Texas A&M AgriLife Extension

B-6242
10/10

Parkland Dedication Ordinances in Texas: A Missed Opportunity?

Parkland Dedication Ordinances in Texas: A Missed Opportunity?

John L. Crompton
Distinguished Professor and Regents Professor
Department of Recreation, Park and Tourism Sciences
Texas A&M University

Foreword by
Jamie Rae Walker
Texas AgriLife Extension Specialist

This study was supported in part by a grant from the Terese and Jacob Hershey Foundation

Contents

Foreword

The population of Texas continues to grow rapidly, and cities are confronted with the challenge of providing facilities to service this growth. Over the past 25 years, about 50 Texas cities have enacted parkland dedication ordinances to address park needs related to such growth.

In this publication, John L. Crompton, Distinguished Professor and Regents Professor at Texas A&M University, reviews parkland dedication ordinances that have been enacted in 48 Texas cities. The analysis identifies what constitutes best practices when establishing or revising a parkland dedication ordinance. We hope this information will enlighten Texas community leaders on the possibilities this approach offers for ensuring that future residents have access to parkland and the associated benefits.

—Jamie Rae Walker

Assistant Professor and
Texas AgriLife Extension Specialist
The Texas A&M University System

Executive summary

- The study analyzed the parkland dedication ordinances of 48 Texas cities and reported the acres of parkland per 1,000 population in 83 Texas cities.
- The Texas Supreme Court in 1984 ruled parkland dedication to be constitutionally legal.
- The magnitude of a parkland dedication is guided by the U.S. Supreme Court ruling in 1984 that the dedication requirements imposed on a developer should be "roughly proportional" to the increased demands of the proposed development on a city's park system.

Conclusions

- The unrealized potential for additional funding from the parkland dedication ordinances of 44 of the 48 cities is estimated to range from 300 percent to 3,600 percent. This foregone revenue stream stems from two sources:
  - Many ordinances are restricted to only a subset of parks—typically neighborhood, or neighborhood and community parks—instead of all parks, and they do not extend into the extraterritorial jurisdiction (ETJ) areas.
  - The dedications are fixed at levels far below the cost of acquiring and developing parks. The dedications fail to follow the U.S. Supreme Court's guidance that they should be "roughly proportional" to the increased demands new homeowners put on a park system. In 38 of the 48 cities, the ordinances were confined to parkland acquisition and failed to include a fee for park development. A large majority of cities failed to use empirical procedures to identify accurate levels of service and costs. Instead they used arbitrary numbers—even though this approach is illegal. Without these empirical data, elected officials remain unaware of the large opportunity costs incurred.
- The potential of parkland dedication ordinances remains largely unrealized because many elected officials are unaware of their existence or importance, and/or because elected officials are reluctant to confront the vigorous opposition to increases in dedications that invariably arises from the development community, which is a powerful constituency in many communities.
- Elected officials should support substantial enhanced dedications for three powerful political reasons:
  - It is a fiscally conservative action. A bedrock principle of fiscal conservatism is that those who benefit from government services should pay for them.
  - Elected officials can respond to the amenity needs created by new growth by requesting existing residents to pay for them, by not providing them, or by requiring the new development to pay for them. Few elected officials in Texas are likely to run for office on a platform of raising taxes on existing residents or lowering a community's quality of life, which are the first two options.

- Increases in dedications are unlikely to lead to any increases in the price of new homes. Rather, these increases are likely to be absorbed by reducing the house size by a minimal amount, reducing the costs of finishes and fittings in the house, or paying less for the land.

Findings from the analysis

- The dedication requirement in a parkland dedication ordinance should comprise three elements: a land requirement; a fee-in-lieu alternative to the land requirement; and a parks development fee. The first two components were incorporated in all 48 ordinances reviewed, but only 10 of the ordinances contained provision for a park development fee. Ordinances that contain only the land and the fee-in-lieu elements require existing taxpayers to pay the costs of improvements to transform the bare land into a park.
- The most widely accepted approach to meeting the U.S. Supreme Court's "rough proportionality" criterion is to assume that new residents' demands will require the same level of service as those of existing residents in the community. A recommended approach for calculating that level of service is provided.
- The amount of cash for a fee-in-lieu should be equal to the fair market value of the land that would have been dedicated. However, the methods of establishing the equivalence of fair market value vary widely, and some of the approaches could be challengeable in the courts.
- Some of the 10 cities that charge a park development fee appear to derive it arbitrarily rather than empirically, which is unlikely to be accepted by the courts.
- It is advantageous for small cities that anticipate future growth to invest substantially in park areas in their early stages of development, because that investment could be used to leverage relatively large dedications from developments as the city grows.
- To measure the "roughly proportional" impact of a development on the public park system, the mitigation contribution of private amenities within the development must be accommodated. However, 27 of the 48 ordinances do not include a provision authorizing any credits for private amenities; others insert an arbitrary limit of 50 percent or 100 percent; and others leave it to the city's discretion. All of these options fail to provide an empirical quantitative approach to providing "proportionate" credit for private amenities.
- Most ordinances include a reimbursement clause authorizing cities to acquire and develop parks in advance of need when land is more readily available and less expensive, and to use dedication fees to reimburse themselves later.

- Almost all cities require a fee-in-lieu and/or park development fee to be paid before filing the final plat.
- There is widespread adherence to the nexus principle in the 48 ordinances. This is done by creating zones and ensuring that the money generated from developments in a zone is expended in that zone. The communities without zones tend to be relatively small cities in which all residents could be deemed as being near a park wherever it is located.
- Although court rulings direct that fees-in-lieu should be expended in a reasonable time frame, 16 of the 48 cities fail to specify a time frame of any kind. Most of the remaining 32 cities interpret "reasonable time frame" as either 10 or 5 years.
- In 17 of the 48 ordinances, the parkland dedication authority is confined to neighborhood parks. The remaining two-thirds provide enabling authority for a broader set of parks beyond the neighborhood level.
- Three cities extend their ordinances to include nonresidential as well as residential property. It is doubtful that nonresidential dedication requirements can meet the courts' "roughly proportionate" criterion.
- Cities in Texas have legislative authority to regulate subdivisions in their ETJs. However, only seven of the 48 ordinances provide enabling authority to require parkland dedications from developments in the ETJ.
- Some of the ordinances' inadequacies can be attributed to the lack of a requirement for them to be reviewed periodically. Only 11 of the 48 ordinances have a time frame for regularly reviewing the ordinance incorporated into it.
- Most ordinances specify a preferred minimum size for dedicated parkland. The most common preferred minimum size was 5 acres.
- A large majority of ordinances declare that floodplain land is undesirable and unlikely to be accepted as part of a dedication requirement, except in unusual cases. When it is accepted, most cities limit it to 50 percent of a dedication, and 11 cities require it to be discounted, equating 2 or 3 floodplain acres of floodplain to 1 acre of parkland.
- Only a few ordinances speak to the issue of detention/retention areas being accepted to meet dedication requirements.

Evolution of Parkland Dedication Ordinances in Texas

To determine the status of parkland dedication ordinances in Texas, a survey was sent to all municipalities in Texas that were known to have public park amenities. Of the 117 cities contacted, 83 responded and 48 of those reported that they had parkland dedication ordinances. Copies of those ordinances can be viewed at **www.rpts.tamu.edu/landdedication**. The content of those 48 ordinances serves as the basis for this report.

The 83 cities that responded are listed in Table 1. Although some of these cities did not have parkland dedication ordinances, all did report their total parkland acreages. Most of the population data were provided by the cities' park and recreation directors who responded to the survey. In the few instances where these data were not given, Census Bureau estimates of population were used. Table 1 shows the standard of park provision in acres per 1,000 population for these 83 cities.

Table 1. Acres of parkland per 1,000 population in 83 Texas cities.

City	Population	Total park acreage	Acres/1,000 residents
The Colony	36,000	1,925.00	53.47
Madsonville	4,159	200.00	48.09
Alvin	21,500	740.00	34.42
Grand Prairie	147,000	4,850.00	32.99
Grapevine	46,684	1,492.00	31.96
Southlake	24,900	644.10	25.87
Austin	656,562	16,862.00	25.68
Highland Village	14,500	354.00	24.41
Wichita Falls	104,000	2,300.00	22.12
Abilene	115,000	2,466.00	21.44
Beaumont	113,866	2,197.95	19.30
Brownwood	20,407	393.00	19.26
Lufkin	36,800	700.00	19.02
Cedar Park	45,000	847.00	18.82
Rowlett	53,000	994.00	18.75
Wylie	32,000	592.00	18.50
Dallas	1,200,000	21,500.00	17.92
Deer Park	30,000	527.00	17.57
League City	62,500	1,041.00	16.66
Rockwall	30,000	480.00	16.00
Mont Belvieu	2,500	40.00	16.00
Plano	240,000	3,800.00	15.83
Amarillo	182,462	2,880.00	15.78
Carrollton	116,500	1,793.00	15.39
Cedar Hill	43,500	653.75	15.03
Pflugerville	30,000	450.00	15.00

Continued on next page

Continued from previous page

City	Population	Total park acreage	Acres/1,000 residents
Frisco	89,000	1,300.00	14.61
McKinney	110,000	1,604.00	14.58
College Station	88,163	1,274.00	14.40
Cleburne	29,500	400.00	13.56
Baytown	70,513	950.00	13.47
Missouri City	63,910	848.99	13.28
Seguin	22,011.00	289.41	13.15
Sherman	35,000	450.00	12.86
Texarkana	35,000	450.00	12.86
Arlington	362,426	4,651.60	12.83
San Antonio	1,282,800	16,310.00	12.71
Canyon	13,000	163.00	12.54
Temple	58,447	727.00	12.44
Lewisville	89,000	1,100.00	12.36
Victoria	61,000	750.00	12.30
Garland	222,432	2,698.00	12.13
Mansfield	55,000	664.00	12.07
Sugarland	74,472	896.30	12.04
Keller	34,800	415.00	11.93
Denton	105,000	1,158.00	11.03
Hutto	14,000	150.00	10.71
Red Oak	9,000	95.00	10.56
Waco	118,093	1,245.00	10.54
Mesquite	135,893	1,427.00	10.50
Richardson	97,300	1,000.00	10.28
Sunnydale	3,960	40.00	10.10
Houston	1,953,631	19,699.00	10.08
Harlingen	64,418	643.00	9.98
Corinth	18,000	179.00	9.94
Greenville	25,000	242.00	9.68
Flower Mound	60,450	575.00	9.51
Colleyville	21,720	202.00	9.30
Waxahachie	25,000	230.00	9.20
New Braunfels	45,000	408.00	9.07
Irving	197,000	1,770.00	8.98
Lubbock	209,000	1,800.00	8.61
Conroe	45,000	383.00	8.51
Bay City	18,000	150.00	8.33

Parkland dedication is a requirement imposed by a local governmental entity mandating that subdivision developers or builders dedicate land for a park and/or pay a fee to be used by the government entity to acquire and develop park facilities.

Continued from previous page

City	Population	Total park acreage	Acres/1,000 residents
San Angelo	90,000	747.00	8.30
Bryan	72,015	580.00	8.05
Rockport	25,000	200.00	8.00
Weslaco	32,000	250.00	7.81
Hurst	37,100	288.00	7.76
Euless	50,000	328.00	6.56
Duncanville	36,871	237.00	6.43
Pasadena	150,000	919.74	6.13
La Porte	33,500	188.00	5.61
Angleton	18,130	100.00	5.52
Corpus Christi	293,122	1,586.46	5.41
Haltom	39,000	184.00	4.72
Killeen	103,000	469.00	4.55
Leander	23,000	90.00	3.91
Edinburg	68,802	253.00	3.68
Bedford	49,796	150.00	3.01
Bellaire	16,000	42.00	2.63
Richland Hills	8,132	13.10	1.61
West University Place	16,000	13.50	0.84

Parkland dedication is a requirement imposed by a local governmental entity mandating that subdivision developers or builders dedicate land for a park and/or pay a fee to be used by the government entity to acquire and develop park facilities. These dedications help provide park facilities in newly developed areas of a jurisdiction without burdening existing city residents. They may be considered a type of user fee because the intent is that the cost of new parks should be paid for by the landowner, developer, or new homeowners who are responsible for creating the demand for the new park facilities.

The philosophy is that new development generates a need for additional park amenities, and the people responsible for creating that need should bear the cost of providing the new amenities. Neighborhood and community parks are intended to serve those people in the areas near them. Thus, they make no positive contribution to the quality of life of existing residents, suggesting that existing residents should not be asked to raise their taxes to pay for them. In essence, what a community is saying to new residents is: "This is the quality of life we have here. If you move here, we expect you to maintain it. If you are not willing to pay this parkland dedication fee, then go elsewhere where the fee is lower because that city has an inferior park system."

An appealing feature of parkland dedication is that it responds to market conditions.

Evolution of ordinances

Parkland dedication in the United States has a 90-year history. The first ordinance was passed by the state of Montana in 1919. It stated, "For the purpose of promoting the public comfort, welfare and safety, such plat and survey must show that at least one-ninth of the platted area, exclusive of streets, etc., is forever dedicated to the public for parks and playgrounds." In 1923, the City of Bluefield, West Virginia, required "not less than five percent of the area of all plats shall be dedicated by the owner for parks and playground purposes except in the case of a very small area."[2]

The earliest parkland dedication ordinances in Texas were enacted by Corpus Christi in 1955, Deer Park in 1959, and Carrollton in 1962. Wichita Falls enacted an ordinance in the 1950s but rescinded it in the 1970s.

Two earlier studies have reported on the status of parkland dedication ordinances in Texas. In 1977, a survey of 107 Texas cities received responses from 59 cities;[3] *of those, 12 reported having a parkland dedication ordinance. However, two of the 12 municipalities reported that they did not enforce their ordinances because of the questionable legality of such ordinances at that time.*

Ten years later in 1987, 183 Texas communities were contacted. Of these, 113 responded (62 percent) and 19 of them reported having parkland dedication ordinances.[4]

An appealing feature of parkland dedication is that it responds to market conditions. If fewer new people come to the city than predicted, less money is forthcoming and fewer parks are built. Similarly, as costs for acquisition and development of parks increase or decrease, the parkland dedication requirements can be increased or decreased accordingly.

Perspectives toward parkland dedication are likely to vary among different stakeholders, such as elected officials, developers, new residents, and existing residents[1]. However, parkland dedication enables elected officials, who are the key decision makers on this issue, to protect the interests of current residents and to manage growth.

A basic and long-held principle of growth management is that development must be supported by adequate public facilities and services and that private and public investment must be coordinated to achieve that objective. Parkland dedication ordinances are intended to ensure that park facilities are available when homeowners buy their new homes, and to avoid authorizing development without ensuring that the park infrastructure necessary to support the new demands is available.

In the early days of parkland dedication ordinances, there was some doubt about their legality in Texas. Some people claimed that they were unconstitutional because such ordinances violated the Fifth Amendment to the U.S. Constitution, the last 12 words of which are "nor shall private property be taken for public use, without just compensation." However, in 1984 the Texas Supreme Court concluded in *City of College Station v. Turtle Rock Corporation*[5] that requiring parkland dedication or fees-in-lieu "was a valid exercise of the city's police power because it was substantially related to the health, safety, and general welfare of the people."

Before the *Turtle Rock* case, fewer than 10 cities in Texas had active ordinances. Table 2 shows that once the doubts relating to the constitutionality of such ordinances were removed in 1984, the number of cities adopting them increased markedly.

Table 2. Years when Texas cities first enacted parkland dedication ordinances.[1]

Time period	# of cities
< 1970	3
1970–1974	1
1975–1979	1
1980–1984	2
1985–1989	15
1990–1994	5
1995–1999	7
2000–2004	4

[1]Wichita Falls enacted an ordinance in the 1950s, but rescinded it in the 1970s. Angleton enacted an ordinance, but the city's parks and recreation director reported that "it has never been enforced."

There is sometimes confusion between parkland dedication fees and impact fees. Parkland dedications emanate from the "police powers" of Texas home rule municipalities; these powers enable cities to take actions that promote the health, safety, and welfare of their residents. In contrast, impact fees require enabling authority from the state legislature before they can be imposed.

Of the 27 states that have passed impact fee enabling legislation, 22 authorize impact fees for park and recreation amenities. Only in Texas, Illinois, New Jersey, Pennsylvania, and Virginia does the impact fee authorization not embrace parks.[6] In the other 22 states, it is possible for cities to impose both parkland dedication fees and impact fees. The latter can be used to fund a much wider array of recreational opportunities than basic park amenities.

However, Texas has not granted enabling authority for impact fees. In 1986 when the Texas legislature authorized impact fees, it confined them to only "water supply, treatment and distribution facilities; wastewater collection and treatment facilities; storm water, drainage, and flood control facilities, and roadway facilities." With the *Turtle Rock* case fresh in their minds, the conservative Texas legislature specifically stated, "The term [impact fee] does not include dedication of land for public parks or payment in lieu of the dedication to serve park needs."

The earliest parkland dedication ordinances in Texas were confined to land. They required the developer to deed a specified amount of acreage based on the number of residents expected to live in the area. These ordinances had three inherent weaknesses:

- Because most developments are small, only small, fragmented spaces would be provided.
- The land dedicated by the developer was likely to be the least suitable for building on (often drainage ditches, flood plain, or detention ponds), and it may also have been unsuitable for park use.
- The location of the parkland was determined by the location of the development.

Fees-in-lieu give the city the option of declining a dedication of land and instead require the developer to pay a sum based on the fair market value of the land that otherwise would have been dedicated. Fees-in-lieu can alleviate weaknesses sometimes associated with parkland dedication ordinances.

These limitations quickly encouraged cities to broaden their ordinances to require developers to contribute cash instead of dedicating land. These cash payments were termed *fees-in-lieu*. They gave the city the option of declining a dedication of land and instead requiring the developer to pay a sum based on the fair market value of the land that otherwise would have been dedicated.

The *Turtle Rock* case established the constitutionality of parkland dedication in Texas, but it required that "regulation must be reasonable." It defined reasonable as "a reasonable connection between the increased population arising from the subdivision development and increased park and recreation needs in the neighborhood." Because this definition was rather nebulous, the focus of most legal challenges after *Turtle Rock* shifted from whether parkland dedication was constitutionally legal, to what constituted a reasonable dedication requirement.

A definitive guideline for answering this question was provided a decade later in *Dolan v. City of Tigard*[7] in which the U.S. Supreme Court ruled that there must be a "rough proportionality" between the conditions imposed on a developer and the demand from the projected development. The court stated, "no 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." The court went on to note that in making the individualized determination, "the city must make some effort to quantify its findings in support of the dedication." Thus, to survive a constitutional challenge, *Dolan* requires a city to demonstrate a "roughly proportional" quantitative relationship between dedication requirements imposed on a developer and the increased demands of the proposed development on its parks system.

In the *Turtle Rock* case, the Texas Supreme Court stated that the "burden rests on the real estate developer to demonstrate that there is no such reasonable connection" in any challenge to an ordinance. Thus, before the *Dolan* case, Texas developers challenging a city's dedication ordinance had to prove it was unfair. **The *Dolan* decision shifted the burden of proof to cities—they must now justify that an ordinance is fair.** It requires cities to make individualized determinations that every parkland dedication effects a roughly proportional response to the demand generated by a development. This is a radical change that most Texas cities have not embraced in their ordinances. Failure to consider it leaves them vulnerable to their ordinances being challenged successfully and ruled illegal.

The requirements of the Supreme Court's ruling are manifested in the introduction to the City of Mansfield's ordinance, which states:

> The City of Mansfield has adopted by Council action the Mansfield Parks, Open Spaces and Trails Master Plan, which provides planning policy and guidance for the development of a municipal park and recreation system for the City of Mansfield. The plan has assessed the need for park land and park improvements to serve the citizens of Mansfield. The plan has carefully assessed the impact on the park and recreation system created by each new development and has established a dedication and/or cost requirement based upon individual dwelling units. The plan constitutes an individualized fact based determination of the

> impact of new living units on the park and recreation system and establishes an exaction system designed to ensure that new living units bear their proportional share of the cost of providing park and recreation related services. Park land dedication requirements and park development fee assessments are based upon the mathematical formulas and allocations set forth within the plan.

Texas' interpretation of the *Dolan* case has been codified in the Texas statutes (212-904) which mandate that "the developer's portion of the costs may not exceed the amount required for infrastructure improvements that are roughly proportionate to the proposed development."

Assessing the constitutionality of parkland dedication ordinances in Texas: a framework of four criteria

The guidance provided by the *Turtle Rock*, *Dolan*, and some subsequent cases where courts have provided some minor clarifications of issues in those two major cases, suggests that four broad criteria may be used to assess the constitutionality of parkland dedication ordinances in Texas. These four criteria provide the framework for most of this report:

- The method of calculating a parkland dedication requirement must demonstrate that it is proportionate to the need created by a new development.
- The ordinance must adhere to the nexus principle.
- A time limit must be set for expending fees-in-lieu.
- The scope and range of the ordinance must be delineated.

Calculation of the amount of a park dedication requirement

The dedication requirement in a parkland dedication ordinance should comprise three elements:

- A land requirement
- A fee-in-lieu alternative to the land requirement
- A parks development fee

Although the first two elements were incorporated in all 48 Texas ordinances reviewed in this study, the park development fee is a more recent addition to the ordinances and has been incorporated in only 10 of them.

A problem with ordinances that contain only the land and fee-in-lieu elements is that they provide only for the acquisition of land. The additional capital needed to transform that bare land into a park is borne by the existing taxpayers. In some instances, the result is that the dedicated land is never developed into a park and remains sterile open space that detracts from the community's appeal rather than adding to it. This led 10 Texas communities to expand their ordinances to incorporate a park development fee element to cover the cost of transforming the land into a park. Thus, the scope of parkland dedication ordinances in Texas has broadened as they have gained legal and public acceptance.

The most widely accepted approach to meeting the *Dolan* "rough proportionality" criterion is to assume that the new residents' demands will require the same level of service as those of the existing residents in the community. The courts have ruled consistently that standards for new residents cannot be set at a higher level than those prevailing for existing residents. Thus, deficiencies in the supply of park amenities arising from demand generated by earlier development cannot be funded by imposing higher dedications on new developments.

A problem with ordinances that contain only the land and fee-in-lieu elements is that they provide only for the acquisition of land. The additional capital needed to transform that bare land into a park is borne by the existing taxpayers. In some instances, the result is that the dedicated land is never developed into a park and remains sterile open space that detracts from the community's appeal rather than adding to it.

A recommended approach for calculating a parkland dedication requirement based on existing level of service is illustrated in Table 3, which describes how the City of College Station ascertained its parkland dedication requirement for both neighborhood parks and community parks. The calculation has four parts:

- *Current level of service*
- *Fee-in-lieu*
- *Park development fee*
- *Total neighborhood parks fees for single-family and multifamily units*

Table 3. Park land dedication and development fees methodology for neighborhood and community parks in College Station.[1]

Requirement	Methodology
Neighborhood parks: Current level of service is 1 acre per 285 people. 2008 total population: 87,758. 2.80 persons per household (PPH) for single family and 2.28 PPH for multifamily based on census information for owner- and renter-occupied units.	
Land	**Single family:** 285 people ÷ 2.80 PPH = 102 DUs = 1 acre per 102 DUs **Multifamily:** 285 people ÷ 2.28 PPH = 125 DUs = 1 acre per 125 DUs
Fee-in-lieu of land	*Assume 1 acre costs $32,000.* **Single family:** $32,000 ÷ 102 DUs = $314 per DU **Multifamily:** $32,000 ÷ 125 DUs = $256 per DU
Park development fee	The cost of improvements in an average neighborhood park in College Station is $630,520. One neighborhood park serves 2,309 people, based on a total city population of 87,758 being served by 38 parks (count includes neighborhood parks and 6 mini parks). It costs $273 per person ($630,520/2309) to develop an average neighborhood park. **Single family:** $273 x 2.80 PPH = $764 per DU **Multifamily:** $273 x 2.28 PPH = $622 per DU
Total neighborhood park fee	**Single family:** $314 + $764 = $1,078 **Multifamily:** $256 + $622 = $878
Community parks: Current level of service is 1 acre per 294 people. 2008 total population: 87,758. 2.80 persons per household (PPH) for single family and 2.28 PPH for multifamily based on census information for owner- and renter-occupied units.	
Land	**Single family:** 294 people + 2.80 PPH = 105 DUs = 1 acre per 105 DUs **Multifamily:** 294 people + 2.28 PPH = 129 DUs = 1 acre per 129 DUs
Fee-in-lieu of land	*Assume 1 acre costs $32,000.* **Single family:** $32,000 + 105 DUs = $305 per DU **Multifamily:** $32,000 + 129 DUs = $248 per DU
Park development fee	One community park serves 10,970 people, based on a total city population of 87,758 being served by 8 community parks. The cost of improvements in an average community park in College Station is $2.5 million. It costs $228 per person ($2,500,000/10,970) to develop an average neighborhood park. **Single family:** $228 x 2.80 PPH = $638 per DU **Multifamily:** $228 x 2.28 PPH = $520 per DU
Total community park fee	**Single family:** $305 + $638 = $943 per DU **Multifamily:** $248 + $520 = $768 per DU

DU = dwelling unit *PPH = persons per household*

Continued on next page

Continued from previous page

[1]Community Park Planning Guidelines

A typical community park in College Station is designed to serve residents from several neighborhoods located within a ½- to 3-mile radius. These parks are generally 25 to 70 acres in size. However, larger and smaller community parks may be developed to meet specific requirements of a particular area of town.

Community parks, by their nature, serve both the active and passive leisure needs of residents. The acquisition and development of the "basic" infrastructure and facilities for the passive usage of these community parks is based on the demand from new residents and should be addressed through the Park Land Dedication Ordinance requirements.

The development of facilities for active use programs that might also be included in community parks, such as swimming pools, sports complexes, recreation centers and other similar improvements, are the responsibility of the entire community. These facilities should be developed with specific funding approval through general obligation bond elections or City Council approved authorizations as needed.

A typical College Station community park has these "basic" infrastructure elements and facilities:

• Playground areas with shade covers	$120,000
• Group picnic pavilion with restrooms	$750,000
• Concrete walking trails, lights, benches, fountains (per mile)	$500,000
• Picnic tables, trash receptacles, and furnishings	$ 50,000
• Lighted tennis courts (2)	$140,000
• Lighted basketball court	$ 50,000
• Roads and parking (200 spaces)	$500,000
• Landscape improvements	$250,000
• Design fees	$140,000
• **Total planning estimate**	**$2,500,000**

Each community park varies in size, design, and facilities based on the needs of the residents. These guidelines are developed to serve as a base line for planning future community parks for College Station.

The neighborhood parks calculation in Table 3 is used for the purpose of illustration. Part 1 derives the current level of service of 1 acre per 285 people for neighborhood parks by dividing the city's population by its existing neighborhood public park acreage. The level of service standard is transformed to dwelling units (DUs) by dividing the 285 people by the average number of people in single and multifamily dwellings. These averages are available from the Census Bureau. This establishes the land dedication requirement at 1 acre per 102 DUs for single-family units and 1 acre per 125 DUs for multifamily units.

Part 2 calculates the fee-in-lieu based on an average land cost in the city of $32,000 per acre. In larger cities, there may be merit in calculating different average land values in different areas of the city because land values vary widely. For example, fees-in-lieu in Austin average $650 across the city, but Austin divides the city into three zones: Western, Central, and Eastern, and imposes different fees in each zone. Thus, the fees-in-lieu per unit for developments in densities with fewer than 6 units per acre are $840, $630, and $420 for the three zones, respectively. Similarly, the City of Rockwall has 25 park district areas, each with a different per lot fee ranging from $151 to $620. The different fees-in-lieu will not penalize lower land value areas where most affordable housing is built, and they will capture higher land values from areas where the most expensive housing is located.

Table 4. Estimated costs for neighborhood parks in College Station.

Item	Cost
Basketball court	$40,000
6-foot sidewalk @$5.50 per SF x 4,000 linear feet	$132,000
Handicap-accessible ramp x 2	$2,000
Pedestrian bridge (average 30 feet) with concrete footings	$40,000
Picnic unit (slab, table, trash can, grill) @ $4,000 x 2	$8,000
Shelter and slab (2 picnic tables w/trash cans)	$34,000
Area lights (12′ ht.) @$4,000 x 20	$80,000
2-foot x 8-foot park sign (Cylex) and keystone planter bed	$6,000
Benches (painted steel) with slab @$2,000 x 4	$8,000
Bicycle rack	$1,500
50 trees (30–45 gal. installed) w/Irrigation @ $350	$17,500
Specialized irrigation system	$15,000
Drinking fountain (concrete-handicap accessible, dual height, dog dish)	$7,500
Water meter 1.5 inches	$1,200
Electric meter/breaker panel	$2,000
Finish sodding, grading and seeding	$5,000
Drain lines @ $20 linear feet (average 100 feet)	$2,000
Swing set with rubber and gravel mix	$25,000
Playground with concrete base and rubber surfacing	$75,000
Playground shade cover	$17,500
Galvanized fence @ $36/linear foot, 1,500 feet	$54,000
Subtotal	$573,200
10% contingency	$57,230
Total	$630,520

Part 3 in Table 3 calculates the park development fee. Its derivation is shown in Table 4, which lists the elements and their costs incorporated in a typical College Station neighborhood park. These development costs are divided by the average number of people served by a neighborhood park. The resultant fee of $273 per person is then multiplied by the number of people per household to derive dwelling unit fees of $764 for single units and $622 for multifamily units.

Part 4 aggregates Parts 2 and 3 to derive total neighborhood park fees of $1,078 for single-family units and $878 for multifamily units. If the city accepted land (Part 1) rather than a fee-in-lieu (Part 2), the developer would be required to pay only the park development fee. A similar process was used to derive the community park fee shown in Table 3.

Overview of parkland dedication requirements in Texas cities

Table 5. Parkland dedication requirements in Texas cities.

	Dwelling units		Current level of parkland provision		Land dedication requirements		Fee-in-lieu*[a]	
City	Population	#DU	Total park acreage	DU/acre	DU/acre	DU/acre multifamily	SDU	MDU
Alvin	21,500	8,442	740.00	11.41	100.00		$300.00	$-
Angleton	18,130	7,220	100.00	72.20	200.00		$1,083.00	$250.00
Austin	656,562	276,842	16,862.00	16.42	83.33		$650.00	$-
Bryan	72,015	25,703	580.00	44.32	74.00	90.00	$162.00	$133.00
Cedar Hill	43,500	11,075	653.75	16.94	133.00		$250.00	$-
Cedar Park	45,000	8,914	847.00	10.52	41.67		$720.00	$480.00
College Station	88,183	34,619	1,274.00	27.17	102.00	125.00	$619.00	$504
Colleyville	21,720	6,549	202.00	32.42	25.00		$1,802.00	$-
Corinth	18,000	4,100	179.00	22.91	50.00		$-	$-
Corpus Christi	293,122	107,831	1,586.46	67.97	NA		5% of total value	$-
Deer Park	30,000	9,921	527.00	18.83	NA		5% of total value	$-
Denton	105,000	32,716	1,158.00	28.25	170.21		market value	$-
Edinburg	68,802	16,031	253.00	63.36	125.00		$250.00	$-
Flower Mound	60,450	16,833	575.00	29.27	29.76		market value	$-
Frisco	89,000	13,683	1,300.00	10.53	100.00		$300.00	$-
Grapevine	46,684	16,486	1,492.00	11.05	145.20		$1,416.00	$-
Haltom	39,000	15,716	184.00	85.41	150.00		$-	$-
Highland Village	14,500	4,009	354.00	11.32	N/A		$2,160.00	$-
Houston	1,953,631	783,009	19,699.00	39.75	55.50		$700.00	
Hutto	14,000	424	150.00	2.83	50.00		market value	
Keller	34,800	9,216	415.00	22.21	30.00	60.00	$1,000.00	$-
La Porte	33,500	11,720	188.00	62.34	93.00		$490.00	$-
League City	62,500	17,280	1,041.00	16.60	90.00		$1,000.00	$-
Leander	23,000	2,612	90.00	29.02	NA	10.54	$550.00	$-
Lewisville	89,000	31,764	1,100.00	28.88	33.00		$750.00	$-
McKinney	110,000	19,462	1,604.00	12.13	50.00		market value	$-
Mansfield	55,000	9,172	664.00	13.81	100.00		$500.00	$-

Continued on next page

Continued from previous page

	Dwelling units		Current level of parkland provision		Land dedication requirements		Fee-in-lieu*[a]	
City	Population	#DU	Total park acreage	DU/acre	DU/acre	DU/acre multifamily	SDU	MDU
Missouri City	63,910	17,481	848.99	20.59	100.00		$900.00	$-
New Braunfels	45,000	14,896	408.00	36.51	150.00		$100.00	$-
Pearland	70,000	13,922	376.92	36.94	100.00		market value	$-
Pflugerville	30,000	5,239	450.00	11.64	50.00		market value	$-
Plano	240,000	86,078	3,800.00	22.65	N/A		$467.47	$323.96
Rockwall	30,000	7,089	480.00	14.77	67.00	250.00	151.00-620.00	$-
Rowlett	53,000	14,580	994.00	14.67	71.92		$325.00	$-
San Antonio	1,282,800	433,122	16,310.00	26.56	70.00	114.00	market value	$-
Southlake	24,900	6,614	644.10	10.27	40.00		market value	$-
Sugarland	74,472	21,090	896.30	23.53	114.38		$350.00	$240.00
Temple	58,447	23,511	727.00	32.34	133.00		$225.00	$-
The Colony	36,000	8,812	1,925.00	4.58	64.00		market value	$-
Waxahachie	25,000	7,909	230.00	34.39	100.00		$200.00	$-
Weslaco	32,000	10,230	250.00	40.92	N/A		$150.00	$350.00
Wylie	32,000	5,326	592.00	9.00	20.00		b/w $1500 - $3000	$800.00

[a] This does not include park development fees.

Table 5 shows the current level of parkland provision for the Texas cities with dedication ordinances in column 5. These are the same data that were reported in Table 1, but in Table 5 they are expressed in terms of dwelling units per acre of parkland. This is derived by dividing column 3 by column 4. The number of dwelling units in column 3 was extracted from Census Bureau data. In columns 6 and 7 and 8 and 9, Table 5 uses the same measure of dwelling units to report the current dedication requirements for parkland in terms of dwelling units per acre and for the alternative fee-in-lieu option.

Calculation of the parkland dedication requirement

Most cities responding to the survey express their current parkland dedication requirements in terms of dwelling units per acre. In some instances, the requirements for single-family differ from those of multifamily dwelling units. For example, in College Station the neighborhood parks requirement for a single-family unit is 102

dwelling units per acre; for multifamily developments, it is 125 dwelling units per acre. This recognizes that both the size of the household and the building density are likely to differ within these two categories. Hence, the amount of parkland needed to meet the needs of their residents and maintain the existing level of service will differ.

Four Texas cities express the dedication amount in acres per 1,000 population:

- Austin: 5 acres per 1,000
- Cedar Park: 8 acres per 1,000
- Denton: 2.5 acres per 1,000
- Rowlett: 4.5 acres per 1,000

Assuming that these dedication amounts reflect the current level of service, this form of specification is likely to meet the "rough proportionality" standard because it relates the area required to likely demand from a development. All four cities do this explicitly by using a similar formula. For example, the Austin formula is:

$$\frac{5.0 \times (\text{No of units}) \times (\text{Persons/Unit})}{1{,}000} = \text{Acres to be dedicated}$$

To facilitate comparison with other Texas cities in this study, the requirements of the four cities were converted to dwelling units per acre by using the following approach (the Austin example):

$$\frac{\text{City dedication requirement (5 acres per 1,000 = 1 acre per 200)}}{\text{Census average household size for the city (2.4)}}$$

This suggests that in Austin, the ratio is 83.33 dwelling units per acre of parkland.

In four Texas cities, the dedication requirements are expressed as a percentage of the tract to be developed. Corpus Christi and Deer Park both require 5 percent of the total land area of the subdivision; in Elgin, the amount is 8 percent. Leander uses both the acres per 1,000 population and tract percentage in its ordinance: "two and a half (2.5) acres for each 100 new dwelling units or 5% of the total project area, whichever is greater."

The percentage of tract approach has the advantage of simplicity and ease of computation, but it takes no account of development density. Although the park demands generated obviously will differ according to the number of people residing in a development, adopting the percentage approach means that the dedication requirement remains the same whether five or 100 people per acre live in the homes built. This approach fails to meet the "rough proportionality" standard and is likely to be rejected by the courts.

Calculation of the fee-in-lieu

All the ordinances reviewed for the study authorized communities to require developers to contribute cash instead of dedicating land. The cities that required the highest fees-in-lieu were (expressed in terms of per dwelling unit):

- Highland Village $2,298
- Colleyville $1,802
- Wylie $1,500
- Grapevine $1,416
- Mansfield $1,250
- Arlington $1,083
- League City $1,000
- Keller $1,000

The amount of cash for a fee-in-lieu should theoretically be equal to the fair market value of the land that would have been dedicated if the community had selected that option. This criterion was cited explicitly in the ordinances of 15 Texas cities:

Corpus Christi	Hutto	Pflugerville
Denton	La Porte	Rockwall
Flower Mound	Leander	San Antonio
Grapevine	McKinney	Southlake
Haltom	Plano	The Colony

However, these cities differed greatly in the methods used to establish the equivalence of fair market values. Some of the methods of determining the fee-in-lieu may be challengeable in the courts. For example, the Leander ordinance requires "fair market value . . . or a minimum of $550 per residential unit, whichever is greater." It is unlikely that the city could defend a fee that is higher than fair market value.

The Allen ordinance states that "payment of money in lieu of land will be sufficient to acquire and develop neighborhood parks at a rate set by the Council by resolution." It does not speak to the methodology that is used to arrive at that rate, which likely will be defensible only if it is no higher than fair market value.

The Allen situation exemplifies a common potential problem among the ordinances in that fair market value is often presented as a fixed amount per dwelling unit. How that amount is derived is unknown. At least in some cases, it is likely that it is determined arbitrarily, which likely would be rejected by the courts. However, given that cities tend to fix the amount far below fair market value, this practice is unlikely to be challenged by developers.

Some cities, such as Rockwall and Haltom, commit to revise the fee-in-lieu amount annually to reflect changes in land values. The Haltom ordinance states:

> Annually during the budget adoption process the city council shall establish a raw acreage acquisition cost figure to be used in calculating park fees. The council shall, after reasonable study and investigation, and based upon the best available information as to land and property values within the community, determine what the cost would be of acquiring one acre of vacant land in a

> developing area of the community. This figure shall be the raw acreage cost under which all park fees are calculated for the budget year. The amount of the fee per dwelling unit shall thereafter be established by resolution of the city council on an annual basis.

In some instances, equivalency is determined at the site level. This means that a unique market value must be determined for each development. For example, Denton's ordinance states:

> The value of the land shall be calculated as the average estimated fair market value per acre of the land being subdivided at the time of preliminary plat approval . . . If the Developer/Owner objects to the fair market value determination, the Developer/Owner at his own expense, may obtain an appraisal by a State of Texas certified real estate appraiser, mutually agreed upon by the City and the Developer/Owner.

This approach gives the city the prerogative of establishing the fair market value but provides the developer with the right to contest it at his/her expense.

An alternative approach is for the city to offer developers a per-unit option based on an average city valuation of the land so they can choose from two methods. This was used in Austin.

The Colony's dedication ordinance provided for the city council to use one of three approaches for ascertaining fair market value. Presumably the city could calculate the requirement yielded by all three methods and choose the one that the council preferred:

> In determining the average per acre value of the total land included within the proposed residential development, the Council may base its determination on one or more of the following:
>
> 1. The most recent appraisal of all or part of the property made by the Central Appraisal District; or
> 2. Confirm sale prices of all or part of the property to be developed, or comparable property in close proximity thereof, which have occurred within two (2) years immediately preceding the date of determination; or
> 3. Where, in the judgment of the Council, (1) or (2) above would not, because of changed conditions, be a reliable indication of the then current value of the land being developed, an independent appraisal of the whole property shall be obtained by the City and paid for by the developer.

Many cities equate fair market value to the appraised value established by the county tax assessor. Despite the legal requirement in Texas that the assessed value should be set at the fair market value, many tax assessors set their appraisals below fair market value to avoid the costs associated with large numbers of property owners contesting their valuations. To counter this tendency to low-ball appraisals, the McKinney ordinance authorizes the city council to upgrade the county assessor's appraised value if the council elects to do so:

> Any payment of money required to be paid by this article shall be in an amount equal to the value of the property established by the most recent appraisal of all or part of the property made by the central appraisal district. Periodically the city may have an independent appraisal conducted for a sampling of properties to determine if the appraised value established by the central appraisal district is appropriate. The city council may adjust the amount assessed based on any difference between the value of property established by the central appraisal district and the value of property per the independent appraisal. The adjustment shall be a percentage change to all properties of the values established by the central appraisal district.

The San Antonio ordinance arbitrarily caps the maximum fee-in-lieu that can be charged at $30,000 per acre, presumably as a result of pressure from the development community, although it does allow for an annual inflation adjustment. To alleviate political pressure on the city council, the San Antonio ordinance requires that fee-in-lieu valuations be undertaken by an independent "third party." Presumably, this is an attempt to arrive at a valuation that is transparently free of vested interest and influence that may be exerted by developers or the city. The ordinance states:

> Beginning in 2010, and once every fifth (5th) year thereafter, the fair market value cap may be adjusted based on the evaluation and recommendation of a consultant selected and engaged by the City.

Some cities require only that land be dedicated and do not impose a park development fee; these cities authorize developers to make improvements to existing parks in lieu of paying a park dedication fee. The city of Elgin's ordinance for example, authorizes this:

> The director of public works may recommend to the planning and zoning commission that a developer dedicate park improvements in lieu of park land, equivalent to the cash contribution herein.

Other cities that include this provision are Arlington, Cedar Hill, Corpus Christi, Keller, La Porte, Plano, and Rosenberg.

League City was alone in specifically prohibiting the possibility of developers receiving credit for park improvements:

> The developer may, at his option, improve the park area. Improvements to the recreational sites cannot be used as credit towards the Land Dedication or the Regional [Parks] Fee.

Ordinances that contain only the land and the fee-in-lieu elements without containing a park development fee require existing taxpayers to pay the costs of improvements to transform the bare land into a park.

Calculation of park development fees

The survey revealed that among the 48 municipalities with parkland dedication ordinances in Texas, only 10 had expanded their ordinances to include a park development component. The park development fees charged in these cities are listed in Table 6. In 3 of the 10 cities, a different park development fee was charged for single dwelling units (SDU) than for multiple dwelling units (MDU).

Four of the 10 communities (Cedar Hill, La Porte, Mansfield, and New Braunfels) use language similar to that incorporated in the La Porte ordinance:

> Such park development fee shall be set from time to time by ordinance of the City Council of the City of La Porte sufficient to provide for the development of amenities and improvements on the dedicated land to meet the standards for a neighborhood park to serve the area in which the subdivision is located. Unless and until changed by ordinance of the City Council of the City of La Porte, the park development fee shall be calculated on the basis of $318 per dwelling unit.

In these four cases the fee is specified, but the basis used to calculate it is not attached to the ordinance. The rounded nature of some of the park development fees of these cites (such as $250, $500, and $750) and their wide disparity suggest that there was a degree of arbitrariness in fixing these fees that is unlikely to be accepted by the courts.

Table 6. Park development fees for Texas cities.

City	All	Single dwelling unit	Multiple dwelling unit
Bryan	--	$385	$292
Cedar Hill	$250	--	--
College Station	--	$1,402	$1,142
Denton	--	$291	$187
Flower Mound	$790	--	--
Highland Village	$1,025–$1,447 (based on level of service)	--	
La Porte	$318	--	--
Mansfield	$750	--	--
New Braunfels	$500	--	--
Rockwall	$202–$831 (based on district level of service)	--	

Seven cities provided an empirical basis for deriving their park improvement fees. In four cases (Denton, Flower Mound, Highland Village, and Rockwall) the cost of a typical neighborhood park is cited as the basis for the fee. For example, the Denton ordinance states: "Based on an assumed cost of typical improvements for a five acre park of $208,000." The neighborhood park development costs used by Flower Mound, Highland Village, and Rockwall are $117,600, $293,500, and $375,000, respectively. The Rockwall ordinance is unique in requiring annual reviews of the park development fee:

> A uniform cost shall be prepared annually for the park features set forth for a neighborhood park in the Activity Menu for the Park Plan, and adopted by the City Council. The dedication factor shall

> be applied to the cost to determine the pro-rata share per new dwelling unit for recreational improvements-facilities.

College Station and Bryan are the only cities whose ordinances provide empirical details as to how their park improvement costs were derived. The derivation for College Station was shown earlier in Table 4 (neighborhood parks) and Table 3 (community parks).

The cities of Cedar Hill, College Station, Flower Mound, and Mansfield authorize developers to construct improvements at a park in lieu of paying the park development fee. Thus, the Mansfield ordinance states:

> In lieu of payment of the regional park development fee, the developer, with approval of the Director, may have the option to construct the neighborhood park improvements.

None of the 48 ordinances made provision in their calculations of the fee-in-lieu or park development fee for giving a credit to new homeowners for tax payments made to retire the debt of similar existing parks in other areas of the city. Conceptually, this is a nuance that should be incorporated.

If the residents of new subdivisions are required to finance new parks for which they generate a need, it may be argued that they should not have to help retire outstanding debt for development of similar existing parks elsewhere in the community that they often must do because it is incorporated into their ad valorem tax. If the rest of the community does not share the cost of their parks, the residents of new developments should not have to pay for the rest of the community's parks of that type. In the past, this concern has not been prominent because the intent of parkland dedication was limited to financing only the land acquisition cost; the whole community paid for development costs. However, with the trend toward incorporating a development fee element in the dedication, this equity concern is likely to become more prominent.

The leverage potential of dedication ordinances

Figure 1. Illustration of how a city's investment in parkland provides the potential for leveraging private development investment in parks.

Scenario

- Cities A and B each have a population of 10,000 (4,000 dwelling units).
- Each city's population will increase by 25,000 (10,000 dwelling units) in the next 10 years.
- City A has invested in 200 acres of public parkland; City B has invested in 20 acres of public park land. Thus, the existing levels of service are:
  - City A: 1 acre per 20 dwelling units (4,000/200)
  - City B: 1 acre per 200 DUs (4,000/20)
- Land costs in both cities are $30,000 per acre.
- Park development costs in both cities are $50,000 per acre.

Continued on next page

Continued from previous page

Initial city investment in parks with general obligation bonds

Cost	City A	City B
Land	200 acres @ $30,000 = $6 million	20 acres @ $30,000 = $600,000
Park development	200 acres @ $50,000 = $10 million	20 acres @ $50,000 = $1 million
Total initial investment	**$16 million**	**$1.6 million**

Private investment required by a parkland dedication ordinance

Requirement	City A	City B
Potential dedication requirement over the 10-year period	10,000 DUs ÷ 20 = 500 acres	10,000 DUs ÷ 200 = 50 acres
Value of land dedicated	500 acres @ $30,000 = $15 million	50 acres @ $30,000 = $1.5 million
Park development costs dedicated	500 acres @ $50,000 = $25 million	50 acres @ $50,000 = $2.5 million
Total private dedication	**$40 million**	**$4 million**

Conclusion

- At the end of 10 years of growth, City B would have to issue an additional $36 million in general obligation bonds ($40 million - $4 million) to catch up with the amount of parkland it had failed to accrue in that 10-year period.
- Thus, the total investment of taxes for providing equal provision of parkland would be $16 million in City A and $37.6 million ($36 million + $1.6 million) in City B.

One of the implications of existing level of service being the benchmark used to determine "rough proportionality" is that investments in parkland by a city leverage the dedication amount that can be required from developers. This is illustrated in Figure 1, where City A's initial investment of $16 million (200 acres) in general obligation bonds leveraged private investment of an additional $40 million (500 acres) over the 10-year growth period used in the Figure's scenario. In contrast, City B's much lower initial investment of $1.6 million (20 acres) in general obligation bonds established a much lower level of service, which meant that it could leverage only $4 million (50 acres) from private developers during the same 10 year period.

Clearly, it is advantageous for small cities that anticipate future growth to invest substantially in park areas in their early stages of development, because that investment could be used to leverage relatively large dedications from developments as the city grows. If they fail to do this, such cities subsequently will have to adopt the much more challenging political strategy of requesting their residents to approve bond issues for park land to achieve a given desired level of service.

Credit for private park and recreation amenities

The provision of private park and recreation amenities within a subdivision for the exclusive use of residents within that subdivision compounds the problem of calculating the "rough proportionality" between a dedication requirement imposed on a developer and the increased demands of the proposed development on the parks system. Presumably, the private amenities will absorb some of the demand generated by the new homes that would otherwise have had to be accommodated by public parks. This reduced demand for public parks suggests that credit must be given for private amenities when calculating the dedication requirements.

Of the 48 ordinances reviewed, 27 made no provision for giving credit for private amenities. A credit of "up to 50 percent" was the credit authorized most often, appearing in the ordinances of 12 cities: Alvin, Corpus Christi, Denton, Haltom, Hutto, McKinney, Missouri City, New Braunfels, Rosenberg, Southlake, Sugarland, and Temple. The wording of the Corpus Christi ordinance was typical:

> Up to 50% of the park dedication requirement may at the discretion of the City, be fulfilled by privately owned and maintained park and recreation facilities. Credit for private parkland must meet the standards of the Parkland Dedication Guidelines concerning adequate size, character and location.

In 11 of these 12 ordinances, no guidance was given on how to determine the amount of credit to allow on the spectrum from 0 percent to 50 percent. Leaving this decision to "the discretion of the city" introduces an element of arbitrariness that could result in similar developments being treated differently. The City of Haltom tried to remove some of this arbitrariness by specifying credits for individual park elements so a development's aggregate credit for private amenities depended on how many of these elements the amenities incorporated:

In determining the amount of credit, the following criteria shall be used:

	Criterion	Credit
(a)	Exceeding the open space requirement by more than 25%	10%
(b)	Providing swimming pool(s)	10%
(c)	Providing playgrounds	10%
(d)	Providing volleyball, basketball, and/or tennis courts	10%
(e)	Providing walking/jogging trails	10%

Whenever credit is given for private amenities, the ordinances invariably include requirements ensuring that a stable source of funding will be available to maintain and renovate the facilities. For example, the Grapevine ordinance states:

> The city council may . . . allow the open space and park and recreational areas . . . to be restricted to the use and enjoyment of residents of the particular development or subdivision . . . such areas shall be maintained by and deeded to a homeowners' association, or a trustee . . . the homeowners are liable for the payment of maintenance fees and capital assessments . . . unpaid

> homeowners' fees and assessments will be a lien on the property of the delinquent homeowners.

Ordinances in the cities of El Paso, Grapevine, Rockwall, and San Antonio authorize credit of up to 100 percent. Thus, El Paso allows "up to a one-hundred percent reduction from the initial parkland dedication requirement for the installation of private amenities." The Rockwall ordinance offers the 100 percent credit but "the park property within the private development must be easily accessible to the general public either through the use of the city trail system or public roadways." Thus, to qualify for the credit, the private park amenities cannot be for the exclusive use of the subdivision's residents.

San Antonio authorizes up to 100 percent credit but, like the City of Haltom, the amount of credit is linked to specific elements included in a private park. For example, one element is "open play areas" for which the credit is a maximum of 1 acre for every 5 acres of parkland dedication, while a swimming pool "may count towards no more than 50% of the parkland dedication requirement."

The cities of Elgin, Leander, Mansfield, and Pflugerville did not specify an upper amount for the credit. The Elgin ordinance characterized the position of three of those cities:

> Subdividers and developers may be allowed a credit against the park land dedication requirement for private parks or recreational facilities . . . The director of public works shall recommend to the planning and zoning commission the amount of the credit to be allowed, if any.

The City of Mansfield is most sensitive to meeting the requirements of "rough proportionality" and states:

> The developers shall reserve a proportional credit, as determined by the Director, based on actual out-of-pocket dollar costs that the developer incurred for the improvement of the private park or recreational facility.

There is a challenge in determining what is "proportionate credit." If a developer constructs such amenities as tennis courts, a swimming pool, or a golf course for the private use of a subdivision's residents, how much demand for public parks do the amenities absorb? Given the difficulty of considering such a question, the Mansfield ordinance suggests that perhaps the only equitable way to give credit is to do it on a cost basis. Thus, the cost of the private amenities would be deducted from the cost of the public parkland dedication that the developer would otherwise have to pay.

The "rough proportionality" requirement mandates that proportionate credit be given for private amenities. Private park space cannot be considered part of a community's existing level of service. Thus, such credit does reduce the amount of public open space. This has a marked adverse effect on the formula for calculating dedication requirements. For an example of the possible impact, see Table 3 and substitute a lower level of service than the prevailing 1 acre per 285 people (say, 1 acre per 350 people) for neighborhood parks in the calculations.

The analysis in this section shows that most Texas communities ignore the issue of credit for private amenities; they either insert an arbitrary upper limit of 50 percent

or 100 percent, or they leave it to the city's discretion. All of these options fail to provide "proportionate" credit for private amenities.

This is not likely to be a major issue in most Texas cities because relatively few developments include private amenities. Nevertheless, the issue should be addressed to avoid the possibility of legal challenge in the future.

Reimbursement clause

Many communities require that neighborhood parks usually be at least 5 acres in size because the cost of sending crews to maintain smaller parks of (say) 2 or 3 acres across the city is not justified by their relatively low level of use. A challenge confronting many cities is that most developments are so small that their parkland dedication acreage requirement is much too low to meet this 5-acre minimum standard. Consequently, cities usually accept the alternative dedication of a fee-in-lieu of land.

However, accepting the fee-in-lieu option creates a conundrum. When sufficient cash accrues from these payments, the city tries to buy adequate land for a park. Unfortunately, by the time enough money has been paid by developments to accomplish this, most of the land suitable for a park of appropriate size is likely to have been acquired for development. Invariably, the only land available for a park is flood plain or detention basin land that developers could not use but that is also often inferior for use as a park. Alternatively, if potentially good park land is still available, it is likely to be relatively expensive because land prices are likely to rise as the intensity of development in an area increases.

This scenario has led most communities to insert a reimbursement clause into their dedication ordinances. For example, the College Station ordinance states: "If the City does acquire park land in a park zone, the City may require subsequent parkland dedications for that zone to be in fee-in-lieu-of-land only. This will be to reimburse the City of the costs of acquisition." Indeed, to implement this reimbursement mechanism, in a 2008 bond referendum, the voters of College Station approved a $1 million "parkland revolving fund." This fund will enable parkland to be acquired and be replenished from subsequent fees-in-lieu.

A reimbursement clause enables a city to buy parkland before development by using funds such as general obligation bonds or certificates of obligation and to reimburse itself later, at least in part, from the fees-in-lieu.

This process enables a city to buy parkland before development by using general obligation bonds or certificates of obligation and to reimburse itself later, at least in part, from the fees-in-lieu. Thus, a reimbursement dedication fee apportions the cost of providing park facilities for new development before it is needed to each new development in proportion to its use of the parks.

Negotiation with landowners at times when activity in the real estate market is slow, when a bargain sale opportunity becomes available, or when the land is beyond the community's existing developed areas may result in good park and recreational land being purchased at a relatively low price. It is also likely to be easier to acquire substantial tracts of 50 to 300 acres, for example, during this time than after development extends to these outlying areas. In effect, these acquisitions represent excess capacity to the community's current needs. Adopting this approach is likely to be supported by developers because the existence of parks makes new developments more attractive to homeowners.

Timing of the dedication requirement

In almost all the ordinances reviewed, the land dedication, fee-in-lieu, and/or park development fee must be paid "prior to filing the final plat for record." However, seven municipalities included variations to this clause.

College Station uses this clause for single-family residences, but for multifamily developments the dedication is to be made "prior to the issue of any building permits." This is done because the platting does not specify the number of apartments to be built, so the fee is unknown. Because only one builder is involved for multiple apartments, it is administratively easy to collect the fee at the time a building permit is requested.

The cities of Keller, Mansfield, and New Braunfels require the dedication to be "prior to final plat or the issuance of a building permit when a plat is not required." Plano and Corinth both require the dedication at the time of application for a building permit. In the case of a land dedication, Edinburg uses the final plat clause, but for fee-in-lieu payments the city divides the timing: "50% payable at the time of final plat approval on a lot basis and the remaining 50% of such payment shall be made at the time a building permit is applied for on a dwelling basis whether it is a single, two, or multifamily dwelling."

Adherence to the nexus principle

In the *Turtle Rock* case, the Texas Supreme Court referred to *Berg Development Co v. City of Missouri City,*[8] a 1980 Texas case in which the courts ruled the Missouri City parkland dedication ordinance to be unconstitutional because a subdivision's fee-in-lieu could be expended on parks anywhere in the city rather than only at a park close to that subdivision.

The Missouri City ordinance did not preclude the city from exacting funds from a developer and then failing to use the money to provide parks for the assessed development. Therefore, that park dedication ordinance placed a special economic burden upon the developer and ultimately on the home buyer with no guarantee that they would benefit from the exaction. This defect made the Missouri City ordinance arbitrary, and therefore unreasonable and unconstitutional.

Thus, the court made it clear that the land or fees dedicated must be used to benefit the subdivision from which they are taken.

This requirement was reaffirmed in 1987 by the U.S. Supreme Court in *Nollan v. California Coastal Commission.*[9] The *Nollan* decision confirmed the "required nexus" rule recognizing the need for a jurisdiction to establish a rational nexus, or essential connection, between the demand enacted by a development and the park being developed with the resources provided by the developer. It requires that the dedicated resources be used to provide facilities that benefit those who will live in the development. This means that an agency should have a parks master plan that divides the jurisdiction into geographical districts. Each district should have a separate fund in which to credit all dedication fees-in-lieu and park development

The nexus rule requires that the dedicated resources be used to provide facilities that benefit those who will live in the development.

fees originating from that district. These revenues should be spent on parks within the district in which they originated.

The size of these districts is determined by the distance that residents are likely to travel to visit a park. As the distance between the development and the amenities increases, it becomes more likely that an ordinance will lose a legal challenge based on rational nexus. Conversely, if the geographical districts are made very small so that they are more defensible to a legal challenge, it will take much longer for enough funds to accrue to enable park amenities to be developed. Ideally, the size of the districts should be based on information from empirical studies measuring how far people in the community travel to parks. However, in most cities, a standard distance of ¼, ½, or 1 mile to a neighborhood park is considered "reasonable."

Language in the College Station ordinance is typical of that used to meet the nexus requirement:

> Park Land fees will be deposited in a fund referenced to the park zone or community park district involved. Funds deposited into a particular park zone fund or community park district may only be expended for land or improvements in that zone or district.

All 48 ordinances generally adhere to the nexus principle. Of the communities that did not specify the need for expenditures to be made only in the zone in which they were deposited, most are relatively small. In these cases, all residents in the city could be deemed as being near a park, wherever it is located.

The nexus requirement is not specified in the ordinances of seven larger cities: Cedar Park, Weslaco, Deer Park, and El Paso. Although this is surprising, it does not necessarily mean the nexus principle is not followed. It may mean only that while in practice it is met, it is not formally specified in the ordinance.

The courts have made it clear that when fees in lieu are paid, the homes generating the fees are expected to benefit from new park amenities within a reasonable time frame.

Time limitation for expending fees-in-lieu

The courts have made it clear that when fees-in-lieu are paid, the homes generating the fees are expected to benefit from new park amenities within a reasonable time frame. Nevertheless, 16 of the 48 cities fail to specify a time frame of any kind, which is a limitation of their ordinances. Of the remaining cities, Table 7 shows that the term "reasonable time frame" is most commonly determined to be either 10 years (13 cities) or 5 years (nine cities). Others range from a low of 2 years (Temple) and 3 years (Grapevine) to 7 years (Bryan) and 8 years (Rockwall).

Table 7. Time frame for spending fees-in-lieu for various Texas cities.

10 years	5 years	Other	None
Allen	Austin	Bryan (7)	Angleton
Alvin	Cedar Park	Corpus Christi (4)	Colleyville
Arlington	College Station	Grapevine (3)	Corinth
Carrollton	Edinburg	Lewisville (3 ½)	Deer Park
Cedar Hill	Frisco	McKinney (6)	El Paso

Continued on next page

Continued from previous page

10 years	5 years	Other	None
Denton	League City	Rockwood (8)	Elgin
Haltom	Rosenberg	Temple (2)	Flower Mound
Mansfield	Rowlett	The Colony (4½)	Highland Village
Missouri City	Wylie		Keller
New Braunfels			La Porte
Pearland			Leander
Plano			Pflugerville
Waxahatchie			San Antonio
			Sugarland
			Weslaco

Variations in the time frame may reflect differences in rate of growth. The 5-year time frame adopted by, for example, College Station, Cedar Park, and Austin, probably reflects the rapid population growth occurring in these communities. It is surely unrealistic, even in rapidly growing communities, that shorter time frames of 2 or 3 years are sufficient to collect enough funds, to identify and acquire available park land, and to let contracts to develop a park. For many communities, an 8- or 10-year time frame is likely needed to accomplish these tasks.

No communities included time periods that differed according to type of park. This was surprising. It may be feasible to accrue enough resources to fund a neighborhood park within 5 years in a fast-growing city. However, more time will likely be needed to fund a community park within the same time frame because the costs are likely to be (say) five times greater, and the growth rate in a particular neighborhood may be much faster than that of other neighborhoods that in aggregate constitute a community park zone.

If the reasonable time frame criterion is not met, the ordinances must provide for those who pay the fees-in-lieu to receive a refund. Language in the College Station ordinance is typical:

> The City shall account for all fees-in-lieu of land and all development fees paid under this Section with reference to the individual plat(s) involved. Any fees paid for such purposes must be expended by the City within five (5) years from the date received by the City for acquisition and/or development of a neighborhood park or a community park as required herein. Such funds shall be considered to be spent on a first-in, first-out basis. If not so expended, the landowners of the property on the expiration of such period shall be entitled to a prorated refund of such sum, computed on a square footage of area basis. The owners of such property must request such refund within one (1) year of entitlement, in writing, or such right shall be barred.

Developers probably will not request refunds even if the time frame is not met because they are unlikely to be concerned enough to monitor how the money is spent

5 years later and because there is only a 1-year window of opportunity in which to claim the refund.

The scope and range of Texas cities' parkland dedication ordinances

The survey revealed that the scope of Texas cities' parkland dedication ordinances varied across three dimensions:

- The type of parks for which they provided
- The inclusion or exclusion of nonresidential development
- The inclusion or exclusion of subdivisions in the ETJ

Each of these issues is addressed in this section.

Types of parks specified in the ordinances

Table 8. Cities whose ordinances were limited to providing neighborhood parks.

Allen	Edinburg	New Braunfels
Alvin	Haltom	Pearland
Austin	La Porte	Rockwall
Carrollton	Lewisville	San Antonio
Cedar Hill	Mansfield	Waxahachie
Denton	Missouri City	

The ordinances of 17 of the 48 municipalities confine their parkland dedication authority to neighborhood parks (Table 8). This relatively restricted scope of about one-third of the ordinances is surprising, because the trend to a broader scope was noted over 15 years ago in a 1992 study investigating parkland dedication practices in six states, including Texas:

> Historically, park exactions have been used to provide neighborhood parks, but data from this study suggest a changing practice. Many communities are now beginning to use the exacted fee to acquire, develop, or renovate community and citywide parks . . . This experimentation can meet the constitutional standard of "rational nexus" if the municipality can demonstrate that the development of these large parks serves residents of the subdivisions subject to the exaction[4].

However, these authors went on to note that while municipalities in other states were broadening the mandate of exactions, "The exception to this trend is in the state of Texas, where municipalities predominantly restrict their use of the funds to neighborhood parks."

This view of the legitimacy of a broader spectrum of parks being eligible for dedication fees was reinforced over a decade ago by the National Recreation and Park Association in its guidelines for planners, which stated: "The rational nexus test for parks and recreation can be expanded beyond the neighborhood park to community and regional parks where additional user pressures will occur and additional park and recreation capacity will be needed." [10]

Ordinances of the other two-thirds of Texas communities provide enabling authority for dedication for a broader range of parks beyond the neighborhood level. The enabling authority in these ordinances was of three types: general and nonspecific, broad-based and specific, and limited scope beyond the neighborhood level. Examples of the language used in each of these types of ordinances are given in Figure 2.

Figure 2. Examples of ordinances providing enabling authority beyond the neighborhood level.

Examples of nonspecific language

- Corpus Christi: "provide for the parkland needs of future residents."
- Leander: "dedicate to the public sufficient and suitable lands for the purpose of public parkland."
- Flower Mound: "land dedicated for parks, containing passive or active recreational areas and amenities that are reasonably attributable to such development."

Examples of broad-based and specific enabling language

- Frisco: "The city of Frisco is in need of neighborhood, community, regional, greenbelt and central parks due to population increases in the City from residential development which creates a specific demand for parks of various sizes."
- League City: "To provide park and recreational areas in the form of neighborhood parks, recreational parks, regional parks and connecting trails as a function of residential development in the City of League City."
- Rosenberg: The ordinances in some of these communities confirm that the fee-in-lieu also is distributed across all types of parks. For example, the ordinance states: "The allocation of cash paid to the City in lieu of land dedication shall be divided equally between neighborhood, community and regional parks."

Cities whose ordinances provided for limited expansion beyond the neighborhood park level.

Typically, these cities extended their ordinances to incorporate community parks and/or linear greenways: Examples include:

- Bryan: "to provide recreational areas in the form of community parks . . . Community parks typically serve an area with a radius of one mile, and most of these also serve as neighborhood parks."
- Highland Village: "providing for developer funded recreational areas in the form of a community park, neighborhood parks and an inland trails system – linear park."
- Arlington: "linear parks and neighborhood parks" [In Arlington, all of the city's community parks qualify as "linear parks]."

Although most cities' enabling legislation gave them a mandate to require dedication for more than neighborhood parks, in many cases they confined their implementation to only neighborhood parks, because of tradition, inertia, and presumably opposition from the development community.

Nonresidential park land dedications

The cities of Colleyville, Hutto, and Southlake extend their ordinances to include nonresidential as well as residential property. The Hutto ordinance states:

> In order to provide for the open-space needs of the community, the Developer of a Non-residential subdivision of three acres or more will be assessed a parkland fee at recordation of the final plat of $800 per acre.

It is difficult to see how such a requirement meets the U.S. Supreme Court's test of "rough proportionality." In the *Dolan* case, the court made it clear that a city cannot just say that it would be nice to have open space and then require property owners to dedicate the land for it. A park dedication ordinance must demonstrate the effect an individual development has on creating a need for parks.

The Colleyville and Southlake ordinances recognize the necessity of making the need case and use identical language to do this:

> Although non-residential development does not generate residential occupancies per se, it does create environmental impacts, which may negatively affect the living environment of the community. These impacts may be ameliorated or eliminated by providing park or open space areas which buffer adjoining land uses, prevent undue concentration of paved areas, allow for the reasonable dissipation of automotive exhaust fumes, provide natural buffers to the spread of fire or explosion, and provide separation of lighting, waste disposal, and noise by-products of non-residential operations and activities from adjacent residential areas. The City has therefore determined that non-residential developments must provide dedicated parks and/or reserved open space at a ratio of one (1) acre of parkland for every fifty-six (56) non-residential gross acres of development or prorated portion thereof.

This language still seems too vague to demonstrate "rough proportionality" showing that employees will generate new demands for parks. However, in all three of these cases, the dedication requirement is so small in the context of the overall investment in a nonresidential development that it is unlikely developers will incur the cost and ill will with the city by challenging it, so the requirement will probably be met without challenge. The buffering requirement specified in the Colleyville language could probably be achieved equally well by strengthening the requirements of regular planning ordinances rather than through a dedication ordinance.

Extending ordinances to extraterritorial jurisdictions

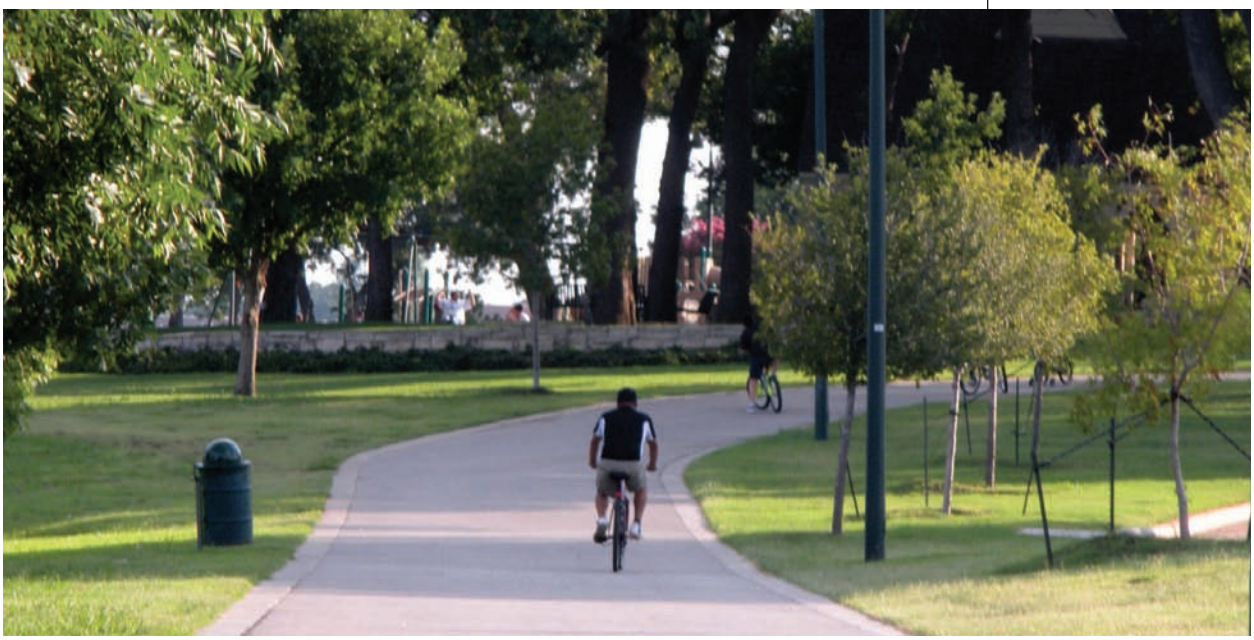
Cities in Texas have legislative authority to regulate subdivisions built in their ETJs. This means that park dedication ordinances can be extended to include subdivisions outside a city's boundaries but within the ETJ. The ETJ extends for 3½ miles beyond the existing boundaries of a city with fewer than 100,000 population. It extends to 5 miles when the 100,000 population threshold is reached.

Only seven of the 48 cities make explicit reference in their ordinances to dedication extending to ETJ subdivisions: Alvin, Austin, College Station, Corpus Christi, Leander, Mansfield, and New Braunfels. For example, the Corpus Christi ordinance states:

> All residential subdivisions located within the city or within the area of extraterritorial jurisdiction of the city, shall be required to provide for the parkland needs of future residents through the fee simple dedication of suitable land for park and recreation purposes.

A challenge in extending dedication to the ETJ is the cost of maintaining dedicated parks located far outside the city's existing boundaries. To encourage developments to carry these costs until they are annexed, the city of Austin ordinance increases its limit of 50 percent credit for private amenities in the city to 100 percent in the ETJ:

> For subdivisions located outside the city limits, up to 100% credit may, at the discretion of the City, be given if the subdivider enters into a written agreement with the City stating that all private parkland shall be dedicated to the City at the time of full purpose annexation of said subdivision by the City.



Time frame for revising ordinances

Only 11 of the 48 ordinances incorporate a time frame for reviewing the ordinance. The College Station ordinance states: "The City shall review the Fees established and amount of land dedication required at least once every three (3) years." The 3-year review clause also appeared in the Bryan, League City, and Plano ordinances; in Wylie, it is every 2 years; and in Arlington and San Antonio, the review period is every 5 years.

Five communities integrate revisions to fees-in-lieu into the annual budget process: Angleton, Haltom, Pflugerville, Rockwall, and Southlake. An annual reappraisal is likely to be viewed as being unreasonable or onerous by most city councils for two reasons. First, there may be too few land transactions recorded in a year to provide enough data to establish a clear trend. The smaller the number of transactions used to determine an average cost for acquiring land, the less reliable and more contentious that valuation is likely to be. Second, the prospect of undergoing a controversial public hearing process on this issue each year is likely to be unappealing to most elected officials.

The San Antonio and Arlington ordinances incorporate a compromise solution that avoids annual reviews but tries to reflect increases in land values in interim years between major 5-year reviews. The Arlington ordinance states:

> Development fees shall be updated annually on September 1st by the Director in accordance with the U.S. Department of Labor, Bureau of Labor Statistics' Dallas-Fort Worth Consumer Price Index for All Urban Consumers.

Criteria for acceptance of parklands

Most ordinances include guidelines to help determine whether to accept parkland or to require a fee-in-lieu. Typically, they include multiple items relating to such factors as location, accessibility, and character of the land. Two of these elements that are common to most ordinances and often contentious are minimum size and acceptability of floodplain and detention pond land.

Minimum size

Table 9. Desired minimum size of dedicated parkland specified in ordinances.

Amount of acreage	Cities
None specified	Angleton, Arlington, Corpus Christi, Deer Park, El Paso, Elgin, Flower Mound, Grapevine, Highland Village, Pflugerville, Weslaco
1 acre	Corinth, Edinburg, Haltom, La Porte, Lewisville, Pearland, The Colony, League City (¼ acre)
3 acres	Alvin, College Station, Leander, San Antonio, Temple
5 acres	Allen, Carrollton, Cedar Hill, Cedar Park, Denton, Frisco, Keller, Mansfield, Missouri City, New Braunfels, Rosenberg, Rowlett, Southlake, Waxahachie, Wylie
6 acres	Austin, Bryan
7 acres	Colleyville
10 acres	McKinney, Rockwall, Sugarland

Most ordinances specify a preferred minimum size for dedicated parkland, recognizing that tiny parks provide limited scope for providing amenities and are relatively expensive to maintain in terms of cost per user served. Table 9 shows that preferences range from ¼ acre in League City to 10 acres in McKinney, Rockwall, and Sugarland, with the most frequent preferred minimum size being 5 acres.

These are desired minimums; none of the ordinances categorically rejects the acceptance of land dedications that are smaller than their preference. The New Braunfels ordinance is typical:

> The City Council and the New Braunfels Parks and Recreation Department generally consider that development of an area less than five acres for neighborhood park purposes may be inefficient for public maintenance.

Acceptability of floodplain and detention pond land

The large majority of ordinances indicate that it is generally undesirable to accept floodplain land as part of a dedication requirement. For example, the City of Mansfield ordinance states:

> The City shall not accept land . . . within floodplain and floodway designated areas . . . unless individually and expressly approved by the Director.

Some cities recognize the limitations of floodplain land but emphasize the positive potential of such sites rather than their limitations. For example, the Bryan ordinance states:

> Consideration will be given to land that is in the floodplain . . . as long as . . . it is suitable for park improvements.

Some cities state a maximum proportion of floodplain that they will accept in a dedication. In most cases, 50 percent is specified. For example, San Antonio requires "Areas within a 100 year floodplain shall not exceed 50% of the area counted as parkland." Variations in the 50 percent requirement range from the ordinance of The Colony, "Not more than 20% of the proposed park is to be located within the 100 year floodplain," to that of Denton, "Floodplain areas shall generally not exceed 75% of the total park site."

Eleven cities specify that if floodplain land is accepted, its contribution toward a dedication requirement is discounted. Thus, the College Station ordinance states, "Land in floodplains or designated greenways will be considered on a three for one basis. Three acres of floodplain or greenway will be equal to one acre of park land." Other communities adopting this three-to-one ratio are Alvin, Denton, McKinney, and The Colony. The cities specifying a two-to-one ratio are Austin, Cedar Hill, Haltom, La Porte, Lewisville, and Pflugerville.

Surprisingly, only a few ordinances address the issue of detention ponds being accepted to meet dedication requirements. Of those, the most commonly used language is similar to the generic statement in the La Porte ordinance:

> Drainage areas may be accepted as part of a park if the channel is constructed in accordance with City engineering standards and if no significant area of the park is cut off from access by such channel.

The League City ordinance is unequivocal in rejecting as "unsuitable" any area located in the 100-year floodplain, but "an exception may be a ballfield that is located in a day detention basin with the approval of the Parks Board and City Council." San Antonio offers the most specific and comprehensive regulations for acceptance of detention areas:

> Detention basins which are required as part of the stormwater management standards shall not qualify as parkland unless 75% or more of the active and usable area is designed for recreational use and the area(s) conforms to the requirements below.
>
> 1. Detention areas shall not be inundated so as to be unusable for their designated recreational purposes. Detention areas must be designed to drain within 24 hours.
> 2. Detention areas shall be constructed of natural materials. Terracing, berming and contouring is required in order to naturalize and enhance the aesthetics of the basin. Basin slopes shall not exceed a three to one (3:1) slope.
> 3. Detention areas may count a maximum of 50% of the park dedication requirement.

College Station appears to be alone in unequivocally rejecting the acceptance of these areas:

> Detention/Retention areas will not be accepted as part of the required dedication, but may be accepted in addition to the required dedication.

Concluding comments

This analysis of the 48 Texas city ordinances studied revealed that parkland dedication is substantially underused as a funding mechanism. Citizens and city leaders need to know the magnitude of the missed opportunity that this represents, possible reasons for this mechanism not being realized, and the political case for fully supporting substantive parkland dedication requirements.

The unrealized potential of parkland dedication ordinances

Over the past 25 years, Texas municipalities have increasingly used parkland dedication ordinances. However, the dedication requirements in their ordinances are much too low, given the prevailing fiscal and legal environments in Texas. The unrealized potential of these ordinances is a function of restricted scope and below-cost dedications.

Restricted scope

The scope of parkland dedication ordinances and their implementation was restricted in three ways. First, 17 of the 48 ordinances fail to extend the scope of ordinances beyond neighborhood parks to embrace community and regional parks. Additional user demand from new development extends to all types of parks, not only neighborhood parks. Hence, dedication fees should cover the cost of creating the additional capacity needed at all types of parks to accommodate the additional user demands. This need has been increasingly recognized over the past 15 years. Figure 2 (page 36) gives examples of Texas cities whose ordinances authorize dedication fees that cover the cost of the added capacity needed at all types of parks. All Texas cities could follow their lead.

A second source of restricted scope is that only seven of the 48 ordinances require parkland dedications from developments in their ETJs. Although it is a complex and lengthy process, Texas law gives cities the right to annex land within their ETJs. Thus, it is likely that subdivisions outside a city's boundary but within its ETJ will at some future time be annexed and integrated into the city. If a city's parkland dedication ordinance is not extended to embrace the ETJ, those homeowners will have no public park amenities when their subdivisions are annexed into the city, and they will pressure the city to provide them. Hence, failure to extend the ordinance into the ETJ is likely to result in a city incurring substantial costs in the future.

Most ordinances do include a reimbursement clause enabling the city to fund the initial acquisition and/or development of a park and to subsequently reimburse itself from the fees-in-lieu and/or park development fees. This clause would enable parks to be provided before development when land for them is both available and less expensive. Although this is a preferred modus operandi, its scope is restricted and it is rarely used because the dedication fees are so low that they do not reimburse the initial capital investment. The reimbursement authority likely will be used only if dedication fees are set a level that enables the initial capital investment to be recovered.

Below-cost dedications

The second factor contributing to the unrealized potential is the failure to set dedications at a level that covers all costs associated with the acquisition and development of the required additional park capacity. The two sources of this failure are captured in the U.S. Supreme Court's *Dolan* decision of 1994 that requires cities: (i) to be proactive in making an "individualized determination" and that (ii) a parkland dedication has a "roughly proportional" relationship between the dedication requirement imposed on a developer and the increased demands of the development on a park system.

The number used by almost all Texas cities for parkland dedication is arbitrary rather than empirically derived (Table 3), which is necessary to meet the "individualized determination" criterion. The *Dolan* ruling put cities on notice that they must provide quantitative evidence that their dedication requirement is appropriate.

Most cities specify their standards in terms of number of dwelling units per acre of parkland, but few incorporate a methodology or calculations showing how this standard was derived. This lack of explanation extends to the derivation of the fee-in-lieu (and in some instances to the park development fee in cases where it was imposed). Only 15 of the ordinances specify that the fee should equate to the fair market value of the land that would otherwise have been dedicated. In many of those instances, the calculations used to establish the equivalence of fair market value are obscure and appear to be arbitrary. The typical response to follow-up questions of city officials on how the standards and fees-in-lieu were determined was, "That is the figure the council decided upon."

Evidence of this arbitrariness is shown in columns 6 and 8 of Table 5, in which the current land dedications and fees-in-lieu are listed. Many of these are "rounded numbers." For example, in column 6, which shows dwelling units per acre, numbers such as 25, 50, 100, and 150 are prevalent. Similarly, in column 8, common numbers include $250, $300, $500, $600, or $750. It is unlikely that the empirical procedure described in Table 3 would consistently yield such rounded numbers.

The most glaring examples of arbitrariness were the four ordinances that specified their standard in terms of percentage of the tract being developed. This means the dedication requirement remains the same whether 5 or 100 people per acre will live in the homes built.

The failure to meet the "individualized determination" criterion makes these ordinances vulnerable to invalidation by the courts. However, of perhaps greater concern is that there is no awareness of what the real standards or fees should be if empirical procedures to determine accurate numbers are not undertaken. This means that when elected officials set arbitrary numbers, which invariably are far below the real costs of acquiring and developing additional parks, they are unaware of the magnitude of the opportunity cost in potential park funding they are foregoing.

When initiating dedication ordinances, city councils often seek to appease vigorous opposition from the development community by setting very low dedication requirements. They rationalize that it is an accomplishment to get such an ordinance passed and that "some revenue is better than no revenue." The lack of

empirical procedures in subsequent reviews of the dedication requirement makes it vulnerable to incrementalism. That is, when the dedications are reviewed, councils tend to raise them by an arbitrary, incremental amount of say, 5 percent, 10 percent, $50, or $100. Because the initial dedication was so low, these increments effectively keep them low. Thus, if an initial fee is set at $300, a 10 percent increase 3 or 5 years later raises it only to $330. During this same period, the cost of acquiring and developing parks has likely risen far above the fee increase of $30 per dwelling unit. This process means that the opportunity cost of forgone park funding increases quantumly as the years pass.

In addition to failing to make an "individualized determination," almost without exception the dedications of Texas cities do not meet the second *Dolan* requirement of "rough proportionality." Invariably, they fail to cover the costs associated with acquisition of additional park capacity created by additional demand from new homeowners.

The rough proportionality criterion directs that a dedication requirement be based on the current level of park provision. However, the data in Table 5 (page 21) show that this rarely occurs in Texas. The magnitude of the ratios in column 5 (current level of parkland provision) should be the same as those in column 6 (dedication requirement) if the cities adhere to rough proportionality. In some cities, the ratios are relatively similar—examples are Colleyville, Flower Mound, Keller, and La Porte. However, other communities have wide disparities—such as in Hutto, The Colony, and Grapevine. To meet the roughly proportionate criterion, 46 of the 48 cities should increase their land dedication requirement and those with wide disparities between current level of provision and dedication requirements should raise it substantially.

If these increases in land dedication were enacted, there would be a corresponding increase in fees-in-lieu. For example, if Mansfield increased its land dedication of 100 dwelling units per acre of parkland to its current level of park provision, which is 13.81 dwelling units per acre of parkland (that is, by 720 percent), its fee-in-lieu would correspondingly rise from $500 per dwelling to $3,600 per dwelling. Such increases may appear shocking when compared to existing dedications, but they indicate the magnitude of the opportunity cost associated with the failure of ordinances to accurately reflect the current level of service.

Although all the ordinances provide for land dedication and a fee-in-lieu alternative to the land requirement, only 10 of the 48 provide for a park development fee. When the fee-in-lieu amounts in Table 5 of these cities are compared with their park development fees in Table 6, it is clear that the park development fees typically far exceed the fees-in-lieu for land acquisition. These data suggest that inclusion of a park development fee is likely to at least double the revenue generated by a parkland dedication ordinance, and in some cases the increases would be much greater.

In summary, the data in Table 5 suggest that increases of between 150 percent and 1,800 percent in the existing parkland dedication requirements could occur in 44 of the 48 cities. These percentages are derived by dividing the current level of parkland provision (column 5) with the current land dedication requirement (column 6). This would occur if empirical procedures were used to make individualized determinations of the costs of parkland and these costs were fully incorporated into dedication ordinances so new developments paid a roughly proportionate share of

the costs. These increases themselves would likely be at least doubled (and in many cases the multiplier would be much higher) if the 38 cities that do not include park development fees in their ordinances were to similarly identify the full costs of developing new parks and fully incorporate them into their dedication ordinances so new developments pay a roughly proportionate share of these costs also.

Why is the potential not being realized?

Texas communities have parkland dedications that are far below the cost of providing parks for new homeowners at a community's prevailing level of service. Two main factors seem to account for the cities' failure to realize the potential of parkland dedication ordinances: inertia and vigorous opposition from the development community.

Inertia

The inertia stems from many elected officials' lack of knowledge about the potential of parkland dedication ordinances to increase park funding. Indeed, parkland dedication ordinances are not discussed or listed in the Texas Municipal League's 2007 publication, *Revenue Manual for Texas Cities*, which claims, "This manual addresses nearly every known source of revenue available to Texas Cities."

Some cities' ordinances have been in force for several decades and have never been revised. This means that elected officials remain unaware of the potential both for adding a park development fee element and for expanding the ordinances' scope to parks far beyond the neighborhood level to which they were confined in the 1960s, '70s and early '80s. Only 11 of the 48 cities require that the ordinance be reviewed at specified regular intervals. This is a major structural failing in the remaining 37 ordinances because without the stimulus of a built-in periodic review, the ordinances never appear on a council agenda and remain invisible to elected officials.

Some cities' ordinances have been in force for several decades and have never been revised. This means that elected officials remain unaware of the potential both for adding a park development fee element and for expanding the ordinances' scope to parks far beyond the neighborhood level.

The lack of regular review probably explains the legal weaknesses manifested in many of the ordinances. There simply has been no reason to reexamine and update them to be consistent with contemporary best practice and court guidelines. Given these legal weaknesses, it is significant that no substantive litigation has been initiated by the development community in Texas challenging parkland dedication ordinances in the 25 years since the *Turtle Rock* case in 1984. This suggests that the cost required by most of the ordinances is so small in the context of the total cost of a development that it is not worthwhile for developers to legally challenge them.

Opposition from the development community

A second reason elected officials have not capitalized on the potential opposition from the development community of parkland dedication ordinances is that any suggested enhancements of them invariably are opposed vigorously by the development community, which is a powerful constituency in most Texas cities. Thus, instead of the criterion for setting fees being to meet the costs of new parks and make growth pay for itself, the criterion is to set them at a level that will not generate an unacceptable political backlash from the development community.

Developers are very conscious of the Fifth Amendment "takings" issue. Although the courts have ruled that parkland dedication does not constitute a taking of private land without adequate compensation, many Texas developers resent the courts' interpretations. They view it as an intrusion of their right to use all of their land as they see fit and strongly oppose the principle of parkland dedication. Because of these perspectives, discussions of dedication issues with developers are often highly emotional.

In some contexts, some elected officials may perceive the opposition from the development community as endangering their personal political aspirations, because developers and real estate interests are influential in many Texas communities and are major contributors to local election campaigns. Indeed, some elected officials are involved in real estate or associated professions, and they oppose substantive dedications as antithetical to their professional value systems.

In many Texas communities, residential development has not been expected to pay its own way in the past. The contention that growth should pay for itself is a relatively recent interjection into Texas' political discourse. The tradition has been for one generation of residents to provide the park opportunities for the next generation by paying for them with ad valorem taxes. Hence, developers legitimately ask: Why do we have a primary responsibility to provide these new parks when most of the parks used by existing residents were inherited by them from previous generations? Do they not have an obligation to provide for future generations as others previously provided for them? There are two responses to this line of argument.

First, when cities are small, all residents are relatively close to a park, wherever it is located. However, when a city reaches a threshold size (say 40,000), parks in new developments on its edge may be 5 miles away from residents living in the center of the city. These residents likely will never use them and therefore are unlikely to support using ad valorem taxes to pay for them.

Second, the rapid growth of Texas cities, the state's renowned fiscal conservatism, and citizens' reluctance to support any tax increases mean that parks must compete for limited funding with many other infrastructure and structure projects, including roads, bike and hike trails, police and fire stations, city offices, and structures for recreation, seniors, and the arts. In this competitive environment, it is unlikely that there will be sufficient ad valorem funds to secure the desired level of parks provision. This point is recognized in the generic context of impact fees by the National Association of Home Builders, the national trade association representing developers and builders: "Developers and builders are acknowledging that impact [parkland dedication] fee payments may mean the difference between undertaking a residential development project or not. For in the absence of needed infrastructure, residential development cannot occur."

Those in the development community who support substantive parkland dedications generally cite some combination of the following four factors as their justification.

First, parkland dedications make parks available at the time, or soon after, new homeowners move into a development. This enhances the property's sale ability. Many real estate projects feature recreation amenities prominently in their promotional campaigns because they have determined that new home buyers seek

these assets. Hence, the requirement to provide park amenities often is consistent with the developer's own inclinations and might be provided by the developer even if they were not required. However, developers probably would prefer to decide for themselves what facilities to provide rather than be mandated to give resources to a city and have its officials make that decision for them.

Second, developers may recognize that ensuring a given level of park provision throughout a community contributes to its general quality of life. This encourages both new residents and businesses to locate in the city, which enhances the developers' long-term business prospects.

Texas residents are increasingly recognizing that in the absence of dedication and impact fees for an array of new facilities, new development is likely to result in local tax increases or service cutbacks. In these contexts, the challenge of growth advocates is to demonstrate that their projects will not have an adverse fiscal impact on the community. Their support of dedication ordinances is an action that can be used to make this case.

Finally, some factions in a community invariably view developers with distrust and suspicion. Developers who endorse a substantive parkland dedication ordinance may contribute to alleviating this negative image by demonstrating that they have a social conscience, are concerned for the general welfare as well as the bottom line, and are prepared to invest in community facilities. Thus, the developers' support for parkland dedication may be viewed as an investment in good public relations and as a means of winning public support for future projects.

In contrast to the vociferous opposition typically expressed by developers, few among the general public are likely to engage in the debate about parkland dedication. Residents usually know and understand little about parkland dedication ordinances and do not recognize that they will be adversely impacted if the ordinances are merely nominal. Consequently, there generally is a lack of a pro-ordinance constituency to counter the opposition from the development community.

The economic case for parkland dedication ordinances

The intangible notion of opportunity costs often fares poorly when compared with the tangible costs that developers contend are harming their businesses. People are less sensitive to information that is not tangibly presented.

A strategy for reducing this imbalance among constituencies is to make the opportunity costs tangible, pointing out to elected officials and the general public the cost of *not* increasing the ordinance requirements. This strategy focuses attention on the negative consequences of the loss that will occur if this action is not taken. It has been widely demonstrated in the field of social psychology that this negative framing of consequences has a powerful persuasive impact on audiences.[12,13] An example of how this was done in College Station is shown in Figure 3. The first half of the figure shows that based on the city's best estimate of the population growth for the next 20 years, an investment for neighborhood and community parks of $30.5 million would be needed merely to maintain the city's existing level of service.

Figure 3. Illustration of the cost to residents of not maximizing the potential of a parkland dedication ordinance.

The estimate of 20-year capital cost requirements for neighborhood and community parks based on a projected increase of 40,000 population in the next 20 years while maintaining the current levels of service.

New neighborhood parks

- Current level of service = 1 acre per 285 people
- Additional land needed to retain current level of service: 40,000 ÷ 285 = 140 acres
- Cost of additional land: 140 acres @ $32,000 per acre $4,480,000
- Average park size of 8 acres means 18 new parks, with park development costs @ $631,000 $11,360,000
- Cost of land plus development: $4,480,000 + $11,360,000 **$15,840,000**

New community parks

- Current level of service = 1 community park per 10,970 people
- Additional land needed to retain current level of service: 40,000 ÷ 10,970 = 4 parks @ 37 acres/park
- Cost of additional land: 148 acres @ $32,000 per acre: $ 4,740,000
- 4 new parks @ $2.5 million per park for "basic infrastructure": $10,000,000
- Cost of land plus development: $4,740,000 + $10,000,000 **$14,700,000**

Total estimated capital cost for 10-year period: $30,540,000

Revenue projections from a land dedication ordinance based on 40,000 additional population with an equal number of single-family and multifamily units.

Existing ordinance requirements

- Single-family: 20,000 ÷ 2.80 = 7,142 dwelling units
  7, 142 DU x $940 $ 6,713,480
- Multifamily: 20,000 ÷ 2.25 = 8,890 dwelling units
  8,890 DU x $731 $ 6,498,590

Total revenue $13,212,070

Proposed new ordinance requirements

- Single-family: 7142 DUs x $2,021 (1,078 + 943) $14,433,982
- Multifamily: 8,890 DUs x $1,686 (878 + 768) $14,988,540

Total revenue $29,422,522

Conclusion: If the proposed new ordinance requirements are not implemented and the existing ordinance requirements are retained, residents may be taxed an additional $16.2 million ($29.4 million - $13.2 million) in the next 20 years in order to maintain the current level of park service.

The second part of Figure 3 shows that if the existing fees-in-lieu of $940 for single and $731 for multiple dwelling units are maintained, about $13.2 million of this cost will be raised from those creating the demand for the new facilities. However, if fees-in-lieu are raised to $2,021 and $1,686, respectively, the new parks will, for the most part, be paid for by the new growth. Failure to impose the new fees would result in existing residents being taxed an additional $16.2 million in the 20-year period to maintain existing levels of neighborhood and community park provision.

The emerging O&M argument

Some in the development community are raising a new question about the requirement of parkland dedication: How can the city justify building new parks when it is struggling to find the money to properly maintain and operate those that it already owns? There are four responses to this question.

First, allocation of operation and maintenance funds is part of the annual budget process. As such, it reflects a short-term view of economic conditions prevailing in the city at that time. In contrast, parkland dedication is a one-time, major investment in capital infrastructure that reflects a long-term view of amenities the city should have in the future.

If a current council decides not to build new parks, it has made it more difficult and expensive for future residents to have them because adequate nearby land may not be available for the parks later. A current council has an obligation not to preempt the options of future councils. It is the prerogative of future councils to decide each year whether or not to fully fund the maintenance and operation of parks; presumably, this will be governed by the economic conditions at that time. The rejection of a parkland dedication ordinance because of concerns about future operation and maintenance costs would lack justification because the future ability to meet such costs is unknown. Previous councils had sufficient vision to create the opportunities that the community currently enjoys. If a current council does not continue to make the same opportunities available to future generations, they would be lacking vision.

A second rebuttal to the operations and maintenance argument is that amenities that are not on the tax rolls in a community create much of the value of the properties that are on the tax rolls. Such amenities include parks, schools, roads, churches, street spaces, nonprofit arts facilities, and police and fire facilities and services. Specifically in the case of parks, the real estate market consistently demonstrates that many people are willing to pay a larger amount for property located close to parks and open space areas. The higher value of these residences means that their owners pay higher property taxes. In many instances, if the incremental amount of taxes paid by each property that is attributable to the presence of a nearby park is aggregated, it will be sufficient to pay the annual costs of operating and maintaining the park.[14]

A third response to the operations and maintenance contention is that the costs can be minimized by the city focusing only on natural parks. The cost of operations is higher for parks that contain elements such as athletic fields. The city could decide to have the parks designed to require minimal maintenance costs.

Finally, the empirical evidence in the past two decades overwhelmingly reports that while residential development may generate significant tax revenue, the cost of providing public services and infrastructure to that development is likely to exceed the tax revenue emanating from it. Thus, preserving open space and creating parks can be a less expensive alternative to development. Indeed, some communities have elected to acquire park and open space land rather than allow it to be used for residential development because this reduces the net deficit for their residents that would occur if new homes were built on that land. [14]

The political case for parkland dedication

Parkland dedication gives local government elected officials in Texas a partial solution to their capital funding problems. There are four main reasons why they represent the safest political option for funding new parks.

First, Texas is a fiscally conservative state, and this is a fiscally conservative action. A bedrock principle of fiscal conservation is the Benefit Principle, which states that those who benefit from government services should pay for them.

Second, elected officials can respond to infrastructure and amenity needs created by new growth in one of three ways:

1. Request existing residents to pay the bills by approving the issuance of general obligation bonds, which will raise their taxes. Many residents are likely to ask, "Why should we agree to raise our property taxes to build parks that are many miles away from where we live and that we will never use?"
2. Decline to provide the new infrastructure and amenities or provide them at a lower level of service than prevails elsewhere in the community. In effect, this means accepting a reduction in the community's quality of life.
3. Require new development to pay the cost of providing the infrastructure and amenities the need for which has been created by them.

Few elected officials are likely to run for office on a platform of raising the taxes of existing residents (option 1) or lowering a community's quality of life (option 2). Indeed, if a public referendum was held inviting the public to vote on which option they would prefer, the likely result would be overwhelming support for option (3).

Third, ostensibly, it would appear that the dedication requirement will lead to some potential home buyers being priced out of the market. The development community is likely to vigorously promote this position. Thus, if an additional (say) $1,000 parkland dedication fee is added to a starter home costing (say) $140,000, representing a price increase of approximately 7/10^{ths} of 1 percent, the developers are likely to argue that it will price out some potential home buyers. If an ordinance is revised every 3 years, it means that over the 3-year period the increase will average 2½/10^{ths} of 1 percent per year. It is unlikely that any other cost of development will increase by such a small amount over a 3-year period. Thus, it is unlikely that such a cost increase would price potential "low-end" homeowners out of the market.

Further, the reality of parkland dedication requirements is that **they are not likely to lead to any increase in the price of a new home.** The new parkland dedication fee could be absorbed in one of three ways.

a. The option of passing it through to the home buyer as suggested in the previous paragraph may be considered. However, if the market would bear a price of $141,000 rather than a price of $140,000, developers would charge that amount because their goal is to maximize their profits. Hence, market forces dictate that a price of $141,000 is unlikely to be an option.

b. The additional $1,000 fee could be absorbed by the developer. This is not a viable option because a developer's willingness to accept the financial risk associated with a project is predicated on a given projected profit margin. Without that profit margin, the project will not proceed, so it cannot be reduced.

c. The non-feasibility of options (a) and (b) mean that the only viable option for absorbing the additional $1,000 dedication fee is to reduce the developer's costs. This can be done in one of three ways:

   (i) Reduce the house size by 10 square feet (assuming a cost of $100 a square foot). Thus, instead of the homes being 1,400 square feet, they would be 1,390 square feet.

   (ii) Engage in "value engineering" to reduce the costs of finishes, fittings, furnishings, or landscaping in the house by $1,000.

   (iii) Pay less for the land. The imposition of a $1,000 parkland dedication fee effectively changes market forces and reduces the value of the land to be sold. This is explained in the following scenario:

Suppose a developer is about to buy a piece of land when the city announces a $1,000 increase in the park dedication requirement. Before the increase, the developer could build 100 units on the land and sell them for $150,000 each. Based on the cost of construction and required profit, she was willing to pay $2 million for the land. As a result of the new ordinance, the builder concludes that she now must charge $151,000 per unit because of the increased cost. However, if the developer can now sell the houses for $151,000 each, why did she not charge that price before the imposition of the fee? In fact, the market for comparable housing limits her to selling the houses for $150,000 each; thus, she will not be able to sell them for $151,000. As a result, the builder is willing to pay only $1.9 million for the land, so she is able to reduce costs and maintain her profit margin.

A fourth reason supporting strong parkland dedication ordinances is that if taxes are raised to pay for parks in new areas, the assessed property values of existing homes in the community will be effectively reduced because potential buyers are likely to pay less for a property with a higher tax burden.[15] A reported corollary of this is that because parkland dedication ordinances potentially lower taxes, they may increase the demand for housing, especially for "small homes within inner suburban areas . . . These are also the areas that offer the greatest job opportunities for lower-skilled workers." [16] These authors explain their empirical findings by suggesting

that exactions such as parkland dedications, "decrease the fiscal deficit imposed on existing residents by new development, allowing more affordable homes to be built within suburban areas." [15]

The limited use of parkland dedication in Texas is surprising given its legal validation, the expansion of its scope that has been accepted by the courts, and its ability to shift the tax burden of maintaining existing service levels away from existing residents to those new residents who create the need for additional amenities. This study suggests that the recognition of these appealing political realities remains limited in Texas. Clearly, there is considerable scope both for extending parkland dedication to municipalities that do not have such an ordinance, and for increasing the requirements in those cities that currently have an ordinance.

References

1. John L. Crompton, "Alternative Approaches to Securing Recreation and Park Amenities through Exactions," *Journal of Park and Recreation Administration* 15(1) (1997): 16–36.

2. L. H. Weir, Parks: *A Manual of Municipal and County Parks* (New York: A.S. Barnes and Co., 1928).

3. Douglas Ehman, *Mandatory Dedication of Park and Open Space Land: Effectiveness and Attitudes towards This Method of Public Land Acquisition in Texas.* Thesis submitted to Department of Recreation and Parks, Texas A&M University (1979).

4. James E. Fletcher, Ronald A. Kaiser, and Susan Groger, "An Assessment of the Importance and Performance of Park Impact Fees in Funding Park and Recreation Infrastructure," *Journal of Park and Recreation Administration* 10(3) (1992): 73–87.

5. *City of College Station v. Turtle Rock Corporation*, 680 S.W. 2d. 802 (Tex 1984).

6. Duncan and Associates, *National Impact Fee Survey: 2007.* (Austin, TX: Duncan and Associates, 2007).

7. *Dolan v. City of Tigard*, 512 U.S. 374 (1994).

8. Berg Development Company v City of Missouri City, 603 S.W. 2d, 273 (1980).

9. *Nollan v. California Coastal Commission*, 483 U.S. 825 (1987).

10. James D. Mertes and James R. Hall, *Park, Recreation, Open Space and Greenway Guidelines* (Ashburn, VA: National Recreation and Park Association, 1995).

11. Texas Municipal League, *Revenue Manual for Texas Cities* (Austin, Texas: Texas Municipal League, 2007).

12. Amos Tversky and Daniel Kahneman, "The Framing of Decisions and the Psychology of Choice," *Science* 211 (1981): 453–458.

13. Irwin P. Levin, Sandra L. Schneider, and Gary J. Gaeth, "All Frames Are Not Created Equal: A Typology and Critical Analysis of Framing Efforts," *Organizational Behavior and Human Decision Processes* 76(2) (1998): 149–188.

14. John L. Crompton, *The Proximate Principle* (Ashburn, VA: National Recreation and Park Association, 2004).

15. Jan K. Bruecker, "Infrastructure Financing and Urban Development: The Economics of Impact Fees, *Journal of Public Economics* 66 (1997): 383–407.

16. Gregory Burge and Keith Ihlanfeldt, "Impact of Fees on Single-Family Home Construction," *Journal of Urban Economics* 60, (2006): 284–306.

Please Complete this Publication Evaluation
Parkland Dedication Ordinances

Evaluation

Your views on the quality and effectiveness of Texas AgriLife Extension Service publications are extremely important. Please take a few minutes to review this publication. Your answers to these questions will help us better meet your needs as well as acquire funding to continue producing affordable publications and programs. You may either fax your response to (979) 845-0466 or complete the survey online at http://www.rpts.tamu.edu/extensionprograms/index.htm.

How satisfied are you with the following aspects of this publication?

	Not at all	Slightly	Somewhat	Mostly	Completely
Accuracy of information	☐	☐	☐	☐	☐
Ability to understand information	☐	☐	☐	☐	☐
Helpfulness of the information	☐	☐	☐	☐	☐
Relevance of the examples used	☐	☐	☐	☐	☐
Author's knowledge level of the subject matter	☐	☐	☐	☐	☐

Please indicate your knowledge level of this topic.

	Before reading this publication				**After** reading this publication			
	Poor	Fair	Good	Excellent	Poor	Fair	Good	Excellent
Which best describes your level of understanding of this topic?	☐	☐	☐	☐	☐	☐	☐	☐

Please indicate your intentions to adopt or apply the information learned from this publication.

Not applicable	Definitely will not	Will not	Undecided	Probably will	Definitely will
☐	☐	☐	☐	☐	☐

Overall, how valuable to you or your community is the information provided?

Not applicable	Not at all	Slightly	Somewhat	Quite	Extremely
☐	☐	☐	☐	☐	☐

Do you anticipate any economic benefit for your community as a direct result of what you learned from this AgriLife Extension publication? If yes, how?

Please share any additional comments you have regarding this publication:

What additional information in this or related subject area(s) would be useful to you, your agency, or your community?

Notes

AgriLIFE EXTENSION
Texas A&M System

Texas A&M AgriLife Extension Service *AgriLifeExtension.tamu.edu*

More Extension publications can be found at *AgriLifeBookstore.org*