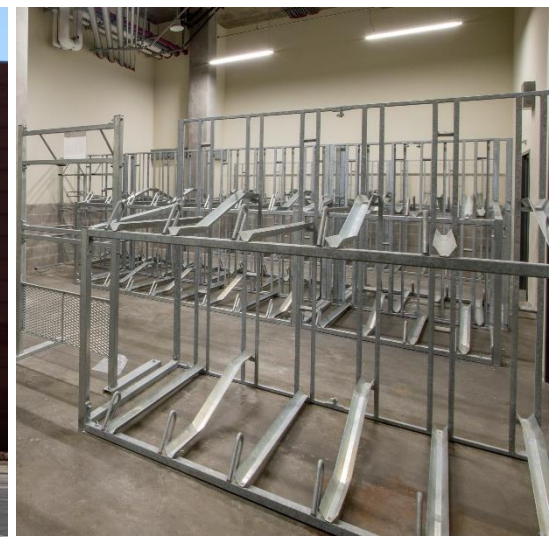


Value Capture: Development Impact Fees and Other Fee-Based Development Charges

A Primer



Primer
Every Day Counts
Innovation Initiative
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FOREWORD

State and local governments often struggle to mobilize the necessary funds to maintain, rebuild, and expand their local transportation networks. Planned projects often face funding hurdles that may result in projects being delayed or cancelled altogether, leaving important safety and mobility objectives unmet.

Value capture refers to a set of techniques that allow monetizing the appreciation in real property values that is triggered by infrastructure improvements. Such monetization enables the generation of future revenues that can be leveraged up front to help finance current or future infrastructure improvements. Under the right circumstances, this may allow practitioners to close funding gaps and accelerate project delivery, as well as trigger much needed economic development to provide livable communities, create jobs, and improve environmental conditions.

Development impact fees (DIF) are one-time charges applied to new developments that local agencies formally establish to pay for additional off-site public improvement capacity needed by the new developments. The charges can cover a wide variety of public services and are based on a general formula that applies equally to all new developments. The charges are proportional to the incremental capacity needs of each development.

This primer is based on literature reviews, interviews, case studies, and lessons learned from practicing agencies. It introduces various DIF techniques and explains how they can provide a gap funding source to help maintain and improve road networks and other critical infrastructure needs. It also provides several cases to illustrate how public agencies have approached instituting and managing DIF programs.

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LIST OF ACRONYMS AND ABBREVIATIONS

APA	American Planning Association
CBA	Community benefits agreement
C/CAG	City/County Association of Governments
CEQA	California Environmental Quality Act
CIP	Capital improvement plan
CO	Certificate of occupancy
DA	Development agreement
DIF	Development impact fee
DOT	Department of Transportation
DT	Downtown
DU	Dwelling unit
FAQ	Frequently asked question
FHWA	Federal Highway Administration
GO	General obligation
GP	General plan
GPU	General plan update
HUD	Housing and Urban Development
ICR	Internal capture rate
ITE	Institute of Transportation Engineers
LCC	League of California Cities
LOS	Level of service
MFA	Mitigation Fee Act
MPO	Metropolitan planning organization
MSD	Municipal service district
PH	Peak hour
PM	Post meridian (afternoon)
RBD	Ravenswood Business District
RPR	Retail pass-by rate

RSP	Ravenswood Specific Plan
SAD	Special assessment district
SDC	System development charge
SP	Specific plan
TDM	Transportation demand management
TID	Transportation improvement district
TIDF	Transportation impact development fee
TIF	Tax increment financing
TOD	Transit-oriented development
TSDC	Transportation system development charge
VC	Value capture
VMT	Vehicle miles traveled
WRCOG	Western Riverside Council of Governments

EXECUTIVE SUMMARY

Development impact fees (DIFs) are intended for off-site public improvement needs for new developments that trigger economic growth. DIFs complement other value capture (VC) techniques, such as tax increment financing (TIF) and special assessment districts (SADs), which are derived more from existing developments with on-site improvement focus. Instead of imposing DIFs on a project-to-project basis, local governments are increasingly choosing to legislate formal DIF programs into local ordinances, tying them directly to local planning processes and helping to finance their overall capital improvement plans (CIPs) and to achieve their long-term growth objectives.

Establishing a DIF program involves the following:

1. Projecting the future growth to be served.
2. Identifying the current and projected level of service (LOS) for each public facility.
3. Identifying any additional facilities or improvements that will be needed to accommodate future growth.
4. Allocating the costs of providing the needed public services between the existing population and the new population.

This primer provides practical information for implementing a DIF program by:

- Providing an overview of DIFs.
- Addressing important DIF efficiency and equity concerns.
- Detailing DIF legal history and legislative needs.
- Identifying key elements of DIF structure.
- Laying out basic DIF implementation principles and steps.
- Describing real-world case examples of transportation-specific DIFs.

Chapter 1: Goal of This Primer

The **basic goal of this primer** is to provide practical information on DIFs and how they can be used for infrastructure funding. The primer is geared to local and regional governments and other public agencies that are responsible for critical infrastructure provisions and facing major funding challenges.

Chapter 2: What Is DIF and How Is its Use Different from Other VC Techniques?

A DIF is a one-time, up-front cash payment that a developer makes, with the local government's approval, for a new development project. This fee offsets some or all of the costs of public facilities outside the project's boundaries that benefit the project, including parks, schools, roads, water/sewage, utilities, and police/fire/emergency services. The fee was originally intended for capital expenditures, but its use has been expanded to include operations, maintenance, and administrative expenses.

Compared to the informal system of negotiated exactions, DIFs add speed and predictability to the development process and are likely to generate considerably more revenues. DIFs can also fund a wider variety of services than special assessment districts (SADs), a prevalent VC technique based on a special levy imposed on property owners. Unlike SADs, DIFs can be structured so that new developments can

buy into existing excess infrastructure capacity, thus allowing local governments to recoup prior public investments. DIFs are also best suited for incremental investments that leverage existing infrastructure, such as infills and redevelopments, for which local government can apply marginal cost pricing.

Chapter 3: How Well Does DIF Address Overall Efficiency and Equity Concerns?

In addition to overall policy perspectives, a DIF structure affects whether local agencies impose fees efficiently and equitably across key DIF stakeholders.

Evaluating the DIF efficiency concerns as an infrastructure financing mechanism entails three basic considerations:

1. Sufficiency—that is, whether the collected VC revenues can cover all costs involved in providing public facility needs.
2. Proportionality (or horizontal equity)—that is, whether local agencies can allocate costs to those who benefit and in accordance with their usage of the facilities.
3. Marginal pricing opportunity—that is, whether local agencies can build the facilities with the least cost possible on an incremental cost basis.

Regarding the sufficiency issue, for new developments, DIF revenues are often insufficient to cover the cost of the infrastructure needs. When DIFs are legislated into local ordinances, they are tied directly to a local general plan (GP) to guide future developments so that early planning efforts can help minimize insufficient funding issues in the future. Regarding the proportionality concern, DIFs have survived its challenges relatively well when compared to other VC techniques because they are legally prohibited from charging new developments more than their proportionate share in the cost of new public facility needs. DIFs, however, can raise the price of properties by more than the amount of the fee and favor existing developments at the expense of new developments. On issues related to the marginal pricing opportunity, the basic premise behind DIFs has been that new developments pay the marginal cost of public facility needs to accommodate the incremental growth they generate. Under marginal pricing, the issue of geographic equity becomes a factor in that greenfield areas may be more costly to serve than infill or redevelopment areas in close proximity to existing infrastructure.

Evaluating the social, or vertical, equity concerns is based on the ability-to-pay principle rooted in welfare economics in which public facilities are paid by only those who are able and can afford to pay. Under DIF, vertical inequities can occur in two respects: (1) a flat-fee structure that does not take into consideration the affordability factor and (2) increases in property prices resulting from DIFs that can price out low-income property buyers.

The problem with the regressive, flat-fee structure can be fixed with a more layered approach to designing the DIF structure, which can vary by land use and other factors. DIFs generally raise prices of both existing and new properties, and make them less affordable, especially for lower income households and renters. In a competitive market, developers also pass on the DIF costs to property buyers and renters, exacerbating the situation even further.

Chapter 4: What Are the DIF Legislative Needs and How Have They Evolved?

Currently, the legal underpinning of DIFs is primarily related to exactions in general and on landmark rulings from two U.S. Supreme Court cases—*Nollan v. California Coastal Commission* (1987)¹ and *Dolan v. City of Tigard* (1994).² Prior to the *Nollan/Dolan* cases, the legal basis for exactions was defended as an exercise of local police power to protect the health, safety, and welfare of the community. Historically, the most contentious legal challenges for exactions under the police power has been the regulatory takings concerns, which occur when government imposes (1) a regulation (e.g., downzoning) that limits the owner's use of that property or (2) exactions on specific groups to pay for an improvement that benefits not only the group but the larger public.

The *Nollan/Dolan* rulings came about to directly address these regulatory takings concerns and for overarching guidance on their justification. These landmark cases established that to collect exactions (1) there needs to be a direct relationship between the project proposed and the exaction required (referred to as the *essential nexus test* per *Nollan*) and (2) the exaction must be roughly proportional to the impact created by the project (referred to as *rough proportionality test* per *Dolan*). To pass these nexus and proportionality tests, public agencies began commissioning what is now called a *nexus (or fee) study* to demonstrate a legal and quantitative basis for the tests.

The more recent ruling by the U.S. Supreme Court on *Koontz v. St. John River Management District* (2013),³ the third landmark case on exactions, further expanded the *Nollan/Dolan* ruling to explicitly include monetary exactions (i.e., impact fees as opposed to land dedications and/or in-kind facility or service provisions). The ruling also clarified that stricter *Nollan/Dolan* tests must be met at a project level, but a more flexible reasonable relationship test could be applied under legislated exactions that apply programmatically across multiple projects.

Following the *Nollan* decision in 1987, several States began adopting DIF enabling legislation, first by Texas in 1987, followed by Illinois in 1988, and soon thereafter by California and New Jersey in 1989. DIF legislative experience has been highly diverse from State to State. Some have statewide enabling legislation that deal with broad local authorities to impose impact fees, whereas in others, authority is given to certain localities only. In most States, DIF policies have evolved through specific court-tested efforts by individual jurisdictions to generate funds they needed to provide public services.

There are currently numerous standards and guidelines available to assist local and regional agencies in developing a legally defensible DIF program. For some cities, such as San Francisco, the local DIF enabling ordinance preceded the State enabling act, whereas for others, the local enabling statutes for specific project cases operationalized the authority granted by the State statutes. After *Nollan/Dolan*, governments, rather than developers, have generally borne the burden of proof to show that a fee bears a reasonable relationship to the project impact. Once a locality enacts DIF legislatively, however, the burden shifts to the developer. The locality's burden is met through legislatively enacted findings, which comply with the State DIF statute. In general, local DIF ordinances provide greater details on the uses of DIFs, including whether the fees are exclusively for capital expenditures or for other operations, maintenance, and/or administrative expenses.

¹ *Nollan v. California Coastal Commission*, 483 U.S. 825 (1987), <https://supreme.justia.com/cases/federal/us/483/825/>.

² *Dolan v. City of Tigard*, 512 U.S. 374 (1994), <https://supreme.justia.com/cases/federal/us/512/374/>.

³ *Koontz v. St. Johns River Water Management Dist.*, 570 U.S. 595 (2013), <https://supreme.justia.com/cases/federal/us/570/595/>.

Chapter 5: How Can a DIF Program Be Best Structured to Maximize Revenues without Impeding New Developments?

To implement a DIF program, local agencies initiate nexus studies through consultants to substantiate that the types and amounts of DIFs charged on new developments meet the legally defensible nexus/proportionality standards. In these studies, consultants develop different fee schedules for different public facility categories (e.g., transportation, water/sewage, schools, parks/open space, fire/safety, affordable housing, etc.) to provide maximum legally defensible fee ceilings. Public agencies often choose to set their fees below these ceilings to ease concerns about the fees being too excessive to impede new developments. Public agencies' funding priorities and their infrastructure needs can also drive the ultimate decision on fee levels.

The way DIFs are structured can improve the proportionality concerns presented earlier while also helping to incentivize those developments that are consistent with the overall local land use and planning goals. Designing the DIF structure basically entails the following:

1. Defining the service area where fees are imposed.
2. Establishing desired LOS standard.
3. Determining the basis for fee structuring.
4. Setting the appropriate timing of fee payment.

Regarding the service area, the larger it is, the more flexibility there is in spending the DIF revenues. Service areas that are too small or too numerous can result in insufficient revenues. For example, even though it may be easiest to design and administer one service area for an entire jurisdiction, having multiple service areas can sometimes help minimize public facility costs and promote local land use planning goals. In addition, areas with alternative funding sources—such as those with existing revenue streams from other VC techniques (e.g., TIF or SAD) or from supplementary Federal/State funding sources—could be treated separately where a lower fee structure is allowed.

Regarding the LOS standards, establishing the service standards for new developments is one of the most critical elements to determining new public facility needs. In DIF statutes, aside from the State and Federal minimum requirements, local agencies generally have full authority to determine the desired LOS standards for different public facilities. Although it is usual practice to adopt the same LOS standard across an entire jurisdiction, this need not be the case. Past, present, or future development patterns and constraints, combined with local growth and land use policies, often provide a rational basis for variable LOS standards.

Regarding the basis for fee determination, once geographic-specific service areas are defined, local agencies can develop a set of standard fee schedules for each area based on the LOS standards pertinent to that area. For each public facility category, standard fee schedules can be developed by land use and building type. For roads, for example, impact fees are generally based on the average vehicle trips generated:

- Per dwelling unit (DU) for single- and multifamily housing (residential land use).
- Per 1,000 ft² for office, retail, and industrial buildings (nonresidential land use).

Incremental public facility costs based on the LOS standards are then linked directly to incremental average vehicle trips to establish unit cost per trip. Final DIF levels—in terms of \$/DU for residential and \$/1,000 ft² for nonresidential uses—are ultimately determined by applying this unit capital cost to specific average vehicle trip generation for each land use.

Finally, the timing of fee payments—specifically, points of fee assessment (imposition) versus fee collection—can become an important part of DIF structuring because of a significant lag (sometimes as long as several years) between when a local agency approves a development project and when actual development takes place. These two points can be simultaneous; for example, local agencies assess and collect fees at the beginning with the building permit or at the end with the final inspection or issuance of the certificate of occupancy (CO). Alternatively, they can occur at different times; for example, fees are assessed at the building permit stage but collected at the final inspection or CO issuance stage.

Chapter 6: What Are the Basic Steps Involved in Implementing a DIF Program?

The basic elements of DIF program implementation generally include the following:

- Establishing DIF goals and objectives.
- Commissioning a nexus study.
- Developing a capital improvement plan (CIP).
- Conducting public hearings and related procedures.
- Preparing a staff report for the administrative record.
- Drafting a DIF ordinance and reaching resolution.
- Conducting an annual accounting of fees, a review of CIP, and audits.
- Collecting and administering fees.
- Dealing with fee challenges and refunds.

DIFs are often multilayered, and each State may have other developer charges outside DIF regulations. One of the key DIF implementation challenges, thus, has been the difficulty of estimating the total fees (“fee stack”) associated with a development project due to the lack of fee transparency and standardization. From the public agencies’ perspective, this can prevent tracking and assessing the reasonableness of fees. From the developers’ perspective, it can present difficulty in accurately predicting the total project costs needed to assess project feasibility in the predevelopment stage. Often, many developers are not willing to risk starting a project without knowing the costs, which could lead them to decide to take their projects elsewhere.

Some ways to increase transparency are by posting:

- All nexus and feasibility studies on the website, in standardized format, before fee adoption.
- Clear and comprehensive fee information in a single, regularly updated master fee schedule that links to interactive fee maps.
- A fee booklet with step-by-step guidance on how to estimate relevant fees for different types of development projects.

Chapter 7: Developing and Adopting Transportation Impact Fees—A Case Example

The City of East Palo Alto, although located in the heart of Silicon Valley in California, has historically faced socioeconomic challenges typical of a less-resourced city; that is, low levels of education, high levels of poverty and unemployment, and an undersupply of affordable housing. Consistent with the overall regional growth strategy focused on in-fill developments, the city identified Ravenswood Redevelopment Project Area as the primary means for future growth for the city. In 2012, the city adopted the Ravenswood Specific Plan (RSP) as a framework for transforming the Ravenswood area into a new downtown. RSP identified significant investments in new or upgraded infrastructure to support the growth, many of which involved off-site improvements that would benefit the entire city as well as the RSP area. The city subsequently decided to use DIFs as the primary mechanism to fund this development-necessitated infrastructure.

At the time of RSP adoption, the city did not have a standard, legislated impact fee structure. The city negotiated DIFs on a case-by-case basis, making them more vulnerable to legal challenge and more staff-intensive to administer. City officials, thus, decided to develop and codify a uniform and legally defensible DIF program to better support the projected development. Between 2013 and 2018, the city commissioned a series of nexus studies to cover a variety of city services, including roads and streetscape, water and stormwater infrastructure, parks and trails, and community facilities. These studies culminated in the adoption of a citywide DIF program, which went into effect in July 2019.

As part of developing the overall DIF program, the city issued two separate transportation-specific nexus studies to be conducted. The 2013 study recommended RSP-specific fees, with no fees outside the RSP area. In 2018, the city commissioned another nexus study, which provided the basis for the citywide transportation impact fees that the city ultimately adopted in 2019. The 2018 study was based on the 10-year CIP from the city's GP and RSP, which contained 23 transportation projects totaling \$100 million of which \$25 million was attributable to new growth based on incremental vehicle trips generated.

Most important, the basis for the 2018 transportation fee schedule were the traffic forecasts for East Palo Alto. In particular, the number of vehicle trips generated by different uses (i.e., single- and multifamily for residential and office, retail and industrial for nonresidential) supported the fee schedule. As a starting point, the 2018 nexus study used trip generation rates of the Institute of Transportation Engineers (ITE), which were adjusted to account for the following:

1. Trip generation rates specific to the city.
2. Intrazonal and nonmotor trips.
3. Local transit trips.

The maximum legally defensible fees in the nexus study were based on the unit capital improvement cost per trip applied to vehicle trips generated by land use. The city council ultimately adopted these maximum fee levels, except for retail, which they reduced based on what were the prevailing impact fee levels in the neighboring communities.

Concluding Remarks

The use of DIFs by local governments has evolved substantially over recent decades. Although at times complex and challenging, the underlying DIF principles are better defined now than ever. For those public agencies new to DIFs, a substantial body of literature and case examples exist—some of which appear in this primer—that can help guide a DIF implementation process. Particularly when a formal DIF program is legislated by local ordinance, due to their focus on off-site improvements for new developments, DIFs can serve local governments as a viable option to provide a reliable local infrastructure funding source that will accommodate growth. Together with development agreements, DIFs represent one of the most powerful and robust VC techniques at public agencies' disposal to help fund transportation infrastructure improvements.

CHAPTER 1: INTRODUCTION

1.1 Context and Objectives of This Primer

In the overall value capture (VC) typology, developer-based VC techniques represent one of the most prevalent VC categories, which are based on various forms of exactions or contributions directly involving the developer community. Other more prevalent VC categories are:

1. Tax increment financing (TIF, based on existing *ad valorem* tax involving general taxpayers).
2. Special assessment district (SAD) fees (based on new tax assessments, generally *non ad valorem*, involving property/business owners and tenants).

Developer-based VC techniques generally take the form of either mandated or negotiated exactions (e.g., land dedication, in-kind or monetary contributions) or development impact fees (DIFs). Relative to TIF and SAD, VC from developer-based techniques can be more challenging and uncertain because they are often contested, especially when they are involuntary, as is the case with DIFs.

DIFs have expanded and evolved substantially throughout the United States over recent decades and currently appear in many different forms, covering a wide range of infrastructure types with varying degrees of applications around the country. These changes have taken place through legislation, regulation, and numerous court cases, resulting in the legal requisite involving essential nexus and rough proportionality tests before local governments can impose DIFs. Although the process has at times been challenging and complex with many debates over the specifics, in some ways, the underlying fee principles are now better defined and more straightforward than ever—perhaps one reason why DIFs have grown substantially in many communities.

DIFs are specifically designed for the public improvement needs of new developments that help local economic growth. Their uses are also focused specifically on off-site improvements outside the development project boundary, thus complementing other VC techniques, such as TIF and SAD, which focus more on on-site improvements in existing developments. Recognizing DIFs as an important infrastructure funding source, many local governments are now choosing to legislate a formal DIF program into local ordinance, rather than dealing with development project by project. In so doing, DIF programs are being inherently tied to local planning processes to help finance local capital improvement plans (CIPs) and to achieve long-term community planning objectives.

The goal of this primer is to provide basic information needed to better understand DIFs and how best they can be used to fund infrastructure projects. The primer is designed for local and regional governments and other public agencies—including State Departments of Transportation (DOTs), metropolitan planning organizations (MPOs), regional transit authorities, rural planning organizations, Tribal governments, and other infrastructure providers—who are responsible for critical infrastructure provisions and are facing major funding challenges.

This primer presents examples from different localities and States; however, because most recent statewide surveys and studies on DIFs are in California, this primer provides more detailed case examples from there. California and Florida use DIFs most often and are where the key DIF legal precedents had been set that led to the *Nollan* and *Koontz* landmark rulings.

CHAPTER 2: DEFINITION AND OVERVIEW

2.1 Background and Definition

First introduced in 1947 in Illinois in the form of a tap-in fee, DIFs became widely accepted in the 1950s and 1960s primarily as a means to recover capital expenditures for water and sewer facilities. In the 1970s, with the decline of Federal and State grants, the use of DIFs expanded to nonutility-related needs, including roads, parks, schools, and other public services. Starting in the 1980s, DIFs have been universally accepted as a critical funding source for municipal facilities.

With the increasing use of DIFs, additional court litigations at the local level (see chapter 4 for more information) led many States to enact laws that authorized local jurisdictions to use DIFs. As of 2015, 29 States have established enabling legislation for DIFs (Federal Highway Administration [FHWA] 2019, 34). Public agencies now commonly use DIFs to pay for parks, schools, roads, sewer systems, water treatment, utilities, libraries, and public safety facilities and services in newly developed areas. DIFs are now known by many different names, a system development charge (SDC) being a common term used for transportation facilities specifically. A transportation-related DIF is also variously referred to as intersection development charge, road impact fee, traffic impact fee, or mobility fee.

In addition to revenue generation, DIFs are a form of land use regulation designed to ensure that communities maintain adequate levels of public facilities in the face of growth. DIFs support the notion that development should pay its own way. Some communities consider DIFs a pro-growth tool because of their ability to defuse rising no-growth sentiments, ensure facility adequacy, and facilitate development approval (HUD 2008, 27).

Although the use of DIFs is widespread, there are four basic community characteristics common to jurisdictions that use DIFs (Carrion and Libby 2000, 2). These community characteristics generally are the following:

1. Having a large population base with foundational public facilities already in place.
2. Experiencing moderate to rapid growth but having the desire to maintain a constant level of public services.
3. Facing high property taxes to support growth and maintain service levels.
4. Being burdened with large, sunken capital investments that are becoming more expensive to replace and maintain.

DIF is a monetary exaction that differs from a tax or a special assessment that a local governmental agency charges a developer in connection with approval of a development project. The fee offsets some or all of the cost of new or expanded public facility needs located outside the new development boundaries that benefit the development project. Also, because they are typically used as a replacement for negotiated exactions, DIFs generally add speed and predictability to the development process, are more equitable, and are likely to generate considerably more revenues than informal systems of negotiated exactions (more discussions follow in section 2.2). The fee was originally intended to fund capital expenditures only, but some public agencies now use them for operations, maintenance, and administrative expenses (Mathur and Smith 2013, 20).

DIF is also a one-time, up-front cash payment made in advance of the completion of the development project—usually at the time of approval of building permits or issuance of certificates of occupancy, although some jurisdictions allow extended payments over a period of years. Based on the landmark *Nollan/Dolan* court rulings (see chapter 4 for more information), an imposition of DIF on a development project must pass the essential nexus and rough proportionality tests; that is, a direct cause–effect relationship must be proven between the proposed project and the fee imposed on the developer, and the fee imposed must be roughly proportional to the impact created by the project (see chapter 4 for more details).⁴

To meet the nexus/proportionality requirements, public agencies typically conduct nexus, or fee, studies. Many different methodologies are used in these studies to determine overall fee structure and appropriate fee levels (see chapter 5 for more details). In general, both the cost of the public facilities and the nature and size of the development project determines what the DIF will be. The resulting fee schedules typically set forth the DIF charges per residential dwelling unit (DU) or per 1,000 ft² of nonresidential floor space.

The DIF structure, however, can be quite complex and multilayered. Different fee schedules are often established for different land uses (e.g., residential, nonresidential), different facility types (e.g., water/sewer, transportation, school, open space, etc.), and different geographic districts within a local jurisdiction (e.g., infill vs. greenfield areas; see chapter 5 for more details). There are also many exceptions—such as exemptions, exclusions, waivers, deferments—to accommodate larger public policy objectives such as affordable housing.

Beyond fulfilling the nexus/proportionality tests, the complexity level is often driven by the level of accuracy needed to achieve horizontal equity (i.e., those who benefit pay) as well as vertical equity (i.e., those who are able pay; see chapter 3 for more details). It is also important to recognize that developers are not necessarily the ultimate bearer of DIFs. Depending on circumstances, others may instead bear the fee, including the landowner, the builder, or the buyer.

In the DIF implementation phase, increased transparency is critical for developers to identify all fee-related project costs early on to assess their projects' feasibility (see chapter 6 for more details). Recognizing that developers are generally more sensitive to fee transparency than specific fee levels, one of the challenges facing public agencies has been to present clear and cohesive fee structure and fee schedules that are transparent, up-to-date, and readily accessible.

⁴ If DIF does not relate to the impact created by the development project or exceeds the reasonable cost of providing the public facilities, then the fee may be declared a special tax subject to voter approval (LCC 2003, 2).

2.2 DIF vs. Developer Exaction

According to the U.S. Department of Housing and Urban Development (HUD), DIFs are different from, and should not be confused with, developer exactions.⁵ DIFs are formally established one-time charges applied to new developments to pay for additional off-site public improvement capacity needed by the new developments. The charges can cover a wide variety of public services (primarily off-site) and are based on a general formula that applies equally to all new developments proportional to their incremental capacity needs. Lacking proportionality and predictability in comparison, developer exactions are typically site-specific, dealing primarily with on-site internal improvement needs within and close to the development project boundaries and negotiated on a case-by-case basis. The following paragraphs describe several ways that DIFs can be different from developer exactions.

In general, developer exactions fall into two broad categories: (1) mandatory land dedication requirements and (2) negotiated exactions. A major limitation common to both types of exactions is that they tend to address only those public improvements that are either on-site or in close proximity to the development. Such needs as roadway systems to relieve congestion or water treatment plants to relieve the overloads are generally beyond the power of an individual developer to address through the exaction process (HUD 2008, 23).

In most communities, developers are already required to construct, at their own expense (and dedicate to the local government), all public improvements within a subdivision that are designed to serve only that subdivision. These internal improvements, which must be constructed to standards set by the local government, typically include local streets, sidewalks, water distribution lines, wastewater collection mains, and storm sewers.

More generally, typical exactions include the dedication of parkland, school sites, and road rights-of-way. In addition, developers may be required to construct public facilities, such as widening the portion of a substandard street on which the development has frontage or installing a traffic signal at a congested intersection nearby. Exactions may also take the form of monetary contributions, such as fees in lieu of dedication or developer participation in a pro rata share of the cost of installing a traffic signal (HUD 2008, 22).

Monetary exactions are generally the result of open-ended negotiations between the developer and the local government. These exactions may be imposed at any stage of the development process that local governments have broad discretionary authority, particularly when regulatory approvals, such as zoning, special permits, or planned unit developments, are required. Although negotiated exactions are standard procedure in many communities, they are tightly regulated in some States, such as North Carolina and Virginia (HUD 2008, 23).

Monetary exactions are superficially similar to DIFs and fees in lieu of dedication and may be considered a direct precursor of DIFs. In-lieu fees, however, are usually based on land costs only and are ill-suited for public services not requiring extensive amounts of land. DIFs, on the other hand, are meant to cover a proportionate share of the capital facility costs (primarily off-site) and may apply to a wider variety of

⁵ According to HUD, DIFs are not considered a developer exaction *per se* but instead fall under the “impact assessment” category, which represents various scheduled charges made against new developments for the purpose of financing public facilities (HUD 2008, 22).

services. In addition, monetary exactions are typically site-specific and often negotiated on a case-by-case basis, whereas DIFs are based on a general formula that applies equally to all developments.

One of the major drawbacks of negotiated exactions is that they lack predictability and proportionality (HUD 2008, 23–24). For example, the amount of the exaction is unpredictable because it may depend on the accident of geography or on the political or bargaining skill of the developer. In addition, small developments—which may cumulatively result in significant capital improvement needs—often escape such exaction requirements because, individually, they are not capable of making significant contributions. Regarding proportionality, regardless of project size, negotiations can be equally time-consuming and expensive for both the developer and the local permitting authority. Past experience also indicates that the need for exaction to be proportional to impact created on public facility needs is often a secondary concern in negotiated exactions (HUD 2008, 29).⁶

2.3 Other Development Charges

In some States, there are fees that fall under the broad umbrella of development fees or charges that carry some characteristics of DIFs and/or monetary exactions, such as utility connection fees and permit processing fees, which are subject to different legislative requirements than those specific to DIF.⁷ As an example, table 1 provides, in addition to DIFs, various in-lieu and development fees that exist in California for different uses that are subject to different legislation. Along with DIFs, some or all of these fees are levied against new development projects as applicable and, when combined, can have material impact on the project's overall feasibility. With these different fee types, it may be challenging for developers or others to fully understand all fee-related cost implications of their development projects upfront. Regardless of how they are categorized and differentiated, the final combined fee could be at the level that may potentially disincentivize real estate investments needed for growth.

⁶ A variant to negotiated exaction is the development agreement (DA) that is based on a negotiated contract between the developer and the local government. Unlike negotiated exactions, DAs can cover a broad range of facilities and, once in place, can provide certainty to both the developer and local government. DAs are widely used throughout California and Florida, and are increasingly seen in other States.

⁷ In addition to these fees, in some States, there are other scheduled charges that developers pay under the broad umbrella of impact assessments that are made against new developments for purposes of financing public facilities. Examples include general impact tax in California, transportation impact tax in Oregon, and public facilities tax in Tennessee.

Table 1. Various Fee Types, Uses, and Regulatory Authority—California Example.

Category	Applicable legislation/fee type	Eligible uses	Subject to impact fee legislation?
Development impact fees (DIFs)	Mitigation Fee Act	Any impacts reasonably attributed to new developments	Yes
In-lieu fees	Subdivision Map Act	In-lieu fees tied to general plan (typically used for bike paths, open space, etc.)	No
	Quimby Act	In-lieu fees specifically for parks	No
	Inclusionary Housing Ordinance	In-lieu fees for affordable housing	No
	California Environmental Quality Act (CEQA)	In-lieu fees to mitigate projects' environmental impacts identified under CEQA environmental impact report	Yes (if nonvoluntary)
Other development fees	Utility connection fees	Cost to provide connection to utility system	No
	School facilities impact fees	Cost to provide additional school facility needs	No
	Permit processing fees	Cost associated with permit processing	No
	Development agreement (DA)/community benefits agreement (CBA) fees	Any fees for public improvements agreed by developers and local jurisdictions as specified in DA/CBA contract	No

Source: Raetz, Garcia, and Decker (2019).

2.4 DIF vs. Special Assessments and Other Alternative Funding Sources

Public finance criteria indicate that DIFs are better suited for certain public facilities than others. Table 2 summarizes the basic economic characteristics of different public facility categories and the preferred funding mechanism, whether it be impact fees, special assessments, user fees, general taxes, or dedicated taxes (HUD 2008, 21). The economic characteristics that table 2 presents are as follows:

- Marginal cost characteristics—that is, whether infrastructure capacity increases can be accommodated gradually in small increments (“smooth”) or intermittently with major investment needs in large increments (“lumpy”; see chapter 3 for more information).
- Scale economy—that is, whether the unit cost savings of providing additional infrastructure capacity increases significantly or moderately with increasing investments (“large” or “moderate,” respectively) or the unit cost remains constant regardless of the size of the investments (“small”).
- Exclusivity (or “excludability”)—that is, the degree to which infrastructure provisions can be limited to only paying customers or the degree to which a government can prevent “free riders” (i.e., nonpaying customers).
- Demand elasticity—that is, whether the demand for infrastructure is highly or moderately sensitive to the price charged (“high” or “moderate,” respectively) or price has little bearing on the demand (“low”).

Table 2. Economic Characteristics and Preferred Funding by Infrastructure Category.

Infrastructure category	Marginal cost characteristics	Scale economy	Exclusivity	Demand elasticity	Preferred funding
Water/wastewater	Lumpy for central facilities	Large	Exclusive	Low	Impact fees
Stormwater	Lumpy for central facilities	Large	Nonexclusive	Low	Special assessment based on impervious surface
Parks	Lumpy for major parks; relatively smooth for smaller parks	Small to moderate	Nonexclusive	Moderate	General taxes
Recreation centers	Lumpy for most	Small to moderate	Can be exclusive	Moderate	General taxes and user fees
Schools/libraries	Lumpy	Small to moderate	Nonexclusive	Moderate	General taxes
Colleges	Lumpy	Large	Exclusive through tuition	Moderate	User fees (tuition) and general taxes

Infrastructure category	Marginal cost characteristics	Scale economy	Exclusivity	Demand elasticity	Preferred funding
Fire/police/emergency medical	Lumpy for central facilities; moderate for stations; smooth for vehicles	Small	Nonexclusive	Low	General taxes
Highways	Lumpy for most; smooth for local streets	Large to moderate	Exclusive through tolls	High	Dedicated taxes or tolls
Transit	Lumpy	Large	Exclusive through fares	High	User fees (fares) and general/dedicated taxes

Source: HUD (2008, 21).

In terms of VC techniques specifically, public agencies throughout the United States are increasingly using DIFs and SADs to shift more of the costs of financing public facilities from the general taxpayer to the beneficiaries of those new facilities. DIFs can fund a wider variety of services and types of facilities than is possible with SADs. DIFs are also better suited for incremental improvements, such as, local access roads or water/sewer lines, for which marginal cost pricing, with minimal incremental costs, is possible (see chapter 3 for more information). On the other hand, SADs are better suited for lumpy investments (e.g., major highways or water/sewer plants) that have low demand elasticity for which achieving significant economies of scale is possible.

From a budgetary perspective, SAD assessments represent a much more secure source of revenue than DIFs and are better suited to secure debt, allowing for more flexibility in financing options. In addition, SADs can be used for both existing and new developments, although financing off-site facilities can be challenging. DIFs, however, are applicable only for new developments and are geared specifically to finance off-site facility needs. Finally, one unique advantage of DIFs is that they can be structured to require new developments to buy into existing excess capacity, thus recouping prior public investments made in anticipation of growth demands. Recoupment of prior investments is generally not possible with SADs (HUD 2008, 27).

As an alternative infrastructure funding source, DIFs differ from user fees in that they represent a reservation capacity fee; that is, they provide the facility capacity whether or not those who pay actually use that capacity at any given point in time. Also, unlike user fees, DIFs are directly tied to local planning processes and to the financing of local CIPs. Thus, DIFs are geared toward helping achieve overall community planning objectives.

Finally, DIFs may not be the best way to finance certain public facilities, in comparison to taxes from public finance perspectives.⁸ For example, facilities such as those for public safety (e.g., police, fire), parks, libraries, and schools may be better financed through general funds from taxes (and debt retired through general obligation [GO] bonds). Similarly, roads can be better financed from dedicated taxes and user fees. Relatively speaking, DIFs may be most appropriate for water and sewer facilities, which was their most common initial use. However, when elected officials find themselves without the legal or political ability to raise taxes but want to maintain the level-of-service quality in their communities, they are increasingly considering DIFs as a pragmatic alternative and critical funding source for their infrastructure needs, including transportation facilities (HUD 2008, i).

⁸ From financial and administrative perspectives in general, property taxes provide a relatively easy-to-administer, reliable stream of revenue to finance infrastructure. Property tax funds can also back general obligation (GO) bonds, which provide the lowest cost financing available to public agencies.

CHAPTER 3: EFFICIENCY AND EQUITY CONCERNS

Efficiency and equity concerns are likely to be important considerations in determining basic DIF structure and appropriate fee levels (see chapter 5 for more information).

3.1 Efficiency Concerns

Transportation agencies evaluating the efficiency of a proposed VC technique as an infrastructure financing mechanism may want to consider the following three factors:

1. **Sufficiency**—that is, whether the collected VC revenues can cover most of the costs involved in providing public facilities.
2. **Proportionality (or horizontal equity)**—that is, whether local governments can allocate the costs to those who benefit and in accordance with their use of the facilities.
3. **Marginal pricing potential**—that is, whether local governments can provide the facilities with the least possible cost on an incremental cost basis.

3.1.1 Funding Sufficiency

In terms of sufficiency, for local agencies providing public services, there is a general acknowledgment that new developments frequently create infrastructure costs that are greater than the revenues generated from DIFs (Carrión and Libby 2000, 11). On the other hand, empirical evidence also shows that DIFs generally raise property prices more than the amount of the fees (Mathur and Smith 2013, 15). Taken together, these seem to indicate that although the currently collected DIF revenues are not sufficient to cover the costs of public improvements, there may be excess values generated from new developments that could potentially reduce the DIF revenue shortages.

One way to remedy the DIF revenue shortage situation is to integrate the DIF program into the local planning process. There is significant variation among States on how, and the extent with which, to use DIF techniques, both in terms of the fee structure and the methodology for determining fee levels. DIFs are often project specific and likely to be negotiated on a case-by-case basis, an approach that is more vulnerable to legal challenge and more staff intensive to administer. Public agencies are increasingly choosing to legislate their impact fee structure and standardize fee schedules for more transparency.

When legislated, DIFs become directly tied to local planning processes and to local general plans (GPs) and specific plans (SPs). For each long-term capital improvement project identified in GPs and SPs (see chapter 5 for more information), nexus studies are often used to allocate project costs between the existing and new developments. Local governments then develop the basic DIF structure and standard fee schedules based on the additional capital improvement needs attributable only to new developments. When linked directly to local comprehensive plans in this way, DIFs can work as an instrument to guide future developments efficiently. They allow public agencies to carry out capital improvements with a funding schedule, ensuring that the improvements are in place to serve the new developments. DIFs can thus be an effective tool for guaranteeing adequate infrastructure that accommodates new development and facilitates growth in areas identified in localities' long-term growth and land-use plans.

3.1.2 Proportionality (Horizontal Equity)

Proportionality is the connection among the demands that new developments place for public facilities, the costs involved in meeting those demands, and how local governments allocate these costs to beneficiaries of the private developments and users of the public facilities. One of the central themes in structuring and implementing DIFs of all types has been this concept of proportionate share (i.e., horizontal equity) that has been generally accepted, dating back to at least the 1970s. This means local governments allocate costs to those who benefit and in accordance with their use of the facilities. From a legal standpoint, DIFs are prohibited from charging new developments more than a proportionate share of the cost of new public facilities. This is closely related to the very definition of impact fees, which are distinguished from taxes or general charges and required to be based on actual or projected expenditures.

Chapter 5 will present the complexity in methodologies used to determine basic DIF structures and resulting fee levels are in large part driven by the desire to achieve horizontal equity (Raetz, Garcia, and Decker 2019). This is manifested in a multilayered DIF structure that often varies with land use (e.g., residential vs. nonresidential), facility type (single vs. multifamily), facility size (e.g., square footage or number of bedrooms), density (e.g., high- vs. low-density areas with different growth potential), location (e.g., proximity to public transit), and configuration (e.g., single use vs. mixed use).

Because they are inherently based on the horizontal equity principle, DIFs have survived proportionality challenges well over the years compared to other VC techniques, except in one major respect. As presented earlier, empirical evidence has shown that impact fees raise the price of properties by more than the amount of the fees. For example, a dollar increase in an impact fee raises housing prices by \$1.66 for new housing and by \$0.83 for existing housing (Mathur and Smith 2013, 15). Because existing homeowners do not pay impact fees, these findings demonstrate that DIFs negatively affect horizontal equity by favoring existing developments at the expense of future developments. Existing property owners may see a windfall gain from increases in property values when infrastructure improvements are capitalized in real estate markets (Strathman and Simmons 2010, 41).

If this proportionality imbalance issue becomes critical, one remedy for transportation agencies may be to make a policy decision about whether the cost of new public facilities is charged directly to the new residents only or shared with current residents—for example, via higher taxes, some type of reimbursement mechanism from the general fund, or even by creating a TIF district with wider footprints that include existing developments. This could be a sensitive issue because current residents can refuse to pay for new facilities serving new residents. Charging all the costs to only new residents, however, would create an undesirable free-rider situation, when current residents benefit from new facilities without paying for them.

Proportionality concerns also arise when dealing with lumpy investments, which are linked to facilities that are built infrequently and cannot be expanded incrementally. According to HUD, highway projects may fall into this category (HUD 2008, 21). The demand for public facilities generally increases incrementally over time because of population growth and changes in community preferences. However, if public facility expansion needed by new developments involves a lumpy asset—for example, major roads, water/sewer plants, schools, and parks, as opposed to local roads, neighborhood parks, or emergency response services—some loss in proportionality may occur. When capital investments are lumpy, the current costs of constructing public facilities needed in the future could be spread among all future users, rather than just among those in new developments.

As presented in section 2.1, nexus studies generally help to separate out the portion of the lumpy investments attributable only to new developments. Public agencies sometimes use recoupment or reimbursement mechanisms to improve the proportionality concerns. As presented earlier, when existing infrastructure has excess capacity from previous lumpy investments, local governments can structure DIFs to allow new developments to buy into the existing capacity, enabling public agencies to recoup prior investments made in anticipation of growth. In addition, if local governments use DIFs for new developments (that are occurring in the present time) to build public facilities that are lumpy, they can structure DIFs such that the current developers can receive reimbursement from future development projects that stand to benefit from any excess capacity in lumpy assets provided as part of the current developments.⁹

DIFs are one-time upfront charges applied to new developments that allow public facilities to be provided roughly concurrent with the new developments. Although pay-as-you-go potential and concurrency are of benefit, DIFs do not offer the ability to use the revenues as supplemental security (like other VC techniques, such as TIFs and SADs sometimes do) for GO and revenue bonds needed to finance large-scale capital projects. DIF revenues are generally required to be spent within a reasonable period following fee payment, which imposes an additional constraint.

3.1.3 Marginal Pricing Opportunity (Geographical Equity)

The choice of an infrastructure financing method can affect the pattern of land developments, and efficient pricing of infrastructure can make the land-use patterns more efficient (HUD 2008, 17). To determine the cost of any developments, there are, in general, two approaches: (1) average cost pricing, which considers the total costs of producing infrastructure services; or (2) marginal cost pricing, which accounts only for the incremental costs needed to produce an additional unit of services.¹⁰ A basic premise behind DIFs is that new developments should pay the marginal cost of providing public facilities necessary to accommodate the growth (Carrión and Libby 2000, 3). Under the marginal pricing method, public officials would first need to determine the location of the central facilities (e.g., major highways or water/sewage plants) and then price the services accordingly. The market would then dictate appropriate and efficient land-use patterns.

Based on this marginal pricing approach, the issue of geographic equity becomes a factor, in that some areas may be more costly to serve than others (HUD 2008, 29). Following this theory, in areas where central facilities already exist in close proximity, the marginal costs would be lower, and if the service areas are densely populated, then the costs would be shared by many and may be even lower. In areas where there are no central facilities in close proximity and the service areas are sparsely populated, the marginal costs could be significantly higher.¹¹ By adopting DIFs and their marginal pricing approach, especially when significant foundational infrastructure is already in place, the current residents are, in

⁹ In Oregon and California, for example, reimbursement districts are often used for this purpose.

¹⁰ Public finance economists advocate marginal pricing based on a three-tier charging system that includes (1) a charge for the capital costs of producing the main infrastructure assets (e.g., major highways or water/sewage plants); (2) a charge for the local connections to the main assets (e.g., local access roads or water/sewer lines), which may vary depending on density and distance from the main assets (e.g., residential density and distance from a major highway influence the costs of local access roads); and (3) a charge for actual use based on the short-term costs of producing the infrastructure services (e.g., water meter charges).

¹¹ In San Diego, for example, impact fees in sparsely populated areas can be more than 10-fold higher than those in densely populated areas.

effect, helping to ease the burden of future infrastructure provisions by shifting only the incremental infrastructure costs onto new residents; that is, new residents are essentially buying their way into the community (Carrión and Libby 2000, 3).¹²

An element of geographic equity is related to infill and redevelopment because older areas may have excess infrastructure capacity that is underutilized. Even in places where the infrastructure needs upgrading, the cost can be less per unit of development if infill and redevelopment is encouraged. DIFs might help offset many of the subsidies of new developments that produce a leapfrog urban sprawl pattern that allows developments to skip over land closer to the urban area. In this context, DIFs could be one area where marginal cost pricing could become an issue of local policymaking.

More generally, research has found that DIFs may affect the location decisions of residents or businesses if these decisions are highly sensitive to price (i.e., elastic demand; Burge 2012, Carrión and Libby 2000). Businesses may choose to locate in a community without impact fees (mostly in rural settings), which can slow urban growth. DIFs may also reduce the price of undeveloped land because DIFs act as a deterrent to develop open land (Carrión and Libby 2000).¹³ The irony is that in low-density, growth-hungry rural areas where the marginal costs of providing infrastructure are high, DIFs have generally remained minimal, whereas in high-density, fast-growing urban areas where the marginal costs are low, DIFs have at times reached as high as 20 percent of the property sales prices (Dresch and Sheffrin 1997). This may be the reason why DIF revenues have proven to be an important funding source for capital-intensive public transit facilities in urban areas.¹⁴

3.2 Social Equity Concerns (Vertical Equity)

Social or vertical equity is based on the ability-to-pay principle, rooted in welfare economics, in which only those who are able and can afford it should pay for public infrastructure. In public finance, the vertical equity consideration calls for the wealthy to pay more than the poor for government provided goods and services. Vertical equity concerns about DIFs pertain to the negative impact of fees on lower income households and property owners. Commentators have noticed that under DIF, vertical inequities can occur in two respects: (1) a flat-fee structure that does not take into consideration the affordability factor and (2) an increase in property prices resulting from DIFs that can price out low-income property buyers.

Although the courts have made it clear that lawful impact fees must reflect proportionate shares, they have also accepted very relaxed approaches, including the common use of flat fees set at average levels applied to every case in the community (HUD 2008, ii). An impact fee can be legally accepted as long as the process for establishing the fee achieves an overall, general correspondence between costs and fees. Unlike real property taxes, however, flat fees tend to have a regressive effect; that is, they fall disproportionately on people with lower incomes than those with higher incomes. Especially when DIFs are set at high levels, they tend to be more regressive.

¹² This may be one way to justify the windfall value appreciation benefit enjoyed by current residents, as presented earlier.

¹³ A more recent study found that impact fees paid by commercial developers lower the value of commercially zoned undeveloped land, whereas impact fees associated with utility systems that apply more universally are found to have a uniformly negative influence on land values in general (Burge 2012).

¹⁴ For example, the City of San Francisco's DIF program for the transportation sector, in the form of transportation sustainability fees, is dedicated primarily to improving the city's public transit facilities.

DIFs based on a flat-fee structure can be horizontally equitable but vertically inequitable. For example, local jurisdictions often assess the same impact fee per unit for parks for all residential dwellings in a given service area based on horizontal equity. If DUs differ by the number of people living in them based on type or size of dwelling, then they do not achieve vertical equity.¹⁵ Charging each unit the same flat fee could negatively influence vertical equity, with smaller units overpaying with respect to their occupancy and income levels, and the larger units underpaying.

As was the case with horizontal equity (see chapter 5 for more information), problems with the flat-fee structure can be fixed using a more layered approach; that is, by designing the DIF schedule to vary with land use, facility type, facility size, density, location, and/or configuration. The basic trade-off in fee structuring is between the administrative ease that comes with simplicity in methodology and more accurate and equitable fee structure offered by more complex multilayered approach that can be challenging administratively. One way to deal with the complexity is to integrate DIF structuring into the planning process and to establish multilayered but standardized fee schedules that are transparent and updated on a regular basis. Chapter 6 will present further local jurisdictions can streamline the overall DIF implementation process by legislating the fees into local ordinances.

As presented earlier, DIFs generally raise prices of both new and existing properties more than the amount of the fees. With these price increases, DIFs also negatively affect vertical equity by making properties less affordable, especially for renters who are generally of lower income. The cost burden of properties as a proportion of household income also increases more for lower income households than higher income households (Mathur and Smith 2013, 15). In a competitive market and in the short term, developers would also attempt to pass the DIF costs onto buyers, exacerbating the vertical inequity situation even more.

To remedy vertical inequity, local jurisdictions often establish exceptions to DIF payments in the form of exemptions, exclusions, waivers, deferments, and other financial incentives (HUD 2008, 66–69). Localities give (1) exemptions when new developments do not create new impacts (e.g., converting nonresidential units into residential units with fewer resulting impacts) and (2) exclusions (or reductions) when alternative revenues are available to finance the facilities (e.g., fees are excluded or reduced when Federal and/or State funds are used or when other financing mechanisms—such as community or business improvement districts, empowerment zones, or enterprise zones—are available).

Local jurisdictions also give waivers for all or part of the impact fees on certain, qualifying developments, such as for affordable housing. A growing number of local jurisdictions also offer buyers of affordable housing forgivable loans to use as down payment as an indirect way to waive impact fees (HUD 2008, 68). Because empirical studies overwhelmingly show that developers pass impact fees onto homebuyers or renters,¹⁶ such waivers would help lower the housing price or rent for lower income households (Carrión and Libby 2000, 4). In general, smaller properties, such as small offices and commercial establishments, can receive waivers because the owners of such properties are less likely to be able to pay than the owners of larger properties. Finally, impact fees can also be paid in installments as opposed

¹⁵ Federal data in 2003, for example, showed that the average household size of units less than 500 ft² was nearly 2.0, whereas it was more than 3.0 for units more than 2,500ft². Furthermore, households with higher incomes were more likely to own larger houses. The same 2003 Federal data showed that per capita household income for the smaller unit was \$9,950/person but was well over \$25,000/person for the larger unit (HUD 2008, 105).

¹⁶ By way of higher property prices or rents.

to in a lump sum or at a later stage in the development process. In some jurisdictions, developers of low-income housing are given deferrals for as long as 10 to 15 years (HUD 2008, 69).

3.3 Who Ultimately Bears the DIF Burden?

Determining who ultimately pays the DIFs is needed because, under certain circumstances, developers may be motivated to pass the fees onto others. In a robust real estate market, for example, developers and builders may pass the fees onto property buyers, whereas in a down cycle, developers and builders may be willing to assume some of the costs to lower the price and remain competitive. According to the National Association of Home Builders, it is easier to pass DIFs forward from developers to buyers than backward from developers to landowners. If this is true, then there is the assumption that buyers of new properties will pay the fees through higher prices due to impact fees. On the other hand, if the fee is imposed before developers have had a chance to account for them, developers will have to pay the fee out of their profits.

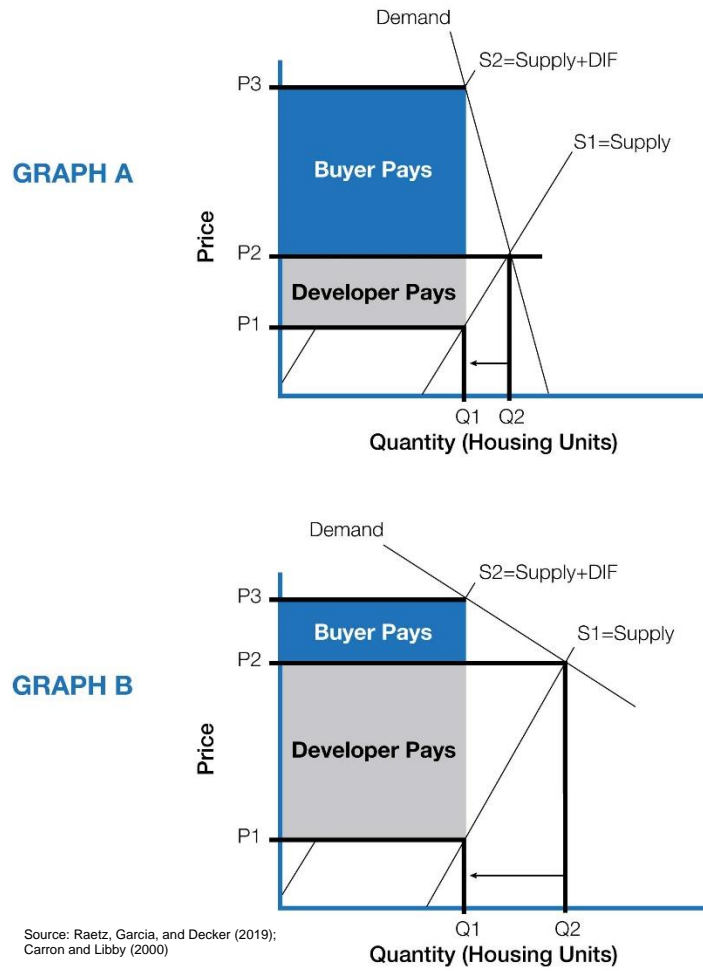
The strength of housing demand and the availability of similar developable land in nearby localities may affect who will ultimately bear the burden of an impact fee. In general, the relative share of the impact fee that sellers and buyers pay depends on demand elasticities. If buyers of new homes are not price sensitive (i.e., demand is inelastic), they will pay a greater portion of the impact fee. In the short term, both buyers and developers bear part of the burden unless developers offset their share of the fee by reducing lot or dwelling size, quality, and/or amenities (see figure 1).

If the housing demand is strong and not price sensitive (which means the demand is “inelastic” and does not change significantly with the price, as shown by a steep demand curve in figure 1-A), and if there are no substitutable sites in similar markets with a lower fee, then developers will likely still have opportunities to achieve the return necessary to attract institutional financing by passing the impact fee to buyers of the new homes (shown as the larger blue shaded area in figure 1-A), shouldering less of the burden of the fee themselves (shown as the smaller gray area in figure 1-A).

In markets where the housing demand is weak and sensitive to price (which means the demand is “elastic” and changes significantly depending on the price, as shown by a relatively flat demand curve in figure 1-B) and that have substitutable sites in nearby localities without fees, developers and landowners will likely pay more of the impact fee from their profit margin (shown as the gray shaded area in figure 1-B, which is much larger than the blue shaded area borne by buyers) or see a short-term drop in building as few or no developable sites meet the return requirements of developers and investors.

Over time, it is generally believed that owners of developable land will adjust to the fee and accept lower prices, allowing for more housing production. Empirical data show that buyers of both new and existing housing often bear DIFs, particularly those who bought homes in strong economic markets or shortly after implementation of the DIF, with landowners also bearing a portion of the fee in some cases (Raetz, Garcia, and Decker 2019, 21). The share of fees that developers bear and the factors that affect this share are unclear, in part because of a lack of data about developers’ financial circumstances.

Figure 1. Graphs. DIF Burden vs. Demand Elasticity.



CHAPTER 4: LEGAL ISSUES AND LEGISLATIVE NEEDS

4.1 Constitutional History and Legal Challenges¹⁷

DIFs have expanded and evolved substantially throughout the United States over recent decades and currently appear in many different forms covering a wide range of infrastructure types with varying degree of applications around the country. These changes have taken place through State or local legislation, regulations, and numerous court cases. Although the process has at times been challenging and complex with much debate over specifics, the underlying fee principles are now better defined and more straightforward than ever—perhaps one reason why DIFs have grown substantially in many communities.

The legal underpinning of DIFs are based primarily on the essential nexus and rough proportionality requirements associated with exactions in general, stemming from the rulings from two landmark U.S. Supreme Court cases—*Nollan v. California Coastal Commission* (1987)¹⁸ and *Dolan v. City of Tigard* (1994).¹⁹ Because DIFs will likely continue to be contested in the future regardless of these rulings, it is beneficial to have some understanding of past legal challenges and of how DIFs have evolved over the years in response. Overall, the legal evolution of DIFs can be divided into three periods: (1) pre-*Nollan/Dolan*, (2) *Nollan/Dolan*, and (3) post-*Nollan/Dolan*.

In the absence of explicit State enabling legislation, many public agencies originally developed impact fees as a form of monetary exaction. Pre-*Nollan/Dolan*, local agencies originally defended the legal basis for impact fees as an exercise of local government's broad police power—one of the trinity of powers that distinguishes government from private organization²⁰—to protect the health, safety, and welfare of the community. Local governments generally considered exactions to represent an exercise of police power because, when properly applied, they engender a legitimate governmental (public) interest.

In the pre-*Nollan/Dolan* period, before the 1990s, lawsuits and subsequent court rulings often determined public agencies' ability to collect exactions. Unlike in the decades prior to the 1990s, when courts mostly ruled in favor of public agencies, the basic trend since then has been for courts to lean in favor of stronger legal rights for property owners (which, in this case, includes developers), making public agencies moderate their regulatory position on exactions. This shift in the courts, after the *Nollan/Dolan* rulings, was also due in large part to public agencies' heightened use of DIFs, which was brought about by strong resistance to property tax increases in general and a continued decline in Federal funding.

The most important legal aspects to police power involving exactions in the pre-*Nollan/Dolan* period were the constitutional arguments against zoning; that is, zoning failed to meet the constitutional guarantees associated with the due process, equal protection, and takings (or just compensation) clauses.²¹ Due process guarantees generally involved both procedural (e.g., whether local jurisdictions provided

¹⁷ Unless otherwise specifically noted, the primary source of the key discussions provided in this section come from Barclay and Gray (2020).

¹⁸ *Nollan v. California Coastal Commission*, 483 U.S. 825 (1987), <https://supreme.justia.com/cases/federal/us/483/825/>.

¹⁹ *Dolan v. City of Tigard*, 512 U.S. 374 (1994), <https://supreme.justia.com/cases/federal/us/512/374/>.

²⁰ The other two are the authority to tax and the power to take property under eminent domain.

²¹ Due process clause is contained in both the Fifth and Fourteenth Amendments to the U.S. Constitution, equal rights clause in the Fourteenth Amendment, and just compensation or takings clause in the Fifth Amendment.

appropriate notice, proper hearing, timely permitting) and substantive (e.g., whether zoning is a legitimate use of the police power) issues. Under equal protection, the primary legal issue was whether a zoning ordinance favored certain property owners over others.

The most contentious and difficult legal challenge regarding zoning and exactions under police power, however, was the takings (also known as *just compensation*) clause. The constitutional protection against taking property without just compensation usually applies to situations in which a government agency physically takes a property (i.e., through eminent domain). Additional complexities arise, however, when a regulatory taking occurs and when the government imposes (1) a regulation (e.g., downzoning) that limits the owner's use of that property or (2) exactions on specific groups to pay for an improvement that benefits not only the group but the larger public (Rappa 2002).

The *Nollan* (1987) and *Dolan* (1994) rulings directly addressed these regulatory takings concerns on exactions and for overarching guidance on their justification and accountability. These two cases established that in order to collect exactions (1) there needs to be a direct relationship between the project proposed and the exaction required (referred to as the *essential nexus test* per *Nollan*) and (2) the exaction must be roughly proportional to the impact created by the project (referred to as the *rough proportionality test* per *Dolan*). Following the *Nollan* decision in 1987, several States began adopting impact fee-enabling legislation to facilitate localities' ability to implement DIFs: first, Texas in 1987, followed by Illinois in 1988, and then California and New Jersey in 1989. As of 2015, 29 States had established enabling legislation for DIFs (FHWA 2019, 34).

To pass the *Nollan/Dolan* tests, public agencies began commissioning what is now called a *nexus (or fee) study* to demonstrate a legal basis for the required nexus and to develop a quantitative basis for specific impact fee levels that are proportional. A strong nexus study, along with robust State and/or local enabling legislation helps defend the use of DIFs. Especially for new developments, however, impact fees vary widely due to the significant variations in the level of concessions developers provide that often depend on the local economic conditions and political climate (Fulton and Shigley 2012).

It is important to note that, pre-*Nollan/Dolan*, there had been numerous lower court rulings that established a reasonable relationship standards for exactions based on police power (specifically, per the Fourteenth Amendment).²² Although the courts, in the post-*Nollan/Dolan* period, have made it clear that lawful impact fees must meet the stricter *Nollan/Dolan* standards, the courts have also accepted very relaxed approaches, including the common use of flat fees set at average levels applied uniformly throughout the community (HUD 2008, ii). As presented earlier, as long as the process achieves an overall, reasonable correspondence between costs and fees, it is legally accepted as an impact fee.

The California Supreme Court ruling on the *Ehrlich v. Culver City* (1996) case²³ helped to establish an additional and more inclusive test for exactions by reconciling the elements of the stricter *Nollan/Dolan* essential nexus/rough proportionality test with the pre-*Nollan/Dolan* reasonable relationship test, which had already been codified into the California State legislation (Kim 2018, 19). The *Ehrlich* ruling has been significant in two respects: (1) local jurisdictions must also apply a *Nollan/Dolan* analysis to monetary

²² The reasonable relationship test requires that there is a reasonable connection between the fee charged to the developer and the needs that development generates. In addition, lower courts have also expounded on a "specifically and uniquely attributable" test that requires that the fee charged to the developer is directly and uniquely attributable to that development. See, for example, *Ayres v. City Council of Los Angeles* (1949), 34 Cal.2d 31, <https://law.justia.com/cases/california/supreme-court/2d/34/31.html>.

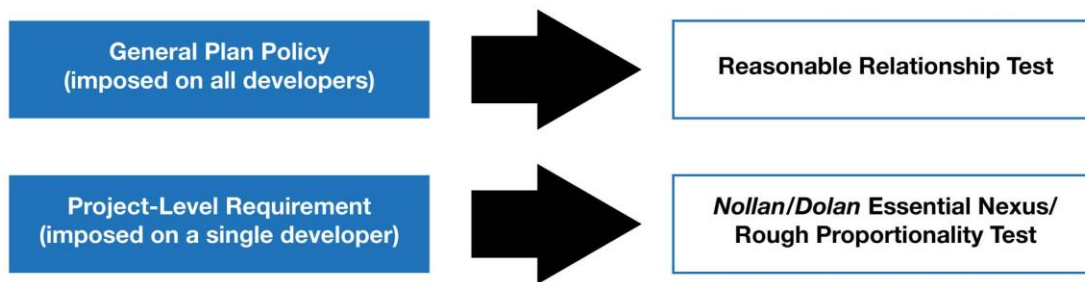
²³ *Ehrlich v. City of Culver City* (1996), 12 Cal. 4th 854, 50 Cal. Rptr. 2d 242, 911 P.2d 429, <https://law.justia.com/cases/california/supreme-court/4th/12/854.html>.

exactions (i.e., in the form of fees, including DIFs, as opposed to land dedication or in-kind facility/service provisions) and (2) only those fees specifically imposed on a particular project were entitled to be judged by the heightened *Nollan/Dolan* criteria, with other generally applicable fees being tested under a reasonable basis.

The *Ehrlich* ruling served as an important precedent for the U.S. Supreme Court's more recent ruling on *Koontz v. St. John River Management District* (2013),²⁴ the third landmark case on exactions. The *Koontz* ruling further clarified *Nollan/Dolan* decisions by (1) expanding the application of the *Nollan/Dolan* test to include monetary exactions explicitly and (2) allowing lower courts to resolve the applicability of legislative exactions (i.e., pertaining to entire areas of cities or more programmatic applications) while making it clear that *Nollan/Dolan* tests are applicable for adjudicative exactions (i.e., pertaining to individual parcels or project-specific disputes; Wake and Bona 2015, 559–562).

Figure 2 provides an overall relationship test guideline for exactions as relates to all three landmark cases (i.e., *Nollan* 1987, *Dolan* 1994, and *Koontz* 2013). As shown, the reasonable relationship test is considered sufficient for exactions that are imposed on all developers as part of a broad policy scheme, whereas the stricter essential nexus and rough proportionality test should probably be used when exactions are imposed on a single developer. Transportation agencies considering the use of DIFs should consult with their own counsel to make sure that the DIF is structured to pass a legal challenge should that occur.

Figure 2. Chart. *Nollan/Dolan/Koontz* Relationship Test Guidelines for Exactions.



Source: Fulton and Shigley (2012)

More generally, public agencies' experimentation with impact fees has been paralleled by increasing State court involvement in the review of these fees. A general trend in State courts has been to require a "rational nexus" between the fee and the public improvement needs created by development as well as the benefits incurred by the development. This analysis is a moderate position between a standard that requires that the fee be "specifically and uniquely attributable" to the needs a new development creates and the relaxed standard that the fee be "reasonably related" to the needs a development makes (APA 1997).

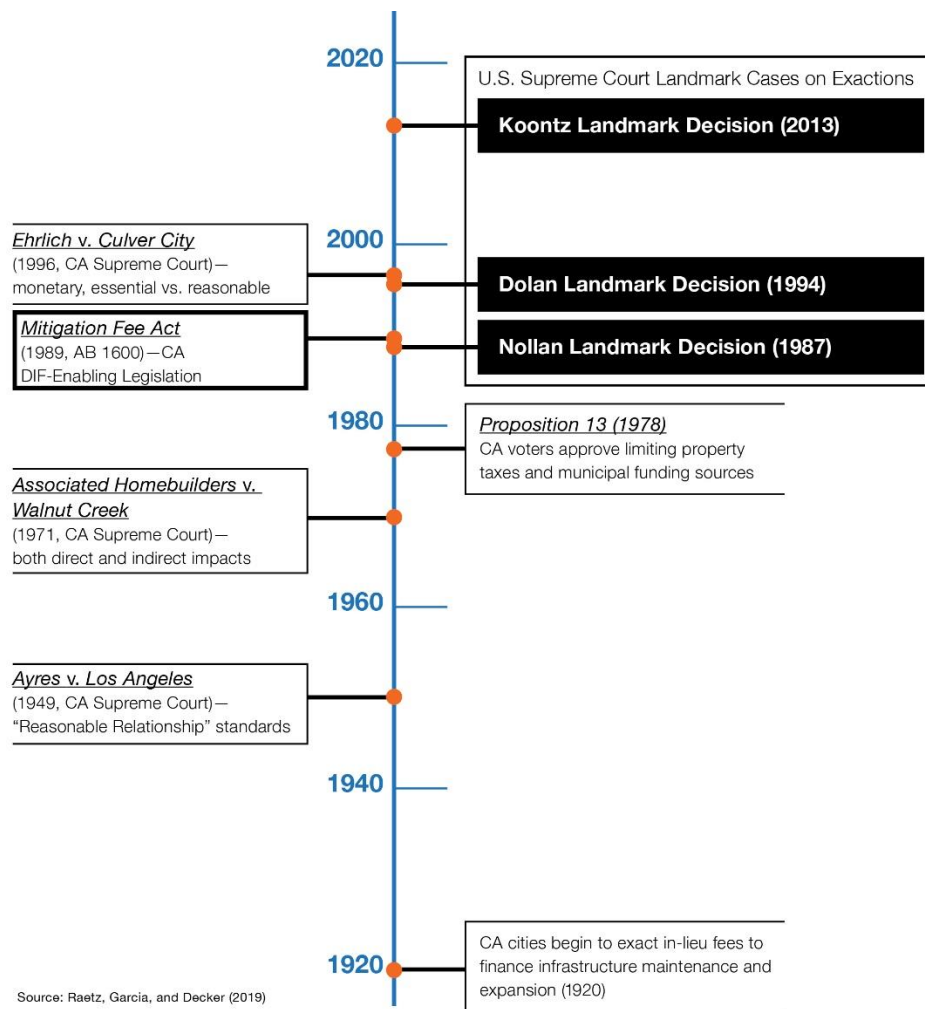
Figure 3 summarizes the overall evolution of DIFs in terms of legal challenges and court rulings as presented earlier. The timeline shown is for California specifically, but it could be considered generally representative of a typical sequence of events from the legal perspective at other States.²⁵

²⁴ *Koontz v. St. Johns River Water Management Dist.*, 570 U.S. 595 (2013), <https://supreme.justia.com/cases/federal/us/570/595/>.

²⁵ As was the case for both *Nollan* and *Koontz*, California has been one of the States making the most use of DIFs and has set several legal precedents that led to the U.S. Supreme Court landmark decisions on exactions and impact fees.

In summary, working back from the beginning, fee-based exactions (i.e., in-lieu fees instead of land dedications) in California started as early as in the 1920s, falling under the police power granted to cities and counties in Article 11 of the California Constitution. These fees went largely unchecked until State courts required a reasonable relationship test in *Ayres v. City Council of Los Angeles* in 1949.²⁶ The California Supreme Court later expanded the eligible fee uses significantly in *Associated Homebuilders Inc. v. City of Walnut Creek* in 1971,²⁷ with the ruling that development fees could also be used to mitigate indirect as well as direct impacts. In short, before Proposition 13 in the late 1970s, in which voters imposed significant restrictions on the ability of local governments in California to raise property taxes, the courts had generally ruled in favor of exactions under the police power doctrine.

Figure 3. Illustration. DIF Legal Evolution/Timeline—California Example.



²⁶ *Ayres v. City Council of Los Angeles*, 34 Cal.2d 31, 207 P.2d 1, 11 A.L.R.2d 503, <https://law.justia.com/cases/california/supreme-court/2d/34/31.html>.

²⁷ *Associated Home Builders etc., Inc. v. City of Walnut Creek* (1971) 4 Cal.3d 633, 639-647, <https://law.justia.com/cases/california/supreme-court/3d/4/633.html>.

After Proposition 13, public agencies in California started to increasingly use DIFs to make up for the significant loss in property tax revenues. Throughout the United States, outside of California, local governments also relied on DIFs as the resistance to property tax increases gained strong support. As a result, courts became much more restrictive, which precipitated the two landmark *Nollan* (1987)/*Dolan* (1994) decisions by the U.S. Supreme Court described earlier. Soon after the *Nollan* decision, California was one of the first States to adopt the impact fee-enabling legislation, the Mitigation Fee Act (MFA) of 1989 (Assembly Bill 1600), which was meant to regulate impact fees more stringently.²⁸ Finally, the *Ehrlich* case in 1996, presented earlier, helped to resolve potential conflict between the reasonable relationship and stricter *Nollan/Dolan* standards, which culminated in the *Koontz* landmark decision by the U.S. Supreme Court in 2013.

4.2 State Enabling Legislation

Policy experience with DIFs has been highly diverse from State to State. Some have statewide enabling legislation that broadly allows local authorities to impose impact fees, whereas other States grant authority only to certain localities. In most States, DIF policies have evolved through the specific court-tested efforts of individual local jurisdictions to generate funds needed to provide public services. As of 2015, 29 States had passed statewide legislation that affects the ability of local agencies to levy DIFs (FHWA 2019). State DIF legislation is generally intended to codify existing constitutional and decisional law regarding impact fees and exactions; that is, previous court decisions that had already shaped the law in each State.

The development of DIF legislation across States has been asymmetric and diverse, ranging from very specific and restrictive yet comprehensive—as is the case for Texas—to very brief and general—such as the legislation in Indiana. Texas, cited as having the first DIF legislation, specifies not only the procedure for calculating fees but also the formulas to use as well as the recalculation and refund requirements (HUD 2008).²⁹ Indiana, on the other hand, specifies a single and unified impact fee for each new development.³⁰

For some States, such as New Mexico and Indiana, statewide DIF statutes have been largely motivated by the need to address their critical affordable housing issues. In general, most States allow the use of DIFs for improvements related to water/sewer/stormwater, roads, parks/libraries, schools, and police/fire. Although DIFs use is more prevalent for water/wastewater, several States emphasize DIFs specifically for transportation infrastructure, in some cases through the establishment of various forms of transportation districts.

Oregon's DIF-enabling legislation, for example, clearly states local communities' ability to use Transportation SDC (TSDC) for public transportation.³¹ Illinois' DIF Statute adopted in 1988 allows collection of transportation impact fees for roads that are directly affected by traffic demands generated by new development (Carrión and Libby 2000, 8).³² In New Jersey, the Transportation Development

²⁸ California Government Code §§ 66000-66025.

²⁹ Tex. Local Gov't Code § 395.001 et seq. Since its original enactment in 1987, the Texas DIF statute was amended in 2001 to (1) provide credit when alternative funding is available, (2) increase the road impact fee service area (from 3 to 6 miles), (3) increase the mandatory update period (from 3 to 5 years), (4) eliminate the recalculation requirement, and (5) decrease the number of public hearings for fee update (from two to one).

³⁰ Ind. Code § 36-7-4-1300 et seq.

³¹ ORS 223.299. In this case, for capital improvements only.

³² 605 Ill. Comp. Stat. § 5/5-901 et seq.

District Act of 1989 allows the creation of transportation improvement districts (TID) and transportation development districts (Carrión and Libby 2000, 8).³³ The New Jersey DOT forms districts upon the petition of local officials. The legislation provides for the development of a master traffic plan to measure the extent of existing deficiencies and the impact of future development. Impact fees may then be charged to new developments based on specific impacts and any projects necessary to offset the impacts.

California and Florida have the highest use of DIFs, but these States have had very different experiences in terms of their DIF legislative needs. In California, as described earlier, the ability to impose DIFs was largely determined by established case law until the MFA in 1989, which was enacted soon after the 1987 *Nollan* ruling.³⁴ The MFA (Assembly Bill 1600), which became effective on January 1, 1989, is broad in its language, allowing local governments to use impact fees on capital projects that are reasonably related to increased demand for public facilities, but specific about the way that impact fees are imposed on development projects.³⁵ For example, the agency imposing the fee must:

1. Identify the purpose of the fee.
2. Identify the use to which the fee is to be put, including the public facilities to be financed.
3. Show a reasonable relationship between the fee's use and the type of development project.
4. Show a reasonable relationship between the public facility to be constructed and the type of development.
5. Account for and spend the fees collected only for the purposes and projects specifically used to calculate the fee (Carrión and Libby 2000, 7).

Currently, the MFA, together with established case law, regulates how local agencies set and report on impact fees.

In contrast, Florida did not have State DIF-enabling legislation until 2006 (Mathur and Smith 2013, 19).³⁶ Its DIF legislation is brief and does not specify eligible uses for impact fee funding, leaving those decisions to public agencies. As such, two other pieces of State legislation have largely determined local imposition of DIFs:

1. The Growth Management Act of 1985,³⁷ which requires local agencies to maintain adequate service levels for public facilities consistent with local land use plans and prohibits approval of new development that would cause a reduction in service level for existing users.
2. The Florida Concurrency Statute³⁸ that, based on past case law, allows localities to levy impact fees (Carrión and Libby 2000, 7–8).

³³ N.J. Rev. Stat. § 27:1C-1 et seq.

³⁴ Cal. Gov. Code § 66000 et seq.

³⁵ Additionally, the MFA specifically allows the use of impact fees for transportation-related improvements but does not specify whether their use is exclusively for capital expenditures or also for operations and maintenance expenses. Also, as presented in table 1 in chapter 2, the MFA explicitly excludes Quimby Act in-lieu fees for parks, fees covering the cost of processing applications, or fees collected under development agreements.

³⁶ Fla. Stat. § 163.31801.

³⁷ Laws of Florida Ch. 85-55. This law made substantial revisions to §§ 163.3161–163.3211.

³⁸ Fla. Stat. § 163.3180.

For the transportation sector specifically, as the Concurrency rule³⁹ fell short in addressing congestion, Florida adopted the Community Planning Act in 2011, which removed the transportation concurrency requirement to allow an alternative mobility fee funding system, a form of DIF program.⁴⁰ As of 2016, more than 20 local jurisdictions in Florida have implemented mobility fee programs (Renaissance Planning 2017).

For some States, DIF-enabling legislation has very limited application. Arkansas, for example, adopted a State enabling fee act in 2003 that only applies to the water/wastewater sector for municipalities and excludes DIF authority for counties altogether (HUD 2008, 38).⁴¹ In other States with no statewide DIF legislation, such as Tennessee and North Carolina, impact fees and development taxes are generally authorized for individual jurisdictions through special acts of the State legislature (HUD 2008, 37). For example, Kentucky has no DIF-enabling legislation but allows an open space mitigation fee specifically for Lexington-Fayette County as part of the county's zoning ordinance.

For many States, DIFs were commonly used by home-rule (charter) cities⁴² long before the passage of State DIF legislation (HUD 2008, 95). Colorado's long history of DIF uses by home-rule cities eventually evolved into the State DIF legislation that passed in 2001.⁴³ Ohio has no specific State DIF-enabling legislation, but home-rule cities (as well as other general law cities) have a long history with sewer tap or connection fees, excise taxes, and other local charges on new developments. The Ohio Supreme Court affirmed these charges, which are effective as long as the State legislature does not issue an express or implied prohibition of the fees. They are still subject to constitutional tests of equal protection and due process (Carrion and Libby 2000, 9–11).

4.3 Local Ordinances and Legislative Processes

Rulings at the State court level have generally defined how DIFs may be applied and used at the local level. Thus, there are numerous authorities and guidelines available to assist local and regional agencies in the planning processes that must be undertaken to develop a legally defensible DIF program. For some cities, such as San Francisco, the local-enabling ordinance preceded the State enabling act, whereas for others, DIF ordinances pertaining to specific project cases operationalize the authority granted by the State statutes.

After *Nollan/Dolan*, the government—rather than the developer—has generally borne the burden of proof to show that the fee bears a reasonable relationship to the impact of the proposed development. However, once the locality enacts the proper legislative fee, the burden shifts to the developer to show that the fee either fails to advance a legitimate State interest or deprives the developer of any viable economic use of its land (LCC 2003, 6; Raetz, Garcia, and Decker 2019, 18). The locality's burden of

³⁹ For a development to "be concurrent" or "meet concurrency," the local government must have enough infrastructure capacity to serve each proposed development.

⁴⁰ Laws of Florida Ch. 2011-139. This law made substantial revisions and additions to §§ 163.3161–163.3247. With the removal of the transportation concurrency requirement, Florida Legislature has encouraged the adoption of mobility fees if local government repeals transportation concurrency (Renaissance Planning 2017).

⁴¹ Ark. Code § 14-56-103.

⁴² A home-rule or charter city has the ability (as granted by its State) to pass its own laws to govern itself as it sees fit so long as it obeys the State and Federal Constitutions. Because of their relative legislative independences, home-rule cities are better positioned to use DIFs without the State enabling legislation.

⁴³ Colo. Rev. Stat. § 29-1-801 et seq.

proof on the legitimacy of DIFs is met through legislatively enacted findings (that precede DIF program enactment), which generally comply with the State DIF statute.⁴⁴

Local ordinances generally provide details on the uses of DIFs, including whether the fees are exclusively for capital expenditures or whether they may be used for operations, maintenance, and/or other administrative expenses. Although the local statutes also specify the projects that are eligible for impact fee funding, the details on eligibility vary at the State level. California and Oregon statutes, for example, specify project eligibility, whereas the Florida statute does not, thus leading to concerns that the Florida DIF statute could be amended to potentially limit the extent of eligible projects in which impact fees can be charged based on the current authority granted to public agencies (Mathur and Smith 2013, 20).

4.3.1 Florida

Although the Florida State statutes are ambiguous on the types of expenses eligible for DIF funding, the local statutes are clear. For example, in the City of Aventura, its Code of Ordinances operationalize the City's authority to charge a transportation mitigation impact fee.⁴⁵ The Code specifically allows impact fee use for the expansion, operation, and maintenance of the City's public transportation system. Furthermore, it specifies 3 percent of fee revenues can be used for the cost of administering the impact fee program (Mathur and Smith 2013, 20). Broward County operationalized its DIF authority⁴⁶ through the County Land Development Code, which specifies that the fee can be used for capital as well as operating expenditures with 2 percent set aside for administration expenses (Mathur and Smith 2013, 19).

4.3.2 California

In California, the City of San Francisco originally enacted the transportation impact development fee (TIDF) in 1981 through a local ordinance that the San Francisco County Board of Supervisors passed. The ordinance is now covered in Article 4 of the San Francisco Planning Code and allows the TIDF to fund capital, operations, maintenance, and overhead costs. Only nonresidential users pay the fee, and specific properties are exempt, including those in specific redevelopment areas (e.g., those used for warehousing and recreation or owned by the city, State, or Federal governments). This local statute was passed without the benefit of State enabling legislation and was, therefore, vulnerable to legal challenges. The most critical one was the 1981 class-action lawsuit in *Russ Building Partnership v. City and County of San Francisco*, in which the city successfully defended the local statute and the fee was upheld in the courts.⁴⁷

Although cities big and small in California have historically relied on impact fees for almost 100 years, their experiences have varied significantly. Unlike San Francisco, for example, some larger and more urbanized cities, such as Los Angeles and Oakland, only recently established substantial citywide impact fee structures for residential projects (Raetz, Garcia, and Decker 2019, 20). In 2015, the Los Angeles City Controller released an audit of the city's impact fees, calling for broader use and better management of the fees, noting that the city might be missing out on as much as \$91 million per year in potential revenue from commercial, industrial, and residential development. Since then, Los Angeles has established

⁴⁴ As will be presented in chapter 6, involvement by the City Attorney is crucial throughout the DIF implementation process.

⁴⁵ Chapter 2, Article 4, Division 5, § 2-302.

⁴⁶ § 27.40. DIF in this case is in the form of transportation concurrency fee because the county has chosen to require transportation concurrency.

⁴⁷ *Russ Bldg. Partnership v. City and County of San Francisco* (1987) 199 Cal.App.3d 1496, 1504.

citywide parks and affordable housing impact fees. The City of Oakland’s recent decision to implement a citywide impact fee structure—covering affordable housing, transportation, and capital improvement costs—was motivated in part by the recent court decisions that restricted the reach of its inclusionary zoning program to for-sale projects.

4.3.3 Oregon

In Oregon, Portland operationalized the city’s authority to charge a TSDC through its City Code to fund multimodal transportation improvements and associated bus and transit improvements, sidewalks, bicycle paths, and pedestrian facilities.⁴⁸ Further, in operationalizing the State statute, the Code explicitly prohibits the use of the fee for maintenance and repairs, and for the purchase or maintenance of rolling stock (e.g., buses, railcars, etc.; Mathur and Smith 2013, 18).⁴⁹

4.3.4 Ohio

In Ohio, even without the State enabling legislation, the City of Beavercreek has had a formal impact fee ordinance since 1993. For transportation improvements, the city defined a special impact fee district to provide new streets, roads, and related traffic facilities needed for new developments. The fee is paid at the time of application for a zoning permit or final residential plat approval concerning the land to be developed within the special district. Funds collected from the developers goes into a special trust fund, and no funds may be used for maintenance. The impact fee ordinance was intended to shift an appropriate share of the cost of new roads and streets onto the new development (Carrión and Libby 2000, 10–11).

Sidebar 4.1: Representative Examples of Local DIF Ordinance

Case example		Key features of local DIF legislation	Local specificity at state level
State	Local jurisdiction		
CA	San Francisco City	The city’s TIDFs (a) fund capital, O&M, and overhead costs; (b) apply to only nonresidential housing; and (c) are exempt in specific redevelopment areas	Local DIF ordinance (1981) preceded State DIF (1989)
	Oakland City	Recently implemented citywide impact fees to fund capital costs for affordable housing and transportation	State DIF specifies local eligibility criteria
	Los Angeles City	Recently established citywide parks and affordable housing impact fees	State DIF specifies local eligibility criteria

⁴⁸ Chapter 17.15.

⁴⁹ Chapter 17.15.100.B.3.

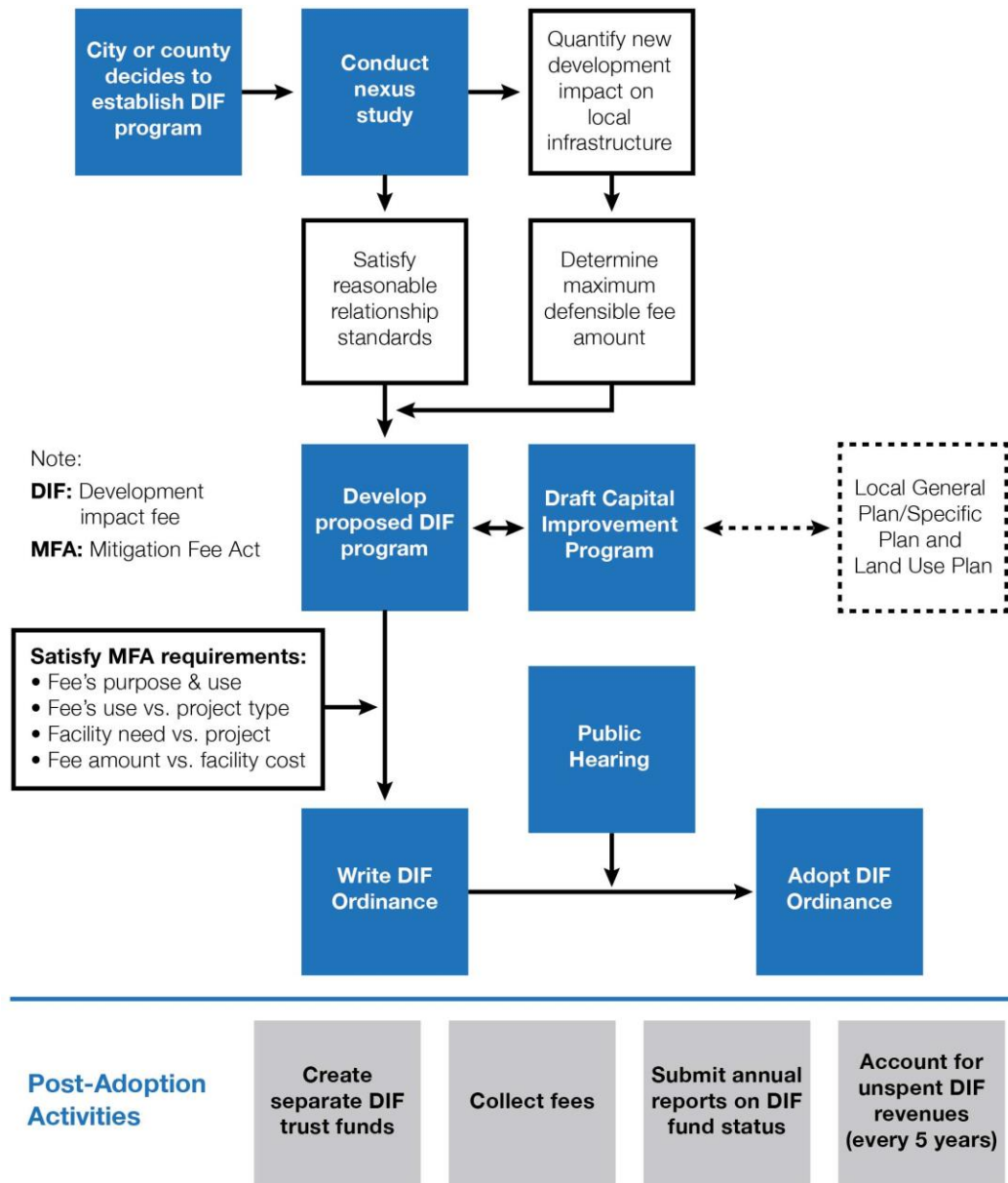
Sidebar 4.1: Representative Examples of Local DIF Ordinance (continued)

Case example		Key features of local DIF legislation	Local specificity at state level
State	Local jurisdiction		
FL	Aventura City	City's transportation mitigation impact fees fund capital, O&M, and administration costs of public transportation	State DIF ambiguous on local eligibility criteria
	Broward County	County's DIF authority established over municipalities' authority through county-level Land Development Code	State DIF ambiguous on local eligibility criteria
OR	Portland City	City's TSDCs fund multimodal transportation improvements, but their use for maintenance is prohibited	State DIF specifies local eligibility criteria
OH	Beavercreek City	Has formal impact fee ordinance; formed special impact fee district to fund new roads and transportation improvements for new developments (excluding maintenance costs)	No State DIF-enabling legislation

4.3.5 Local DIF Implementation Process—California Example

As a representative example, depicts the local DIF implementation process and basic steps involved in establishing local a DIF ordinance for cities and counties in California (see chapter 6 for additional details on DIF implementation processes).

Figure 4. Chart. Legislative Process for Local DIF Ordinance—California Example.



As shown, a city or county first selects DIF as their choice of VC techniques to raise revenues and decides to establish a new impact fee. A locality can typically satisfy the reasonable relationship standard required by the State DIF-enabling legislation (in this case, the MFA) by conducting a nexus study. This study quantifies the impact of new development on local infrastructure and determines its cost, which is considered the maximum legally defensible fee amount. Exceeding this maximum fee ceiling could leave the locality vulnerable to litigation (Raetz, Garcia, and Decker 2019, 20).

Localities often draft CIPs in concert with their proposed fee program. CIPs generally establish the basic plan for the construction and financing of public facilities within a jurisdiction. In California, as in many other States, the use of CIPs is encouraged (though not required) by the State DIF legislation to help set out the planned use of DIF revenues for improvements related to new developments. Nexus studies, particularly when combined with CIPs, help strengthen the required findings in establishing or increasing a fee as specified in the State DIF statute.

Once the locality meets the State requirements, it can then draft the DIF ordinance. As required by California's MFA, the locality must hold at least one public hearing and get feedback before formally adopting the ordinance (Raetz, Garcia, and Decker 2019, 20).⁵⁰ The MFA also stipulates other critical postadoption administrative needs, including:

1. Creating separate funds to collect revenue from each impact fee type pertaining to each infrastructure category.⁵¹
2. Collecting fees beginning 60 days after the passage of the ordinance.⁵²
3. Drafting annual reports on the status of the funds, including descriptions of each fee and the balance and use of each fund.⁵³
4. For any unspent revenues, identifying the fee purpose and demonstrating the reasonable relationship for fees at every 5 years after the start of the fee collection (Raetz, Garcia, and Decker 2009, 20).⁵⁴

⁵⁰ Cal. Gov. Code § 66018.

⁵¹ Cal. Gov. Code § 66006(a).

⁵² Cal. Gov. Code § 66017(a).

⁵³ Cal. Gov. Code § 66006(b).

⁵⁴ Cal. Gov. Code §66001(d)). The MFA also includes a mechanism by which a party can protest an impact fee. When a local agency approves a development project or imposes the fee, the agency must send a notice of the fee amount and a 90-day window to file any legal protest. When protesting, the applicant must still pay the fee in full (or show evidence of arrangements to pay the fee when due), as well as serving a notice outlining the reason for their protest. If the court invalidates a fee ordinance or finds in favor of the plaintiff, the local agency at fault must refund the unlawful portion of the fee plus interest (Cal. Gov. Code §§ 66020–66022). Also, the protesting party may request an independent audit at his or her own expense (Cal. Gov. Code § 66023).

CHAPTER 5: NEXUS STUDIES AND FEE STRUCTURING

5.1 Nexus Studies and Development Feasibility

This section first reviews current practices for conducting nexus studies, which jurisdictions commonly used to set fee amounts proportional to project impacts, and then presents how public agencies could consider the effect of these fees on development project feasibility to guard against unreasonable fee levels that may discourage new developments.⁵⁵

5.1.1 Nexus Studies

Public agencies commission nexus, or fee, studies to substantiate that the types and amounts of impact fees charged on new developments meet the legally defensible nexus/proportionality standard. Because they can be costly and often complex, these studies are typically conducted for program-level assessments when public agencies are interested in establishing an overall DIF program that can be legislatively enacted. At the program level, and as presented in chapter 4, the pertinent legal requisite is a broad reasonable relationship standard that fee amounts must be arguably reasonable, relative to the impacts of new developments.

All exactions (inclusive of DIFs), whether ad hoc or legislatively enacted, are likely supported by findings that demonstrate the proper relationship between the impact created and the fee exacted. Findings are an opportunity for the government agency imposing the DIF to explain why the fees are necessary, what impacts new developments create, how new developments impact the existing communities, and how the collection of fees will alleviate all or a portion of these impacts. Failure to make the proper findings may result in an invalidation of the fees in the case of a court challenge, and nexus studies provide means to reach proper findings.

Public agencies typically categorize DIFs based on the services they fund, which could include one or more the following general categories:

- Transportation fees for costs of expanding transportation infrastructure, including roads, transit, and other multimodal facilities and systems (bicycles, pedestrians, transportation demand management [TDM], etc.).
- Utility impact fees for expansions of water, sewer, electricity, and gas infrastructure.
- Park fees for parks, parkland, trails, and other open space facilities.
- Environmental fees for environmental mitigation programs.
- Fire and public safety fees for expanding the police, fire, and other public safety and emergency response systems.
- School/library fees for expanding schools and library resources.

⁵⁵ FHWA is not involved in conducting or reviewing these studies, even if the proposed DIF will support highway infrastructure.

- Affordable housing⁵⁶ fees that are earmarked for developing affordable housing needed to complement market-rate housing growth.
- Other public building/facility fees for any expansions of city facilities, such as facilities for general administration, health and human services, and public works.

Nexus studies can be conducted for a specific category, such as transportation fees, or for multiple categories depending on public agencies' goals regarding the extent of the DIF program they want to establish.

Although most State DIF statutes require that local agencies determine the reasonableness of fees charged to development projects, there are no set standards or parameters regarding how policymakers and consultants reach conclusions of reasonableness. Nexus study consultants often use best practices based on overall industry experience, but no specific industry standards currently exist. There are wide variations in methodologies across localities, consultants, and types of fees. Although no specific methodology is identified in State or local statutes regarding nexus studies, most studies follow a similar structure. For residential developments, for example, a recent survey of nexus studies that cities in California conducted indicate that there are two general approaches: the plan-based method and the level-of-service method (Raetz, Garcia, and Decker 2019, 51–52).

In the most common, plan-based method, a nexus is determined by assessing the infrastructure needed to serve a future population based on growth estimates, and it involves the following broad steps (see chapter 7 for a specific example):

- Identify the future demand for services, often based on estimates from official planning documents, such as a GP or relevant estimates from MPO.
- Identify the public facilities needed to meet this demand for service, and estimate the cost to provide these facilities.
- Subtract other sources of revenue that will be used to provide the same facilities to determine a net facilities cost.
- Choose a demand variable (e.g., post meridian [PM] peak hour [PH] vehicle trips), and apply variable rates (e.g., trip generation rate) to various land uses (e.g., residential, nonresidential).
- Calculate total future demand (i.e., total PM PH vehicle trips) by summing up across all land uses.
- Divide the net facilities cost by total demand to determine the unit cost per demand variable (e.g., average cost per PM PH vehicle trip).
- Apply unit cost to each land use demand variable to determine impact fee schedule by different uses (e.g., \$/DU for single and multifamily and \$/1,000 ft² for office, retail, and industrial uses).

⁵⁶ It is important to distinguish market-rate housing as part of new residential developments from affordable housing as part of public facility impacts. In addition to affordable housing impacts, residential developments create impacts on all public facilities, including roads, water/wastewater, police/fire, parks/open space, schools/libraries, etc.

In the LOS method, a nexus is determined by identifying an LOS standard (either existing or desired) that a municipality would like to achieve or maintain in the future. Local agencies generally have full authority to determine the desired LOS for infrastructure for their jurisdiction under State DIF statutes. This method involves the following broad steps:

- Define an LOS standard (e.g., number of firefighters per 1,000 resident or LOS D⁵⁷ for roads) often identified in an official document such as a GP.
- Use current replacement costs pertaining to the LOS standard to determine the incremental public facility cost standard, reduced by subtracting other sources of revenues that will be used to provide the facilities.
- Choose a demand variable (e.g., residents served, trips generated), and apply variable rates to various land uses (e.g., residential, commercial, retail).
- Multiply each land use demand variable by the cost for each incremental facility standard to determine fee schedule by land use.

Especially for the plan-based method, nexus studies often link impact fees directly to public improvement projects identified in a CIP tied to a GP. However, these studies do not always include an analysis of CIPs as a basis for project impacts. In California, for example, the MFA recommends that local jurisdictions link their impact fees directly to projects identified in a CIP, but the language is nonbinding. Better integrating CIPs in nexus studies would ensure that fees are directly tied to defined projects at the local level. Nexus studies based on CIPs can facilitate making the required findings, which are integral to the local ordinance that establishes the DIF program.

5.1.2 Effect on Development Feasibility

Development feasibility is aimed at assessing whether the imposition of DIFs on a new development project can negatively impact its financial feasibility to the extent that the developer decides not to proceed with the project.

Nexus studies are ultimately about setting maximum and legally defensible fee amounts based on the relationship between new developments and increased usage of public facilities. Public agencies often choose to set their fees below this ceiling in an effort to ease concerns about dampening new developments. The ultimate decision on fee levels is often driven by public agencies' funding priorities based on their infrastructure needs and the potential effect of the fees on development feasibility based on local real estate markets.⁵⁸ In some cases, public agencies intentionally lower the LOS standards (and, as a result, lower their public facility needs) in their nexus studies to help improve the feasibility of new developments by lowering the fee amount.⁵⁹

As presented, a variety of methods is used in nexus studies to estimate maximum fee amounts, but these studies generally do not address development feasibility concerns regarding the fees. Public agencies generally attempt to make reasonable decisions when setting the final fee levels with limited information

⁵⁷ LOS standard examples given for roads in this primer refer to LOS A through F, as defined in Highway Capacity Manual (HCM 2016).

⁵⁸ In California, for example, relative to the legal maximum found in nexus studies, Oakland set a public building fee at 9 percent, Los Angeles set a parks fee at 33 percent, and both Imperial and Riverside counties each set their parks fees at 100 percent.

⁵⁹ For example, City of Sacramento's GP sets their parks LOS at 5 acres per 1,000 residents, but the new parks impact fees were set based on a lower standard of 3.25 per 1,000 residents.

on development feasibility. The rigor in development feasibility analysis can impact the extent to which achieving optimum fee revenues can occur without hindering new developments. The depth of feasibility analysis undertaken beyond the nexus studies is often a function of local resources available. In general, public agencies choose one of the following options in addressing development feasibility:

1. Use more informal methods, rather than commissioning analysis beyond a nexus study, such as using working groups with knowledge of the local development process to inform their final decisions.
2. Rely on analysis of fees charged in adjacent jurisdictions as a proxy for development feasibility in their own jurisdiction.
3. Rely on full feasibility analyses to determine the amount of fees that the market can bear without slowing or stopping new developments.

Most local agencies choose the second option, which is often not a preferred approach because real estate markets are highly localized and new development potential can differ dramatically between jurisdictions. This approach also does not take into account other sources of revenue that nearby jurisdictions may be leveraging to finance certain infrastructure needs (e.g., higher property taxes).⁶⁰ To account for this variation in revenue, some local agencies conduct an infrastructure burden cost analysis that can provide a more in-depth view into how adjacent jurisdictions pay for their infrastructure (Raetz, Garcia, and Decker 2019, 56). However, such an analysis does not examine market conditions and still has shortcomings regarding what the development market can bear.

The most robust and reliable analysis is a separate feasibility study, which determines the total fee amount that could be charged without slowing or stopping new development from taking place. Such studies are sometimes conducted for implementing affordable housing impact fees or new inclusionary zoning requirements. In these feasibility studies, real estate consultants assess a range of prototypical projects (e.g., mid-rise projects, townhomes, single-family homes, etc.), sometimes for submarkets within a jurisdiction, to see how the fee levels affect the development feasibility across different project types and locations (Raetz, Garcia, and Decker 2019, 56).

Although most public agencies make good-faith efforts to consider feasibility, the majority are not conducting analyses robust enough to fully account for the impacts that fees have on new developments. One of the main concerns is about the added expense of feasibility studies, particularly for those jurisdictions with limited resources.⁶¹ Less-resourced jurisdictions may see less value in impact fees if they are too expensive to implement. As a result, they may choose not to actively incentivize new developments or be encouraged to shift to less regulated type of exactions from new developments, such as development agreements that are negotiated. It has also been found that multiple jurisdictions can combine their funds and efforts to conduct combined nexus and feasibility studies to lower the costs of these studies.⁶²

⁶⁰ Property tax allocations from the State can vary widely from city to city. In California, for example, some cities receive as much as 49 percent, whereas others as little as 3 percent of property tax revenues from the State, which can greatly affect local infrastructure budgets. In addition, some jurisdictions may have Federal and/or State funding for certain infrastructure or other VC techniques such as SADs already in place to draw revenues.

⁶¹ Raetz, Garcia, and Decker (2019, 28) recommends a State-level support in the form of technical assistance or a standardized feasibility tool that localities could use to conduct their own independently designed feasibility studies.

⁶² For example, in San Mateo County, California, 16 jurisdictions hired one consulting firm to combine (but separate) nexus and feasibility studies pertaining to 21 elements in their GPs. This combined strategy resulted in each jurisdiction with 75 percent in cost savings when compared to the cost of hiring consultants individually.

5.2 Fee Design and Structuring

The way in which public agencies design and structure impact fees can address important proportionality concerns—that is, the extent to which fees accurately reflect the cost of development impacts—while also helping to incentivize those developments that are consistent with their overall land use and planning goals (e.g., more dense multifamily housing rather than large single-family homes). From a practical standpoint, public agencies make many decisions in the fee design process, and the resulting DIF program will likely depend on the details of those decisions. Broadly, the design and structuring DIF program would entail the following basic elements:

- Defining service area and addressing geographical or locational concerns.
- Establishing LOS standards appropriate for infrastructure category under consideration.
- Determining the basis for fee structuring, typically as relates to the use characteristics of the specific structure (e.g., multifamily housing, office building) under consideration.
- Addressing other concerns, such as interjurisdictional issues, the need for incentives and exceptions, and the effect of real estate market conditions.

As presented, impact fee structures can vary significantly for different public facility categories (e.g., roads, water/sewer, parks, schools/libraries, police/fire, affordable housing), and fees must, therefore, correspond separately for each category. Although all fees are essentially based on use characteristics of a specific structure under consideration, other external factors may affect costs for some fee categories. For example, for a single-family house:

- Costs of roads per house will reflect the internal roads built primarily for that house as well as other offsite improvements (e.g., access roads, intersections) that are built to serve groups of homes in the same area.
- Costs of water, sewer, and stormwater facilities can vary significantly based on distance from the house to the central facility as well as on the overall density of homes near the target home.
- Costs of police and fire services may also depend to some degree on the distance from a house to the police or fire station.

5.2.1 Defining Service Areas—Locational Characteristics

Impact fee practice generally requires that the fees collected in a service area are spent in that area. However, public agencies have some flexibility in setting the service area. As a matter of practice, the larger the service area, the more flexibility there is in spending the revenue where (and when) it is needed most. Service areas that are too small and/or too numerous can result in insufficient revenues all around. Many services—such as police, fire, and public safety—act as a system in serving the entire jurisdiction. Even though it may be easiest to design and administer one service area for an entire jurisdiction, it is also important to consider refining the service area design and fee structure in ways that minimize public facility costs and promote the underlying land use planning goals (HUD 2008, 54).

Public agencies often rely on geographically specific impact fees to account for variations in infrastructure costs. If the infrastructure needed to serve growth in one large part of the community is already in place, but substantial new investment is needed in another, then local agencies may draw service areas reflecting this (HUD 2008, 54). In this case, service areas can be based on the extent of the existing

infrastructure and local agencies can apply marginal cost pricing. Although average pricing for fees takes into account the total cost of development impacts over an entire jurisdiction, marginal cost pricing takes into account the infrastructure cost of one additional unit of development. This approach to pricing has been shown to result in more efficient development, reducing the need for permit issuance in the urban fringe and limiting sprawl (HUD 2008, 18).

For example, the urban core may have lower costs because a new development can plug into existing sewer, water, and road systems, whereas a development in a typical greenfield area would have much higher infrastructure costs. Public agencies already rely on neighborhood-level fees to differentiate fee rates between (1) areas with greenfield development in which infrastructure may need to be built from scratch and (2) infill developments, which can often rely on less costly updates to current infrastructure. When cities and counties refrain from differentiating their rates for greenfield and infill development, they can run the risk of overcharging developments with lower impacts by averaging costs across a larger region.

Two good examples regarding geographic-specific fee structures are Albuquerque and San Diego (HUD 2008, 78). Albuquerque established impact fees that went into effect in 2005 based on three tiers—fully served, partially served, and unserved—to recognize that some areas already had most or all of the infrastructure needed to serve new developments, including infill and redevelopment opportunities, whereas other areas did not. San Diego currently has more than 40 community planning areas, each with their own fee amount set to reflect the different infrastructure cost levels for greenfield and infill developments.⁶³

In addition to existing infrastructure, service areas and geographic-specific impact fee structures can also be based on proximity to public transit systems. For example, in the early 1990s, Atlanta was the first city in the nation to reduce road impact fees for development near heavy-rail transit stations. Recognizing the reduced impact with public transit, the city reduced road impact fees by 50 percent for all multifamily communities within one-quarter mile of rail transit stations and 25 percent for developments between one-quarter and one-half miles (HUD 2008, 56).

High-density, mixed-use developments can also reduce road impacts. Some studies of mixed-use projects show up to a 40 percent reduction in road impacts (HUD 2008, 107). When living, working, shopping services are all nearby, people need fewer car trips and the distance traveled is reduced. Also, according to the National Household Travel Survey, as density increases, vehicle miles traveled (VMT) per person generally decreases (HUD 2008, 57). Further reductions can result from the presence of public transit.⁶⁴ Since impact fee levels for transportation facilities are among the highest, density-based reductions help assure that such fees do not adversely impact new developments.

More generally, many jurisdictions have special developments at subdivisional level or SPs that are separate and distinct from their GPs. These SPs generally have their own land use and zoning standards and often involve transit-oriented developments (TODs) based on smart, high-density growth patterns and goals. Many public agencies design impact fee structures for geographic areas covered under the SPs separate from the rest of their jurisdictions. Chapter 7 will present, as a case example, the City of

⁶³ Beyond geographic specificity, impact fees levied also reflect high variance in terms of funding priorities. In California, for example, localities with more greenfield developments, such as Irvine and Roseville, prioritize transportation funding in their fee structures. Conversely, Los Angeles and Oakland, both built-out, large cities, prioritize affordable housing fees.

⁶⁴ According to HUD (2008, 57), for example, the reduction in miles per person from the lowest residential density category (fewer than 75 units/mi²) to the highest (more than 6,000 units/mi²) is about half.

East Palo Alto's two-tier impact fee structure, one for the area covered by the city's Ravenswood TOD SP and the other covering the rest of the city.

Service areas can also be designed to take into account the availability of alternative funding sources. There are circumstances when parts of a jurisdiction already have the revenue stream needed to assure adequate public facilities. For example, in Texas, special municipal service districts (e.g., municipal utility districts) generate their own revenue to construct and maintain facilities. In Florida, many developments of regional impact form local improvement districts for the same purpose. Other specialized arrangements, such as TIF districts and various forms of SADs, also provide alternative revenue sources. Locally generated revenue may be sufficient in these areas to finance public facility needs for new developments.

Although these alternative mechanisms are available to fund the same facilities that impact fees would, local agencies may draw service areas to exclude them or could draft DIF ordinances to exempt them from impact fee assessments (HUD 2008, 55).⁶⁵ This kind of service area design may be appropriate for only those facilities that have a relatively predictable revenue stream dedicated to them (such as roads supported by dedicated gasoline taxes).

5.2.2 Establishing LOS Standards

Establishing LOS standards or goals for infrastructure, whether for roads or other categories, that serve new developments is one of the most critical elements in determining new public facility needs. In State DIF statutes, aside from any State and/or Federal guidelines that may apply, local agencies generally have full authority to determine the desired LOS standards for different public facilities in their jurisdictions. Although it is common to adopt the same LOS standard across an entire jurisdiction—such as LOS D for roads, or 3.5 acres of park per 1,000 residents—this need not be the case. Past, present, or future development patterns and constraints, combined with local growth and land use policies, often provide a rational basis for variable LOS standards.

For roads, it is not unusual for cities and counties to have an LOS D for highways in urban areas and LOS C for suburban and rural areas. Urban areas are more prone to congestion than nonurban areas, and the cost to maintain the same LOS could discourage new developments closer in (HUD 2008, 56). Variable LOS standards, however, may not be suitable for facilities such as water/wastewater, libraries, or schools that serve the entire jurisdiction and where vertical (social) equity is essential.

It is also important to note that, if a higher LOS is adopted in an area, public facilities should be brought up to the new standard through revenue from sources other than impact fees to ensure that the rational nexus requirement is not breached. Although it is reasonable to expect new developments to pay for a portion of new public facility costs, if localities have very high current LOS or set high LOS goals, they are effectively asking newcomers to pay a cost of entry to their communities by levying the costs on new developments based on those standards (Raetz, Garcia, and Decker 2019, 53). Setting high LOS standards and transferring those costs to impact fees can also prove exclusionary if the fees increase local property prices.

⁶⁵ Care must be taken, however, to ensure this is done properly. For example, although Texas municipal service districts (MSDs) may finance their own infrastructure, they typically do not finance the regional roads and regional parks serving them (HUD 2008, 55).

5.2.3 Determining the Fee Basis—Use Characteristics

Once delineation of geographic-specific service areas has occurred, the next challenge is to determine a set of standard fee schedules for each service area based on the LOS standards pertinent to the infrastructure being created in that service area. As presented, different fee schedules are generally established for different public facility categories. Within each facility category, standard fee schedules are developed by land use and type of structure—differentiated in terms of residential (single-family, multifamily) and nonresidential (office, retail, industrial). For most categories, the basis of impact fees are per DU for residential-use types and per 1,000 ft² of floor space for nonresidential-use types. The basis for fees is tied to the units of demand that best reflect different levels of need they generate on public facilities. They are intended to represent the lowest common denominator for impacts upon which a uniform schedule can be developed (without having to create additional layers of fee schedules) that can sufficiently address the proportionality concerns.

For roads, impact fees are typically based on the numbers of trips generated or VMT per DU for single- and multifamily housing and per 1,000 ft² for office, retail, and industrial structures. These demand variables are linked directly to incremental public facility costs to determine the unit impact fees in terms of \$/DU for residential and \$/1,000 ft² of nonresidential uses (see chapter 7 for more information on how transportation impact fees are determined). Table 3 provides different fee schedule bases for different public facility types used in a recent nexus study for the City of East Palo Alto.

Table 3. Fee Schedule Basis by Public Facility Type.

Facility type	Demand basis	Fee basis	Basis unit	Impact fee
Transportation	No. trips or VMT	Residential use	DU	\$/DU
		Nonresidential use	1,000 ft ²	\$/1,000 ft ²
Water/wastewater	Daily water consumption	Residential	DU	\$/DU
		Nonresidential	Small meter	\$/meter
			Large meter	\$/GPD
Storm drainage	Impervious surface area	Geographic district	Acreage	\$/acre
Parks/open space	Service population ¹	Residential use	DU	\$/DU
		Nonresidential use	1,000 ft ²	\$/1,000 ft ²
Affordable housing	Development location/type	Residential use	1,000 ft ²	\$/1,000 ft ²
		Nonresidential use	1,000 ft ²	\$/1,000 ft ²
Public buildings	Service population ¹	Residential use	DU	\$/DU
		Nonresidential use	1,000 ft ²	\$/1,000 ft ²

Source: AECOM (2019a); VMT—vehicle miles traveled; DU—dwelling unit; GPD—gallons per day.

¹Service population = population + 0.5 employment.

Particularly for residential developments, there has been a great deal of research and discussion about whether per DU properly represents the impact fee basis and whether other measures, such as per square footage or per number of bedrooms, better address the proportionality concerns both from a horizontal and vertical equity standpoint. Although per DU is used predominantly, HUD recommends the size (i.e., per square footage) as the preferred basis of impact fees for residential developments (see sidebar 5.1; HUD 2008, 44).⁶⁶

Sidebar 5.1: Unit Fee Basis for Residential Developments

Early uses of impact fees were typically in simple forms using constant or flat fees across houses or apartments, often without regard to any notion of size or type of unit that was covered under the fee. This kind of fee structure charges impact fees to purchasers in a way that is simple to calculate and provides the necessary revenues for construction of infrastructure. Many jurisdictions still charge flat impact fees on all residential units regardless of type or size. However, underlying costs across units range widely based on size of the unit and number of occupants that tend to use more or less of particular services. While the fixed amounts are undoubtedly simple to understand and enforce, they are inherently unfair. Flat rate impact fees compromise affordability and are socially negative to the degree they systematically overcharge purchasers in smaller, less expensive houses or apartments and undercharge others in the most valuable houses.

If impact fees are to be varied based on differences between units, then what is the appropriate variable? Choices are essentially unit type (single-family detached, town house, condominium, apartment and manufactured home are usual types), number of bedrooms, or size in square feet. Then the per capita multiplier would be characterized as persons per unit, based on unit type, number of bedrooms, or square footage of heated space. All would be an improvement over assessing a flat fee on all residential units despite differences in occupancies between them. . . .

While there are different variables that might be used for this purpose, based on a comprehensive literature review and research conducted in the course of this project, the authors found that the simplest and most universal factor associated with actual costs is the square footage of the home. For certain impact fees, particularly those covering libraries, parks, open space and construction of schools, square footage of the homes may be sufficient for allocating costs. For other fees, such as those covering roads, public safety and water or drainage, additional significant variables should also be considered along with dwelling unit square footage in determining the appropriate costs and payments. Depending on the particular fee, these variables might include size of lots and the density of subdivisions or broader neighborhoods. But the key point is that basing all types of impact fees in whole or in part on house or apartment square footage rather than charging uniform rates is straightforward to implement and helps to avoid overcharging smaller units more than their true proportionate share.

Source: HUD (2008, ii, 43–4).

⁶⁶ To date, local agencies have adopted few road impact fees that vary by the size of the dwelling unit. This is largely because road impact fees are generally based on national trip generation rate data from the Institute of Transportation Engineers (ITE) trip generation manual, which does not provide rates by dwelling size. However, ITE data are often modified to reflect other sources that document trip generation rates for residential uses that vary by the size of the household.

5.2.4 Inter-Jurisdictional Issues and Other Considerations

When infrastructure needs transcend jurisdictional boundaries, inter-jurisdictional fees can provide a streamlined way to mitigate impacts. These fees also offer a way for less-resourced localities to leverage fees for infrastructure funding. In recent years, some public agencies have come up with innovative ways to better capture the impact of new developments that cross-jurisdictional boundaries (see sidebar 5.2). Although there may be concerns about nexus precisions (i.e., the extent to which fees are proportional and directly linked to impacts generated for different infrastructure categories and geographic areas), particularly those covering broad swaths of land, public agencies have generally designed inter-jurisdictional fees to target an area with more homogeneous costs (Raetz, Garcia, and Decker 2019, 48).

In West Riverside County, California, many households live in one town and commute to work in another, creating a type of “commute shed.” While hometowns benefit from fees on new developments, those funds can only be spent within the hometown boundaries. The Western Riverside Council of Governments (WRCOG) collects transportation uniform mitigation fees from new developments throughout the WRCOG’s boundaries and redistributes that funding to reimburse local agencies for transportation improvements within the broader commute shed.

Similarly, the Sacramento Area Council of Governments and three of its member cities have partnered with California DOT to establish a mandatory fee on new developments, targeting a region that relies on a section of the Interstate 5 (I-5) corridor as part of the I-5 Subregional Corridor Mitigation Program. To better reflect variations in traffic and freeway usage patterns, the fee program has four distinct fee districts with different fee schedules. These regional fees provide a path for less-resourced communities to assess and implement impact fees within their own jurisdictions while addressing the broader impacts of new developments across multiple jurisdictions.

Sidebar 5.2: Inter-Jurisdictional Impact Fees—Examples

In West Riverside County, California, many households live in one town and commute to work in another, creating a type of “commute shed.” While hometowns benefit from fees on new developments, those funds can only be spent within the hometown boundaries. The Western Riverside Council of Governments (WRCOG) collects transportation uniform mitigation fees from new developments throughout the WRCOG’s boundaries and redistributes that funding to reimburse local agencies for transportation improvements within the broader commute shed.

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Source: Raetz, Garcia, and Decker (2019).

Various incentives and exceptions are sometimes incorporated into fee structuring to serve several purposes, including promoting overall land use policy goals (e.g., high-density TOD), rectifying vertical inequity situations (e.g., general affordability concerns with higher impact fees), or accounting for reduced impacts (e.g., areas where traffic demand management can be implemented). These incentives and exceptions can be situation-specific or more programmatic in nature. Programmatic incentives associated with geographic specificity were covered in section 5.2.1, and programmatic exceptions associated with remedying vertical inequities were covered in section 3.2, in the form of exemptions, exclusions, waivers, and deferments. As presented, local agencies grant (1) exemptions when a new development does not create a new impact, (2) exclusions when alternative revenues are available, (3) waivers to promote local policy goals (such as affordable housing), and (4) deferments to reduce early phase risks to developers and developments.

Finally, some of the variance in impact fee rates between localities reflects the differences in real estate markets. Public agencies sometimes set their fees higher, assuming that developers will be able to cover the costs due to healthy real estate market and overall high property prices. Structuring the fees according to local housing markets can ease the impact of fees on weaker submarkets. Also, rather than applying the full amount of a fee or fee increase when approved, localities can stage implementation in steps over a period of time to give the housing and land markets a chance to adjust to the higher cost of development.

5.3 Timing of Fee Payments

Numerous State DIF statutes specify the timing of when impact fee assessments and collections can occur. Others are silent and, in States without DIF enabling acts, the timing of payment is mostly a local option. The two critical timing issues are (1) the point of fee assessment (i.e., fee imposition) and (2) the point of fee collection. Sometimes they are simultaneous, such as being assessed and collected with the building permit, perhaps the most common approach, because it is the most efficient administratively. It is also the earliest point during the development process when the expected impacts of a new development are best known. At that stage, the assessed and collected impact fees increase the chance that fees will flow into new or expanded infrastructure roughly concurrent with the impacts of new development (HUD 2008, 60).

Some public agencies assess and collect impact fees at the end of the development process, during the final inspection or issuance of the certificate of occupancy (CO). This has the advantage of preventing the developer from incurring financing costs on the period between the impact fee payment at the building permit stage and sale of the property. When a property is held for rental, it allows the developer to finance the fee with lower cost take-out financing, the long-term or permanent financing that replaces interim or construction financing. A variant on this approach is assessing impact fees at the building permit stage but collecting them at the final inspection or CO stage. This has the advantage of allowing the local government to budget for the revenue before it is paid, and it provides the developer with increased certainty on the amount (HUD 2008, 61).

5.3.1 Fee Imposition

The timing of fee imposition—the point in the entitlement and development process when the calculation and assessment of impact fees occur—can be just as important to developers as the feasibility of fee estimation. The sooner developers know their fee costs, the sooner they can estimate a project’s overall costs and feasibility. Local agencies, on the other hand, prefer setting fee amounts later in the development process to better capture the most up-to-date fee rate. Local agencies also impose fees later to help capture the up-to-date impacts of new developments that experience delays in the period between building permit review and construction (Raetz, Garcia, and Decker 2019, 31).

The most recent surveys of cities and counties in California indicate that fees are typically imposed at the time of building permit application or building permit issuance (Raetz, Garcia, and Decker 2019, 32). However, there were other variations—such as fees imposed at the time of construction plan review or at issuance of the CO. Some cities, such as Oakland, had a more complex multilayered imposition schedule (see sidebar 5.3).

The surveys also found that there is often a lag between project approvals and when actual development takes place (Raetz, Garcia, and Decker 2019, 33). Several years can pass between permitting, building approvals, and the actual construction of a building because of project-specific or market changes, such as a recession. In some cases, a developer may substantially revise the project, which could result in substantive changes to the development project scope and public facility impacts. Local agencies impose fee amounts later in the development process to better insulate against these types of changes in scope. In contrast, developers want to set fee amounts earlier to lower the risk of substantial cost increases during the development process.⁶⁷ Lowering the risk of cost increases delivers more certainty to investing institutions, increasing access to funding and lowering the contingency needed, reducing overall carrying costs (Raetz, Garcia, and Decker 2019, 33).

Sidebar 5.3: Multilayered Fee Payment Schedule—City of Oakland

Oakland provides an example of a more complicated fee imposition schedule. In its online materials, the city specifies that if a building permit application expires or had changes that require a new building permit, the city imposes fees at the time of the new application. Similarly, if a building permit has not received approval within a 1-year window following the most recent application, the city imposes the fees at the time of approval. Finally, the city must issue CO within 3 years of the building permit issuance. Otherwise, the city imposes the fees at the time of issuance of the certificate. Oakland needed to clearly outline the timing of fee imposition because their new impact fees stepped up dramatically after adoption. For example, their total impact fees per unit in Fee Zone 1 (downtown Oakland and Oakland Hills) increased from \$8,500 in September 2016 to \$15,500 in July 2017, ultimately leveling off at \$28,800 in July 2018.

Source: Raetz, Garcia, and Decker (2019).

⁶⁷ One way for developers to freeze fees early in the process is to use development agreements or vesting maps, but these typically only apply to very large projects or subdivisions.

5.3.2 Fee Collection

From developers' perspectives, the timing of fee collection is important because spending money earlier in the development process results in a longer period between fee outlay and occupancy, when revenue begins to flow back to the developer. When local agencies prolong this window, developers must incur carrying costs over a longer period of time, which often requires paying out of pocket because many banks will not close financing on a project until permit issuance. Because of this dynamic, paying fees early in the development process may be difficult for smaller developers without capital on hand.

From the perspective of a local jurisdiction, however, some fees may be more important to collect early to cover more immediate costs. For example, collecting transportation or utility impact fees may be needed before occupancy to fund timely construction of the street improvements required to serve the residents of a new development. Most local governments ask for payment at the time of either building permit issuance or CO, but the difference between these two stages includes construction, which can take a long time.⁶⁸ Developers argue that the additional carrying costs can increase the overall price of properties.

Some State DIF statutes restrict when localities may require developers to pay impact fees. In California, for example, local jurisdictions may not require developers to pay fees until the issuance of a CO or the date of final inspection, whichever happens first. However, there are exceptions if they determine “that the fees or charges will be collected for public improvements or facilities for which an account has been established and funds appropriated and for which the local agency has adopted a proposed construction schedule or plan or used the fees to reimburse for expenditures.” (Raetz, Garcia, and Decker 2019, 34).

In the same surveys presented earlier, it was found that most cities and counties surveyed collect impact fees at the time of building permit issuance, although timing can vary according to the fee (Raetz, Garcia, and Decker 2019, 34). A minority of jurisdictions collect fee payments at the time of either CO or final inspection, whichever event happened first, because this timeline aligns with the incidence of the impacts on public facilities. Some cities collected fee payments at different points in the development timeline for different fees. For example, Oakland collects half of its affordable housing impact fees at the time of building permit issuance and half at the issuance of CO. This split timeline was established because affordable housing fees make up the lion's share of total fees (82 percent and 92 percent of total fees for single-family and multifamily prototypes, respectively), and splitting collection times was intended to free up funds for affordable housing while also limiting the amount of carrying costs on loans (Raetz, Garcia, and Decker 2019, 34).

⁶⁸ For example, an analysis of development pipeline data from the City and County of San Francisco in production between 2009 and 2017 found that the time between entitlement and certificate of occupancy averaged approximately 2 years.

Some jurisdictions provide fee deferral programs to build more flexibility into the timing of fee collection.⁶⁹ These deferral programs can represent an important local tool to accommodate developer concerns when fiscally possible. They were found to incentivize new developments because they enabled developers to pull larger batches of permits at once and allowed a steady supply of work for builders to move construction workers smoothly from project to project rather than reassembling teams, which can be costly and challenging in the tight labor market. However, there are also potential challenges with fee deferrals in that without the presence of collateral it may be difficult to recoup the full amount of the fee later in the process (Raetz, Garcia, and Decker 2019, 34).

⁶⁹ For example, since the late 1990s, Sacramento County has offered three impact fee deferral programs to encourage economic development, affordable housing, and residential developments (Raetz Garcia, and Decker 2019, 34). The programs allow developers/builders to pay a small portion of the development impact fees at building permit and to defer or delay paying the remainder of the fees until a later date.

CHAPTER 6: IMPLEMENTATION CONSIDERATIONS

6.1 Basic Principles

Creating a DIF program can be a costly and labor-intensive process. A well-planned fee program can generate sufficient funds to allow public agencies to adequately meet the increased public facility or service needs that new developments create. A poorly planned program can result either in not collecting enough money and being forced to pay for new developments through the general fund or in collecting too much money based on an unsupported fee program, thus exposing the program to a fee challenge.

According to the League of California Cities (LCC), for example, the basic principles that can help guide the implementation of a DIF program can include the following (2003, 7–9):

- *Plan for future growth/development.* Understanding where growth may occur within the jurisdiction can help in planning for specific public facility needs. In planning for such needs, to the extent practical, local governments should explore the opportunities for marginal cost pricing (i.e., leveraging the existing capacity as much as possible for geographic equity, as presented earlier). Typically, the local GP can serve as a guideline in this respect, and if obsolete, the GP should be updated before basing fees on the plan's growth projections.
- *Strike the right balance in fee structuring.* Although it is important to tailor each fee to address a particular impact and to avoid broad-brush fees that could be subject to legal challenges, creating too many fee categories may create administrative difficulties in implementing and accounting for fees once they are collected. Also, new developments cannot be made to pay more than their fair share (especially for existing deficiencies), and fees must bear a reasonable relationship to the actual cost of providing only the incremental public services that new developments require.
- *Establish reasonable LOS goals.* The GP generally specifies the acceptable LOS, in accordance with the applicable standards, at which certain types of public facilities must be maintained. Although a jurisdiction cannot require new developments to pay for existing deficiencies, it can require new developments to provide an acceptable LOS, including deciding more generally whether to raise or lower the current LOS for public facilities. As an example, it is possible to use expenditures from the general fund to raise the LOS for existing developments while requiring new developments to pay for incremental LOS above what is currently in place.
- *Keep the legislative body informed.* At the beginning of the process to enact fees, it is important to ensure that the city council or other local decision-making body understands the nexus requirement. For slow-growth communities, the body needs to understand that new developments cannot be required to mitigate current deficiencies. For pro-growth communities, the body needs to recognize that undercharging new developments may result in a mandate that general fund monies be used to maintain required service levels.

- *Assess effect on development feasibility.* Too many exactions might hurt rather than help, the local economy. Before a jurisdiction starts creating multiple layers of fees, it would help to consider what types of developments are most affected by high impact fees and whether new fees will help or hinder the kinds of development it wants to encourage.⁷⁰
- *Consider use of development agreements as appropriate.* Development agreements (DAs), contractual arrangements between local jurisdictions and developers (where significant developer concessions can be negotiated in exchange for long term vested rights), are generally not constrained by the DIF legislative nexus requirements. If DAs are used, a provision should be included, whereby the developer waives any right to contest fees under DIF legislative provisions.

6.2 Key Implementation Elements/Processes

In chapter 4, presented basic legislative processes involved in establishing a DIF program at the local level. This section elaborates further on the key implementation elements identified in .⁷¹

Decision to Establish DIF Program

Once a jurisdiction has considered the areas where growth may occur and the scope of public improvements that will be required by this growth, it can decide to proceed with establishing a DIF program. As presented earlier, establishing a DIF program will depend on the relevant State and local laws, but it generally will require the following:

1. Projecting the future growth that will be served.
2. Identifying the current and projected LOS for each public facility.
3. Identifying any additional facilities or improvements that will be needed to accommodate future growth.
4. Allocating the costs of providing the needed public services between the existing population and new population.

In addition to the basic principles outlined in the previous section, the LCC also recommends the following additional factors to consider when establishing a fee program (2003, 11–12):

- *Don't adopt too long of a time horizon for future growth.* Pick a reasonable period within which the required improvements could be built and projected development could occur.
- *Identify all infrastructure improvements for nexus study.* Identify all improvements in which impact fees can be applied—including impact areas that are obvious (e.g., congested intersections) as well as those that are less obvious (e.g., the lack of art in public places)—and think creatively about the use of impact fees. Public input prior to initiating a fee study may help in identifying such improvements.

⁷⁰ For example, high residential impact fees can price low-income households out of the housing market and encourage developers to construct larger, more expensive homes in markets that can more easily absorb higher fees. Similarly, high commercial impact fees may drive business tenants to a neighboring city or an unincorporated area that has lower fees. One way to address such issues is fee waivers.

⁷¹ FHWA is not involved in these processes.

- *Consider holding at least two public workshops.* Public participation at the beginning of the fee process gives the program the opportunity to answer their questions and incorporate their concerns into the program. Public participation near the end of the process, before bringing the required ordinance for resolution, can highlight any potential legal challenges and allow jurisdictions an opportunity to respond appropriately before final action is taken.

Commissioning a Nexus Study

Once a jurisdiction decides what public services and infrastructure will require funding through impact fees, the next step is to commission a nexus (or fee) study. As presented in section 5.1, the goal of the nexus study is twofold: (1) to establish the legal support to impose the fee (i.e., nexus between the impact created and the amount of the fee imposed) and (2) to quantify the projected impact on local infrastructure. Unless the fee being considered is extremely rudimentary, an experienced consultant can help determine legally defensible fees. Consultants can also help identify fees that had not been considered and propose funding alternatives if impact fees are not sufficient.

Once a local agency proposes a fee study, developers may rush to secure project approval before the new fees are in place. To avoid this, the agency may consider passing a resolution requiring that all future development participate in the pending fee program, or it may attach conditions on approval, requiring new development to comply with whatever fee program the agency ultimately adopts.

Developing CIP

As presented earlier, many jurisdictions prepare a CIP in conjunction with a fee program. A CIP establishes a schedule of improvements necessary to accommodate the projected growth and typically includes the approximate size, location, time of availability, and estimated costs of all improvements to be financed through fees. The CIP is closely tied to the local GP that delineates when, where, and how growth may occur within the jurisdiction. Local governments may develop capital improvements for their entire jurisdiction or for specific geographic areas where they established SPs.

Public Hearing and Procedures

State DIF-enabling legislation typically delineates specific procedural requirements to be satisfied in both establishing new fees and increasing an existing fee, including public hearing requirements. For example, the MFA in California requires that the local agency must conduct at least one scheduled public meeting with appropriate prior notices. Any costs incurred in conducting the required public hearing may come from the proceeds of the enacted fee. Upon adoption of the required ordinance and resolution, the fees become effective 60 days thereafter. The legislation also requires that a local agency make available, for public review, data indicating the cost to provide the service for which the fee is charged and the anticipated revenue sources to provide the service, including general fund monies if used.

More generally, the legislative body (e.g., the city council) cannot delegate the responsibility of adopting or increasing impact fees to its planning commission or other body. It alone adopts the necessary ordinance and resolution, including considering a fee amount that is lower than the actual cost of providing public services. Some jurisdictions have found that taking a conservative approach with less than 100 percent full cost recovery can often help avoid challenges that the fee is too high (LCC 2003, 16).

Preparing Staff Report

In addition to the fee study and CIP, the staff report for adoption of a DIF program should also be a part of the administrative record. The city attorney should work with community development or public works staff to ensure that all required evidence is presented. A well-drafted staff report can be the crux of the legal defense of the fee. Any conclusions or opinions made by staff in the staff report or at the public hearing constitute "substantial evidence" for purposes of any future legal challenge. The staff report should refer to any improvement or infrastructure standards set forth in the GP or any SP and explain how the fee will help in meeting these standards (LCC 2003, 17).

Drafting Ordinance and Reaching Fee Resolution

An ordinance is a law or statute adopted by a municipal legislative body. A resolution is a formal expression of the opinion or will of an official municipal body, serving as a basis for adoption by a vote. The ordinance establishing the fee program provides the legal basis for the imposition of the fee and required procedures, as dictated by relevant State and local legislation. Although the resolution can contain the actual amount of the fee, it is not advisable to include the amount of the fee in the ordinance itself. Any change to the fee would generally require a formal ordinance amendment.

According to the LCC (2003, 18), for example, local DIF ordinances can generally include the following elements:

- Legislative findings supporting the imposition of fees.
- A section formally establishing distinct fund categories for each of the fees.
- A provision for an automatic annual adjustment for inflation.
- A statement specifying when developers pay the fees.
- A provision providing an appeal procedure.
- Provisions for exemptions or credits.

Annual Accounting for Fees

Once the local government pass the fee ordinance, the jurisdiction can start collecting fees. DIF-enabling legislation typically requires that jurisdictions account for every fee that they collect under its terms. It is generally required that funds jurisdictions collect for each capital facility or service be deposited in separate accounts and not commingled with any other funds for other impact fees. While funds are accruing for individual capital facilities, the jurisdictions are often required to keep track of each fund and provide an annual fee report. If they fail to accurately account for the collected fees, they may need to refund the fees. The details depend on the fee ordinance, the State enabling legislation, and any other applicable laws.

For States required to do an annual accounting, local jurisdictions may need to have the following information available at the end of each fiscal year (LCC 2003, 18):

- A brief description of the type of fee in each account or fund.
- The amount of the fee.
- The beginning and ending balance of the account or fund.
- The amount of the fees collected and the interest earned.
- An identification of each public improvement on which fees were expended and the amount of each expenditure.
- An identification of the approximate date by which the construction of the public improvement will commence.
- A description of any interfund transfer or loan and the public improvement on which the jurisdiction will expend the transferred funds.
- The amount of refunds made and any allocations of unexpended fees that are not refunded.

Annual Review of CIP and Audits

If the public agency adopts a CIP along with the DIF program, it may need to update the CIP regularly. In addition, anyone can request an audit of a local agency's fee to determine whether the fee exceeds the amount reasonably necessary to cover the cost of the services provided. The local agency or an independent auditor may conduct the audit. All costs that the local agency incurs by preparing the audit may be recovered from the person requesting the audit.

Fee Collection Process

As presented earlier, impact fees can be collected at different times and different rules can apply for different structures, which can make the collection more complicated. For example, residential developments that include multiple DUs may be required to pay fees on the following:

1. A pro rata basis for each dwelling when it receives its final inspection or CO.
2. A pro rata basis when a certain percentage of dwellings have received their final inspection or CO.
3. A lump-sum basis when the first dwelling in the development receives its final inspection or CO, whichever occurs first.

It is up to the local agency to decide which of these three payment options it requires. If a different payment schedule is critical for the local agency, execution of a development agreement may provide an alternative fee collection approach.⁷²

⁷² See *Value Capture: Development Agreement and Other Contract-Based Value Capture Techniques—A Primer* (FHWA 2020).

Dealing with Fee Challenges and Refunds

State DIF-enabling legislation generally provides specific procedures for challenging DIFs. The challenges can be to fees imposed on a specific development project or to legislative approval of a fee program. For project-specific challenges, the protesting party may sometimes be required to pay all impact fees in full when due regardless of the pending challenges. In general, both the protesting party and local jurisdictions are subject to strict timelines in terms of when to file the protest, when to issue written notices, and when to provide documentary evidence. Also, procedural requirements may be different for different fee categories (e.g., water/sewer linkage fees vs. road impact fees).

A local agency generally cannot withhold approval simply because a party protests the fee. However, it can deny a project on other grounds even if the fee is challenged. It is important that the legislative body knows this principle before deliberations commence on a project in which fees are likely to be an issue. In addition, the imposition of fees that triggers the protest period typically begins when the local agency first imposes the fees as a condition of approval, not when the developer actually pays the fee.⁷³

In California, for example, for a project-specific challenge, if the court finds in favor of the developer, the court will direct the local agency to refund the unlawful portion of the payment with interest (LCC 2003, 23). Similarly, for a fee ordinance challenge, if the court finds the ordinance or resolution invalid as enacted, the court will direct the local agency to refund the unlawful portion of the fee plus interest. The refund will go to any person who has complied with the protest provisions of the DIF-enabling legislation.

6.3 Standardization and Transparency

In a recent comprehensive survey of impact fees and other development charges in California, one of the key findings was the difficulty of estimating the total fees (referred to as the *fee stack*) on any specific development project (Mawhorter and Reid 2018). This lack of transparency can prevent the State and localities from tracking and assessing the feasibility and reasonableness of fees. One way to lift the burden of unknown development fees is for localities to develop standards pertaining to the following:

1. Determining the amount of fees that can be charged.
2. A fee transparency policy with up-to-date fee schedule information in an easily accessible public format.
3. A clear framework of when local agencies can charge or change fees during the development process (Raetz, Garcia, and Decker 2019, 5–6).

In the past, the American Planning Association (APA) addressed some of the issues related to standardization as part of its broader impact fee policy guides (see sidebar 6.1).

⁷³ According to the LCC, for example, it is also critical that the local agency provides written notice when a development project is approved, consistent with legislative requirements (LCC 2003, 23). The timeline to file suit typically does not begin until the notice is delivered to the developer, and failure to file the notice may result in an open-ended statute of limitations. This could place the agency in a vulnerable position should the developer build out the project and then file its protest and lawsuit. The easiest way to ensure the provision of proper notice is to include the required language into the agency's standard fee condition.

Sidebar 6.1: Impact Fee Standards—APA

Along with its eight specific policy guides on impact fees, APA has long established a set of standards for impact fees as in the following (1988):

- The imposition of a fee must be rationally linked (the “rational nexus”) to an impact created by a particular development and the demonstrated need for related capital improvements pursuant to a capital improvement plan and program.
- Some benefit must accrue to the development as a result of the payment of a fee.
- The amount of the fee must be a proportionate fair share of the costs of the improvements made necessary by the development and must not exceed the cost of the improvements.
- A fee cannot be imposed to address existing deficiencies except where they are exacerbated by new development.
- Funds received under such a program must be segregated from the general fund and used solely for the purposes for which the fee is established.
- The fees collected must be encumbered or expended within a reasonable timeframe to ensure that needed improvements are implemented.
- The fee assessed cannot exceed the cost of the improvements, and credits must be given for outside funding sources (such as Federal and State grants, developer-initiated improvements for impacts related to new development, etc.) and local tax payments that fund capital improvements, for example.
- The fee cannot be used to cover normal operations and maintenance or personnel costs, but must be used for capital improvements, or under some linkage programs, affordable housing, job training, childcare, etc.
- The fee established for specific capital improvements should be reviewed at least every two years to determine whether an adjustment is required, and similarly the capital improvement plan and budget should be reviewed at least every 5 to 8 years.
- Provisions must be included in the ordinance to permit refunds for projects that are not constructed, since no impact will have manifested.
- Impact fee payments are typically required to be made as a condition of approval of the development, either at the time the building or occupancy permit is issued.

Developers draft a pro forma⁷⁴ as a first step in conceptualizing a potential project, and the cost of all local development fees represents an important line item in that project budget. Impact fees and other development charges can make up a big portion of developers' project budget, and these fees can vary widely from jurisdiction to jurisdiction.⁷⁵ For developers, this broad range makes it very difficult to estimate the fees for their projects because there are no standard costs across a given State. Without standardized systems, developers are not able to accurately predict total project costs, which is critical for the predevelopment stage. As a result, many developers are not willing to take the risk of starting a project without knowing the costs and often decide to take their projects elsewhere.

According to recent surveys, development fees are also often set with no oversight or coordination between departments that are responsible for administering different fees, further complicating what can be a disorganized process. Since there is no formal standard system for development fees, developers often rely on informal relationships with planning or building officials, putting smaller development companies with less connections in a disadvantageous position (Raetz, Garcia, and Decker 2019, 17).

According to the same surveys, developers typically begin by searching online for development fee schedules to come up with an estimate of fee costs. Beyond estimating project feasibility, development fee schedules also provide a window into the cost of building at the local level, as well as funding priorities for the local jurisdiction. Those priorities are reflected in the nexus studies that provide the foundation for establishing a specific impact fee and a locality's related fee schedule. Key aspects of fee transparency, therefore, are availability and accessibility of fee schedules, nexus studies that explain the basis for fee calculations, and annual reports of accounting for fees that are already being implemented.

The same surveys also found that although a few localities post their nexus studies online, these studies are rarely easily accessible to the public and are often outdated. Fee schedules can also be challenging to find and are not always updated or complete. Although a few jurisdictions provided a centralized master fee schedule online, representing a neat compendium of all fees, most have adopted their fees through different ordinances and/or post them on different departmental websites, complicating the process of identifying and estimating fees.⁷⁶ Finally, it was also challenging to obtain annual fee reports, indicating a significant barrier to determining whether local agents are levying, collecting, and spending fees appropriately. Some jurisdictions do not consolidate all of their impact fees in a single annual report, making it necessary to request reports separately from different departments.

⁷⁴ For real estate investors, a pro forma is a report that gathers current or estimated income and expense data to project the net operating income and cash flow of a proposed property.

⁷⁵ According to the recent survey in California, for example, the fees can vary from \$12,000/DU in Los Angeles to \$86,000/DU in Fremont for multifamily housing and from \$28,000/DU in Sacramento to \$171,000/DU in Fremont for single-family housing—as much as a sevenfold difference (Mawhorter and Reid 2018).

⁷⁶ For a given fee, once online users can locate the fee schedule, they found fee calculations in most cases to be straightforward. They encountered more complications when they attempted to calculate total development fees for a proposed project, which ranged from unavailable or obsolete fee schedules to missing maps for neighborhood-specific fees.

Despite these shortcomings, a few select localities were able to find remedies to the transparency and standardization challenges, representing best practices they could apply more widely (see sidebar 6.2). The following summarizes key recommendations from the aforementioned survey:

- Post all nexus and feasibility studies on the localities' websites using a standardized format, if possible, rather than assuming the public can understand consultant reports.
- Release nexus and feasibility studies well in advance of fee adoption, allowing time for the public to review and debate their reasonableness.
- Post clear, comprehensive, and up-to-date fee schedules on a single regularly updated master fee schedule on the website of a department typically catering to developers.
- Provide clear fee maps (and, if possible, interactive GIS map for cross-checking) for neighborhood-specific fees identifying other non-DIF development charges subject to different legislative requirements.
- Provide fee estimates as well as guidance on how to calculate fees, including sufficient guidance to enable estimation of all fees for a given project early in the development process.

Sidebar 6.2: Examples on Transparency and Standardization

Recent surveys of cities and counties in California revealed a few examples from the following jurisdictions on how they effectively address transparency and standardization issues:

- *City of Fremont* clearly lists all its development fees on an updated master fee schedule, with the impact fees clearly identified. The city also provides a summary sheet on impact fees that lists the fee amounts and answers frequently asked questions about the fees.
- *City of Oakland* provides impact fee schedules. The city sets aside all impact fees on a separate web page, and places the fee schedule next to information on related meetings, municipal code chapters, administrative regulations, links to specific fees (e.g., school, utility fees), nexus and feasibility studies, and annual fee reports.
- *Riverside County* hosts a website called "Map My County," which outputs a full report on a parcel, including the applicable DIFs. This approach is a clear way to identify all applicable impact fees, particularly when a locality has fees that vary by geographic or proximity zones.
- *City of Roseville* provides The Residential Fee Booklet, which helps to walk applicants through each step of estimating all relevant fees specific to their development projects. Such a booklet can be valuable, especially when, as is often the case, all applicable fees are not collected in one master schedule and the fees are not simply structured with clear multipliers and amounts.
- *City of San Francisco* increases most of its impact fees annually on January 1, and the adjusted fees appear annually in the Citywide Development Impact Fee Register, available on the Planning Department website. The Controller's Office annually adjusts the applicable fees based on the Annual Infrastructure Construction Cost Inflation Estimate, which the City Administrator's Capital Planning Group publishes and the Capital Planning Committee approves.

Source: Raetz, Garcia, and Decker (2019).

6.4 Internal Administrative Capacity

One potential disadvantage of implementing a DIF program might be that it is complicated and expensive to implement. Adopting a DIF program may carry additional costs to the locality because of the need for increased staff resources, for increased interdepartmental coordination, and for analytical rigor pertaining to nexus and feasibility studies.

All things being equal, a fee program may slow potential growth because developers may prefer to locate their projects in a community without impact fees. A fee program may also reduce the price of undeveloped land, as presented in chapter 3, because impact fees can act as a deterrent to develop open land. Establishing the right level of impact fees that does not impede developments, thus, requires localities to engage in more professional and sophisticated capital facilities planning processes, requiring additional administrative staff with the necessary skills. In addition, one of the administrative factors that contribute to the success of a fee program is having an innovative mindset and internal capacity to review, deliberate, and implement an impact fee program (Carrión and Libby 2000, 4).

In many ways, the transparency-related challenges of finding detailed fee schedules, annual fee reports, and nexus studies online presented in the previous section reflects a lack of resources at the local level. For less-resourced public agencies, the daily work often takes precedence over conducting a full review of all development fees or consolidating annual reports and nexus studies. Requiring a higher level of transparency for nexus studies, for example, would impose additional administrative costs on local agencies. Although the cost of gathering relevant data and posting nexus studies can be relatively low, translating nexus studies for the public might be more challenging.⁷⁷ More generally, any added requirement focused on increasing transparency should consider the internal budgetary and staff capacity implications.⁷⁸

In general, as presented earlier, there can be significant variations in designing and setting fees. Different types of fees require different types of nexus analysis, resulting in localities adopting different multipliers for different facility types. The multilayered fee structure often calls for interdepartmental coordination and staff resources with a cross-departmental knowledge base. In the planning stage, for example, there needs to be extensive coordination between land use and facility planning because impact fees depend on a comprehensive land use and capital improvements program. In the implementation stage, in part because of political priorities, revenue needs, and different departmental authorities, fee implementation can often involve staggered rollouts of different fees in which the fee management responsibility needs to be split across multiple departments.

⁷⁷ The upfront expense and administrative burden could be lowered by grandfathering in existing nexus studies, and localities could fold this added transparency into future contracts with nexus consultants.

⁷⁸ Rietz Garcia, and Decker (2019, 31) recommend that the increased transparency could perhaps be paired with additional support and/or technical assistance from the State.

In addition to technical and financial departments, the role of the city attorney or the locality's legal department also becomes critical in creating a legally defensible fee program that is consistent with the relevant State and local statutes. At minimum, the city attorney's responsibilities typically include the following:

1. Drafting the fee ordinance and reviewing all project documents (e.g., fee study, staff report, council resolution, etc.) to ensure the creation of a full and proper record.
2. Ensuring that the fee study complies with the State enabling legislation.
3. Ascertaining that the fee study is written in understandable English.

The success of an impact fee program can also depend on the analytical rigor in nexus studies and, more important, in development feasibility studies that ultimately lead to the adoption of specific fee levels. As presented earlier, the depth of analysis undertaken by localities is often a function of resources available and some localities do not commission additional analysis beyond a nexus study, relying instead on more informal methods, such as working groups or comparing with neighboring communities. As a result, fees are often set at levels that fail to optimize revenues and hinder new developments.

To remedy the internal capacity issue, some localities with fewer resources have been able to devise a solution through a joint procurement strategy. For example, as presented earlier, the City of Palo Alto and 15 other jurisdictions in San Mateo County, California, hired one consulting firm to conduct separate (but combined) nexus and feasibility studies for each jurisdiction, resulting in cost savings of as much as 75 percent for all jurisdictions. Similar resource savings can be achieved when inter-jurisdictional fees are applied through regional collaborations—in this case, a single nexus and feasibility study is conducted across multiple jurisdictions. This illustrates one way in which smaller localities can innovate to reduce the cost of nexus and feasibility analyses while maintaining the necessary analytical rigor.

CHAPTER 7: TRANSPORTATION IMPACT FEE CASE EXAMPLE— CITY OF EAST PALO ALTO

7.1 Background and Overview

East Palo Alto is a city in San Mateo County, California. Despite it being adjacent to Palo Alto, home to both Silicon Valley and Stanford University, East Palo Alto has historically experienced significant socioeconomic challenges, including low levels of education, high levels of poverty and unemployment, and an undersupply of affordable housing for low-income residents. Because of insufficient affordable transit options, area residents who are employed outside their community commute largely by automobile (Nelson\Nygaard 2018).

During the postwar period, much of East Palo Alto developed at population densities lower than what current regulations would otherwise permit. Today, local, county, and State regulations encourage infill development in urbanized areas of San Mateo County to limit sprawl and mitigate traffic congestion, typically at densities significantly higher than existing development. In East Palo Alto, therefore, infill development represents the primary avenue for growth to fulfill these goals.

The most significant infill development planned in East Palo Alto is the Ravenswood Redevelopment Project Area, a 350-acre site in northeast East Palo Alto. Despite being among the last developed areas in the city, the area has seen its population grow at rates much higher than those of the city as a whole. In September 2012, East Palo Alto's city council adopted the Ravenswood SP (RSP), which proposed a framework for transforming the site into a new downtown.

The RSP projected significant growth within the Ravenswood Business District (RBD) in housing, employment, and nonresidential space. This projected new growth would require significant investment in new or upgraded infrastructure, including storm drainage, roads, parks, libraries, and community centers. Many of these improvements will benefit the entire city as well as the RBD, and DIF would help fund this development-necessitated infrastructure.

At the time of RSP adoption, East Palo Alto did not have a standard, legislated impact fee structure. Instead, the city negotiated the impact fees on a case-by-case basis, an approach it considered to be more vulnerable to legal challenge and more staff-intensive to administer. Under this approach, the burden of proof of nexus was the responsibility of the city. Given the legal risks and bureaucratic challenges regarding the case-by-case approach, the city decided to develop and codify a uniform and legally defensible DIF program to better support the projected developments.

Between 2013 and 2018, the city commissioned several nexus studies of impact fees with respect to a variety of city services, including parks and trails, community facilities, water infrastructure, storm drainage, streetscape, and a transportation impact fee. These studies culminated in the adoption of a citywide DIF program, which went into effect in July 2019. Table 4 summarizes the overall structure of the DIF program currently in place in East Palo Alto for different facility types (AECOM 2019a). In addition to DIF, other development charges are also shown in (see in chapter 2 for these non-DIF charges). As presented earlier, the unit basis for fees is shown to differ for different facility types. The city also chose to establish geographic-specific fee schedules for areas within the RBD and those outside the RBD, in particular for stormwater and housing in-lieu fees.

Table 4. DIF and Other Development Charges—East Palo Alto.

Fee type/facility category	Single family	Multifamily	Office/ Research and Development	Retail	Industrial
	Per DU		Per 1,000 ft ²		
Development impact fee (DIF) schedules					
Parks and trails					
Citywide fees	\$4,133	\$2,847	\$1.15	\$0.77	\$0.46
Public facilities					
Citywide fees	\$7,248	\$4,993	\$2.01	\$1.34	\$0.81
Transportation					
Citywide fees	\$2,358	\$1,775	\$7.33	\$7.33	\$4.77
Storm drainage	Per DU	Per impervious acre			
Fees outside RBD	\$2,800	\$70,000			
Fees within RBD	\$4,840	\$121,000			
Other development charges (not DIF)					
Affordable housing commercial linkage fees					
Citywide fees	\$0.00	\$0.00	\$10.72	\$0.00	\$0.00
Housing impact in-lieu fees	Per sq. ft.				
Citywide fees: Single-family infill	\$36.22	NA	NA	NA	NA
Citywide fees: Town houses	\$34.78	NA	NA	NA	NA
Citywide fees: Rental units	NA	\$25.35	NA	NA	NA
Fees outside RBD: Condos	NA	\$50.58	NA	NA	NA
Fees within RBD: Condos	NA	\$67.62	NA	NA	NA
Quimby Act in-lieu fees (parks)					
Citywide fees	Varies ¹		NA	NA	NA

Fee type/facility category	Single family	Multifamily	Office/ Research and Development	Retail	Industrial
	Per DU		Per 1,000 ft ²		
Storm drainage fees					
Citywide fees	Varies ²				
Water capacity fees³					
Citywide fees	\$8,147	\$5,014	\$3.45	\$5.01	\$3.45

Source: City of East Palo Alto (AECOM 2019a).

¹ Quimby fees can include park land dedication acreage or park in-lieu fees, which do not pertain to rental apartments where no subdivision of land or air space is involved. Fees apply only to single-family/town house subdivisions and multifamily condo projects.

² East Palo Alto currently levies storm drainage fees on all qualifying developments within the city. These existing storm drainage fees are different from the DIF presented above, which would replace and supersede the existing storm drainage fees.

³ Water capacity fees for nonresidential development are estimated based on unique water demand by project and on meter size.

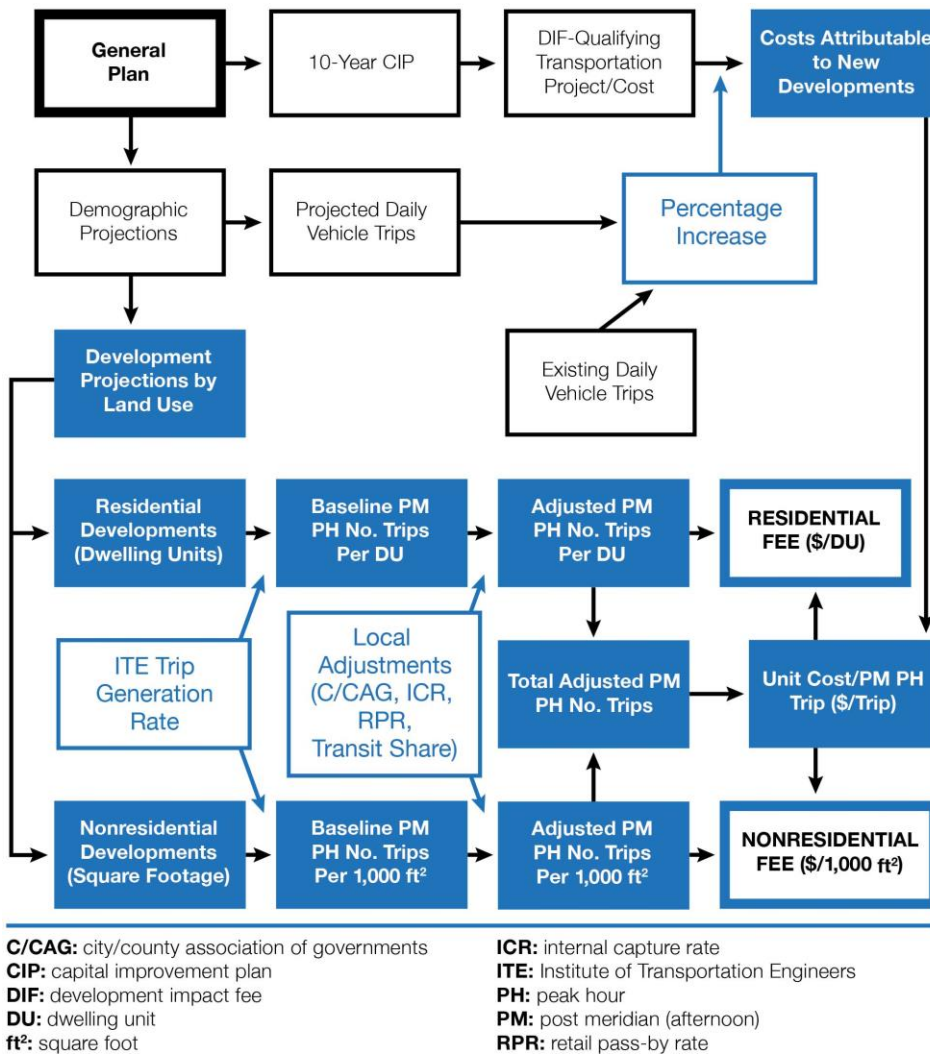
Concurrent with the nexus study, the city also commissioned a financial feasibility study, which concluded that maximum legally defensible fee levels for all facility categories determined from the nexus study would not negatively impact development feasibility (AECOM 2019b).⁷⁹

7.2 Transportation Impact Fee Nexus Study— Trip Generation Approach

The City of East Palo Alto had considered implementing a transportation impact fee, along with other city services, for several years and commissioned a transportation-specific nexus study in 2013. The 2013 study recommended implementing only the RBD-specific transportation impact fees, with no fees outside the RBD. The city postponed the implementation of this RBD fee proposal and commissioned another nexus study in 2018, which provided the basis for the citywide fee that went into effect in July 2019. Figure 5 summarizes the basic steps involved in the 2018 transportation impact fee nexus study.

⁷⁹ The city adopted maximum fee levels in all cases, except for the transportation impact fees for retail developments (see section 7.4 for more details).

Figure 5. Chart. Basic Steps in Transportation Fee Nexus Study—East Palo Alto.



The bases for the 2018 transportation impact fee nexus study (Nelson\Nygaard 2018) were the demographic and land use projections and the 10-year CIP provided in the East Palo Alto GP update (GPU, 2015) and the RSP (2013). Table 5 summarizes the incremental growth in demographics and new developments by land use, estimated over the 25-year planning horizon for both the city as a whole and the RBD, specifically.

Table 5. Demographic and Development Projections—Incremental (2015–2040).

Projection category		Parameter	Unit	Citywide	RBD
Demographics		Population	No. people	9,626	3,278
		Employment	No. people	6,009	3,545
		Service population ¹	No. people	12,631	5,051
New developments by land use	Residential	Town houses	DU	1,486	493
		Multifamily housing	DU	1,033	342
	Nonresidential	Office/R&D	Sq. Ft.	1,940,000	1,236,000
		Retail	Sq. Ft.	333,000	112,000
		Industrial	Sq. Ft.	268,000	268,000

Source: City of East Palo Alto (AECOM 2019a).

¹Service population = Population + 0.5 (Employment).

Based on the 10-year CIP, table 6 summarizes the overall capital project needs to accommodate the growth projections, by public facility category, that qualify for impact fees. Table 6 also breaks out those capital project costs attributable only to new developments to be considered in the impact fee assessment. For transportation, the percentage for new developments was based on the number of new vehicle trips generated. The facility costs for new developments, shown in table 6, also include an additional 4 percent to account for administering the impact fees once they are in place.

Table 6. Ten-Year CIP—East Palo Alto.

Public facility category		DIF-qualifying total facility cost	% attributable to new growth	Facility cost attributable to new growth ¹
Parks and trails		\$37,190,000	30%	\$11,601,000
Public buildings		\$65,218,000	30%	\$20,344,000
Storm drainage	Outside	\$35,619,000	12%	\$4,283,000
	Within RSP	\$18,511,000	39%	\$5,657,000
Transportation		\$98,641,000	25%	\$25,282,063

Source: City of East Palo Alto.

¹ Includes 4 percent administrative fee.

The CIP contained 23 projects qualifying for transportation impact fees, which amounted to almost \$100 million in total costs. As summarized in Table 7, these projects were mostly improvements involving roads/interchanges and bicycle/pedestrian/sidewalk improvements, with separate estimates for the RBD area.

Table 7. Ten-Year CIP—Transportation Projects.

Project category	% total	Project cost (in \$1,000)
Road/interchange improvements	56%	\$55,070
Bicycle/pedestrian/sidewalk improvements	19%	\$19,038
Streetlights/safety	1%	\$1,111
Plans/studies/assessments	1%	\$798
Other	7%	\$6,562
Ravenswood specific plan projects	16%	\$16,062
Total	100%	\$98,641

Source: City of East Palo Alto.

The demand basis for the transportation impact fee schedule used in the 2018 nexus study was the number of PM PH trips generated. For the baseline, trip generation rates by land use were taken from ITE’s Trip Generation Manual (9th edition). To align with East Palo Alto’s unique land use and transportation conditions, the nexus study then adjusted the ITE baseline trips as follows (see Table 8):

- The first adjustment compared ITE trip generation rates with a local, specialized travel demand model that San Mateo County’s MPO, City/County Association of Governments (C/CAG) of San Mateo County developed. The C/CAG travel demand model incorporates local land use and transportation characteristics and is considered more reliable locally than unadjusted ITE estimates. On a citywide basis, the C/CAG 2040 model estimated just 76 percent of ITE-based trips.
- The second adjustment removed internal trips, accounting for intrazonal trips and trips made by nonmotorized modes. The nexus study assumed the percentage of internal trips considered to be a half of those for RSP, which were 16 percent for residential uses, 1 percent for office/R&D and industrial uses, and 22 percent for retail uses. These estimates also included a retail pass-by discount of 38 percent, reflecting the percentage of retail trips that were part of multiple-stop linked trips.
- The final adjustment made was to factor in local transit trips. According to the City of East Palo Alto’s GPU, public transit makes up 6 percent of total commute trips.

Table 8. Trip Generation Adjustments—PM PH Vehicle Trips.

Land use	ITE code	2040 forecast	Trips/unit (ITE)	Total no. trips (ITE)	CCAG adj. factor	RSP ICR	RSP RPR	Transit mode share	Adjusted trips/unit	Adjusted no. trips ¹
Residential		DUs	Per DU						Per DU	
Town houses	230	1,486	0.52	773	76%	8%	NA	6%	0.34	508
Multifamily	220	1,033	0.39	403	76%	8%	NA	6%	0.26	266
Nonresidential		Sq. Ft.	Per 1,000 ft ²						Per 1,000 ft²	
Office/R&D	710	1,939,853	1.49	2,890	76%	0.5%	NA	6%	1.06	2,063
Retail	820	333,406	3.73	1,244	76%	11%	19%	6%	1.93	643
Industrial	110	267,987	0.97	260	76%	0.5%	NA	6%	0.69	185
Total				5,570						3,665

Source: City of East Palo Alto. RSP ICR—Ravenswood Specific Plan internal capture rate; RSP RPR—Ravenswood Specific Plan retail pass-by rate.

¹ Due to rounding at each adjustment, final numbers may not add up to the total exactly.

Table 9 shows the transportation impact fee calculations based on the adjusted trip generation. These calculations reflect the maximum legally supportable impact fees for transportation that can apply citywide.⁸⁰

Table 9. Maximum Impact Fee Calculation for Transportation (Citywide).

Description		Value	Source/comments
Transportation impacts (2015–2040)			
A	Total daily vehicle trips (2040)	124,453	General plan update (2015)
B	Existing daily vehicle trips (2015)	93,782	
C	Total new daily vehicle trips (2015–2040)	30,671	A–B
D	% Growth in daily vehicle trips (2015–2040)	25%	C/A
E	New post meridian (PM) peak hour (PH) vehicle trips generated (2015–2040)	3,665	Table 8
F	Percentage of new trips citywide	100%	

⁸⁰ Although the fee schedule presented in table 9 is based on the number of vehicle trips generated, the basic methodology can just as well use VMT as the basis for demand, which would better represent the actual infrastructure usage. If average trip length is applied uniformly to derive VMT for the entire city, the VMT-based fee schedule would essentially be the same as those presented in table 9. The 2018 nexus study performed VMT-based fee assessments using (1) the same average trip length that applied citywide (in this case, 7.92 miles/trip) and (2) two different average trip lengths representing areas within the RBD (i.e., 7.25 mi/trip) and outside the RBD (i.e., 8.46 mi/trip). The city, however, never implemented the VMT-based fee assessments.

Description		Value	Source/comments
New development forecast (2040)			
G	Town houses (DU)	1,486	Table 8 (Table 5)
H	Multifamily (DU)	1,033	
I	Office/R&D (Sq. Ft.)	1,939,853	
J	Retail (Sq. Ft.)	333,406	
K	Industrial (Sq. Ft.)	267,987	
Project costs			
L	Total transportation project costs from CIP	\$98,641,000	Table 7
M	Cost attributable to new trips (including 4% administrative fee)	\$25,282,063	L*D*1.04 (Table 6)
N	Cost attributable to new trips outside RBD, with 4% administrative fee	\$25,282,063	F*M
O	Unit cost per PM PH vehicle trip	\$6,898	N/E
Residential unit conversion			
P	Town houses (PM PH trips/DU)	0.34	Table 8
Q	Multifamily (PM PH trips/DU)	0.26	
Commercial unit conversion			
R	Office/R&D (PM PH trips/1,000 ft ²)	1.06	Table 8
S	Retail (PM PH trips/1,000 ft ²)	1.93	
T	Industrial (PM PH trips/1,000 ft ²)	0.69	
Residential nexus fee maximum			
Single-family (\$/DU)		\$2,358	O*P
Multifamily (\$/DU)		\$1,775	O*Q
Nonresidential nexus fee maximum			
Office/R&D (\$/1,000 ft²)		\$7.33	O*R
Retail (\$/1,000 ft²)		\$13.30	O*S
Industrial (\$/1,000 ft²)		\$4.77	O*T

Source: AECOM (2019a); Nelson/Nygaard (2018).

7.3 Trip Reduction Credits—TDM and TODs

Subject to city council approval, the city allowed a reduction in fee levels, as presented in table 9, when vehicle trips could be reduced beyond the projected trips, such as when a TDM program was used. An additional adjustment was also allowed for affordable and senior housing developments based on the projected trips.

For the TDM-related reduction, the nexus study recommended using the existing C/CAG methodology, which establishes a PH trip credit rate specific to each TDM measure, such as bicycle storage, a dedicated shuttle to rail station, subsidized transit passes, and a vanpool program, among others. The level of reduction would depend significantly on the combination of these measures and on the number of employees and residents per land use.

The study also recommended trip reduction credits for TODs within one-half mile of transit stations when the following conditions were satisfied:⁸¹

- There is direct access between the development and the transit station along a barrier-free, walkable pathway.
- Convenience retail uses, including food stores, are located within one-half mile of the development.
- The development provides either the minimum number of parking spaces that the local ordinance requires or no more than one onsite parking space for zero to two bedroom units, and two onsite parking spaces for three or more bedroom units, whichever is less.

If a development project met these conditions, the city allowed a 6 percent transit share adjustment in estimating the new vehicle trips based on the current level of access to public transit. If transit access were to improve beyond the current level, an additional fee reduction could be applied based on a new higher transit share percentage.

7.4 Comparative Transportation Impact Fees

As a part of the 2018 transportation impact fee nexus study, the consultant conducted a review of neighboring and peer communities of the City of East Palo Alto to examine the methodologies used in estimating the fees and the actual fee schedules implemented in these communities. Although not comprehensive, this review in part served as an initial look into development feasibility analysis of the maximum legally defensible fee schedules developed in the nexus study.

A survey of 95 different jurisdictions indicated that approximately 23 percent of those surveyed used the PH vehicle trips as the demand basis for fee assessment, the same approach used for East Palo Alto. Other jurisdictions used a different demand basis; for example, 42 percent used average daily trips, 34 percent used some measure of property size (e.g., square footage, number of units), and the remaining 1 percent used building valuation.

It was also found that the actual implemented fee schedules varied widely. As shown in table 10, for residential developments, the difference in fees was as much as \$22,700, ranging from \$511/DU in San

⁸¹ This recommendation was based on the Assembly Bill 3005 (AB 3005), which the California State Legislature adopted in 2008.

Ramon to \$23,206/DU in Pittsburg. For commercial developments, some cities, such as Daly City and Live Oaks, did not impose any fees, and the highest fee was \$23.39/1,000 ft² in Emeryville.

Table 10. Transportation Impact Fees at Comparable Cities.

Jurisdiction	Single family	Multifamily	Retail/ commercial	Office
	Per DU		Per 1,000 ft ²	
East Palo Alto	\$2,358	\$1,775	\$7.33	\$7.33
San Ramon	\$733	\$511	\$2.09	\$0.96
West Berkeley	\$630–\$1,206	\$630–\$1,206	\$5.10	\$3.89
Oakland	\$1,000	\$750	\$0.75	\$2.00
Redwood City (Downtown [DT])	\$1,124	\$690	\$2.28	\$1.66
Redwood City (Outside DT)	\$1,499	\$920	\$3.04	\$2.21
Martinez	\$1,444	\$993	\$1.45	\$1.18
Daly City	\$1,464	\$1,836	–	–
Richmond	\$1,516	\$1,212	\$3.77	\$3.32
Sunnyvale	\$1,805	\$1,108	\$3.34	\$2.66
Walnut Creek	\$2,462	\$1,477	\$7.04	\$6.97
Pleasant Hill	\$2,572	\$2,062	\$12.31	\$5.86
Menlo Park	\$2,623	\$1,610	\$3.88	\$3.88
Palo Alto	\$2,627	\$1,613	\$3.88	\$3.88
Live Oaks	\$3,011	\$2,290	–	–
Vallejo	\$4,571	\$2,572	\$4.73	\$3.59
Vacaville	\$8,745	\$5,421	\$4.73	\$3.59
Emeryville	\$12,541	\$7,023	\$23.39	\$18.69
Pittsburg	\$23,206	\$14,219	\$2.74	\$2.58

Source: Nelson/Nygaard (2018).

It is interesting to note that the fees for residential developments for East Palo Alto (\$2,358/\$1,775) were close to those in Menlo Park (\$2,623/\$1,610) and Palo Alto (\$2,627/\$1,613), two cities abutting East Palo Alto, whereas those for commercial developments were almost double (i.e., \$7.33 for East Palo Alto and \$3.88 for both Palo Alto and Menlo Park). This may be the reason why the city reduced the maximum defensible fee for retail property assessed in the nexus study from \$13.30 to \$7.33.

CONCLUSION

Local governments' use of DIFs has evolved substantially over recent decades. Although at times complex and challenging, the underlying DIF principles are defined better now than ever. For public agencies new to DIFs, a substantial body of literature and case examples exist—some of which appear in this primer—that can help guide a DIF implementation process. Due to their focus on off-site improvements for new developments, DIFs can serve local governments as a reliable, local infrastructure funding source that will accommodate growth. Together with development agreements, DIFs represent one of the most powerful and robust VC techniques at public agencies' disposal to help fund transportation infrastructure improvements.

GLOSSARY OF TERMS

Capital improvement plan (CIP)—Typically, a 5- to 10-year plan that identifies a list of capital projects necessary to accommodate the anticipated growth or new developments and that includes a phasing plan and financing option for implementing the capital projects

Demand elasticity—Price elasticity of demand representing a measure of the change in the quantity demanded in relation to its price change; demand is elastic if price sensitive (i.e., consumers readily change their behavior) and inelastic if not price sensitive

Development feasibility—Feasibility of a development project proceeding as proposed when local jurisdictions impose maximum legally defensible impact fees

Essential nexus test—A test required from the *Nollan* ruling to establish a direct cause-effect relationship between the proposed project and the exaction imposed on property owners and/or developers to pay for the public improvements the project needs

Exaction—A financial burden or other requirements a local government places on a developer to pay for all or a portion of the public improvements needed for the developer's project as a condition of project approval

Exclusivity—The more correct economic term being “excludability,” the degree to which a government can limit a public service or resource to only paying customers, or conversely, the degree to which a government can prevent nonpaying customers from accessing a service or resource for free

General law city—As opposed to a home rule or charter city, a city that is bound by the State's general law, even with respect to municipal affairs

General obligation (GO) bond—A municipal bond backed solely by the credit and taxing power of the issuing jurisdiction rather than the revenue from a given project

General plan—Comprehensive planning guidelines to a city's or county's future development goals; provides policy statements to achieve those development goals (alternatively referred to as master plan or comprehensive plan)

Geographic equity—The degree to which the cost to provide public service is equal and fair from one geographic area to another

Home rule or charter city—A city, with a population of at least 5,000, that has adopted a home rule charter for its local self-governance and that can pass any regulation or law it deems necessary, unless the State law prohibits it

Horizontal equity—Alternatively referred to as *proportionality*, the degree to which those who benefit from public service pay for the service proportional to the benefit they receive

Inclusionary housing—Local policies that tap the economic gains from rising real estate values to create affordable housing for lower income families; for example, requiring developers to sell or rent 10 to 30 percent of new residential units to lower income residents

In-lieu fee—A fee paid by a developer in lieu of mandatory land dedication requirement or other developer exactions associated with his or her development project

Lumpy investment or asset—A large-scale infrastructure investment of asset (e.g., major highway, water/sewer plant) that is built infrequently and cannot be expanded incrementally

Marginal pricing—An approach to determining infrastructure cost that accounts only for the incremental costs needed to produce an additional unit of public service

Nexus study—Also known as a *fee study*, a study to demonstrate a legal basis for the required nexus between development project and impact fees and a quantitative basis for specific impact fee levels that are proportional to the impact created by the project

Ordinance—A law or statute that a municipal legislative body adopts

PM peak hour—Representing a 60-minute time period when the highest number of trips are generated during the afternoon period between 4 PM and 6 PM

Police power—The capacity of the States to regulate behavior and enforce order within their territory for the betterment of the health, safety, morals, and general welfare of their inhabitants

Pro forma—A report prepared for real estate investors that gathers current or estimated income and expense data to project the net operating income and cash flow of a proposed development project

Proportionality—Alternatively referred to as *horizontal equity*, the degree to which those who benefit from public service pay for the service proportional to the benefit they receive

Rational nexus—General requirement that impact fees be rationally linked to an impact that a particular development project creates, which represents a moderate position between a strict standard that the fee be specifically and uniquely attributable to the needs created by new development and the relaxed standard that the fee be reasonably related to the needs

Regressive—When all receive a uniform rate, putting a larger burden on low-income households than high-income households

Regulatory taking—May occur when a government imposes regulations (such as zoning) that limit the owner's use of that property or exactions or fees on a specific group to pay for improvements that benefit not only the group but the public at large

Resolution—A formal expression of the opinion or will of an official municipal body, which serves as a basis for adopting an ordinance

Rough proportionality test—A test required from the *Dolan* ruling that proves the need for the exaction amount from a developer and/or property owner is roughly proportional to the impact created by the project

Scale economy—Alternatively referred to as *economies of scale*, a scale economy is achieved when public or private entities can produce goods and services on a larger scale with lower unit costs

Specific plan—A comprehensive and zoning document for a defined geographic area within a city; implements the city’s general plan by providing a special set of development standards applied to that area

Transit-oriented development—A type of dense and compact urban development that maximizes mixed-use space (i.e., residential, business, and leisure) within walking distance of public transit, thereby maximizing its use

Vertical equity—Another term for social equity and based on the ability-to-pay principle rooted in welfare economics; the degree to which only those who are able and can afford to pay should pay for public services

Vested right—A property owner’s irrevocable right to develop his or her property and that cannot be changed by future growth restrictions or other regulatory reversals

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