Government at all levels faces financial uncertainties. During the 1970s, the rising cost of government was attributed to a combination of general inflation and rapid increases in the cost of energy. Although the pressure of these factors has abated in recent years, it remains, particularly in urban areas experiencing rapid growth. The Reagan administration shift to federalism has reduced revenue pass through for state and local governments. At the same time, pressure to further relieve the property tax has intensified as controls like Proposition 13 abound throughout the country. This has resulted in a search by local government for alternative revenue sources.

In response to this search, local governments have begun experimenting with a variety of revenue-raising devices that are capable of both achieving political support and withstanding legal challenges. Several of these devices, including dedications, fees in lieu of dedications, and impact fees, have met with moderate success over the last decade. An increasing number of local communities in Florida now believe that new residents or developers, or both, should bear a fair share of the infrastructure cost required to provide additional services demanded. This interest is not exclusive to Florida. The states of California, Washington, and Arizona have had a history of legislative enablement and judicial support for impact fees and mandatory dedications (1). The fiscal impact fee, in particular, has generated a great deal of excitement recently in Florida and throughout the country. Impact fees are a one-time charge collected by local government from new development in order to generate revenue for capital
funding necessitated by that development. There are several advantages associated with the use of impact fees (2). Those who directly benefit from the capital project are the only individuals who pay for those facilities. Impact fees are relatively easy to administer because they are collected from one individual at one time. To the extent that they represent a factor of user charge, it has been suggested that they have the potential for imposing a degree of market discipline on resource-allocation decisions (2).

Impact fees have been used to recover all (or in most cases part) of the cost of recreational facilities, sewers, fire and police stations, water supply systems, and medical facilities. Although transportation impact fees have only recently generated interest, they are now being considered in communities throughout Florida and have recently been enacted in four Florida counties (Palm Beach, Sarasota, Lake Hillsborough, and Broward). In view of its obvious appeal, this new tax is expected to be the subject of experiment by communities throughout the country. The purpose of this paper will be to explore this new source of transportation revenue by using the Florida experience as a point of departure. Several specific issues will be discussed.

First, transportation impact fees should be evaluated in view of a number of legal considerations. The judicial standards on which impact fees are based in many states depend on the reasonableness of such fees in serving the police power objectives of health, safety, and welfare. These standards foster a judicial concern for the satisfaction of a number of strict legal requirements that will be discussed.

Second, the ordinance establishing transportation impact fees in Palm Beach County has survived judicial challenges and has become a model in Florida. Important features of this ordinance will be described, including its system of fees.

Third, the economic incidence, or who ultimately bears the burden, of the transportation impact fee is an important public policy issue that will be explored.

Fourth, tax systems are often established in order to exert a constructive influence on behalf of public policy objectives. Many public officials in Florida are concerned with the development stress associated with rapidly increasing population, sprawling settlement patterns, and a fragile natural environment. It has been suggested that transportation impact fees, when used in conjunction with a legally binding comprehensive plan, can be an effective growth management tool.

LEGAL ISSUES

Impact fees are generally subjected to a two-tiered constitutional attack (3). First, they are challenged as a violation by the state constitutional. Second, if statutory authority is found, the local ordinance establishing the impact fee is either challenged as an unreasonable regulation exceeding policy power authority or as a disguised tax.

Whether impact fees are taxes or not is critical in shaping their legal environment. The choice a court can make often determines their validity. If labeled a tax, the impact fee will be invalidated unless specific statutory authorization exists. Alternatively, if the impact fee is viewed as a police power regulation, broad legislative delegation will suffice. The principles of law applicable to impact fees operating under the police power umbrella are in sharp contrast to those relating to taxation, which depend on powers of taxation (4).

Impact taxes are viewed solely as a revenue device. Their purpose is to raise revenue to help defray the general cost of government. In the process, they must be nonconfiscatory and nondiscriminating, but otherwise they can be set at relatively arbitrary levels and used for any general fund purpose (4).

For fees, the chief concern of the courts, beyond the question of statutory enablement, is the reasonableness of the impact fee in serving the police power objectives of health, safety, and welfare. This fosters a concern for the relationship between how the fee is levied and expended on the one hand and whether the developer who pays the fee benefits from the facility on the other. The judicial criteria by which the courts judge whether impact fees are reasonably related to the broad objectives of police power vary across state jurisdictions. Three distinct tests of reasonableness are evident in case law but have already been fully discussed elsewhere (2-4) and therefore will not be addressed in this paper.

In many jurisdictions, Florida included, the legal parameters have been established by the courts and the focus of attention of public officials has shifted from the legal validity issues toward how to draft impact fee ordinances that are acceptable to the courts. Offering guidelines for the design of impact fees is difficult because legal standards differ according to the jurisdiction in question. Nevertheless, some generally applicable standards can be formulated. The following basic list has been suggested for Florida but should have considerable applicability to other states as well (3,5):

1. An impact fee ordinance should expressly cite statutory authority for local government regulation of the substantive area selected.
2. A need for the service or improvement resulting from new development should be demonstrated.
3. The fee charged must not exceed the cost of improvements required by the new development.
4. The improvements funded must benefit adequately the development that is the source of the fee (even if nonresidents of the development also benefit).
5. In place of a rigid and inflexible formula for calculating the amount of the fee to be imposed on a particular development, a variance procedure should be included, so that the local government may consider studies and data submitted by the developer to decrease his assessment.
6. Last, the expenditure of funds should be localized to the areas from which they were collected.

PALM BEACH COUNTY IMPACT FEE SYSTEM

In 1979 Palm Beach County, Florida, enacted an ordinance that established a system of transportation impact fees (Fair Share Contribution for Road Improvement, Ordinance 79-7, as amended by Ordinances 81-4 and 85-10). From September 1979 through June 1985, this system of fees generated approximately $13.5 million in transportation revenue (according to the Finance Department, Palm Beach County). The ordinance, as amended, sets forth a schedule of impact fees that are based on trip generation by type of land use activity, the cost of constructing additional highway lanes and lane capacity. The collected funds are deposited in the trust fund of a designated impact zone, 40 of which were created by the ordinance. The zones were drawn from a base of circles within a 6-mi radius and then modified to fit major geographic boundaries within the county. The use of the zone ensures that the developer paying the fee will receive a benefit from the road improvement. The funds collected can only be used for the purpose of constructing or improving roads and bridges on the major
road network system. Fees collected must be expended within the zone and during a reasonable period of time (6 years) or returned to developers.

Impact fees are assessed at the time the building permit is issued for any new land development activity within the county and municipalities that have adopted the ordinance. In addition, the county encourages developers to make road improvements themselves, which are fully credited against the impact fee.

The fee schedules are based on the following formulas:

Residential fees = \left(\frac{1}{2} \text{ external trips} / \text{l lane capacity} \right) \times \left(\text{cost to construct l lane for 3 mi} \right) \tag{1}

Nonresidential fees = \left(\frac{1}{2} \text{ external trips} / \text{l lane capacity} \right) \times \left(\text{cost to construct l lane for 1 mi} \right) \tag{2}

The ordinance includes different formulas for residential and nonresidential development. Many of the nonresidential trips are captured from traffic already on the road. Therefore, the formula for nonresidential development requires a fee sufficient to replace the capacity of only 1 mi of road versus 3 mi of road for residential development.

As an illustration, the following data from the Palm Beach ordinance are used to calculate the fee on a single-family home (under 2,000 ft²) using Formula 1:

| External trips: | 10 |
| Road capacity: | 7,000 vehicles a day |
| Construction cost (1 lane for 3 mi): | $1,125,000 |
| Trip distribution: | 50 percent |
| Transportation impact fee: | $804 |

Table 1 provides a selected list of impact fees that were taken from Palm Beach County Ordinance 85-10 and calculated from the foregoing formulas.

**TABLE 1 Transportation Impact Fees for Various Types of Land Development in Palm Beach County, Florida**

<table>
<thead>
<tr>
<th>Land Development</th>
<th>Official Daily Rate</th>
<th>Fee ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single family (&lt;2,000 ft²)</td>
<td>10 per dwelling unit</td>
<td>804</td>
</tr>
<tr>
<td>Single family (&gt;2,000 ft²)</td>
<td>13 per dwelling unit</td>
<td>1,045</td>
</tr>
<tr>
<td>Multifamily</td>
<td>7 per dwelling unit</td>
<td>562</td>
</tr>
<tr>
<td>Mobile home</td>
<td>5 per dwelling unit</td>
<td>402</td>
</tr>
<tr>
<td>Nonresidential</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospital</td>
<td>15 per bed</td>
<td>402 per bed</td>
</tr>
<tr>
<td>General recreation</td>
<td>3 per parking space</td>
<td>80 per parking space</td>
</tr>
<tr>
<td>Nursing home</td>
<td>3 per bed</td>
<td>80 per bed</td>
</tr>
<tr>
<td>Motel</td>
<td>14 per room</td>
<td>375 per room</td>
</tr>
<tr>
<td>General office</td>
<td></td>
<td></td>
</tr>
<tr>
<td>100,000 ft² or less</td>
<td>18 per 1,000 ft²</td>
<td>482 per 1,000 ft²</td>
</tr>
<tr>
<td>Greater than 200,000 ft²</td>
<td>11 per 1,000 ft²</td>
<td>295 per 1,000 ft²</td>
</tr>
<tr>
<td>General retail</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80,000 ft² or less</td>
<td>10 per 1,000 ft²</td>
<td>2,679 per 1,000 ft²</td>
</tr>
<tr>
<td>Greater than 1,500,000 ft²</td>
<td>29.8 per 1,000 ft²</td>
<td>799 per 1,000 ft²</td>
</tr>
</tbody>
</table>

Source: Palm Beach County Ordinance 79-7: Fair Share Contribution for Road Improvement, as amended by 85-10.
Price elasticity is the percentage change in quantity demanded or supplied divided by the percentage change in price. A high elasticity of demand means that consumers will react to a small price increase by cutting back sharply on quantity demanded, presumably in favor of substitute goods or services. Low elasticity of demand, or inelasticity, means that consumers will pay higher prices with little reduction in quantity demanded, presumably because they have very few close substitutes. When the percentage change in quantity over the percentage change in price equals 1, the condition is referred to as unity. With an elastic supply schedule, production will increase substantially in response to a modest price increase, whereas under inelastic supply conditions production will increase relatively little.

Given Equation 3, the buyer’s share of the fee will clearly be larger the less elastic the demand is and the more elastic the supply. With inelastic demand the buyer of housing services is less able to avoid the fee by substituting other housing, whereas with elastic supply the builder, especially over time, is able to adjust production by shifting his resources into other areas.

According to Weitz[2], this is exactly the type of housing market found most often in urban areas. For example, empirical estimates of the price elasticity of demand for all housing in urban areas[6,9] have been around unity or below, whereas studies of the supply side of the housing industry have found very high price elasticities. In one study, Muth[10] concludes that the price elasticity of supply is 5.5. Under these conditions, the buyer-occupant would probably bear most of the tax burden. As an illustration, the buyer’s share of the $804 tax burden on a single-family house (<2,000 ft²) in Palm Beach County would be $680. This crude approximation was derived by using Equation 3 and the absolute value of the demand and supply elasticity given previously (E_d = 5.5 and E_s = 1).

GROWTH MANAGEMENT

Growth management is a term that is difficult to define clearly. It is often discussed as if it were a singular concept, yet the wide variety of recommendations made on its behalf can usually be assigned to two distinct categories: (a) the management of the nature, location, and timing of growth or (b) the management of the impacts of growth.

The first category includes land use planning controls, transportation investment decisions, and water resource controls. Land use planning controls such as staging plans, public facility ordinances, and point-permit developer incentive plans are used to both encourage and discourage development. Transportation investment decisions are used to deny access to environmentally sensitive areas or provide enhanced access to declining urban areas. Water resource controls are equally effective in discouraging or preventing development in undeveloped or environmentally sensitive areas. Although public discussion of growth management often focuses on the first category (affecting the location and timing of growth), public officials are often more interested in the second category—managing the impacts of growth.

Impact fees are an example of the second category and can be considered a fiscal approach, the impact of which is to shift a greater share of the cost of providing new public services to new residents or developers or both. In one sense, impact fees, along with benefit assessment districts, exactions, joint development, and other value capture approaches, are current examples of the pressure in public finance to find new revenue sources and to rely, wherever possible, on user fees. They are in effect a form of narrow-based taxation. Impact fees function more to accommodate growth than to manage it, by providing another source of revenue that can be used to invest in new infrastructure. It has even been suggested that local impact fees have reduced pressure on the property tax and helped to blunt resistance to new development[4].

Several features of the typical impact fee in Florida prevent its effective use in controlling the location of growth. For most of the ordinances in Florida, the fee structure does not permit discrimination among like categories. For example, all residential structures of a certain size, regardless of their location, are assessed the same fee. Fees currently collected in Florida are generally less than 1 percent of the development cost and thus are too low to affect location decisions, even if the structure of fees were allowed to vary across a community. Nor do the impact fee ordinances enacted in Florida currently have a mechanism that would allow government to control either the timing or nature of growth. Thus impact fees as currently established in Florida are basically neutral toward the nature, timing, and location of growth but are sensitive to the fiscal cost of growth.

SUMMARY

Local governments have begun experimenting with a variety of revenue-raising devices that are capable of both achieving political support and withstanding legal challenge. One such revenue device, the transportation impact fee, has generated a great deal of interest in Florida and, because of its obvious appeal, holds great promise as a new revenue source.

Evolving case law provides local officials with sufficient legal guidance to enact ordinances establishing transportation impact fees. In this regard, the ordinance establishing impact fees in Palm Beach County, Florida, has survived judicial challenges and become a model in Florida.

The economic incidence of a transportation impact fee is an important public policy issue. With price elasticity of demand at unity or below and the price elasticity of supply very high, it can probably be...
anticipated that the buyer-occupant of a home will bear most of the tax burden.

Finally, impact fees are essentially fiscal devices and function poorly as a growth management tool for control of the nature, timing, and location of growth.

REFERENCES


The contents of this paper 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 of the Florida Department of Transportation.

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