, or compliance review, employees or representatives of the state will be allowed access to the leased ROW;
10) statement that any improvements to the ROW will be kept in good condition for both safety and appearance purposes and that improvements will be done in such a way as to cause as little interference with the highway as possible;
11) statement that if the department determines that the lessee has not met its maintenance obligation, then the department may enter the facility or premises to do the appropriate work at the expense of the lessee;
12) noncompliance with the terms of the lease will result in forfeiture of deposits, liability for litigation costs or any other costs to the department;
13) when considered necessary by the department, a performance bond;
14) the responsible party or the lessee to be required to carry enough insurance, as determined by the department, naming the department as co-insured, except when the lease is with an agency that has been assigned the full responsibility for payment for damage or injury at the site;
15) statement that on the sole decision of the Commission, the lease may be terminated when the area ceases to be used or is abandoned;
16) statement that on the sole decision of the Commission, the lease may be terminated when there is noncompliance with the lease or such noncompliance is not remedied in an appropriate amount of time (if deemed necessary, the Commission may request the removal of any temporary improvements to the ROW by the responsible party, at no expense to the department);
17) statement that without the prior written agreement of the department, the lease or the leased property shall not be transferred, assigned, or conveyed to another party;
18) prohibition against the placing of liens or use of the property or the improvements on the property as security for any loan;
19) statement that the lessee assumes all risks of losses resulting from the lease;
20) description of nondiscrimination requirements; and
21) any other provisions deemed necessary by the Deputy Director.

Additionally, any leasing of highway ROW must be done according to the following restrictions as deemed appropriated by the Deputy Director:

1) FHWA must approve all matters involving the leasing of the highway ROW.
2) Any use of the ROW beneath the highway's grade-line must provide adequate vertical and horizontal clearances for the safety of the highway facilities.
3) Any use of the ROW above the highway must provide adequate horizontal and vertical clearances.
4) Any improvement on the highway ROW must be constructed so as not to restrict visibility or in any way interfere with the safety of traffic on the highway.
5) All structural supports built on the ROW must clear all horizontal and vertical clearances set by the design standards of the department.
6) The use of the ROW shall not increase the risk of hazardous conditions to highway and non-highway users because of highway location, design, maintenance, and operation.
7) The lessee shall include appropriate safety devices to minimize the risk of injury to users and nonusers of the facilities due to an accident on the highway. Any structure built over the highway shall be sufficiently

enclosed to prevent people and objects from falling. Any construction over or under the highway must include plans, approved by the department, for evacuation in case of a major accident, if it endangers occupants of the facilities.

8) The facilities on the ROW shall be built in accordance with local building codes for fire resistance. Neither the storage of combustible or hazardous materials nor occupations deemed hazardous to the traveling public shall exist on highway ROW. The department may require conformance with a nationally accepted model building code, if the local codes are questionable.
9) The department shall determine the length of highway allowable for structures built over the highway.
10) Any structure built over or under a highway shall not adversely affect the highway with such things as odors, fumes, or discharges from the said structure.
11) Any signing on the property shall pertain to the services offered or the ownership and shall be approved by the district engineer.
12) Any construction requiring the temporary or permanent alteration of the highway must have the prior written approval of the department.
13) If the department decides that additional alterations are needed to support the proposed use of the highway ROW, then such alterations shall be made at no cost to the department.
14) Any construction on the ROW shall be done in such a way as to allow adequate access for inspection, maintenance, and reconstruction when necessary.
15) Anyone wishing to lease highway ROW may be required to submit an attorney's title opinion that the proposed lease will be consistent with the property rights owned by others.
16) Anyone wishing to lease highway ROW is responsible for supplying the department with all the engineering, designs, and findings requested.

As for requests for leases, anyone desiring to lease highway ROW must submit a written request to lease to the district engineer in whose district the land is located. At a minimum, the request shall include the following:

1) the name and address of the person requesting the lease;
2) a written description of the property to be leased, proposed improvements (if any), intended use of the proposed property, and the proposed period of the lease;
3) drawings of the proposed site, proposed improvements including the necessary utilities, existing highways, all proposed means of access, and preliminary drainage plans;
4) adequate information to support findings by the commission to authorize leasing of the highway ROW; and
5) the name, address, and telephone number of the person authorized to provide additional information to the department upon request.

In order to comply with the requirements of this section, the district engineer shall request any additional information deemed necessary in addition to the written request mentioned above. Lease requests shall be sent by the district engineer to the ROW Division for processing and for preparing recommendations to the Commission, Deputy Director, and FHWA. The District Engineer shall inform the person desiring the lease as to the status of the lease request.

House Bill Number 9: Article 3, Section 4A - Lease of Rest Areas

The department may lease a rest area to a person engaged in sales and services that will serve the needs of the traveling public. Section 94.002 of the Human Resource Code does not apply to the granting of a lease authorized under this section. (Section 94.002 of the Human Resource Code states that anyone operating coin-operated machines on state property must have a license to do so from the Texas Commission for the Blind or have the authority to do so from an agency with a permit to arrange such facilities.) Any person leasing a rest area shall be required by the department to maintain the rest area in a proper manner and to promptly repair any damage caused by the lessee or a customer of the lessee. Or, the lessee may pay the state for all expenses incurred for repairing any damage. The Department can adopt any rules necessary to implement this section.

This last piece of legislation is the most important, because it permits the leasing of rest areas to private entities for the purpose of expanding services to the traveling public. This legislation enables commercialization of non-Interstate highway rest areas. It also states that the restrictions on vending, traditionally controlled by the

Commission for the Blind, are not applicable in this instance.

SUMMARY

TxDOT, like any public agency, is subject to a number of rules and regulations. Currently, the commercialization of rest areas faces several obstacles. The foremost obstacle to overcome is the prohibitive language of the federal laws controlling use of federally supported ROW. Federal law prohibits the presence of commercial enterprises on federal ROW, unless they fall under the protected status of the Randolph-Sheppard Act. On the state side, the Texas Legislature rewrote Texas law to allow commercial activity on state-owned ROW. This allows TxDOT to experiment with commercialization on non-interstate highways.

The Texas Commission for the Blind is one agency that may affect future rest area commercialization activities. In Texas, they have the protected status of the Randolph-Sheppard Act, which allows them to have the first bid on any commercial enterprise on state property. They currently operate vending machines at rest areas around the state. If a rest area were to become commercialized, the Blind Commission could stand to lose revenue from the competing vendors. However, if the Blind Commission were given the opportunity to benefit from the revenues generated by the commercialized rest area, they would probably be more willing to cooperate. As it stands right now, the new Texas legislation effectively bypasses the Blind Commission, so it would be in the Blind Commission's best interest to work cooperatively with TxDOT in future arrangements for commercial activities on state highway ROW.

With this chapter, the Tier 1 policy development analysis is complete. Conceptually, there is a sound basis for developing a policy to commercialize rest area services in Texas. From an institutional perspective, changes are required if commercialization is to be realized on the interstate system. Based on the underlying premises of the various federal laws, i.e., provide services to the motorist that promote safety, it is reasonable to expect the federal prohibition to be lifted during the upcoming years. Rest areas on other highways, however, are available for commercial activities. The following three chapters will explore in greater depth the issues effecting successful implementation of commercialized rest area facilities.

CHAPTER 4. FACILITY AND PROPERTY ANALYSIS

OVERVIEW

The first step in developing an implementation plan for rest area commercialization is an analysis of the physical characteristics and requirements. This chapter explores these issues in greater detail. Initially, an inventory of existing facilities will be summarized, along with their associated traffic. This information is particularly critical in determining the size and services needed for a commercialized operation. The geometric characteristics of existing facilities are also examined and compared with those of commercialized sites in use in other states. This information will allow a general assessment of the adequacy of existing rest area ROW for commercial operations.

TEXAS REST AREAS

The first Texas rest area was created in 1936, a roadside picnic area. Texas rest areas have progressed significantly since that time. Stimulated by funds designated from the Federal Beautification Act of 1965, Texas began ROW acquisition and construction of interstate rest area facilities. Today, rest areas provide restroom facilities, picnic tables, some vending operations, and other information for motorists.

TxDOT maintains 111 rest areas located at 67 sites around the state. Of the 111 rest areas, 80 are on interstate highways (IH), 28 are on U.S. Highways (US), 2 are on State Highways (SH), and 1 is on a Ranch Road (RR). Table 4.1 lists the rest areas in Texas. Between 1992 and 2002, 36 new sites are planned, along with the closing of 23 existing sites, netting 124 sites in the year 2002 (Ref 8).

Many of the Texas rest area facilities are approaching the end of their useful lives. Nearly 90 percent of the facilities are over 10 years old, and almost 50 percent of the rest areas are 20 years or older, as shown in Figure 4.1. Reconstruction costs for these existing facilities range from $250,000 to $600,000 per site. A new facility costs approximately $1.5 million (Ref 8). Total life-cycle rest area costs are explored in more detail in Chapter 5.

A TxDOT Rest Area Task Force was formed in 1990 to study Texas rest area issues. As part of this task force effort, a survey of Maintenance Supervisors was conducted, summarizing the major problems with Texas rest areas. The results of this survey are shown in Table 4.2 (Ref 9, p 13). In addition to this survey, the Task Force also reviewed the files of complaints from the traveling public during 1987, 1988, and 1989. The letters, basically, noted the same problems as did the Maintenance Supervisors (Ref 9, p 14). Interestingly, the Task Force recommended that the TxDOT administration support the concept of rest area commercialization (Ref 9, p 65).

REST AREA TRAFFIC

TxDOT now collects traffic data at rest area sites on a routine basis. Average daily traffic (ADT) for the main lanes and rest areas is summarized in Table 4.3. (The data in Table 4.3 are calculated from TxDOT data seasonally adjusted by data collected for this study.) For all highways with reported traffic counts, 6.2 percent of the main-lane traffic uses rest area facilities—referred to as the capture rate. The Ranch Road has the highest capture rate of the listed highways; however, there is only one Ranch Road with a rest area. Generally, the interstate highway has the highest capture rate.

As noted in the previous chapter, federal law prohibits commercial activities on interstate facilities. Therefore, only 25 percent of the existing rest areas could be commercialized. Even more important, as shown in Figure 4.2, main-lane ADT on the interstate accounts for 84 percent of all traffic servicing rest areas in Texas. This will affect, significantly, the financial impact of commercialization, as will be described in the following chapter.

Table 4.1 Summary of Texas rest areas

District	County	Highway	Number of Units	Year Built
1	Franklin	IH 30	2	1969
2	Palo Pinto	IH 20	2	1973
2	Johnson	IH 35W	2	1967
2	Wise	US 287/81	1	1970
3	Cooke (TB)	US 287	1	1967
3	Cooke	IH 35	2	1988
3	Clay	US 287	1	1977
3	Wichita	US 287	2	1974
3	Wichita	US 277/281	2	1973
4	Carson	IH 40	2	1969
5	Hale	IH 27	2	1989
5	Crosby	US 82	1	1970
6	Ward	IH 20	2	1966
6	Midland	IH 20	2	1972
6	Pecos (E)	IH 10	2	1981
6	Pecos (W)	IH 10	2	1968
6	Andrews	US 385	1	1978
7	Sutton	IH 10	2	1981
7	Coke	US 87	1	1979
7	Concho	US 87	1	1978
7	Kinney	US 90	1	1970
8	Nolan	IH 20	2	1977
8	Callahan	IH 20	2	1980
8	Howard/Mitchell	IH 20	2	1989
8	Haskell	US 277	1	1978
9	Bell	IH 35	2	1968
9	Hill	IH 35W	2	1967
10	Van Zandt	IH 20	2	1974
10	Cherokee	US 69	1	1970
11	Nacogdoches	US 59	2	1975
11	Polk	US 59	2	1975
12	Harris	IH 10	2	1966
12	Galveston	SH 87	2	1977
13	Victoria	US 59	2	1989
13	Colorado	IH 10	2	1973
14	Hays	IH 35	2	1967
14	Williamson	IH 35	2	1966
14	Gillespie	RR 1	1	1969
14	Gillespie	US 290	1	1969
15	Comal	IH 35	2	1968
15	Medina	IH 35	2	1974
15	Bexar	IH 10	2	1973
15	Kerr	IH 10	2	1980
15	Guadalupe	IH 10	2	1981
16	Live Oak	IH 37	2	1989
16	San Patricio	IH 37	2	1975
16	Refugio	US 77	1	1971
17	Walker	IH 45	2	1973
18	Ellis	IH 35E	2	1980
18	Navarro	IH 45	2	1976
18	Kaufman	IH 20	2	1967
19	Bowie (TB)	IH 30	1	1974
19	Bowie	IH 30	2	1983
19	Harrison (TB)	IH 20	1	1967
19	Harrison	IH 20	2	1968
19	Cass	US 59	1	1978
20	Orange (TB)	IH 10	1	1966
20	Orange	IH 10	2	1966
21	Brooks	US 281	1	1970
21	Kenedy	US 77	1	1978
24	Culberson	IH 10	2	1976
24	Culberson	US 62/180	1	1974
24	El Paso	IH 10	2	1967
24	El Paso (TB)	IH 10	1	1979
25	Wheeler	IH 40	2	1972
25	Collingsworth	US 83	1	1975
25	Know	US 82	1	1989

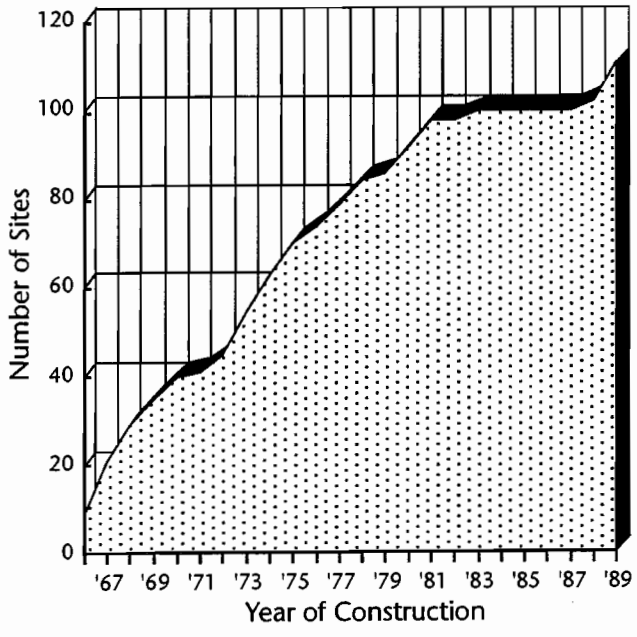


Figure 4.1 Cumulative age of Texas rest areas

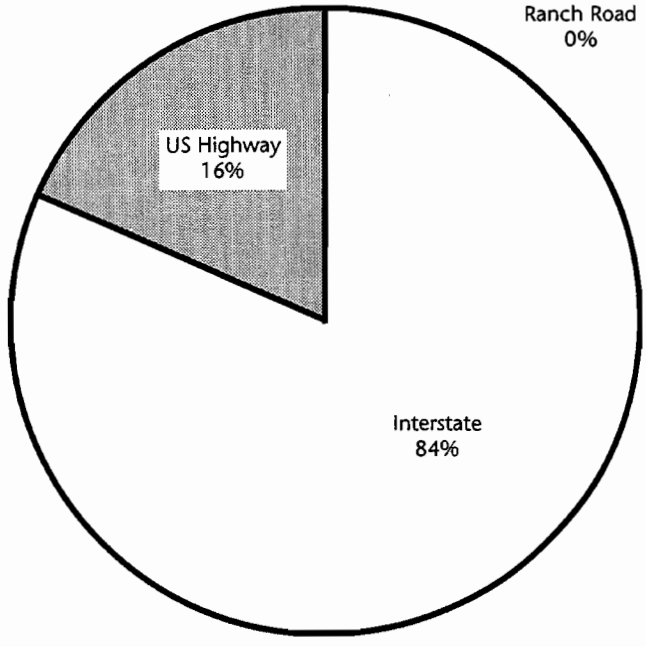


Figure 4.2 Distribution of main-lane ADT near Texas rest areas

Table 4.2 Texas rest area problems

Problem	Rest Areas (%)
Vandalism and Theft	77
Graffiti	62
People Engaged in Vending, Panhandling, Drug use, and other Undersirable Activities	40
Uncleanliness and Litter	32
Inadequate Parking	30
Irrigation of Landscaping	23
Inoperable Low Flush Toilets, Water Fountains, and Hand Dryers	17

Table 4.3 ADT for Texas rest areas and highways

	Main-Lane ADT[a]	Rest Area ADT[b]	Capture Rate (%)
Interstate	22,873	1,442	6.3
U. S. Hghway	13,274	744	5.6
Ranch Road	496	119	23.9
All Highways	20,331	1,260	6.2

[a] Represents one-way traffic only.
[b] Represents traffic at a single rest area site.

REST AREA GEOMETRY

The geometric characteristics of a rest area facility are an important element in developing plans for commercialized facilities. Figure 4.3 illustrates the elongated design, typical of most Texas rest areas. Overall, the facility encompasses about 572,000 square feet of ROW. In addition, it is important to note that most Texas rest areas serve traffic from a single direction only. Consequently, most of the rest areas in Texas are paired sites. Excluding tourist bureaus, all interstate rest areas are paired facilities. On the other hand, for non-interstate highways, only 12 (6 pairs) out of 30 sites are paired. Given the preference of commercial rest area operators to build a single site serving both directions of traffic, non-interstate locations may be particularly appealing.

Figure 4.4 illustrates the typical commercialized rest area facility used on several U.S. toll roads. The facility is located in the median, serving both directions of traffic. This rest area design requires a left-lane entrance off of the highway. Limited space in the median along Texas highways may make this kind of design infeasible.

Figure 4.5 illustrates one innovative approach to serving bi-directional traffic with a single facility. The restaurant and other services are structured as a bridge. This is a more expensive facility than that illustrated in Figure 4.4; however, it is less expensive than building two separate facilities. An important consideration in this design is allowance for expanded lane capacity under the bridge. The structure should be designed to handle future traffic flows without significant modifications to the bridge structure.

There are several commercial facilities on the New York State Thruway that serve traffic from a single direction. The Chittenango Travel Plaza is illustrated in Figure 4.6. This facility is more compact than the typical Texas rest area, which raises another important issue—availability of existing ROW. It is in the State's best interest to not have to purchase additional ROW for commercial uses, which, in fact, may be constitutionally restricted.

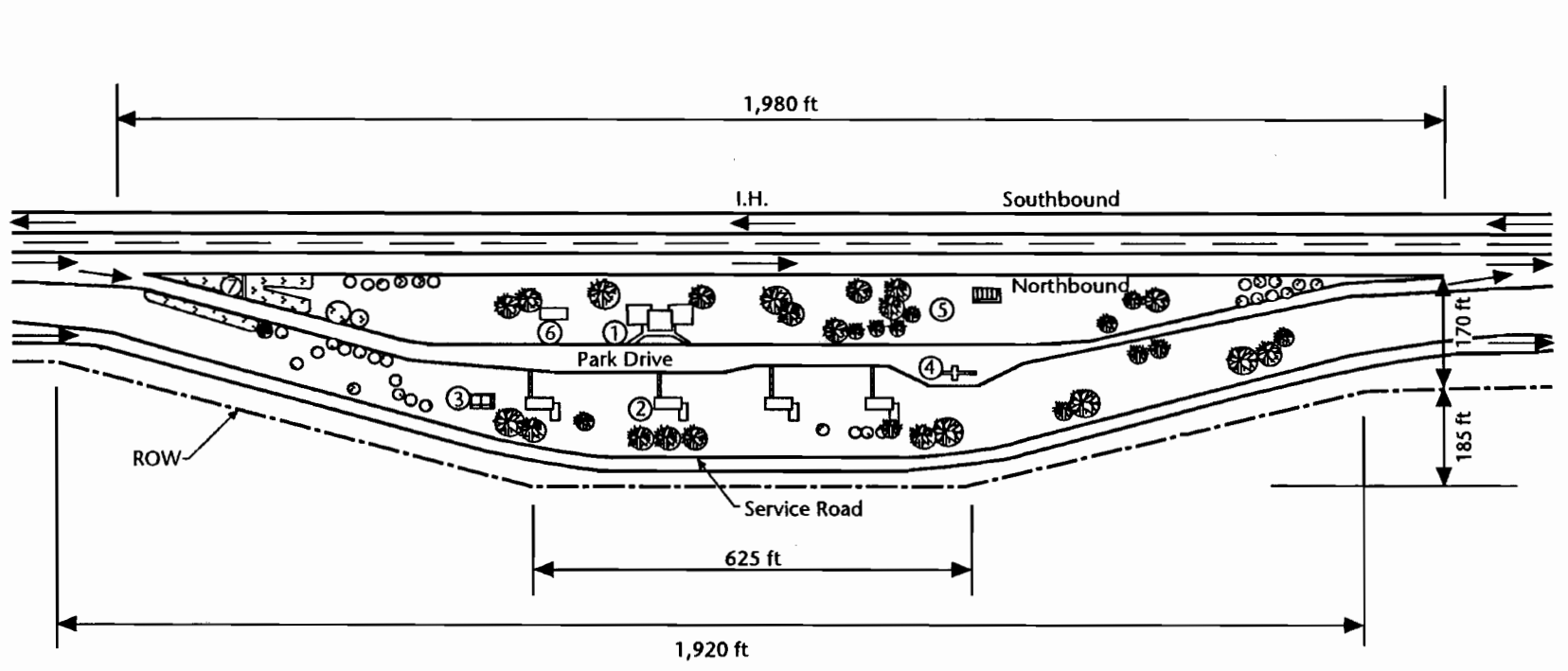
A more detailed analysis of the area requirements of a commercialized facility, such as that shown in Figure 4.6, reveals that the total area (580,000 square feet) is only slightly more than that required for the typical Texas rest area (572,000 square feet). Figure 4.7 overlays the Chittenango Travel Plaza on the typical Texas rest area. Given the similar area requirements, it is reasonable to expect that commercial travel plaza designers will be able to accommodate their needs within existing rest area ROW.

Obviously, the geometric requirements will vary by site. Additionally, there are other issues that need to be examined for specific sites. These include:

- availability of additional land area beyond (but contiguous to) the existing ROW;
- expansion potential of the sanitary sewer;
- expansion potential of the water supply;
- expansion potential of other utilities;
- ability to use or reuse existing facilities including buildings, pavement and parking lots; and
- environmental impact statement on the potential increase in usage of the area and its resources.

SUMMARY

Because of the federal restrictions on commercial use of ROW, the number of opportunities for commercialization in Texas is limited. Only 31 sites qualify for analysis as feasible sites, and low ADT at many of these locations further reduces the number. Geometric factors, on the other hand, should not pose a problem. Total area requirements of existing service plazas on various U.S. toll roads are very similar to the total area available at Texas rest areas.



*Referring to the rest area of North Interstate 45, District 17, North of Huntsville in Walker County.

Figure 4.3 Typical Texas rest area layout

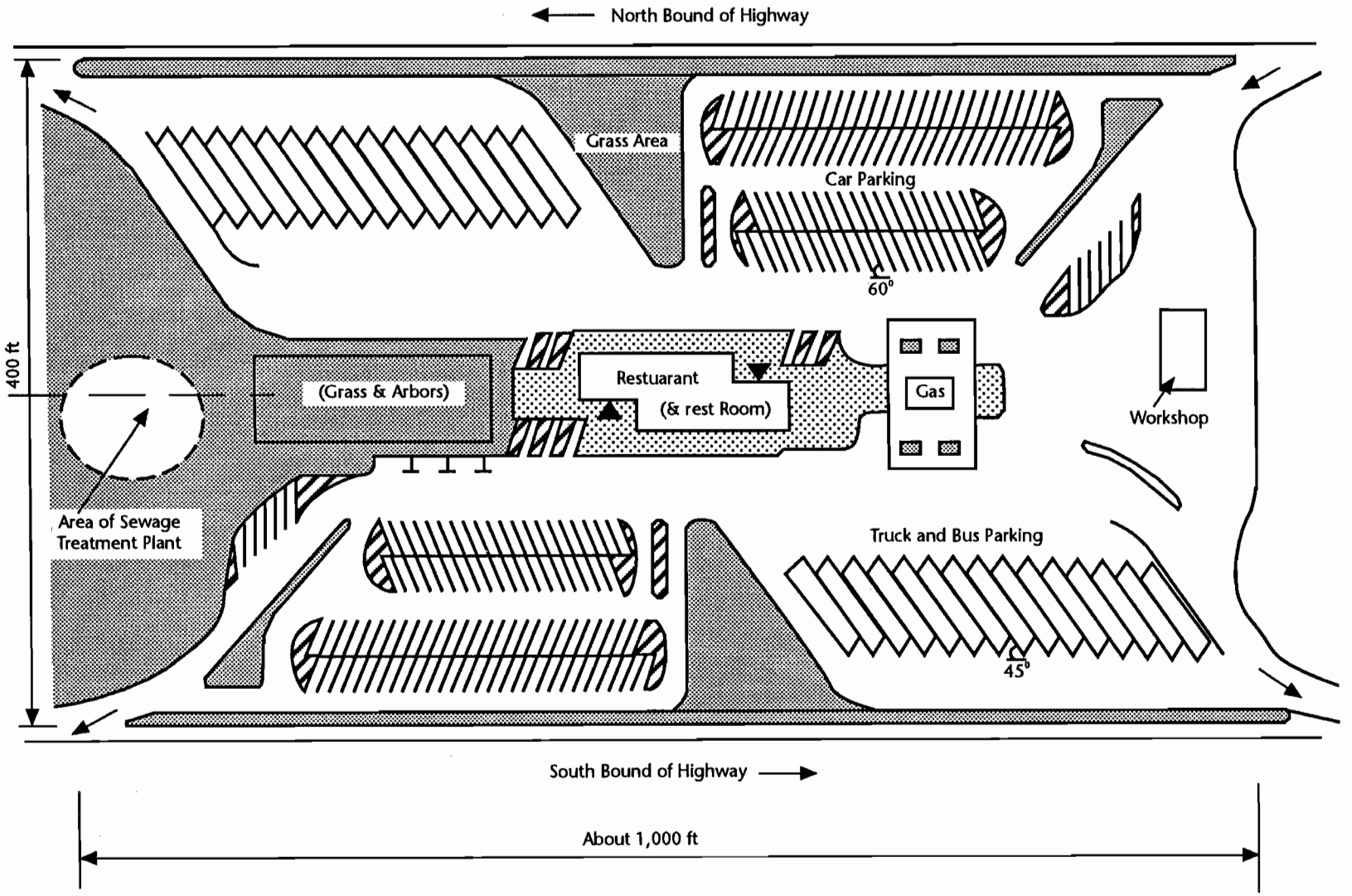
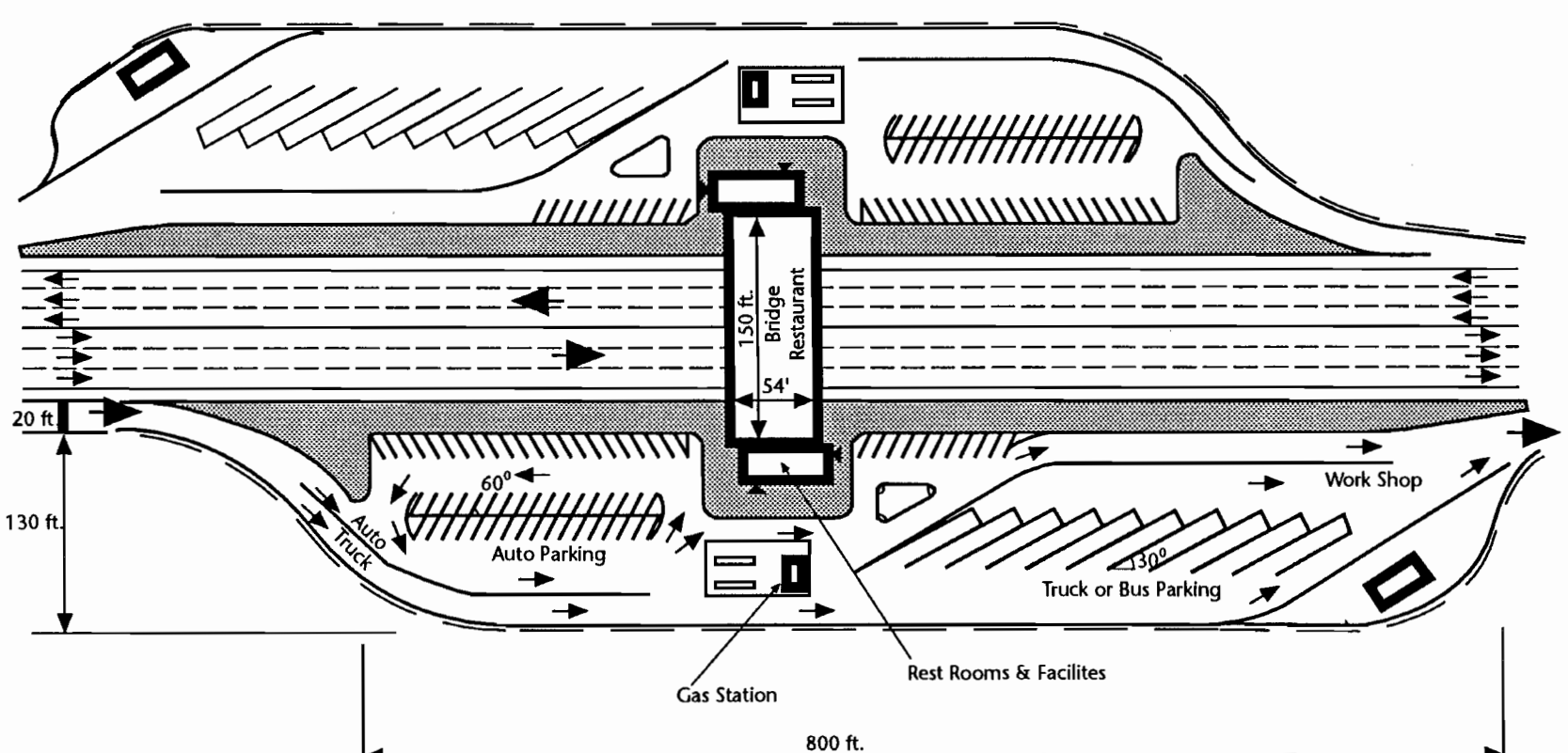


Figure 4.4 Rest area in a Wide Median



Notice:

1. Capacity of the bridge restaurant: contains four different restaurants, each having 75 seats.
2. Parking area on one side: contains 63 auto parking paces and 10 truck (or bus) parking spaces.
3. Other facilities include: gas station and work shop on each side.

Figure 4.5 Two-sided rest area sharing a bridge restaurant

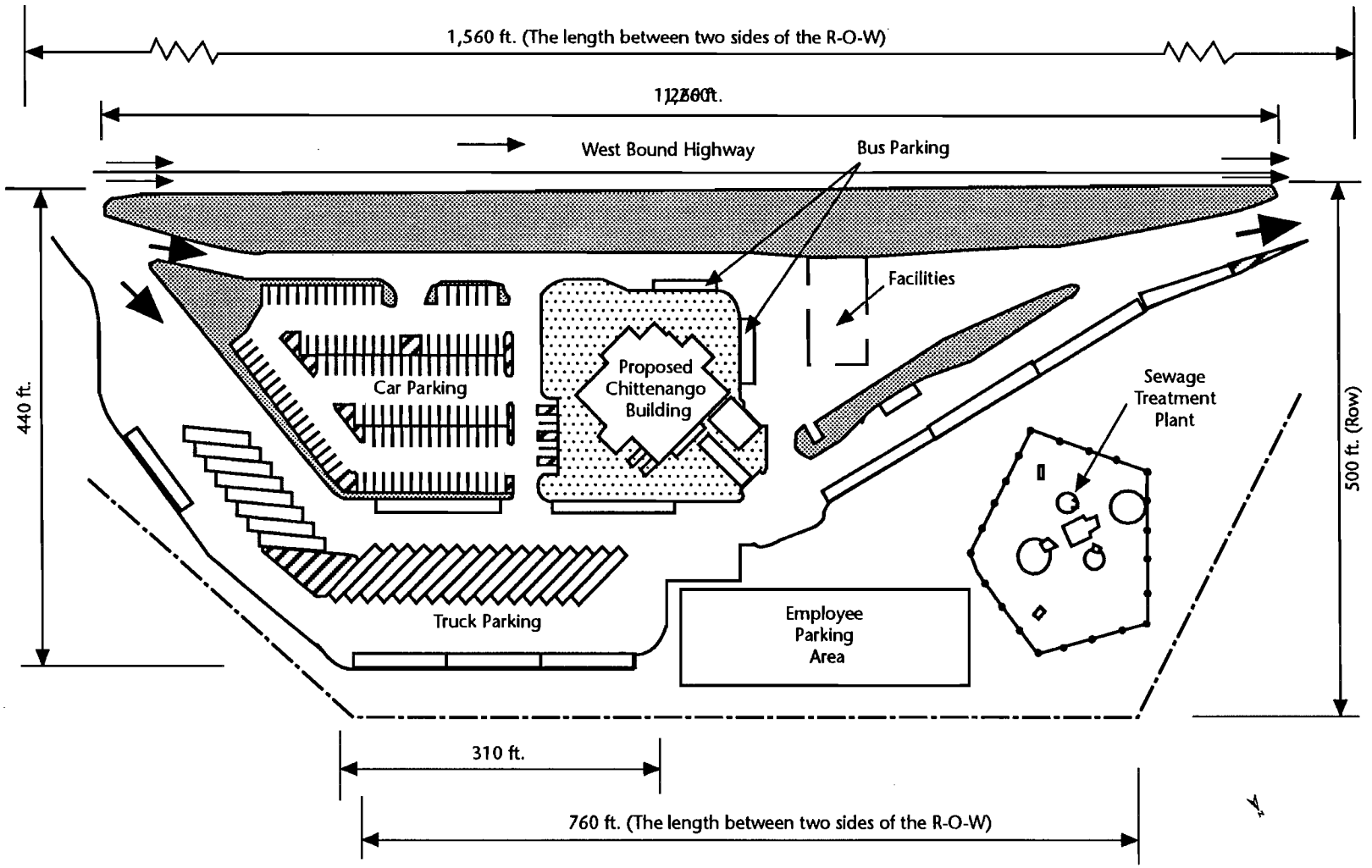
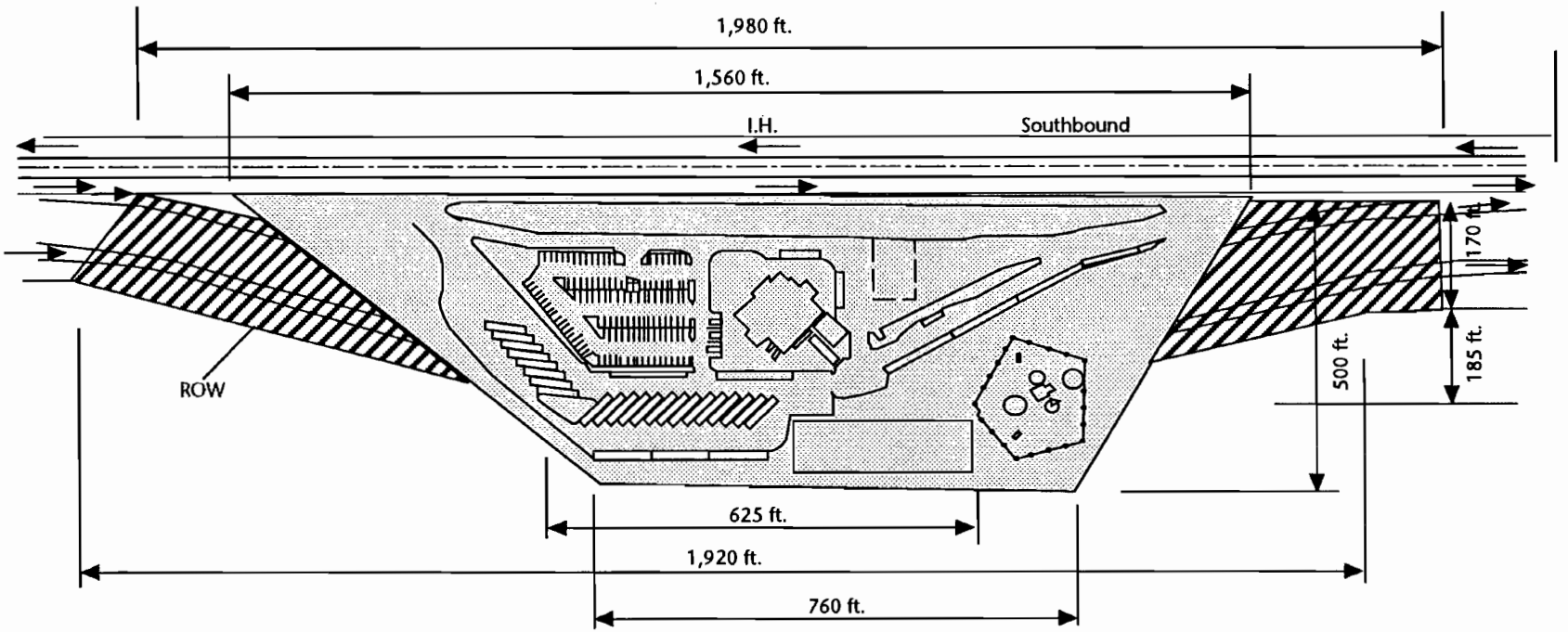


Figure 4.6 Chittenango travel plaza (New York state thruway)



The area of the typical Texas rest area layout is about 572,000 square feet.

The area of the Chittenango travel plaza is about: 58,000 square feet.

Figure 4.7 Size comparison of commercial and public owned rest areas

CHAPTER 5. FINANCIAL/ECONOMIC ANALYSIS

OVERVIEW

The basic premise of privatization is that the private sector, through market factors, can provide services at a lower cost than the public sector. Therefore, an analysis of the financial implications of commercialized rest areas is a critical component for determining the feasibility of privatization. This chapter will begin with an analysis of current TxDOT rest area costs. This will establish the base-line for comparison of commercialization alternatives. Following this discussion, an estimate of potential revenues and costs from commercialized operations are presented and compared with those of the baseline TxDOT case. Finally, the chapter concludes by documenting some of the nation's experiences with toll road travel service plazas and their associated revenues.

TEXAS REST AREA COSTS

TxDOT plans to spend nearly $52.8 million (1991 dollars) for the construction of 36 new rest area units during the next 10 years (Ref 8, p 17). This amounts to nearly $1.5 million per site and these costs are expected to be higher because of new design improvements. Additionally, other facilities will require reconstruction as they near the end of their service lives. Reconstruction costs range from $250,000 to $600,000 depending on the size of the facility (Ref 8, p 23). Rest area facilities require major rehabilitation every 5 to 7 years at a cost of approximately $150,000 per site (Ref 8, p 23). Finally, sites incur annual routine maintenance costs that average about $50,000 per facility. (This conservative estimate is based on CTR analysis of unaudited rest area maintenance data from 1987 to 1990. Several other states reported average maintenance costs of around $100,000/year (Ref 14, p 49; Ref 15, p 2).)

A 28-year life-cycle scenario was constructed in order to determine annualized costs for Texas rest areas. The results are illustrated in Figure 5.1 for a new and for a reconstructed facility. Annualized rehabilitation and maintenance costs are the same for both facilities, $14,693 and $50,000 respectively. Annualized construction costs for a new facility ($157,201), however, are significantly higher than the reconstruction costs for an existing facility ($37,608). Based on the number of facilities in the current 10-year plan and accounting for closings, Texas will spend approximately $17 million/year on rest areas (see Table 5.1). This amounts to about 35¢ per vehicle entering the rest area site.

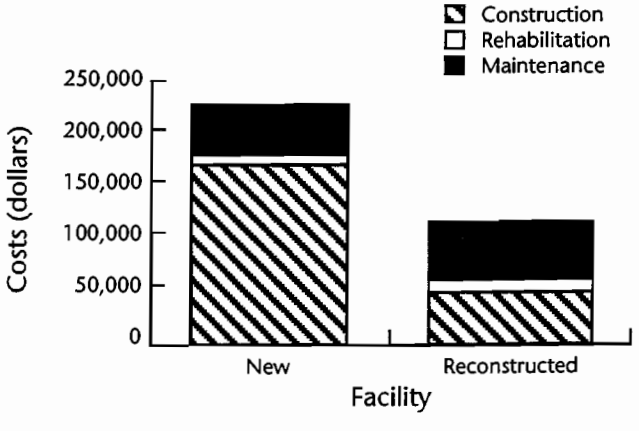


Figure 5.1 Annual rest area costs for Texas

Table 5.1 Total annualized rest area costs for Texas

	Number	Annualized Cost/Facility	Total Annualized Costs
Existing Facilities[a]	88	$102,301	$9,002,488
New Facilities	36	$221,894	$7,988,184
TOTAL	124		$16,990,672

[a] 111 current facilities less 23 closings eguals 88 existing facilities.

COMMERCIALIZED REST AREA REVENUES

Generally, commercial rest area facilities are much more expensive than non-commercial public rest areas. For example, the construction budget for the 16 travel service plazas on the New York Thruway is $96 million, or $6 million per site (Ref 10, p III-10). Importantly, there is a difference in the focus of the two operations. Commercialized facilities are in the business of generating revenue. Consequently, their facilities are designed to accommodate clientele from a different perspective. The service plazas on most toll roads are very attractive facilities with a range of services for consumers.

Model Assumptions

In order for commercialization to work on Texas highways, rest areas must be financially viable. A model was constructed to estimate potential revenues from various concessions offered by commercial rest area operators. For the purposes of the model, concessions were categorized as fuel, food, or other. Data from the Illinois rest area privatization study were used in developing some preliminary estimates. These data are presented in Table 5.2 (Ref 11).

The capture rates used in the Texas model are based on existing capture rates at each TxDOT rest area. These rates are considerably lower than the 15 percent capture rate used in the Illinois study. It is anticipated that actual capture rates for a commercialized facility would be higher than existing rest area utilization rates. The California Department of Transportation (Caltrans) estimated that the capture rate at their C. H. Warlow site would increase from 2.3 percent to a minimum of 4.0 percent following commercialization, because of the additional services offered (Ref 12, p 25).

Texas Commercialized Rest Area Revenue Estimates

Based on the previous assumptions, annual concession revenues were estimated for Texas rest areas. A minimum ADT of 2,750 was required for sales to take place. Four locations (2 Interstate, 1 U.S. Highway, and the Ranch Road) fell below this figure. The results of the model are shown in Figure 5.2. (See the Appendix for a more detailed listing of each rest area site.) For all highways, annual rest area sales are estimated to be $436 million, or an average of $4.2 million per location. This figure is comparable to the California estimate of $6.6 million for its C. H. Warlow site where ADT of 33,000 was reported in 1988 with an estimated 4 percent of this traffic using the commercial rest area. (Restaurant sales were estimated at $1.9 million, convenience store sales at $1.5 million, 2.9 million gallons of gasoline sold. Assuming a price of $1.10/gallon for gasoline, this yields a total of $6.6 million (Ref 12, p 25).) (The capture rate for Texas rest areas, as reported previously in Table 4.3, is 6.2 percent with an average ADT of 20,331.) It is also similar to the $6.9 million Illinois estimate for full service rest areas—ADT of 18,000 vehicles and a 20 percent capture rate.

Since federal law prohibits commercial activity on interstate highways, it is appropriate to highlight non-interstate facilities. Based on the information in Figure 5.2, Other Highways (non-interstate) represent only 14 percent of the total revenues. Other Highway revenues are estimated at $61 million, or about $2.5 million per commercialized location. Although this is

Table 5.2 Illinois rest area sales data

	Limited-Range	Mid-Range	Full Service
ADT	2,750-4,500	5,500-8,000	8,500-9,500
Capture Rate	15%	15%	15%
Fuel Sales:			
% Buying	65%	65%	65%
Avg. Expenditure	$10.00	$10.00	$10.00
Food Sales:			
% Buying	30%	50%	50%
Avg. Expenditure	$2.00	$3.00	$4.00
Other Sales:			
% Buying	20%	30%	30%
Avg. Expenditure	$1.00	$1.50	$2.00

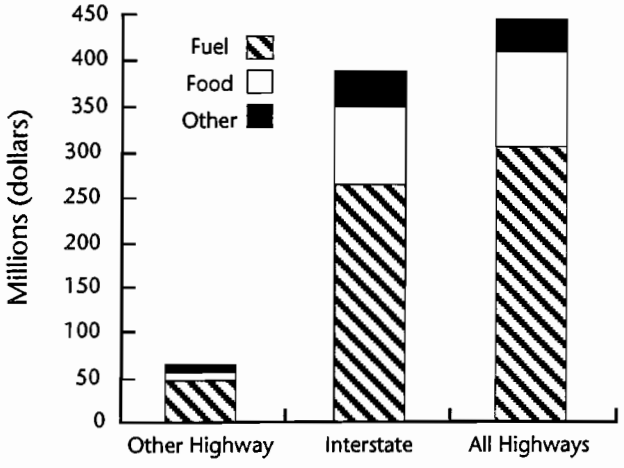


Figure 5.2 ***Estimated Texas rest area concession revenues***

substantially less than the interstate figure of $4.7 million/location, relative to the annualized cost of existing rest areas, it nonetheless represents a significant figure.

TEXAS COMMERCIALIZED REST AREA COSTS

Revenues from commercial activities represent only one side of the equation. The cost structure is equally important in determining whether commercialization is a viable business enterprise. The cost structure for the commercial activity includes facility costs and operating costs.

Facility Costs

Facility costs consist of a number of components including ROW acquisition, engineering, site development, construction, utilities, and other contingencies. As mentioned previously, facility costs for travel service plazas on the New York Thruway are averaging about $6 million per facility. The Illinois feasibility study estimated facility costs ranging from $1.8 million for a limited-range service facility, through $4.0 million for a mid-range service facility, to $10.5 million for a full-service area with a center median bridge (Ref. 11). This latter facility is designed to handle traffic from both directions, similar to that illustrated previously in Figure 4.5. Based on the lower ADT and estimated service requirements in Texas, $5.0 million is used as an average estimate for a commercialized facility.

Operating Costs

The operating costs for rest area services include inventory costs, labor, state leases or revenue sharing fees, depreciation, etc. For purposes of this analysis, operating costs were categorized as follows:

- inventory (products, food, fuel, etc. for sale);
- labor (wages and fringe benefits);
- depreciation;
- state revenue sharing; and
- other (including advertising, maintenance, utilities, and administrative).

Information on commercialized rest area operating costs is proprietary. Consequently, industry averages were used for inventory costs, labor costs, and other costs. Depreciation is calculated using straight-line depreciation of the estimated facility cost. State revenue sharing is variable, depending on the agreement between the commercial enterprise and the state agency. Table 5.3 lists the values used in the calculation of annual costs for commercial rest areas (Ref 13, p L44).

Table 5.3 ***Commercial rest area operating costs***

Operating Costs	Gross Sales (%)
Inventory	33.6
Labor	26.4
Other	19.4
TOTAL	79.4

Annualized Commercial Rest Area Costs

Facility and operating costs were examined over a 28-year life-cycle. Annualizing these figures at a 10 percent discount rate and assuming $4.6 million in annual revenues, based on earlier calculations, yields the results shown in Figure 5.3. Not surprisingly, total annualized costs for commercial rest areas ($4,402,920) are significantly higher than those for the typical Texas rest area ($221,894 for a new facility). There are significant

costs associated with running a commercial enterprise that do not exist for a public rest area.

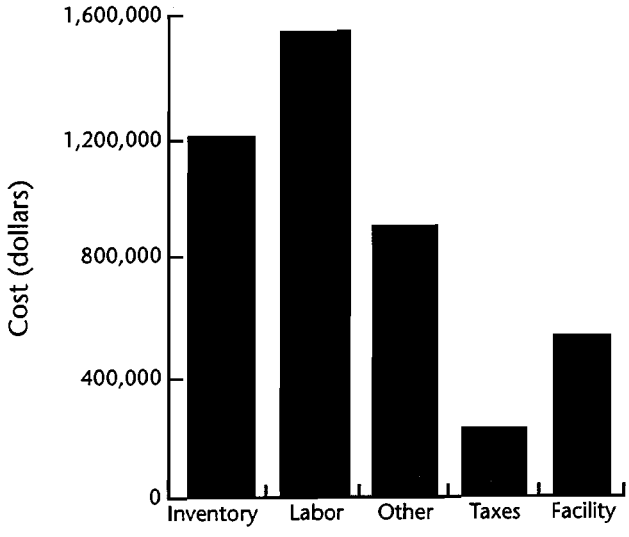


Figure 5.3 Annualized costs for Texas commercialized rest areas

ECONOMIC VIABILITY OF COMMERCIALIZED REST AREAS

Combining the revenue and cost estimates allows a basic determination of the economic feasibility of a commercialized operation. The base-line case, as shown in Table 5.4, demonstrates that a business will receive a reasonable rate of return (14 percent) on its facility investment of $5 million.

Table 5.4 Annualized income statement for Texas commercialized rest areas

Revenues	$4,594,856
Costs:	
Operating	$3,868,347
Facility	$534,573
Subtotal	$4,402,920
Net Income	$191,936

In the above scenario, the state benefit would be the elimination of costs for provision of rest areas in the amount of $102,301 per existing site. However, there are also state revenue opportunities associated with commercial operations. Nearly all states that have commercialized rest areas receive lease revenues and/or a percentage of gross revenues. Table 5.5 lists the toll road rest area concession revenues for several states.

Table 5.5 1991 toll road concession revenues

State	Revenue (In Millions)
Illinois	4.5
Indiana	4.1
New Jersey	11.4
New York	6.4
Ohio	5.6
Oklahoma	1.1

Assuming Texas were to receive 5 percent of gross sales in the base-line scenario, the commercial enterprise would receive a 10.6 percent return on his/her investment and the state would receive revenues annualized to $229,117 per location. In this scenario, the total benefit to the state would be $331,418 per existing site. ($229,117 in concession revenues plus the $102,301 savings in existing rest area costs.)

Given the variable nature of operating costs, facility costs, which are fixed, are critical for economic viability. In the base-line case, with the state not receiving a percentage of sales, the break-even facility cost is about $6.97 million. A facility more expensive than this amount would not be a profitable venture for a commercial enterprise. Importantly, firms must take great care to not over-design facilities.

CONCLUSIONS

Rest area costs for the state of Texas are growing. During the next 10 years, Texas will spend about $17 million annually on rest areas. Given the increasing need for other highway infrastructure, it will be difficult to adequately address these needs in a timely manner. Based on the model developed for this study, commercialization of existing and future rest area facilities could have a pronounced effect on TxDOT rest area costs. Assuming it were legally feasible to commercialize rest areas, these sites could be privatized, replacing the $17 million cost with $ 28.4 million in state revenues.

Until the federal law changes, Texas can commercialize only those facilities off the interstate. As noted in Chapter 4, this amounts to about 25 percent of the existing rest areas or about 35 percent of the rest areas planned over the next 10 years. The estimated revenues for non-interstate facilities are about $2.5 million per location. Using this revenue value, along with a facility cost reduced to $3.5 million and the state receiving only 2.5 percent of sales, a firm would receive a respectable 10 percent return on investment.

Moreover, the state would receive annualized revenues of $66,658 per location. Combining these results with data from all rest areas provides an estimate of the overall impact of a commercialization program based on current federal law. As shown in Table 5.6, the state revenues from non-interstate operations yield annual income of about $2.7 million. This revenue can be used, in turn, to offset some of the costs associated with state-run rest areas. The net result is a 55 percent reduction in the rest area costs for TxDOT (see Figure 5.1, shown previously) over the next 10 years. Therefore, despite the federal limitation, Texas can benefit from privatizing facilities off the interstate system.

Finally, although not completely substantiated, a number of states have reported beneficial impacts to their state economies because of their rest area programs. The area in which external benefits are most often mentioned is the positive impact of rest areas on the state's economy, primarily on its tourism industry. This impact includes (1) enhancement of the state's image through a favorable impression made by rest areas and welcome centers; (2) traveler decisions to extend their stay in the state as a result of information received at welcome or information centers; (3) traveler decisions to make further trips to a state because of information received or because of generally favorable impression; and (4) decisions to purchase goods or services, and to visit attractions not previously planned, as a result of information received in the rest area (Ref 16, p 29).

Commercialized rest area centers, undoubtedly, could contribute more to this end.

Table 5.6 Texas rest area costs with limited privitization

	Number	Revenue Per Location	Cost Per Location	Total Net Revenue
Non-interstate				
Existing Facility	26	$66,658	$0	$1,733,108
New Facility[a]	18	$66,658	-$14,136	$1,016,076
Subtotal	44			$2,749,184
Interstate				
Existing Facility	62	$0	-$102,301	-$6,342,662
New Facility	18	$0	-$221,894	-$3,994,092
Subtotal	80			-$10,336,754
TOTAL	124			-$7,587,570

[a] Costs represent state ROW purchases for 18 new sites less ROW revenue from 5 closings.

CHAPTER 6. PUBLIC ATTITUDES ANALYSIS

OVERVIEW

The final component of the second-tier analysis is an examination of public perceptions. An analysis of other state experiences with privatization revealed the need to investigate public attitudes regarding commercialization. In order to accomplish this task, a rest area users' survey about the various components of privatization was conducted at 5 sites (4 Interstate and 1 U.S. Highway) around the state. Following this overview, a description of the methodology is presented. The results are discussed separately for Interstate and U.S. Highway respondents. The U.S. Highway results are of immediate interest, given the federal ROW restrictions discussed previously.

SURVEY METHODOLOGY

A survey was designed to generate basic information about rest area users and to solicit comments concerning commercialized operations. A sample survey form is listed in Figure 6.1. In addition to this information, rest area and main-lane ADT data and vehicle classification data were also collected. This information was used to modify ADT data used in previous chapters.

Five sites were selected for conducting the surveys. Consideration was given to geographic location, proximity to a large metropolitan area, main-lane ADT, and type of highway being served. Table 6.1 summarizes basic information regarding the survey sites.

Table 6.1 Rest area survey sites

District	County	Highway	ADT
15	Kerr	IH 10	9,432
8	Nolan	IH 20	19,614
13	Colorado	IH 10	20,002
14	Williamson	IH 35	58,744
11	Polk	US 59	14,662

The surveys were conducted on Thursdays during the months of August to October, 1991. Motorists were surveyed between 8 am and 11 am and between 1 pm and 4 pm.

INTERSTATE SURVEY RESULTS

In total, 623 persons, drivers and passengers, were interviewed. The results for each of the questions are presented after a general discussion of the results.

Structured Survey Responses

Of the vehicles entering the rest area, 82 percent were passenger vehicles—cars, pick-up trucks, and recreational vehicles. The other 18 percent were large and small commercial vehicles. Slightly less than one-third of the vehicles stopping in rest areas were from out of state.

Nearly 50 percent of the respondents were on a business-related trip, and about another 31 percent were traveling on vacation. This latter figure is not surprising, given that the interstate surveys were conducted in August. Nearly 71 percent of the respondents were traveling over 250 miles on the day of the survey.

As expected, restroom use was the predominant reason for stopping at the rest area, and the average stay lasted less than 15 minutes. Truck drivers tended to spend longer times in the rest area than passenger vehicles.

Of those interviewed, 68 percent reported stopping at rest areas frequently. However, most said they would never stop at night if they were alone, especially women. Some women said they were afraid even to stop during the day. Many truckers also commented on their reluctance to stop at rest areas, on account of crime and harassment. These comments are consistent with national attitudes as reported in a Transportation Research Board (TRB) report:

Figure 6.1 Texas rest area survey

1. In what type of vehicle are you traveling? (Check one)

_____ Passenger car/van
_____ Recreational vehicle (RV)
_____ Combination truck
_____ Pickup truck
_____ Motorcycle
_____ Other (Specify) _____

2. In what state do you reside? _____

3. What is the main purpose of this trip? (Check one)

_____ Home to work
_____ Work to home
_____ Recreation
_____ Commercial business
_____ Personal business
_____ Vacation
_____ School
_____ Shopping
_____ Other

4. What will be the total length of this trip today? (Check one)

___ 0-25 miles ___ 26-100 miles ___ 101-250 miles ___ more than 250 miles

5. What are the main reasons for stopping at this rest area? (Check as many as apply)

_____ Restrooms
_____ Telephone
_____ Car trouble
_____ Picnic area
_____ Rest/stretch
_____ Other (Specify) _____
_____ Vending machines
_____ Tourist/travel info.

6. How much time did/will you spend at this rest area? (Check one)

___ 0-15 minutes ___ 16-30 minutes ___ 31-60 minutes ___ Over 1 hour

7. In your travels, how frequently do you stop at rest areas?

_____ Frequently _____ Occasionally _____ Rarely

8. Did/will you use vending services today? _____ Yes _____ No

9. If the following commercial services were available at a rest area, which would you use?

_____ Fuel
_____ Vehicle services
_____ Restaurant
_____ Traffic report
_____ Business services (fax, copy)
_____ Gift shop
_____ Arcade games
_____ Weather report
_____ Lodging reservation service
_____ Automated bank teller
_____ Truck dispatch service
_____ Convenience store
_____ Postal services

10. How do you feel about commercial services (i.e., food and gas) being offered at rest areas?

_____ Favor _____ Oppose _____ No opinion

11. Additional comments:

> ... the results of every survey examined shows an extremely high positive opinion of rest areas in general.... However, users' attitudes concerning perceived personal security are somewhat more negative. Although 99 percent of all respondents indicated that they felt safe and secure during the daylight hours, only slightly more than half expressed no reservations about stopping at night (Ref 16, p 17).

Most rest area users (79 percent) did not utilize available vending services. This, however, did not relate to their opinions regarding other services. Two-thirds of the respondents indicated a preference for restaurant, fuel, and convenience store services at rest areas. Overall, 72 percent of the respondents indicated they were in favor of commercialized rest area facilities. Generally, those that opposed were adamant in their opposition.

Other Survey Comments

Over one-third (39 percent) of the people who answered the survey had additional comments to make about either the rest area itself or the idea of commercialization at rest areas. These comments, recorded and divided according to general topics, are summarized in Table 6.2.

Table 6.2 General comments from surveys

Concern	Number	%
Services	50	21
Upkeep/Cleanliness	48	20
Hassle/Quiet/Crowds	33	14
Commercial Prices	31	13
Convenience/Benefit	30	12
Safety	21	9
Funding/Taxes	19	8
Jobs/Competition	15	6
Parking	10	4
Privacy	10	4
Compared to Other States	6	2
TOTAL	243	

Many of the people who commented covered several areas in their comments, hence the percentages do not add to 100 percent. Overall, the people who commented were most concerned with services and the general upkeep of existing rest areas. Many of those surveyed wanted more rest areas and expressed concern/admiration for the rest area they were visiting. Those who commented about crowds, tended to be in opposition to the idea of commercialization in general. Others specifically mentioned that prices would determine whether or not they utilized commercial services at rest areas. Finally, safety played a key role in stopping at rest areas, especially for women and for truck drivers. Truck drivers commented most frequently on the presence of undesirable activities at rest areas that either made them concerned or uncomfortable about their safety.

U.S. HIGHWAY SURVEY RESULTS

Surveys near Lufkin, Texas, on U.S. Highway 59 were conducted over two days with 295 total responses. Responses for each of the questions are illustrated on the pages following this general discussion.

Passenger cars and vans using the rest area were about the same percentage of total vehicles as on the Interstate. There were a larger percentage of pick-up trucks and a smaller percentage of combination trucks, however, using the U.S. Highway rest area facility.

There were fewer out-of-state residents frequenting the U.S. Highway facility than the Interstate (17 percent versus 31 percent, respectively). This is also reflected in the lower percentage of U.S. Highway users on vacation. U.S. Highway rest area users had a higher percentage of recreation trips than users of the Interstate, however. Business use of the U.S. Highway facility was nearly identical to that of the Interstate. The greater use by in-state residents also helps explain the differences in trip length. Nearly 54 percent of the U.S. Highway rest area users were on trips between 101 and 250 miles, as compared to 22 percent of the Interstate rest area users.

Use of rest rooms continues as the predominant reason for stopping at the rest area, and at even a higher frequency (94 percent) than that of Interstate users (83 percent). Length of time spent at the rest area follows the same general pattern as that for Interstate rest areas, although since there are fewer commercial trucks, less than 1 percent stay over one hour.

Frequency of use is nearly the same, as it should be, since the survey question does not distinguish between an Interstate rest area or a U.S. Highway rest area.

An even higher percentage of users (89 percent), reported that they did not use the vending machines on the premises.

Interestingly, fewer respondents as a percentage of total responses at the U.S. Highway rest area indicated a preference for fuel, restaurants, and convenience stores compared to the number of Interstate respondents. Likewise, support for commercialized rest areas dropped from 72 percent in favor at Interstate rest areas to 65 percent

in favor at the U.S. Highway rest area. The difference was made up in "no opinion" and not in negative responses.

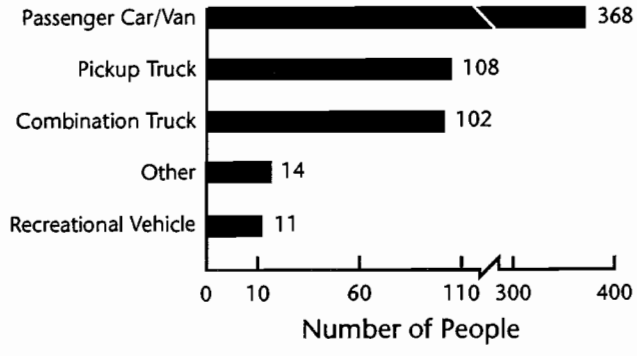
CONCLUSIONS

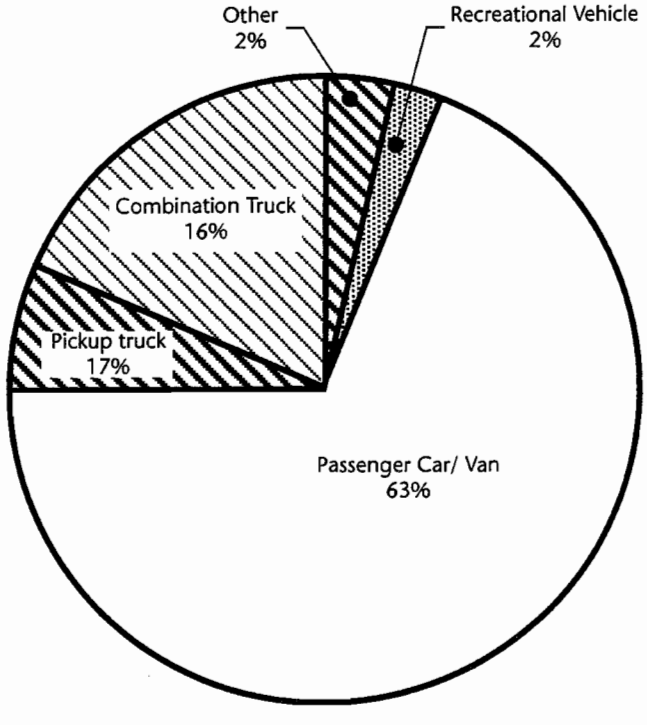
Based on the Texas surveys, 70 percent of the respondents favored commercialization of rest areas. Nearly two-thirds of the respondents indicated a desire for fuel, food, and other convenience items at these facilities. These figures are somewhat higher than those of the earlier survey reported in the 1989 TRB report. Only 30 percent of the interviewed rest area respondents, and around 58 percent of the phone survey respondents, desired these services at rest areas (Ref 16, p 17).

Commercialization of rest areas is not without opposition. Many small businesses that depend on highway traffic, see commercial rest areas as an unfair threat to their livelihood. In fact, the language removing federal restrictions on commercial use of ROW was pulled from the ISTEA because of opposition raised on the part of existing businesses at interchanges that would lose business to new operations on public-owned ROW (Ref 17). TxDOT must take precautions to prevent undue controversy with this program by taking all plans to the public early. Michigan, in one instance, did not take this approach and wound up facing adversarial state legislation that altogether prohibited the commercialization of rest areas (Ref 15, p 1).

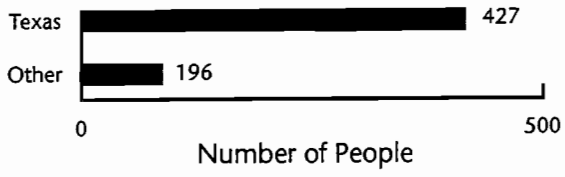
TxDOT should hold public hearings in those communities in close proximity to proposed commercialized rest area sites. The concerns of the community should be taken seriously, and, wherever possible, members of the community should be included in the decision-making. If a community thinks of itself as a participant in the process, it will be less likely to oppose the innovation. In addition, TxDOT should emphasize the potential gains a commercialized facility would bring to a nearby community. For instance, free space for tourist advertising could be made available, as well as possible gift shops that exhibit local artisans' work. The opposition could also be countered by offering local vendors the opportunity to bid for space in the commercialized facility. While these small operators may not be able to compete with larger, national chains, they may be able to offer smaller-scale services.

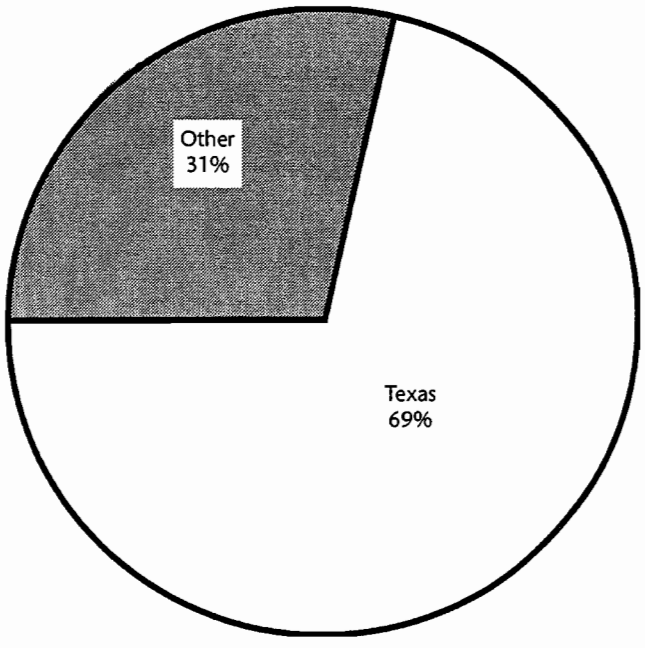
Interstate Question #1. Type of vehicle



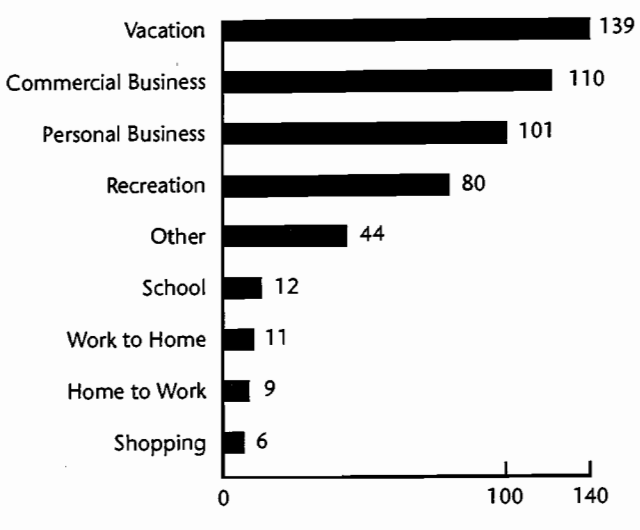


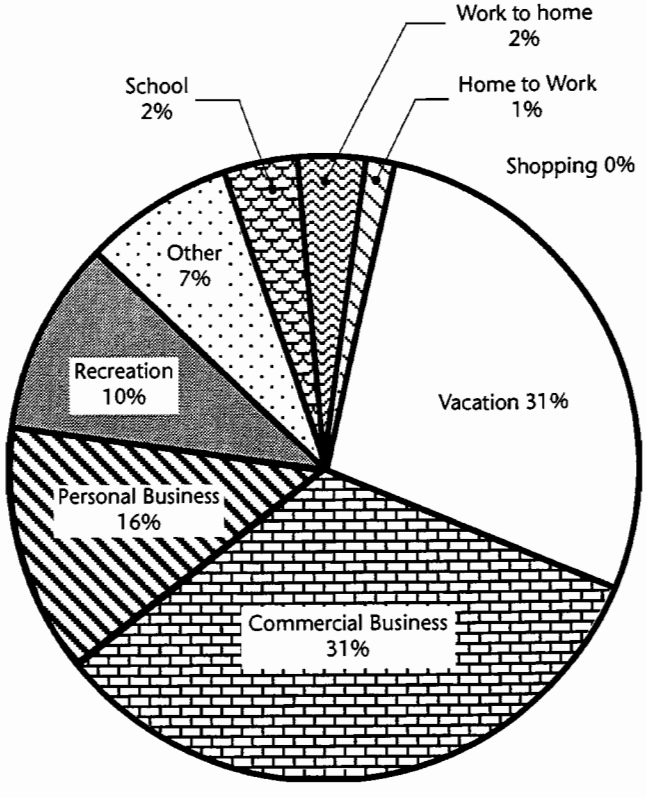
Interstate Question #2. State residence



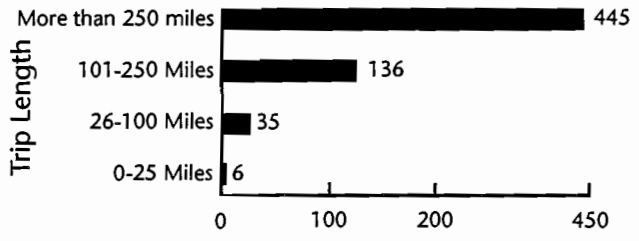


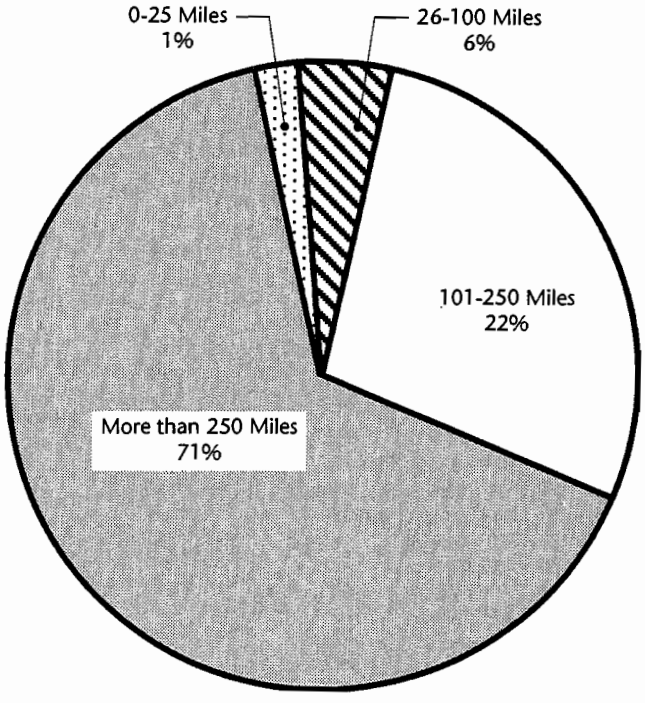
Interstate Question #3. Trip purchase



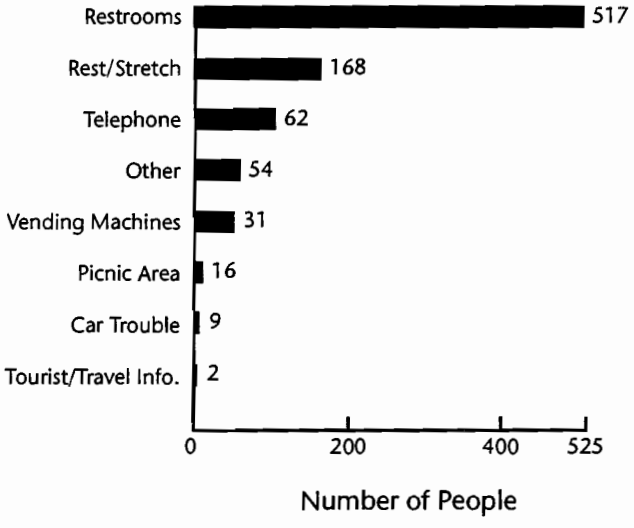


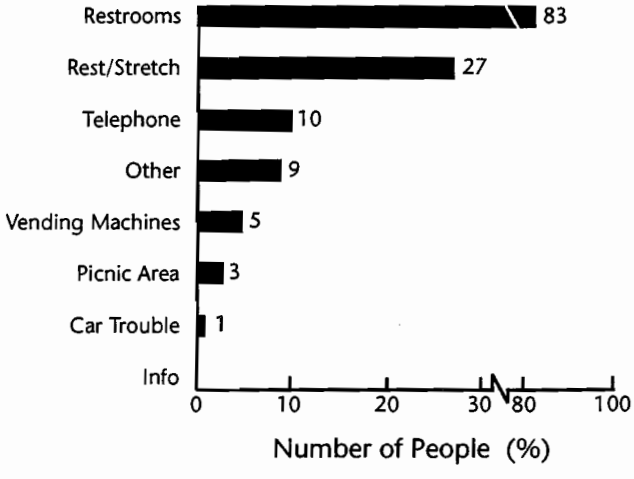
Interstate Question #4. Trip length





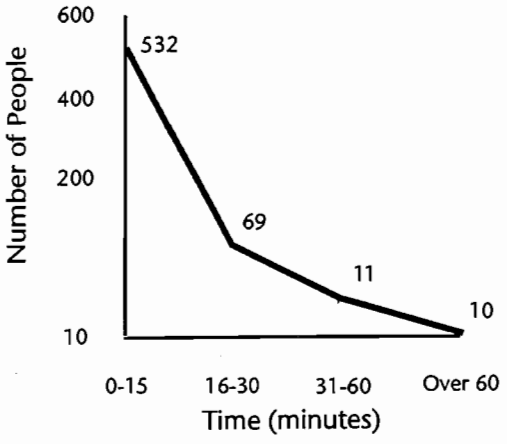
Interstate Question #5. Reasons for rest area use

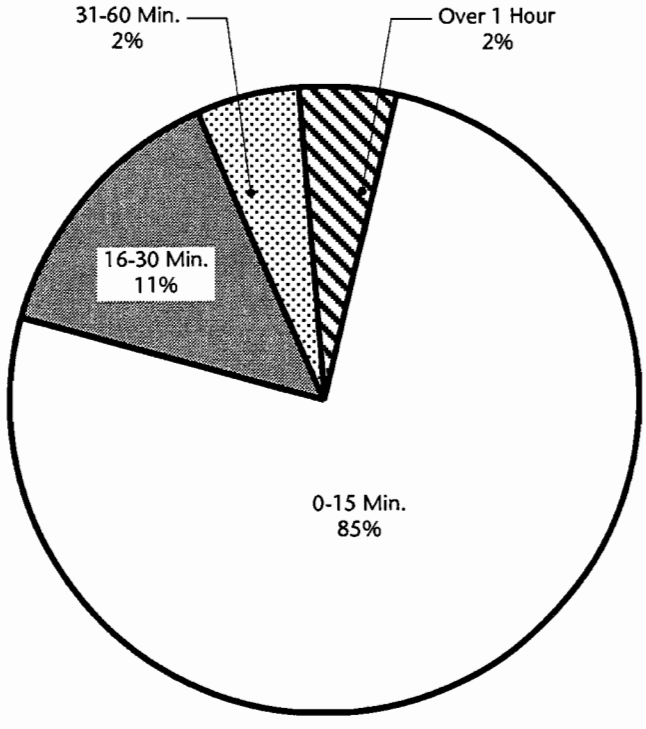




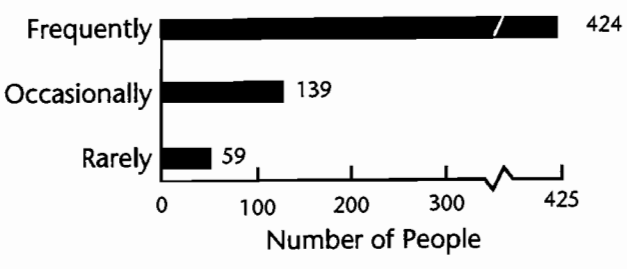
Note: Percentages are obtained by dividing the number from the left figure by the total number of responses (623).

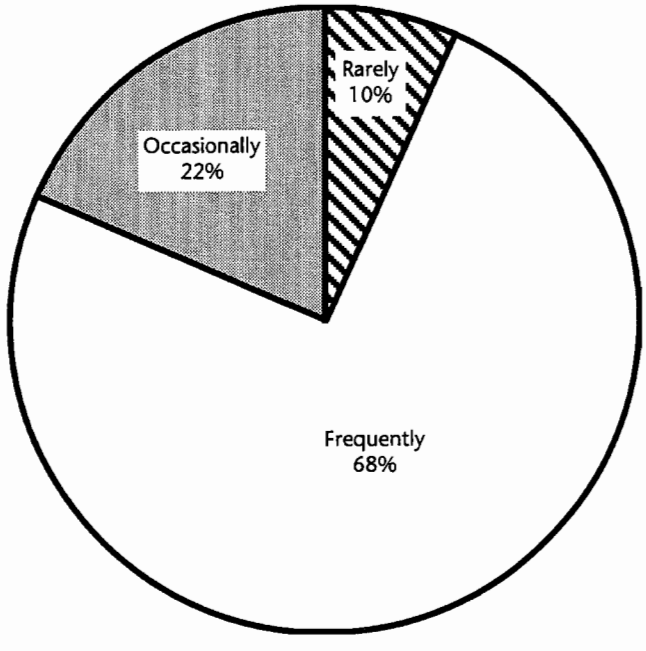
Interstate Question #6. Time spent at rest area



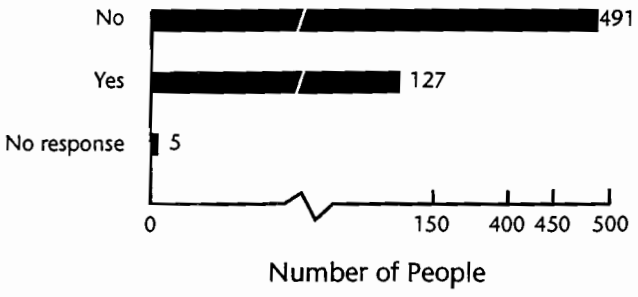


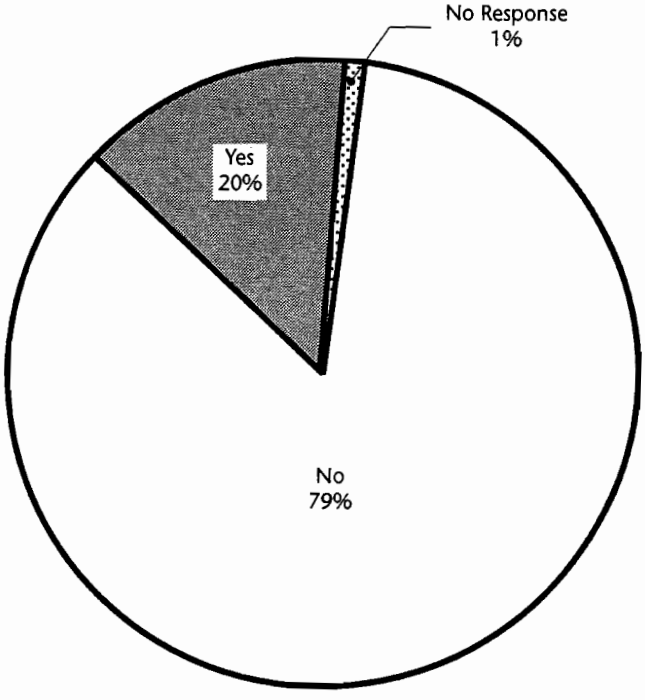
Interstate Question #7. Frequency of rest area use



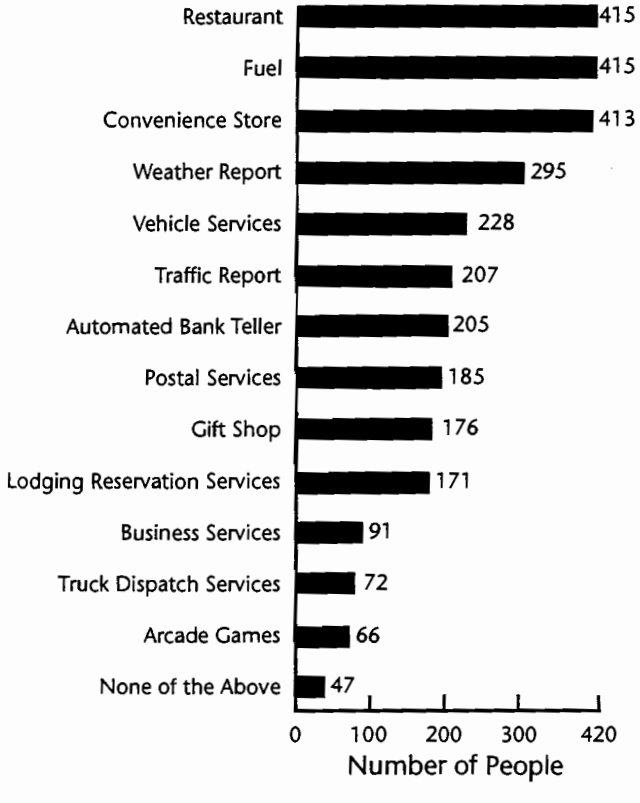


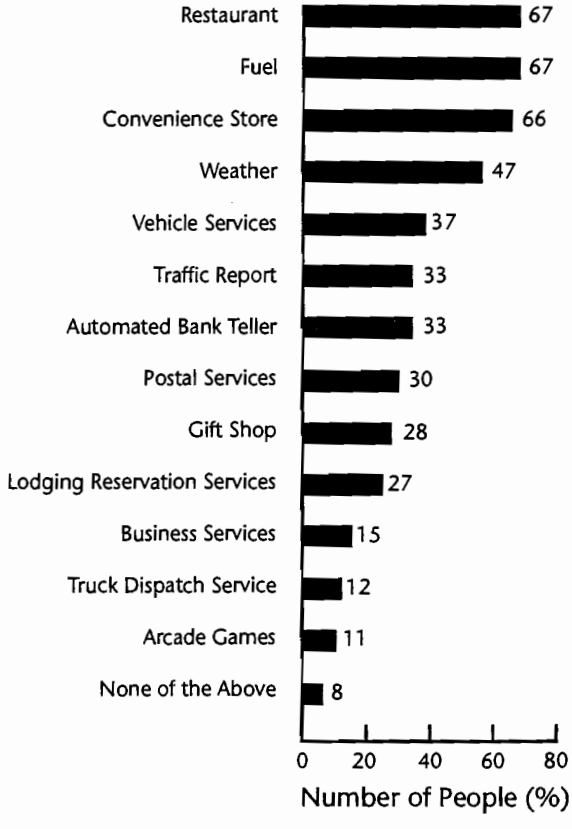
Interstate Question #8. Usage of vending services





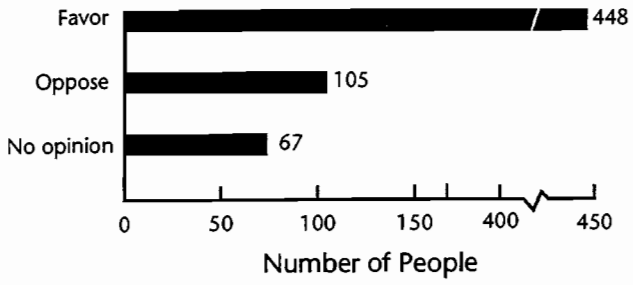
Interstate Question #9.Preferences for commercial services

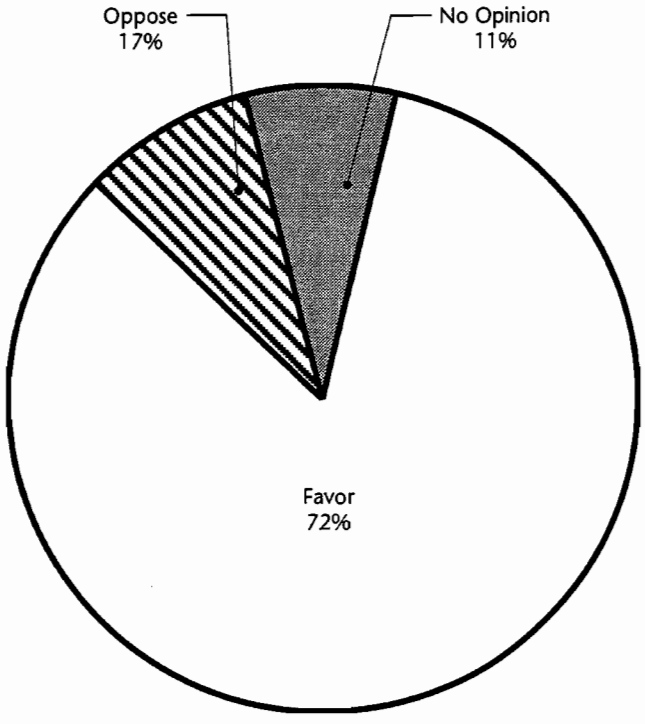




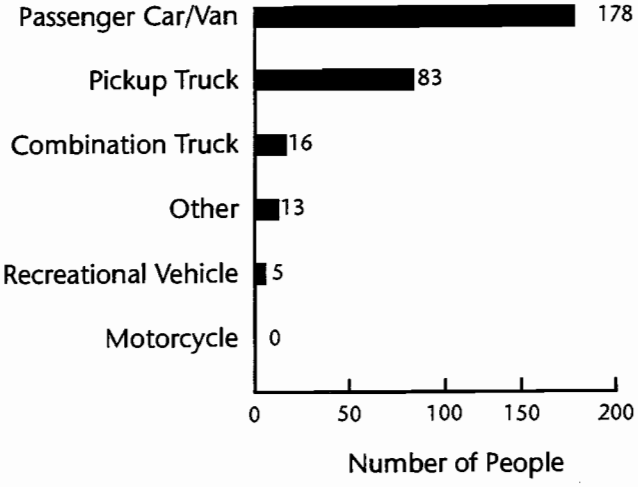
Note: Percentages are obtained by dividing the number from the left figure by the total number of responses (623).

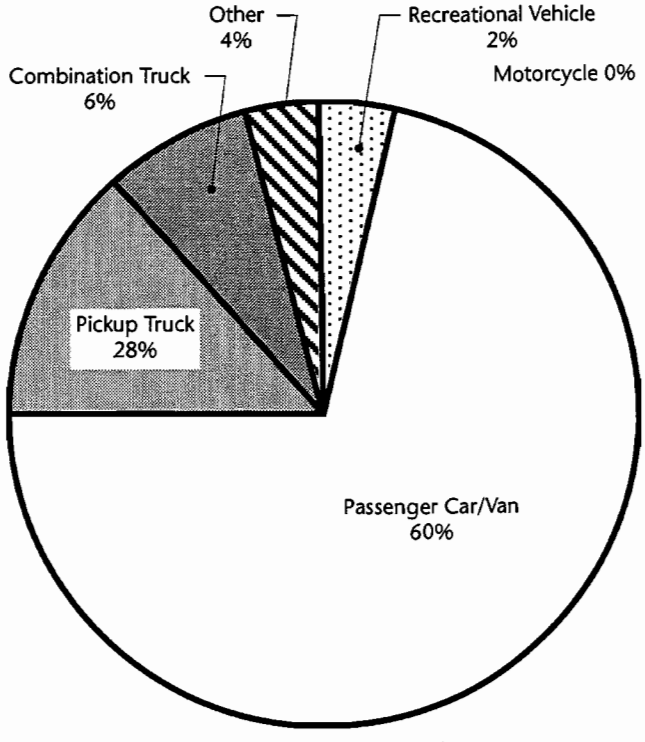
Interstate Question #10. Views on commercialization





U.S. Highway Question #1.Type of vehicle





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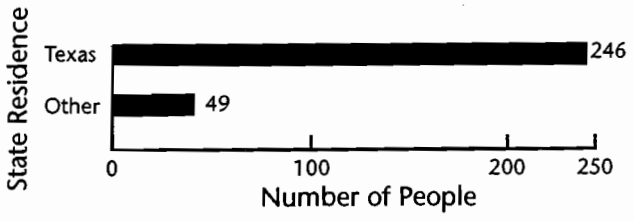
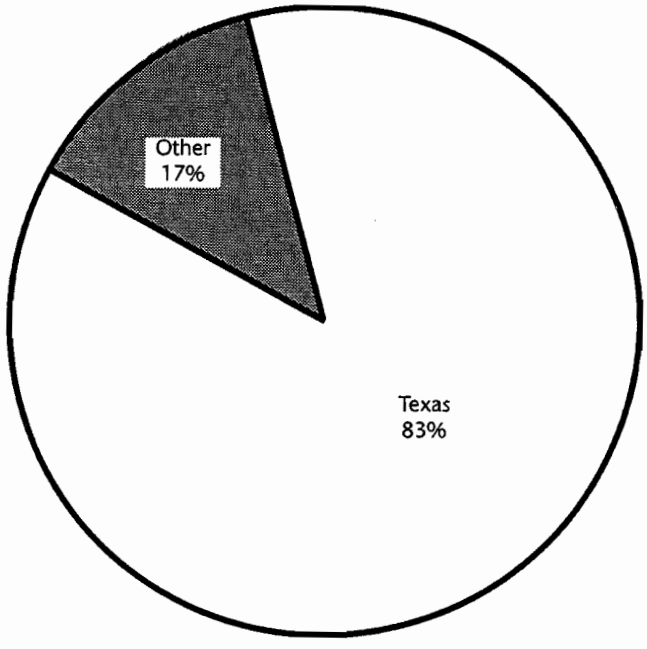
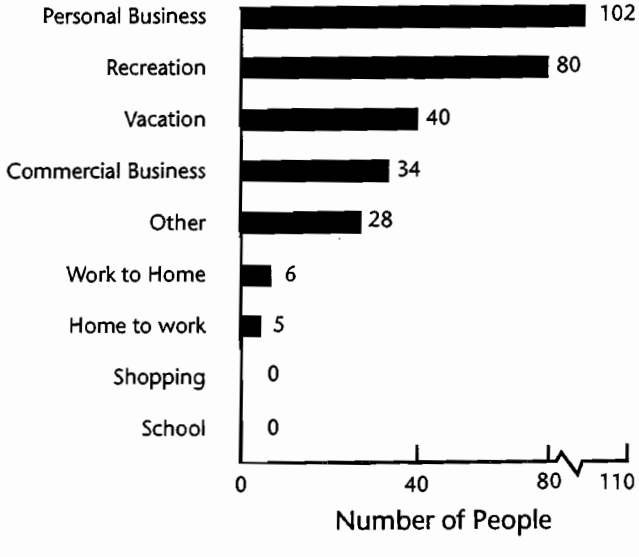
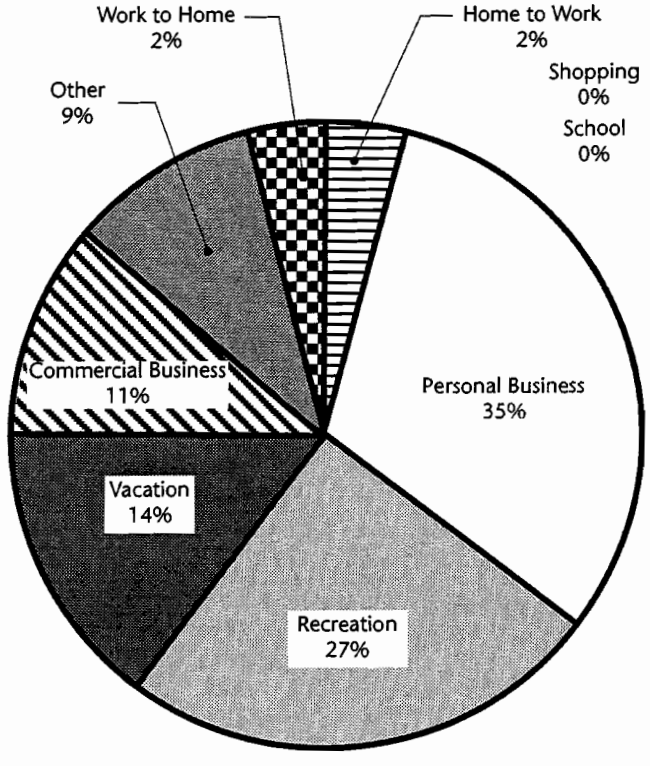




U.S. Highway Question #3. Trip purpose





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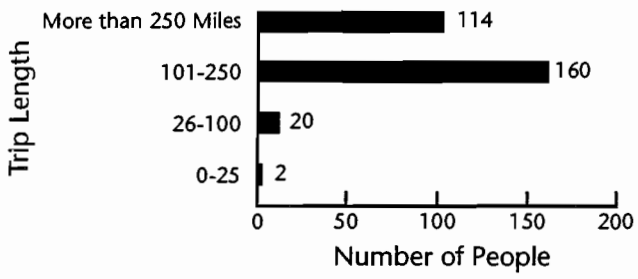
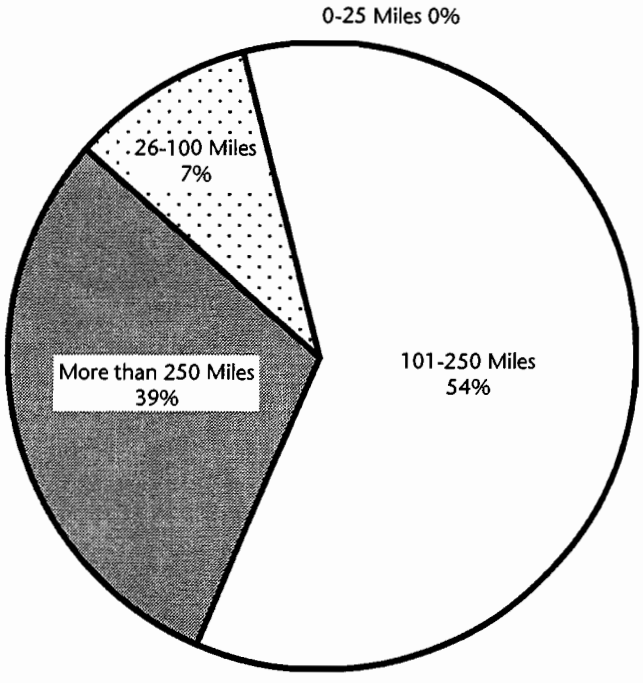
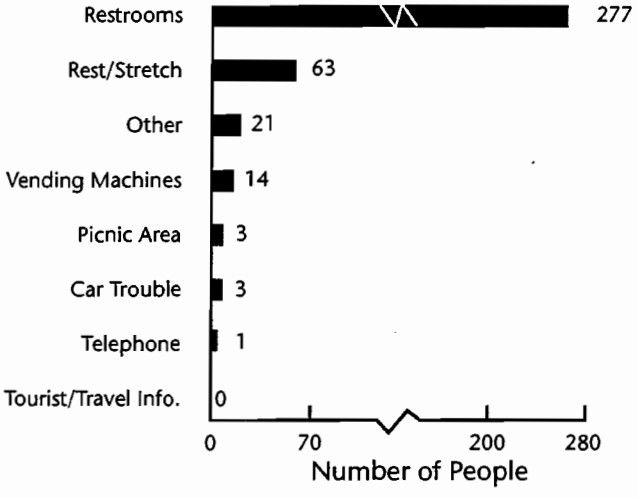
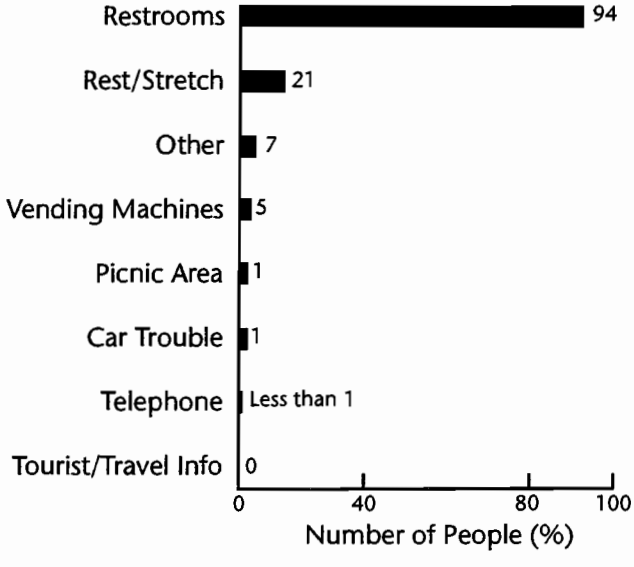




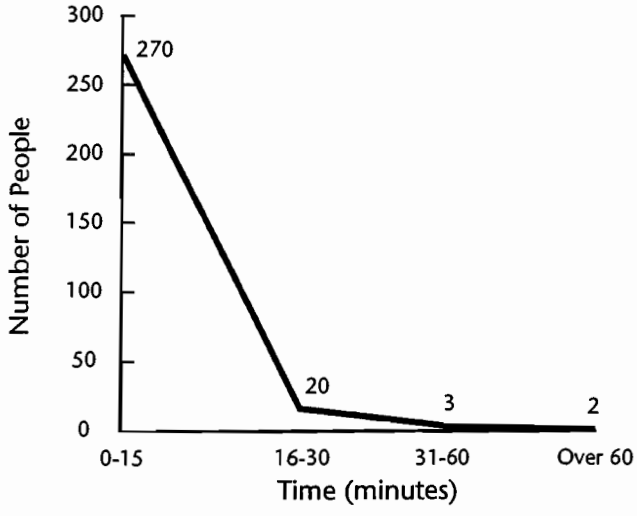
U.S. Highway Question #5. Reasons for rest area use

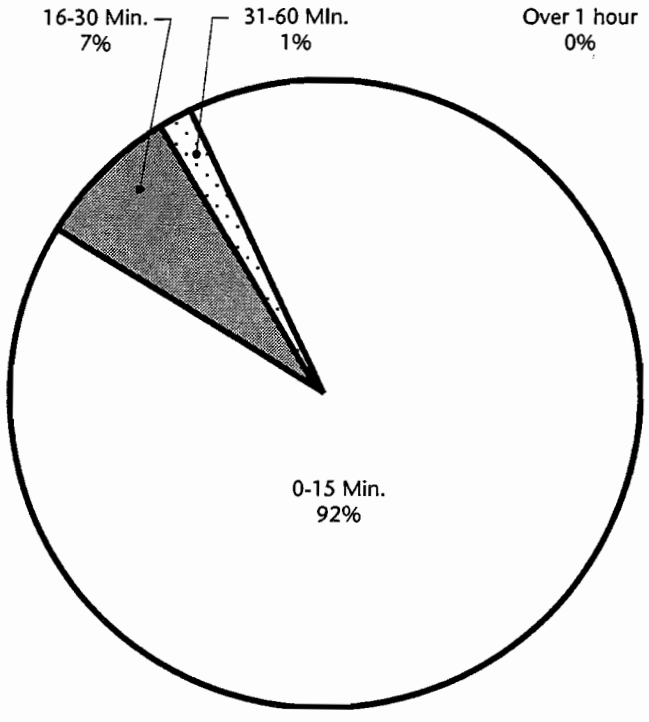




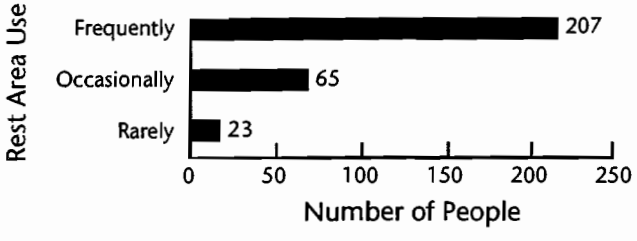
Note: Percentages are obtained by dividing the number from the left figure by the total number of responses (295).

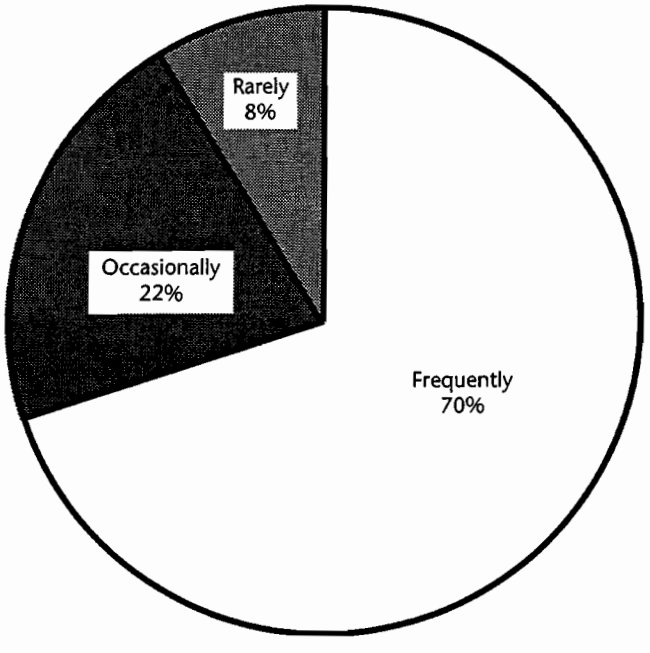
U.S. Highway Question #6. Time spent at rest area



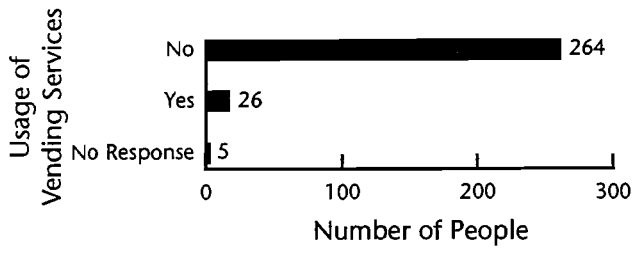


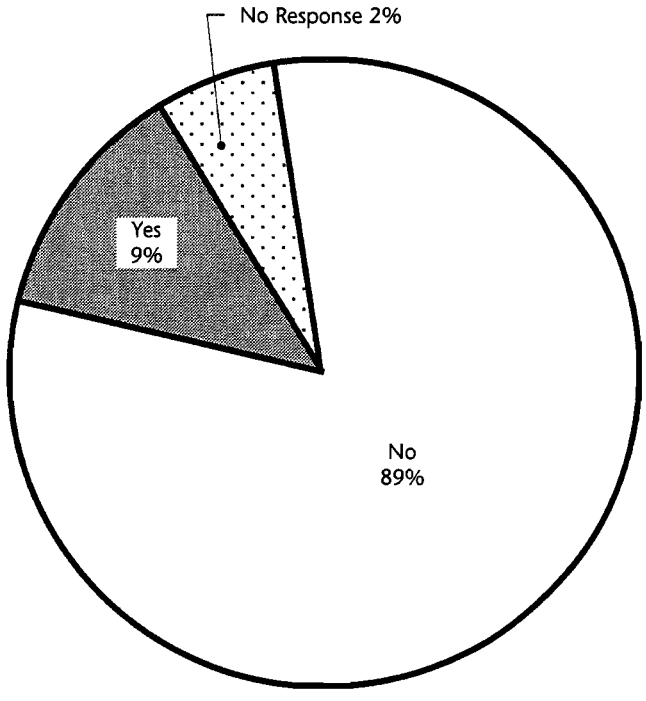
U.S. Highway Question #7. Frequency of rest area use



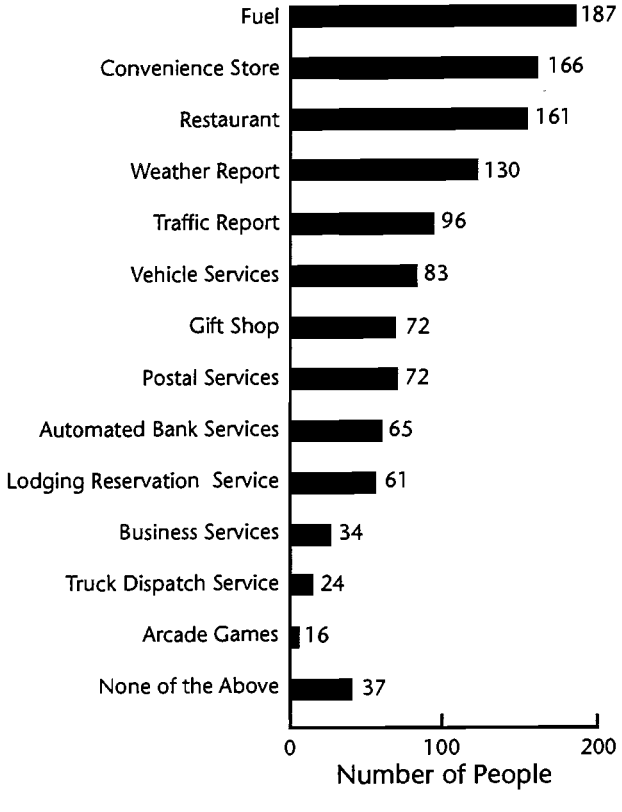


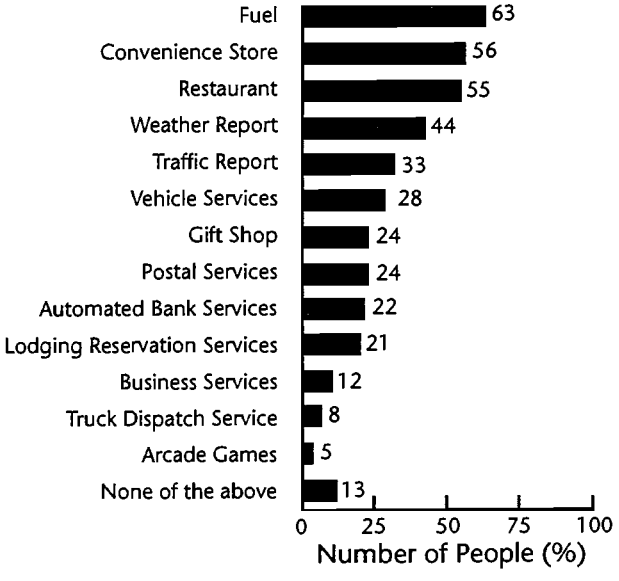
U.S. Highway Question #8. Usage of vending services





U.S. Highway Question #9.Preferences for commercial services





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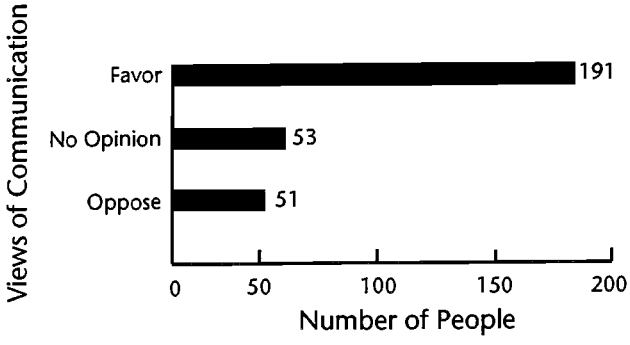
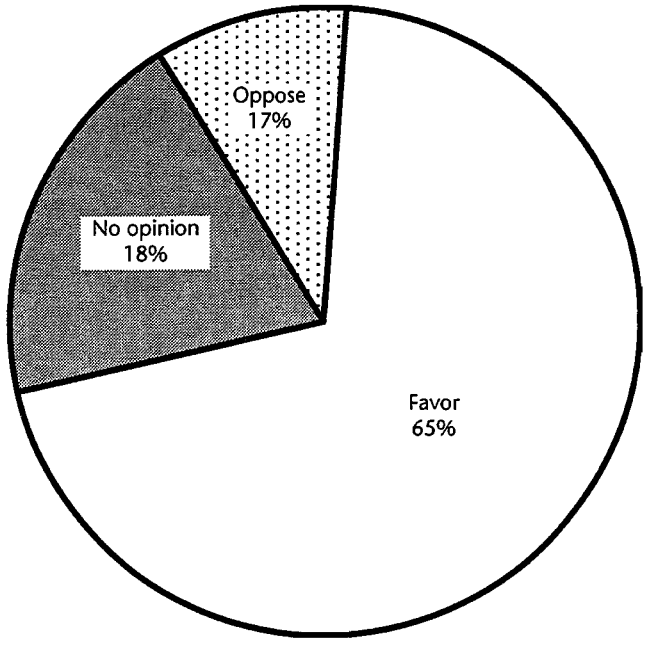
U.S. Highway Question #10. Views on commercialization





CHAPTER 7. CONCLUSIONS AND RECOMMENDATIONS

OVERVIEW

As mentioned in previous chapters, privatization is not new, particularly in transportation. This final chapter highlights some of the relevant state experiences with rest area privatization and combines this information with the other factors discussed in previous chapters to conclude the 2-tiered analysis presented in Chapter 1. The chapter concludes with several recommendations, including the identification of several U.S. Highway candidate sites for commercialized operations.

STATE EXPERIENCES WITH REST AREA COMMERCIALIZATION

California

Increasing rest area costs and limited state revenues forced Caltrans to explore privatization strategies for rest area provision. The cost to construct a California rest area, excluding ROW acquisition, is about $5 million. Maintenance costs range from $75,000 to $125,000 annually. Another reason leading to commercialized rest operations was the increasing number of criminal activities at rest areas. Crime is considered a significant problem in over 20 percent of the state's rest areas (Ref 19, p 1). As a result of these two factors, California began feasibility studies of several sites for privatized rest areas.

California's first Traveler Services Rest Area (TSRA) will be located near the Interstate 15/Route 395 interchange in San Bernadino County. The main-lane traffic past this site is about 68,000 vehicles per day (Ref 19, p 2). As part of this project, Caltrans is contributing the land and $500,000. In exchange, the developer/operator will operate and maintain the site for 35 years. Additionally, the operator is responsible for security. Caltrans will receive a percentage of sales on all goods and services, which is estimated at $9 million over the life of the agreement (Ref 19, p 2). Caltrans used the following implementation plan to carry out this project (Ref 20, pp iv-vi).

1. Project Planning
   - Select candidate sites.
   - Determine policies and explore possibilities for solving key problems.
2. Site and Joint Development Business Partner Selection
   - Invite statements of interest through an aggressive marketing effort to encourage interest.
   - Screen prospective business partners considered qualified to participate in a commercial services rest area and receive request for proposals.
   - Invite and evaluate proposals.
   - Negotiate with a least three prospective business partner candidates.
3. Development, Design, and Engineering
   - Acquire land.
   - Apply for rezoning, if necessary.
   - Prepare detailed site plan, including soils engineering report, geology report, hydrology report, grading and landscape plans, street and utility improvements and specifications.
   - Meet review and permit application requirements.
   - Arrange financing.
4. Construction
5. Maintenance Plan
6. Monitoring Plan addressing business selection; development, design, and engineering; construction; and public use, financial returns to private businesses, and Caltrans' operation and maintenance costs.

In addition to the San Bernadino site, California has selected four additional interchange locations for commercial rest areas—Randolph Collier on I-5 in Siskiyou County; C. H. Warlow on Route 99 in Tulare County; Buckman Springs on I-8 in San Diego County; and Wiley's Well on I-10 in Riverside County. Feasibility analysis has begun at these locations. The Request for Statements of Qualifications was issued for the C. H. Warlow Rest Area in February 1991. Caltrans has

two financial objectives for this last site. First, the state should contribute no more than 50 percent of the cost to improve the existing rest area to serve the design year demand. Second, the state should obtain an annual rate-of-return on its investment of at least 10 percent (Ref 12, p 31).

Community relations is an important component of the California commercial rest area services program. Caltrans has encountered the greatest local opposition in areas where the regional economy is weak and local businesses depend on highway users. Caltrans experienced little opposition in areas with high traffic volumes, where numerous commercial services already exist. In fact, in one location, local businesses and political leaders expressed strong support for the commercial services rest area as a means of attracting large numbers of highway users into their downtown business districts (Ref 19, p 3). The major recommendation for strengthening community support is to incorporate staffed traveler information centers at the commercial facility. The consultant's report notes:

> Incorporation of a staffed traveler information center within the Traveler Services Rest Area is often of particular interest to local business people. Such a center can help to generate a considerable amount of tourism and business sales in the region, but as a separate facility they can cost as much as $250,000 to build and $50,000/year to operate. California has elected not to finance such centers on its own, and the development and operation costs are generally well beyond the reach of most communities even where a region's private and public sectors work together to sponsor such centers. However, by incorporating the center within one of a Traveler Services Rest Areas commercial buildings, its construction and operation costs can be reduced significantly, and if the State chooses, a portion of the rental revenues obtained from the private Traveler Services Rest Area operator can be used to cover a portion of the center's operating costs (Ref 19, p 3).

Because of the federal restrictions, only sites accessible from interchanges are being studied in California. The success, or failure, of an off-highway rest area site has yet to be tested. Traditionally, motorists indicate a preference for the convenience of highway rest areas; i.e., they do not have to exit the highway system. The impact of the California interchange rest areas approach is of particular interest and may have important implications for future rest area services. The TRB report on rest area safety reported that between 12 and 14 percent of rest area users would pull to the shoulder if rest area sites were not available (Ref 16, p 15). Whether the interchange rest area translates into more vehicular shoulder stops is an important safety concern. More detailed research is needed in this area.

Virginia

The Virginia Transportation Research Council conducted a study "to investigate the opportunities for future development, expansion, and operation of Virginia's rest areas and welcome centers through the joint efforts of [the] Virginia Department of Transportation (VDOT), the Virginia Division of Tourism (VDT), and the private sector" (Ref 21, p 3). The Virginia report makes the following observations (Ref 21, pp 20-23):

1) The viability of the California approach to interchange, off the ROW, rest areas has yet to be determined. Studies in Virginia indicate that motorists prefer to stop at interstate rest areas rather than exit the system for food, beverages, and restrooms.
2) Increasing traffic from commercialized rest areas might negatively affect motorist convenience unless traffic lanes, parking space, restroom facilities are adequate to meet increased demand.
3) Increased traffic at commercial rest areas might negatively affect private businesses at nearby interchanges. Local involvement is a key element in rest area commercialization. Regardless of their involvement in the rest area venture, local businesses and leaders must be well-informed of the commercial rest areas' intentions and plans and have some input into the process. This is critical to the success of private/public ventures for rest area commercialization.
4) Privatization contracts need to be meticulously negotiated and supervised. Issues to consider as part of the feasibility process include volume and mix of traffic, location of the facility both in terms of competing businesses and attainable ROW, and the environmental typology.
5) Commercialization of rest areas is a viable alternative to funding rest areas and welcome centers in Virginia if, and when, federal obstacles are removed.
6) VDOT should be very conservative with regard to rest area construction and refurbishment in the near term, as the federal ban on

commercial services at interstate rest areas and welcome centers will likely be lifted in the next 2 years.

Michigan

The Michigan Department of Transportation (MDOT) began exploring innovative roadside rest area development in the late 1980's. In the spring of 1989, a consultant was hired "to conduct a service plaza feasibility and impact study for a Department-owned site at the I-94/9th Street interchange" in the Texas Township outside of Kalamazoo (Ref 15, p 1). MDOT had purchased nearly 100 acres at this intersection and desired to jointly develop the property with a private developer to provide commercial services at a roadside rest area facility. As a result of intense local opposition, the State legislature enacted legislation preventing MDOT from completing this project.

Local opposition stemmed from a number of issues. First, local public officials argued that with state ownership of property, the private service plaza would not have to pay local property taxes. Although they conceded that personal property taxes could be issued, these would be lower than real property taxes; moreover, personal property taxes depreciate rather than appreciate over time like real property (Ref 15, pp 20-21). Second, the community was concerned about security, open space, and scale. Local citizens believed the development would be disproportionate with respect to the low-density characteristics of the area (Ref 15, p 21). Third, the community was concerned about the additional traffic generated at the site and potential congestion problems (Ref 15, p 20). Finally, local businesses were concerned about the competitive impact of the service plaza (Ref 15, p 22).

These issues are not unique to the Kalamazoo area. Importantly, MDOT and the consultant did not involve the community early enough in the planning and decision process. In truth, many of these concerns could have been adequately addressed through early discussions and negotiations with the community. There were many important benefits to the community; however, by the time the community became involved in the process, these other benefits received little attention. The important lesson from the MDOT experience is that local leaders and business persons must be involved in the earliest stages of the project.

Illinois

Illinois has experience with commercialized rest areas on their toll roads. The success of this program, coupled with an expectation that the federal restrictions on commercial interstate activities would be repealed, led Illinois to begin a comprehensive examination of commercial rest area facilities for their interstate highways. This examination, culminating in a study report, examined the following areas (Ref. 11):

- existing rest area conditions;
- motor services market;
- rest area development concepts, costs, and developer options;
- economic feasibility;
- operation of joint public/private facilities; and
- implementation strategy.

Following an inventory of existing facilities, a survey of rest users was conducted, along with vehicle counts. In a manner similar to that of the Texas survey respondents, 68 percent of the Illinois respondents reacted favorably to the idea of commercial services at rest areas (Ref 11, p 34). The Illinois survey also revealed consumer preferences for national brand names and reasonable prices as key factors influencing decisions to purchase goods and services at commercialized facilities.

As reported in the financial analysis chapter, Illinois developed three rest concepts— limited-range, mid-range, and full service. The estimated costs of these facilities ranged from $1.5 million to $12 million, depending on the level of development and the geometric configuration.

In addition to the federal legislation, Illinois also has state enactments that limit opportunities for commercialization. Without regard to the legal barriers, a pro forma model was developed to determine the economic feasibility of commercialized rest areas. The model included some very optimistic projections and concluded that for all three levels of service, a commercialized rest area facility should have a rate of return ranging from 10.8 percent to 15.7 percent over the 20-year life-cycle.

To more clearly define potential sites, an 8-step screening process was developed to evaluate various locations, both existing and new. Development of existing sites is seen as advantageous since most of the needed ROW is already owned by the state; however, new sites offer greater design flexibility. The screening process makes an effort to quantify the following characteristics:

- Physical design—addresses need for ROW (varies from 10 to 30 acres depending on actual design and level of development) and water and sewer system needs.
- Economic—based on the pro forma model; examines profitability and feasibility.

- Operational—investigates factors influencing day-to-day operations such as available labor and support services.
- Design requirements—assesses the ability to use existing facilities and infrastructure.
- Service needs—evaluates level of traveler services within close proximity to the rest area site.
- Local impacts—addresses need for community involvement and coordination.
- Environmental issues—reevaluates sites for their impacts on the surrounding environment and closeness to sensitive areas such as wetlands or historical sites.

Prosser, Washington

The City of Prosser, the Prosser Land Development Company, and the Washington Department of Transportation (WDOT), in a joint venture, developed the Prosser Rest Area and Horse Heaven Hills Auto/Truck Stop in 1990. WDOT agreed to construct the rest area facility, 20 years ahead of schedule, when the Prosser Land Development Company agreed to donate 3.2 acres of land for the rest area and maintain the rest area at no cost to the state for the next 13 years (Ref 18).

The City of Prosser approached WDOT about this joint development as part of their effort to draw tourists to the Yakima Valley's local wineries. The city operates a shuttle between the truck stop, located next to the rest area, to downtown Prosser. Construction is also underway next to the truck stop for a fast-food restaurant, recreational vehicle park, motel, and truck wash (Ref 18).

The Prosser example is a good illustration of how a local community can benefit from a commercial rest area operation.

Connecticut

Connecticut benefitted from the grandfathering provisions of the federal legislation restricting commercial use of ROW. The Connecticut portion of I-95, completed prior to 1960, has commercialized facilities on the interstate. "In 1989, McDonald's, which operates the facilities, provided $4.3 million in rents and commissions to the state. The petroleum vendor, Mobil, provided $3.6 million to the state the same year" (Ref. 21, p. 16). Primarily because they have been in existence for some time, Connecticut has not experienced local opposition to its commercial facilities.

TOLL ROAD SERVICE PLAZAS

The most extensive experience with commercial rest areas has occurred on a number of the nation's toll roads. Since the early 1980's, Marriott has been under a long-term agreement with the Maryland Transportation Authority to rehabilitate the service plazas on the state's tolled portion of I-95. The Maryland House and the Chesapeake House service plazas have been very profitable to Marriott and the Transportation Authority. Total sales average about $5 million annually, with the Transportation Authority receiving a percentage of these sales. Additionally, the Transportation Authority receives 8-9 cents per gallon of gasoline sold at the plaza stations. As in Connecticut, their have been no real complaints by local businesses (Ref 21, p 13).

The Ohio Turnpike Commission also has an arrangement with Marriott to operate 14 of the turnpike's 16 plaza restaurants. The remaining 2 plaza restaurants are operated by Hardees. BP American operates all of the fuel service stations at the plazas. The contracts range from 2 to 5 years. The Commission receives a rent plus, a percentage of gross restaurant sales, and a share of the fuel sales. In 1989, the Commission received $1.8 million from fuel sales and $4 million from restaurant sales (Ref 21, p 13).

Marriott operates 8 travel plazas on the Florida Sunshine Parkway. Fuel services are provided by sub-contracts with various oil companies. The fuel prices cannot exceed the average fuel price of nearby, off-tollway stations by more than 2 cents per gallon. Marriott has guaranteed the Florida Department of Transportation at least $6 million annually in rent and a commission equalling 14 to 16 percent of gross sales. The state is expected to receive $145 million over the next 20 years (Ref 21, p 14).

Recently, the New York State Thruway has contracted with Marriott and McDonalds to renovate or construct service plazas on their toll facility. Illinois, Oklahoma, New Jersey, Pennsylvania, and Kansas also operate commercial rest areas on their toll facilities. This brief discussion of toll road service plazas indicates the potential for commercial services on the nation's highways. Although access to the toll road is more controlled, this will not be a limiting factor for non-toll facilities. The only factor preventing implementation of commercialized rest area facilities on the interstate system is the existence of the federal law. If this changes, a number of

states will actively develop commercialized rest area service programs. A number of private companies, including McDonald's, Mobil, Howard Johnson's and Marriott, are poised to work with states in developing these programs.

A change in the federal law should be forthcoming in this decade. The American Association of State Highway and Transportation Officials (AASHTO) has adopted a position that states should be permitted to commercialize interstate rest areas. This policy was included in the initial drafts of the surface transportation reauthorization bills. It is only a matter of time before it is again presented to the Congress for consideration and approval.

SUMMARY AND CONCLUSIONS

In Chapter 1, a 2-tiered analysis for examining the feasibility of rest area commercialization was presented. Tier 1 examines the conceptual and legal/institutional issues for developing a commercialization policy. Conceptually, there is strong support for such a policy. Additionally, all state legal impediments have been removed. What remains is a change in federal policy. Tier 2 examines the key issues relating to implementation of a rest area policy. An analysis of the facility and property requirements reveals no inconsistency with commercialized rest area service requirements. In some instances, there may be a need to purchase additional ROW depending on the facility design. The financial and economic analysis strongly supports the idea of commercialization. There exists a real opportunity to change the provision of rest area services from a cost item to a source of new revenue to the State Highway Fund. Finally, based on an analysis of public attitudes, there is support for commercial rest area services.

Two key issues emerge from this analysis, as well as from other state experiences with commercialization. First, every effort must be made to include locally-affected communities in the planning and review process. Early inclusion of the communities can mean the difference between a successful site and a program stalled by political and/or legal action. Second, the most successful commercialization programs on toll-roads involve the use of name brand goods and services. Marriott and McDonald's understand this concept. People are most comfortable with goods and services with which they can easily identify. Travel consumers do not want surprises. With name brand goods and services, they know what they are getting.

Until the federal law changes, it is recommended that TxDOT develop a pilot commercialization program on high-traffic U.S. highways. The sites in Table 7.1 should be considered as potential sites. Most of the sites have a relative high ADT, with the exception of Concho, which has a very high capture rate. Based on the financial model discussed in Chapter 5, the information in Table 7.2 is derived. The results are conservative, based on the current rest area capture rates. As reported in Chapter 5, it is projected that rest area facilities offering commercial services would attract a higher percentage of traffic. Accordingly, the best candidates are the dual facilities on U.S. 59 located in Victoria and Nacogdoches Counties. Less complex facilities could be constructed at the other sites with reasonable rates of return. Selection of the specific site should be a joint decision between TxDOT and the commercial rest area service provider. Together, these two groups should work with the nearest communities to determine their interest in and reaction to a commercialized rest area site.

A process, such as the 6-step California model, the model presented in the Illinois feasibility study, or the process used by TxDOT for leasing, should be followed. Valuable experience from these pilot projects can be gained and later translated into a larger commercialization program on the interstate system, once the federal restriction is removed. Additionally, in a manner similar to that of the Virginia recommendation, plans for expansion of existing interstate rest areas should be kept to a minimum. Significant new investment is probably not the best near-term strategy. Finally, TxDOT should work with other states to change the federal policy restricting commercial services on interstate ROW. Given limited resources for infrastructure development and the need to keep pace with traveler service demands, this should not be a difficult policy to change. The federal policy over the past decade has called for innovative approaches to public services. Rest area commercialization is consistent with this philosophy.

There are a number of opportunities for private sector provision and/or participation in developing transportation infrastructure and support services in Texas. Texas has been one of the nation's leaders in developing innovative approaches. TxDOT is sponsoring other research directly related to the theme of this report. Research Report 1270-1F, *Transportation Corporations and Road Utility Districts: The Texas Experience* (Ref 22), documents the recently completed research evaluating

Texas Transportation Corporations and Road Utility Districts. These organizations are instruments of the state allowing for private sector input into the funding and development of highways. Successful Transportation Corporations and Road Utility Districts are functioning in the Houston, Dallas, and Austin areas. Additionally, TxDOT is examining other avenues of private sector support for transportation infrastructure in Research Projects 1281, "Highway Privatization in Texas," and 1322, "An Evaluation of the Status, Effectiveness, and Future of Toll Roads in Texas." This report on the feasibility of rest area commercialization, combined with the other TxDOT research, lays an important foundation for cooperative public/private endeavors in providing infrastructure to the Texas motoring public. In light of limited resources for funding transportation improvements and the growing cost of these improvements, privatization efforts can assist TxDOT in achieving its mission.

Table 7.1 Potential non-interstate commercial rest area sites

Highway	County	District	(Main-Lane ADT)	Capture Rate (%)
U.S. 287	Clay	3	23,714[a]	2.84
U.S. 87	Concho	7	7,819[a]	16.99
U.S. 59	Nacogdoches	11	40,462[b]	5.41
U.S. 59	Victoria	13	39,355[b]	7.64
U.S. 77	Refugio	16	23,619[a]	3.63
U.S. 281	Brooks	21	16,909[a]	7.58
U.S. 77	Kenedy	21	19,807[a]	6.18

[a] Represents ADT for one direction.
[b] Represents ADT for both directions of the highway.

Table 7.2 Financial analysis of potential sites

Highway	County	Facility Type[a]	State Share of Sales (%)	State Revenues	Business Return on Investment (%)
U.S. 287	Clay	Standard	0.5	$12,151	10.3
U.S. 87	Concho	Standard	5.0	$222,228	14.6
U.S. 59	Nacogdoches	Dual	5.0	$394,620	11.4
U.S. 59	Victoria	Dual	7.5	$812,574	13.1
U.S. 77	Refugio	Standard	2.5	$77,230	11.8
U.S. 281	Brooks	Standard	5.0	$230,917	15.1
U.S. 77	Kenedy	Standard	5.0	$220,467	14.5

[a] The facility cost is estimated at $3.5 million for the standard and $8 million for the dual. The dual facility serves both lanes of traffic and could be like the figure illustrated earlier in figure 4.5 or Some other type of bridge structure.

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APPENDIX

District	County	Main-Lane ADT	Rest Area ADT	Capture Rate	DAILY REVENUES			
					Fuel	Food	Other	Total
1	Franklin	21,375	1,911	8.94%	$12,421	$3,822	$1,147	$17,390
1	Franklin	20,227	1,600	7.91%	$10,398	$3,199	$960	$14,557
2	Palo Pinto	16,855	1,781	10.57%	$11,575	$3,562	$1,068	$16,205
2	Palo Pinto	21,677	1,683	7.76%	$10,936	$3,365	$1,010	$15,311
2	Johnson	32,251	1,311	4.06%	$8,521	$2,622	$787	$11,930
2	Johnson	31,444	1,287	4.09%	$8,363	$2,573	$772	$11,708
3	Cooke	24,431	1,417	5.80%	$9,211	$2,834	$850	$12,895
3	Cooke	27,325	919	3.36%	$5,973	$1,838	$551	$8,362
4	Carson	18,716	812	4.34%	$5,276	$1,623	$487	$7,386
4	Carson	16,035	896	5.59%	$5,824	$1,792	$538	$8,153
5	Hale	10,889	721	6.62%	$4,687	$1,442	$433	$6,562
5	Hale	10,407	809	7.78%	$5,259	$1,618	$485	$7,363
6	Ward	10,760	836	7.77%	$5,431	$1,671	$501	$7,603
6	Ward	10,187	812	7.97%	$5,281	$1,625	$487	$7,393
6	Midland	14,246	994	6.98%	$6,459	$1,987	$596	$9,043
6	Midland	14,844	922	6.21%	$5,991	$1,843	$553	$8,387
6	Pecos	5,056	740	14.64%	$4,811	$444	$148	$5,403
6	Pecos	4,443	988	22.24%	$6,422	$593	$198	$7,213
6	Pecos	4,945	805	16.27%	$5,230	$483	$161	$5,873
6	Pecos	5,315	618	11.63%	$4,017	$371	$124	$4,512
7	Sutton	1,911	835	43.69%	$0	$0	$0	$0
7	Sutton	1,976	989	50.06%	$0	$0	$0	$0
8	Howard	14,433	906	6.28%	$5,890	$1,812	$544	$8,246
8	Mitchell	12,320	1,057	8.58%	$6,871	$2,114	$634	$9,620
8	Nolan	19,307	1,426	7.39%	$9,271	$2,853	$856	$12,980
8	Nolan	19,920	1,052	5.28%	$6,836	$2,103	$631	$9,570
8	Callahan	26,659	1,069	4.01%	$6,946	$2,137	$641	$9,725
8	Callahan	27,093	1,271	4.69%	$8,260	$2,542	$762	$11,564
9	Bell	31,883	1,914	6.00%	$12,438	$3,827	$1,148	$17,414
9	Bell	35,727	2,496	6.99%	$16,223	$4,992	$1,498	$22,712
9	Hill	12,931	795	6.15%	$5,170	$1,591	$477	$7,238
9	Hill	16,060	822	5.12%	$5,344	$1,644	$493	$7,482
10	Van Zandt	24,218	1,605	6.63%	$10,431	$3,210	$963	$14,603
10	Van Zandt	25,381	2,083	8.21%	$13,538	$4,166	$1,250	$18,953
12	Harris	22,668	2,557	11.28%	$16,621	$5,114	$1,534	$23,269
12	Harris	22,510	1,850	8.22%	$12,026	$3,700	$1,110	$16,836
13	Colorado	20,528	2,312	11.26%	$15,027	$4,624	$1,387	$21,038
13	Colorado	19,475	1,932	9.92%	$12,557	$3,864	$1,159	$17,580
14	Hays	55,187	1,949	3.53%	$12,667	$3,898	$1,169	$17,734
14	Hays	52,031	2,000	3.84%	$13,002	$4,001	$1,200	$18,202
14	Williamson	54,949	2,765	5.03%	$17,975	$5,531	$1,659	$25,166
14	Williamson	62,538	2,101	3.36%	$13,657	$4,202	$1,261	$19,119
15	Comal	54,371	2,219	4.08%	$14,426	$4,439	$1,332	$20,196
15	Comal	61,457	2,393	3.89%	$15,557	$4,787	$1,436	$21,780
15	Medina	18,681	1,592	8.52%	$10,348	$3,184	$955	$14,487
15	Medina	17,295	1,223	7.07%	$7,949	$2,446	$734	$11,128
15	Bexar	26,268	1,503	5.72%	$9,771	$3,007	$902	$13,680

Revenue estimates for interstate commercialized rest areas

District	County	Main-Lane ADT	Rest Area ADT	Capture Rate	DAILY REVENUES			
					Fuel	Food	Other	Total
15	Bexar	26,075	1,185	4.54%	$7,702	$2,370	$711	$10,783
15	Kerr	9,461	992	10.49%	$6,449	$1,984	$595	$9,029
15	Kerr	9,402	997	10.60%	$6,479	$1,994	$598	$9,071
15	Guadalupe	23,649	1,503	6.36%	$9,772	$3,007	$902	$13,681
15	Guadalupe	19,913	1,573	7.90%	$10,226	$3,146	$944	$14,316
16	Live Oak	11,907	1,683	14.13%	$10,937	$3,365	$1,010	$15,312
16	Live Oak	14,292	1,676	11.73%	$10,896	$3,353	$1,006	$15,254
16	San Patricio	14,825	930	6.27%	$6,044	$1,860	$558	$8,462
16	San Patricio	13,838	1,092	7.89%	$7,098	$2,184	$655	$9,937
17	Walker	19,931	1,738	8.72%	$11,298	$3,476	$1,043	$15,817
17	Walker	19,481	2,341	12.02%	$15,215	$4,682	$1,405	$21,302
18	Ellis	35,303	2,128	6.03%	$13,829	$4,255	$1,277	$19,360
18	Ellis	25,036	2,113	8.44%	$13,732	$4,225	$1,268	$19,224
18	Navarro	19,860	2,014	10.14%	$13,091	$4,028	$1,208	$18,327
18	Navarro	19,730	1,703	8.63%	$11,070	$3,406	$1,022	$15,498
18	Kaufman	29,399	1,492	5.07%	$9,697	$2,984	$895	$13,576
18	Kaufman	28,564	1,939	6.79%	$12,600	$3,877	$1,163	$17,641
19	Bowie	41,102	2,409	5.86%	$15,658	$4,818	$1,445	$21,921
19	Bowie	21,697	1,169	5.39%	$7,599	$2,338	$701	$10,638
19	Bowie	21,755	1,079	4.96%	$7,014	$2,158	$647	$9,819
19	Harrison	23,281	1,859	7.98%	$12,082	$3,718	$1,115	$16,915
19	Harrison	25,175	1,670	6.63%	$10,855	$3,340	$1,002	$15,198
19	Harrison	27,156	1,085	4.00%	$7,053	$2,170	$651	$9,874
20	Orange	35,790	1,581	4.42%	$10,279	$3,163	$949	$14,391
20	Orange	45,838	1,949	4.25%	$12,667	$3,898	$1,169	$17,734
20	Orange	44,329	1,458	3.29%	$9,479	$2,917	$875	$13,271
24	Culberson	15,212	1,218	8.00%	$7,915	$2,435	$731	$11,080
24	Culberson	13,875	1,024	7.38%	$6,653	$2,047	$614	$9,314
24	El Paso	33,073	434	1.31%	$2,820	$868	$260	$3,948
24	El Paso	15,316	1,080	7.05%	$7,022	$2,161	$648	$9,830
24	El Paso	15,426	1,635	10.60%	$10,627	$3,270	$981	$14,878
25	Wheeler	15,367	1,085	7.06%	$7,054	$2,170	$651	$9,875
25	Wheeler	15,546	917	5.90%	$5,962	$1,834	$550	$8,346
TOTAL		1,829,813	115,326	6.30%	$737,762	$222,593	$66,841	$1,027,196
AVERAGE*		23,459	1,479	6.30%	$9,458	$2,854	$857	$13,169

**The averages do not include the sites with zero revenues.*

Revenue estimates for interstate commercialized rest areas

District	County	Main-Lane ADT	Rest Area ADT	Capture Rate	DAILY REVENUES			
					Fuel	Food	Other	Total
3	Clay	23,714	675	2.84%	$4,385	$1,349	$405	$6,139
3	Wichita	11,947	595	4.98%	$3,870	$1,191	$357	$5,418
3	Wichita	14,488	678	4.68%	$4,407	$1,356	$407	$6,170
3	Wichita	16,413	417	2.54%	$2,709	$833	$250	$3,792
3	Wichita	19,214	424	2.21%	$2,754	$847	$254	$3,856
5	Crosby	4,100	303	7.38%	$1,966	$182	$61	$2,208
6	Andrews	6,769	264	3.90%	$1,714	$396	$119	$2,228
7	Coke	8,816	399	4.53%	$2,593	$798	$239	$3,630
7	Concho	7,819	1,329	16.99%	$8,637	$1,993	$598	$11,228
7	Kinney	4,564	681	14.93%	$4,428	$409	$136	$4,973
8	Haskell	7,147	235	3.29%	$1,531	$353	$106	$1,990
10	Cherokee	17,075	812	4.75%	$5,275	$1,623	$487	$7,385
11	Nacogdoches	20,065	1,118	5.57%	$7,266	$2,236	$671	$10,173
11	Nacogdoches	20,397	1,073	5.26%	$6,975	$2,146	$644	$9,765
11	Polk	15,075	1,100	7.29%	$7,148	$2,199	$660	$10,007
11	Polk	14,249	956	6.71%	$6,211	$1,911	$573	$8,696
13	Victoria	17,897	1,545	8.63%	$10,042	$3,090	$927	$14,058
13	Victoria	21,458	1,463	6.82%	$9,508	$2,926	$878	$13,312
14	Gillespie	6,604	559	8.46%	$3,631	$838	$251	$4,721
16	Refugio	23,619	858	3.63%	$5,574	$1,715	$515	$7,804
19	Cass	18,259	339	1.86%	$2,205	$679	$204	$3,087
21	Brooks	16,909	1,282	7.58%	$8,334	$2,564	$769	$11,667
21	Kenedy	19,807	1,224	6.18%	$7,956	$2,448	$734	$11,139
24	Culberson	3,040	493	16.22%	$3,205	$296	$99	$3,599
25	Collingsworth	3,215	185	5.74%	$1,201	$111	$37	$1,348
25	Knox	2,449	348	14.22%	$0	$0	$0	$0
14	Gillespie	496	119	23.92%	$0	$0	$0	$0
TOTAL		345,607	19,471	5.63%	$123,525	$34,488	$10,380	$168,393
AVERAGE*		13,706	760	5.55%	$4,941	$1,380	$415	$6,736

**The averages do not include the sites with zero revenues.*