

# A Closer Look at Impact Fees

ROBERT W. DRAPER

Localities in five states use impact fees (charges collected during approval of land development) to support public facilities to serve proposed development. Such fees are especially useful for funding improvements in suburban and fringe areas where development pressures are particularly strong and land is readily available.

In this paper the emphasis is on impact fees for roadway improvements; some of the topics addressed are developers' concerns, determining traffic impacts, attracting development, and planning considerations.

It has been common practice as part of local subdivision approval to require that developers provide on-site improvements including water and sewer facilities, curbs and gutters, internal roads, and sidewalks. Providing internal road improvement has been viewed as a legitimate exercise of a locality's police power for more than 30 years (1). A more recent phenomenon has been local officials expecting developers to pay for off-site road improvements to serve traffic generated by a new development. The use of impact fees is one device communities have used to require developers to fund off-site improvements.

Impact fees are charges collected by a locality during its approval of land development to support public facilities needed to serve the proposed development. Impact fees are used to fund a variety of public facilities including roads, schools, water and sewer facilities, and parks. This paper is focused on the use of impact fees for road improvements. The use of impact fees by various localities in the United States and the types of highway improvements funded with the fees are highlighted. Several important concerns and issues related to the use of impact fees are explored:

- Are they a tax or a fee?
- How do they address developers' concerns about up-front payment of fees, paying a "fair share," and decisions about improvements?
- Who really pays the impact fee?
- How are traffic impacts determined?
- How do impact fees affect a locality's ability to attract development?
- How can the planning process address privately funded improvements in scattered locations?
- What is the future of impact fees?

There is a broad range in the level and type of fees used in various localities (Table 1). Not surprisingly the fees are higher in localities that use impact fees to help support a mix of public facilities than they are in areas that use them to support only road improvements. Localities have different processes for collecting impact fees and generally use two approaches:

- Local officials calculate the fees on the basis of information about the development; its potential traffic impacts; and, in some instances, a predetermined program of improvements needed to serve a developing area or

- Local officials and a developer negotiate fees and funding agreements for specific improvements to accommodate the traffic associated with a new development on a case-by-case basis.

Some localities use a combination of these two approaches, giving a developer the option of paying a calculated fee or negotiating for specific improvements. The impact fees are usually either imposed on all development or selected new development. Fees imposed only on selected new development are usually linked to a performance standard whereby a fee is triggered by the likelihood that traffic generated by a proposed development will cause a nearby facility (usually an intersection) to exceed a specific level of service.

## TAX OR FEE?

A locality may legitimately require off-site road improvements, but a developer can only be required to pay the portion of the costs that reflects the needs created by the development and its increased accessibility provided by the improvement (2). If a locality imposes an impact fee higher than the developer's share of the costs for improvements reasonably needed to serve the new development, the courts view the fee as a tax and overrule the impact fee (3–5).

## DEVELOPERS' CONCERNS

Cost and certainty are a developer's overriding concerns. Quite simply, early in the development review, a developer wants to know what fees or improvements local officials expect him to provide and he does not want any surprises later. On the basis of a recent FHWA study on developer-funded improvements (6), the following observations can also be made about the developer's viewpoint:

- A developer wants to minimize up-front capital costs, so he prefers to phase improvements (or fees) to coincide with each phase of a development's completion or buildout.

- A developer wants other developers and the locality to share in the expense of off-site improvements that benefit more than the new development.

- A developer wants to have control over improvements constructed with his money, particularly when he funds the entire costs. Thus, a developer often prefers to assume responsibility for constructing the off-site improvements so he has

TABLE 1 USE AND IMPACT FEES IN SELECTED LOCALITIES

| Locality                             | Approach          | Amount of Calculated Fee   | Basis   | Types of Highway Improvement   |
|--------------------------------------|-------------------|--|---|--|
| Newport Beach, Calif.                | Negotiated fee    | NA   | Performance standard: based on percentage of traffic generated by a development that will use a nearby intersection                               | Widenings<br>Intersection improvements   |
| San Diego, Calif. <sup>a</sup>       | Calculated fee    | SF unit: \$1,900–\$3,800<br>MF unit: \$1,300–\$2,700<br>Commercial acre: \$4,000–\$56,000<br>Industrial acre: \$3,000–\$22,000 | Estimated cost of expanded facilities associated with undeveloped lots; varies by area within city  | Arterials<br>Collectors<br>Local streets   |
| Palm Beach, Fla. <sup>b</sup>        | Combined approach | SF unit<br><2,000 ft <sup>2</sup> : \$804<br>≥2,000 ft <sup>2</sup> : \$1,045<br>Commercial or industrial acre: \$28,500       | Highway construction costs and number of trips generated by development   | Widenings<br>Intersection improvements   |
| Corvallis, Oreg. <sup>c</sup>        | Calculated fee    | SF unit: \$1,500–\$2,000<br>Commercial acre: \$17,000  | Value of development, lot area, structure area, cost of expanded capital facilities; varies by area within city                                   | Widenings<br>Intersection improvements<br>Bridge replacements  |
| Snohomish County, Wash. <sup>d</sup> | Combined approach | \$150 per daily trip generated   | Performance standard: developer's proportionate share of cost to improve roads that will operate at LOS D due to traffic generated by development | Widenings<br>Intersection improvements   |
| Waitsfield, Vt. <sup>e</sup>         | Negotiated fee    | NA   | Cost of improvements in developing area, size of development, and its traffic impacts   | Planning study to identify areawide improvements serving new development<br>Intersection improvements<br>Widenings |

NOTE: SF = single family and MF = multifamily.

<sup>a</sup>San Diego's fees or facility benefit assessments are for three subareas within the city that have adopted financial plans. The fees are used for roads, parks, libraries, schools, fire stations, and other public facilities. Development fees are also collected in other areas of the city and tend to be toward the lower range of the fees shown in the table.

<sup>b</sup>The \$28,500 represents a typical commercial development with a 85,000-ft<sup>2</sup> building that covers 25 percent of the site. In practice, fees for commercial and industrial uses are calculated on the basis of a \$26.79 rate per ADT, which Palm Beach officials convert to a fee of \$2,679 per 1,000 ft<sup>2</sup> (up to 80,000 ft<sup>2</sup>) and a declining rate for larger developments.

<sup>c</sup>Corvallis uses the fees to fund water, sewer, and transportation facilities. The fees are divided equally among these three categories. Square footage of structure is used to calculate fees for commercial activities; the \$17,000 per acre shown in this table is estimated.

<sup>d</sup>Although Snohomish County uses a combined approach (i.e., allowing developers to either pay a calculated fee or negotiate for the fees due), in most instances the developers have opted to negotiate the fee.

<sup>e</sup>Waitsfield is unique among these localities in that local officials are negotiating development fees solely on the authority of state statute. Vermont Act 250, a land use control law, requires a state land use permit for major development. Agreements are negotiated to correct "unreasonable congestions and unsafe conditions" on highways as part of the permitting process. Fayston and Warren are other Vermont localities that use the state statute to negotiate development fees.

more control over the cost and the timing and has assurance that the improvements will be constructed.

- A developer does not want long-term responsibility for road maintenance, so he prefers to turn over responsibility for the roads to the locality when they have been constructed. A locality will usually wait a year to accept the improvements, allowing sufficient time for any construction deficiencies to show up.

Unfortunately, it is difficult to structure an impact fee that is fully responsive to all the concerns raised by developers (Table 2). By nature, a negotiated impact fee provides greater flexibility to a locality and a developer. Some localities use a combination of calculated and negotiated impact fees. This approach works well in that small developers may pay the fees and proceed with their project. Larger developers, on the other hand, may find it worthwhile to negotiate for specific improvements that suit the needs of their development and its proposed buildout. A developer sometimes may be able to negotiate for

improvements that he believes cost less than the sum of flat fees he would have otherwise paid.

## WHO PAYS?

Although a developer pays impact fees to a locality, an important issue is who really bears this cost. Does the developer pass the cost on to the consumer (i.e., the "newcomer" who occupies or shops at the development)? Does the developer lower his offer for vacant land in anticipation of the additional development costs associated with impact fees? In that case the seller of the property actually bears the fee. Or, does the developer pay the impact fee in full from his own pocket or profit?

Some developers refer to impact fees as legal extortion; perhaps they pay impact fees from their profits. One California court believes that a developer pays an impact fee voluntarily (7):

The dedication of land or the payment of fees as a condition precedent to development is voluntary in nature. Even though the developer cannot legally develop without satisfying the condition precedent, he voluntarily decides whether to develop or not develop. Development is a privilege not a right.

The courts are also wary about newcomers paying the entire cost of expanding public facilities in developing areas. One Utah court has specified rigorous criteria that should be considered in determining the allocation of the cost of facilities funded through impact fees (8):

1. The cost of existing facilities;
2. The manner of financing the existing capital facilities such as user charges, special assessments, bonded indebtedness, general taxes, or federal grants;
3. The relative extent to which the newly developed properties in the municipality have already contributed to the cost of existing capital facilities by such means as user charges, special assessments, or payment from the proceeds of general taxes;
4. The relative extent to which the newly developed properties and other properties in the municipality will contribute to the cost of existing capital facilities in the future;
5. The extent to which the newly developed properties are entitled to a credit because the municipality is requiring their developers and owners (by contractual agreement or otherwise) to provide common facilities (inside or outside the proposed development) that have been provided by the municipality and financed through general taxation or other means (apart from user charges) in other parts of the municipality;
6. Extraordinary costs, if any, in servicing the newly developed properties; and

7. The time-price differential inherent in fair comparisons of amounts of costs paid at different times.

Although the fee does not necessarily have to achieve a precise mathematical equity, the court notes that the locality must disclose the basis for calculating an impact fee to anyone who challenges its reasonableness.

The preferred approach is for the impact fee to be absorbed in the cost of land. To achieve this objective, Weitz (9) has suggested several guidelines for a locality planning to adopt impact fees:

1. Give adequate notice: Provide 4 or 5 years notice that impact fees are on the horizon. This is fair to citizens, land investors, and developers and will avoid a situation in which a developer buys land without expecting to pay for off-site improvements and then is hit with an impact fee imposed after purchase.
2. Tailor developer contributions to specific sites: Fees should be based on the expected impact of developments on surrounding facilities. The end result should be that land near facilities with excess capacity should cost more than land near facilities that are overcapacity. Other things being equal, the difference in the land price would be equivalent to the impact fees.
3. Do not constrict the supply of land: A sufficient supply of land is needed for the impact fees to be absorbed in the cost of land. The supply of land should not be constricted artificially through restrictive land use requirements. Preferably, land should be assessed at its full value so (a) vacant land will fully reflect the effects of impact fees and (b) a decision to sell is

TABLE 2 RESPONSIVENESS OF IMPACT FEES TO DEVELOPERS' CONCERNS

| Developers' Concern             | Type of Impact Fee  |   |
|---------------------------------|---|---|
|                                 | Calculated  | Negotiated  |
| Minimize up-front capital costs | Unresponsive: calculated fees are usually collected early in the development process  | Varies: Sometimes improvements are required before building permit is issued. However, depending on scale of development and nature of improvements, they may be phased with development.   |
| Pay "fair share"                | Responsive: calculated fees are commonly levied on all new developments   | Varies: Negotiation provides opportunity for cost-sharing agreements among multiple developers and the locality. However, when the need for improvements is triggered by performance standard, subsequent developers often get "free ride" due to excess capacity provided an improvement funded by an earlier developer. |
| Control overimprovements        | Unresponsive: calculated fees are often collected, then earmarked by the locality for improvements in developing areas within the jurisdiction  | Responsive: Developer and local officials negotiate for specific improvements. Developer usually has option to contract for the improvements directly or fund the improvement through a state or local contract.  |
| Maintain roads                  | Responsive: the locality has full control of road construction and maintenance, impact fees usually support new facilities or major upgrade of existing facilities (beyond routine maintenance) | Responsive: Developer and local officials usually negotiate that the locality assumes full maintenance responsibility 1 year after construction is completed.   |

made on the basis of whether the anticipated appreciation will offset the carrying costs.

4. Design consistent land use requirements: Land use requirements should be predictable and pragmatic. There should be flexibility to trade off higher density for more developer contributions, but local officials should exercise this option cautiously. If developers believe approval of such a trade-off is automatic, they will bid up land in anticipation of building at a higher density. Local officials should also be wary that the increase in a developer's contribution approximates the increase in value associated with approval of a higher density.

5. Set realistic fees: Fees should reflect the proportionate cost of improvements associated with a development and the value of increased accessibility. If fees are too low, the developer will receive some windfall. If they are too high, the costs will be passed on to the consumer. If they are not substantiated, the courts will overturn the impact fee.

Who pays? The answer depends on the timing of the institution of the impact fees, the structure of the fees, and the supply of land. Theoretically, impact fees can be capitalized in the value of land. In practice, the cost is more likely borne by the consumer. A developer may haggle with a land investor about the price of land and perhaps discuss the financial implications of impact fees on its development. The price of land and development expenses (including impact fees) are separate line items in a developer's mind, especially when an option or offer has been accepted for the land. The final development program—the type, scale, and mix of development—is decided later during review and approval by local officials. The development program is the key factor in determining the impact fee whether the fee is calculated or negotiated for specific improvements. The impact fees associated with the development program become a fixed cost in the developer's base expenses for estimating his return. In turn, it is passed through to the newcomer who occupies or shops at the development.

## DETERMINING TRAFFIC IMPACTS

Determining the traffic impacts of proposed development is an important issue for several reasons. It allows local officials to identify potential deficiencies of the highway network that could result from traffic generated by a proposed development. In turn, this provides the basis for devising improvements and negotiating a funding agreement with the prospective developer. This process can constitute a systematic process for calculating an impact fee and is essential if an impact fee is to withstand legal challenges. Broward County, Florida, developed one of the more widely recognized processes for determining the traffic impacts of proposed development (10). Its computerized model, Traffic Review and Impact Planning System, is used to estimate the traffic impacts of proposed development and determines the development's fair share of the cost of planned improvements.

The traffic impacts associated with new development can be determined by using available transportation planning and engineering procedures. In simple terms, it is a matter of comparing future traffic with and without the proposed development. In reality, it involves a considerable degree of

judgment and a good technical understanding of the subtle effects of different assumptions when applying the methodology. There follows a step-by-step description of a suggested process for determining the traffic impacts of new development and some of the issues that are critical in applying the methodology:

- Step 1: forecasting background traffic. Background traffic is a combination of existing traffic and traffic that will be generated by other development already approved within the general vicinity of a proposed development. The key issue is whether the background traffic includes any traffic that would be generated by the proposed development.

- Step 2: identify planned highway improvements and potential deficiencies. The background traffic is assigned to the highway network. The network should include proposed highway improvements that are expected to be constructed whether or not the particular development under review is built. Highway deficiencies are identified with the background traffic. Ideally, no deficiencies occur. The key issue is making a realistic determination about the proposed highway improvements.

- Step 3: estimate the traffic generated by the proposed development. Trip generation rates and information on the size of the proposed development are used to estimate the amount of traffic associated with the development. There are several important issues. What trip generation rates are used? Often a locality will use rates compiled by the Institute of Transportation Engineers (11) or agree with the developer on rates that more accurately reflect local conditions. What mix of vehicles, vehicle occupancy rates, and peak-hour factors is used? Assumptions about these factors drive the all-important number of vehicle trips generated by the proposed development. These assumptions are especially important when decisions are being made about the effectiveness of special transit services or employer-sponsored ridesharing programs associated with the proposed development.

- Step 4: estimate the amount of pass-by traffic that will be attracted to the development. Pass-by traffic is background traffic that will be attracted to the development. Assumptions about pass-by traffic are important when estimates are being made of the traffic impacts of retail development. An estimate is needed of the number of drivers who will stop and shop as part of their normal trip by the site. For a mixed-used development, it is also important to separate the number of trips that will be generated on site between activities, such as the number of employees making midday shopping or lunch trips on site. Although pass-by traffic may be separated out as part of Step 1, it is important to recognize the distinctions among and assumptions about these trips when determining the overall traffic impacts of a proposed development.

- Step 5: assign traffic from the development to the highway network and identify deficiencies. The traffic from the development is assigned to the network with the background traffic. Traffic volumes are examined and potential operating deficiencies are identified.

Determining the traffic impacts associated with a proposed development is rather straightforward, but it can be a tedious, complicated exercise. Availability of data is a problem, especially getting reliable data on the results of transportation



management programs (Step 3) and pass-by traffic (Step 4). Local planners and the developer's representatives should agree on the critical assumptions for the analysis so the results will provide a constructive basis for determining the impact fees, especially when the intention is to negotiate improvements to serve the traffic associated with a development.

## ATTRACTING DEVELOPMENT

A key factor that affects the feasibility of impact fees is the presence of a strong local economy. The supply of and demand for developable land must be sufficient to absorb the added expense of impact fees. An area with a soft local economy trying to attract development is an entirely different situation. Publicly funded improvements are often necessary to attract development to such an area.

Impact fees evolved as an element of a broader growth management strategy for localities experiencing strong development pressure in such places as California, Florida, and Washington. The objective was to encourage development to occur in areas within a locality where public facilities have adequate capacity to serve the development. Impact fees are used as a penalty for development in areas where there is insufficient capacity.

A complicating factor is border effects between localities. The traffic impacts of development sometimes occur in an adjacent jurisdiction. There is no formal mechanism for imposing impact fees across jurisdictions. Ideally neighboring localities need to coordinate development approvals near their boundaries and negotiate joint funding agreements with developers to share the cost of improvements in the area. A more unfortunate situation is the case of two jurisdictions with and without impact fees. The jurisdiction without the fees will have an advantage in attracting development, and the other jurisdiction will experience the traffic impacts with little prospect for negotiating a joint agreement.

## PLANNING CONSIDERATIONS

During the planning process improvements that will be needed in developing areas can be identified and impact fees can be used to fund the improvements as development occurs. Broward and Palm Beach Counties, Florida, use this approach. Each county is divided into districts and officials identify road improvements needed to serve new development within each district. Impact fees are credited to separate accounts for each district. If the county does not use the fees to construct the improvements within several years, it must refund the money to the property owner.

San Diego, California, uses a similar approach to fund a broad array of public facilities. The developing portion of San Diego is divided into 14 communities. A comprehensive plan that identifies the public facilities that will be needed as the area develops—roads, parks, libraries, schools, fire stations, and other capital facilities—is prepared for each community. The cost of these facilities is estimated, and a fee is computed to cover the costs associated with each undeveloped parcel. In most areas, an agreement is negotiated with each developer on

the basis of the calculated development impact fee. Financing plans, which reflect the capital improvements identified in each community's comprehensive plan, have been adopted for three communities and another is pending. Each financing plan also includes rates for calculating a facilities benefit assessment for the development of each lot. When a financing plan has been adopted, the fee is calculated during development approval and individual developer agreements are no longer necessary.

When funding agreements for the improvements are negotiated in a piecemeal manner, planning plays an important role in providing data for traffic impact studies and examining the broader effects of privately funded improvements in scattered locations. A regional planning agency and the localities within a metropolitan area can work together to share information under this approach. A locality is provided on-line access to regional traffic forecasts for use in estimating background traffic near a proposed development as part of the traffic impact analysis for that development. Information on privately funded improvements is funneled into the planning process. As part of subsequent plan updates, such improvements are reflected in the performance of the highway system when the need for area-wide improvements is determined.

## CONCLUSION: FUTURE CONSIDERATIONS

Localities in California, Colorado, Florida, Oregon, Texas, and Washington use impact fees. Maine, Maryland, New Hampshire, New Jersey, New Mexico, and North Carolina are considering their use. Impact fees are accepted by the courts and are viewed by some developers as a normal part of doing business. They are in line with the current emphasis on user fees and increased private-public cooperation for funding capital facilities. They are a useful means of funding improvements in suburban and fringe areas where development pressures are particularly strong and land is readily available. In such localities they can represent a significant portion of the local revenue used for highway improvements.

As localities continue to grapple with the problems of traffic congestion and limited public resources, local officials will continue to view impact fees as another source of funds for needed improvements. When they have been accepted as an element of a more comprehensive growth management strategy, impact fees are commonly viewed in terms of their revenue potential.

Let no one be fooled. Impact fees are not a panacea. The application of impact fees requires deliberate thought by local officials about local factors that affect feasibility, administrative complexity, and equity.

A strong local real estate market is crucial to the feasibility of imposing impact fees. A concerted effort is needed to implement them. State or local enabling legislation, or both, is usually required. Impact fees are time consuming to administer: it is especially time consuming for local planning staff, local officials, and developers to negotiate and approve funding agreements on a case-by-case basis. If a calculated fee is used, local staff must identify improvements that will serve a developing area, estimate their cost, derive a formula for distributing the costs among prospective developments, collect the

fees as development occurs, and account for the fees used to fund improvements in specific areas. Finally, serious equity issues are raised by exacting a hidden fee for public facilities from newcomers.

Local officials should address all of these issues when considering whether to institute impact fees. Planners have a responsibility to raise these issues in the decision-making process. Impact fees are appropriate and desirable as part of a broader growth management strategy for a community. They are less appropriate and desirable when viewed strictly as an alternative source of revenue. A dedicated local add-on fuel tax, for instance, is administratively simpler, more flexible, and more equitable in distributing the cost of highway improvements among the general local population that uses all public roads. It is neither feasible nor appropriate from a public policy viewpoint to expect impact fees to be the primary source of funds for highway improvements. State and local governments should rely on a mix of revenue sources—both traditional use fees and more contemporary sources—to support future transportation improvements.

## REFERENCES

1. Brous v. Smith, 106 N.E.2d 503 (1952).
2. Land/Vest Properties, Inc. v. Town of Plainfield, 379 A.2d 200 (1977).
3. Home Builders and Contractors Association of Palm Beach County, Inc. v. Board of County Commissioners of Palm Beach County, 446 So.2d 140 (1983).
4. Timothy Ross Lafferty v. Payson City, 642 P.2d 376 (1982).
5. Trent Meredith, Inc. v. City of Oxnard, 170 Cal. Rptr. 685 (1981).
6. Laurence J. Meisner, Kimley-Horn Associates, Inc. *Financing Urban Transportation Improvements*, "Report 2: Use of Private Funds for Highway Improvements." Federal Highway Administration, Jan. 1984.
7. Trent Meredith, Inc. v. City of Oxnard, 170 Cal. Rptr. 685 (1981).
8. Branberry Development Corp. v. South Jordan City, 631 P.2d 899 (1981).
9. S. Weitz. Impact Fees: There Is No Free Lunch. *Planning*, Vol. 50, No. 7, July 1984, pp. 12–14.
10. *Trip Generation—An Informational Report*. 3rd ed. Institute of Transportation Engineers, Washington, D.C., 1982.
11. R. Knack, J. Frank, and H. Stewart. How Road Impact Fees are Working in Broward County. *Planning*, Vol. 50, No. 6, June 1984, pp. 24–27.

# Impact Fee Assessment Using Highway Cost Allocation Methods

SUE MCNEIL, THOMAS ROSSI, AND CHRIS HENDRICKSON

Although local governments have traditionally borne the cost of local roadway improvements to accommodate traffic growth, there has been a growing interest in the assessment of impact fees on developers to finance such improvements. Impact fees have been assessed as flat fees based on the size of the development; variable fees depending on the type and location of the development; and negotiated fees determined by the required investments, the interests of the local communities, and the resources of the developer. Variable fees are analogous to roadway user taxes in that roadway costs vary with traffic and a desired revenue target is to be met. Techniques used in highway cost allocation studies can be directly applied to the design of equitable variable impact fees. Because highway cost allocation studies have received considerable attention and have been widely applied, these allocation methods might be usefully adopted for impact fee assessment.

Economic implications of roadway cost allocation methods for impact assessment are discussed.

Historically, municipal and county governments have borne the cost of providing transportation infrastructure. More recently, infrastructure has been financed by imposing impact fees on developers (1, 2). To withstand challenges in court from developers and citizens and to effectively finance road improvements before traffic from developments affects the local area, impact fees must be equitable, consistent between developers and over time, and administratively feasible. Furthermore, impact fee revenues together with available public funds should be sufficient to cover the cost of required improvements. Impact fees should also be economically efficient and occasion as little cost and resource misallocation as possible (3, 4). This latter objective has received greater attention in the theoretical literature than in practice. The objectives of governing bodies in setting impact fees have been primarily

S. McNeil and T. Rossi, Department of Civil Engineering, Massachusetts Institute of Technology, Cambridge, Mass. 02139. C. Hendrickson, Department of Civil Engineering, Carnegie Mellon University, Pittsburgh, Pa. 15213.