

**Development Exactions:  
Process and Planning Issues**

Jennifer Evans-Cowley

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## **Abstract**

The use of exactions to finance public facilities necessary to accommodate new growth is a concept that has gained wide national acceptance by local governments. This lesson provides information on the historic and legal background of exactions, methods for calculating exactions, and implications of exactions.

### **About the Author**

Jennifer Evans-Cowley, PhD, AICP is an Assistant Professor in the City and Regional Planning program at Ohio State University. Her dissertation and subsequent research papers on development impact fees have been published in the *Journal of Planning Literature* and *Growth and Change*. She regularly consults with builders' associations on the use of development impact fees.

Dr. Jennifer Evans-Cowley  
Assistant Professor  
The Ohio State University  
City and Regional Planning  
21 Northridge  
Columbus, OH 43214  
tel: 614/247-7479  
fax: 614/292-7106  
cowley.11@osu.edu

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## **Development Exactions: Process and Planning Issues**

### **Introduction**

Development exactions are a form of land use regulation whereby a property owner must provide a payment or property in order to initiate land development. Exactions are an exercise of police power intended to protect the public health, safety, and welfare. They do so by protecting the community from the negative effects of growth. When growth happens there is a need for an increase in public facilities such as roads, fire stations, and sewers. Exactions aid in protecting the community from the increased cost of providing infrastructure by sharing the cost with the new residents.

In the past cities paid for off-site infrastructure through general obligation and revenue bonds. If this was not possible, a developer was required to construct the infrastructure. The challenge to fast-growing cities was that they did not have the bond capacity or revenues to finance all of the new infrastructure and public facilities demanded by development. Exactions serve as a method to allow cities to pass a portion of the cost of public facilities on to a developer at the time development begins, rather than waiting until tax revenue or service charges are collected from new residents.

The basic principle behind the adoption of an exaction is that it should protect existing residents from the impacts of growth by providing a revenue source to pay for needed public facilities. An exaction requires a land developer or builder to contribute a share of a local government's cost of providing on- and off-site infrastructure and public facilities to serve the developing property. For example, an exaction can require the dedication of land for a new park, or an impact fee can be charged for the cost of extending a road to a development before a developer can hook up the internal streets of a subdivision to the city street network.

There are several reasons for a local government to use exactions. To begin, some cities wish for new development to include the cost of public facility provision as part of the cost of new development. This shifts the financial burden of new public facilities from existing tax payers to new development. Existing taxpayers who believe that they are subsidizing growth think that growth should help pay for itself. Budget shortfalls, cuts in state aid, and the refusal of taxpayers to increase tax rates have increasingly led to cities relying on exactions to help finance the impacts of new growth on public facilities.

In addition to shrinking aid from higher levels of government, some local governments have experienced a refusal by taxpayers to accept increased tax rates to pay for new public facilities. For some tax payers this represents an antigrowth sentiment. These people do not want new development and believe that developers should have to pay the full cost of public facilities if they want to join their community.

Another reason for a local government to use exactions is to synchronize the payment of infrastructure with the timing of development. For example, a wastewater

treatment plant must be built to service thousands of units rather than a single new house. The problem is that this type of facility requires payment upfront, although it will not be fully utilized until a later point in time. Impact fees, a type of exaction, provide revenue that can be used to pay off bonds over the period of time development will occur.

While exactions do shift the cost of new facilities to new development, there are impacts of their use, including raising the price of housing in the community, slowing the rate of development, and, potentially, slowing economic development. The issue of incidence of exactions and other critical policy questions are discussed in the Using Exactions to Finance Public Goods section of this chapter.

Court decisions have upheld the ability of governmental agencies to assess exactions, discussed in depth in the Legal Basis of Exactions section of this chapter. The courts have found that exactions are a valid use of “police power.” However, an exaction must be attributable to the impact of the development. This is known as the “rational nexus” test. Although broadly interpreted, the rational nexus test as applied to impact fees means that the need for new public facilities must be attributable to the development being assessed the impact fees, that the need must be proportionate to the need for facilities generated by the development, and that the development must receive a reasonable, although not exclusive, benefit from the facilities financed by the impact fees.

Exactions of all types are widely utilized by local governments. Local governments may have all types of exactions or utilize a few different types. For example, impact fees are most heavily used along the Pacific Coast, with one survey reporting that 62 percent of Pacific Coast cities surveyed impose them<sup>1</sup>. The fees associated with exactions can vary widely. Again using impact fees as an example, in a 2005 survey on impact fees the average impact fee for a single family home was \$7,669. If California is excluded, the average impact fee was \$5,361<sup>2</sup>. The lowest impact fee was \$446 for DuPage County, Illinois, which charges a road impact fee, while the highest was \$41,108 for Gilroy, California, which charges impact fees for roads, water, sewer, drainage, parks, libraries, fire, police, general government, and schools<sup>3</sup>. In the following sections the specific types of exactions and their application are discussed further.

This chapter is divided into five parts: 1) background on exactions; 2) institutional and legal requirements to use exactions; 3) issues with exactions; 4) impact fees across the country; and 5) implementation of impact fees. This chapter discusses all types of exactions, but emphasizes impact fees because of their relative newness, growing popularity, and contentiousness.

## History of Exactions

Exactions, especially in the form of land dedication, have long been part of the development approval process. The Standard Planning Enabling Act of 1928 required, as a condition of subdivision approval, that all streets, water mains, sewer lines, and other utility structures be provided by the developer.<sup>4</sup> This act was copied by most states. This means that since the 1920s developers have been required to install and then dedicate the roads and water and sewer lines within their subdivisions.

While exactions internal to development projects have been commonplace, it wasn't until the 1950s that local governments began requiring exactions external to developments as an exercise of police power intended to protect the public health, safety, and welfare. Local governments used their responsibility to regulate land use and provide public facilities as the justification to require exactions. Prior to the 1970s local governments typically paid for the provision of public facilities, such as parks, roads, and sewers. During the 1970s and 1980s the federal and state governments began reducing the amount of money provided to local governments to support public facilities. Rather than accepting increases in property tax rates, the public began to demand that growth "pay its own way." "Pay its own way" means that developers contribute to the cost of their impact on the local community. The pay its own way movement led to local governments becoming creative in formulating methods of paying for public facilities that service development but are not internal to subdivisions.

Parkland fee-in-lieu programs were the first examples of non-dedication exactions in the United States. Beginning in the 1950s and 1960s local governments began assessing capital recovery fees for the funding of water and wastewater facilities to service new development. While some communities assessed capital recovery fees, the assessment of impact fees increased rapidly during the 1970s. During the 1980s and 1990s impact fees for other types of public facilities, such as schools, public safety facilities, and roads, increased. Strong growth experienced by many communities in the 1980s, 1990s, and 2000s has resulted in increased demand for new roads, drainage, and other public facilities to serve new development. Cities are increasingly relying on impact fees as a tool to alleviate growing pains and cash flow problems. For example, in Texas more than one-third of cities with populations of 10,000 or more assess development impact fees<sup>5</sup>. In the 1990s and 2000s linkage fees have grown in popularity in high cost of living communities. These exactions provide needed affordable housing and other socially oriented facilities.

## **Types of Exactions**

### **Dedication**

A dedication is a requirement for a developer to donate land and/or facilities for public use. For example, a developer might be required to dedicate land to be used as a park for use of the residents living in a development. Developers are frequently required to dedicate the water and sewer lines and roads internal to a subdivision to the local government, which then takes on the responsibility of maintaining these facilities.

### **Tap Fees**

Utility connection fees, commonly known as tap fees, are exactions that are used to fund capital improvements. Connection fees are charged to allow cost-recovery of the cost to tie new development into the existing infrastructure network. These fees typically cover the cost of water meters, establishing new customer accounts, and inspections of the connections of the water lines to the water systems, as well as the cost of tying into the infrastructure system.

### **Fee-in-lieu**

A fee-in-lieu is an exaction that requires the developer to pay a fee instead of providing a public facility on-site. Parks and other forms of infrastructure are a type of public good, and it is possible for the private sector to provide these public facilities, but it is impractical for each developer to build parks, roads, and water and sewer lines when they could be shared. To address these issues local governments developed fee-in-lieu of programs for parkland in which developers could choose to pay fees rather than dedicate land for parks. This type of program provides greater flexibility to local governments to site parks that will best serve their communities. For example, if a developer plans to build five houses it would be impractical to provide a park on-site. Instead the developer pays a fee-in-lieu of providing the park on site.

### **Linkage Fee**

Linkage fees are an exaction that is used to pay for the secondary effects of development. They are used to collect money from large scale commercial, industrial, and multifamily development to provide for such things as affordable housing, job creation, and day care facilities. The premise of a linkage fee is that employees of a business, such as custodians and receptionists, need to be able to afford housing within their community. Linkage fees are primarily used by local governments in areas where the cost of housing is extremely high, such as California and Massachusetts.

### **Impact Fee**

Impact fees “are scheduled charges applied to new development to generate revenue for the construction or expansion of capital facilities located outside the boundaries of the new development (off-site) that benefit the contributing development.”<sup>6</sup> Impact fees are most commonly assessed for roads, water, sewer, and stormwater, but can be utilized for other types of facilities such as schools and fire stations.



Dedications, tap fees, linkage fees, and impact fees, which are very similar in purpose, all require developers to contribute to the impacts caused by new development. Impact fees and linkage fees are both designed to require developers to pay for appropriate shares of the impacts created by and serving the developments in question. A simple distinction between dedications and fees is offered by Snyder and Stegman<sup>7</sup>. Dedications are facilities constructed and/or donated to a city. Impact fees “are scheduled charges applied to new development to generate revenue for the construction or expansion of capital facilities located outside the boundaries of the new development (off-site) that benefit the contributing development.”<sup>8</sup> For example, a developer may provide parkland as part of a subdivision development or pay fees in-lieu of providing parkland<sup>9</sup>. Table 1 provides information on how different types of exactions compare.

**Table 1. Comparison of Exactions**

	<b>Dedication</b>	<b>Tap Fee</b>	<b>Fee-in-Lieu</b>	<b>Linkage Fee</b>	<b>Impact Fee</b>
<b>On or Off-Site</b>	On-Site	On-Site	Off-Site	Off-Site	Off-Site
<b>Form of Contribution</b>	Land/Facility	Fee	Fee	Fee	Fee
<b>Complexity of Administration</b>	Low	Low	Low	High	High
<b>Time of Payment</b>	Final Plat	Building Permit	Final Plat	Over fixed period of time established by ordinance	Building Permit or Final Plat
<b>Relationship between the Exaction and Facility</b>	Reasonably Related	Reasonably Related	Reasonably Related	Reasonably Related	Rational Nexus
<b>Extent of Use</b>	High	High	High	Low	Medium

\*Note: The time of payment varies from state to state and by local government. This column provides general information on when an exaction would be expected to be paid.

Dedications and tap fees are used to pay for on-site facilities. Fee-in-lieus are used for facilities that are impractical to provide on-site. Impact fees and linkage fees are used to pay for facilities provided off-site. Dedication is contributed in the form of land or a facility, while the other forms of exaction are payments to the local government. While dedications, tap fees, and fee-in-lieu programs are relatively simple to administer, linkage fee and impact fee programs require a high level of administrative capacity. These programs often require the hiring of consultants to prepare the research and documentation of the need for the fee and the calculations for determining a fair and equitable fee. There must be a relationship between the exaction and the public facility. There are different tests that courts use in determining the connection between the

exaction and public facility. This relationship is discussed further in the Legal Basis for Exactions section of this chapter. Because dedications, tap fees, and fee-in-lieu programs are simple to administer they are also the mostly widely used, with many communities across the country utilizing these exactions. Impact fees are increasingly being used across the nation, while linkage fees are limited to high cost areas primarily on the east and west coasts.

### **Legal Basis for Exactions**

Exactions are based on the Tenth and 14<sup>th</sup> Amendments of the U.S. Constitution<sup>10</sup>. The Tenth Amendment notes that states are reserved powers not specifically stated in the Constitution. The 14<sup>th</sup> Amendment provides for due process, equal protection, and the protection of private property to the states. Exactions have been tested in the courts in almost every state in which they have been used on the basis of due process, equal protection, and the right to travel. The arguments in these cases typically revolve around the taking of private property without just compensation. There are two critical U.S. Supreme Court cases related to the use of exactions: the Nollan and Dolan cases.

In 1987 the U.S. Supreme Court ruled in *Nollan v. California Coastal Commission* that the dedication of an easement can represent a taking<sup>11</sup>. In this case the Nollan's planned to demolish their existing beachfront home and replace it with a larger one. The California Coastal Commission required the dedication of an easement that would allow for public passage along the property line between the seawall and the ocean. The Commission argued that the easement furthered the public interest by providing increased public access to the seashore, and that it would decrease both congestion at the existing public beaches and the psychological barrier to beach use created by the continuous line of developed properties between the street and the ocean. The U.S. Supreme Court found that this exaction was a taking because there was an insufficient nexus between the access and the development. The Court held that the Commission would be free to purchase the access or to exact an impact fee, but that it could not require the easement because there was not a reasonable relationship between the exaction and the construction project.<sup>12</sup>

In 1994 the U.S. Supreme Court ruled on the *Dolan v. City of Tigard* case<sup>13</sup>. Dolan planned to expand her hardware store and add to her parking lot. The City of Tigard conditioned the approval of the application upon a dedication of both land for a public greenway along Fanno Creek to minimize flooding that would be exacerbated by the increases in impervious surfaces associated with her development and a pedestrian/bicycle pathway to help relieve traffic congestion in the City's central business district. Dolan alleged that the land dedication requirements were not related to her proposed development and constituted an uncompensated taking under the Fifth Amendment of the U.S. Constitution. In this case the U.S. Supreme Court ruled that there was not a reasonable relationship between the development and the requirement to dedicate land for a greenway and bike path. It ruled that there must be a "rational nexus" between a legitimate state interest and the permit condition. There must also be a "rough

proportionality” between the required dedication and the development project. The court found that in this case there was not a rational nexus between the dedication and the building expansion.

The court found that the City required that 15 percent of a property must remain as open space, but it never explained why land held as a private open space should be converted to a public open space and why this conversion was required in the interest of flood control. The city also did not demonstrate that the additional number of vehicle and bicycle trips generated by the expansion of the hardware store was reasonably related to the dedication for the bike path<sup>14</sup>.

The results of this case illustrate the need for cities that use exactions to develop standards and measurements that connect requirements to the impact of development. This means that a city cannot just say that it would be nice to have a bike path connecting its downtown to its suburban areas and then require property owners to dedicate the land for it. If a city wants to do this they must develop an exaction program that demonstrates both the need for the bike path and the impact that individual development has on bicycle travel. For example, a study might find that a subdivision with 100 homes generates 32 bicycle trips per day. The trip generation can then be tied to the need for a bicycle path, which can lead to a determination of what portion of the cost of the bicycle path should be borne by a developer.

The courts have typically used a two-part test to determine the legality of an impact fee. The first part of the test determines if the local government has the statutory authority to impose the impact fee under state law. This authority may be granted through enabling legislation explicitly or through general grants of authority, such as home rule statutes. Where there is not enabling legislation for exactions, courts have used the concept of implied authority to uphold the exactions. Implied authority comes from the valid exercise of police powers to protect the public health, safety, and welfare of a community where the local government has home rule authority.<sup>15</sup>

The second legal test of the validity of exactions is the application of state and federal constitutional standards, including due process, equal protection, and the taking of private property for public use without just compensation. The courts have used three tests to evaluate the reasonableness of exactions: the reasonably related, the specifically and uniquely attributable, and the rational nexus. The rational nexus is the most common legal text of impact fee ordinances.

The reasonably related test came out of the first case in which development exactions were upheld, the 1949 *Ayres v. City of Los Angeles* case. In this case the California Supreme Court found that there must be a reasonable relationship between an exaction and the need for infrastructure created by development<sup>16</sup>. This case requires a local government to link the impact fee charged with the need created by the new development. While this is a state court case, many other states also use this test. For example, several cases, including *Jordan v. Menomonee Falls* and *Collis v. Bloomington*, used the reasonable relationship test to test the relationship between a planned

subdivision and the municipality's dedication requirement.<sup>17 18</sup> In *College Station v. Turtle Rock Corporation*, the Court used the reasonable relationship test to uphold the City's right to assess a parkland dedication fee.<sup>19</sup> This is the loosest of the three court tests for the reasonableness of exactions.

The specifically and uniquely attributable test was established in the 1961 *Pioneer Trust and Savings Bank v. Village of Mount Prospect* case.<sup>20</sup> In this case the Illinois Supreme Court required that an impact fee be uniquely and specifically attributable to the incremental need for infrastructure. This means that the exact users of the new capital facilities must be documented and a determination must be made of precisely how the fee paid relates to the need for capital facilities. This is the most challenging and least used of the three legal tests as it is extremely difficult to document the exact level of infrastructure need generated for each new development. When this test is used the courts nearly always strike down exactions.

The rational nexus test is the third of the three tests for reasonableness. In *Longridge Builders, Inc. v Planning Board of the Town of Princeton*, a New Jersey court found that there must be a reasonable connection between an infrastructure need and new development.<sup>21</sup> The impact fee assessed by the Town of Princeton must not exceed the proportionate share of the cost to be incurred by providing infrastructure to service the new development. The rational nexus test also requires that there be a reasonable connection between the expenditure of the fee collected and the benefits received by the development (Robinson, 1990). The rational nexus test serves as the benchmark for the legality of impact fee ordinances, with impact fee ordinances that follow the rational nexus being likely to be upheld in a court challenge. Most courts, when determining if a rational nexus exists, ask the following questions:<sup>22 23</sup>

- Has the impact of new development been linked to the need for public facilities?
- Is the fee excessive or proportional?
- Is there a reasonable connection between the use of the fees and the benefits produced for the new development?

After a court evaluates the reasonableness of an exaction, it may evaluate whether the local government has followed the substantive and procedural standards set forth in the enabling legislation. This may include determining whether fees have been properly collected, kept in a separate account, refunded where appropriate, and so on.

In order to have an exaction that will withstand legal challenge, a local government must ensure that they have the legal authority to assess the exaction, have created a rational nexus between the development and the exaction, and follow the substantial and procedural standards established in enabling legislation where applicable. By following these legal standards, local governments will have established an exaction that is likely to withstand legal challenge.

Several recent court cases illustrate the test of the legal standards. The City of Ocean Springs, Mississippi adopted a development impact fee program to fund a variety of infrastructure and public facilities. The Mississippi Supreme Court in the City of Ocean Springs v, Homebuilders Association of Mississippi, Inc. found that the impact fee was a tax.<sup>24</sup> The Court found that Ocean Springs did not have the statutory authority to adopt impact fees. It found that the municipality needed enabling legislation in order to levy and collect this tax and that no such authority had been authorized. In this case, the impact fee ordinance did not pass the statutory test because Mississippi municipalities are not home rule. The Court did not evaluate whether the impact fee passed the rational nexus test because of its failure to pass the statutory authority test.

Passing the statutory authority test is critical to having impact fees that will withstand court challenges. A 2006 court decision in North Carolina found that counties do not have the statutory authority to assess impact fees. In Durham Land Owners Association v. County of Durham, the court found that counties do not have the statutory authority to assess school impact fees.<sup>25</sup> In this case, the county was required to refund the fees and pay interest. Another example is a case in Illinois. The Illinois Appellate Court ruled in 2002 that the Village of Newark lacked home-rule authority and therefore could not impose impact fees to pay for school construction.<sup>26</sup> In Illinois different types of municipalities do or do not have home rule authority; for example, villages do not have home rule authority.

The City of Beavercreek adopted a roadway impact fee to help pay for the cost associated with new roadway construction in a rapidly growing commercial area. The City created a fee that followed the rational nexus test. In the Homebuilders Association of Dayton and the Miami Valley v. City of Beavercreek, Ohio, the Ohio Supreme Court ruled that the city made an extraordinary effort to limit the fee to developments necessitating new transportation expenditures.<sup>27</sup> A deduction was made for “pass through” existing traffic, and specific exemptions were granted. The court found that the impact fee is in fact a fee and not a tax. In addition, while Ohio does not have impact fee enabling legislation, municipalities are granted home rule authority. In this case, the City of Beavercreek’s impact fee program passed the statutory requirements and the rational nexus test.

These cases illustrate the importance of meeting the three-part test of statutory authority, rational nexus, and substantial and procedural standards established in enabling legislation where applicable.

## Using Exactions to Finance Public Goods

Before considering the adoption of an exaction, a local government needs to consider a number of questions. To begin, what is the economic rationale for the use of exactions? The economic rationale is “the invisible hand” theorem, which argues that the market economy will do a better job than a central planner in determining how much of a particular type of development should be made and at what cost. The idea is that the profit motive of the private sector will lead developers to contain costs and use resources in the most efficient way. Therefore, the price of new construction will reflect the cost of providing infrastructure and public facilities.

While this is the economic rationale, should new growth have to pay the full cost of providing public facilities? Some public officials and taxpayers believe that new growth should. There are several issues that can be considered with this argument. First, existing taxpayers were subsidized when they bought new homes in a community. If an existing resident buys a new home in a community they pay the exaction, while the newcomer purchases an existing house and avoids the fee.

How is intergenerational equity addressed? Intergenerational inequity occurs if current users are disproportionately paying for long-term facilities. There can be a problem with intergenerational inequity when exactions are imposed. Essentially, homeowners have paid an upfront property tax. In addition to exactions, homebuyers will pay annual property taxes that pay for infrastructure that will be used by other residents in the community. If property taxes were utilized to pay for infrastructure needed to support new growth prior to the implementation of impact fees, then the infrastructure provided to existing residents was subsidized in part by prior generations of tax payers. The result is that this subsidy is being denied to new residents. In order to meet the rational nexus, impact fee programs should be designed to credit newcomers for their portion of property taxes, which will pay to retire the indebtedness on existing infrastructure that will not benefit the newcomers.

While many citizens argue that development should pay its own way and believe that, in theory, this means that the developer will absorb the cost of the exaction, the incidence of exactions could fall upon the landowner, developer, or homebuyer. In a tight housing market, the developer would pass the cost on to the builder and then on to the homebuyer. In an oversupplied market, the developer would pass the exaction back to the raw land owner through a lower purchase price. In an inbetween market, the developer would absorb the cost of the exaction.

While in theory the cost of the exaction can be passed forward, passed back, or absorbed, empirical studies have found that these theories don't always work. Most of the research on the incidence of exactions has specifically evaluated the affects of impact fees. Studies of raw land have mixed results, with some finding lower land prices<sup>28</sup> and others not<sup>29 30 31</sup>. In a study of vacant land prices in Toronto between 1977 and 1986, Skaburskis and Qadeer found that impact fees resulted in an increased price for vacant lots at a rate 20 percent greater than the fee.<sup>32</sup> A study of land prices in Florida and

Colorado found that there was no statistically significant difference in land prices in Colorado and that land prices were significantly higher in Florida in impact fee areas.<sup>33</sup> A study of land values in 43 Texas cities that impose impact fees found that for each \$1,000 increase in impact fees, lot values increase by 1.3 percent on developed lots. On undeveloped land, lot prices increase by 0.042 percent per \$1,000 in assessed impact fees.<sup>34</sup> A study of Dade County, Florida found that undeveloped land prices fell by 8 percent, approximately the amount of the impact fee assessed.<sup>35</sup> These results suggest that the impact fee is not pushed back to the undeveloped land owner, but instead to the homebuyer.

Even though the fee is charged to the developer or builder, studies have found that the fee is passed along to the developer<sup>36 37 38 39 40</sup>. These studies found that the price of a home is often increased by more than the price of the impact fee, varying from exactly to more than three times the impact fee. Delaney and Smith, in a study of Florida communities over a twelve year period, found that that the impact fee resulted in higher home prices for both new and existing homes in Dunedin compared to other communities<sup>41 42</sup>. A study of Loveland, Colorado found that the average prices of new homes increased 7 percent after impact fees were assessed. The study also found a substantial impact on existing housing because the assessment of an impact fee on new housing resulted in price increases of up to \$7,000. Sellers of existing houses could ask a higher asking price because the selling price of new homes was higher.<sup>43</sup> A study of King County, Washington between 1991 and 2000 found that new home prices increased by 166 percent of the impact fee.<sup>44</sup>

An increase in housing price leads to the question of equity and housing affordability. The studies mentioned above found that housing prices do increase when impact fees are put in place. Part of the explanation is that exactions and impact fees are capitalized into the cost of construction. For example, a developer buys 50 acres for a subdivision. The developer donates land for a park and pays the impact fee for each lot created at the time of platting. The developer then adds the cost of the exaction and impact fees to the raw land and subdivision costs and adds on a percent profit. Next the developer sells the lots to builders, who base their house prices on the price they paid for each lot. The house-to-lot price ratio is typically 4:1 or 5:1 for single family homes. If a builder purchases a lot for \$20,000, then they would build a home that costs between \$80,000 and \$100,000. If an exaction and impact fee totals \$5,000, then the price would go up to between \$100,000 and \$125,000. A homebuyer would now pay more to buy a home in the community, and he or she would also incur the added costs of a higher down payment, financing, and interest costs.

Impact fees may also have an effect on multifamily construction. In a study in Florida, water and sewer impact fees were found to have a negative effect on the rate of multifamily housing construction, while impact fees for other forms of infrastructure expand the multifamily housing stock.<sup>45</sup> This is the only study on the effects on multifamily housing, but if impact fees drive up the cost of single family housing then it would not be unreasonable to assume that it would also affect the rents paid for

multifamily units. The result is that an impact fee may be exclusionary, making housing in a community unaffordable to some groups of people.

As demonstrated above, impact fees can increase the cost of housing. This leads to the question of whether the market will optimally provide the housing that is needed for the community residents. Is housing, or some part of the housing market, a public good? Should local governments intervene and provide support for the development of affordable housing.

Are development exactions a form of regressive taxation? When property taxes are used to pay for public facilities, all members of the community contribute to the cost of facilities. This tax tends to be progressive, as the more expensive the house the more a person pays in property tax. Additionally, the homestead exemption limits the total amount paid in property. A homeowner that owns a \$100,000 house pays a smaller amount in property taxes than a homeowner that owns a \$500,000 house. However, with exactions the cost is allocated on per unit basis with the same rate applied to all units. The result is that rather than spreading the cost of facilities across the property tax base, with some paying less than the actual cost of facilities and others paying more, the cost is equal across units.

Some communities may specifically use exactions as an exclusionary tool to keep out newcomers that do not fit the community's preferred demographic profile.<sup>46</sup> One study found that the amount charged for impact fees went up if a local government believed that the impact fees were effective in acting in an exclusionary way.<sup>47</sup> Some states allow cities to waive an impact fee for any service unit that qualifies as affordable housing<sup>48</sup>. Another option is to implement linkage fees for affordable housing. These are both methods to minimize the problem of affordability in a community.

Another issue to consider with exactions is related to revenue generation. Exactions are typically paid at the time of the building permit, although they can be assessed earlier. However, infrastructure may be demanded in the first few years. Cities must finance infrastructure improvements until the exactions are provided. How much general revenue should a city initially allocate towards infrastructure?

Do impact fees result in a declining demand for infrastructure? Development impact fees may be used to transfer a portion of the capital cost for new infrastructure from the public to the private sector. For example, if the local government recovers 40 percent of the cost of extending a new roadway through impact fees, then the local government only needs to come up with 60 cents of each dollar needed to expand the roadway. This means that the local government could use the 40 cents they would have spent on the roadway, but is now being paid by the developer, for the provision of other governmental services. In effect, the impact fee serves as a deterrent to growth, which will be discussed further in the following paragraph. Alternatively, in a study of 85 cities, the use of impact fees is associated with lower levels of capital spending. In this study, cities with impact fees spent \$175 less per capita than did cities without a fee structure. The authors explain that the reduction in spending is a result of a price effect.



The impact fee increases the cost of development, which may reduce the demand by developers for new infrastructure.<sup>49</sup>

This argument is further supported by a study of growth rates. In a longitudinal study of DuPage County, Illinois between 1977 and 1992 residential growth declined by 25 percent in cities with development impact fees when compared to other cities in the county without impact fees<sup>50</sup>. The study found that the rate of development growth in impact fee cities was 3 percent per year, compared with 4.3 percent in nonfee cities<sup>51</sup>. Impact fees may act as a pricing mechanism that limits the demand for new infrastructure.

While some local governments may be concerned by a lower growth rate, it can be argued that the result is a more efficient city size.<sup>52 53</sup> Without revenue from impact fees a local government would not have the resources to finance infrastructure extensions to service new growth. Impact fees can be designed to mimic marginal cost pricing.<sup>54</sup> The cost of providing service to new residents may be higher than the cost of providing services to existing residents. In order for new residents to move in they can be required to pay the marginal cost of services. For example, if a developer wants to locate in a currently undeveloped area, the marginal cost model would require that developer to bear the full burden of extending the infrastructure, such as roads and utilities to service the development. With impact fees, the fee structure can be set based on service areas. If the cost to extend infrastructure is higher in one area of a city than another, the price of the fee can be set to reflect this cost difference. The result may be a more efficient city size, where developers will pay until the infrastructure cost is too high.<sup>55 56</sup> The result is that some types of development, such as leapfrog or low-density housing, may not be economically feasible.<sup>57</sup> In this case, in-fill development may be more economically feasible.<sup>58</sup>

Should cities use impact fees for debt financing? The most cited reason for cities to do so in one national study was that “citizens’ desire that new growth pay its way”, followed by a large increase in new home construction. For counties, the main reason for adopting impact fees was the “county’s inability to meet citizens’ demand for infrastructure and services”.<sup>59</sup>

In studying the use of impact fees in Sarasota, Florida, Nelson et al. found that impact fees had a positive effect on planning by eliminating the negotiating process that cities and developers had previously engaged in for infrastructure provision. The use of impact fees ensured that all development proposals were treated similarly, promoting equity.<sup>60</sup>

Impact fees must reflect the payments made towards existing infrastructure. A new household pays the exactions and impact fees, taxes that pay for the maintenance and rehabilitation of existing infrastructure, and service charges for the use of the existing infrastructure system. Some state enabling legislation requires that local governments provide a credit for the payments newcomers make that support existing facilities.

However, an impact fee that meets the rational nexus requirements will reflect the contributions towards the existing infrastructure network.

What portion of the cost of public facilities should be paid by the developer if less than the maximum minus the credit? If a city is promoting economic development should it charge lower exactions? It has been argued that exactions discourage growth and economic development, making cities that have adopted them less competitive with cities that have not. If the exactions are not in sync with adopted economic development policies they may discourage some nonresidential uses from locating in a community, although one study found no effect on employment growth<sup>61</sup>.

Should cities use exactions for financing public facilities? Each city has to determine whether exactions are the most appropriate financing mechanism to pay for public facilities. While exactions are popular because they shift payment to the developer, they are not a cure all. Local governments need to evaluate their infrastructure financing mechanisms. Which mechanisms are working best? For example, if most of the infrastructure investment is in repairing and replacing existing infrastructure, impact fees would not be a useful tool. Whereas if cities are constructing a large amount of new infrastructure and public facilities, impact fees may be an appropriate tool for generating revenue to pay for the infrastructure bond debt. Linkage fees may work well in communities that have severe affordable housing problems and it is difficult to build affordable housing given land and construction costs in the private market.

Who should use exactions? All of the issues above are complex. Each type of exaction requires a different level of administrative capacity. For example, before instituting impact fees a local government needs to establish a comprehensive plan, including land use assumptions, capital improvements program, and the impact fee ordinance. This can be cumbersome and costly, especially for smaller cities. A small city would need to hire a consultant to design its impact fee program. Staff time would be required to administer the impact fee program by collecting the impact fees and utilizing those funds to pay for infrastructure. If a small city lacks the administrative capacity to administer an impact fee program, it may not be practical to adopt impact fees. However, given the high cost of developing new infrastructure and the limited bonding capacity of small cities, impact fees can be an important tool for financing needed public facilities. One way that small cities can effectively utilize impact fees is by cooperating with larger municipalities. The City of Fort Worth, Texas provides water service to many of the surrounding smaller cities. Each city that receives water service from Fort Worth can choose to pay for the infrastructure expansions through its taxes or, in part, through the assessment of impact fees. Each city is responsible for establishing its own impact fee program, but it coordinates with the City of Fort Worth to provide the infrastructure. Under this system of intergovernmental cooperation each city maintains some autonomy in its impact fee program, but it is able to share information provided by the City of Fort Worth, which typically initiates the impact fee study updates that are then utilized by the other local governments to update their own impact fee program. Hurst is an example of a city that has utilized the information provided by Fort Worth to update its impact fee assessments.<sup>62</sup> For any community planning to utilize impact fees, there

must be adequate administrative capacity or the ability to hire capacity to administer a fee program that will meet the rational nexus standards.

Exactions can be an effective planning tool. By linking the comprehensive plan, capital improvements, and the methods for financing, local governments can create a fiscally sound plan that will provide the local government with sufficient revenue to support new growth. It is critical that local governments carefully evaluate the potential impacts of exactions before moving forward. There is limited research addressing each of the issues mentioned above. In the current climate of fiscal constraints, growing cities must find new and innovative ways to finance public facilities to accommodate expected growth. Exactions serve as one method for financing public facilities, but should not be the only one.

### **The Use of Dedications**

Dedications are used across the country for a wide array of purposes. Most commonly, dedications are for land and improvements internal to a development site. Below is a list of common land dedications required by local governments:

- Streets and alleys
- Bike paths
- Parks and recreation facilities
- Water and Sewer lines
- School sites
- Groundwater storage
- Stormwater drainage facilities
- Public access to waterways

Each state has its own stipulations about what can and cannot be required of a developer for a dedication. For example, California allows local governments to require sunlight easements to facilitate solar energy use and land for local transit facilities.<sup>63</sup>

### **The Use of Fees-in-Lieu**

Like dedications, fees-in-lieu are commonly used across the United States. Fees-in-lieu are most commonly used for land and facilities that would normally be provided as a dedication on-site. Fees-in-lieu are used when a development site is not suitable for the dedication. The most common type of fee-in-lieu is for parks and recreation facilities.

Parkland fee-in-lieu programs establish the minimum amount of acreage to be dedicated per unit and then multiply by the fair market value for the dedication requirement. For example, the City of Susanville, Nevada requires 0.081 acres of parkland for each dwelling unit in an R-1 zoning district.<sup>64</sup> If a developer plans to build a 10-unit subdivision, they would be required to provide 0.81 acres of land for park use. Because it would be impractical to build a park to service just 10 houses, the developer would be required to pay the fair market value of 0.81 acres. If the fair market value of land is \$100,000 per acre, the developer would pay \$81,000 to the City of Susanville for the property.

Fees-in-lieu can also be used for other types of facilities, such as those listed in the dedications section. Some communities have inclusionary zoning requirements for developers to build a certain percentage of new housing as affordable units. These ordinances in some cases offer the opportunity to pay a fee-in-lieu of construction of the required units. The City of Alameda, California requires 15 percent of new housing in a particular development be affordable. If a developer plans to build nine or fewer houses, they may opt to pay a fee-in-lieu. The City requires that the fee amount be set by the City Council based on the anticipated cost of constructing inclusionary units.<sup>65</sup>

### **The Use of Linkage Fees**

While dedications and fees-in-lieu are widely utilized across the country, linkage fees are more limited in their implementation. Linkage fees finance socially desirable facilities such as housing and day care facilities and programs such as job training. The fee is based on the connection between the need for socially desirable facilities and programs and the construction of new businesses.

Linkage fees are primarily used in locations where the cost of living is very high. Below is a list of communities where linkage fees have been implemented (note that this list is not all inclusive):

- Berkeley, California
- Concord, California
- Cupertino, California
- Los Angeles, California
- Livermore, California
- Menlo Park, California
- Oakland, California
- Petaluma, California
- Pleasanton, California
- Napa County, California
- Napa, California
- Sacramento, California
- San Diego, California
- San Francisco, California
- Santa Monica, California
- Sunnyvale, California
- Washington, DC
- Miami, Florida
- Key West, Florida
- Atlanta, Georgia
- Hawaii County, Hawaii
- Shreveport, Louisiana
- Boston, Massachusetts
- Cambridge, Massachusetts
- Somerville, Massachusetts

- Detroit, Michigan
- Philadelphia, Pennsylvania
- Seattle, Washington

The amount charged for linkage fees varies widely. Boston has generated more than \$45 million in linkage fees that have been used to construct almost 5,000 housing units since their program began in 1986. Boston's program, which applies to all large-scale commercial buildings, requires a fee of \$7.18 per square foot for housing and \$1.44 per square foot for job creation. These fees are paid over a seven- or twelve-year schedule, depending on location. In comparison, the City of San Francisco requires a linkage fee of \$7.05 per square foot for office uses with a 25,000 square foot exemption. In San Francisco the fee is paid in full upon the issuance of the building permit.<sup>66</sup> The calculation of linkage fees is complicated and must be calculated carefully. *A Practitioner's Guide to Development Impact Fee Calculation* provides detailed information on how to accurately calculate linkage fees.

### **The Use of Impact Fees**

The practice of using impact fees to offset the costs of growth and provision of infrastructure has been used in many states across the United States. The first impact fee was assessed by Broward County, Florida in 1977.<sup>67</sup> Texas adopted the first general impact fee enabling act in 1987. The first national studies of impact fees in 1985 found that the use of impact fees had spread rapidly across the United States.<sup>68</sup>

As of 2005, 26 states had adopted impact fee enabling legislation, as shown in Table 2.<sup>69</sup> More recently, Montana enabled impact fees in 2005 and Arkansas did so in 2003. Maryland, Tennessee, and North Carolina do not have enabling legislation, but have authorized the use of impact fees for individual local governments through special acts of legislature.

**Table 2. States with Impact Fee Authorizing Legislation, 2005**

<i>State</i>	<i>Year of Adoption</i>	<i>State</i>	<i>Year of Adoption</i>
Arizona	1988	New Jersey	1989
Arkansas	2003	New Mexico	1993
California	1989	Oregon	1991
Colorado	2001	Pennsylvania	1990
Georgia	1990	Rhode Island	2000
Hawaii	1992	South Carolina	1999
Idaho	1992	Texas	1987
Illinois	1987	Utah	1995
Indiana	1991	Vermont	1989
Maine	1988	Virginia	1990
Montana	2005	Washington	1991
Nevada	1989	West Virginia	1990
New Hampshire	1991	Wisconsin	1993

Source: Duncan and Associates

Other states, such as Florida and Ohio, do not have authorizing legislation but allow impact fees to be assessed through home rule authority. In these states, the ability of cities and counties to adopt impact fees has been established through case law. Alaska, Iowa, Massachusetts, Montana, New Jersey, New Mexico, Ohio, Oregon, South Carolina, and Utah all have home rule authority. Other states allow some local governments home rule authority. Alabama provides municipalities but not counties with home rule authority and California only provides charter cities with home rule authority.

Dillon's Rule is used in some states to determine whether a local government has the power to implement impact fees. Dillon's Rule states that local governments have only three types of powers: 1) those granted in express words, 2) those necessarily or fairly implied in or incident to the powers expressly granted, and 3) those essential to the declared objects and purposes of the corporation not simply convenient, but indispensable. Dillon's Rule states that if there is any reasonable doubt whether a power has been conferred, then the power has not been conferred<sup>70</sup>. Effectively, this means that local governments do not have any powers unless they are specifically enabled by the state. A total of 39 states use Dillon's Rule, of which 31 apply Dillon's Rule to all municipalities<sup>71</sup>.

Each state with enabling legislation has specific guidance for governments that wish to adopt impact fees. Their enabling legislation restricts the types of facilities for which impact fees may be used (see Table 3). For example, the enabling legislation in Texas limits home rule and general law cities to imposing impact fees for water, wastewater, drainage, and roadway infrastructure. It also provides specific requirements for a capital improvements plan, land use study, and methods for calculating impact fees.

There are differences in enabling legislation in terms of implementation. For example, of the enabling legislation across the country, most states require that the

impact fee revenues be expended within five to fifteen years or be refunded to the fee payer. The goal of these provisions is to ensure that the funds are being utilized to service new development. Time limits on impact fees ensure that the fees collected are spent in a timely manner. One challenge on rebates is determining to whom they should go. Should they go to the developer who initially paid the fee or the homeowner who ultimately paid the fee in the form of the purchase price of the home?

The time at which the impact fee is paid differs from state to state. One-third allow impact fees to be collected at any time during the development process. The remaining legislation limits the collection of the impact fees either to the time that the building permit is issued or to the time that the certificate of occupancy is issued. When the fee is collected is an interesting issue. If the fee is collected at the time of platting there is a chance that the property will not be built within the time during which the expending of the impact fees is required. If the impact fee is collected at the time of the building permit, the fee may not be paid before the time at which the infrastructure needs to be in place.

**Table 3. Types of Facilities for which Impact Fees can be Assessed, by State**

State	Road	Water	Sewer	Storm Water	Parks	Fire	Police	Library	Solid Waste	School
Arizona	X	X	X	X	X	X	X	X	X	
Arkansas	X	X	X	X	X	X	X			
California	X	X	X	X	X	X	X	X	X	X
Colorado	X	X	X	X	X	X	X	X	X	
Georgia	X	X	X	X	X	X	X	X		
Hawaii	X	X	X	X	X	X	X	X	X	X
Idaho	X	X	X	X	X	X	X			
Illinois	X									
Indiana	X	X	X	X	X					
Maine	X	X	X		X	X			X	
Montana	X	X	X	X	X	X	X	X	X	
Nevada	X	X	X	X	X	X	X			
New Hampshire	X	X	X	X	X	X	X	X	X	X
New Jersey	X	X	X	X						
New Mexico	X	X	X	X	X	X	X			
Oregon	X	X	X	X	X					
Pennsylvania	X									
Rhode Island	X	X	X	X	X	X	X	X	X	X
South Carolina	X	X	X	X	X	X	X			
Texas	X	X	X	X						
Utah	X	X	X	X	X	X	X			
Vermont	X	X	X	X	X	X	X	X	X	X
Virginia	X									
Washington	X				X	X				X
West Virginia	X	X	X	X	X	X	X			X
Wisconsin	X	X	X	X	X	X	X	X	X	

Source: Duncan and Associates

Note: In some states the authority to impose impact fees differs for cities and counties. This can include the authority to impose impact fees and the types of facilities for which impact fees can be imposed.

Approximately half of the impact fee legislation allows local governments to offer a waiver of impact fees for either affordable housing or economic development projects. Of those allowing waivers, half require local government to reimburse an impact fee fund from another revenue source for the funds lost by waiving the impact fee. Waiving impact fees for affordable housing can reduce the cost to the homebuyer, making housing more affordable. However, in the cases of impact fee waivers, the local government is ultimately absorbing the cost of providing infrastructure to service the new homes and businesses.



Most enabling acts make no mention of crediting developments with their past or future revenue contributions. Texas is an exception to this rule. The Texas enabling act requires that developments be credited with their contribution in the form of other taxes or fees that are used for capital improvements of the same facility type that the impact fee requires. The intent of this law is to provide credit for the taxes and fees that homeowners will pay to support other similar infrastructure improvements. The issues section above discusses the importance of a fair impact fee that recognizes the contribution of new development more thoroughly.

Impact fees are widely used, as shown in Table 4. Communities undergoing significant growth, especially on the urban fringe, are the most likely to adopt them. A study by Purdum and Frank found that the utilization of impact fees follows a U-shape.<sup>72</sup> The study found that communities with low and high growth use the fees more than those with moderate growth.

**Table 4. Non-inclusive List of Cities with Impact Fees**

Bentonville	AR	Scotts Valley	CA	Las Cruces	NM
Conway	AR	St. Helena	CA	Los Lunas	NM
Fayetteville	AR	Vacaville	CA	Rio Rancho	NM
Apache Junction	AZ	Windsor	CA	Ruidoso	NM
Avondale	AZ	Basalt	CO	Santa Fe	NM
Buckeye	AZ	Boulder	CO	Las Vegas	NV
Casa Grande	AZ	Colorado Springs	CO	Mesquite	NV
Chandler	AZ	Commerce City	CO	Reno	NV
Chino Valley	AZ	Durango	CO	Amherst	OH
Eloy	AZ	Eagle	CO	Beavercreek	OH
Florence	AZ	Ft. Collins	CO	Delaware	OH
Fountain Hills	AZ	Loveland	CO	Middletown	OH
Gilbert	AZ	Windsor	CO	North Royalton	OH
Glendale	AZ	Altamonte Springs	FL	Ontario	OH
Goodyear	AZ	Apopka	FL	Moore	OK
Marana	AZ	Cape Coral	FL	Bend	OR
Mesa	AZ	Cocoa	FL	Eugene	OR
Oro Valley	AZ	Daytona Beach	FL	Hillsboro	OR
Payson	AZ	Deland	FL	Salem	OR
Peoria	AZ	Deltona	FL	West Linn	OR
Phoenix	AZ	Edgewater	FL	Franklin	SC
Prescott	AZ	Eustis	FL	Hilton Head	SC
Queen Creek	AZ	Ft. Myers	FL	LaVergne	SC
Scottsdale	AZ	Lakeland	FL	Mt. Pleasant	SC
Sedona	AZ	Matland	FL	Smyrna	SC
Show Low	AZ	North Port	FL	White House	SC
Sierra Vista	AZ	Oakland	FL	Allen	TX
Surprise	AZ	Ocoee	FL	Arlington	TX
Tempe	AZ	Orlando	FL	Baytown	TX
Tucson	AZ	Palm Bay	FL	Carrollton	TX

Bakersfield	CA	Palm Beach Gardens	FL	College Station	TX
Brea	CA	Palm Coast	FL	Colleyville	TX
Carlsbad	CA	Port Orange	FL	Denton	TX
Carpinteria	CA	Rockledge	FL	Fairview	TX
Citrus Heights	CA	Tampa	FL	Flower Mound	TX
Clovis	CA	Winter Garden	FL	Ft. Worth	TX
Davis	CA	Winter Springs	FL	Fredericksburg	TX
Elk Grove	CA	Alpharetta	GA	Georgetown	TX
Escondido	CA	Atlanta	GA	Justin	TX
Fremont	CA	Canton	GA	Kennedale	TX
Gilroy	CA	Roswell	GA	McKinney	TX
Hayward	CA	Boise	ID	Plano	TX
Highland	CA	Post Falls	ID	Round Rock	TX
Lancaster	CA	Aurora	IL	Rowlett	TX
Livermore	CA	DeKalb	IL	San Marcos	TX
Lodi	CA	Fishers	IN	Watauga	TX
Long Beach	CA	Noblesville	IN	Draper	UT
Orinda	CA	Lenexa	KS	Provo	UT
Palo Alto	CA	Olathe	KS	Sandy City	UT
Paso Robles	CA	Overland Park	KS	Tooele	UT
Redding	CA	Baton Rouge	LA	West Jordan	UT
Redlands	CA	Cambridge	MD	West Valley	UT
Rialto	CA	Kansas City	MO	Leesburg	VA
Ripon	CA	Lee's Summit	MO	Burlington	VT
Rocklin	CA	Madison	MS	Williston	VT
Sacramento	CA	Bozeman	MT	Bothell	WA
Salinas	CA	Cary	NC	Burlington	WA
San Diego	CA	Durham	NC	Kirkland	WA
San Francisco	CA	Lincoln	NE	Tumwater	WA
San Leandro	CA	Concord	NH	Cedarburg	WI
San Luis					
Obispo	CA	Fremont	NH	Fitchburg	WI
Santa Maria	CA	Manchester	NH	Hudson	WI
Santa Paula	CA	Salem	NH	Oconomowoc	WI

Source: Duncan Associates<sup>73</sup> and Author

As illustrated in this section, impact fees vary significantly from state to state in terms of the types of facilities that can be financed, whether they are enabled, and the implementation requirements. It is critical to review state enabling legislation before proceeding with the creation of an impact fee program.

In implementing an impact fee system it is important that each community develop an individualized implementation program. An impact fee ordinance in one city cannot simply be placed on another city with the exact same fees. Adopting impact fees requires a significant investment of time on the part of a local government to determine the facility needs, costs, and anticipated amount of development. How should a local government implement an impact fee program? Impact fees cannot simply be developed out of thin air. There are a series of steps that should be followed to meet the rational

nexus. *A Practitioner's Guide to Development Impact Fees* provides additional detail on the steps outlined below.

**Step 1:** To start, the local government needs to determine whether there is enabling legislation in place that authorizes the use of impact fees and the conditions under which they may be implemented. If there is not enabling legislation, case law on impact fees in the state needs to be examined.

**Step 2:** Next, the local government can appoint a committee made up of community stakeholders, including staff, builders, developers, citizens, and elected officials, to undertake a comprehensive assessment of the need for impact fees and to develop guidelines for program implementation.

**Step 3:** The local government's comprehensive plan should identify areas where new growth is anticipated, as well as the types of growth that will be occurring in the community. This includes forecasting population, employment, and land use consumption, as these areas of growth are used to anticipate the demand for new public facilities. The comprehensive plan may go into sufficient detail about future growth, or there may be a need for a separate impact fee study over the next five, ten, and fifteen years. The future population and future land use are critical pieces of information needed to calculate impact fees. State enabling legislation in some states requires the definition of the amount and type of growth expected in a specified future period ("future" may be identified in the state enabling legislation and could be between five and 15 years).

**Step 4:** The community may have facility plans in place, or may need to determine future facility demand. Any facility plans should identify when new facilities will be needed to service future residents and should be based on the build-out condition of the community.

What are the appropriate measures for different types of impact fees? The appropriate measure will vary by facility. For example, trip generation rates are used to determine the impact of a new development on a roadway. The Institute of Transportation Engineers (ITE) publishes trip generation rates by land use.<sup>74</sup> For example, ITE reports that a single-family detached house generates an average of 9.57 trips per day.<sup>75</sup> This can be used as a basis for formulating the facility demand or the local government may choose to develop its own trip generation study.

**Step 5:** The local government must identify its capital improvements program. This program outlines the specific facility needs in the identified growth areas, including the cost and time of construction. The capital improvements program should identify the specific public facilities required to service the identified growth areas, along with their anticipated cost. Many capital improvement programs are for five to seven years. There may be a need to calculate the capital improvement needs over a longer period of time.

**Step 6:** How will the capital improvements program be financed? It takes a substantial commitment of funds to pay for a capital improvements program. The source

of revenue to pay for these facilities needs to be identified. The sources of revenue can include the general fund, grants, bonds, user fees, impact fees, and other sources of revenue.

**Step 7:** A local government must clearly articulate the rules and assumptions behind the impact fees. It should identify how much of the infrastructure cost it seeks to finance through impact fees—for example, 50 percent of the cost of new infrastructure will be borne by the developer. This could be determined based on the shortfall in financing infrastructure from other revenue sources. The terms of the impact fees must be identified, such as when the impact fee is paid, if there is a rebate procedure, and any waivers of fees.

**Step 8:** A local government must determine the exact method for calculating the impact fee. There can be a significant challenge in calculating impact fees for different types of public facilities. Utilities such as water and sewer have separate enterprise funds and fees-for-service that make their financing less complicated. However, facilities financed from the general fund can pose greater difficulties in estimating fair impact fees. There are several methods for assessing impact fees. The method selected should evaluate state enabling legislation where available, a community's goals, and standardized methods of calculation.

Of critical importance is determining the service unit. The calculation of a service unit is based on the existing level of service within a specified service area. The level of service is a ratio of the value of existing facilities and equipment to existing service units. For example, school service units represent the demand for school facilities generated by a typical single-family house. They are based on the average number of school children per service unit for various land uses. To ensure that new development does not pay twice for the same service, the debt on existing facilities is provided as a credit. Existing excess capacity in service districts should also be recognized as part of the credit. *A Practitioner's Guide to Development Impact Fees* outlines detailed formulas for calculating impact fees.<sup>76</sup> The scope of this lesson does not include the exact formulas, but instead focuses on the primary methods for fee calculation.

Impact fees must be calculated in a way that will match the rational nexus criteria. The primary method for calculating development impact fees is based on a capital improvements program. Effectively, a capital improvements program is based on the new facility needs attributable to new development. This information is then tied to projected development impacts. Appendix B provides an example of impact fee calculations. Additionally, *A Practitioner's Guide to Development Impact Fees* provides numerous examples of each of these methods.<sup>77</sup>

**Step 8:** The administrative implementation must be established, including setting up separate accounts, tracking collection and expenditures, enforcing payment of the fees, and refunding unspent funds. These implementation procedures should be based on state enabling legislation where available.

In order to have a successful impact fee program, a local government needs to ensure that the long range plans for its community adequately project future demand for public facilities. Additionally, a local government needs to use appropriate methodologies and procedures for developing impact fee programs to ensure that the programs will withstand legal review.

Before implementing an impact fee program, planners and planning commissioners should talk to other cities about their experience using impact fees. Have the impact fees resulted in adequate revenue for sewer systems? Have impact fees resulted in adequate parkland? Have impact fees resulted in housing affordability problems? Have impact fees resulted in problems with recruiting businesses to move into the community? These are the types of questions planners should ask before developing an impact fee program.

### **Conclusion**

In summary, exactions are intended to contribute to the cost of providing public facilities to service new development. In order to use exactions, local governments must ensure that the exactions are allowed under state statute, meet the rational nexus test, and follow any administrative or procedural requirements established by the state. Before enacting exactions, the local government needs to tie together comprehensive planning, capital improvements planning, and financial planning. By combining these three planning processes the local government will ensure that it has adequate revenue to support growth.

As local governments face increasing fiscal barriers, they will increasingly rely on passing the burden of new facilities to developers. There are many issues that cities need to consider before developing an impact fee program. Local governments must ensure that they fully understand the potential ramifications of the use of exactions and mitigate for any negative effects. Staff are needed to administer exactions, so the local government should evaluate any additional administrative staff requirements prior to adoption of exactions.

Exactions are one financial and planning tool to assist local governments in financing the impacts of new development. Exactions should be used in concert with other financial tools such as bonds, developer agreements, and general fund revenue to cover the cost of new facilities.

**Instructor's Name**  
**Course Name and Number**  
**In-Class Exercise: Exactions and New Development**

Overview: This exercise is designed to get students talking and thinking about exactions.

- 1) When would you use each type of exaction and under what circumstances?
- 2) What is the constitutional basis for exactions?
- 3) What are the rationales for exactions from a legal perspective? What about from an economics perspective?
- 4) What are the necessary administrative preconditions to successfully implement each type of exaction?
- 5) Which types of exactions work well with different levels of administrative capacity?
- 6) How are exactions tied to the comprehensive planning process?
- 7) What are the intergenerational equity issues with exactions?
- 8) What are the social justice issues related to exactions?
- 9) Who ultimately pays for exactions? Who could potentially pay for exactions?
- 10) Should development pay its own way? Why or why not?

**Instructor's Name**  
**Course Name and Number**  
**In-Class Exercise: Exactions and New Development**

Overview: This exercise is designed to provide students an overview of impact fee programs in local governments. The purpose of this exercise is to allow students the opportunity to better understand how impact fees are administered.

Step 1: Divide students into groups of three or four.

Step 2: Provide each student team an example impact fee ordinance. The instructor could choose to select ordinances from their home state. ImpactFees.com under the local link provides an extensive list of links to impact fee ordinances, schedules, procedures, and studies.

Step 3: Ask each team to read their impact fee ordinance and answer the following questions:

- a. For what types of infrastructure can the impact fees be assessed?
- b. Does the ordinance specify the impact fee dollar amount, or does it specify how the impact fee is calculated?
- c. Does the ordinance specify when the impact fee is paid?
- d. Does the ordinance have a provision for credits? If so, how is it calculated?
- e. Does the ordinance connect land use planning to impact fees?
- f. Is the ordinance clear and easy to understand?
- g. Does the ordinance provide sufficient guidance to its staff to develop the impact fee program?

Step 4: Engage in a class discussion about the similarities and differences between the ordinances. Does one community charge substantially more than another? For what types of infrastructure do the impact fees pay? Discuss the questions listed above.

**Instructor's Name**  
**Course Name and Number**  
**Assignment: Exactions and New Development**  
**Due Date: \_\_\_\_\_**

Overview: This assignment is designed to give you an overview of exaction programs in local governments. You are asked to select a local jurisdiction that you will study in order to evaluate the connection between land use planning, capital budgeting, and exactions. You will obtain the local documents as noted below, review them, and interview key officials in order to evaluate the planning process in the jurisdiction. This assignment can be done individually or as a team. The assignment, when turned in, should be approximately five pages in length.

Step 1: Identify a community that has impact fees.

Note: The instructor can pre-identify a list of 10 or more communities that have their impact fees or linkage ordinance programs as well as their comprehensive plans online.

Step 2: Obtain existing written documents. You will need to obtain copies of the community's comprehensive plan, capital improvements program, and impact fee or linkage fee ordinance. This is the minimum number of documents needed, but you may find that you need to obtain additional documents as well.

Step 3: Review the local government's comprehensive plan. Is this a growing community? What type of development is forecasted for in the future? What public facility needs are identified in the comprehensive plan? Does there appear to be a direct connection between the needs of the comprehensive plan and the facilities that are being assessed in the impact or linkage fee? Document the specific public facility needs identified in the comprehensive plan.

Step 4: Review the local government's capital improvements program. What time frame do the capital improvements cover? What public facilities identified in the capital improvements program are part of the impact fee or linkage fee program? What portion of the capital improvements program is attributable to new development? What is the relationship between the capital improvements program, the comprehensive plan, and impact fees?

Step 5: Review the impact or linkage fee ordinance and associated program documents. What public facilities are paid for through fees collected? What portion of the cost of public facilities is paid for by the fees? Who is responsible for administering the fee program?

Step 6: Interview the person that is responsible for administering the impact or linkage fee program to better understand how the program works in the local government. Create a list of questions, such as the following; How much revenue has been generated by the fee program? How have developers responded to the impact fee program? Do you think the fee program has resulted in an increase in the cost of development? For impact fee



programs, has the program had an impact on the development of affordable housing in the community? For linkage fee programs, has the program had an impact on economic development and job creation? How is the fee program linked to long range planning in the community?

Step 7: Evaluation. Based on your review, does this impact fee program meet the rational nexus test? Could the fee program be more closely tied to land use planning? What recommendations would you have if you were responsible for administering the fee program?

Written report: The written report should include answers to the above questions. Include references to the documents that you reviewed as part of this project. The report should include an introduction providing an overview of the community you have selected.

## Bibliography and Suggested Readings

Fulton, William. 1987. Exactions Put to the Test. *Planning*. December.

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**Appendix A**  
**Model Impact Fee Ordinance**

The National Institute of Municipal Law Officers, Inc. developed a model impact fee ordinance to be used for classroom purposes. The findings of this ordinance link planning to capital improvements and new development. The model ordinance provides the conditions under which fees can be assessed, how fees are calculated, and conditions under which fees must be refunded. This model ordinance provides all of the critical elements that should be included if a city wishes to develop an impact fee program.

ORDINANCE NO. \_\_\_\_\_

AN ORDINANCE OF THE CITY/TOWN OF \_\_\_\_\_ ADDING  
ARTICLE 22-1 TO THE \_\_\_\_\_ MUNICIPAL CODE

Article 22-1

Sections:

22-101 Authorization.

22-102 Purpose and Intent.

22-103 Findings.

22-104 Applicability.

22-105 Exemptions.

22-106 Definitions.

22-107 Notice and Hearing Required for Establishing or Increasing an Impact Fee.

22-108 Imposition, Calculation and Collection of Impact Fees.

22-109 Impact Fee Accounts.

22-110 Use of Impact Fee Proceeds.

22-111 Refunds.

22-112 Audits.

22-113 Protests and Appeals.

22-114 Statute of Limitations.

22-115 Variances and Exceptions.

22-116 Amendment Procedures.

22-117 Credits.

22-118 Conflicts.

22-119 Severability.

**22-101 Authorization.**

This ordinance is enacted pursuant to the general police power, the authority granted to cities by the State Constitution, and State Code Sections \_\_\_\_ through \_\_\_\_.

**22-102 Purpose and Intent.**

This ordinance is for the purpose of requiring that new development pays for its fair share of public facilities through the imposition of impact fees which will be used to finance, defray or reimburse the City for all or a portion of the costs of public facilities which serve such development. The amount of each impact fee shall be calculated based upon the gross square footage of nonresidential development, number of residential dwelling units, type or density or intensity of use, trip generation, or other appropriate methodology which insures that the fee is roughly proportional to the impacts of new development on public facilities. The City assumes responsibility for and will pay for with general city revenues all public facility needs for existing development.

**22-103 Findings.**

The City Council hereby finds that:

- a. The City assumes the responsibility for and is committed to providing public facilities at levels necessary to cure any existing deficiencies in already developed areas.
- b. Impact fees collected pursuant to this article shall not be used to cure existing deficiencies in public facilities.
- c. New residential and nonresidential development imposes increased and excessive demands upon City public facilities.
- d. Planning, economic and demographic studies project that new development will continue and will place ever-increasing demands on the City to provide public facilities to serve the new development.

e. The development potential and property values of properties in the designated benefit areas are strongly influenced by City policy as expressed in the comprehensive plan and as implemented by the city zoning ordinance and map.

f. To the extent that new development in designated benefit areas, places demands upon the public facilities, those demands should be satisfied by shifting the responsibility for financing the provision of such facilities from the public to the development creating the demands.

g. The City Council, after careful consideration of the following studies (list them) and the experience of other similarly situated cities, finds that the imposition of impact fees to finance specified major public facilities in designated benefit areas, the demand for which is created by new development, is in the best interests of the general welfare of the City and its residents, is equitable, and does not impose an unfair burden on new development.

#### **22-104 Applicability.**

Unless expressly excepted or exempted, this ordinance applies to all fees imposed by the City to finance public facilities attributable to new development, including without limitation:

- a. Sewer connection charges;
- b. Water connection charges;
- c. Park and recreation fees;
- d. Drainage fees;
- e. Thoroughfare and bridge fees;
- f. School and child care fees;
- g. Library fees;
- h. Police and fire fees;
- i. Transportation improvement fees;
- j. Public art and cultural events fees; and
- k. Civic center fees.

## **22-105 Exemptions.**

The provisions of this ordinance do not apply to:

- a. Taxes and special assessments;
- b. Fees for processing development applications;
- c. Fees for enforcement of or inspections pursuant to regulatory ordinances;
- d. Fees collected under development agreements;
- e. Fees imposed pursuant to a reimbursement agreement between the City and a property owner for that portion of the cost of a public facility paid for by the property owner which exceeds the need for the public facility attributable to, reasonably related to, and roughly proportional to the development;
- f. Fees to mitigate impacts on the environment; or
- g. Fees imposed, levied or collected by other governmental agencies including subdivisions of the state and federal government.

## **22-106 Definitions.**

As used in this ordinance:

- a. *Benefit area* means the geographic area within which impact fees are collected and expended for a particular type of capital improvement serving development projects within such area.
- b. *Capital improvement* means land or facilities for the storage, treatment or distribution of water; for the collection, treatment, reclamation or disposal of sewage; for the collection and disposal of stormwaters and for flood-control purposes; for purposes of transportation and transit, including without limitation, streets, street lighting and traffic-control devices and supporting improvements, roads, overpasses, bridges, airports, and related facilities; for parks and recreational improvements; for public safety, including police and fire facilities; for schools and child care facilities; for libraries and public art; for public buildings of all kinds; and for any other capital project identified in the City's Capital Improvements Plan. *Capital improvement* also includes design, engineering, inspection, testing, planning, legal land acquisition and all other costs associated with construction of a public facility.
- c. *Capital Improvements Plan* means the five-year plan for capital improvements, adopted annually by the Council, describing the approximate location, size, time of availability and estimated cost of capital improvement projects and identifies sources of funding for capital improvement projects.

d. *Capital Improvements Project List* means the list attached to the annual Council resolution setting the base fee amount for each specific impact fee. The list shall describe the approximate location, size, time of availability and estimated cost of each capital improvement to be funded from a particular impact fee account.

e. *Collection* means the point at which the impact fee is actually paid over to the City.

f. *Commitment* means earmarking impact fees to fund or partially fund capital improvements serving new development projects.

g. *New development* or *development project* means and includes any project undertaken for the purpose of development, including without limitation a project involving the issuance of a permit for construction, reconstruction, or change of use, but not a project involving the issuance of a permit to operate or to remodel, rehabilitate, or improve an existing structure, nor the rebuilding of a structure destroyed or damaged by an act of God, nor the replacement of one mobile home with another on the same pad if no dwelling unit is added.

h. *Dwelling unit* means one or more rooms in a building or a portion of a room, designed, intended to be used, or actually used for occupancy by one family for living and sleeping quarters, and containing one kitchen only, and includes a mobile home, but not hotel or motel units.

i. *Impact fee* means any monetary exaction imposed by the City as a condition of or in connection with approval of a development project for the purpose of defraying all or some of the cost of or repayment of costs previously expended from other City funds for capital improvements relating to the project.

j. *Impose* means to determine that a particular development project is subject to the collection of impact fees as a condition of development approval.

k. *Nonresidential development project* means all development other than residential development projects.

l. *Residential development project* means any development undertaken to create a new dwelling unit or units.

#### **22-107 Notice and Hearing Required for Establishing or Increasing an Impact Fee.**

a. Prior to establishing or increasing of any impact fee the City Council shall hold a public hearing at which oral and written testimony may be given.

b. Notice of the time and place of the public hearing, including a general explanation of the matter to be considered, shall be published for a minimum of ten days prior to the hearing, in a newspaper regularly published at least once a week. The period of notice commences upon the first day of publication and terminates at the end of the tenth day.

c. At least ten days prior to the public hearing, the City shall make available to the public data showing the amount, or the estimated amount of the impact fee, and a summary of the basis for the calculation of the impact fee amount.

d. Council action to establish or increase any impact fee shall be taken only by ordinance or resolution.

e. Any costs incurred by the City in preparing for and conducting the public hearing may be recovered as a part of the impact fees which are the subject of the hearing.

#### **22-108 Imposition, Calculation and Collection of Impact Fees.**

a. Except as provided in this ordinance and any amendment to this ordinance, the City shall impose impact fees as a condition of approval of all new development projects. No tentative or final subdivision map, parcel map, grading permit, building permit, final inspection, or certificate of occupancy, or other development permit, may be approved unless the provisions of this section have been fulfilled.

b. Impact fees shall be imposed by including the following language in any document of development approval:

Approval of this project is conditioned upon payment to the City of all applicable impact fees and connection fees, as provided in Article 22-1 of the Municipal Code.

c. Impact fees shall be collected by the City Engineer at the time, and as a condition of issuance of a building permit, except that the connection fees shall be collected at the time of application for connection to the utility system.

#### **22-109 Impact Fee Accounts.**

a. The City shall establish an impact fee account for each benefit area, as designated by the City Engineer, for each type of capital improvement for which an impact fee is imposed, and impact fees collected shall be deposited in each such account according to type of improvement and benefit area. The funds of the account shall not be commingled with other funds of the City. Any account previously established for the deposit of funds which would have been developer impact fees under this article shall be deemed an impact fee account for the purposes of this article.

b. Each impact fee account shall be interest-bearing and the accumulated interest shall become a part of the account.

c. The funds of each account shall be expended within the benefit area exclusively for the capital improvements for which the impact fees were collected.



### **22-110 Use of Impact Fee Proceeds.**

a. Impact fees shall be expended only for the type of capital improvements for which they were imposed, calculated, and collected and according to the time limits and procedures established in this article. Impact fees may be used to pay the principal, interest and other costs of bonds, notes and other obligations issued or undertaken by or on behalf of the City to finance such improvements.

### **22-111 Refunds.**

a. Except as described in subsection b of this section, upon application of the property owner, the City shall refund that portion of any impact fee which has been on deposit over five years and which is unexpended and uncommitted. The refund shall be made to the then-current owner or owners of lots or units of the development project or projects.

b. If fees in any impact fee account are unexpended or uncommitted for four or more years after deposit, the City Council shall make findings, at least once each fiscal year while such condition prevails, to identify the purpose to which such fees shall be put and to show a roughly proportional and reasonable relationship between the fee and the purpose for which it was collected. If the Council makes such findings, the fees are exempt from the refund requirement.

c. The City may refund by direct payment, by offsetting the refund against other impact fees due for development projects by the owner on the same or other property, or otherwise by agreement with the owner.

### **22-112 Audits.**

A property owner may request an audit to determine whether the impact fee imposed is roughly proportional to or exceeds the amount reasonably necessary to finance capital improvements attributable to the development project. The City Council shall then retain a qualified, independent auditor and he or she shall determine whether the fee is appropriate. The City may require as a condition of the right to such an audit, that the property owner pay for the cost of the audit and deposit with the City a sum equal to the reasonable estimated cost of the audit. The decision of the independent auditor is final unless appealed to the Council by the property owner as provided by this article.

### **22-113 Protests and Appeals.**

a. A person may protest or challenge the imposition of a fee imposed pursuant to this article by filing, with the City Clerk within ten days following mailing of notice of the auditor's decision to the appellant, a written notice of appeal with a full statement of the grounds, and an appeals fee of two hundred dollars or such other amount as may be fixed from time to time by resolution of the City Council. The City may continue processing the development application if the notice of appeal is accompanied with a bond or other security in an amount equal to the impact fee.

b. The appellant bears the burden of proof to demonstrate that the amount of the fee was not calculated according to the procedures established in this article.

c. At a regular meeting following the filing of the appeal, the City Council shall fix a time and place for hearing the appeal and the City Clerk shall mail notice of hearing to the appellant at the address given in the notice of appeal. The hearing shall be conducted at the time and place stated in the notice and the determination of the Council shall be announced at the conclusion of the hearing or at the next regular meeting of the Council. The determination of the City Council shall be final.

#### **22-114 Statute of Limitations.**

Any judicial action or proceeding to attack, review, set aside or annul the reasonableness, legality, or validity of any impact fee must be filed and service of process effected within ninety days following the date of imposition of the fee or the final determination of the City Council, whichever is later.

#### **22-115 Variances and Exceptions.**

Petitions for variances and exceptions to the application of this article shall be made in accordance with Section \_\_\_ of the City Code.

#### **22-116 Amendment Procedures.**

At least once each year, prior to the City Council's adoption of the budget and revisions to the Capital Improvements Project List, the Director of Finance shall report to the City Council with:

- a. Recommendations for amendments to this article and to other parts of this code and to resolutions establishing impact fees;
- b. Proposals for changes to the Capital Improvements Project List, identifying capital improvements to be funded, in whole or in part, by impact fees;
- c. Proposals for changes in the boundaries of benefit areas; and
- d. Proposals for changes to impact fee rates and schedules.

#### **22-117 Credits.**

- a. A property owner who dedicates land or agrees to participate in an assessment district or otherwise contributes funds for capital improvements, as defined in this article, may be eligible for a credit for such contribution against the impact fee otherwise due.
- b. The City Engineer shall determine (1) whether the contribution meets capital improvement needs for which the particular impact fee has been imposed; and (2)

whether the contribution will substitute for or otherwise reduce the need for capital improvements anticipated to be provided with impact fee funds; and (3) the value of the developer contribution. In no event, however, shall the credit exceed the amount of the otherwise applicable impact fee.

c. Any application for credit must be submitted at or before the time of development project approval on forms provided by the City. The application shall contain a declaration of those facts, under oath, along with the relevant documentary evidence which qualifies the property owner for the credit.

**22-118 Conflicts.**

In the event of a conflict between the provisions of this article and the provisions of any other ordinance or resolution establishing or amending impact fees, the provisions of this article shall govern.

**22-119 Severability.**

If any section, subsection, sentence, clause, phrase or portion of this article is for any reason held to be invalid or unconstitutional by the final decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this article. The City Council declares that it would have adopted this article and each section, subsection, sentence, clause, phrase or portion thereof, irrespective of the fact that any one or more sections, subsections, phrases or portions be declared invalid or unconstitutional.

## **Appendix B**

### **Example Impact Fee Calculations**

The City of Albuquerque adopted development impact fees in 2005. The City assesses impact fees for drainage, parks, public safety, and roadway facilities. This example explores how impact fees are calculated for individual facilities. The information contained in this example comes from the City of Albuquerque website. More information about Albuquerque's impact fee program can be obtained from <http://www.cabq.gov/council/impactfees.html>.

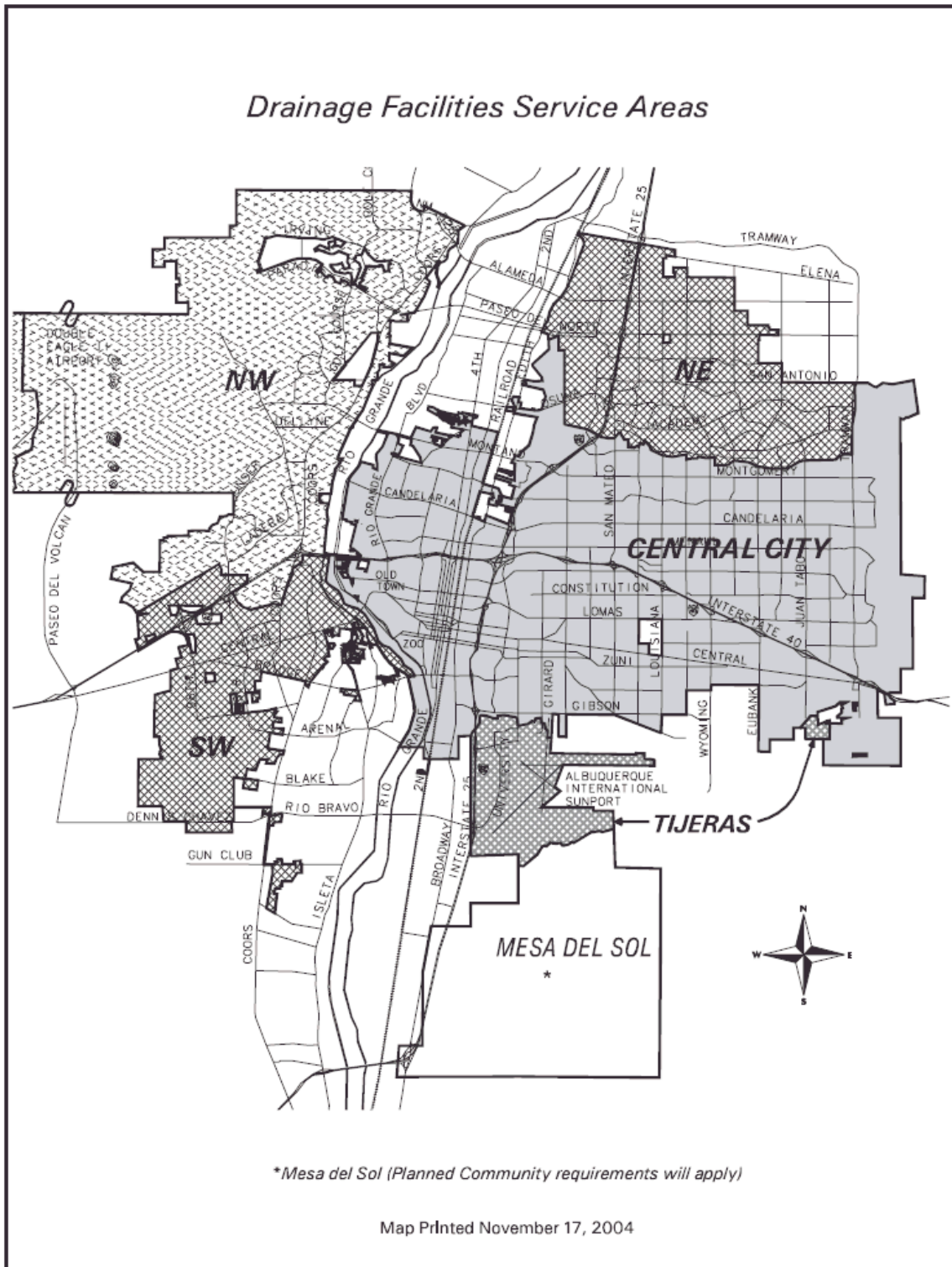
#### **Drainage Impact Fee**

This example uses the City of Albuquerque's methodology for determining the impact fee for storm water drainage facilities.

The City began by developing land use assumptions that identified the anticipated population growth, amount of land to be developed, and the types of land uses anticipated. After evaluating the anticipated growth in the City over the next 20 years, the City created drainage plans that were evaluated prior to calculating the impact fee. The City and its consultants, Integrated Utilities Group, Inc., removed the projects that were no longer needed based both on anticipated growth and on whether they would rehabilitate existing infrastructure or would not be constructed by the City. The costs for these projects were then updated to today's dollars.

The next step was to establish service areas that met the rational nexus test. This meant that the developments in each service area had to be tied to where storm water runoff would flow. The city includes a number of drainage basins. Each project identified in the drainage facility plans was assigned to the appropriate drainage basin (service area), as shown in Figure 1. Developing service areas allows projects to be assigned based on hydrologic planning areas and outfalls to rivers.

Figure 1. Albuquerque Drainage Facilities Service Areas



Source: City of Albuquerque

The next step was to determine the total cost of the stormwater improvement projects through 2025, as shown in Table 1. The project costs are based on the facility needs to provide protection of major structures in the event of a 100-year flood. This cost should provide a credit for anticipated payments by new units towards existing debt for facilities in the service areas. Following the determination of the project costs by service area, the city needed to determine the anticipated number of service units. A service unit is one acre of impervious surface.

Table 1. Cost of Drainage Projects

<b>Service Area</b>	<b>Basin Area (acres)</b>	<b>Total Cost of Projects to 2025 in 2004 \$s</b>
Northwest	15,490	\$62,237,473
Far Northeast	11,753	\$15,044,434
Fully Served	40,250	\$0
Southwest	9,021	\$35,393,166
Tijeras	2,611	\$2,933,604

Source: City of Albuquerque

The City used the following formula to calculate the number of service units.

$$\text{Service Units (SU)} = \text{Total Land Area} \times \text{Impervious Factor}$$

The City determined that there will be an average density of five units per acre, resulting in an impervious factor of 0.73. The impervious factor identifies the percentage of imperviousness by land use. The City used a percent impervious cover as calculated by the U.S. Soil Conservation Service TR-55 Manual.<sup>78</sup> An impervious factor of 0.73 means that for each acre of development there will be 0.73 acres of impervious area. This translates to 0.73 acres of service units per total acre of land.

The next step is to calculate the per unit service factor.

$$0.73 \text{ (impervious factor)} / 5 \text{ (average density)} = 0.146 \text{ (per unit service factor)}$$

The impact fee is then based on the expected number of service units and the total project costs for the service area. The impact fee varies by service area, as shown in Table 2.

Table 2. Impact Fee by Service Area

<b>Unit</b>	<b>Central City</b>	<b>Far NE</b>	<b>Tijeras</b>	<b>SW Mesa</b>	<b>NW Mesa</b>
1 impervious acre	\$0	\$10,208	\$13,290	\$12,836	\$14,052

Source: City of Albuquerque

For a developer building a house in Tijeras, the impact fee is \$13,290 per acre of impervious surface. Based on a density of five units per acre, the per unit service factor is 0.146. To determine the impact fee:

$$0.146 \text{ (per unit service factor)} \times \$13,290 \text{ (impact fee per acre)} = \$1,940.34$$

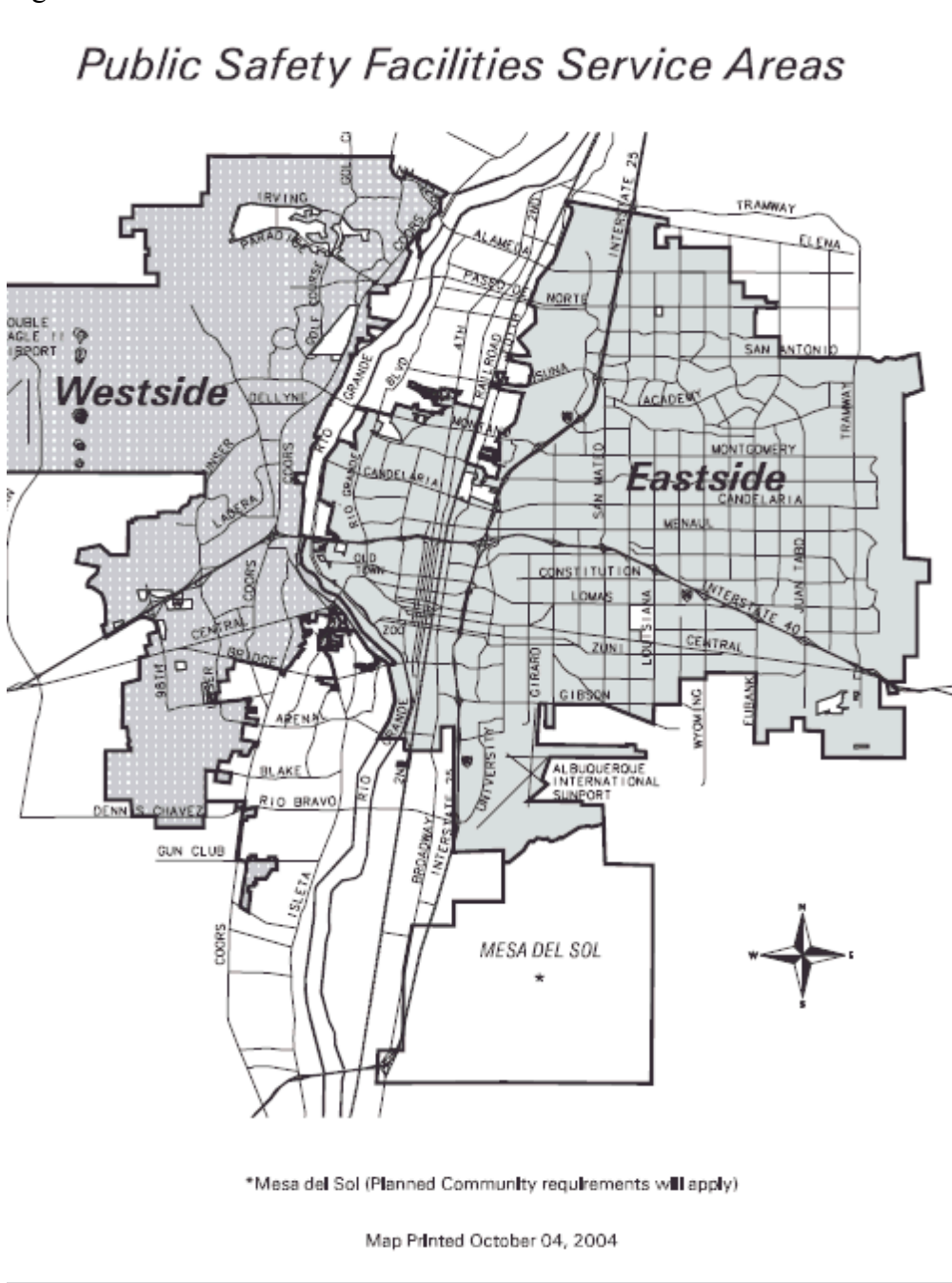
In this example, the developer would pay a drainage impact fee of \$1,940.34 for a new single family house on one-fifth of an acre.

### **Public Facilities Impact Fee**

The City began by developing land use assumptions that identified the anticipated population growth, amount of land to be developed, and types of land uses anticipated. After evaluating the anticipated growth in the City over the next 20 years, the City created public facilities plans that were evaluated prior to calculating the impact fee. The City removed the projects that were no longer needed based on anticipated growth, and on whether they would service existing development or would not be constructed by the City. The costs for these projects were then updated to today's dollars.

The next step was to establish service areas that met the rational nexus test. This meant that the development in each service area must be tied to where the police and fire stations would be located and the areas that they would service. The city is divided into two service areas, east and west side. Each project identified in the capital improvements program was assigned to the appropriate service area, shown in Figure 2. Developing service areas allows projects to be assigned based on which side of the Rio Grande River they are located.

Figure 2. Public Facilities Service Areas



Source: City of Albuquerque

The next step was to determine the total cost of the public safety projects through 2025, as shown in Table 3. Between 2005 and 2025 the City will need to add three public safety facilities on the east side and two on the west side. The project costs are based on the facility needs to provide the level of protection desired by the City. With the police facilities, there is the added challenge that some facilities, such as the crime lab, will



serve all areas of the city. In this case, the amount of the cost attributable to new development is determined.

Table 3. Cost of Public Safety Projects

<b>Service Area</b>	<b>Total Cost of Police Projects to 2025 in 2004 \$</b>	<b>Total Cost of Fire Projects to 2025 in 2004 \$</b>
City-wide	\$5,996,000	\$0
East Side	\$3,000,000	\$8,136,829
West Side	\$3,500,000	\$9,175,144
Total	\$12,496,000	\$17,311,974
Amount to be paid by impact fees	\$8,452,038	\$17,311,974

Source: City of Albuquerque

While making its drainage fee calculations, the City used a formula to determine the number of service units. With public facilities the formula is based on square footage. The City determined that, based on growth projections, the fee varies according to the location of the development and the land use. The City calculated the average cost to provide service on the east and west sides of the city for each type of land use. It is more expensive for the City to provide service on the east side than the west side, so the fee rate for the east side is higher. This cost should provide a credit for anticipated payments by new units towards existing debt for facilities in the service areas.

The City determined that the needed improvements total \$237.45 per person on the east side and \$143.86 per person on the west side. This is calculated by taking the total needed improvements divided by the new anticipated population. An estimate of the number of people over a 24 hour period per 1,000 square feet was calculated.

The City then applied a unit cost per 1,000 square feet. The unit costs by land use are:

- 0.743 for residential,
- 0.300 for industrial,
- 0.268 for office, and
- 1.224 for retail.

Why are the unit costs so much higher for retail than for industrial and office? The difference is due to the cost of providing service. Retail typically has a very high cost related to public safety. Police are frequently called to retailers to deal with crimes such as the theft. The impact fee is then applied on a 1,000 square foot basis, as shown in Table 4.

Table 4. Public Safety Facilities Impact Fee Schedule

Land Use	Unit (in square feet)	East Side Service Area	West Side Service Area
Residential	1,000	\$276	\$207
Retail	1,000	\$455	\$341
Office	1,000	\$100	\$75
Industrial	1,000	\$111	\$83
Institutional	1,000	\$108	\$81

Source: City of Albuquerque

The next step is to calculate the impact fee for a new 2,000 square foot single family home. For a developer building a house on the east side, the impact fee is \$276 per 1,000 square feet of floor area. The City used the following formula to determine the impact fee.

$$2,000 \text{ (square feet of unit/1,000)} \times \$276 \text{ (impact fee per 1,000 square feet)} = \$552$$

In this example, the developer would pay a drainage impact fee of \$552 for a new single family house. If the house were built on the west side of Albuquerque the impact fee would be \$414.

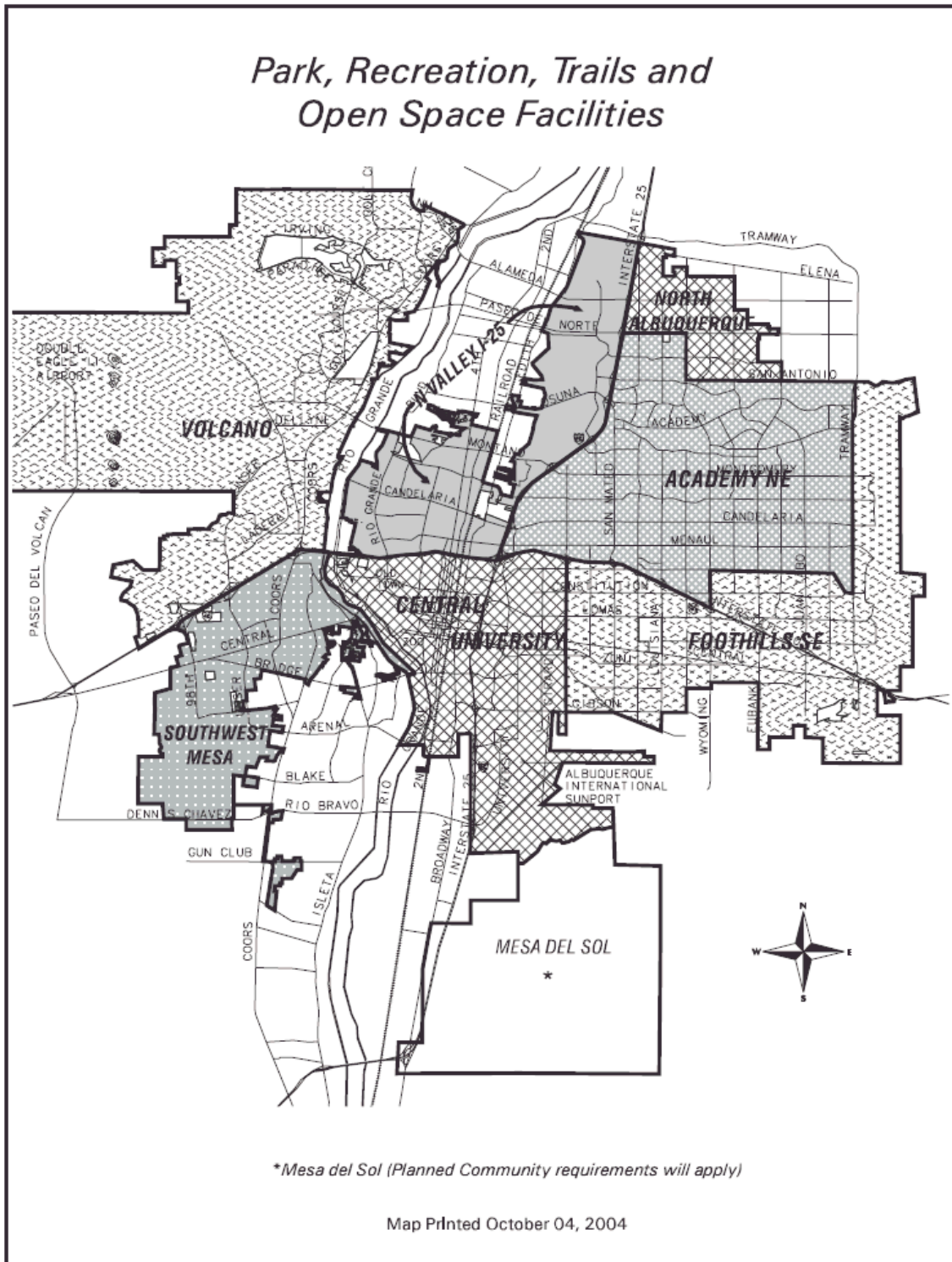
### **Parks and Recreation Impact Fee**

This example uses the City of Albuquerque’s methodology for determining the impact fee for parks and recreation facilities.

The City began by developing land use assumptions that identified the anticipated population growth, amount of land to be developed, and the types of land uses anticipated. After evaluating the anticipated growth in the City over the next 20 years, the City created parks plans that were evaluated prior to calculating the impact fee. The City and its consultants, Arthur Nelson and James Nicholas, removed the projects that were no longer needed based on anticipated growth, and on whether they would renovate existing parks or would not be constructed by the City. The costs for these projects were then updated to today’s dollars.

The next step was to establish service areas that met the rational nexus test. This meant that the development in each service area must be tied to where new residents would recreate. The city includes seven service areas. Each project identified in the capital improvements program was assigned to the appropriate service area, as shown in Figure 3. Developing service areas allows projects to be assigned based on where citizens will typically go to recreate.

Figure 3. Albuquerque Parks and Recreation Service Areas



Source: City of Albuquerque

The next step was to determine the total cost of the parks and recreation projects through 2025, as shown in Table 5. The project costs are based on the acres of parkland per 1,000 population, acres of trails per 1,000 population, and acres of open space per 1,000 population. Following the determination of the project costs by service area, the city needed to determine the anticipated number of acres of parkland and facilities needed. In order to maintain the desired level of service, the City will need to acquire an additional 0.251 acres for trails, 2.6 acres for neighborhood and community parks, and 59.296 acres for open space per 1,000 population.

Table 5. Cost of Parks and Recreation Projects

<b>Service Area</b>	<b>Total Cost of Open Space Projects to 2011 in 2004 \$*</b>	<b>Total Cost of Trails Projects to 2011 in 2004 \$*</b>	<b>Total Cost of Local Parks Projects to 2011 in 2004 \$</b>
North Valley			\$3,760,000
Foothills			\$625,000
Academy			\$3,457,000
N Albuquerque			\$3,680,000
Central/University			\$0
SW Mesa			\$14,350,000
NW Mesa/Volcano			\$18,117,000
<b>Total</b>	<b>\$18,719,000</b>	<b>\$6,095,000</b>	<b>\$43,989,000</b>
<b>Amount Attributable to Impact Fees</b>	<b>\$18,719,000</b>	<b>\$848,825</b>	<b>\$34,034,995</b>

Source: City of Albuquerque

\* The cost of projects is spread across service areas.

The City used a formula to determine the number of service units. With public facilities the formula is based on square footage. The City calculated the average cost to provide parks and recreation service for each of the service areas. This cost should provide a credit for anticipated payments by new units towards existing debt for facilities in the service areas. The impact fee is then based on the expected number of service units and the total project costs for the service area. The impact fee varies by service area, as shown in Table 6.

Table 6. Impact Fee by Service Area

<b>Service Area</b>	<b>Unit (in square feet)</b>	<b>Impact Fee for Parks/Recreation</b>
North Valley	1,000	\$1,630
Foothills	1,000	\$520
Academy	1,000	\$1,220
N Albuquerque	1,000	\$1,550
Central/University	1,000	\$390
SW Mesa	1,000	\$1,610
NW Mesa/Volcano	1,000	\$1,210

Source: City of Albuquerque

For a developer building a house in Academy, the impact fee is \$1,220 per 1,000 square feet of house. For a 2,000 square foot house, the homebuilder would pay \$2,440.

The City of Albuquerque uses an appropriate methodology that links the impacts of new development with the needed infrastructure improvements. This impact fee program meets the rational nexus connecting impacts and benefits. This appendix provides an explanation of how impact fees are calculated for three different types of facilities.

## End Notes

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- <sup>25</sup> Durham Land Owners Association v. County of Durham, No. COA05-736 (N.C. Ct. App. June 6, 2006)
- <sup>26</sup> Thompson v. Village of Newark. Second District Appellate Court No. 2-01-0542 (May 3, 2002).
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