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An Analysis of Parkland Dedication Ordinances in Texas

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EXECUTIVE SUMMARY: Parkland dedication ordinances from 48 Texas cities were analyzed. All ordinances incorporated a land requirement and a fee in lieu alternative to it, but only 10 of them contained a provision for a park development fee. Most of the cities that imposed a fee in lieu and/or park development fee appeared to derive them arbitrarily rather than empirically, which is unlikely to be accepted by the courts. A recommended approach for calculating the level of service that meets the U.S. Supreme Court's criterion of "rough proportionality" is provided. Other widespread limitations among the ordinances were a failure to: incorporate a time period for expending fees; give credit for private amenities within a development; extend ordinances beyond the level of neighborhood parks and to subdivisions in the extra territorial jurisdiction; and mandate periodic reviews of ordinances to update them. Reasons for the underutilization of parkland dedication ordinances identified in the analyses and strategies for rectifying this issue are addressed by posing three questions. First, what are the sources of the unrealized potential of parkland dedication ordinances? Three reasons relating to their myopic scope are identified: failure to extend ordinances beyond neighborhood parks to embrace community and regional parks; failure to extend ordinance requirements into cities' extraterritorial jurisdictions; and inability to take advantage of reimbursement provision ordinances. A second source of their unrealized potential is the failure to set dedications at a level that covers all the costs associated with the acquisition and development of the additional park capacity required to meet the demands of new residents. The second question was, why is their potential not being realized? Two reasons are suggested: inertia, and vigorous opposition from the development community. The inertia stems from the ordinances not appearing on the agendas of many elected officials because no requirement is included that they be reviewed at regular intervals. Developers routinely oppose any expansions of these ordinances and they are a powerful political constituency in many communities. Rebuttals to the developers' arguments are provided. The third question asks, why should elected officials warmly embrace parkland dedication? There are three reasons: it is fiscally conservative in that those who are benefitting from the service are paying for it; the alternatives are to raise taxes on existing residents or lower the community's quality of life, neither of which are politically attractive; and a recognition that parkland dedication requirements are not likely to lead to any resident being unable to afford a new home.

KEYWORDS: Parkland dedication, impact fees, exactions, Texas

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Parkland dedication is a local government requirement imposed on subdivision developers or builders, mandating that they 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 are a means of providing park facilities in newly developed areas of a jurisdiction without burdening existing city residents. They may be conceptualized as a type of user fee because the intent is that the landowner, developer, or new homeowners, who are responsible for creating the demand for the new park facilities, should pay for the cost of new parks.

The philosophy is that because new development generates a need for additional park amenities, 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 proximate to them. Thus, they make no positive contribution to the quality of life of existing residents, suggesting there is no reason why existing residents should 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 is responsive to market conditions. If fewer new people come to the city than predicted, then less money is forthcoming, so fewer parks are built. Similarly, as costs for acquisition and development of parks increase (or decrease), then parkland dedication requirements can be increased (or decreased) accordingly.

Perspectives toward parkland dedication are likely to vary among different stakeholders: elected officials, developers, new residents and existing residents (Crompton 1997). However, from the perspective of elected officials, who are the key decision makers on this issue, parkland dedication enables them 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 purchase their new homes, and to avoid authorizing development without ensuring that the park infrastructure necessary to support the new demands is available.

The purpose of this paper is to report on the present status of parkland dedication ordinances in Texas. A survey was sent to all municipalities in Texas that were known to have public park amenities. Out of the 117 cities that were contacted, 83 responded and 48 reported they had parkland dedication ordinances. Copies of all those ordinances were obtained and can be viewed at www.rpts.tamu.edu/landdedication.¹ This paper analyzes the content of those 48 ordinances.

Literature Review

Parkland dedication in the U.S. 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 per cent 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." (Weir, 1928).

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, Ehman (1979) surveyed 107 Texas cities. He received responses from 59 of them, and 12 reported having a parkland dedication ordinance because of the 12 municipalities reported that they did not enforce their ordinance 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%) and 19 of them reported having parkland dedication ordinances (Fletcher, Kaiser, & Groger, 1992).

In those early days of parkland dedication ordinances, there was some doubt about their legality in Texas. Some claimed that they were unconstitutional because such ordinances violated the Fifth Amendment to the U.S. Constitution, the last twelve words of which state, "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 vs Turtle Rock Corporation* 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, there were fewer than 10 cities in Texas with active ordinances. Once doubts relating to the constitutionality of such ordinances were removed in 1984, there was a marked increase in the number of cities adopting them, with an additional 15 cities passing ordinances between 1985 and 1989. Since 1989, a further 16 cities have enacted parkland dedication ordinances.

There is sometimes confusion between parkland dedication fees and impact fees. Parkland dedications emanate from the "police powers" of Texas home rule municipalities, which enable cities to take actions that promote the health, safety, and welfare of their residents. In contrast, impact fees require state legislative statutory enabling authority before they can be imposed. Among the 27 states that have passed impact fee enabling legislation, 22 of them 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 (Duncan and Associates, 2007). 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, this enabling authority for impact fees does not exist in Texas. Indeed, in 1986, when the Texas legislature authorized impact fees they were confined only to "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 in the 1986 legislation: "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 acreage which was based on the number of

residents expected to reside in an area. There were three inherent weaknesses in these ordinances:

- 1. 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 upon (often drainage ditches, floodplain or detention ponds) and it may also be unsuitable for park use.
- 3. Location of the parkland was determined by the location of the development.

These limitations quickly encouraged cities to broaden their ordinances so they authorized communities 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." This definition was rather nebulous, so after *Turtle Rock*, the focus of most legal challenges shifted away from whether parkland dedication was constitutionally legal to debating what constitutes a reasonable dedication requirement.

A definitive guideline for answering this question was provided a decade later in *Dolan vs City of Tigard (512 U.S. 374. 1994)* in which the U.S. Supreme Court ruled there must be a "rough proportionality" between the conditions imposed on a developer and 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, previous to 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 so they must now justify that an ordinance is fair. It requires cities to make individualized determinations that every parkland dedication affects 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 successfully challenged and ruled illegal.

The requirements of the Supreme Court's ruling are manifested in the introductory rubric of 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's interpretation of the *Dolan* cases 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."

The guidance provided by the *Turtle Rock*, *Dolan*, and some subsequent cases where courts have provided some minor clarifications of issues articulated in those two major cases, suggest there are four broad criteria for assessing the constitutionality of parkland dedication ordinances in Texas. These four criteria provide the framework for this paper: a) method of calculating a parkland dedication requirement demonstrating it is proportionate to the need created by a new development, b) adherence to the nexus principle, c) time limitation for expending fees in lieu, and d) scope and range of the ordinance.

Calculating the Amount of a Park Dedication Requirement

The dedication requirement in a parkland dedication ordinance should be comprised of three elements: a) a land requirement, b) a fee in lieu alternative to the land requirement, and c) a parks development fee. The first two elements were incorporated in all 48 Texas's ordinances reviewed in this study, but the park development fee is a more recent addition to 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 existing taxpayers. In some instances, the result is that the dedicated land is never developed into a park and remains sterile open space which detracts from a 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 pay for 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 *Dolan'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. It is important to note that the courts have consistently ruled that standards for new residents cannot be set at a higher level than those prevailing for existing residents. Thus, deficiencies in supply of park amenities arising from demand generated by earlier development cannot be funded by imposing higher dedications on new developments. A recommended approach for calculating a parkland dedication requirement based on existing level of service is illustrated in Table 1, which describes how the City of College Station ascertained its parkland dedication requirement for both neighborhood parks and community parks. There are four parts to the calculation.

Dedication Requirements for Neighborhood Parks in the City of College Station

1. Land Requirements: The current level of service is one (1) acre per 285 people. 2008 Total Population: 87,758

2.80 Persons per Household (PPH) for Single Family and 2.28 PPH for Multi-Family based on Census information for owner and renter-occupied units.

Single Family	Multi-Family
285 people/2.80 PPH = 102 DUs	285 people/2.28 PPH = 125 DUs
1 Acre per 102 DUs	1 Acre per 125 DUs

2. Fee in Lieu of Land: (Assume 1 acre costs \$32,000 to purchase).

Single Family	Multi-Family
\$32,000/102 DUs = \$314 per DU	\$32,000/125 DUs = \$256 per DU

3. 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 six 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 *Multi-Family* \$273 x 2.28 PPH = \$622 per DU

4. Total Neighborhood Park Fee

Single FamilyMulti-Family\$314 + \$764 = \$1,078\$256 + \$622 = \$878

The neighborhood parks calculation is used for the purpose of illustration. Part 1 derives the current level of service of one 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 multi-family dwellings. These averages are available from the U.S. Census Bureau. This establishes the land dedication requirement at one acre per 102 DUs for single family and per 125 DUs for multi-family 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 the city of 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 six 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 constructed, and they will capture higher land values from areas where the most expensive housing is located.

Part 3 in Table 1 calculates the park development fee. This was done by listing the elements incorporated in a typical College Station neighborhood park and costing them. 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 and \$622 for single and multifamily units, respectively. Part 4 aggregates Parts 2 and 3 to derive total neighborhood park fees of \$1,078 and \$878 for single and multifamily units, respectively. 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.

Overview Of Parkland Dedication Requirements In Texas Cities

Table 2 reports the current level of parkland provision for the Texas cities with dedication ordinances in column 5. These data 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 U.S. Census Bureau data. In columns 6 through 9, Table 2 uses the same DUs measure to report the current dedication requirements for parkland in terms of DUs per acre and for the alternative fee in lieu option.

The disparity is striking between the ratios in column 5, which calculate the current level of park provision, and those in column 6, which report the parkland dedication requirement. If the criterion of "rough proportionality" was being applied, then these ratios should be identical. These comparative data clearly indicate that, based on the Supreme Court ruling, in almost all Texas cities, the current parkland dedication requirement is much too low.

Calculation of the Parkland Dedication Requirement

Most cities responding to the survey express their current parkland dedication requirements in terms of DUs per acre. In some instances, the requirement for single-family and multifamily dwelling units are different. For example, in College Station, the single-family unit requirement for neighborhood parks is 102 DUs per acre, while for multifamily developments, it is 125 DUs per acre. This recognizes that both size of household and building density are likely to be different 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 be different.

There were four Texas cities whose dedication requirements are expressed as a percentage of the tract to be developed. Corpus Christi and Deer Park both require 5% of the total land area of the subdivision, while in Elgin the amount is 8%. Leander uses both the acres per 1000 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,

	Wylie	Weslaco	Waxahachie	The Colony	Temple	Sugarland	Southlake	San Antonio	Rowlett	Rockwall	Plano	Pflugerville	Pearland	New Braunfels	Missouri City	Mansfield	McKinney	Lewisville	Leander	League City	La Porte	Keller	Hutto	Houston	Highland Village	Haltom	Grapevine	Frisco	Flower Mound	Edinburg	Denton	Deer Park	Corpus Christi	Corinth	Colleyville	College Station	Cedar Park	Cedar Hill	Bryan	Austin	Angleton	Alvin		
	32,000	32,000	25,000	36,000	58,447	74,472	24,900	1,282,800	53,000	30,000	240,000	30,000	70,000	45,000	63,910	55,000	110,000	89,000	23,000	62,500	33,500	34,800	14,000	1,953,631	14,500	39,000	46,684	89,000	60,450	68,802	105,000	30,000	293,122	18,000	21,720	88,183	45,000	43,500	72,015	656,562	18,130	21,500	Population	Dwelling Units
	5,326	10,230	7,909	8,812	23,511	21,090	6,614	433,122	14,580	7,089	86,078	5,239	13,922	14,896	17,481	9,172	19,462	31,764	2,612	17,280	11,720	9,216	424	783,009	4,009	15,716	16,486	13,683	16,833	16,031	32,716	9,921	107,831	4,100	6,549	34,619	8,914	11,075	25,703	276,842	7,220	8,442	# DL	s
	592.00	250.00	230.00	1,925.00	727.00	896.30	644.10	16,310.00	994.00	480.00	3,800.00	450.00	376.92	408.00	848.99	664.00	1,604.00	1,100.00	90.00	1,041.00	188.00	415.00	150.00	19,699.00	354.00	184.00	1,492.00	1,300.00	575.00	253.00	1,158.00	527.00	1,586.46	179.00	202.00	1,274.00	847.00	653.75	580.00	16,862.00	100.00	740.00	Total Park Acreage	Current Level of Parkland Provision
	9.00	40.92	34.39	4.58	32.34	23.53	10.27	26.56	14.67	14.77	22.65	11.64	36.94	36.51	20.59	13.81	12.13	28.88	29.02	16.60	62.34	22.21	2.83	39.75	11.32	85.41	11.05	10.53	29.27	63.36	28.25	18.83	67.97	22.91	32.42	27.17	10.52	16.94	44.32	16.42	72.20	11.41	DU/Acre	and Provision
	20.00	N/A	100.00	64.00	133.00	114.38	40.00	70.00	71.92	67.00	N/A	50.00	100.00	150.00	100.00	100.00	50.00	33.00	NA	90.00	93.00	30.00	50.00	55.50	N/A	150.00	145.20	100.00	29.76	125.00	170.21	NA	NA	50.00	25.00	102.00	41.67	133.00	74.00	83.33	200.00	100.00	DU/Acre	Land De
								114.00		250.00									10.54			60.00														125.00			90.00				e DU/Acre Multi family	dication Req.
This does not include park	b/w \$1500 - \$3000	\$ 150.00		market value	\$ 225.00	\$ 350.00	market value) market value	~) 151.00-620.00	\$ 467.47	market value	market value	\$ 100.00	\$ 900.00	\$ 500.00	market value	\$ 750.00	\$ 550.00	\$ 1,	\$ 490.00	\$ 1,	market value	\$ 700.00	\$ 2,160.00	ري ا	\$ 1,416.00	\$ 300.00	market value	\$ 250.00	market value	5% of total value	5% of total value		\$ 1,802.00	\$	\$ 720.00	\$ 250.00	\$162.00	\$ 650.00	\$ 1,083.00	\$ 300.00	SDU	Fee-in-Lieu*ª
ark	\$ 800.00	\$ 350.00	ۍ ۱	\$	\$	\$ 240.00	ۍ ۱	ۍ ۱	ۍ ۱	ۍ ۲	\$ 323.96	\$ '	\$	•	\$	\$	\$ -	\$ -	د ه ۱	ۍ ۱	ب	د ۲			ۍ ۱	\$ '	ۍ ۲	د ې ا	ۍ ۱	\$ '	ۍ ۱	\$ -	\$	ۍ ۱	\$		\$ 480.00	\$	\$133.00	\$	\$ 250.00		MDU	J*a

development fees.

Table 2. Current Parkland Dedication Requirements in Texas Cities.

adopting the percentage approach means the dedication requirement remains the same regardless of the number of people per acre living in the homes that are constructed. 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 conceptual criterion for determining the amount of cash for a fee in lieu is that it should 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 explicitly cited in the ordinances of 15 Texas cities. However, there was wide divergence among these cities on the operationalizations they 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 seems unlikely that the city could defend a fee that is higher than fair market value! The Allen ordinance states, "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 frequently is presented as a fixed amount per DU. How that amount is derived is unknown. At least in some cases, it is likely that it is arbitrarily determined, which is an approach courts have rejected. However, given that cities have a tendency to fix the amount far below fair market value, this practice is unlikely to be challenged by developers.

Some cities, for example, Rockwall and Haltom, commit to annually revise the fee in lieu amount to reflect changes in land values. Thus, 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 has to 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 have two methods to pick from. This was used in Austin.

The Colony 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 pick whichever 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: a) the most recent appraisal of all or part of the property made by the Central Appraisal District; b) confirmed 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 c) Where, in the judgment of the Council, a) or b) 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 operationalize fair market value by equating it to the appraised value established by the county tax assessor. Despite the legal requirement in Texas that assessed value should be set at fair market value, there is widespread recognition that many tax assessors set their appraisals below fair market value in order 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, which 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 which require only that land be dedicated and do not impose a park development fee, 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.

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.

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 3. In three of the 10 cities, a different park development fee was charged for single-dwelling units (SDU) than for multiple-dwelling units (MDU).

City	All	SDU	MDU
Bryan		\$385	\$292
Cedar Hill	\$250		
College Station		\$1402	\$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 (depending on district level of service)		

Table 3. Park Development Fee Amounts.

Four of the 10 communities 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 (e.g. \$250, \$500, and \$750) and their wide disparity, suggests there was a degree of arbitrariness in fixing these fees, which is unlikely to be accepted by the courts.

The other seven cities provide an empirical basis for deriving their park improvement fees. In four cases, 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 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.

The cities of 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's neighborhood parks was shown earlier in Table 1. 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 which should be incorporated.

If residents of new subdivisions are required to finance new parks for which they generate a need, then it may be argued that they should not have to help retrieve outstanding debt for development of similar existing parks elsewhere in the community, which frequently they are required to do because it is incorporated into their ad valorem tax. If the rest of the community does not share the cost of their parks, 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 towards incorporating a development fee element in the dedication, this equity concern is likely to become more prominent.

The Leverage Potential of Dedication Ordinances

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 Table 4, 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 table'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, then such cities subsequently will have to adopt the much more challenging political strategy of requesting residents to approve bond issues for park land to achieve a given desired level of service.

Table 4. Illustration of How a City's Investment in Parkland Provides the Potential for Leveraging Private Development Investment in Parks.

Scenario:

- (i) Cities A and B both have a population of 10,000 (i.e. 4000 dwelling units).
- (ii) Both cities will increase to 25,000 population (i.e. 10,000 dwelling units) in the next 10 years.
- (iii) City A has invested in 200 acres of public parkland, while 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 (4000/200)
 City B: 1 acre per 200 DUs (4000/20)
- (iv) Land costs in both cities are \$30,000 per acre
- (v) Park development costs in both cities are \$50,000 per acre.

Initial Investment in Parks with G.O. Bonds

	City A	City B
Cost of Land	200 acres @ \$30,000 = \$6 million	20 acres @ \$30,000 = \$600,000
Park Development Costs	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

	City A	City B
Potential dedication requirement over the 10-year period	10,000 pop/20DUs = 500 acres	10,000 pop/200 DUs = 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 Dedicatio	n \$40 million	\$4 million

Conclusion

- At the end of 10 years' growth, City B would have to issue an additional \$36 million in GO 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.

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 has to be given for private amenities when calculating the dedication requirements. Out of the 48 ordinances reviewed, 27 made no provision for giving credit for private amenities. A credit of "up to fifty percent" was the most frequently authorized credit, appearing in the ordinances of 12 cities. The wording of the Corpus Christi ordinance was typical:

Up to fifty (50) percent 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 how much credit should be allowed up to a maximum of 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 attempted 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 eligibility for credit, the following criteria were developed with each element allowing for a 10% credit: a) exceeding the open space requirement by more than 25%, b) providing swimming pool(s), c) providing playgrounds, d) providing volleyball, basketball, and/or tennis courts, e) providing walking/jogging trails.

Whenever credit is given for private amenities, the ordinances invariably include requirements that ensure a stable source of funding is 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 four cities authorize credit 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 one acre for every five

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 operationalizing "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 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. An understanding of the impact can be assessed by using the data in Table 1 and substituting a lower level of service than the prevailing one acre per 285 people (e.g., one 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; insert an arbitrary upper limit of 50 percent or 100 percent; or 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 a legal challenge in the future.

Reimbursement Clause

Many communities require that neighborhood parks usually be at least five acres in size, because the cost of sending crews to maintain smaller parks 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 five-acre minimum standard. Consequently, it is usual for the alternative dedication of fee in lieu of land to be accepted.

However, accepting the fee in lieu option creates a conundrum. When sufficient cash accrues from these payments, the city attempts to purchase 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 floodplain or detention basin land that developers could not use, but which is also often inferior for use as a park. Alternatively, if potentially good park land is still available, the cost of its acquisition is likely to be relatively high since land prices are likely to rise as 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 facilitate the operationalization of this reimbursement clause, in a 2008 bond referendum the voters of College Station approved a \$1 million "parkland revolving fund." This will enable parkland to be acquired and be replenished from subsequent fees in lieu. This enables a city to purchase parkland ahead of development by using general obligation bonds or certificates of obligation, and to subsequently reimburse itself, at least in park, from the fees in lieu. Thus, a reimbursement dedication fee apportions the cost of providing park facilities for new development prior to construction 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, can 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, at 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 (Crompton 2004).

Timing of the Dedication Requirement

In almost all the ordinances that were reviewed, the land dedication, fee in lieu, and/ or park development fee has to be paid "prior to filing the final plat for record." However, there were seven municipalities that 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 how many apartments there will be, so the fee is unknown. Since 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 it 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 multi-family dwelling."

Adherence To The Nexus Principle

In the *Turtle Rock* case, the Texas Supreme Court referred to *Berg Development Co* vs *City of Missouri City*, 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 by the U.S. Supreme Court in Nollan vs California Coastal Commission (483 U.S. 825.1987). 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 facilities being developed with the resources provided by the developer. It requires that the dedicated resources must be used to provide facilities that benefit those who will reside 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 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 becomes greater, it is more likely that an ordinance will not be legally defensible based on rational nexus. On the other hand, if the geographical districts are made very small so that they are more defensible to a legal challenge, then it will take much longer for sufficient 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, but in most cities a standard of $\frac{1}{4}$, $\frac{1}{2}$ or 1 mile within 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.

There is general adherence to the nexus principle in the 48 ordinances. Most of the communities that did not specify the need for expenditures to be made only in the zone in which they were deposited are relatively small. In these cases, all residents in the city could be deemed as being proximate to a park wherever it is located. There are a few larger cities where the nexus requirement is not specified in the ordinance. This is surprising, but 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

Time Limitation for Expending Fees in Lieu

The courts have made it clear that when fees in lieu are paid, there is an expectation that the homes generating them will benefit from new park amenities within a reasonable timeframe. Nevertheless, 16 of the 48 cities fail to specify a timeframe of any kind which is a limitation of their ordinances. Among the remaining cities, the term "reasonable timeframe" is most commonly operationalized either as 10 years (13 cities) or five years

(nine cities). Others range from a low of two years to eight years (four cities). Variations in the timeframe may reflect differences in rate of growth. The five-year timeframe 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 rapid growth communities, that shorter timeframes of two or three years are sufficient to collect funds, identify and acquire available park land, and to let contracts to develop a park. For many communities, it seems likely that an eight- or 10-year timeframe is required to accomplish these tasks.

There were no communities that included time periods that differed according to type of park. This was surprising. It may be feasible to accrue sufficient resources to fund a neighborhood park within five years in a fast-growing city. However, it is likely to require more time to fund a community park within the same timeframe because: a) the costs are likely to be significantly greater; and b) the rate of growth in a particular neighborhood may be much faster than in other neighborhoods which in aggregate constitute a community park zone.

If the reasonable timeframe criterion is not met, then ordinances have to 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.

The likelihood of refunds being requested is minimal even if the timeframe is not met because: i) The developer responsible for paying the fee in lieu is unlikely to be sufficiently concerned to monitor how the money was spent five years later; and ii) there is only a one 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: a) the type of parks for which they provided, b), the inclusion or exclusion of non-residential development, and c) 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

The ordinances of 17 of the 48 municipalities confine their parkland dedication authority to neighborhood parks. This relatively restricted scope of approximately one-third of the ordinances is surprising, since the trend to a broader scope was noted over 15 years ago in a 1992 study that investigated 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 (Kaiser, Fletcher & Groger, 1992, p. 23).

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" (p. 23).

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" (Mertes & Hall, 1995, p. 84).

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 non-specific; broad based and specific; and limited scope beyond the neighborhood level. Examples of the language used in each of these types of ordinances are presented. in Table 5. Although most cities' enabling legislation gave them a mandate to require dedication for more than neighborhood parks, it should be noted that tradition, inertia, and presumably opposition from the development community, in many cases confined their implementation of dedication only to neighborhood parks.

Non-residential Park Land Dedications

The cities of Colleyville, Hutto, and Southlake extend their ordinances to include non-residential as well as residential property. Thus, 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 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 impact an individual development has on creating a need for parks.

The Colleyville and Southlake ordinances recognize that it is necessary to make the need case and use identical language in an effort 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

Examples of Non-Specific 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."

The ordinances in some of these communities confirm that the fee in lieu also is distributed across all types of parks. For example, the Rosenberg 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 included:

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]."

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 still appears to lack the specificity needed 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 non-residential development that it is unlikely developers will incur the cost and illwill with the city by challenging it. 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 Extra Territorial Jurisdictions

Cities in Texas have legislative authority to regulate subdivisions constructed in their Extra Territorial Jurisdictions (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 three and a half miles beyond the existing boundaries of a city with fewer than 100,000 population. It extends to five 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. 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. In an attempt to encourage developments to carry these costs until they are annexed by the city, the city of Austin ordinance increases its limit of 50 percent credit for private amenities to 100 percent in the ETJ:

For subdivisions located outside the city limits, up to (100) percent 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.

Timeframe for Revising Ordinances

In only 11 of the 48 ordinances is a timeframe for reviewing the ordinance incorporated. Thus, 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 three-year review clause also appeared in the Bryan, League City, and Plano ordinances; in Wylie it is every two years; while in San Antonio and Arlington the review period is every five years.

There were five communities in which revisions to fees in lieu are integrated into the annual budget process: Angleton, Haltom, Pflugerville, Rockwell, 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 one year period to provide sufficient 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 going through a controversial public hearing process on this issue each year is likely to be unappealing to most elected officials.

A compromise solution which avoids annual reviews, but attempts to reflect increases in land values in interim years between major five-year reviews is incorporated in the San Antonio and Arlington ordinances. Thus, 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 Parkland

Most ordinances include guidelines to assist in determining whether or not 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 analyzed in this section: minimum size and acceptability of floodplain and detention pond land.

Minimum Size

Most ordinances (37 of the 48) specify a preferred minimum size for dedicated parkland, recognizing that very small parks provide limited scope for providing amenities and are relatively expensive to maintain in terms of cost per user served. Preferences range from ¹/₄ acre in League City to 10 acres in McKinney, Rockwall and Sugarland, with the most frequent preferred minimum size being 5 acres (n = 15). It is emphasized that these are desired minimums and none of the ordinances categorically reject the possibility of accepting land dedications that are lower 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.

Acceptance of Floodplain and Detention Pond Land

There are a few ordinances in which the issue of accepting floodplain land as part of a dedication requirement is not mentioned, but the large majority of them consider it to be generally undesirable. 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, which they accept in a dedication. In most cases, 50% is specified. Thus, San Antonio requires "Areas within a 100-year floodplain shall not exceed 50% of the area counted as parkland." Variations in the 50% requirement range from The Colony, "Not more than 20% of the proposed park is to be located within the 100 year floodplain," to Denton, "Floodplain areas shall generally not exceed 75% of the total park site."

There were 11 cities that specify that if floodplain land is accepted, then its contribution towards 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." Four additional communities adopted this three-to-one ratio and six specify a 2:1 ratio.

Surprisingly, only a small number of ordinances address the issue of detention ponds being accepted to meet dedication requirements. Among them, the most commonly used language is similar to the generic statement used 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 seventy-five percent (75%) or more of the active and usable area is designed for recreational use and the area(s) conforms to the requirements below.

- 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.
- 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.
- Detention areas may count a maximum of fifty percent (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.

Discussion

To the best of the author's knowledge, this is the first detailed critique of parkland dedication ordinances to appear in the literature. While the ordinances analyzed were confined to Texas, it is likely that many of the findings emanating from this analysis would be representative across the U.S. The analysis revealed an array of limitations and failings among the ordinances resulting in the mechanism being underutilized. In this concluding section strategies to counter the limitations and underutilization are suggested.

The analysis showed that over the past 25 years, there has been an increasing use of parkland dedication ordinances by Texas municipalities. However, the dedication requirements enshrined in their ordinances are much too low given the prevailing fiscal and legal environments. The unrealized potential of these ordinances is a function of their restricted scope and of below-cost dedication requirements.

Restricted Scope

The scope of parkland dedication ordinances and their implementation was restricted in three ways. First, the failure to extend the scope of ordinances beyond neighborhood parks to include community and regional parks was evident in 17 of the 48 ordinances. 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. There has been increasing recognition of this over the past 15 years, and there is no longer any legal reason for them to be limited only to neighborhood parks. A second source of restricted scope was manifested by the finding that only seven of the 48 ordinances required parkland dedications from developments in their Extra Territorial Jurisdictions (ETJ). Although it is a complex and lengthy process, Texas law gives cities the right to annex land within their ETJ. 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, then when these subdivisions are annexed into the city they will have no public park amenities and there will be pressure from those homeowners for 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 did include a reimbursement clause enabling a city to fund the initial acquisition and/or development of a park, and subsequently to reimburse itself from the fees in lieu and/or park development fees. This enables parks to be provided ahead of 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 the revenue stream they provide is insufficient to 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 unrealized potential is the failure to set dedications at a level that covers all the 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: to be proactive in making an "individualized determination" that 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.

Almost all Texas cities use an arbitrary number for parkland dedication instead of a number empirically derived as illustrated in Table 1, which is necessary to meet the "individualized determination" criterion. The *Dolan* ruling put cities on notice that they have to provide quantitative evidence that their dedication requirement is appropriate.

Most cities specified their standard in terms of number of dwelling units per acre of parkland, but few incorporated a methodology or calculations showing how this standard was derived. This lack of explanation extended to derivation of the fee in lieu (and in some instances to the park development fee in cases where it was imposed). Only in 15 of the 48 ordinances was it specified 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 operationalizations used to establish the equivalence of fair market value were obscure and appeared to be arbitrary. The typical response to follow-ups by the author with city officials seeking information on how the standards and fees in lieu were determined was, "That is the figure the council decided upon."

Many of the requirements were expressed in "rounded numbers," suggesting they were arbitrarily derived. Thus, when dwelling units per acre were specified, numbers such as 25, 50, 100, and 150 were prevalent. Similarly, common numbers for fees in lieu included \$250, \$300, \$500, \$600, or \$750. It is unlikely that a legitimate empirical procedure would consistently yield such rounded numbers.

The most glaring examples of arbitrariness were the four ordinances that specified their standard in terms of the percentage of tract developed. This means the dedication requirement remains the same irrespective of whether there are five or 100 people per acre in the homes that are constructed! This approach clearly is legally unacceptable.

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 unrealistically low dedication requirements. They may rationalize that it is an accomplishment to get such an ordinance passed and "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, if the dedications are periodically reviewed, there is a tendency for councils to raise them by an arbitrary, incremental amount of say, 5%, 10%, \$50, or \$100. Since the initial dedication was so low, these increments effectively keep them low. Thus, if an initial fee is set at \$300, a 10% increase three or five years later raises it only to \$330. During this same period, it is likely that the cost of acquiring and developing parks has increased far more than a \$30 per dwelling unit fee increase will cover. This process means the opportunity cost of park funding foregone increases quantumly as the years go by.

In addition to the failure to be proactive in making 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 should be based on the current level of park provision. However, the data in Table 2 show this is rarely the case. The magnitude of the difference between the ratios in column 5 (current level of parkland provision) and those in column 6 (dedication requirement) should be the same if there is adherence to rough proportionality. In some cities they are relatively similar, for example, Colleyville, Flower Mound, Keller and La Porte. However, in other communities there are wide disparities, for example, Hutto, The Colony, and Grapevine.

Indeed, 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 requirement 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 (i.e., by 720%), then 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 are indicative of the magnitude of the opportunity cost associated with current ordinances.

While 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 2 of these cities are compared with their park development fees, which were cited in Table 3, 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 2 suggest that increases between 150% and 1800% 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 paid a roughly proportionate share of these costs also.

Why is the Potential not being Realized?

The analysis clearly showed that Texas communities have parkland dedications that are far lower than the cost of providing parks for new homeowners at a community's prevailing level of service. There appear to be two main reasons for the failure to realize the potential of parkland dedication ordinances: inertia and vigorous opposition from the development community.

The inertia stems from parkland dedication ordinances not appearing on the agendas of many elected officials. Indeed, 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" (p. i), parkland dedication ordinances are not discussed or listed. 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 expanding their scope to parks far beyond the neighborhood level to which they were confined in the 1960s through the early '80s, and for adding a park development fee element. Only in 11 of the 48 cities was there any requirement 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.

The lack of regular review may explain the legal weaknesses manifested in many of the ordinances. There simply has been no reason to re-examine and update them to be consistent with contemporary best practice and court guidelines. Given these legal weaknesses, it is significant that there has been no substantive litigation initiated by the development community in Texas challenging parkland dedication ordinances in the 25 years that have passed since the *Turtle Rock* case in 1984. This suggests the nominal magnitude of 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.

A second reason elected officials have not capitalized on the potential of parkland dedication ordinances is because any suggested enhancements are invariably opposed by the development community which is a powerful constituency in most Texas cities. Thus, instead of the criterion for setting fees 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 find the principle of park land dedication to be repulsive and an anathema. It is this perspective that results in discussions of dedication issues with developers often being highly emotional.

In some contexts, animosity from developers may be perceived by some elected officials to endanger 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 oppose substantive dedications because they are 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's 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, then all residents are relatively proximate 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 five miles away from city center residents. These residents likely will never use them and, thus, will not be supportive of using ad valorem taxes to pay for them. Second, the rapid growth of Texas cities, combined with Texas's renowned fiscal conservatism and reluctance to support any tax increases, means that parks have to compete for limited funding with a plethora of other infrastructure and structure projects: roads; bike and hike trails; police and fire stations; city offices; structures for recreation, arts and seniors; et al. 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, which is 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" (p. 146).

Those in the development community who are supportive of 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 salability. Many real estate projects prominently feature recreation amenities in their promotional campaigns because they have determined these are assets that new home buyers seek. Hence, the requirement to provide park amenities often are 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 should be provided, rather than be mandated to give resources to a city and to have officials make the decisions.

Second, they 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 developers' long-term business prospects. Third, there is growing recognition among Texas residents 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 in cutbacks in the prevailing level of service. 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. Endorsement of a substantive parkland dedication ordinance may contribute to alleviating this negative image by demonstrating that developers 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, 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. They have little awareness or understanding of parkland dedication ordinances and do not recognize that they will be adversely impacted if they are merely nominal, so there generally is a lack of a proordinance constituency to counter opposition from the development community.

It is always difficult to win an argument based on the intangible notion of opportunity costs, when the opposition from the development community cites tangible costs that they purport are adversely impacting their business. What is out of sight is out of mind. 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 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 (Tversky & Kahneman 1981; Levin, Schneider, & Gaeth 1998). An example of how this was done in College Station is shown in Table 6. The first half of the table 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.

The second part of Table 6 shows that if the existing fees in lieu of \$940 and \$731 for single and multiple dwelling units, respectively, are maintained, then approximately \$13 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, then 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 \$17.3 million in the 20-year period to maintain existing levels of neighborhood and community park provision.

The Emerging O&M Argument

As their traditional arguments against parkland dedication requirements have encountered more resistance, some in the development community have embraced a new line of attack: How can you justify building new parks when you are struggling to find the money to properly maintain and operate those that the city 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 that prevail 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 construct new parks, then it has pre-empted the right of future residents to have them, because there will be no land available to retrospectively construct them. A current council has an obligation not to pre-empt the options of future councils. It is the prerogative of future councils to decide each year whether to fully fund the maintenance and operation of parks or not to do so and, presumably, this will be governed by the economic conditions prevailing at that time. Not to proceed with a

Table 6. Illustration of the cost to residents of not maximizing the potential of a parkland dedication ordinance.

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 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 Cost of additional land: 140 acres @ \$32,000 per acre Average park size of 8 acres means 18 new parks, with park development costs @ 576,000 	0/276 = 140 acres \$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 new parks @ \$2.5 million per park for "basic infrastructure" 	\$ 4,740,000 \$10,000,000							
	\$14,700,000							
Total Estimated Capital Cost for 10-year period	\$30,540,000							

Revenue projections from land dedication ordinance based upon 40,000 additional population with equal amount of single-family and multifamily units.

Existing Ordinance Requirements:

Total Revenue	\$29,422,522
Single Family: 7142 DUs x \$2,021 (1,078 + 943) Multi Family: 8,890 DUs x \$1,686 (878 + 768)	\$14,433,982 \$14,988,540
Proposed New Ordinance Requirements	
Total Revenue	\$13,212,070
Multifamily: 20,000/2.25 = 8,890 Dwelling Units 8,890 DU x \$731 =	\$6,498,590
Single Family: 20,000/2.80 = 7,142 Dwelling Units 7, 142 DU x \$940 =	\$6,713,480

Conclusion

If the proposed new ordinance requirements are not implemented and the existing ordinance requirements are retained, then residents may be taxed an additional \$17.3 million in the next 20 years in order to maintain the current levels of park service.

parkland dedication ordinance because of concerns about future operation and maintenance costs would be myopic and arrogant since the future ability to meet such costs is unknown. Previous councils had sufficient vision to create the opportunities a 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 properties that are on the tax rolls. Such amenities would include parks, schools, roads, churches, street spaces, non-profit arts facilities, police and fire facilities and services, et al. 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 which 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 (Crompton, 2004).

A third response to the operations and maintenance contention is that the costs can be minimized by focusing only on natural parks. Cost of operations is higher for those parks containing elements such as athletic fields. If a park is designed at the outset with minimal maintenance costs in mind, then that can be accomplished. 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 less expensive alternatives 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 which would occur if new homes were built on that land (Crompton 2004).

The Political Case for Parkland Dedication

Parkland dedication provides local government elected officials with 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, 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:

- Request existing residents to pay the bills by approving the issuance of general obligation bonds that will raise their taxes. Many residents are likely to ask, "Why should we agree to raise our property taxes to build parks many miles away from where we live 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) Requiring 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 were 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 7/10ths of 1%, they are likely to argue it will price out some potential home buyers. If an ordinance is revised every three years, it means that over the three-year period, the increase will average a little over 2/10ths of 1% per year. It is unlikely that any other cost of development will increase by such a small amount over a three-year period. Thus, the probability of such a price increase pricing potential "low-end" homeowners out of the market is improbable.

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.

- 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, then developers would charge that amount since their goal is to maximize their profits. Hence, market forces dictate that a price of \$141,000 is unlikely to an option.
- 2) The additional \$1000 fee could be absorbed by the developer. This is not a viable option, because a developer's willingness to accept the level of 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 is sacrosanct and cannot be reduced.
- 3) The non-feasibility of options (1) and (2) 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:
 - Reduce the house size by 10 square feet (assuming a cost of \$100 a square foot). Thus, instead of homes being 1400 square feet, they would be 1390 square feet.
 - Engage in "value engineering" to reduce the costs of finishes, fittings, furnishings or landscaping in the house by \$1,000.
 - 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 purchase 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 upon 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 developer concludes she now has to charge \$151,000 per unit due to 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 only willing to pay \$1.9 million for the land, so she is able to reduce costs and maintain her profit margin (i.e., \$2 million [100 lots x \$1,000]).

A fourth reason that strong parkland dedication ordinances should be able to garner political support is that if taxes are raised to meet the costs of new parks, then the assessed property values of existing homes will be effectively reduced since potential buyers are likely to pay less for a property with a higher tax burden (Bruecker, 1997). A reported corollary of this is that such exactions, because they potentially lower taxes, 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" (Burge & Ihlanfeldt, 2006 p. 305). 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" (p. 305).

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 analysis of Texas ordinances suggests recognition of these appealing political realities remains limited in Texas. Clearly, there is considerable scope for both extending parkland dedication to municipalities that do not have such an ordinance, and increasing the requirements in those cities which currently have an ordinance.

In most communities, parkland dedication ordinances are under the purview of planning departments since they constitute a component of a city's subdivision regulations. The limitations and failings of ordinances described in this paper suggest that many park and recreation directors have not taken a proactive role in the development of these ordinances. This is unfortunate given that many agencies are struggling to find resources to expand and/or renovate their park systems. Parkland dedication ordinances offer a mechanism for doing this, but the field's leaders in a community must be centrally involved in advocating for the improvement and enhancement of these ordinances if their great potential is to be realized.

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Footnote

¹ To enhance the readability, specific citations to city statues cited in the paper are not given, but all of the cited statues can be viewed on this Web site.