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ARTICLES

TAXING DEVELOPMENT: THE LAW AND ECONOMICS OF TRAFFIC IMPACT FEES

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I. INTRODUCTION

Should municipalities charge developers fees for negatively impacting residents? New developments often use existing or require new infrastructure and services, including roads, sewers, refuse collection, parks, fire protection, police, and schools. Even though developers can often provide the necessary infrastructure within their own developments as part of the construction process, impacts from new development may spill over into existing communities, requiring additional capital improvements.[1] When governments provide these services and infrastructure to users for "free," who should pay? Over the past fifty years, governments have increasingly charged new developments impact fees for imposing costs on communities.[2] The modern Pigovian idea is that governments can set a fee at the value of the impact to internalize externalities and thereby encourage an economically efficient amount of development.[3] Hypothetically then, local governments can charge the development a fee equal to the impact it causes,

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[1] Jerry Kolo & Todd J. Dicker, *Practical Issues in Adopting Local Impact Fees,* 25(3) ST. & LOC. GOV'T REV. 197, 197 (1993).

[2] WILLIAM ABBOTT, MARIAN MOE & MARILEE HANSON, PUBLIC NEEDS AND PRIVATE DOLLARS 51 (Solano Press Books 1993).

[3] See ROBERT FRANK, MICROECONOMICS AND BEHAVIOR 634-39 (McGraw-Hill, Inc. 6th ed. 2006) for a discussion of Pigovian tax theory by which governments correct marginal externalities by measuring them and setting fees at exactly that level.

thereby internalizing this externality. If the exact value of the external impact is known, its imposition as a fee can encourage the economically efficient amount of development. However, despite the increasing popularity of development impact fees, several issues make the government's "economically efficient" solution easier said than done.[4]

This article discusses the legality of traffic impact fees and illustrates the problems with their use. Contemporary U.S. law suggests that municipalities should base fees on a rational nexus of costs and benefits and on rough proportionality of a fee with the external cost imposed by new development.[5] How do governments measure these external costs? Can governments assess the marginal impacts of all homes before they are built? Do all developments have the same marginal impact on infrastructure, and if not, should governments impose different fees based on the impact? Without an exact measure, a government will inevitably undercharge some developments and overcharge others, making "economically efficient" development impossible. In the absence of markets with actual prices for these common pool resources, governments will face numerous calculation problems.

Even if governments could determine exact marginal impacts, implementation problems nevertheless arise due to public choice concerns.[6] Existing residents, politicians, and bureaucrats have incentives to support higher fees for several reasons.[7] First, residents receive a free ride when fees support existing infrastructure.[8] Additionally, high fees increase the cost of development and thus the price of new homes.[9] This translates into higher prices for its substitute—existing homes.[10] Therefore, existing residents have little reason to oppose exorbitant fees on new development.[11] Politicians and bureaucrats also have an incentive to support higher fees because these fees increase their budgets.[12] Furthermore, existing residents are a politician's constituents, so he or she will curry favor with them rather than appeasing the needs of potential residents.[13] In light of these problems, traffic impact fees are unlikely to internalize externalities

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[4] For the various difficulties, many of which we will discuss later at length, see Kolo & Dicker, *supra* note 1, at 197-206.

[5] See ABBOTT, MOE & HANSON, *supra* note 2, at 52-55 for a good overview of past and current law on impact fees.

[6] *See infra* footnotes 129-33 and accompanying text, discussing public choice theory.

[7] *See infra* section III. C.

[8] MARLA DRESCH & STEVEN M. SHEFFRIN, PUBLIC POLICY INSTITUTE OF CALIFORNIA, WHO PAYS FOR DEVELOPMENT FEES AND EXACTIONS?, at v (June 1997), http://www.ppic.org/content/pubs/report/R_697SSR.pdf.

[9] *Id.*

[10] *Id.*

[11] JOHN LANDIS ET AL., DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT, PAY TO PLAY: RESIDENTIAL DEVELOPMENT FEES IN CALIFORNIA CITIES AND COUNTIES, 1999, at 9 (2001).

[12] *See infra* notes 205-14 and accompanying text.

[13] *See infra* notes 214-19 and accompanying text.

in any Pigovian sense.

Section II provides a history of fees and exactions in the United States and California[14] and reviews the important legal issues surrounding their application. Section III discusses the economics of impact fees and provides evidence of the level of traffic impact fees in various cities in California. It further concludes that the variation of fees among jurisdictions indicates that at least some cities are miscalculating or misusing traffic impact fees. Section IV offers some alternatives to impact fees that would use the market to internalize all costs through privatization. Developers could provide the roads and connectors of new developments and turn them over to residents to maintain upon completion. The application of electronic tolling could privatize highways and thoroughfares and thereby match revenue with costs, reduce government debt, and discourage congestion. Finally, residents adjoining existing streets could organize street owners associations to take control of the existing grid. Similar privatization methods could apply to other improvements and services, as well. Section V provides some concluding remarks.

II. LEGAL HISTORY OF FEES AND EXACTIONS

Land development requires supporting services and infrastructure, such as roads, utilities, parks and schools, as well as police, fire, and solid waste disposal.[15] Accordingly, new development often requires improvements to such services and infrastructure.[16] Historically, because public expenditures spurred private investment,[17] municipalities financed these improvements with bonds and local property taxes, supplemented by state and federal grants and subdivision dedications and fees.[18] However, a combination of more complex (and more costly) improvements, environmental considerations, a dramatic decline in federal expenditures on local infrastructure in the 1980s,[19] and the property tax revolt epitomized by Proposition 13 in California has led local governments to search for other methods of financing needed infrastructure.[20] Exactions and impact fees have grown increasingly popular with local governments as a supplementary financing source. By the mid 1980s, approximately 60% of local governments were using impact fees along with in-kind levies.[21]

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[14] California is one of the leaders in the development of impact fees. *See* Dennis H. Ross & Scott Ian Thorpe, *Impact Fees: Practical Guide for Calculation and Implementation,* 118 J. URB. PLAN. & DEV. 106, 106 (1992).

[15] David L. Callies, *Exactions, Impact Fees and Other Land Development Conditions,* 1998 NAT'L PLAN. CONF. PROC. 1, *available at* http://www.design.asu.edu/apa/proceedings98/Callies/callies2.html.

[16] *Id.*

[17] Kolo & Dicker, *supra* note 1, at 197.

[18] *Id.*

[19] Callies, *supra* note 15, at 1.

[20] Ross & Thorpe, *supra* note 14, at 107.

[21] ALAN A. ALTSHULER, JOSÉ A. GÓMEZ-IBÁÑEZ & ARNOLD M. HOWITT, REGULATION FOR

For decades, local governments had used exactions—the on-site construction of public facilities or dedication of land for public use.[22] In the 1920s, they began instituting impact fees—also called exactions—as a new local financing tool.[23] Where no appropriate land was available for a traditional exaction, developers could substitute off-site land or a fee in lieu of a dedication.[24] Over time, these fees came to include capital costs for on- and off-site improvements brought about by new development.[25] Rooted in the idea that new developments should pay their own way,[26] municipalities have increasingly used impact fees to pay for improvements that property taxes traditionally financed.[27] "According to the State Controller's Office, fees and service charges account for almost 20% of annual local government revenues."[28] These fees are generally a one-time charge on new development by local government as a condition of approval for a building permit to pay the development's proportional share of capital improvements.[29] California law defines a "fee" as a monetary exaction "other than a tax or special assessment."[30] Fees share two characteristics with taxes: they are levied on developers as a monetary charge, and they are often assessed on a proportional basis. However, localities cannot tax without specific legislative authority from the state.[31] This distinction between taxes and fees is important in the evolution of impact fees. Although impact fees, exactions, in-lieu fees, and compulsory dedications are often synonymous as conditions precedent to obtaining final development approvals,[32] courts sometimes treat dedications differently from impact or in-lieu fees. The courts have reviewed dedications and impact fees through a series of cases in an attempt to more clearly define their appropriate use and proper legal role.

The legal basis for government intervention in the development process is its police power to protect the public health, safety, and welfare of its citizens.[33] In *Berman v. Parker,* Justice William O. Douglas stated, "[t]he concept of public welfare is broad and inclusive .... It is within the power of the legislature to

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REVENUE: THE POLITICAL ECONOMY OF LAND USE EXACTIONS 36-37 (1993).

[22] Callies, *supra* note 15, at 1.

[23] Kolo & Dicker, *supra* note 1, at 197.

[24] *Id.*

[25] *Id.*

[26] Ross & Thorpe, *supra* note 14, at 107.

[27] ABBOTT, MOE & HANSON, *supra* note 2, at 51.

[28] WILLIAM ABBOTT, PETER M. DETWILER, M. THOMAS JACOBSEN, MARGARET SOHAGI & HARRIET STEINER, EXACTIONS AND IMPACT FEES IN CALIFORNIA 15 (2001).

[29] Shishir Mathur, Paul Waddell & Hilda Blanco, *The Effect of Impact Fees on the Price of New Single-family Housing*, 41 URB. STUD., 1303, 1303 (June 2004).

[30] CAL. GOV'T CODE § 66000 (West 2005).

[31] *See* Nick Rosenberg, *Development Impact Fees: Is Limited Cost Internalization Actually Smart Growth?*, 30 B.C. ENVT'L. AFF. L. REV. 641, 642-43 (2003).

[32] See Callies, *supra* note 15, at 1, for a similar treatment of these terms as synonymous.

[33] DANIEL J. CURTIN, JR. & CECILY T. TALBERT, CALIFORNIA LAND USE AND PLANNING LAW 1 (25th ed. 2005).

determine that the community should be beautiful as well as healthy, spacious as well as clean, well balanced as well as carefully patrolled."[34] In California, this police power is enumerated in Article XI, Sect. 7 of the Constitution. Cities have the power to "make and enforce within limits all local police, sanitary, and other ordinances and regulations not in conflict with general laws."[35] *California Building Industry Ass'n v. Governing Board of the Newhall School District* confirms this power.[36] Prior to the United States Supreme Court's 1987 decision in *First English Evangelical Lutheran Church of Glendale v. County of Los Angeles*,[37] California courts had held that unreasonable land-use regulations that denied all beneficial use of property did not require damage awards; rather, landowners were limited to seeking judicial invalidation.[38] *First English* overturned this view, holding that such takings required compensation under the Just Compensation Clause of the Fifth Amendment as applied to the states by the Fourteenth Amendment.[39] This determination effectively imposed a restraint on local governments' police power.[40] Later cases confirmed that a taking consists of permanently depriving a landowner of all economically viable use of their land; partial and temporary limitations, however, generally did not constitute a taking.[41]

As far back as 1949, California courts have sought a connection between a project's conditions and its impacts. In *Ayres v. City Council,* the California Supreme Court upheld the dedication of a street right-of-way abutting a subdivision as having a reasonable connection to the subdivision, even though the city benefited more than the subdivision's residents.[42] In *Candid Enterprises, Inc. v. Grossmont Union High School District*, the California Supreme Court held that as long as local government is subordinate to state law and limits its powers to its own jurisdiction, its police power "is as broad as the police power exercisable by the Legislature itself."[43] This local police power is inherent, so it is not necessary that the state delegate it.[44] The local government must conform to the Constitution's due process requirements, and those actions must be reasonable and non-

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[34] Berman v. Parker, 348 U.S. 26, 33 (1954).

[35] CURTIN & TALBERT, *supra* note 33, at 1 (quoting CAL. CONST. art. XI, § 7).

[36] Cal. Bldg. Indus. Ass'n v. Governing Bd. of the Newhall Sch. Dist., 253 Cal. Rptr. 497, 509 (Cal. Ct. App. 1998); CURTIN & TALBERT, *supra* note 33, at 314.

[37] First English Evangelical Lutheran Church of Glendale v. County of L.A., 482 U.S. 304 (1987).

[38] *See* Agins v. City of Tiburon, 598 P.2d 25, 28 (Cal. 1979).

[39] *First English*, 482 U.S. at 322. *See also* CURTIN & TALBERT, *supra* note 33, at 289.

[40] *First English*, 482 U.S. at 321.

[41] CURTIN & TALBERT, *supra* note 33, at 285. *See also id.* at 263-312 (full discussion of takings jurisprudence).

[42] Ayres v. City Council, 207 P.2d 1, 7-8 (Cal. 1949). *See also* CURTIN & TALBERT, *supra* note 33, at 316-17.

[43] Candid Enters., Inc. v. Grossmont Union High Sch. Dist., 705 P.2d 876, 882 (Cal. 1985).

[44] CURTIN & TALBERT, *supra* note 33, at 2. *See also Candid Enters.*, 705 P.2d at 882.

discriminatory.[45] The court established that the necessity and form of regulation encompassed in the police power "is primarily a legislative and not judicial function" and that the courts may only review such regulations for reasonableness with respect to legislative intent, rather than to what the court believes the regulation *should* be.[46]

After the court's confirmation of the police power of local governments to establish fees and exactions, a series of cases in the 1970s and 1980s began delineating the limitations to that power.[47] Two cases stand out. First, *Nollan v. California Coastal Commission* established that a *rational* connection (nexus) must exist between an imposed condition and the development in which the landowner engages. [48] In this case, a landowner proposed to remodel and expand an existing beach house and requested a permit from the Coastal Commission for the reconstruction.[49] As a condition of the permit, the Commission required the landowner to dedicate an easement for public use of one-third of the property along the ocean as beach access.[50] The California Court of Appeal upheld the Commission's police power under its duty to protect the coast.[51]

The U.S. Supreme Court reversed the decision.[52] The Commission argued that the easement increased public access to the shore and decreased the psychological barrier to the beach created by continuous development between the street and the sea.[53] The Court found that the imposed easement provided no relief for this psychological barrier,[54] nor did it remedy any added congestion potentially created by the building.[55]

> It is quite impossible to understand how a requirement that people already on the public beaches be able to walk across the Nollans' property reduces any obstacles to viewing the beach created by the new house. It is also impossible to understand how it lowers any "psychological barrier" to using the public beaches, or how it helps to remedy any additional congestion on them caused by construction of the Nollans' new house. We therefore find that the Commission's imposition of the permit condition cannot be treated as an exercise of its land use power for any of these purposes.[56]

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[45] CURTIN & TALBERT, *supra* note 33, at 20. *See also* G & D Holland Constr. Co. v. City of Marysville, 91 Cal. Rptr. 227, 229-30 (Cal. Ct. App. 1970).

[46] CURTIN & TALBERT, *supra* note 33, at 4. *See also* Consol. Rock Prod. Co. v. City of L.A., 370 P.2d 342, 346 (Cal. 1962).

[47] Callies, *supra* note 15, at 2.

[48] Nollan v. Cal. Coastal Comm'n, 483 U.S. 825, 837 (1987).

[49] *Id.* at 828.

[50] *Id.*

[51] Callies, *supra* note 15, at 3. *See* Nollan v. Cal. Coastal Comm'n, 223 Cal. Rptr. 28, 31 (Cal. Ct. App. 1986).

[52] *Nollan*, 483 U.S. at 842.

[53] *Id.* at 838; Kolo & Dicker, *supra* note 1, at 198.

[54] *Nollan*, 483 U.S. at 838; ABBOTT, MOE & HANSON, *supra* note 2, at 63.

[55] *Nollan*, 483 U.S. at 838-39.

[56] *Id.*

The Court stated that if the Commission had imposed a condition with an essential nexus to the deleterious effects stated, it would have upheld that condition.[57] Because this was not the case, the Commission's condition amounted to a taking:

> [T]he lack of nexus between the condition and the original purpose of the building restriction converts that purpose into something other than what it was. The purpose then becomes, quite simply, the obtaining of an easement to serve some valid government purpose, but without payment of compensation. Whatever may be the outer limits of "legitimate state interests" in the takings and land-use context, this is not one of them.[58]

The Court also implied that the actual conveyance of property might require a closer nexus than the payment of fees,[59] a position later followed by the California Court of Appeal in *Blue Jeans Equity West v. City and County of San Francisco*.[60] However, *Nollan* was sufficient to establish the "rational nexus" condition for exactions.[61]

In the second case, *Dolan v. City of Tigard*,[62] the Supreme Court established that imposed development conditions must promote a legal public interest, have a rational connection to the development, and *additionally* must be reasonably related[63] to the impact of the proposed development.[64] Dolan sought a building permit to double the size of her construction supply business and pave a 39-space parking lot.[65] As a condition of the permit, the City of Tigard imposed the dedication of a bike path and greenway/floodplain easements under the comprehensive land use plan developed in Tigard's Community Development Code (CDC).[66] The City maintained that the bikeway could offset some of the traffic impact of the proposed enlarged business and that greenway dedication of all property within the flood plain could offset the proposed additional impervious pavement.[67] Dolan properly but unsuccessfully appealed through local and state administrative channels, the Oregon courts, and ultimately to the U.S. Supreme Court, which granted certiorari.[68] The Court applied a three-pronged analysis.[69] First, they found that the conditions promoted a legitimate public interest in

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[57] *Id.* at 836.

[58] *Id.* at 837.

[59] *Id.* at 840-41.

[60] Blue Jeans Equity W. v. City & County of S.F., 4 Cal. Rptr. 2d 114, 118 (Cal. Ct. App. 1992). *See also* CURTIN & TALBERT, *supra* note 33, at 318-19.

[61] Callies, *supra* note 15, at 4.

[62] Dolan v. City of Tigard, 512 U.S. 374 (1994).

[63] The court describes this as a requirement of "rough proportionality." *Id.* at 391.

[64] Callies, *supra* note 15, at 5.

[65] *Dolan*, 512 U.S. at 379.

[66] *Id.* at 379-80; Callies, *supra* note 15, at 4.

[67] *Dolan*, 512 U.S. at 381-82; Callies, *supra* note 15, at 4.

[68] *Dolan*, 512 U.S. at 382-83; Callies, *supra* note 15, at 5.

[69] Callies, *supra* note 15, at 5.

preventing flooding and reducing traffic.[70] Second, they found that there was a rational nexus between flood prevention and limiting impervious surfaces in the flood plain, as well as between traffic reduction and encouraging bicycle use.[71] However, the Court found that there was insufficient connection between the required dedications and the projected impacts of the development.[72]

The City used "tentative" findings to relate the storm water flow and traffic increase to the property, and these findings were insufficient to justify the breadth of conditions imposed.[73] The Court imposed a "rough proportionality" test and stated that "[n]o precise mathematical calculation is required, but the city must make some sort of individualized determination that the required dedication is related both in nature and extent to the impact of the proposed development."[74] Additionally, the Court noted that the city had given no justification for requiring a public easement rather than a private easement for flood control.[75] The ability to exclude, the Court found, is "one of the most essential sticks in the bundle of rights that are commonly characterized as property."[76]

Following *Nollan* and *Dolan*, courts have struck down many land development conditions for lack of nexus or proportionality.[77] However, because both cases dealt primarily with land dedications, it remained unclear how the heightened standards applied to fees in lieu of dedications. The California Supreme Court answered this question in *Ehrlich v. City of Culver City*.[78] In the 1970s, Ehrlich acquired an undeveloped 2.4-acre parcel and requested a general plan and zoning change for a specific plan to develop a private tennis club.[79] In 1981, due to financial losses, he applied to change the land use and construct an office building instead.[80] Ehrlich did not proceed with construction after the planning commission voted against the application based on the City's need for commercial recreation sites.[81] In 1988, after continuing financial losses, Ehrlich applied for a general plan amendment of the specific plan, and a zoning change to build a thirty-unit condominium project valued at $10 million.[82] When the application was denied, Ehrlich demolished the facility and donated the athletic equipment to the City.[83] Ehrlich filed suit against the City while entering into negotiations with them for the condominium

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[70] *Dolan*, 512 U.S. at 387; Callies, *supra* note 15, at 5.

[71] *Dolan*, 512 U.S. at 387-88; Callies, *supra* note 15, at 5.

[72] *Dolan*, 512 U.S. at 393-95; Callies, *supra* note 15, at 5.

[73] Callies, *supra* note 15, at 5 (quoting *Dolan*, 512 U.S. at 388-89).

[74] *Dolan*, 512 U.S. at 391; Callies, *supra* note 15, at 5-6.

[75] *Dolan*, 512 U.S. at 393.

[76] *Id.* (quoting Kaiser Aetna v. United States, 444 U.S. 164, 176 (1979)).

[77] *See generally* Callies, *supra* note 15, at 6-10 (discussing land dedication cases around the United States).

[78] Ehrlich v. City of Culver City, 911 P.2d 429 (Cal. 1996).

[79] *Id.* at 433-34.

[80] *Id.* at 434.

[81] *Id.*

[82] *Id.*

[83] *Id.*

construction.[84] After a closed-door meeting, the City approved the condominiums conditioned on the payment of fees: $280,000 for a recreation mitigation fee (based on partial replacement of lost recreational facilities), $33,200 for public art, and $30,000 for parkland.[85] Ehrlich protested under sections 66020 and 66021 of the California Government Code[86] and challenged the recreation and art fees, but not the parkland fee.[87] The trial court found in favor of Ehrlich invalidating the recreation fee, but not the art fee.[88] The appeals court, however, reversed the invalidation of the recreation fee.[89] The United States Supreme Court remanded the case back to the appeals court in light of *Dolan*; and, in 1994, the appeals court again upheld the fees.[90]

At this point, the California Supreme Court agreed to consider the application of *Nollan* and *Dolan* to development fees, as opposed to dedications.[91] The court found that ad hoc development conditions based on individual negotiations between a developer and a local government pose "an inherent and heightened risk" that the government would use its police powers to impose conditions unrelated to the impacts of development and avoid paying just compensation.[92] The court distinguished legislatively created impact fees imposed on a class of landowners from individual ad hoc fees: "in land use 'bargains' between property owners and regulatory bodies . . . where the individual property owner-developer seeks to negotiate approval of a planned development . . . the combined *Nollan* and *Dolan* test quintessentially applies."[93] Additionally, looking to *Blue Jeans Equity West* in which the court upheld a "traffic impact development fee" on commercial project outside of the downtown core,[94] the *Ehrlich* court found that heightened scrutiny was unnecessary where legislative action on a broad class of properties established dedicated assessments.[95] Dedications and ad hoc assessments, however, must meet the heightened scrutiny test.[96]

Later decisions supported the holding in *Ehrlich*, including *Loyola Marymount University v. Los Angeles Unified School District* and *San Remo Hotel, L.P. v. City and County of San Francisco.*[97] Justice Thomas of the United States Supreme

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[84] *Id.*

[85] *Id.* at 434-35.

[86] CURTIN & TALBERT, *supra* note 33, at 323.

[87] *Ehrlich,* 911 P.2d at 435.

[88] *Id.*

[89] *Id.*

[90] *Id.* at 436; CURTIN & TALBERT, *supra* note 33, at 323.

[91] *See Ehrlich,* 911 P.2d at 438.

[92] *Id.* at 439.

[93] *Id.* at 438.

[94] Blue Jeans Equity W. v. City & County of S.F., 4 Cal. Rptr. 2d 114, 119 (Cal. Ct. App. 1992); *accord* Commercial Builders of N. Cal. v. City of Sacramento, 941 F.2d 872, 874-75 (9th Cir. 1991) (upholding a low-income housing fee on nonresidential development).

[95] *Ehrlich,* 911 P.2d at 444. *See also* CURTIN & TALBERT, *supra* note 33, at 324.

[96] Callies, *supra* note 15, at 8.

[97] CURTIN & TALBERT, *supra* note 33, at 324. *See also* San Remo Hotel, L.P. v. City &

Court, however, dissented in the denial of certiorari for a Georgia case, stating that the distinction between legislative and ad hoc assessments is a "distinction without a constitutional difference."[98] Because the *Ehrlich* case was ad hoc,[99] the court applied the *Nollan/Dolan* test.[100] It found a rational nexus between the planned condominium's removal of potential recreation space due to its zoning change and the recreation mitigation fee, but struck down the fee as disproportional to the impact because the city provided no individualized findings between the exactions and loss of zoning.[101] The court remanded the matter to the city council for reconsideration of the amount of the fee based on the court holding.[102] Finally, the court required that a party that challenges a development fee must follow established statutory procedure, must pay the fee under protest, and must file suit within 180 days.[103]

It is worth noting that in *San Remo*, where the California Supreme Court upheld replacement housing in-lieu fees for a condominium conversion, there was a close four to three vote, and Associate Justice Janice Rogers Brown entered a sharp dissent.[104] In her dissent, Justice Brown supported private property, finding it an endangered species in California and entirely extinct in San Francisco.[105] The City had established policies where property owners were subject to the whim of the majority, or worse, to the power brokers independent of the majority: "Where once government was a necessary evil because it protected private property, now private property is a necessary evil because it funds government programs."[106] Justice Brown found the ordinance that imposed these fees unconstitutional under the Takings Clause of the California Constitution.[107] The plaintiffs filed a federal challenge to the fees, but the Ninth Circuit Court of Appeals affirmed its dismissal because the decision by the California Supreme Court precluded their federal action.[108] The United States Supreme Court granted certiorari only on the issue of preclusion and so did not reach the merits of the case.[109] The Court dismissed the

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County of S.F., 41 P.3d 87, 102 (Cal. 2002); Loyola Marymount Univ. v. L.A. Unified Sch. Dist., 53 Cal. Rptr. 2d 424, 434-35 (Cal. Ct. App. 1996).

[98] Parking Ass'n of Ga. v. City of Atlanta, 515 U.S. 1116, 1118 (1995) (Thomas, J., dissenting). *See also* Callies, *supra* note 15, at 8.

[99] CURTIN & TALBERT, *supra* note 33, at 323-24.

[100] *Ehrlich*, 911 P.2d at 447.

[101] *Id.*

[102] CURTIN & TALBERT, *supra* note 33, at 325. The *Ehrlich* court also upheld the public art fee as a land use regulation based on the city's police power to control aesthetics rather than as an exaction. *Id.*

[103] *Id.*

[104] San Remo Hotel, L.P. v. City & County of S.F., 41 P.3d 87, 88 (Cal. 2002).

[105] *Id.* at 120 (Brown, J., dissenting).

[106] *Id. See also* CURTIN & TALBERT, *supra* note 33, at 328.

[107] *San Remo Hotel*, 41 P.3d at 128 (Brown, J., dissenting).

[108] San Remo Hotel v. City and County of S.F., 545 U.S. 323, 326-27 (2005).

[109] *San Remo Hotel*, 545 U.S. at 327 n.1; CURTIN & TALBERT, *supra* note 33, at 329 n.7.

case in June of 2005 on procedural grounds,[110] finding the defendants' state court endeavors "equivalent" to a federal trial[111] and effectively denying heightened scrutiny of the City's legislative authority to impose fees.

The California Supreme Court clearly distinguished between ad hoc and legislatively imposed exactions.[112] Exaction abuses and private property advocacy by builders' groups eventually led to "nexus legislation"[113] under Assembly Bill 1600.[114] California established this legislation in 1987, effective as of January 1, 1989, which added sections 66000-66011 to the California Government Code.[115] In 1996, in light of *Ehrlich,* the Legislature relabeled sections 66000-66025 the "Mitigation Fee Act" ("Act").[116] In the Act, the Legislature amended the definition of a fee to include both legislatively imposed and ad hoc fees.[117] Currently, a government entity imposing an impact fee on development projects must: establish the purpose of the fee, establish the use of the fee including public facilities to be financed, show a reasonable nexus between the purpose of the fee and the type of development, show a reasonable relationship between the public facility which the fee will finance and the type of development on which it imposes the fee, show a reasonable relationship between the specific amount of the fee and the cost of public facilities attributable to the project, and account for and spend collected fees only for the purposes intended with provision for the return of unexpended funds.[118]

The final condition includes provisions requiring the government entity to deposit, invest, account for, and expend the fees, as well as account for unexpended or uncommitted funds once each fiscal year.[119] The entity must identify a schedule of improvements and adopt a capital improvement plan within 180 days of determining that sufficient funds were collected.[120] Within 180 days of the closing of the fiscal year, there must be a full accounting of the funds and a review of the accounting by the local government council at its next regularly scheduled meeting,

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[110] *San Remo Hotel*, 545 U.S. at 335.

[111] *Id.* (quoting San Remo Hotel v. City and County of S.F., 364 F.3d 1088, 1098 (9th Cir. 2004)); Michael Berger, *San Remo Hotel: When Ship Comes In—But Only Passes By*, L.A. DAILY J., July 11, 2005, at 2-3.

[112] Ehrlich v. City of Culver City, 911 P.2d 429, 447 (Cal. 1996).

[113] CURTIN & TALBERT, *supra* note 33, at 329.

[114] Laura Westrup, Cal. Dep't of Parks & Recreation, *Quimby Act 101: An Abbreviated Overview*, CAL. PARKS & RECREATION, Summer 2002, at 8, *available at* http://www.cprs.org/membersonly/Sum02_Quimby.htm.

[115] CAL. GOV'T CODE §§ 66000-66011 (West 1989); CURTIN & TALBERT, *supra* note 33, at 329.

[116] CAL. GOV'T CODE §§ 66000-66025 (West 1996); CURTIN & TALBERT, *supra* note 33, at 329.

[117] CURTIN & TALBERT, *supra* note 33, at 329.

[118] *See id.* (citing §§ 66001(a), 66001(b), and 66006); Ross & Thorpe, *supra* note 14, at 108.

[119] § 66006(a); CURTIN & TALBERT, *supra* note 33, at 329.

[120] CURTIN & TALBERT, *supra* note 33, at 329 (citing § 66001(e) and § 66002).

not less than fifteen days after it becomes available.[121] The Act establishes specific procedures and a time line, including a ninety-day protest period when a landowner or developer may contest a fee, of which the government entity must provide written notice.[122]

Ultimately, the establishment of exactions rests on the police power of the state, as established under *Berman*[123] and confirmed in *California Building*.[124] *Ayres* establishes the need for a connection between an exaction and a proposed development.[125] *Nollan* and *Dolan* delineate the dimensions of the connection, *i.e.*, rational nexus and rough proportionality, at least with respect to dedications of land.[126] *Ehrlich* extends the *Nollan/Dolan* test to individually negotiated, or ad hoc, monetary exactions, while legislatively imposed monetary exactions on a broad class of properties require a lesser degree of documentation to establish proportionality under current California law.[127]

Although the Act clarified what is required to impose impact fees, municipalities still abuse these fees. Using California traffic impact fees, this article will show that many local governments have not taken into account the full effect of the economic difficulties posed. Many commentators consider traffic fees the best example of successful impact fees,[128] but if even these fees fail to live up to the Pigovian ideal, we might question the desirability of development impact fees in general.

III. ECONOMICS OF TRAFFIC IMPACT FEES

Developers make decisions on what and where to build based on perceived costs and benefits.[129] In each development, they need to provide an efficient level and mix of services that will maximize their profits.[130] New development requires infrastructure, and to the extent that they can provide services within a project, developers have the proper incentive to make an efficient allocation where the benefit of these services matches their cost.[131] Developers will provide infrastructure up to the point where additional infrastructure costs more than it

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[121] *Id.* at 329-30 (citing § 66006(b)).

[122] *Id.* at 330 (citing § 66020(d)(1)).

[123] Berman v. Parker, 348 U.S. 26, 32 (1954).

[124] Cal. Bldg. Indus. Ass'n v. Governing Bd. of the Newhall Sch. Dist., 253 Cal. Rptr. 497, 509 (Cal. Ct. App. 1998).

[125] Ayres v. City Council, 207 P.2d 1, 7-8 (Cal. 1949).

[126] Dolan v. City of Tigard, 512 U.S. 374, 391 (1994). Nollan v. Cal. Coastal Comm'n, 483 U.S. 825, 834-45 (1987).

[127] CURTIN & TALBERT, *supra* note 33, at 326.

[128] *See, e.g.*, Rosenberg, *supra* note 31, at 680-81; Callies, *supra* note 15, at 14.

[129] ROBERT B. EKELUND, JR. & ROBERT D. TOLLISON, MICROECONOMICS: PRIVATE MARKETS AND PUBLIC CHOICE 10 (6th ed. 2000) (describing marginal analysis).

[130] *Id.*

[131] *Id.*

benefits the developer.[132]

The catch is that new development may have effects that spill over into surrounding neighborhoods. In a zero transaction-cost world in which existing residents own the common pool of resources in their neighborhoods, a developer could bargain with and compensate residents to achieve an "efficient" level of services where marginal costs and marginal benefits are equal. In reality, existing residents do not own common pool resources, and the transaction costs of bargaining are positive.[133] The idea is that the government should require developers to pay city or county governments an impact fee or exaction to compensate the public for the burden that the new development places on existing services.[134] Government imposes these exactions—as a dedication, construction of facilities, or fee in-lieu—on the new development as a condition of approval to build.[135]

According to Pigovian theory, an economically efficient amount of new development will occur if the exaction precisely matches the costs which the new development imposes on the community and the government spends the fees to offset those costs.[136] Although finding an economically efficient level of taxes may be simple in a textbook, real world political difficulties may result in governments setting fees at levels significantly above their marginal impact. As the Department of Housing and Community Development ("HCD") reports, this clearly is the case in California.[137] Under these circumstances, developers, landowners, and new buyers suffer.[138] Developers respond to high exactions by building less, causing the price of existing building stock to increase.[139] There is less developed property for new residents, as well as for new and existing businesses, causing rents to rise, businesses to close or relocate, and employment to fall.[140] Problems determining

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[132] *Id.* *See* DAVID N. HYMAN, PUBLIC FINANCE: A CONTEMPORARY APPLICATION OF THEORY TO POLICY 56-69 (8th ed. 2005) (discussing marginal costs, marginal benefits, and efficiency).

[133] EKELUND & TOLLISON, *supra* note 129, at 84.

[134] Kolo & Dicker, *supra* note 1, at 197.

[135] *Id.* at 197-98.

[136] *See generally* EKELUND & TOLLISON, *supra* note 129, at 444.

[137] LANDIS ET AL., *supra* note 11, at 1 ("California development fees are extremely high. Single-family homebuilders in California in 1999 paid an average of $24,325 per unit in residential development fees, based on the results of a sample of eighty-nine cities and counties. Owners of new infill homes paid an average of $20,327 per unit. Apartment developers paid an average of $15,531 per new apartment unit."). This report provides the most comprehensive look at impact fees in California to date. Other reports had various weaknesses, including reviewing only selected product types and/or selected fees, making comparisons of disparate types of housing across jurisdictions, and focusing on specific locales rather than on the state as a whole. *Id.* at 25. This study overcomes many of the deficiencies of other surveys by using a detailed survey over a representative range of statewide data (eighty-nine jurisdictions). *Id.* at 25-30.

[138] *See id.* at 22-23; DRESCH & SHEFFRIN, *supra* note 8, at iv-v.

[139] *See* DRESCH & SHEFFRIN, *supra* note 8, at iv-v.

[140] *Cf. id.* at 22-24.

the proper level of fees arise in both the calculation and the implementation of exactions.

A. Basic economics of impact fees

Impact fees increase the price of housing and commercial development. Although legally, development impact fees are not considered taxes, in the traditional economic view, their effect is the same as a unit tax on new development.[141] Taxes on new construction raise prices for consumers, lower revenue of developers, depress prices for undeveloped land, and decrease the quantity of new construction.[142] Figure 1 illustrates the economic effect of an impact fee on new development. The effective supply curve shifts up the level of the impact fee, by increasing the price from P1 to P2 by the amount of the fee which decreases the quantity from Q2 to Q1.[143] Even if the fee is legally imposed on the developer, the developer may pass some or all of the burden of the tax onto other parties involved in a transaction. Some combination of buyers, builders, and landowners must bear the burden of the tax.[144]

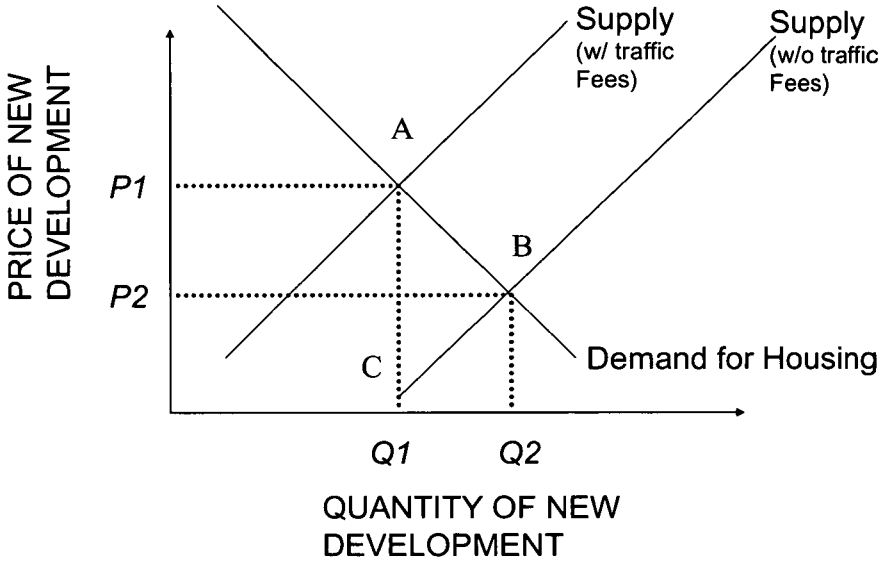
[141] DRESCH & SHEFFRIN, *supra* note 8, at 17-26. See Larry D. Singell & Jane H. Lillydahl, *An Empirical Examination of the Effect of Impact Fees on the Housing Market*, 66 LAND ECON, 82 (Feb. 1990) for a more detailed analysis of impact fees.

[142] DRESCH & SHEFFRIN, *supra* note 8, at 25-28.

[143] See Figure 1.

[144] WILLIAM BOYLES & MICHAEL MELVIN, ECONOMICS 492 (6th ed. 2005).

Figure 1. Increased Fees Make Development More Expensive.



If the quantity of construction decreases by a large enough amount, government revenue from impact fees may also decrease.[145] Many jurisdictions mistakenly think that increases in fees always lead to increased revenue.[146] As fees increase, however, the cost of developing increases.[147] When fees are high enough, they may discourage so much development that total revenue for government actually falls.[148] At the limit, if fees are zero, total revenue from fees is zero.[149] If fees are so large that they deny the developer any income, no development takes place and total revenue is again zero.[150] Figure 2 illustrates that, between these two limits, there is a total revenue maximization point on the inverted U shape of the total revenue curve.

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[145] See Figure 2.

[146] The City of Salinas, California, implicitly assumed this when it calculated the amount of revenue needed from traffic impact fees and divided it by the number of impositions. *See infra* notes 178-79. *See also* Denis Collins, *Fund Jolts for City, N. Va; Gasoline Levy Results Short of Expectations; New N. Va Gasoline Tax fails to give Expected Relief*, WASH. POST, Dec. 14, 1980, at B1.

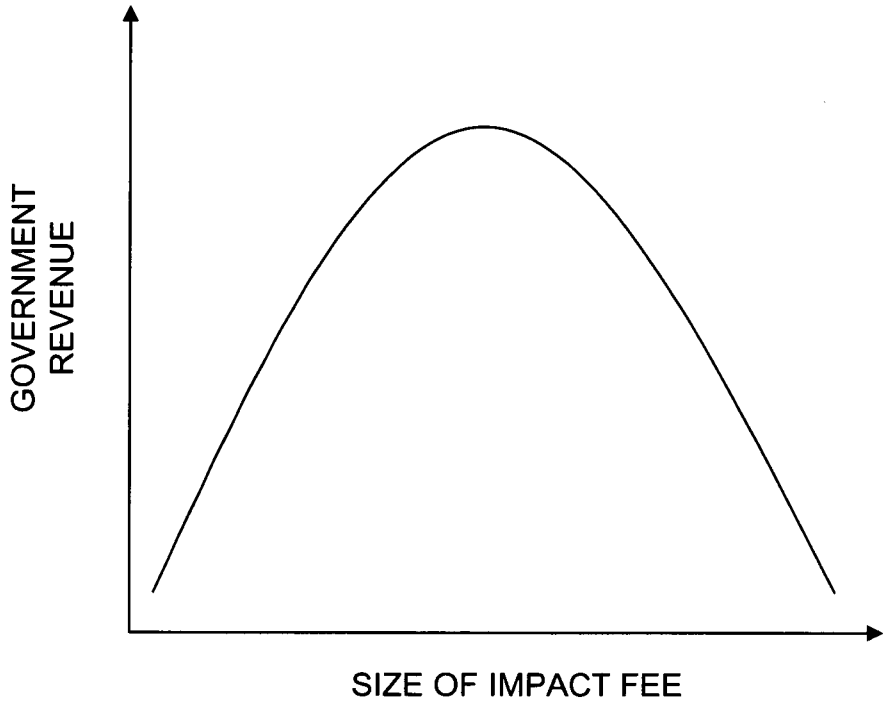
[147] *See* HARVEY S. ROSEN, PUBLIC FINANCE 381–82 (6th ed. 2002) (discussing the economics of the Laffer Curve).

[148] *See id.* at 381.

[149] *See id.*

[150] *See id.*

Figure 2: Laffer Curve for Impact Fees.



As impact fees increase, governments risk surpassing the maximum point on the total revenue curve.

In California, impact fees are considerable. Among eighty-nine communities, impact fees account for an average of ten percent of the median new home price.[151] Dresch and Sheffrin noted that the fees imposed on single-family dwellings in Contra Costa County, California from 1992–1996 were significant, ranging from $20,000–$30,000 per dwelling and as much as nineteen percent of the mean sales price.[152] The HCD found that single-family home builders paid an average of $24,325 in development fees for tract homes and $20,327 for in-fill homes, whereas apartment developers paid $15,531 per new apartment unit.[153] Though the HCD reported that fees varied significantly across the state ($4,000 to over $60,000 per single-family dwelling[154]), "[f]ees are highest relative to housing prices in the State's fastest growing and most affordable communities."[155] With relatively low land costs and high levels of development, these communities' economies of scale in construction lead to relatively low housing costs. However, they have little long-

[151] LANDIS ET AL., *supra* note 11, at 2.
[152] DRESCH & SHEFFRIN, *supra* note 8, at 74.
[153] LANDIS ET AL., *supra* note 11, at 103.
[154] *Id.* at 9.
[155] *Id.* at 107.

term infrastructure planning and financing and are more dependent than other communities on development fees for infrastructure.[156] Consequently, although construction costs are low, fees are high. Many charge the highest fees as a percentage of sale price (greater than fifteen percent),[157] and fast-growing, affordable communities were more likely to have recently increased their fees than slow-growing, expensive ones.[158] The HCD noted that among their sample, traffic and transportation fees were the most frequently increased type of capital facility fees,[159] making up the bulk of exactions (approximately eighty percent).[160]

Fees affect affordability by more than just their imposed amount. Because municipalities normally collect fees at the start of the project, builders must include fee interest (carrying costs)—in addition to the actual fee—in their overhead until a house is sold and during any additional processing time.[161] Mathur et al. found that in Washington State, from 1991–2000, this increase averaged 1.66 times the fee and was larger for more expensive houses.[162] Though noting that the reasons for the price effects needed further study, they found that their results were consistent with Dresch and Sheffrin's 1997 results for the western part of Contra Costa County, California showing a $1.88 increase in housing price for each $1.00 impact fee increase.[163] Responding to the Mayor of Visalia's comment that fees do not seem to have a chilling effect on housing sales,[164] Robert Keenan of the Building Industry Association of Kings/Tulare Counties (one of the fastest growing areas in California) pointed out that fees and carrying costs do have a chilling effect: "Is his assumption that because they're raising fees, we're selling more homes? . . . The real chilling effect is that local buyers are being priced out of the market."[165] He noted that fees reduce affordability quickly.[166] Housing statistics showed that from the third quarter to the fourth quarter of 2004, Tulare County's affordability went from first in the state at 46.4% of people at the median being able to afford a home to only 40.1% when prices increased $12,000.[167] Keenan stated, "That's 6.3% of people making the median income who just got priced out in three months . . . .

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[156] *Id.*

[157] *Id.* at 87.

[158] *Id.* at 56.

[159] *Id.*

[160] *Id.* at 103.

[161] Mathur, Waddell & Blanco, *supra* note 29, at 1311.

[162] *Id.* at 1308, 1311.

[163] *Id.* at 1311 (citing DRESCH & SHEFFRIN, *supra* note 8).

[164] Tim Sheehan, *Visalia Hikes Fees to Help Pay for Booming Growth*, FRESNO BEE, Mar. 13, 2005, at A1.

[165] *Id.*

[166] *Id.*

[167] *Id.* This discussion was in response to a new round of fee increases that combined to add over $11,000 to the price of Visalia's "average" new home. *Id.* One City Council member worried that he had only been on the council a short time, but had already considered two increases. *Id.*

Fees do have a chilling effect."[168] As Figure 1 above illustrates, increasing fees on development leads to higher prices for consumers and a smaller quantity of development. During periods of low demand, developers can pass fees and exactions backwards to landowners, or landowners and developers can share them.[169] However, in periods of high demand, typifying the California market in recent years, developers tend to pass these fees forward to homebuyers.[170] In the long run, high fees give developers an incentive to build more expensive homes, making fees a smaller percentage of total price as the fees are charged per dwelling unit rather than as a percentage of sales prices.[171] They also encourage developers to target higher income buyers, who may be less sensitive to price increases.[172] Ultimately, fewer buyers can afford to purchase homes because of excessive impact fees.[173] To reverse this trend, the government must lower fees. The HCD estimates that a fifty percent reduction in fees could result in a four to eight percent increase in affordability[174] based on the reduction in fees alone (assuming the reduced fee translated to a lower price on a dollar-for-dollar basis),[175] with potential increases in affordability in at least one area (Brentwood) of fourteen percent.[176] A similar reduction in fees could potentially increase apartment rent affordability by four to eight percent.[177]

Additionally, excessive fees discourage efficient commercial development. A fee acts as a tax on new commercial development in the same manner as residential development—by raising prices and reducing the amount of development that takes place. Imagine a business that is contemplating opening a large 100,000 square foot store in Salinas. Under a 2004 proposed fee increase,[178] the store's owner would face a traffic impact fee of between $2,000,000 and $4,800,000, instead of the current fee of $1,117,200[179] and would have to weigh the benefit of being in Salinas against the cost-savings of a nearby, lower-tax community. Some companies would locate elsewhere, leading to less construction and commercial space, a lower tax base, fewer jobs, and higher business costs. A spatial shift of

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[168] *Id.*

[169] LANDIS ET AL., *supra* note 11, at 23.

[170] *Id.*

[171] *Id.* at 3.

[172] *Id.* at 3-4. *See also* Sheehan, *supra* note 164.

[173] Sheehan, *supra* note 164.

[174] LANDIS ET AL., *supra* note 11, at 96.

[175] Note that this is an estimate because, in areas and times of high demand, developers may not reduce prices on a dollar-for-dollar basis, and it may take time for these reductions to show up in housing prices. *Id.* At the same time, the reduction in fees may be reflected in additional reductions due to the reduction in the multiplier effect. See *id.* at 95–97 for a more thorough discussion.

[176] *Id.* at 104.

[177] *Id.* at 106.

[178] Benjamin Powell & Edward Stringham, Economic Analysis of the Proposed Traffic Fee Increases in Salinas 2 (Apr. 20, 2004) (unpublished manuscript, on file with the authors).

[179] *Id.* at 3, 9-10.

commercial businesses from high-fee areas to low-fee areas would occur.[180] The shift would also contribute to urban sprawl when the businesses moved to low-fee communities beyond the urban limits.[181]

B. Problems of calculating fees

Although the elimination of impact fees would translate into more affordable housing, advocates of impact fees believe that housing imposes negative externalities, which municipalities should tax. As previously mentioned in Pigovian theory, governments should set an exaction at the level of the impact that new development imposes on existing infrastructure. For traffic impact within a development, establishing the proper facilities for ingress and egress is relatively simple.[182] In fact, the simplest way to ensure the efficient cost/benefit nexus of infrastructure within a development is to have the builder finance it himself. However, the impact to surrounding neighborhoods is more problematic. Local governments would need to quantify the impact by measuring traffic usage before and after development, holding other possible causalities constant, and calculating the burden of any increased usage imposed on other citizens.

Holding other causal factors constant, however, is easier said than done. Whether increased traffic is solely from new development or from more intense use in surrounding developments is not always clear. Is the number of drivers in all households on average increasing, and are choices of labor and leisure changing, affecting trip generation? Does the new development draw some traffic away from other developments that previously received it? Who is responsible for neighboring traffic into the development? Is the development in-fill or outlying?[183] Any one-size-fits-all or two-tiered system of traffic impact fees will not lead to a Pigovian solution because each project will have a different marginal impact, yet be charged the same fee. Consequently, fees set higher than a project's marginal impact will discourage efficient development while fees set below the marginal impact will encourage development with excess burdens. "In short, unlike the private market where prices and costs function as efficiency signals, development fees appear to play no part in encouraging efficient local land-use or capital improvements planning."[184]

The HCD noted that these fees are an inefficient way of paying for capital infrastructure as that infrastructure is less expensive when built before it is needed.[185] Exactions based on the next growth increment are necessarily higher than they would be if tied to a realistic and comprehensive general plan established

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[180] LANDIS ET AL., *supra* note 11, at 9.

[181] *Id.*

[182] *See id.* at 43 (discussing calculation methods of local traffic mitigation fees).

[183] Infill may not impose unplanned spillover, while outlying development may require substantial connecting roads.

[184] LANDIS ET AL., *supra* note 11, at 56.

[185] *Id.* at 5.

prior to development.[186] The HCD found that the link between traffic impact fees and long-term capital improvement is weak.[187] According to the HCD, "[d]evelopment fees are higher than they should be . . . ."[188]

In theory, the most efficient method of determining the impact of a development is to value its marginal contribution to infrastructure.[189] Suppose an area is undeveloped but has a general plan to accommodate 1,000 homes. With a long-term capital improvement plan funded and in place, each new development could pay its incremental (marginal) share of the necessary improvements until the completion of the general plan. In California, where such funding is generally lacking and some development has already taken place,[190] estimating marginal costs is complicated.[191] Most fee determination is made on an average cost basis.[192] Average cost pricing is problematic for two reasons. First, it is difficult to separate the impact of new development from improving conditions of existing development.[193] Second, if the average cost is the total improvement cost divided by the current population, rather than total developed population, new development pays a disproportionate share.[194] While the California Supreme Court considers this practice illegal, the HCD found, "it is implicit to some degree whenever fees are set on the basis of average cost."[195]

The appropriate calculation of exactions is difficult. Government needs to know the marginal impact that a development's drivers will have on the roads. The impact of various projects is discrete and changes over time. This puts government in a position akin to central planners, attempting to measure marginal costs or marginal benefits of different actions in the absence of prices.[196] Government can attempt to create a formula in which it assumes that a certain type of development generates a specific number of trips, but the marginal impact of these developments will differ depending on the developments' locations. For example, the marginal impact of a development in a part of town with plenty of empty roads will be much less than a development in a congested area or in an area lacking roads. To truly charge fees at the level of the marginal impact, the government needs to have a different fee for each resident of each development based on how much, when, and where they drive. This is not the current practice.

Many governments turn to average cost pricing as a substitute for measuring

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[186] *Id.*

[187] *Id.* at 2.

[188] *Id.* at 5.

[189] *Id.* at 16.

[190] *Id.* at 5, 106.

[191] *Id.* at 16.

[192] *Id.* at 102.

[193] *Id.* at 16-17.

[194] *Id.*

[195] *Id.* at 17.

[196] *See generally* Edward Stringham, *Kaldor-Hicks Efficiency and the Problem of Central Planning*, 4 Q.J. AUSTRIAN ECON. 41 (2001) (discussing the problem of government decision making in the absence of prices).

marginal impact.[197] In many cases, the government decides how much it wants to spend on road improvements. It subtracts the dollar amount that can be financed through other means and then divides the remaining costs among all proposed development.[198] This method is much easier to calculate but extremely flawed. Why should developers in one part of town have to pay for the construction of a road in a separate part of town where their customers will not drive? Despite the legal requirement that fees have to be proportional with impact,[199] in practice they are not.

C. Political problems of implementing fees

Individuals make choices based on incentives.[200] Prior to the introduction of public choice theory,[201] modern democratic government was generally viewed as paternalistic and benevolent, making decisions to maximize social welfare.[202] Public choice exposes government actors to the scrutiny of economic analysis[203] based on their rational self-interests just like private individuals.[204] Fully understanding the implementation of exactions requires understanding the incentives of those who implement them, including politicians who propose the exactions, current residents who vote for them, and bureaucrats who apply them.

Consider the incentives faced by a politician seeking to get elected. One potentially perverse incentive is that politicians must cater to current residents because future residents do not vote in current elections. Consequently, politicians may focus on short-term policies that benefit current residents at the expense of future residents. This focus can translate into incentives to engage in "fiscal zoning"[205] to restrict residential development and to discourage some, or even all, types of growth.[206] For example, fiscal zoning may discourage apartments and low-

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[197] LANDIS ET AL., *supra* note 11, at 16.

[198] Powell and Stringham encountered the City of Salinas attempting to use this method with a proposed impact fee increase in 2004. *See* Peter Kasavan, *Traffic Impact Fee Boost Tempered a Bit*, CALIFORNIAN (Salinas, Cal.), Apr 10, 2004, at 2D.

[199] LANDIS ET AL., *supra* note 11, at 17.

[200] STEVEN E. LANDSBURG, THE ARMCHAIR ECONOMIST: ECONOMICS AND EVERYDAY LIFE 3 (1993).

[201] *See* MIT DICTIONARY OF ECONOMICS 351 (David W. Pearce ed., 4th ed. 1992) (defining public choice as "an economic analysis of politics").

[202] BRIAN SNOWDON & HOWARD R. VANE, MODERN MACROECONOMICS: ITS ORIGINS, DEVELOPMENT, AND CURRENT STATE 30, 518–21 (2005).

[203] For an introduction to public choice economics, see WILLIAM C. MITCHELL & RANDY T. SIMMONS, BEYOND POLITICS: MARKETS, WELFARE, AND THE FAILURE OF BUREAUCRACY (1994); GORDON TULLOCK, ARTHUR SELDON & GORDON L. BRADY, GOVERNMENT FAILURE: A PRIMER IN PUBLIC CHOICE (2002).

[204] *See* EKELUND & TOLLISON, *supra* note 129, at 457–79.

[205] Fiscal zoning refers to the practice of using zoning laws to restrict perceived high cost, low revenue development and encourage its opposite. *See* LANDIS ET AL., *supra* note 11, at 27.

[206] *Id.* at 9, 27.

cost starter homes[207] and instead encourage high-income housing which will enhance local property values. This is particularly true where politicians view development only in terms of present costs and not long-term benefits, such as "increases in tax base, sales tax, employment, and other secondary and tertiary benefits."[208] While high-income housing may increase specific property tax values, overall tax value over time may fall as less development takes place.[209] One way politicians accomplish fiscal zoning is through implementing excessive exactions. Politicians may use fees to encourage commercial development and discourage housing to capture sales tax revenue and limit expenditures on additional public services.[210] They may strategically set fees to either attract growth or divert development where common markets exist for it among adjacent communities.[211] As noted above,[212] the average cost method most commonly used for fee estimation requires new entrants to bear the cost of improving existing facilities.[213] While these practices may hurt affordability, they can be good politics because they benefit the current electorate and come at the expense of potential residents.[214]

Current residents can benefit from high impact fees in several ways. First, they can limit low-income newcomers to their community by limiting high density or low-cost housing through exclusionary zoning. Second, they can have new development foot the bill for infrastructure upgrades that primarily benefit existing residents.[215] This particularly applies to traffic impact fees that represent a large portion of capital fees (the majority category of fees)[216] when based on average cost pricing,[217] and where new development usage is difficult to separate from more intensive use of existing improvements.[218] Third, while both of these policies will decrease housing affordability, voters who already own their homes may not care. Existing homes are a close substitute for new homes, and as fees drive up the cost of new homes, existing home values increase (Figure 3).[219]

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[207] *Id.* at 17.

[208] Kolo & Dicker, *supra* note 1, at 201.

[209] This is a fallacy of composition where what is true of the specific case is not true in the aggregate. See Figure 2.

[210] LANDIS ET AL., *supra* note 11, at 27.

[211] *Id.*

[212] *See supra* notes 189-99 and accompanying text.

[213] LANDIS ET AL., *supra* note 11, at 9.

[214] These practices also harm owners of raw, undeveloped land, but those owners are often not residents of the community where the land is owned. Even if they are residents, they only get one vote compared to the many votes of the owners of homes throughout the community.

[215] NAT'L ASS'N OF HOME BUILDERS, CONSUMER GUIDE TO UNDERSTANDING IMPACT FEES 1 (2004), http://www.nahb.org/generic.aspx?sectionId=112&genericContentID=3792.

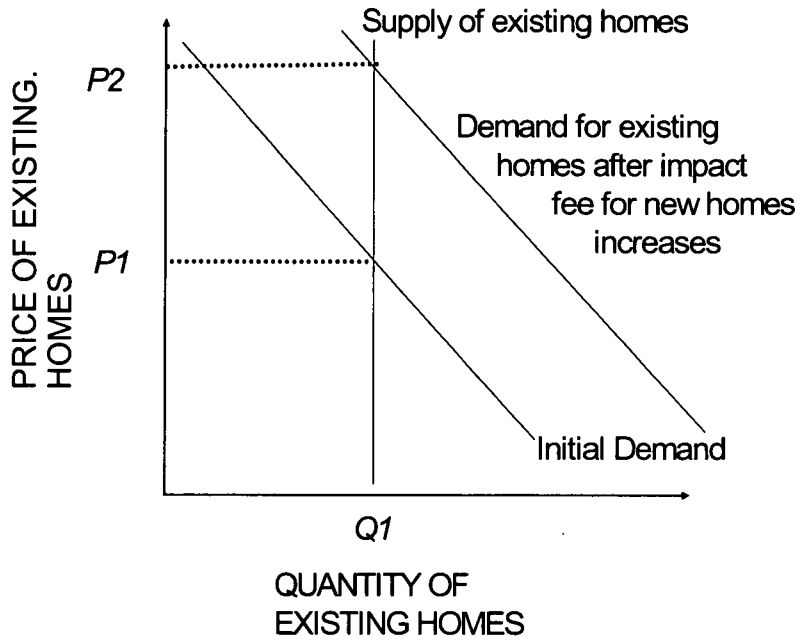
[216] LANDIS ET AL., *supra* note 11, at 2.

[217] *Id.* at 9.

[218] *See supra* Section III. B.

[219] Note that the supply curve of existing houses is fixed (vertical) in the short run by definition so that the whole fee is translated into higher prices.

Figure 3. Increased Fee Makes Existing Homes More Expensive.



Bureaucrats have incentives to support higher fees as well. For example, as the local planning director becomes more important because of his or her role in administering impact fee programs, he might be able to demand a higher salary and benefit from having a larger planning staff, increasing the reach of his department, his influence, and his future job opportunities.[220] In addition, when bureaucrats have the authority to waive fees, they are in a position to extract resources from builders in other ways.

Thus, politicians, existing residents, and bureaucrats can find their incentives aligned to raise fees excessively, creating inefficient outcomes.[221] The economic analysis of politics demonstrates that local governments' impact fees may not be set based on some Pigovian model. The variation in fees among jurisdictions indicates that politics may influence impact fees.

Variation in fees, in and of itself, is not flawed as new development may have different impacts in different communities. If fees are set according to the Pigovian criteria, cities with similar economic and demographic characteristics should have similar fee structures validated by comprehensive nexus studies. Fees should vary between jurisdictions according to differences in population, growth, age, density,

[220] See Paul Wyckoff, *The Simple Analytics of Slack-Maximizing Bureaucracy*, 67 PUB. CHOICE 35 (1990) for a detailed description of budget and slack-maximizing bureaucracies.

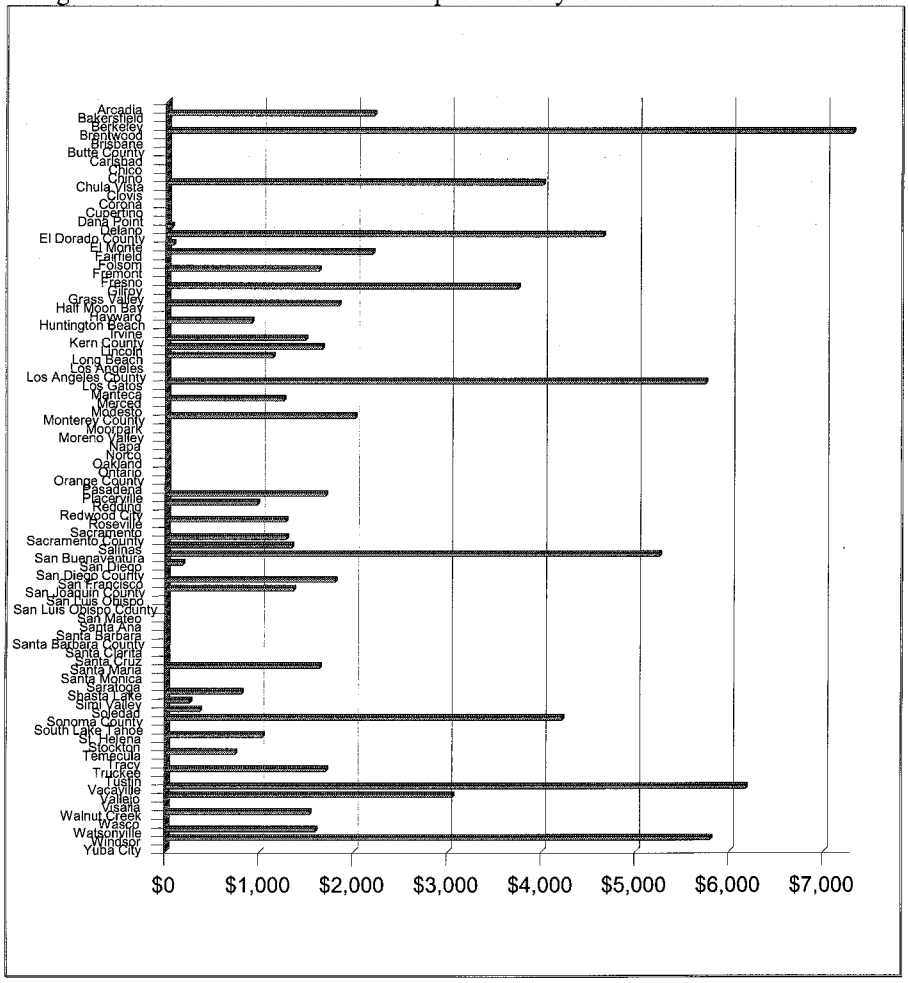
[221] LANDIS ET AL., *supra* note 11, at 9.

income, and development activity. However, if politics is driving fee structures in California cities, fees could vary greatly with no obvious relationship to the above characteristics.

Fees do vary widely across California—total development fees vary from 2% to 20% of new housing prices, which translated from $11,176 to $59,703 for single-family tract homes.[222] Fees vary similarly for apartments, but are $8,000 to $10,000 lower per unit.[223] Capital facility fees, the majority of which are traffic fees, make up 80% of housing fees and 86% of apartment fees.[224] Of all fees, traffic fees varied the most among jurisdictions[225] and were the most frequently increased capital facilities fees.[226] Figure 4 illustrates the level of traffic impact fees by Californian city. Is the actual marginal traffic impact of an additional house zero dollars in Santa Barbara and $7,000 in Berkeley? It's possible but unlikely.

[222] *Id.* at 103-04.
[223] *Id.*
[224] *Id.* at 2.
[225] *Id.* at 22.
[226] *Id.* at 56.

Figure 4. 1999 Residential Traffic Impact Fees by California Jurisdiction.[227]



Because California courts have firmly upheld the nexus of development fees and infrastructure costs (albeit in a more distant sense for legislative enactments),[228] fees should vary in a predictable way. The HCD states, "[i]f the Mitigation Fee Act is working as intended—that is, if there truly is a nexus between development fees and capital facilities costs—then development fees should vary in ways that are both recognizable and explainable."[229] This, however, is not the case.

The HCD surveyed impact fees in eighty-nine communities in California. It found that some charged a multitude of fees, while others charged only a few.[230] Some communities charged a consolidated fee based on a schedule, while others

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[227] *Id.* at Appendix B.

[228] *See supra* notes 123-27 and accompanying text.

[229] LANDIS ET AL., *supra* note 11, at 59.

[230] *Id.* at 62.

simply lumped fees together without explanation, leaving both staff and developers without a reliable way to estimate project fees.[231] Fee collection appeared arbitrary because of these methods.[232]

The HCD used regression models to try to determine what caused the variation in fees among jurisdictions. It controlled for type of jurisdiction (city or county), population, population change, housing supply ratio, city age, gross density, per capita net expenditure, and median household income. These models only explained 48% of the variation in traffic fees between cities.[233] Only three factors were significant, and they varied directly (fees moved in the same direction as each variable): city age, median household income, and housing supply ratio.[234] The HCD ran nine different regressions, one for each type of impact fee a city charged, i.e. planning fees, traffic, school, etc. The HCD model was able to explain as little as 4% of the variation in a fee to as much as 48% of the variation.[235] The model that considered the sum of all impact fees charged by cities was only able to explain 24% of the variation in fees among cities.[236]

These regressions show that the explanatory variables provided a poor explanation of fee variation.[237] They were able to explain only 48% of the variation in traffic and park fees, leaving 52% unexplained, while in-lieu fees leave 96% of the variation unexplained.[238] Overall, 76% of fee variation remained unexplained.[239] Fees also varied inconsistently by and even within region.[240] Fees did not substitute for public debt as might be expected if they cover capital infrastructure.[241] This large variation in fees is strong evidence that impact fees are set by politicians to benefit current residents and are not set to encourage economically efficient development as the law requires. If one believes that the fees are set proportionally to impact, we must conclude that the marginal impact on traffic of additional residence is zero in Santa Monica, a few hundred dollars in San Diego, and more than $10,000 in Brentwood.

The Act requires a reasonable connection between fees and actual impact; communities are supposed to commission studies establishing this nexus and update them at least every five years.[242] The studies should include projections of population to be served, current and future service levels, determination of needed future facilities with cost estimates, proper cost apportionment between new and

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[231] *Id.*

[232] *Id.* at 7.

[233] *Id.* at 79.

[234] *Id.* at 80.

[235] *Id.* at 78.

[236] *Id.*

[237] *Id.*

[238] *Id.*

[239] *Id.*

[240] *Id.* at 103.

[241] *Id.* at 86.

[242] CAL. GOV'T CODE §§ 66001-66002 (West 1996). The plans are often referred to as nexus studies and are certified by resolution or ordinance.

existing residents, and procedures for notification of fees and protest.[243] However, twenty of eighty-nine jurisdictions surveyed could *not produce even one* nexus study.[244] Few nexus studies were comprehensive, and most were simply city council findings.[245] The studies were generally two to five years old, and cities had few resources to update them.[246] Seventeen cities had general studies; nine had specific traffic studies, and thirty had a nexus study for at least one category of fee.[247] Where nexus studies existed, they usually employed average cost pricing and were poorly linked to capital spending.[248]

Impact fees in California are not set according to comprehensive studies that match the marginal cost of development to the fee charged. The incentives of politicians, current residents, and local bureaucrats are aligned to impose high fees rather than any type of Pigovian fee. The fee setting process in California is ad hoc and political.[249] When combined with the difficulties of calculating proper fees (if jurisdictions were so inclined) and the inefficiencies of their collection, traffic impact fees are a flawed method of providing infrastructure. Some alternative methods of infrastructure provision could avoid these problems.

IV. ALTERNATIVES TO IMPACT FEES

Fees are far from some Pigovian ideal. Calculating each individual project's specific impact is difficult, and using any single- or multi-tier average fee will discourage some economically efficient developments. Additionally, developments might impact a neighbor's subjective well-being in both positive and negative ways. We have seen that impact fees are unlikely to successfully internalize externalities, but are these extremely problematic impact fees the only option available? Luckily, alternatives to impact fees exist. Simply changing the way communities provide roads would allow developers and others to internalize these costs. If road provision reforms could internalize all costs, there would be no spillover costs and hence no need for inefficient impact fees. Some market solutions will internalize these costs and be more efficient.

A. Traffic Alternatives

New development traffic costs spill over onto existing residents and city budgets in three ways. New outlying development requires construction of new local roads within the development and roads to connect it to the existing traffic grid. When cities are responsible for constructing and/or maintaining these roads, existing taxpayers bear some of the burden of new development if there are no impact fees.

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[243] LANDIS ET AL., *supra* note 11, at 50.
[244] *Id.* at 51.
[245] *Id.*
[246] *Id.*
[247] *Id.* at 52-54.
[248] *Id.* at 51.
[249] *Id.* at 49.

New development also brings in more residents whose travel crowds major highways and thoroughfares. Offsetting this burden often requires additional highway lanes or new entrances. Taxpayers again bear the cost of construction. Finally, the community's increased population burdens the existing local traffic grid. This imposes costs on local residents through increased delays and gridlock and through government expenditures to finance road widening and other traffic control measures. The question remains: is the problem inherent to the market, or is the problem due to the way government provides these common pool resources?[250] If government simply turned over the provision of roads to the private sector,[251] then the problem of externalities would not arise. As discussed below, the market presents some potential solutions.[252]

1. Local and Connecting Roads

It is possible to provide local roads within a new development and roads needed to connect the development to the existing traffic grid without resorting to impact fees. If local governments do not finance and construct these roads within a development, then existing residents do not have to foot the bill. The potential builder would have to bear the cost of installing the roads himself in order to complete his project. This is already common with many developments in California and elsewhere in the United States.[253] Because a developer can only sell homes if they are accessible to their residents, the developer has an incentive to install any necessary roads. Since the developer benefits from the roads and bears the costs if they are not built, developers will construct only those projects where the cost of development is less than the expected consumer value once the project is complete. All costs and benefits of the local and connecting roads are borne by the individual developer so that any local costs are internalized. Most importantly, this would bring the design and placement of the roads into the realm of economic calculation, which Ludwig von Mises finds essential.[254] With private provision, the developer will want to design the road system in a way that maximizes the final

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[250] *See generally* Bruce Benson, *Are Public Goods Really Common Pools? Considerations of the Evolution of Policing and Highways in England*, 32 ECON. INQUIRY 249 (1994).

[251] See GABRIEL ROTH, ROADS IN A MARKET ECONOMY (1996) and STREET SMART (Gabriel Roth ed., 2006) for excellent discussions on alternative ways to construct, finance, and operate roads.

[252] *See* ROTH, *supra* note 251; STREET SMART, *supra* note 251.

[253] Bruce Benson, *Are Roads Public Goods, Club Goods, Private Goods, or Common Pools?* 38 (unpublished manuscript, on file with authors), *available at* http://garnet.acns.fsu.edu/%7Ebbenson/hywys.doc.

[254] No real price can be established for capital goods that are not traded in the market place. Therefore, no true signal of the urgency of their need is available and no efficient allocation of resources will take place. See LUDWIG VON MISES, HUMAN ACTION: A TREATISE ON ECONOMICS 201-32 (Mises Institute 1998) for a thorough discussion of the economic calculation as the guide for appropriate action.

value of the new development. With local government provision, the profit and loss system is absent, so governments have little information or incentive to maximize the value of a specific tract.

In addition to construction costs, communities could also separate road maintenance so that no costs spill over to the existing community. After the development is completed, the beneficiaries of the local and connecting roads will be the residents of the development. Many neighborhoods already have homeowners' (or street owners') associations to collect fees and pay for maintenance of the streets. Home buyers can pay for a fraction of the cost of the connecting roads along with the purchase price of the house. When structured this way, existing local residents would not bear the immediate or future infrastructure costs of servicing the new development. The new development would internalize all costs of local and connecting roads, so there would be no need for impact fees to finance them.

There is already much evidence that development in the United States can provide its own local roads as private or club goods.[255] Over 24 million U.S. residents lived in gated communities in 1997,[256] and this is only a fraction of the total number of U.S. citizens living on privately provided roads.[257] In short, there is little theoretical or empirical justification for governments to fund the construction and maintenance of local and connecting roads in new development through the use of traffic impact fees.

2. Highways and Thoroughfares

Financing highways and thoroughfares solely by new development (if developments are on a small scale) cannot be efficient because existing residents also benefit from the construction or expansion. Requiring new developments to bear the full burden of constructing or expanding these roads would inefficiently discourage any development.[258] Efficient highway construction and improvement mandate that those who benefit from the highway, i.e. drive on it, must be the ones who pay for it. Currently, broad-based tax revenue, and not direct usage charges, fund most highways.[259] Where broad-based taxes fund highway maintenance, drivers do not pay the full cost of their use, so highways are often overcrowded and underprovided. New development only compounds this problem by adding more drivers to the highways. Because of the difficulties in calculating and

[255] *See generally* FRED FOLDVARY, PUBLIC GOODS AND PRIVATE COMMUNITIES (1994); James Buchanan, *An Economic Theory of Clubs*, 32 ECONOMICA 1 (1965).

[256] BRUCE BENSON, TO SERVE AND PROTECT 93 (1998).

[257] Bruce Benson, *Are Roads Public Goods, Club Goods, Private Goods, or Common Pools?*, *supra* note 253, at 38.

[258] *See supra* notes 184-88 and accompanying text.

[259] Gasoline taxes are an inefficient method of financing roads because they do not distinguish who drives on which roads and at what times. Different roads have different demands and levels of congestion and, to operate efficiently, should have different prices to reflect that. Gasoline taxes fail to do this.

implementing impact fees on new development, any opportunity to provide or maintain highways privately will enhance economic efficiency.

Private construction and maintenance of highways is less common today, but many successful modern and historical examples of private provision exist. In early America, private parties often constructed and financed turnpikes.[260] Between 1794 and 1840, 238 turnpike groups built and operated 3,750 miles of New England private turnpikes.[261] Four thousand miles of private turnpikes traversed New York by 1821.[262] Pennsylvania had about 2,400 miles in 1832, while Maryland had 300 miles of private roads in 1830, and New Jersey companies provided about 550 miles of private turnpikes in 1821.[263] Overall, relative to the size of the economy, colonial turnpikes in the early United States were larger than the post-WWII interstate system.[264]

SR91 in Southern California is the most well-known, current U.S. example of a privately constructed and operated highway. In 1995, $134 million of private capital was spent to construct a four-lane, private toll highway adjacent to an existing non-toll government highway in Orange County just east of Anaheim.[265] The road is approximately ten miles long and charges a fixed toll that varies between $1.00 and $5.50 depending on the time of day.[266] The road generates annual revenue of approximately $29 million and has turned a profit every year since 1998.[267] In addition to shorter commute times, drivers report that the private toll lanes are safer than the adjacent freeway.[268] The toll way also manages to avoid the cost and delay of tollbooths by using one-hundred percent electronic toll monitoring that allows drivers to continuously maintain highway speed.[269]

Orange County has several highways that, although not completely private, follow the SR91 model. These highways comprise fifty-one miles of congestion-relieving toll roads operated by TCA,[270] a public/private transportation

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[260] *See* Daniel Klein, *The Voluntary Provision of Public Goods? The Turnpike Companies of Early America*, *in* THE VOLUNTARY CITY 76 (David T. Beito, Peter Gordon & Alexander Tabarrok eds., 2002) (discussing these turnpike companies and what mechanisms allowed them to provide the roads).

[261] *Id.* at 84.

[262] *Id.*

[263] *Id.*

[264] Gerald Gunderson, *Privatization and the 19th-Century Turnpike*, 9 CATO J. 191, 192 (1989).

[265] Edward C. Sullivan, *HOT Lanes in Southern California, in* STREET SMART, *supra* note 251, at 189, 191.

[266] *Id.*

[267] *Id.* at 197.

[268] *Id.* at 209.

[269] *Id.* at 196.

[270] Press Release, Transportation Corridor Agencies/The Toll Roads, Toll Roads Save Time, Gas, and Money (June 2006), http://www.thetollroads.com/home/news_press_june_06d.htm (last visited Jan. 22, 2007).

partnership.[271] Chicago recently joined in the move to privatization when it leased the Chicago Skyway to a private Spanish/Australian investor group for ninety-nine years for $1.83 billion.[272] Growing interest in toll roads spurred the second Bush Administration to propose a new $100 million "Open Roads Financing Pilot Program" to explore the expanded use of tolls.[273]

Privatization would provide another advantage in allowing governments to reduce their borrowing needs or use their scarce revenue in other ways. Dana R. Levenson, City of Chicago Chief Financial Officer, is quoted, "[t]his transaction, which is the first of its kind in the nation, fulfills Mayor Daley's continued commitment to pursue innovative financing techniques, and has provided Chicago taxpayers with an unprecedented single, up-front payment of $1.83 billion that we will use to invest in our people and protect Chicago's taxpayers both today and in the future."[274] Nevada is currently investigating toll roads to help ease a $3.8 billion shortfall in Nevada's highway budget between now and 2015.[275] This solution is becoming increasingly necessary as gas tax revenues shrink with more fuel-efficient vehicles while, at the same time, the aging highway system requires more maintenance.[276] Indiana and New Jersey are currently studying the privatization of state-owned facilities.[277]

Toll roads also offer an additional potential advantage: congestion pricing. Many businesses already use congestion pricing. For instance, movie theaters charge a low price on a midweek afternoon, when the additional cost of filling an empty seat is close to zero, and a higher price on weekend evenings, when demand is high and the number of people willing to fill a seat drives up its opportunity cost.[278] Traffic congestion pricing is similar.[279] While the marginal cost of traffic impacts from development is difficult to measure, existing road sensor technology and FasTrak[280] electronic tolling simplify measuring the marginal cost of

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[271] Transportation Corridor Agencies/The Toll Roads, About TCA – Background and History, http://www.thetollroads.com/home/about_history.htm (last visited Jan. 22, 2007).

[272] Peter Samuel, *Chicago Skyway Handed over to Cintra-Macquarie After Wiring $1830m*, TOLLROADSNEWS, Jan. 25, 2005, http://www.tollroadsnews.info/artman/publish/article_777.shtml (last visited Jan. 22, 2007).

[273] Press Release, David Bauer, Editor, *Washington Update*, Am. Road & Transp. Builders Ass'n (Feb. 13, 2006) (on file with authors).

[274] Samuel, *supra* note 272.

[275] Brendan Riley, *Nevada Task Force Eyes Toll Roads to Resolve Shortfall*, CONSTRUCTION EQUIPMENT GUIDE, Feb. 4, 2006.

[276] Transportation Corridor Agencies/The Toll Roads, *supra* note 271.

[277] Samuel, *supra* note 272.

[278] BRADLEY FLAMM & GREGORY ROSSTON, STAN. INST. FOR ECON. POL'Y RES., POLICY BRIEF, TRAFFIC CONGESTION, CONGESTION PRICING, AND THE PRICE OF USING CALIFORNIA'S FREEWAYS, at 2, (Apr. 2005), http://siepr.stanford.edu/Papers/briefs/policybrief_apr05.pdf.

[279] *Id.*

[280] FasTrak is the California Dept. of Transportation's electronic tolling system. *See id.* at 2-3.

congestion.[281] SR91 in Orange County uses a variable-hour pricing system with price fluctuations tied to historical traffic conditions.[282] Many other countries are experimenting with similar pricing schemes: London and Singapore practice simple downtown daily driving fees; Norway, Hong Kong, the Netherlands, Italy, and France use area, facility, or distance-based programs, and San Diego uses real-time congestion data to change tolls up to every six minutes with electronic notification to drivers.[283] Although some argue that tolling unfairly disadvantages the poor,[284] a study of Orange County's SR91 showed that not only the wealthy used the toll road. "The ability to save time and reduce uncertainty confers substantial benefits to all drivers, including service professionals who can make more service calls and parents of any income group rushing to avoid charges for child care."[285] Not only does congestion pricing reduce demand at peak travel periods, when it generates profits, but it also provides the incentive to build more roads, further lowering the costs of congestion. Private tolling provides both a demand and supply solution. It is a better method of financing and operating new highways than charging new development impact fees.

3. Existing Local Traffic Grid

If new developments had to pay for their own local and connecting roads and if highways were privately provided and financed, the inefficiencies of development impact fees would shrink significantly. The only traffic impact that would remain would be increased congestion on existing local roads. Here, too, each development will have a different marginal impact, so fees will not provide the Pigovian solution. The total "economic inefficiency" in this situation would, however, be smaller than when fees cover all types of road construction. Even in this instance, private alternatives could eliminate the need for impact fees.

Of the numerous ways of privatizing existing roads, one stands out. Municipalities could simply turn over existing local roads to the residents who live on them. New street owners' associations would form to establish rules, limit access, and finance their maintenance.[286] Streets with many commercial businesses would likely find it advantageous to encourage usage so that the businesses could attract customers (think of free streets around shopping malls), while residential streets might try to limit access to only residents and guests (think of the gated community with a single entrance). Each association would make these individual

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[281] *See id.*

[282] Edward Sullivan, *HOT Lanes in Southern California,* in STREET SMART, *supra* note 251, at 189.

[283] *See* FLAMM & ROSSTON, *supra* note 278, at 2.

[284] *Id.* at 3.

[285] *Id.*

[286] Although charging tolls is a possibility, the transaction costs of this are likely too high at present. In the future, the use of electronic tolls which charge drivers via satellite or overhead monitor may overcome transaction costs allowing these roads to operate more like modern toll financed private highways.

decisions. Under this situation, existing local residents would be able to limit the impact of new development to minimize spillover costs.

This privatization reform is the most radical change necessary to eliminate the traffic impact of new development; however, it is not without precedent in the United States. In the 1970s and 1980s, the city of St. Louis deeded back a number of its existing streets to current residents to govern through street owners' associations. The process began in 1970 when the Westminster Place area of St. Louis petitioned the city to deed the streets back to the residents because they were unhappy with the approximately 6,000 cars a day that were using the area as a shortcut around major boulevards with traffic lights.[287] The street owners' association had responsibility for street, sewer, and streetlight maintenance; garbage pickup; and the right to limit through-traffic and install speed bumps.[288] The success of private street associations led to their spread in St. Louis. The city had over 427 private street associations by 1982,[289] and in two municipalities, such associations provided more than 50 percent of the street mileage.[290] Although the privatization of the existing street grid is more complicated than it would be if developers financed their own local and connecting roads and privatized highways, the St. Louis case shows that it is an option.

If communities: (1) simply had developers build their own local and connecting roads, (2) used toll roads to privatize highways and thoroughfares, and (3) deeded back the existing traffic grid to local residents, then local development would no longer create any spillover costs on local communities. The alleged need for traffic impact fees would no longer exist.

B. Privatization of Other Impacts

In addition to traffic impacts, governments also often charge development impact fees for water provision, sewers, storm systems, parks, schools, refuse collection, and police and fire services. These goods are often considered public goods because their provision has spillover effects on the community. However, when attempting to charge developers for the marginal impact that their developments cost the community, governments face the same calculation problems as occur with traffic impact fees. An important alternative to government exactions for these impacts exists. Advocates of impact fees usually overlook the simplest way of eliminating this problem: private provision.

A large literature in economics demonstrates that the market can provide many local "public goods" traditionally associated with local governments.[291] Why

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[287] *See* Bruce Benson, *Do Holdout Problems Make Compulsory Right-of-Way Purchase and Public Provision of Roads Necessary?*, *in* STREET SMART, *supra* note 251, at 43.

[288] *Id.*

[289] ROGER B. PARKS & RONALD J. OAKERSON, ADVISORY COMM'N ON INTERGOVERNMENTAL RELATIONS, METROPOLITAN ORGANIZATION: THE ST. LOUIS CASE 9 (1988).

[290] FOLDVARY, PUBLIC GOODS AND PRIVATE COMMUNITIES, *supra* note 255, at 191.

[291] *See* TYLER COWEN, THE THEORY OF MARKET FAILURE (1988); FOLDVARY, PUBLIC

would private enterprise have an incentive to provide positive public goods or minimize negative externalities? Private parties will do so if they can internalize those benefits. Harold Demsetz describes how they can accomplish this:

> The enclosing of the land into a single ownership entity which often undertakes to provide services usually provided by government from tax revenue, such as streets, sidewalks, refuse collection, and even police protection, allows the owner to exclude those who refuse to pay rentals which cover the cost of these services.[292]

Market arrangements can take many forms, from contractual homeowners' associations with multiple parties to multi-tenant income properties with a single owner.[293]

Consider a proprietary community such as Disney World or Disney's privately planned city, Celebration. These communities are essentially private cities that internalize the production of local public goods.[294] Disney provides private security, sanitation, transit, streets, parks, and other civic goods and services[295] to residents and visitors over a forty-five square mile area.[296]

One important difference between private entities such as Disney and public government is that the profit mechanism motivates and disciplines the former. An advantage of the profit motive is that it aligns the incentives of proprietors with the incentives of their customers because the proprietors can only make money if their customers are satisfied.

Disney, for example, has an incentive to figure out and provide the optimal amount of local public goods because they want to maximize the value of their land. If they have refuse, crime, or sewer problems within their bounds, Disney will suffer losses. The incentives for local governments, on the other hand, are much less clear given the absence of prices, profits, and losses.[297] If government

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GOODS AND PRIVATE COMMUNITIES, *supra* note 255; SPENCER MACCALLUM, THE ART OF COMMUNITY, (1970); MARKET FAILURE OR SUCCESS: THE NEW DEBATE (Tyler Cowen & Eric Crampton eds., 2002); Spencer MacCallum, *The Case for Land Lease Versus Subdivision: Homeowners' Associations Reconsidered*, *in* THE VOLUNTARY CITY, *supra* note 260, at 371; Spencer MacCallum, *The Quickening of Social Evolution: Perspectives on Proprietary (Entrepreneurial) Communities*, 2 INDEP. REV. 287 (1997); Frederic Deng, Peter Gordon & Harry Richardson, Private Communities, Market Institutions, and Planning, (Jan. 2002) (unpublished manuscript, on file with authors).

[292] Harold Demsetz, *The Exchange and Enforcement of Property Rights*, 7 J. L. & ECON. 11, 24-25 (1964).

[293] MacCallum, *The Case for Land Lease Versus Subdivision*, *supra* note 291, at 371, 379.

[294] *See* Fred E. Foldvary, *Proprietary Communities and Community Associations*, *in* THE VOLUNTARY CITY, *supra* note 260, at 264-65.

[295] *Id.*

[296] *See* FOLDVARY, PUBLIC GOODS AND PRIVATE COMMUNITIES, *supra* note 255, at 114-33 (discussing all of the community goods Disney provides).

[297] See FRIEDERICH A. HAYEK, INDIVIDUALISM AND ECONOMIC ORDER (1992), at 77-91, for a well-developed discussion of prices. *See also* VON MISES, *supra* note 254. See JOSEPH

officials make bad decisions, they may need to worry about being fired or being voted out of office, but the feedback mechanism is much less direct.[298]

How do private parties get compensated for providing local public goods? Although there might not be explicit prices for goods like roads, bundling them with goods that must be purchased, such as housing, enables the private party to recoup his or her investment when the price of the private good increases. A home with a road next to it is worth more than a home with no road at all; therefore, if providing a road makes sense, then the developer will have an incentive to provide it. As economist Tyler Cowen points out:

> Shopping malls and condominiums are other examples of the use of tying arrangements for public goods supply. In the case of shopping malls, public goods such as streets and security are paid for through the provision of private goods such as shoes, clothing, and books.[299]

They essentially tie the provision of public goods that have no price with the provision of private goods that have an explicit price, and as long as there is a competitive market in housing, there will be an efficient provision of housing and the accompanying public goods. The literature on private communities by authors MacCallum, Foldvary, Deng, Gordon, and Richardson further explores the advantages of such arrangements.[300]

Some might wonder whether privately produced public goods would work on a large scale. Although great weight is often attached to the importance of spillover effects for local government services,[301] Cowen argues that "[m]ost real-world public goods, however, are local," rather than, "national or global, which implies that there is only one community and that it has a fixed membership."[302] Tom Means and Stephen Mehay test such a hypothesis econometrically and conclude that, "most local government services do not exhibit a significant degree of publicness."[303] Given that the externalities or spillover or neighborhood effects of these public goods are very local, it is not surprising to see so many private communities providing them on their own. Foldvary and Beito, Gordon, and Tabarrok provide the most comprehensive discussions of how private communities

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A. SCHUMPETER, CAPITALISM, SOCIALISM, AND DEMOCRACY 81-86 (Harper & Bros. 3d ed. 1950) (1942) for an explanation of creative destruction from profit and losses.

[298] MITCHELL & SIMMONS, *supra* note 203, at 66-82.

[299] COWEN, *supra* note 291, at 10.

[300] FOLDVARY, PUBLIC GOODS AND PRIVATE COMMUNITIES, *supra* note 255; MACCALLUM, THE ART OF COMMUNITY, *supra* note 291; MacCallum, *The Quickening of Social Evolution*, *supra* note 291; Spencer MacCallum, *The Case for Land Lease Versus Subdivision*, *supra* note 291; Deng, Gordon & Richardson, *supra* note 291.

[301] John H. Y. Edwards, *Congestion Function Specification and the "Publicness" of Local Public Goods*, 27 J. URB. ECON. 80, 94-95 (1990).

[302] COWEN, *supra* note 291, at 14.

[303] Tom S. Means & Stephen L. Mehay, *Estimating the Publicness of Local Government Services: Alternative Congestion Function Specifications*, 61 S. ECON. J. 614, 626 (1995).

can provide local public goods.[304] Developers have used private funds to create entire communities, like Lake Havasu City, Arizona and Irvine Ranch, California.[305] As of 1998, there were about 205,000 neighborhood associations in the United States, housing nearly forty-two million residents and providing a multitude of services including garbage collection, street maintenance, snow removal, gardening, and maintenance of common areas and recreational facilities.[306]

These private associations are not all small condominium associations or entertainment complexes such as Disney World. Some are quite large permanent residential and commercial areas that provide a wide range of public goods for which many politically governed jurisdictions charge impact fees. Ford's Colony near Williamsburg, Virginia is a private 2,500 acre community of single-family houses, town homes, and condominiums that owns all of its own streets and operates a golf course.[307] Sea Ranch, California is a private community with more than 10,000 residents.[308] Sea Ranch provides community goods such as roads, sewers, electricity, fire protection, security patrols, hiking trails, golf, tennis, swimming, and a private airstrip.[309] Although some cities charge impact fees for parks, Arne notes, "Sea Ranch is a park; its commissioners merely put the roads and trails in to let people enjoy nature's wonders. These entrepreneur-mandated improvements, coupled with extensive rules of preservation, took the place of city park commissions and charitable donors."[310] Reston, Virginia is a mixed-use, privately planned and constructed community where more than 40,000 people reside and 22,000 people work, and it remains unincorporated in Fairfax County, despite its size.[311] Reston has a mix of single-family detached homes, apartments, commercial and light-industrial businesses as well as schools, lakes, trails, and golf courses.[312] Reston has 1,045 acres of open space that include woodland, trails, a park with horse and jogging trails, four lakes, ponds, gardens, two golf courses, sports fields, tennis courts, playgrounds, sixteen swimming pools, and lakes for fishing and boating.[313] Overall, there are twenty acres of recreational facilities and

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[304] *See* FOLDVARY, PUBLIC GOODS AND PRIVATE COMMUNITIES, *supra* note 255; THE VOLUNTARY CITY, *supra* note 260.

[305] Foldvary, *Proprietary Communities and Community Associations*, *supra* note 294, at 270.

[306] Robert H. Nelson, *Privatizing the Neighborhood: A Proposal to Replace Zoning with Private Collective Property Rights to Existing Neighborhoods*, *in* THE VOLUNTARY CITY, *supra* note 260, at 307, 309-10.

[307] FOLDVARY, PUBLIC GOODS AND PRIVATE COMMUNITIES, *supra* note 255, at 188.

[308] Robert Arne, *Entrepreneurial City Planning: Chicago's Central Manufacturing District*, *in* THE VOLUNTARY CITY, *supra* note 260, at 102, 103.

[309] *Id.*

[310] *Id.* at 118.

[311] Donald J. Boudreaux & Randall G. Holcombe, *Contractual Governments in Theory and Practice*, *in* THE VOLUNTARY CITY, *supra* note 260, at 289, 297.

[312] *Id.*

[313] FOLDVARY, PUBLIC GOODS AND PRIVATE COMMUNITIES, *supra* note 255, at 179.

parks per 1,000 residents of Reston.[314] This exceeds the recommended 9.7 acres established by the National Recreation Association.[315]

The justification for impact fees is that development entails costs that spill over onto existing residents, yet these costs exist only because of the way tax dollars currently finance services such as roads, sewers, and refuse collection. If private resources provided all these goods instead, impact fees would be unnecessary in the first place. Although municipalities charge impact fees for numerous "public goods," the market provides nearly all of these services in various places.[316] Private provision avoids the calculation and implementation problems. The use of government impact fees to pay for provision of "public" goods and services is not as necessary as many people presume, and we would do well to minimize the inefficiencies they create by privatizing as many of these goods as possible.

V. CONCLUSION

Development fees are not as close to the ideal corrective device as many people assume. One could imagine impact fees being set according to the marginal impact development has on a community, but despite the legal requirement in places like California that impact fees are supposed to approximate marginal impact, in practice they do not. Each individual development has a different impact. For there to be a true nexus between a fee and a development's marginal impact, planners would have to individually evaluate each development for a unique charge. Governments are unable to calculate specific, or even average, marginal impacts of developments, so they assess fees in myriad questionable ways. Development impact fees vary greatly between jurisdictions with many imposing fees that are difficult to justify. Many governments simply come up with a wish list of public projects and then try to get them financed by developers. In these cases, the impact fees are nothing more than a general tax on development. Eliminating impact fees will encourage development and make real estate more affordable.

The elimination of development impact fees need not burden existing residents with any spill over costs of new development. Private resources have provided new roads and other "public goods," which impact fees currently finance. Reforms should move these goods back to the private sector while simultaneously eliminating impact fees to ensure a more efficient level, mix, and dispersion of development.

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[314] *Id.* at 180.

[315] *Id.*

[316] *See* Robert Arne, *Entrepreneurial City Planning, in* THE VOLUNTARY CITY, *supra* note 260, at 102-03 (describing historic examples of privately provided community goods in industrial areas); James Tooley, *Education in the Voluntary City, in* THE VOLUNTARY CITY, *supra* note 260, at 223, 225 (providing examples of private schooling that educated 90 percent of the population); Stephen Davies, *The Private Provision of Police during the Eighteenth and Nineteenth Centuries, in* THE VOLUNTARY CITY, *supra* note 260, at 151.