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From Development Policy to Parks

Expanding Park Access Through
Dedication Ordinances and Impact Fees



POLICY REPORT



10-Minute Walk

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10-MINUTE WALK® POLICY REPORTS

Trust for Public Land's Parks Initiative aims to ensure that everyone has access to a high-quality park close to home. To advance this mission, the 10-Minute Walk® program collaborates with local leaders to implement policies that expand access to quality parks—particularly in historically underinvested communities—to drive lasting, systemic change.

The 10-Minute Walk® Policy Reports series explores key issues that influence park access and equity. Each report provides data and insights that together create a research foundation for follow-on resources, including policy briefs, model ordinances, and implementation strategies. These resources help local leaders advance parks as essential infrastructure for public health, climate resilience, and social cohesion.

The findings, conclusions, and recommendations presented here, as well as any errors, are those of Trust for Public Land. This document is for informational purposes only and does not constitute legal advice.

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Executive Summary

Parks provide essential health, environmental, economic, and societal benefits to communities across the country. Ensuring that all communities have equitable access to parks is vital. Yet, more than 100 million people in the United States—including 28 million children—do not have access to a high-quality park close to home. This disparity is further exacerbated by long-standing racialized policies and planning practices that have resulted in significantly less park space in neighborhoods of color and low-income neighborhoods compared with white or wealthier neighborhoods across the U.S.

Addressing these entrenched park inequities has become a primary goal for many park agencies across the country. At the same time, these agencies also face the ongoing challenge of keeping pace with urban growth and development. Growth necessitates a multifaceted approach to parks: it intensifies the need for enhanced parks in redeveloping urban centers and prompts the creation of new parks in rapidly expanding suburban areas. As park agencies are pressured to meet new residents' needs, the enduring consequences of disparities in park access become even more urgent, further underscoring the necessity of a comprehensive approach.

This dynamic raises an important question: If the policies and planning practices of the past century have resulted in such significant park inequities today, what should city leaders do to write a different story for the next hundred years? To tackle one aspect of this question, Trust for Public Land (TPL) convened experts and practitioners from across the country to explore how land development policy can be better constructed to create parks and green spaces that contribute to healthy, thriving communities for all.

This report focuses on two of the primary land development policies communities use to create new parks: park dedication ordinances and impact fees.

- A park dedication ordinance (PDO) is a city policy that requires a developer to provide land, funding, or both to meet the park needs created by a new development, typically within the property boundary of the contributing development.
- An impact fee is a one-time charge required from developers to offset the cost of city infrastructure, such as parks, that will need to be built to serve the new development.

The role of these two policies in park creation is substantial. A TPL analysis conducted for this report found that 67 percent of recent park and greenway openings across 10 representative U.S. cities were established on land provided by real estate developers as part of dedication requirements or funded by development fees. This trend underscores the urgent need to rethink how city agencies—including parks and recreation, economic development, planning, community services, and housing agencies—and the real estate and development community collaborate to ensure equitable access to nearby parks for all residents.

To better understand the limitations of these policies and practices, and to identify emerging trends among cities, TPL researchers interviewed municipal staff, convened discussion groups, analyzed recent park acquisition data, and reviewed local land development policies. From this process, three critical questions emerged about how land development policies can increase park access and address the park equity gap. These questions form the structure of this report:

How can cities ensure that park creation keeps pace with new development and population growth?

Nationally, park creation is not keeping up with population growth. According to an analysis of TPL City Park Facts data, 65 of the 100 most populous U.S. cities had less park space per person in 2023 than in 2016. TPL analysis found three core challenges cities face with current land development policies that are limiting park creation:

- Park dedication ordinances and park impact fees are not always calibrated to reflect the true cost of land acquisition and park development.
- Cities do not always have financial or staffing capacity to build a park on vacant land transferred as part of a dedication requirement.
- Cities lack the data, staff, and systems to enable better coordination and understand how their development policies are—or are not—working.

How can cities leverage their land development policies to build equitable parks for all?

Cities have traditionally adhered to a strict interpretation of “nexus” guidance, requiring the location of land dedication or fee usage to be on-site or in close proximity to the contributing development. This narrow interpretation ignores that residents are likely to utilize various types of parks across the citywide park system—and it can risk widening the park equity gap by concentrating park investment in areas where park needs may already be met. TPL analysis identified two common missed opportunities cities face in making sure their land development policies ensure access for all:

- Adopted nexus requirements do not always reflect citywide park utilization.
- A lack of flexibility in fee and dedication requirements can restrict a city’s ability to best address current gaps in park access.

How can private partnerships be fostered to provide and manage parks while ensuring public access remains a core city value?

Parks and recreation agencies face challenges such as strained operating budgets and deferred maintenance backlogs, which can hinder their ability to take on new parks acquired through land development policies. To address these challenges, some cities are waiving dedication or fee requirements in exchange for private entities’ agreeing to build and manage new parks. This shift raises critical questions about ensuring public access. TPL analysis identified two key trends emerging among cities that are exploring alternative management approaches for public spaces:

- There are four common partnership entities, each with its own set of governance and financing implications: homeowners associations, special assessment districts, property managers, and business improvement districts.
- Cities are coalescing around a set of criteria to ensure privately managed space remains public, including the display of welcoming and visible signage, city advertising of the space as a public park, the requirement that the space meet the same operational standards as city-managed parks, and legal protection of the space to ensure it remains a publicly accessible park.

This report calls on city leaders to implement land development policies as essential tools for closing the park equity gap in their communities. It also serves as a starting point for TPL to continue researching and refining these policies, while building partnerships to better understand and address the complex dynamics of urban growth, real estate development, equitable park creation and access, and the evolving role of land development policy.

Introduction



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Parks and green spaces are helping confront some of today's most pressing societal challenges. They offer places to play,¹ exercise,² unplug,³ and connect with others in our communities,^{4,5} and they combat climate change.⁶ While high-quality, close-to-home parks and green spaces offer benefits vital to community health, resilience, and sense of social cohesion, there is a significant disparity in who has access to available park space, and not all parks are created equitably.^{7,8,9}

More than 100 million people in the United States—including 28 million children—do not have access to a high-quality park within a 10-minute walk of their home.¹⁰ Even when a park is within walking distance, decades of racialized policies and planning practices have led to chronic disinvestment in parks serving neighborhoods with low income and neighborhoods with majority residents of color. Parks in neighborhoods with a majority of people of color are, on average, half the size of those in majority-white neighborhoods but serve nearly five times as many people. Similarly, parks in low-income neighborhoods are about four times smaller than those in wealthier neighborhoods.¹¹

The complexity and magnitude of this issue necessitate comprehensive strategies, collaborations, and partnerships involving city parks and recreation agencies alongside various land use decision-makers. This point is especially pertinent because local park agencies are not always the primary actors in acquiring land for, or building, new parks today. New findings from Trust for Public Land (TPL) show that city planning and economic development agencies—which typically administer land development policies—and real estate developers are key drivers of land acquisition and park creation.

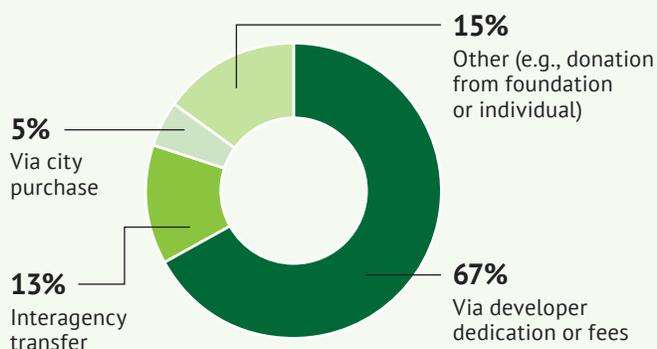
Land Development Policy Is Driving Park Creation

TPL reviewed all park or greenway openings and land acquisitions over the past five years (2018–23) across 10 representative large U.S. cities with available data.^a Collectively, the parks and recreation agencies in these 10 cities opened 76 parks or greenways between 2018 and 2023. Of these 76 sites, 67 percent were acquired via developer land dedication or purchased with development fees. Only 5 percent were acquired via city purchase (excluding purchases with development fees); 13 percent were acquired via interagency transfer, and 15 percent via other means, such as donations from foundations or individuals.

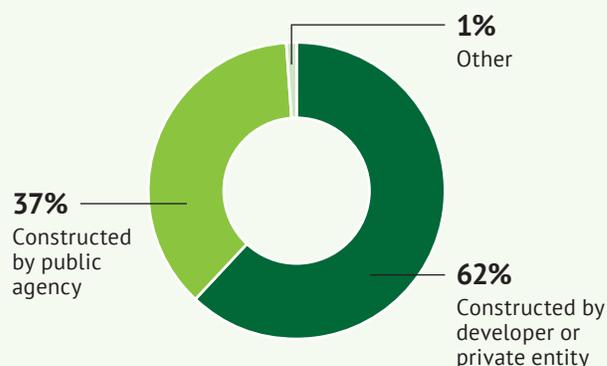
Park development paints a similar picture, which highlights the substantial role of developers: of the 76 park openings described above, 62 percent of the parks were constructed by the developer or a private entity prior to transfer to the city, while 37 percent were developed by the city’s parks and recreation or other public agency (with 1 percent developed by a different entity). See [Appendix C](#) for additional information.

Analysis of all 76 park or greenway openings across 10 major U.S. cities, 2018–23

LAND ACQUISITION MECHANISM



PARK DEVELOPMENT MECHANISM



a The cities analyzed were Aurora, Colorado; Cleveland, Ohio; Columbus, Ohio; Denver, Colorado; Irvine, California; Lewisville, Texas; Lexington, Kentucky; Long Beach, California; Portland, Oregon; and Washington, DC.

Municipalities commonly employ two land development policies to facilitate the acquisition of land and development of parks in line with real estate development: park dedication ordinances (PDOs)ⁱ and impact fees. PDOs require developers to dedicate to a city a specified amount of land, fees, or both.

Impact fees require developers to pay a fee so that the city can acquire or build a park on land not controlled by the developer. The main goal of these two policies is to ensure that a community’s park system grows alongside its population and that the necessary park infrastructure is proportionally funded by development. These are two replicable, scalable policies currently utilized in many cities across the country to ensure development supports park goals.

i The term *parkland dedication ordinance* has historic roots in the early versions of these policies, which initially required land dedications only. Over time, many cities have continued using this terminology, even as the regulations evolved to include fees-in-lieu and land improvement fees. Given that these regulations now extend beyond land dedication alone, the authors advocate for the more comprehensive term *park dedication ordinance* (PDO). For clarity and consistency, we use *PDO* throughout this paper to refer to the policy mechanism at large.

Across the country, growing urban populations, rising land and construction costs, and strained government budgets have left many municipalities unable to fully fund the parks and recreational spaces that communities need. In this context, well-calibrated land development policies, including development mitigations such as land and fee dedications for parks, have become crucial tools to distribute the responsibility for creating and maintaining public parks as new development occurs. By thoughtfully balancing these policies, cities can ensure that new and redeveloping neighborhoods are equipped with adequate parks, preventing further disparities in park access and relieving pressure on existing facilities. To navigate these complexities, city leaders, parks and planning practitioners, and stakeholders need the knowledge, resources, and case-making information to develop local land policies that reflect this shared responsibility to meet community needs.

While this report focuses on PDOs and impact fees due to their significant influence on park creation, other development policies, such as open space zoning regulations, also play a key role in providing green space through the development process. These regulations and their relationship to PDOs and impact fees warrant deeper investigation in future research. It should also be noted that in some localities, evolving legislative environments are directly affecting development policy. A case in point: during the writing of this report, the Texas legislature passed a new law expressly limiting the ability of the state's largest cities to determine their own park dedication requirements for multifamily and commercial developments.¹² This underscores the urgent need for resources to help cities strategically apply PDOs and impact fees.

Investigating Land Development Policies and Park Creation

To explore common patterns and emerging practices in land development policy and park creation, TPL conducted investigations along three parallel tracks, as listed below. TPL researchers supplemented these efforts with secondary research that helped illuminate the conversations and data collected through the three research tracks. The information gathered from all sources was synthesized to develop this report.

1. **Community of Practice:** TPL convened 65 parks and planning practitioners from 37 cities to discuss the role of land use policy, development policy, and partnerships with developers in shaping local park systems. Conversations took place during 2022–23, as part of a “Parks and Development Policy” track of the 10-Minute Walk® Community of Practice (CoP), a learning and peer networking program.
2. **Development policy review:** TPL reviewed the land development policies of 20 cities across the country to identify common patterns and emerging practices and to examine the relationship between these policies and the acquisition and development of parks and green space. As part of this review, TPL researchers conducted phone and email interviews with parks and planning staff to assess the strengths and limitations of these policies in their cities.
3. **Park openings and acquisitions analysis:** TPL analyzed recent park openings and acquisitions in 10 cities across the U.S. to determine the sources of funding for new land acquisition and park development. Data for this analysis was collected from city staff in each of the 10 cities. Additionally, TPL used its City Park Facts dataset to compare system-wide acreage trends over time across the 100 most populous cities.

The full methodology for each of the three research tracks, along with a list of participating cities, is provided in [Appendix A](#). [Appendix B](#) includes the policy review and summary. [Appendix C](#) contains the results of the park openings and acquisitions analysis, while [Appendix D](#) compares system-wide acreage trends using City Park Facts data. Together, these inputs offer a comprehensive perspective on the land development policies cities are currently using and highlight both the challenges and opportunities for refining these policies to further support equitable park creation.

Linking Land Development Policies and Park Equity

The U.S. has a long history of unjust land development policies and practices that have contributed to enduring inequities in the built environment, including significant disparities in park access and quality for communities of color. A history of biased lending, exclusionary zoning, and racial covenants have created and reinforced segregated communities across the U.S.¹³ These practices systematically denied African Americans and other racial and ethnic groups access to housing and public facilities in many neighborhoods, entrenching racial disparities in the built environment.¹⁴ Although these policies were formally outlawed with the passage of the Fair Housing Act in 1968, which aimed to eliminate discrimination in housing based on race, color, religion, sex, or national origin, many cities and policymakers implemented new practices to maintain segregation.¹⁵

During the mid-20th century, efforts to desegregate public parks, pools, and other recreational spaces met significant resistance.¹⁶ Many municipalities chose to close these facilities altogether rather than comply with desegregation mandates.¹⁷ The U.S. Supreme Court upheld these closures in the 1971 *Palmer v. Thompson* decision, allowing cities to close public facilities rather than integrate them, provided the closures applied to all citizens equally. This context helps illustrate the enduring impact of unjust municipal policies and practices on marginalized communities and emphasizes the importance of acknowledging and addressing these historical inequities in contemporary policy discussions.^{18,19}

Today, cities are actively working to rectify these exclusionary practices by reforming zoning and other land development policies.²⁰ As essential components of these policy reform efforts, PDOs and impact fees play a crucial role in building equitable communities where everyone has access to quality parks. Therefore, understanding the historical context in which these policies operate is key. PDOs and impact fees must be carefully designed to ensure they enhance park access equitably and avoid perpetuating past injustices or creating new unintended consequences. Cities must assess how communities of color and low-income residents will be impacted by new policies or changes in policy, as well as how entrenched government decision-making practices and lack of trust may obstruct the effective implementation of park equity goals.

This report explores the intersection of land development policies and park equity from a variety of angles. The intended purpose of PDOs and impact fees is to create parks in line with population growth and associated real estate development. Ensuring that these policies are successful in creating new parks in line with growth is essential to prevent the formation of new gaps in park access. [Section 2](#) of this paper discusses the importance of PDOs and impact fees to ensure the park equity gap does not widen as communities grow simply because the opportunity is missed to build and fund parks as real estate development occurs.

Next, by linking urban growth with park creation, PDOs and impact fees play a significant role in determining where new parks are located and which neighborhoods benefit from park investments. While these policies ensure that parks serve the immediate needs of the new populations they are designed to mitigate, the impact of these growing populations extends across the entire park system. For example, a new real estate development may trigger the requirement for a neighborhood park, but the residents of this development will also visit community and regional parks in other parts of the city to meet their broader recreational needs. [Section 3](#) of this paper examines how land development policies are being adjusted to account for citywide park utilization as a crucial strategy for advancing equitable park distribution and access.

Finally, as cities face financial pressures to maintain their current inventory of parks, they may look to partnerships with the private sector to provide and manage new parks. Understanding the equity implications of this model, as well as how to maintain full public access, is a core concern for cities and is addressed in [Section 4](#).

Report Structure

The report is organized into four sections that address the need for information on these policies, as well as the questions, concerns, and challenges cities may encounter during their implementation.

1. **Land Development Policies and Parks:** This section provides an overview of park dedication ordinances and impact fees and outlines key policy components, legal aspects, and implementation considerations that shape their local application.
2. **Planning for Growth:** This section investigates several reasons park creation is not keeping up with population growth and offers insights from city policymakers who are refining their land development policies to ensure that park creation aligns with new real estate development.
3. **Planning for Access:** This section explores policy strategies that reflect the evolving relationship between urban growth and citywide park utilization and provides policy examples from cities that are achieving a more equitable distribution of park dedications and fees.
4. **Public-Private Partnerships:** This section examines how public-private partnerships can be structured to manage parks effectively while ensuring public access remains a core city value.

As city leaders work to reverse the trajectory of past policies and planning practices that have led to today's significant inequities, this report offers a set of considerations on PDOs and impact fees. It serves as a starting point, outlining current policies and their challenges and limitations, and posing key questions that need to be addressed to maximize the potential of land development policy in achieving multiple public policy goals. The report aims to provide a foundation for TPL and the broader parks and recreation field, supporting the development of additional resources, case studies, partnerships, and policy recommendations.

SECTION 1

Land Development Policies and Parks



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How Do Land Development Policies Impact Park Systems?

Land development policies are regulations enacted by local governments to guide growth and protect public health, safety, and general welfare as real estate development occurs. These policies shape the built environment—the places where people live, work, play, and travel—by regulating where certain land uses such as housing and retail are located; influencing the size and shape of new buildings; and mandating the types of essential public infrastructure and facilities needed to support land uses, including roads, stormwater basins, and parks.

Parks Are Essential Public Infrastructure

Parks are essential public infrastructure and are necessary to protect the health, safety, and welfare of communities across the country. Recent findings from TPL found that cities with the best park systems, based on the ParkScore® Index, are healthier places to live.²¹ Parks are also critical for protecting residents from the dangers of climate change. Neighborhoods without parks are up to 6 degrees hotter than those adjacent to parks, and green infrastructure in parks helps filter millions of gallons of stormwater runoff in communities across the country.²² Parks also contribute significantly to local economies, generating hundreds of billions of dollars in economic activity and supporting more than a million jobs nationwide.²³

The American Society of Civil Engineers, in its 2021 Report Card for America's Infrastructure, gave the quality of the country's parks a grade of D+, reflecting the untapped potential of parks to fulfill these societal goals.²⁴ The poor grade also underscores the disinvestment and neglect that parks face. Parks, when properly invested in, provide many of the same services and benefits as "traditional" infrastructure such as roads and sewers.

The history of land development policies in the U.S. dates to the early 20th century with the introduction of planning tools such as zoning and land subdivision regulations.²⁵ These tools were designed to manage urban growth and isolate incompatible land uses—for example, keeping industrial factories away from residential neighborhoods. Zoning was also used deliberately as a legal mechanism to segregate communities by race and income, thus embedding deep social inequities into the urban landscape.²⁶ Before zoning became widespread, many cities were designed with walkable access to parks and green spaces, which were considered essential for public health. These spaces provided much-needed respite and recreational areas within densely populated neighborhoods but were often racially segregated.²⁷

In the 1950s, suburbanization surged, driven largely by white flight as urban populations moved to sprawling tract developments that required new infrastructure. This movement was often motivated by a desire to avoid changing urban demographics and was supported by policies promoting residential segregation.²⁸ The question of who should bear the cost of the new infrastructure necessary for suburban growth catalyzed the use of various land development regulations, including park dedication ordinances and impact fees.²⁹ In the 1970s and 1980s, changing attitudes toward public facility financing, spurred by the tax revolt, inflation, and rising expectations for facility standards, forced local governments to explore all potential revenue sources.³⁰ Land development regulations such as park dedication ordinances and impact fees became more widely adopted in this context to ensure that new developments contributed their fair share to public infrastructure, including parks and recreational facilities.

Today, these policies operate in tandem with a variety of planning documents to guide urban growth. A community's comprehensive plan stands as the overarching planning document, articulating a community's primary goals and serving as a blueprint for their realization. Supporting this, parks and recreation system plans detail specific goals, policies, and strategies for park development. Land development policies, including park dedication ordinances and impact fees, are the regulations through which these long-range plans are implemented as real estate development progresses. This structured approach ensures that park development aligns with broader urban planning objectives while effectively meeting both present and future community needs.

Defining Park Dedication Ordinances and Impact Fees

Park dedication ordinances and impact fees are specific types of land development policies designed to ensure that as real estate is developed, the necessary infrastructure and public facilities are provided in the appropriate amounts and locations to support a community's growing needs. These policies are commonly included in municipal zoning codes and subdivision regulations.

A **park dedication ordinance (PDO)** is a city policy that requires a developer to provide land, funding, or both to meet the park needs created by a new development, typically within the property boundary of the contributing development. In this context, *dedication* refers to the act of setting aside land specifically for park use as part of the development process, with the ownership of the land typically transferred to the city or local government. PDOs typically apply to residential development, although some cities are starting to implement them for nonresidential project types that generate demand for parks. PDOs may include requirements for land dedications to meet certain quality criteria, fees to construct parks on dedicated land, options for fees-in-lieu of land, and various forms of credits and exemptions.

An **impact fee** is a one-time charge required from developers to offset the cost of city infrastructure that will need to be built to serve the new development. Impact fees differ from PDOs in that they typically pay for the construction of off-site capital improvements that benefit the contributing development. Impact fees are not limited to parks; they were historically established, and are still used today, to fund various infrastructure projects such as roads and sewers. The specific name of these fees can vary by city and state, although they largely operate in the same manner. For example, some cities call them benefits assessments, connection charges, or system development charges. For the sake of clarity and consistency within this report, the term *impact fees* will be used throughout.

Prevalence of PDOs and Impact Fees

For this report, TPL researchers conducted a development policy review of 20 major U.S. cities that either have one of these policies or are interested in adopting one. Of these 20 cities, 10 had PDOs, 5 had impact fees for parks, and the remaining 5, while not having formal policies, still engaged in negotiations with developers to provide parks or open space. The policy review revealed that many policy components are typical from city to city, and these are described in detail under "Policy Components" later in this section. The ways cities address these policy components and fulfill policy requirements, however, vary based on local contexts. (See [Appendix B](#).)

Other research indicates that the majority of large U.S. cities currently utilize a PDO, a park impact fee, or both. A 2020 review found that 57 percent of Texas municipalities (73 of 127) have a PDO. The same study also found that 62 percent of large U.S. cities outside of Texas (29 of 47 cities providing data) had either a PDO, a park impact fee, or both.³¹ A forthcoming study by TPL and a university-based research team reviewed park policies in 25 cities across the U.S. in 2023 and found that more than half of the cities utilized a PDO, park impact fee, or both. Of the 25 cities, 4 cities had a PDO only, 6 cities had a park impact fee only, and 3 cities utilized both policies.

Specific to impact fees, 29 states have passed enabling legislation to define eligible facilities for which impact fees may be imposed; of those states, 83 percent (24 of 29) have authorized the use of local impact fees for parks.³² A 2008 publication by the U.S. Department of Housing and Urban Development reports that impact fees are employed in nearly every U.S. state, including those without specific state legislation, as a common method to generate revenue for the wide variety of capital projects—not just parks—necessitated by new development.³³

Application and Strategic Use

PDOs and impact fees have a long history of use in the U.S. Their application has evolved from ad hoc negotiations to include developer requirements for land dedication, fees-in-lieu of land, and park development fees.³⁴ The first implementations of PDOs and impact fees were largely focused on residential subdivision development. As cities increasingly experience urban infill development—characterized by the construction of large mixed-use buildings in dense downtown cores—they are beginning to adapt their regulations to accommodate denser residential or commercial developments, with varying degrees of success.³⁵

As the application of these policies has evolved, cities—and courts—have generally reached a consensus on the standard for new development: it should maintain current levels of park service as development progresses.³⁶ Therefore, PDOs and impact fees are designed to ensure that new development contributes its proportionate share toward maintaining existing levels of service. This contribution is determined through calculations and geographic considerations that are explored further under “Policy Components.”

Today, municipalities use PDOs and impact fees primarily for two purposes: acquiring land and developing park facilities. In terms of land acquisition, PDOs provide cities with several options. They can enable the city to accept land directly dedicated by developers, ensuring the land is located within the development site. Alternatively, cities can accept a fee-in-lieu of a land dedication, giving the city the flexibility to purchase land off-site, but typically nearby. Another approach allows the city to aggregate fees-in-lieu from multiple developments to purchase a larger site than any single developer would have dedicated. Unlike PDOs, impact fees typically do not provide a land dedication mechanism for acquisition; instead, they rely on the city to use collected fees to acquire off-site park space. Providing a “land dedication-in-lieu-of-fee,” however, is an emerging impact fee practice through which developers can provide land or a fully developed park rather than pay fees.³⁷

In terms of park development, PDOs do not always require the inclusion of park facilities on the dedicated land. Often, the land obtained through PDOs is undeveloped, and the city must allocate additional funds for park construction. Some PDOs include a land improvement or park development fee that finances park construction on the dedicated land. In some instances, PDOs allow for a developer to dedicate a fully constructed park to the city or potentially to an alternative private entity such as a homeowners association (see [Section 4](#)). In contrast, cities typically use impact fees for both land acquisition and park development; the fees can be used to construct capital improvements on existing park sites that serve the new development and to acquire and develop new parks from the ground up.

PDOs and impact fees can create similar outcomes in park creation, but they are distinct in their practical application and legal foundations, both of which are discussed in the following sections. These distinctions can shape how a city strategically puts the policies to use. For example, PDOs are likely most effective at the project level. They ensure that park facilities are integrated into new developments during the planning phase to address the immediate needs of residents. This would tend to make PDOs useful in areas experiencing fast growth where local parks are insufficient or absent. On the other hand, impact fees are likely most advantageous for system-level improvements. They provide cities with a financial mechanism to support broad community planning goals and capital improvement programs, enhancing overall park system capacity that benefits both the contributing development and the wider area. Local governments may benefit from using a combination of both PDOs and impact fees. Together, these mechanisms can comprehensively ensure that new developments contribute their proportionate share to both local and community-wide infrastructure.

Legal Authorization

As with other land development policies, the implementation of PDOs and impact fees involves the interplay of local, state, and federal government. Local governments must navigate state authorization, preemptions, and court precedents while ensuring compliance with federal case law and legal tests, as described in the subsections that follow.

Local authority. To implement a PDO or impact fee, a local government must first confirm its legal authority to impose the policy. Generally, cities with home rule power may implement either type of policy.³⁸ Home rule power grants local governments the authority to enact laws and regulations within their jurisdiction, as long as these actions align with state and federal law. This autonomy is underpinned by a local government’s police power, which is the authority to enforce laws, such as land use policy, to protect the health, safety, and general welfare of the public. Local authority may be restricted at the state level through legislation (see below) and through preemption, as the introduction noted with the example of the state of Texas, whose legislature has limited its largest cities’ ability to determine their own park dedication requirements for certain types of development.³⁹

State court precedent for park dedication. At the state level, courts have consistently upheld PDOs as legitimate exercises of local police power.⁴⁰ A recent example comes from Minnesota, where the state Supreme Court confirmed the legality of PDOs in the 2023 *Puce v. City of Burnsville* case. In this ruling, the court found that the city’s park dedication fee met the “essential nexus” and “rough proportionality” requirements, demonstrating that the fee was related to the impact of the proposed development. The court upheld the fee as a valid exercise of municipal authority, aligning with the broader goals of promoting public health, safety, and welfare. State legislatures may also restrict local discretion in specific PDO requirements, however, as was seen recently with the Texas legislature.

State enabling laws and impact fee legislation. In some states, impact fees are subject to state restrictions and procedural requirements, often referred to as “enabling legislation.” Local governments first created impact fees without these state laws, justifying them under their home rule and police power authority to ensure public health, safety, and welfare.⁴¹ Over time, some state courts have established additional guidelines for these fees.⁴² Currently, 29 states have passed legislation specifically enabling, and providing guidance and restrictions on, the use of impact fees in general (not specific to parks).⁴³ Of the 29 states with impact fee legislation, 24 states explicitly allow local governments to enact impact fees for park creation.⁴⁴ While the lack of clear authorization for a type of facility generally amounts to a prohibition, this is not always the case. For the five states with enabling legislation that does not authorize parks, as well as the 21 states without enabling legislation, practitioners should refer to case law to determine local authority.⁴⁵ For example, while Illinois does not have clear statutory authority for impact fees beyond roads, park fees—as well as school and library fees—are authorized for home rule cities and counties based on the state constitution and court decisions.⁴⁶

Federal case law and legal tests. The U.S. Supreme Court recognizes park dedication ordinances and impact fees as development mitigations. Development mitigations are requirements set by the government that a property developer must meet to gain approval for their project. The court uses a two-part legal test to assess mitigations. The first part, known as the “essential nexus” test, checks whether there is a direct link between the government’s objectives and the mitigation (*Nollan v. California Coastal Commission*). If such a connection exists, the fees must be “roughly proportionate” to the impact that the proposed development is expected to have (*Dolan v. City of Tigard*). These tests ensure that the mitigations are justified and appropriate to the scale of the development. More details on these tests and the related policy components are provided in the following sections.

Key Policy Components and Implementation Considerations

Through discussions with participants in the Community of Practice, TPL researchers identified key policy components and implementation considerations that influence the effectiveness of PDOs and impact fees (see Table 1.1). These insights were further explored through the development policy review of the various approaches cities take with each policy type. (See [Appendix B](#).)

The trends and insights identified across cities can help inform local planning efforts; however, it is important to acknowledge that there is no one-size-fits-all approach. Factors such as existing land use, market pressures, and competing priorities for land influence what strategies work best for cities. PDOs and impact fees also operate in concert with other planning and policy documents to comprehensively shape the location and accessibility of parks. Thus, they should be considered in the context of existing policies and overarching policy goals. The nuances and trade-offs associated with each policy approach are outlined in the following table and the narrative sections that follow.

Table 1.1. Common Components of Park Dedication Ordinances and Park Impact Fees

	Park Dedication Ordinances (PDOs)	Park Impact Fees
Overview		
Application	A PDO is a city policy that requires a developer to provide land, funding, or both to meet the park needs created by a new development, typically within the boundary of the contributing development.	An impact fee is a one-time charge required from developers to offset the cost of city infrastructure needed to serve the new development. Impact fees typically pay for the construction of off-site capital improvements that benefit the contributing development.
Legal authorization	Generally, cities with home rule power can enact PDOs legislatively through existing authorities; however, states can pass legislation to restrict this authority.	Generally, impact fees are adopted by cities under state enabling legislation or through the city’s home rule authority.
Policy Components		
Development type	PDOs are typically applied to residential development only, but some cities are exploring the potential for nonresidential PDOs.	Impact fees are typically applied to residential development but may also apply to nonresidential development.
Land dedication (i.e., land transfer)	Land dedication is the core component of a PDO; it does not necessarily require any associated land improvement or park development.	Typically not applicable, but some cities may allow or give credit for a land dedication-in-lieu of impact fee.
Land acquisition fee	Often provides an option for developers to pay a fee-in-lieu of dedicating land.	Impact fees can typically be used for both land acquisition and park construction.
Land improvement fee (park development fee)	In some cases, PDOs include funds for the city to build park facilities on the dedicated land.	Impact fees can typically be used for both land acquisition and park construction.

	Park Dedication Ordinances (PDOs)	Park Impact Fees
Calculation of land/fee (rough proportionality)	Land acreage is based on maintaining current level of service with the new development contributing its proportionate share. Fee-in-lieu is based on market value of land.	Fee is based on the capital cost of maintaining current level of service with the new development contributing its proportionate share. The fee is determined by actual or projected expenditures as determined through strategic capital planning.
Geographic restrictions (essential nexus)	Defines the geographic boundary or “service area” in which the dedicated land must be located or fees spent.	Defines the geographic boundary or “service area” in which the fees must be spent; typically more flexible than PDO nexus requirements because guided by capital planning documents.
Credits	Typically provided when developers dedicate constructed parks or when private parks are made publicly accessible.	Typically provided when developers contribute land, make park improvements, or construct parks, either as an alternative to or in conjunction with paying impact fees.
Exemptions and reductions	Cities may provide land and/or fee exemptions and reductions when certain types of housing, such as affordable or senior housing, are built.	
Alternative compliance	If a development meets the PDO or impact fee requirement by providing a privately managed park, a city can specify public access requirements for that park.	
Quality, access, and visibility requirements	Some cities provide additional specificity about the land being dedicated—e.g., that it includes park facilities such as playgrounds, or that areas of floodplain and/or stormwater management areas are minimized or excluded from the park.	Typically not applicable unless land dedication-in-lieu of impact fee provided.
Implementation Considerations		
Fee usage	Fees/fees-in-lieu are one-time charges dedicated to land acquisition and capital improvements. As such, they do not address maintenance and operating expenses.	
Development review process	Typically occurs during the rezoning or subdivision review and platting process. Generally overseen by planning departments, often with input from parks and recreation departments.	Generally reviewed and collected at the time of issuing building permits. Typically, the planning, building, or permitting department of a local government handles this review.
Administrative complexity	Generally straightforward to administer; however, given that each development site presents its own set of unique circumstances, PDOs may require additional staff time to ensure compliance on a case-by-case basis.	Impact fees are assessed and collected through standard government processes, but setting up these processes requires coordination across several departments, including parks, planning, capital improvements, and finance.
Timing considerations	It may take years to accrue adequate fees for land purchase. The speed and timing of fund collection from developers can influence a city’s ability to acquire land before its value surpasses the funds amassed. One resolution some cities employ is bonding, backed by a secure source, which is repaid via development fees.	

Policy Components

Development type applicability. PDOs are generally applied to residential developments to ensure that new communities contribute to local park facilities. Some cities are beginning to explore the application of PDOs to commercial developments, however, recognizing the impact these projects can have on community needs for parks and recreation.

Similarly, while park impact fees are traditionally collected from residential developments, some cities have expanded their scope to include nonresidential developments, acknowledging that commercial and other types of developments also contribute to the demand for parks. This broader approach may help ensure a more even distribution of the costs associated with expanding public infrastructure and services.

Land dedication requirements. A land dedication requirement is the core element of a PDO. Through land dedication, a developer transfers to a city a predetermined amount of unimproved land. Impact fees sometimes allow a direct land transfer (dedication-in-lieu of impact fee), but they more typically require fees, which can be used for land acquisition, park development, or both.

Land acquisition fees. Fee payment is the core component of an impact fee. An impact fee is required from developers to offset the cost of city infrastructure that will need to be built to serve the new development. Impact fees can typically be used for a broader range of uses than fees associated with PDOs. Impact fees can typically be used for both land acquisition and park development.

With PDOs, many cities have an option for a developer to provide a fee-in-lieu of land when a land dedication is not suitable or feasible. These fees can be used either to acquire land or to provide capacity-increasing capital improvements to existing parks. Cities may request a fee rather than the dedication of land in several scenarios: when the amount of land to be dedicated is deemed too small to practically serve as a park, when development is occurring in an area already amply served by parks, when the available land is of poor quality, when it is not economically feasible for the developer to dedicate land, and when the land dedicated would not advance the city's overall park goals. Cities that used a fee-in-lieu expressed the importance of clearly articulating when a fee is acceptable in place of a land dedication and retaining decision-making power over whether developers will provide the land or a fee.

Of the 15 cities reviewed with either a PDO or impact fee, every one had a land acquisition fee as part of the city's ordinance—either included in the impact fee or via a fee-in-lieu option as part of the PDO.⁴⁷ Five based their fees on the fair market value (FMV) of the site or the zone where the site was located; three based the fee on FMV for the entire city. The remaining cities used an alternative formula cost factor to set their fees (e.g., average historical acquisition cost or a value determined by the city council). When the fee was non-site-specific (e.g., based on an average city acquisition cost) or not tied to the current FMV, it was unlikely to be sufficient to acquire enough park space for the new development. Cities reported that fees should be calibrated to reflect the cost to acquire the amount of land necessary to service the new development and should be regularly updated to keep pace with fair market value.

Land improvement fees. Almost all impact fees can be used for either land acquisition or park improvements. PDOs are less likely to require a land improvement fee (also referred to as a park development fee) in addition to the dedication of land or a fee-in-lieu of land. For example, half of the 10 cities reviewed for this report that had a PDO did not have a land improvement fee. Improvement fees are required to ensure that a city has adequate funding to develop a park on dedicated land or on land purchased through a fee-in-lieu of land. These improvement fees are often based on the estimated construction costs; of the five cities with a land improvement fee as part of their PDO, all but one based their improvement fee on a monthly or annually updated development cost index (e.g., *Engineering News-Record's* Construction Cost Index, which estimates local construction costs).

Calculation of land/fee (rough proportionality). The U.S. Supreme Court case *Dolan v. City of Tigard* established that development exactions, such as land dedications or fees, must be “roughly proportional” to the impacts of the proposed development. While *Dolan* does not address parks specifically, many states and municipalities interpret this requirement to mean that the amount of land or fee required for parks cannot exceed what is needed to maintain the city's existing level of service.⁴⁸ Cities take different approaches to what types of parks and facilities are included in this level of service

calculation. For example, some cities include neighborhood parks only, some include both neighborhood parks and community parks, while some might include still other types of open space and recreational areas. In almost all cases, cities use a density-based formula to account for how many people will be living in a development and using any associated parks. These formulas are designed to ensure that land dedication requirements do not insist on more park acres per person than the existing level of park service, in order to comply with the legal standard of rough proportionality. A common calculation for establishing the amount of land dedication a city should require is as follows:

$$\begin{aligned} &\text{Acres of land required for dedication} = \\ &\text{city's current level of service (park acreage per 1,000 residents)} * \\ &\text{(number of dwelling units in proposed development)} * \\ &\text{(assumed residents per unit in new development)/1,000} \end{aligned}$$

When a PDO allows for a fee-in-lieu of land, the fee total is also intended to maintain the area's existing level of park service. This can be calculated based on a valuation of the land that would have been required for dedication.

For impact fees, cities must provide a clear rationale for their calculations and application, typically supported by public facility needs assessments and capital improvement planning documents.⁴⁹ This process may involve conducting needs assessment studies to identify the infrastructure and facility demands anticipated from urban growth. These assessments are paired with capital improvement plans that detail the locations and timelines for public improvements. This approach ensures that impact fees are calculated based on the costs required to fund specifically defined projects in advance.

Like park dedication, the calculation of impact fees must adhere to the principle of rough proportionality, ensuring that the fees do not exceed the city's current level of service. In certain cases, however, impact fees may be used to help improve the city's level of service, provided they do not surpass this existing standard.⁵⁰ When aiming for a higher or aspirational level of service, cities must identify and secure additional funding sources beyond impact fees to bridge the gap between the current and desired levels of service.⁵¹ In this framework, impact fees from new developments cover their proportionate share of maintaining the current level of service, while the city finances the additional costs needed to achieve the higher level of service. To avoid legal challenges, special care should be taken to ensure that impact fees are applied in a manner that proportionally contributes to increasing the level of service.⁵²

Geographic restrictions (essential nexus). Cities are required to establish a clear connection—or nexus—between a development and the use of any associated park dedication or fees. The U.S. Supreme Court case *Nollan v. California Coastal Commission* requires that such exactions serve a legitimate public interest and have an “essential nexus” to the impacts of the proposed development. While *Nollan* does not require geographic proximity, many cities adopt distance-based standards or divide the city into park service zones to help demonstrate that land or fees are used in ways that are meaningfully connected to the development's impact. Cities shared several approaches to applying nexus requirements, and the pros and cons of each are explored further in [Section 3](#) of this report.

Credits. Some cities provide credits to developers that reduce the amount of land or fees required in exchange for providing certain improvements to a land parcel. For example, some PDOs provide credits for building a publicly accessible park on dedicated land as an alternative to paying a land improvement fee. Cities may also provide credits when a developer builds a park that will be privately owned and maintained by future residents—for example, by a homeowners association or a special district in a larger subdivision—so long as that park remains publicly accessible. Credits may be provided to developers to align PDOs or impact fees with other city priorities. For instance, cities may provide credit for environmental conservation areas that are protected during construction and integrated into the park, thus helping to advance a city's climate goals. Credit may also be given for trails that connect parks, co-located parks on school sites, or other types of open spaces that meet recreation criteria.

Exemptions and reductions. Some cities provide exemptions for certain housing types, such as affordable housing or senior housing. Exempting certain housing types from PDOs or impact fees is intended to prevent the land development policies from unintentionally increasing the cost of housing. However, these exemptions may also result in residents of these units not having access to nearby parks. Of the 15 cities reviewed for this report that had a PDO or impact fee, eight had an exemption for affordable or senior housing.

Alternative compliance and governance requirements for privately owned parks and green space. In larger-scale developments and subdivisions with privately owned parks and green spaces, cities typically establish requirements for their long-term ownership and maintenance. It's crucial to develop policies that clearly define the responsibilities for ongoing governance and upkeep of these private parks. Commonly, cities require the formation of an alternative management entity, such as a homeowners association (HOA) or special district, to manage maintenance. Additionally, to prevent the city from having to assume ownership due to neglect, some cities implement safeguards by making owners liable for funding any deferred maintenance if the management entity fails to maintain the park adequately.

Quality, access, and visibility requirements. Cities may set in place requirements to make sure that dedicated land and improvements are high-quality and accessible by residents. Such guidelines might address the land's accessibility and visibility from a public right-of-way, its location within a development, its size and dimensions, and its topography—including slope and maximum amount of stormwater infrastructure or floodplain. Additionally, when developers make improvements directly to the land, a city may establish rules for the types of improvements that are acceptable, often based on the city's own park development guidelines.

Implementation Considerations

Fee usage. Impact fees and fees-in-lieu are one-time charges designated for the acquisition of land and capital improvements necessary for park development. They do not cover the ongoing maintenance and operational expenses of the parks they create. The fees associated with these policies support the establishment of new facilities, but the long-term upkeep of these facilities must be managed through other funding sources.

Development review process. Almost all cities have a development review process led by the planning department to review new proposals and ensure that they meet the city's various requirements and support long-range plans. This review process is typically the mechanism by which a city determines whether a development meets park-related requirements. Well-defined policies can ensure consistent application throughout the review process and facilitate collaboration across departments. This is crucial, as some parks departments have reported they do not have a formal role in planning departments' development review. Clear requirements and review processes also provide the planning department with a foundation to initiate discussions between developers and the parks department. This approach ensures predictability for everyone, including developers, by providing them with a defined understanding of project costs and timelines.

Administrative complexity. PDOs are generally straightforward to manage due to their direct application to specific development projects. Each development site presents unique challenges, however, which may necessitate additional staff time to ensure compliance. In contrast, impact fees involve more complex administration that may require coordinated efforts across multiple municipal departments, including parks, planning, capital improvements, and finance. These fees are collected through established government processes, but the need for interdepartmental cooperation can add layers of administrative complexity, especially during the initial setup of these processes.

Both PDOs and impact fees require ongoing administrative attention beyond initial setup. For instance, it is important that fees are assessed annually to account for changes in inflation and land values, ensuring that fee levels remain relevant and effective over time. Effective tracking and management of these fees are also crucial; they must be properly collected and

documented, and there should be mechanisms in place to refund them if they are not spent or contractually committed within a specified time frame—typically 5–10 years.

Timing of transferring land or funding to the city. There are two important considerations a city must weigh related to when to collect land or fees from developers: (1) how the timing of fee collection will influence park development and (2) whether fees will be collected at a sufficient rate to buy land or make improvements within city guidelines.

The timing of land dedication and fee collection significantly affects when a park can be developed. For instance, if a developer conveys land to a city for a park only after most of the development is occupied, the city may be pressured to quickly develop the park to meet the needs of the existing residents. If the park isn't completed when new residents move in, the city might not meet its standard level of park service, and residents might not immediately benefit from a park they have effectively paid for. To address the slow accumulation of fees, one possible solution is for cities to use bonding. This allows cities to borrow funds backed by a secure revenue source and use future impact fees to repay the borrowed amount.⁵³

Main Challenges for Implementing Park Dedication Ordinances and Impact Fees

As outlined in the previous sections, when designing PDOs and impact fees, cities have much to consider—from understanding their legal authority, to determining levels of service, to developing a process for reviewing development plans. While these aspects of policymaking are challenging in their own way, they tend to be technical obstacles that can typically be solved with expertise and additional resources such as better data tracking and more staff time for plan reviews.

Cities also face deeply complex questions and challenges concerning the intersection of urban growth and park equity. These challenges are systemic: they are tied to long-standing patterns both embedded in the built environment and entrenched in local government policies and processes. Meeting these challenges requires reflection, a willingness to learn, and a long-term commitment to change. Land development policies, or a lack thereof, have driven many of the issues of inequities in the built environment; consequently, they can also be part of the solution. Linking PDOs and impact fees to the complex challenges cities face, while leveraging the technical components of these policies for equitable park creation and access, is a primary goal of this report.

TPL researchers held interviews and discussions with city staff to determine the main challenges cities encounter when implementing PDOs and impact fees. The questions city staff raised reflect both the technical and adaptive challenges they face when assessing how these policies can increase park access and close the park equity gap in their cities. Subsequent sections of this paper detail these three core challenges and provide examples of how practitioners are innovatively addressing them through their local land development policies.

SECTION 2

Planning for Growth



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How Can Cities Ensure That Park Creation Keeps Pace with New Development and Population Growth?

As many U.S. cities experience population growth,⁵⁴ it is essential that local governments continue to provide residents with parks. As cities grow—upward or outward—and land becomes scarcer, cities are at risk of failing to meet their local park needs if park development does not keep pace. Park agencies, which across the country are historically under-resourced, may struggle to stay abreast of broader development trends and increasing populations. When not sufficiently resourced, park agencies are often forced to make difficult decisions about how to serve new residents as well as existing ones.

Recent studies comparing park creation and population growth show that parks are not keeping pace with growth. An analysis of TPL's City Park Facts data found that, among the 100 most populous U.S. cities with available data, nearly two-thirds had less park acreage per resident in 2023 than in 2016, with an average decrease in park acres per resident of 5 percent over that time span. (See [Appendix D](#).) In another TPL study, a series of interviews with staff from 12 cities in the mid-2000s found that only one city of the 12 confirmed that it was adding enough park acreage to keep up with population increases. Five of the 12 confirmed that they were not keeping up. Half of those cities were unable to evaluate due to a lack of basic data.⁵⁵

Three Reasons Park Creation Is Not Keeping Up with Population Growth

Through interviews with city staff and a review of policies, TPL researchers identified three primary reasons that development policies—both in design and application—do not advance park creation in line with population growth.

1. Park dedication ordinances and park impact fees are not always calibrated to reflect the true cost of land acquisition, park development, and park maintenance.

Land and fee requirements may not be effective if they don't account for rising costs or if they fail to differentiate between the varying needs and costs of land in less dense subdivisions and denser urban centers. For example, the acreage formulas in park dedication ordinances are typically designed for subdivisions. When these formulas are applied to urban infill developments, which are typically much denser, they often set unrealistic dedication requirements. For instance, consider a 20-acre subdivision with 100 units housing 350 residents, which averages 5 units and 17.5 residents per acre. Contrast this with a 2-acre multifamily site that also has 100 units but only 200 residents, reflecting a much higher density of 50 units and 100 people per acre. If the dedication requirement is 5 acres per 1,000 residents, it would necessitate 1.75 acres from the subdivision and 1 acre from the multifamily site. That 1.75 acres is only 9 percent of the subdivision site, while the 1 acre is 50 percent of the multifamily development site. It is much more feasible to set aside 9 percent of a site for a park than half of it. In almost all cases, this results in urban infill developers paying a fee-in-lieu, which creates a different set of complications, including increasing the cost of infill development, which may run counter to a city's broader housing goals.

The acreage formulas used in PDOs are often not calibrated to account for the urban infill context.

Consider a dedication requirement that requires 5 acres of park space per 1,000 residents.

IN A SUBDIVISION SETTING



20 acres



100 units



350 residents

20-acre subdivision

This would result in:
1.75 acres of park space
or **9% of the project site**



IN AN INFILL SETTING



2 acres



100 units



200 residents

2-acre infill

This would result in:
1 acre of park space
or **50% of the project site**



On the other hand, a fee or fee-in-lieu of land may not be sufficient to acquire land in the urban core because either (1) the fee formula is not constructed to reflect actual market value, or (2) by the time the city has collected enough fees to purchase the land, the land has increased in price beyond the original assessment formula. Addressing these two challenges will likely require formulas that reflect site-specific acquisition costs and flexibility about what land is available, rather than citywide standards. A review of PDOs across 73 Texas cities found that only 13, or 18 percent, based their fee formula on the fair market value of the land being subdivided. A similar number, 12 cities, use a fair market assessment but rely on a broader radius. The remaining 48 did not specify their formula mechanism.⁵⁷ In the analysis of 20 cities conducted for this paper, 15 cities were found to have fee options for land acquisition within their policies, either as an in-lieu option under a PDO or as impact fees. Among these 15 cities, however, only 5 calculated their fees based on the fair market value of the land or the specific zone where the development was located.

Fees from PDOs and impact fees may be pooled together and used for acquiring land, developing it, or both, once enough funds have accumulated. This process involves two main complications. First, there can be a significant delay between the collection of these fees and the eventual purchase of land and creation of parks. This delay can disadvantage developers who begin construction in an area before park investments are made, as the lack of nearby amenities may make it harder to sell or rent residential units. Second, the delay means that land costs will likely increase beyond the original projected value, requiring more funds to be collected than originally required. The effectiveness of these fee collections is further reduced when the initial amounts are insufficient for purchasing land or making improvements, leading to smaller, ineffective accumulations of funds. Additionally, the value of a land parcel may increase when the city shows interest in acquiring it, further complicating the situation.

Another challenge in accurately calculating land and fee requirements relates to how cities define their level of service, which must adhere to the legal standard of “rough proportionality”—meaning the amount of land or fees dedicated must be proportional to maintaining the existing level of park service. Different cities include various types of parks in this calculation: some count only neighborhood parks, others include both neighborhood and community parks, and some consider additional types of green spaces. Given that dedication requirements are capped by maintaining the existing level of service, cities should consider including a broader range of parks to reflect the diverse usage by residents of new developments.

2. Cities do not always have financial or staffing capacity to build a park on vacant land transferred as part of a dedication requirement.

When land is dedicated to the city, it may come without any physical improvement or the funding to convert the site into a high-quality park. Of the 10 cities reviewed in this report with a park dedication ordinance, five had a separate land improvement fee that supplemented the dedication requirement to ensure a park would be built. Cities without a land improvement fee reported that, as a result, dedicated land could remain vacant for years before being developed into a park. This delay was typically caused by one of two factors: (1) the city did not require developers to build the park as part of the dedication process, or (2) the city lacked sufficient funds to develop the park at the time the land was acquired.

For example, in Colorado Springs, Colorado, the city can only use fees collected as part of its PDO for acquisition of new land, not the development of that land into a park. In a best-case scenario, this results in the city accumulating undeveloped land while awaiting available funds to develop the land into a park. In a worst-case scenario, the acquisition fees cannot keep up with inflation either, meaning that the city is often unable even to purchase land for future development.

Additionally, the characteristics of the dedicated land can significantly affect the feasibility of park development. Even if enough land is dedicated, certain conditions, such as steep slopes or floodplains, may complicate its development into a

park. There is a history of successful conversion of “undevelopable” land into valuable park spaces across the country, but these transformations are not easy. Challenging land conditions increase both the complexity and cost of developing the land into a functional park.

Of the 10 cities reviewed in this study with a PDO, seven had some version of minimum criteria for land to be dedicated as park, such as requirements for floodplains, slope, and frontage. These site-selection criteria should prompt cities to explore strategies that balance the land used for parks, housing, and other types of development. In cases where cities prioritize “less-developable” land for parks, they should ensure that they have sufficient funding and staff expertise to convert this land into parks.

A second important consideration among a smaller set of cities is the presence of an open space dedication requirement, as distinct from a park dedication requirement. This results in land being set aside for essential public infrastructure such as sidewalks and trails or primarily left as conservation or environmental management areas. In interviews, cities that have had more success in maximizing open space dedications have used them to expand their greenway networks or for multiple purposes, such as a stormwater management area that does double duty as park space. Greenways are typically easier to adapt to a challenging terrain than a neighborhood park development would be, because they mostly include paths, while parks generally entail more space to serve multiple purposes, such as recreational activities, social gatherings, and green infrastructure.

Across our interviews, city staff expressed a wide range of preferences for what should be required in terms of minimum criteria. Some cities want very clear, stringent criteria on what types of lands should be accepted by cities. Others want to be able to make decisions on a case-by-case basis. Across almost all cities, staff shared that ensuring a clear view into the park via frontage requirements can help maximize its potential benefits.

3. Cities lack the data, staff, and systems to enable better coordination and understand how their development policies are—or are not—working.

Cities rarely have sufficient data and systems to understand the full scale of how their park dedication ordinances and impact fees are shaping local park access. Cities reported that, to enable better coordination between city agencies, better investment is needed in staff dedicated to tracking both public and private parks in the city’s overall park system—whether in the parks and recreation agency or in the planning department. In a 2013 study on park dedication ordinances and impact fees in 12 cities across the country, TPL researchers found that only six had sufficient data to track their program’s land acquisition and development outcomes.⁵⁸ Recent interviews with city staff and conversations with CoP participants confirmed that cities continue to lack training and data management systems. Without data on land and fees, cities may not have a full picture of how their policies are tying into broader park goals.

In some cities, parks and recreation agencies lack the resources to manage small parks, convert lower-quality land into usable parks, or review development decisions effectively. As a result, these agencies may accept only land dedications that meet a minimum size requirement, as maintaining scattered small parcels across the city can be cost-inefficient. For instance, in Fort Worth, Texas, the city does not accept land dedications smaller than 5 acres. This requirement is stipulated in the dedication ordinance, leading smaller developments to pay fees-in-lieu instead. This points to an opportunity to align comprehensive plans and land subdivision requirements to ensure the effective siting of adequate land early in the subdivision mapping process.

In a related issue, many local agencies lack funding or staffing to develop floodplains or other environmentally challenging areas into parks or recreational experiences. Managing floodplain recreation can be time intensive and expensive. While

the dual purpose often leads to net savings, the lack of an explicit staffing and resourcing model can create a barrier to effectively converting these landscapes into accessible parks and recreational spaces that serve the community. Some cities are working to cross-train staff from different departments. For example, Des Moines, Iowa, is conducting cross-training with parks and public works staff on management of green infrastructure and native plantings to ensure that the city's public spaces—regardless of agency ownership—are efficiently maintained.

Several cities shared that, in drastic situations, they have received a land dedication but have not been informed about their ownership responsibilities until after the city accepted the land. This relates to a separate issue: parks and recreation departments might not be fully integrated into decision-making related to property development. This makes it hard to appropriately plan and manage parks and green space.

An additional benefit of tracking these data is a certain predictability, so developers know what to anticipate when budgeting for new projects. When cities have a better sense of how their park dedication ordinances and impact fees are shaping local park access, they can make more strategic decisions about when to prioritize the dedication of land or fees, or when to allow for developers to meet requirements through alternative pathways. The increased clarity on the part of the city has a secondary effect of creating increased predictability and efficiency for developers who are undergoing development review with the city; they will have a better understanding of what will be required from them based on what they are building and where.

Key Considerations from Community of Practice Participants

The following are key suggestions from CoP participants for cities to consider when reviewing or creating policies to ensure park creation keeps pace with population growth.

1. Overall considerations:

- a. Park dedication ordinances should include a land improvement fee or other strategy to ensure parks are built and should not simply be focused on land acquisition.
- b. City planning and parks and recreation should have more formal coordination concerning park dedications and park siting early in the land subdivision process, including investment in data-tracking systems.
- c. Cities should ensure that the requirements of any fee-in-lieu of land or impact fee are written in a way that enables timely acquisition of land.

2. Considerations for land acquisition:

- a. Cities should calculate acreage requirements based on the existing level of service provided by all park types (e.g., neighborhood parks, community parks, and open space), rather than neighborhood parks only.
- b. Cities should calculate acquisition fees (whether for fees-in-lieu or impact fees) using an empirical, site-specific calculation to ensure fee levels are sufficient to acquire land in the targeted area, rather than using a citywide average or outdated cost assumptions.
- c. Cities should consider either ensuring that land quality criteria (e.g., floodplains and slope allowances) are sufficient for park development or investing in the agency staffing necessary to convert challenging open space into creative parks.

3. Considerations for park development:

- a. If requesting land improvement / park development fees, cities should ensure that they are sufficient to develop the type of land being dedicated into a park (e.g., challenging land likely entails higher park development cost).
- b. As an alternative to land improvement fees, cities should consider the feasibility and benefit of having developers build and dedicate the park as they build the rest of the development.
- c. Cities should consider potential benefits and drawbacks of allowing developers to provide privately managed but publicly accessible parks as an alternative compliance approach. This topic is discussed further in [Section 4](#) of this report.

SECTION 3

Planning for Access



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How Can Cities Leverage Their Land Development Policies to Build Equitable Parks for All?

The previous section of this report highlights the fundamental need for parks to keep pace with population growth. It also identifies three key reasons land development policies are not advancing park creation quickly enough to meet demand. In addition to impacting the pace of park creation, these policies also influence where parks are developed and improved—directly affecting who has access and to what types of facilities.

During interviews with city staff, a recurring concern was raised: most park dedication ordinances (PDOs) and impact fees are structured in a way that fails to account for residents' use of varied park infrastructure across the entire city. Development policies that fail to account for the full range of ways residents use a city's park system risk perpetuating inequitable park access. Narrowly defined policies can lead to park creation being concentrated in areas of high economic growth, while other parts of the city's park infrastructure suffer from increased usage without a corresponding investment to support the growth in usership from new developments. Another result can be misaligned investments—for example, by requiring a new neighborhood park to be created in an area where the need is already met, when greater impact could be achieved by funding increased capacity in community parks.

TPL policy analysis revealed that, when determining where dedicated land must be located or where collected fees must be spent, most cities emphasize close-to-home neighborhood parks in their nexus definitions, but they often do not adequately consider how new residents also engage with park infrastructure throughout the city. Discussions with city staff and reviews of their development policies identified two key limitations in how land development policies restrict cities' ability to effectively address park infrastructure needs: (1) the city's nexus definition often fails to reflect citywide park utilization, and (2) land dedication and fee requirements lack the flexibility to address gaps in park access. When these issues are addressed, the entire community, including new development, benefits from a comprehensive park system that meets local, community, and regional needs.

Two Opportunities to Increase Flexibility in Land Development Policies

Cities have traditionally adhered to a strict interpretation of nexus guidance, requiring land to be dedicated or fees to be spent on-site or in close proximity to the development. Although nearby parks are crucial, a narrowly defined nexus overlooks the reality that residents will also rely on parks throughout the city to meet their recreational needs.⁵⁹ This includes not only neighborhood parks but also larger community and regional parks that provide diverse amenities and recreational opportunities. Recognizing this, some cities are introducing more flexibility into their policies to maintain compliance with "essential nexus" requirements while also addressing impacts to the broader park system. Cities typically do so by revising their nexus criteria and modifying their requirements on the allocation and usage of dedicated land or fees.

The ability of a city to create a broader nexus or flexibility in land dedication and fee requirements may depend on a city's legal risk tolerance and political will. Several cities shared that legal teams or director-level staff rely on a more conservative interpretation of what is allowable for parkland dedication ordinances, while other cities are comfortable with a more expansive interpretation. Creating flexibility can also be politically fraught. For example, a study of park impact fees in Los Angeles found that, although the city's policy allowed for greater flexibility in spending fees across broader areas, the funds were typically spent within the council district where they were collected.⁶⁰ Political dynamics and localized priorities can make it challenging to achieve the flexibility needed to redistribute funds equitably across different areas of the city.

1. Adopted nexus requirements do not always reflect citywide park utilization.

Nexus requirements are perhaps the most important tool for defining a city's flexibility regarding the distribution of land and fees generated by land development policies. The U.S. Supreme Court, in its *Nollan v. California Coastal Commission* decision, affirmed that there must be a rational "nexus" between the impacts of a proposed development and the conditions imposed on that development—such as land dedication or fee payments. For the purposes of parks, cities typically demonstrate this nexus in two common ways. One approach is to require that a park funded or created through the development be located within a specified distance—for example, within one mile of the project site. The other is to divide the city into service zones, requiring that land or fees collected from a development be used within the same zone. Some cities define the entire city as a single zone, while others divide it into multiple distinct zones. Cities may also apply different nexus standards depending on whether land is being dedicated or fees are being assessed.

A city's nexus requirement can greatly impact the degree to which dedicated land or fees address park need. If land is not available for acquisition within a designated zone, an area might receive fees but still not see parks developed. Several cities have expressed that their nexus requirements force them to collect fees or look for land in areas that are already

well served by parks or might not have any more land available for purchase, while other areas that have less development continue to experience underinvestment. Similar issues were identified in research from nearly 20 years ago, illustrating the ongoing challenge related to properly defining nexus requirements.⁶¹

Some cities are working to provide flexibility within their nexus requirements to address these challenges. For example, Colorado Springs, Colorado, is providing flexibility in how funds can be allocated by allowing a portion of its PDO revenue to be applied to community parks anywhere in the city, with the rationale that such parks have a wider service radius than neighborhood parks and thus still support residents of a new development. In these circumstances, if a neighborhood's park needs are met, the city retains flexibility to address system-level needs elsewhere in the city. Portland, Oregon, has constructed a two-zone system: one zone encompasses the downtown area, and the other applies to the rest of the city. That, in turn, provides flexibility for spending outside the downtown zone.

When using a zone-based approach, some cities create zones that allow for distribution of funds that reflect citywide park utilization. For example, cities might create a citywide zone within which a portion of collected fees can be used for community or regional parks that will be utilized by residents of the new development. Additionally, several cities are creating zones specific to the characteristics of a neighborhood, such as a downtown zone, that better reflect local development costs and usage patterns. Of the 15 cities with a dedication ordinance or impact fee, more than half used a zone-based approach; the remainder employed a distance-based approach or, in two instances, a citywide approach.

Some cities are also broadening the geography of their nexuses to allow for a more equitable distribution of funds. For example, Madison, Wisconsin, reduced the number of zones where fees can be spent within the city from 11 to four. It also increased the geographic size of those four zones to spread funds across its neighborhoods with more flexibility.⁶² At the same time, it created a citywide fund for a portion of fees collected to distribute funds more equitably across the city. Similarly, San Diego, California, has instituted a new citywide park development impact fee.⁶³ Through 2026, at least 80 percent of the citywide impact fee must be invested in park-deficient communities as defined by the city.⁶⁴ In Los Angeles, California, the city has loosened its nexus requirement in an effort to redirect funds toward communities that are experiencing little development, although an evaluation of the work in Los Angeles has found mixed efficacy.⁶⁵

In addition to allowing for a more equitable distribution of funds, creating a broader nexus can give cities more discretion in selecting land for park development and allow for the creation of a greater range of park types that serve all residents. This broader discretion should be guided by park system master planning to ensure that decisions about park development are aligned with long-term goals for equitable access, diverse park offerings, and strategic growth across the entire park system.

2. A lack of flexibility in fee and dedication requirements can restrict a city's ability to address gaps in park access.

A land-only dedication is the most rigid method of structuring a park dedication ordinance. Cities are beginning to provide a greater range of options that consider the park needs of growing populations within the city's broader park goals. For example, cities may structure their park dedication ordinances to require a fee-in-lieu of land option when the land dedicated would not advance park agency goals.

In Austin, Texas, the city has mapped "park-deficient areas" based on a level of service analysis. When a development falls within that area, the city is likely to require the developer to dedicate land rather than pay a fee-in-lieu of land. When a development is not within the park-deficient area, the city may prioritize a fee-in-lieu instead. This helps the city leverage development trends as part of the solution to its wide-ranging, system-wide park needs. Tools such as TPL's ParkServe®

mapping platform provide easy-to-use datasets to identify “park-deficient areas” if they haven’t yet been identified in a given city. The platform includes every urban park in the U.S. and identifies the neighborhoods within each city that don’t have a park within a 10-minute walk.

Other cities, such as Aurora, Colorado, are working to bolster flexibility in terms of how much land the city will accept. Aurora generally does not accept land dedications for parks that would be less than 5 acres. For large greenfield developments, Aurora requires that developers dedicate land in accordance with the city’s standards, which mandate 7.8 acres of open space, 3 acres for neighborhood parks, and 1.1 acres for community parks per 1,000 residents. When small infill or transit-oriented development projects are planned, however, the city waives the open space acreage requirement and allows for a “small urban park” to meet neighborhood park requirements on-site with the remainder of land requirements paid via a fee-in-lieu. This ensures that even in higher-density, more costly areas of the city, the development policy supports the city’s overall park system goals.

Development Policy, Parks, and Gentrification

Among public park advocates and many of the city staff interviewed as part of this study, there is concern that park creation or renovation could result in the alienation, exclusion, or displacement of long-term residents and businesses through a process referred to as green gentrification. Investment in parks is essential but can also lead to rising rents and property values, exacerbating the risk of displacement if not managed with inclusive, community-stabilizing strategies.

Park development does not necessarily lead to gentrification or displacement, however. A study by Alessandro Rigolon and Jeremy Németh, which analyzed the gentrification impact of 621 new parks and greenways across 10 U.S. cities between 2000 and 2015, found that not all new parks lead to gentrification.ⁱⁱ They found that most gentrification risk was associated with just two types of parks: (1) iconic greenways such as New York’s High Line, The 606 in Chicago, and Atlanta’s Beltline, and (2) parks close to downtown areas.⁶⁶

Less is known about the effect of park development policies, such as PDOs and impact fees, on gentrification and displacement. Some of the research that does exist points to development fees being directed disproportionately to communities that are either gentrifying or at risk for gentrification.⁶⁷ Additionally, the common practice of exempting affordable housing from park dedication and fee requirements necessitates further research to understand the impacts of these policy choices on park access for people living in affordable housing. Further investigation is needed to explore how these policies contribute to the complex social and economic factors that drive displacement.

ii For this study, Rigolon and Németh defined gentrification as an increase in a neighborhood’s income level, education level, or housing value that is steeper than the city’s median increase.

As cities implement development policies aimed at improving their park systems, they must also pair these policies with strategies to reduce displacement risk. Cities can learn from existing models that show how policy can be an important tool for more equitable development. Research by Alessandro Rigolon and Jon Christensen highlights this potential: in their review of 27 park projects across 19 cities, they documented 26 different types of parks-related anti-displacement strategies (PRADS). These strategies included anti-eviction protections for renters and property tax freezes for homeowners, which can safeguard existing residents from displacement due to rising local prices. The report also identified ways policy could incentivize the development of affordable residential housing units, such as by offering density bonuses.⁶⁸ Cities are encouraged to continually monitor the impacts of park investments on housing prices, gentrification, and displacement to develop, adapt, and refine interventions that address these pressures over time.

For more information, see TPL's recently released research report, [Great Parks Should Not Uproot Communities](#), which reviews the growing literature on green gentrification risk factors and anti-displacement strategies for cities.⁶⁹

Key Considerations from Community of Practice Participants

The following are key suggestions from CoP participants for cities to consider when reviewing the ability of their land development policies to address new residents' citywide park utilization.

1. Considerations when refining the city's nexus requirement to allow fees to be used to advance system goals:

- a. Track the park types and level of service across the city to understand where the city might have flexibility to prioritize community-wide or neighborhood-specific improvements to meet overall goals for level of service.
- b. Whether using a zone-based or distance-based approach, consider having a separate "citywide" fund, to which a portion of fees can be added. This allows for the application of funds to community or regional parks that serve both the new development and other neighborhoods. A city's ability to use such a fund may depend on local or state legal guidance.
- c. If using a zone-based approach, consider how best to construct zones based on your local context to allow for funds to meet a wide range of park needs—for example, by having larger zones that allow for a broader distribution of funds across the city.

2. Considerations in creating flexibility for PDOs or fees to address existing gaps in park access:

- a. Include flexibility in your PDO to allow for land dedication, fee-in-lieu of land, and varied sizes and types of dedicated land (e.g., small urban parks in dense urban areas). This flexibility should be complemented by clear guidelines establishing the specific contexts and circumstances under which each type of dedication or payment can be made.
- b. Use tools such as TPL's ParkServe[®] mapping platform to understand current park access gaps, and make sure that your PDO and impact fees prioritize land dedication and park creation in those areas when development occurs nearby.

SECTION 4

Public-Private Partnerships



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How Can Public-Private Partnerships Be Fostered to Provide and Manage Parks While Ensuring That Public Access Remains a Core City Value?

Even when cities adopt park dedication ordinances (PDOs) and impact fees to expand their park systems in line with population growth, park agencies often face fiscal constraints that limit their ability to manage additional facilities. In response, cities may offer developers the option to satisfy PDO and impact fee requirements by providing parks that are privately managed, yet publicly accessible. This approach aligns with a broader objective of many cities' economic development agencies: leveraging private-sector development to serve both public and private interests. By investing in parks, the private sector can contribute to the public good, strengthen ties with the community, and gain a strategic advantage in attracting and retaining a diverse workforce. Additionally, this collaborative approach can help communities attract new workers, businesses, and development opportunities, ultimately strengthening the community's overall fiscal health.

These public-private partnerships must, however, be understood within the context of the financial strain cities are currently facing. As of the 2022 fiscal year, public funding for city parks in the 100 most populous cities remained below pre-2007 Great Recession levels.⁷⁰ This has contributed to a significant backlog of maintenance work in existing parks.

A National Recreation and Park Association (NRPA) study estimated that city parks and recreation agencies would need to spend \$60 billion just to address current maintenance issues.⁷¹ In light of this backlog, CoP participants highlighted a key potential pitfall of privately managed parks: the concern that they could be used to justify cuts to city parks and recreation budgets.

CoP participants also highlighted two additional concerns regarding the privatization of park management. First, there is a fundamental worry about shifting values related to publicly managed lands. Parks have traditionally been viewed as public assets managed for the public good; transferring their management to private entities raises concerns about the potential erosion of these values. Second, ensuring parks remain open and accessible to the public becomes more challenging under private control. Participants emphasized the need to maintain public access and foster an inclusive, welcoming environment. These concerns highlight the complexities of balancing efficiency and the public interest in the context of privatized park management.

Acknowledging these and other challenges, cities are exploring alternative management and financing for parks for the 21st century. In this section, we refer to these as “alternative management entities” (rather than “private”) to include both private (e.g., real estate developers or property managers) and quasi-public (e.g., special district or business improvement district) partnerships. With the ongoing tension between desires for private open space and for public open space, CoP participants emphasized the need to proactively structure these alternative approaches to ensure that accessible, welcoming public spaces remain a core city value.

How the Prevalence of Alternative Management Entities Is Influencing Park Accessibility

CoP participants identified two key factors that influence decisions regarding public access to privately managed parks: the types of organizations that could manage these parks and the financial mechanisms that support their operation. Our interviews and research found that public access remains a central value for parks and recreation agencies, and ensuring ongoing access to privately managed spaces is achievable. In four cities that provided data, 73 percent of their publicly accessible parks opened in the past five years are managed by private or quasi-private entities, such as homeowners associations, business improvement districts, and private institutions including museums.

Alternative Management Entities

When a developer builds a park without transferring ownership to the city, management is often handed over to one of four common alternative management entities: special districts, business improvement districts, homeowners associations, or property managers.ⁱⁱⁱ These entities offer more design and management control to the “buyer” (e.g., commercial tenants or homeowners), as they are not bound by citywide regulations and standards for operation. These entities can also benefit city governments by providing additional funding and management capacity beyond what the city could take on independently. Several common approaches exist for managing parks through these alternative entities.

- **Special districts** are one of five types of local governments as classified by the U.S. Census Bureau and typically require authorization from a geographic population or their elected representatives.⁷² Special districts are created to finance,

ⁱⁱⁱ We exclude other private management entities, such as park conservancies and private institutions (e.g., museums), because they typically do not manage parks created via a city’s development policies.

design, develop, and operate public improvements (e.g., parks and recreation facilities) when an existing municipality would prefer not to or is unable to do so. Common advantages of funding public infrastructure for new developments through special districts include the following: (1) the infrastructure is “off balance sheet” for a municipality, meaning that it doesn’t count against statutory limits on how much the municipality is allowed to borrow; (2) the cost of the development is limited to those who will directly benefit, rather than being spread across the full municipality; and (3) developers prefer this approach over impact fees because it allows them to spread the cost over many decades instead of having to factor it into the unit cost of a development. Disadvantages include fragmentation of governmental services and tax rates, including confusion among residents about who is responsible for services. Special districts are usually authorized via a combination of state and local authority. They can be formed as single-purpose districts—for example, a park district—or multipurpose, with parks being part of a set of public services the district provides. Special districts primarily function as a development tool—solving for the challenge of how to pay for public infrastructure in a new development when a municipality does not use its existing bonding authority to do so.

- **Business improvement districts (BIDs)** are defined geographic locations within whose boundaries businesses are required to pay an additional tax or levy to fund projects; BIDs can also draw on other public and private funding. BIDs are generally operated by a nonprofit organization with full-time staff and a board of directors. BIDs provide a wide range of support for business owners within their boundaries, from enhanced sidewalk cleaning to conducting advocacy for members to funding capital improvements. BIDs often help maintain, clean, and program parks within their boundaries. They may also help with other beautification efforts such as tree planting or greening. Establishing a BID typically requires authorization from the city and support among business owners within its proposed boundaries. Requirements that vary from state to state may govern the implementation of a BID, including enabling legislation. About 40 states have legislation governing BIDs.⁷³
- **Homeowners associations (HOAs)** are fully private organizations typically funded through homeowner fees and tasked with managing a range of responsibilities, including park maintenance. CoP participants mentioned frequent areas of concern for HOA-managed parks, including that in some instances, changes in the HOA’s financial situation may prevent it from fulfilling its upkeep obligations related to privately developed parks. Additionally, HOAs are often run by volunteers without experience or incentive to manage for the general public’s use of their facilities, potentially leading to mismanagement. Another challenge with HOAs is they might implement practices that discourage or even restrict nonresidents from accessing these parks, limiting their value as public spaces.⁷⁴
- **Property managers** are private entities responsible for the management and ongoing maintenance of a park or other privately owned public space. They are most common in commercial, mixed-use, and multifamily residential settings. For example, a property manager may be responsible for upkeep of a small plaza or pocket park in front of a downtown building or for open space and trails within an office park. Property managers are primarily funded through rent payments.

Table 4.1. Approaches for Alternatively Managed Parks

	Entity	Management Type	Finance	Examples of Public Access
Subdivisions	Homeowners associations	Private (typically volunteer-run); either opt-in or requirement of deed for specific geographic boundary	Annual fees	Numerous, but typically informal
	Special districts	Quasi-public; authorized by population or their elected officials; board typically represents developer interests	Bonding authority and annual “tax” assessment	Colorado’s Metro Districts and Austin’s various districts
Urban Core	Property managers	Privately operated (typically professionally managed)	Rent payments	New York City’s privately owned public spaces ^a San Francisco’s privately owned public open spaces ^b
	Business improvement districts	Quasi-public; authorized by elected officials and typically must be agreed upon by a minimum percentage of property owners	Annual fees	Washington, DC’s BIDs Philadelphia’s BIDs (e.g., University City District ^c and Center City District ^d)
Office Parks	Property managers	Privately operated (typically professionally managed)	Rent payments	Infrequent

a New York City Department of City Planning. (n.d.). *New York City’s privately owned public spaces*. <https://www.nyc.gov/site/planning/plans/pops/pops.page>.

b San Francisco. (n.d.). *Privately owned public open spaces*. <https://sfpopos.com/>.

c University City District. (n.d.). *Transforming public spaces*. Philadelphia. <https://www.universitycity.org/transforming-public-spaces>.

d Center City District. (n.d.). *Center City District parks*. Philadelphia. <https://www.centercityphila.org/parks>.

Financing

A core tension in land development policies involves who should pay for the creation of public infrastructure for new development. A primary purpose of dedication requirements and impact fees is to ensure that new development covers the proportionate costs of the public infrastructure it necessitates, but these policies generate one-time dedications and fees to cover park creation, not ongoing operations. On the other hand, alternative management entities can help fund both the creation and the ongoing maintenance of new parks. Homeowners associations, property managers, business improvement districts, and special districts all provide a mechanism for collection of annual fees or rental income to fund the ongoing maintenance of parks that serve members or tenants. In addition, special districts offer a way to finance the construction of parks over many years. States often give this authorization to issue debt backed by an annual assessment (effectively, a tax) on property owners in the district.

While these alternative management structures effectively solve the problem of how to fund a new development’s park infrastructure, they can also perpetuate park equity gaps between high- and low-resourced neighborhoods.⁷⁵ Equity gaps could widen if alternatively managed parks are used to justify decreasing park investment in other neighborhoods. For example, CoP participants shared concerns that city officials might view parks managed through alternative means as fulfilling the city’s overall park needs, thereby justifying cuts or limitations to the parks department’s budget. Instead, officials should ensure that alternative funding contributes to expanding the pool of resources available for parks, rather than endorsing reductions or accepting the stagnation of park funding.

Lessons Learned from Park Conservancies

Strategies to ensure that alternative management structures, such as the four described above, contribute to expanding the overall funding pool without exacerbating existing inequities can be drawn from recent debates about the roles of park conservancies or “friends of” groups. Although these privately managed groups tend to support publicly managed parks, they have been challenged with the same question: whether their presence exacerbates park inequity, by channeling private dollars into parks in affluent neighborhoods, or ameliorates it, by increasing the overall park-funding budget.

For example, the Central Park Conservancy, a nonprofit that manages New York’s Central Park on behalf of the parks department, can provide many lessons in this regard, having been the subject of considerable debate. As a result of these discussions, the Conservancy for many years has allocated substantial funds and technical assistance to support parks throughout New York City, as part of the Conservancy’s Five Boroughs Program.^{76,77} Although alternative management of parks can offer benefits, cities should be aware that it might contribute to inequitable outcomes, particularly if used as a justification for decreasing investment in other areas. This note of caution does not render these approaches irrelevant; when they are employed, however, city leaders should be aware of the potential for widening inequities.

Public Access

When an alternatively managed park is provided as a compliance option for a PDO or impact fee, cities may often require public access. A similar situation could arise through negotiations or incentives, with the city exchanging increased development rights for a publicly accessible park. In these scenarios, a common question is how to ensure that these spaces truly provide public access—as well as what counts as a park. When privately developed and alternatively managed parks are required to provide public access, cities should lay out clear guidelines about the space’s accessibility from a design perspective, its permitted uses, rules (including hours of operation), messaging indicating public access, and protection from future development.

Some cities have put in place clear standards for privately owned public spaces to ensure that these areas remain accessible to residents and are utilized by the public. New York City’s privately owned public space (POPS) program has long been considered a standard-bearer for this assurance. After 60 years of practice, the city’s planning department now requires four critical components to confirm public access: (1) clear design principles, (2) publicly visible signage with common elements and the logo of the POPS program, (3) the ability to enforce maintenance, and (4) the ability to list the site on a publicly available website. Even this program struggles with enforcement, however. A recent analysis by the *New York Times* found that nearly one in five POPS properties does not comply with the city’s program requirements.⁷⁸

This approach is not limited to dense urban areas. Cities with significant planned communities, such as Henderson, Nevada, and Irvine, California, have developed approaches that balance private development and public access. In these cities, developers build the parks as part of the new community, and then the parks are typically managed by the HOA or share joint management between the HOA and the city. These approaches can include deed restrictions or other protections that run with the land in perpetuity and ensure it is maintained and preserved as open space.

Across the cities represented in this discussion series, we identified four criteria common to ensuring public access to a privately managed space:

1. Signage explicitly states that the park is open to the public as well as the park’s operating hours and who is responsible for managing the park. The park entrance and signage should be clearly visible from a public right-of-way. In instances where the park entrance is not directly adjacent to a public right-of-way, such as on the rooftop of a building or behind a gated community, there needs to be explicit signage and wayfinding to direct people to the park.
2. The park is listed in a public list or map of publicly accessible parks that is actively maintained by a city staff member and promoted to the public as listing public places to visit and spend time in (e.g., a city website).
3. The park also meets the same basic maintenance requirements, usage types, and operating hours as other public parks in the city.
4. The park has permanent legal protection to remain a publicly accessible park via an easement or other policy mechanism.

As a potential path forward for alternatively managed parks, some cities are contemplating the establishment of a public spaces program staffed by dedicated personnel to oversee the network of publicly accessible sites managed by various entities alongside the city’s public park system. For example, New York City has recently established a cabinet-level position responsible for overseeing the coordinated development and operation of public spaces. This role focuses on initiatives such as boulevard redevelopment, outdoor dining programs, and revitalizing closed spaces under public bridges. Similar positions, such as a director of the public realm, have been created in other major cities including Boston, Massachusetts, indicating a growing trend toward prioritizing and enhancing public-private partnerships for parks and open spaces.

Key Considerations from Community of Practice Participants

The following are key suggestions from CoP participants for cities to consider when developing alternative management approaches to public space without undermining a city’s commitment to publicly accessible green space.

1. Consider alternative management partners, such as special districts, BIDs, or HOAs, that can increase the overall pool of park funding.

2. Consider developing a program to oversee publicly accessible but privately managed parks for both residential and commercial areas, with a strong emphasis on maintaining public access as a core value.

- a. Assigning a dedicated staff member with enforcement authority ensures effective management of the city’s private park inventory and supports consistent public access and wayfinding.
- b. The program should establish clear and predictable design standards and use appropriate development incentives as a tool to build partnerships with management entities.

3. Consider requiring alternatively managed parks to meet the following criteria for ensuring public access:

- a. Welcoming signage visible from a public right-of-way.
- b. Listing on a city website of publicly accessible parks across the city.
- c. Compliance with maintenance and access standards in place at city parks.
- d. Permanent legal protection to remain a publicly accessible park and protection of the park from future development through an easement or other policy mechanism, including a requirement that the park be replaced if the site is redeveloped.

Conclusion and Call for Future Research



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Land and development policy is an essential tool for city leaders and park practitioners to keep park creation on pace as cities grow. As cities build park systems for the 21st century, there is a growing array of public-private development and management models for public parks. Both regulatory tools and partnerships with the development community are becoming more commonplace and, combined, are contributing significantly to new park creation. Among a sample of large U.S. cities, only 5 percent of park openings in the past five years were on land acquired via outright city purchases; more than half involved land acquired through development policy or dedication. Seventy-five percent of CoP participants shared that they either agree or strongly agree that developers play an essential role in how cities are acquiring land and building new parks.

There is a significant opportunity for cities to implement and optimize park dedication ordinances (PDOs) and impact fees to build park equity: by making sure that park investment keeps pace with population growth, by building flexibility into their policies to allow for PDOs and impact fees to address citywide park utilization, and by ensuring privately owned or managed parks promote public access and system-wide investment. PDOs and impact fees are a growing trend across the country, but more cities need to explore and adopt these policies. Cities that already have land development policies in place can use this report to expand and enhance their regulations to advance equity. Cities without a policy in place can use this as a starting point for building equitable land development policies.

City leaders, researchers, and private-sector developers must work together to define the best way to structure these development policies to advance park equity. Leaders, policymakers, advocates, and practitioners need to be equipped with the knowledge and tools to ensure that a city's land development policies advance its overall park equity goals. There is no one-size-fits-all solution.

As we look toward the future, further research is needed to explore the nuances and potential impacts of these policies so that they can be adapted and optimized to meet the diverse needs of each community. Over the course of developing this report, six types of studies emerged as the most promising next steps for researchers and local leaders interested in advancing their city's PDOs and impact fees:

- **Updating fee and dedication formulas:** Evaluate how cities can modernize local fee and dedication formulas to reflect current land acquisition and park development costs, particularly in cities undergoing significant urban infill development to meet housing needs. In particular, analyze how formulas historically designed for subdivisions can be updated to reflect dense urban development while ensuring compliance with legal standards and balancing stakeholder interests.
- **Refining nexus requirements for equitable park access:** Examine whether refining nexus requirements and introducing flexibility in land dedication and fee structures can improve equitable park access, while also assessing potential unintended consequences such as gentrification and displacement. Consider legal precedents for refining nexus requirements.
- **Restructuring local agency responsibilities for park creation:** Explore innovative ways cities are structuring parks and planning departments to maximize the benefits of development policies in creating essential park infrastructure that promotes health, safety, and well-being.
- **Tracking the impact of development policies on park equity:** Investigate the creation of effective tracking processes and systems to measure how development policies influence park equity. Many cities lack basic data on parks created through development policies, hindering their ability to assess progress toward equity goals.
- **Fostering public-private partnerships for park development:** Assess how public-private partnerships and alternative management structures for park development can ensure public access while promoting equity. Analyze financial models, long-term funding of park maintenance and operations, and policy mechanisms to prioritize public access and equitable outcomes in such partnerships.
- **Addressing developer challenges and exploring incentives:** Investigate financial, logistical, and regulatory challenges developers face in meeting park dedication and fee requirements. Explore incentives and strategies to align developer contributions with city equity goals.

Parks address many of today's most pressing issues, serving as unique resources where a wide array of stakeholders and government officials can unite to enhance public health, climate resilience, community cohesion, and equity. It is essential that cities continue to explore innovative and creative ways to leverage land use policy for parks and green spaces to build thriving, vibrant communities for all.

Further Reading

Crompton, J. L., & Ellis, G. D. (2020). Is a decline in park provisions inevitable in fast-growth cities? Evidence from Texas. *Journal of Park and Recreation Administration*, 40(2). <https://js.sagamorepub.com/index.php/jpra/article/view/10618>

Crompton, J. L. (2010, October). *Parkland dedication ordinances in Texas: A missed opportunity?* Texas A&M AgriLife Extension. <http://college.agrilife.org/rptsweb/wp-content/uploads/sites/21/2015/05/Parkland-Dedication-Ordinances-in-Texas-A-Missed-Opportunity.pdf>

Crompton, J. L. (2022, February). *Parkland dedication: Optimizing an underutilized resource.* Texas A&M AgriLife Extension. <https://cdn-de.agrilife.org/extension/departments/repk/repk-pu-009/files/parkland-dedication-optimizing-an-underutilized-resource.pdf>

Harnik, P., & Yaffe, L. (2005). *Who's going to pay for this park?* Trust for Public Land. https://www.tpl.org/wp-content/uploads/2013/12/ccpe_who_is_going_to_pay.pdf

Nelson, A. C., Nicholas, J. C., Juergensmeyer, J. C., & Mullen, C. (2022). *Proportionate share impact fees and development mitigation.* Routledge.

Rigolon, A., Giamarino, C., & Christensen, J. (2023). Development fees and park equity in Los Angeles. *Journal of the American Planning Association*, 90(2), 230–246. <https://www.tandfonline.com/doi/abs/10.1080/01944363.2023.2201279>

Urban Land Institute. (2018). *The case for open space: Why the real estate industry should invest in parks and open space.* https://americas.uli.org/wp-content/uploads/ULI-Documents/ULI-Case-For-Open-Space_Electronic.pdf

Appendices



Appendix A:

Full Methodology

The common patterns and emerging practices identified in this report reflect the perspectives of city parks and planning staff from large, growing U.S. cities. Specifically, the findings in this report are derived from three key sources.

Community of Practice: Trust for Public Land convened 65 parks and planning practitioners from 37 cities to discuss the role of land use policy, development policy, and partnerships with developers in shaping local park systems. Conversations took place during 2022–23, as part of a “Parks and Development Policy” track of the 10-Minute Walk® Community of Practice (CoP), a learning and peer-networking program.

Development Policy Review: TPL reviewed the land development policies of 20 cities across the country to identify common patterns and emerging practices and to examine the relationship between these policies and the acquisition and development of parks and green space. As part of this review, TPL researchers conducted phone and email interviews with parks and planning staff to assess the strengths and limitations of these policies in their cities.

Park Openings and Acquisitions Analysis: TPL analyzed recent park openings and acquisitions in 10 cities across the U.S. to determine the sources of funding for new land acquisition and park development. Data for this analysis was collected from city staff in each of the 10 cities. Additionally, TPL used its City Park Facts dataset to compare system-wide acreage trends over time across the 100 most populous cities.

Community of Practice

The Community of Practice (CoP) is convened annually by Trust for Public Land’s 10-Minute Walk® program to facilitate discussion among park and planning staff about key issues related to park equity. The 2022–23 cycle included a “Parks and Development Policy” track, in which parks and planning staff from 37 cities discussed how land use policy, development policy, and partnerships with developers shape their local park systems. Five virtual sessions were held between November 2022 and June 2023. Each session was 90 minutes long, with a 45-minute “plenary” presentation followed by 45 minutes of facilitated small-group discussion. TPL invited staff from each of the 100 most populous cities included in the Trust for Public Land ParkScore® Index as well as any city that had formally signed on to the 10-Minute Walk program. TPL facilitators identified themes from each of the discussions, which informed the three key questions identified in this report as well as the most salient recommendations for cities to consider.

The 37 cities in the discussion series represent more than 33 million people, or about 10 percent of the U.S. population. Thirty-two of the 37 cities were among the 100 most populous cities in the country in 2022 (population over 215,000). They represent a range of city densities: 14 of the 37 cities are high density, with more than 10 people per acre; three cities have 7–10 people per acre; 15 cities are medium-low density, with 4–7 people per acre; five cities have fewer than four people per acre. The cities represent a range of growth between 2000 and 2022, with seven cities experiencing population decline since 2000, 16 cities experiencing 1–25 percent population growth since 2000, and 14 experiencing more than 25 percent population growth since 2000. (See [Table A.1.](#))

Development Policy Review

All participants in the discussion series were invited to participate in the analysis of their development policies. This analysis is available in [Appendix B](#). Additional cities with strong park development policies were identified from CoP small-group discussions and asked to participate in the analysis. Twenty cities provided data for the analysis of their park dedication ordinances, park impact fees, or both; 15 of the 20 were participants in the CoP. Columbus, Ohio; Madison, Wisconsin; Oklahoma City, Oklahoma; Portland, Oregon; and St. Paul, Minnesota, also participated in the policy analysis but were not part of the discussion series. Compared with both the CoP participant cities and cities writ large, these 20 cities skewed toward lower densities (65 percent were lower density, compared with a roughly 50–50 split among CoP participants) and higher growth rates (only one was experiencing negative growth), both of which are associated with the need for subdivision development policies. For this reason, the findings of the policy analysis are more representative of cities with park dedication ordinances or impact fees than cities at large. Fifteen of the cities had a park dedication ordinance or impact fee. The other five did not have a formal policy, but did describe how the goal of providing enough park infrastructure for new developments was incorporated into their city’s development review process.

The policy analysis was conducted in a three-step process. First, a set of key policy components and implementation considerations were identified via the discussion series (see main report, [Table 1.1](#)). The key policy components identified were development type, land dedication (i.e., land transfer), land acquisition fee, land improvement fee (park development fee), calculation of the land and fee (rough proportionality), geographic restrictions (essential nexus), credits, exemptions and reductions, alternative compliance, and quality and access requirements. The implementation considerations identified were fee usage, development review process, administrative complexity, and timing considerations.

Second, TPL staff reviewed the text of each city’s relevant development policies and classified each of the policy components. For example, the nexus component of each policy was classified based on whether it was zonal or distance-based. The results of these classifications are presented in [Appendix B](#). Third, TPL staff conducted structured interviews with planning staff responsible for each city’s development policy. These interviews were conducted both to confirm the assessment of the text analysis and to understand how the policies were currently being implemented in practice. For example, some cities allowed for either land dedication or fee-in-lieu, but in practice they only asked for fees or in some cases waived the requirements entirely. These interviews, in particular, informed the analysis of the implementation considerations.

Park Openings and Acquisitions Analysis

All participants in the CoP were invited to participate in the analysis of their park openings and land acquisitions from 2018 to 2023. Additional cities with high-quality park opening data were identified from TPL relationships and asked to participate in the analysis. Ten cities provided data for the analysis of their park openings, land acquisitions, or both, and eight of the 10 were participants in the CoP (Columbus, Ohio, and Portland, Oregon, were not).

These 10 cities are representative of the range of city densities, with an even split between low- and high-density cities. The cities did, however, skew toward larger and high-growth cities, with all but two of the 10 experiencing greater than 23 percent population growth between 2000 and 2022 (Cleveland and Long Beach being the exceptions). All but one were at least 300,000 in population as of 2022 (Lewisville, Texas, was the exception at 131,215). Cities from across the U.S. geography were included, with the exception of the Southeast.

Cities were asked to provide an Excel file with a list of all park openings and all park or open space land acquisitions from 2018 to 2023. A total of 76 agency park openings and 98 undeveloped acquisitions were provided across the 10 cities during this period. Four cities also provided data on publicly accessible but privately managed park openings in that same period, for an additional 35 privately managed but publicly accessible park openings. City staff provided additional data on both openings and acquisitions: specifically, the year opened or acquired, how the site was acquired (e.g., via developer dedication), and who was responsible for the site’s park development (e.g., agency or developer). These inventories were reviewed by TPL and confirmed via interviews with relevant city staff. Results from this analysis are available in [Appendix C](#).

Table A.1. Summary of City Inclusion in Different Components of Study

City	City Characteristics			City Staff Participation		
	2022 City Population	2022 City Density	Pop. Growth Since 2000	Community of Practice	Policy Review	Park Creation Analysis
Anaheim, CA	346,023	High	6%	X		
Arlington, TX	399,679	Medium-Low	20%	X	X	
Aurora, CO	398,994	Low	45%	X	X	X
Austin, TX	1,003,496	Medium-Low	53%	X	X	
Baltimore, MD	576,870	High	-11%	X		
Baton Rouge, LA	227,473	Medium-Low	0%	X		
Boston, MA	685,476	High	16%	X		
Bridgeport, CT	148,654	High	7%	X		
Buffalo, NY	279,145	High	-5%	X		
Charlotte/Mecklenburg, NC	1,164,981	Low	68%	X	X	
Cleveland, OH	371,562	Medium-High	-22%	X	X	X
Colorado Springs, CO	495,511	Medium-Low	37%	X		
Columbus, OH	927,811	Medium-Low	30%		X	X
Dallas, TX	1,320,535	Medium-Low	11%	X		
Denver, CO	744,729	High	34%	X	X	X
Des Moines, IA	218,206	Medium-Low	10%	X	X	
Elizabeth, NJ	135,407	High	12%	X		
Fort Worth, TX	966,549	Medium-Low	81%	X	X	
Grand Blanc, MI	7,960	Low	-3%	X		
Houston, TX	2,355,890	Medium-Low	21%	X		
Irvine, CA	319,103	Medium-High	123%	X		X

City	City Characteristics			City Staff Participation		
	2022 City Population	2022 City Density	Pop. Growth Since 2000	Community of Practice	Policy Review	Park Creation Analysis
Lewisville, TX	131,215	Medium-Low	68%	X	X	X
Lexington/Fayette, KY	327,130	Low	26%	X		X
Lincoln, NE	297,371	Medium-Low	32%	X	X	
Long Beach, CA	464,125	High	1%	X	X	X
Los Angeles, CA	3,903,648	High	6%	X	X	
Madison, WI	277,146	Medium-Low	34%		X	
Minneapolis, MN	439,124	High	15%	X		
New Orleans, LA	388,624	Low	-20%	X		
New York, NY	8,840,134	High	10%	X		
Oakland, CA	446,649	High	12%	X		
Oklahoma City, OK	702,619	Low	39%		X	
Phoenix, AZ	1,647,147	Medium-Low	25%	X		
Plano, TX	291,554	Medium-Low	31%	X		
Portland, OR	665,438	Medium-High	26%		X	X
Raleigh, NC	480,766	Medium-Low	74%	X	X	
Sacramento, CA	534,959	Medium-High	31%	X		
San Antonio, TX	1,453,138	Medium-Low	27%	X		
San Francisco, CA	883,822	High	14%	X		
St. Paul, MN	314,825	Medium-High	10%		X	
Scranton, PA	75,848	Medium-Low	-1%	X		
Washington, DC	706,367	High	23%	X	X	X

City density groups are classified by the following:

Low: <4 people per acre land area

Medium-Low: 4-7

Medium-High: 7-10

High: 10+

Appendix B

Policy Review and Summary

This appendix provides a synopsis of the land development policies in 20 cities reviewed for this report, focusing on park dedication ordinances and impact fees that support park creation. The analysis is limited, as each city may have additional relevant policies beyond those included here. This snapshot is intended to highlight the specific policies examined. Five of the 20 cities—Cleveland, Ohio; Denver, Colorado; Des Moines, Iowa; Lexington, Kentucky; and Charlotte, North Carolina—did not have applicable park dedication ordinances or impact fees and are therefore not included in this appendix.

DEDICATION WITH DISTANCE NEXUS					
	Aurora, CO	Austin, TX	Fort Worth, TX	Los Angeles, CA	St. Paul, MN
What policies does the city have?					
Policy reviewed*	Dedication ordinance				
Link to city ordinance	https://tinyurl.com/5ae3s7jr	https://tinyurl.com/4hk2r94c	https://tinyurl.com/3mw9tukn	https://tinyurl.com/yw9h9p3k	https://tinyurl.com/4tcak3e9
Link to additional city background	https://tinyurl.com/5n6dmwnz	https://tinyurl.com/yu2fn2sv	https://tinyurl.com/28redr9h	https://tinyurl.com/mr4yvke8	https://tinyurl.com/z5umea58
Applicable land type reviewed**	Residential, single-family	Residential, single-family	Residential, single-family	Residential	Residential, multi-family*
Option for land dedication	Yes	Yes	Yes	Yes	Yes
Option for developer-built park	Yes	Yes	Yes	Yes	Yes
Option for land acquisition/fee-in-lieu/impact fee	Yes	Yes	Yes	Yes	Yes
Option for land improvement fee	Yes	Yes	Yes	No	No
Options for credits or exemptions	Yes	Yes	Yes	Yes	Yes
How does the city approach nexus?					
Approach	Distance	Distance	Distance	Distance	Distance
Number of zones (if using zone-based approach)	N/A*	N/A*	N/A	N/A*	N/A
What requirements does the city have for dedicated land?					
Floodplain requirements	Yes	Yes	Yes	Yes**	No
Slope requirements	Yes	Yes	Yes	Yes**	No
Size requirements	Yes	Yes	Yes	Yes**	No
Location requirements	No	Yes	Yes	Yes**	No

	Aurora, CO	Austin, TX	Fort Worth, TX	Los Angeles, CA	St. Paul, MN
What formula does the city use for calculating land donation requirements?					
Formula	3.0 acres per 1,000 for neighborhood parks 1.1 acres per 1,000 for community parks 7.8 acres per 1,000 residents for open space	9.4 acres per 1,000 residents and functional population	3.25 acres x dwelling units x persons/unit for neighborhood; 3.75 acres for community	LD = (DU x P) x F LD: Land to be dedicated in acres. DU: Total number of new market-rate dwelling units. P: Average number of people per occupied dwelling unit as determined by the most recent version of the U.S. Census for the City of Los Angeles. F: Park service factor, as indicated by the Department of Recreation and Parks rate and fee schedule.	Residential: 150 square feet per new dwelling unit with a maximum of 4.5% of the parcel's buildable land.
How does the city construct its fee-in-lieu, acquisition, or impact fee?					
Fee basis	Fair market value (FMV) of site*	Other**	FMV of site	Constant value, city (not tied to FMV assessment)	FMV of site
Frequency of updates to formula	Annual—e.g., tied to annual FMV assessment/Construction Cost Index/inflation	Annual—e.g., tied to annual FMV assessment/Construction Cost Index/inflation	Annual—e.g., tied to annual FMV assessment/Construction Cost Index/inflation	Annual—e.g., tied to annual FMV assessment/Construction Cost Index/ inflation	Not regularly or not applicable
How can the fee be used	Acquisition only	Acquisition or park development	Acquisition or park development	Acquisition or park development	Acquisition or park development
Nexus—where can fees be spent	Within short distance of site (< 1 mile)**	Within short distance of site (< 1 mile)***	Within short distance of site (< 1 mile)*	Other	Within short distance of site (< 1 mile)**
How does the city construct its improvement fee?					
Fee type	Development fee that supplements dedication requirement	Development fee that supplements dedication requirement	Development fee that supplements dedication requirement	No fee present	No fee present
Formula basis	Tied to development cost index (e.g., Construction Cost Index)	Other****	Tied to development cost index (e.g., Construction Cost Index)	N/A	N/A
Frequency of updates to formula	Annual—e.g., tied to annual index/ inflation	Annual—e.g., tied to annual index/ inflation	Annual—e.g., tied to annual index/ inflation	N/A	N/A
Nexus—where can fees be spent	Within short distance of site (< 1 mile)	Within short distance of site (< 1 mile)***	Within short distance of site (< 1 mile)	N/A	N/A
Usage of fees	Park development only	Dedication or park development	Dedication or park development	N/A	N/A
What credits and exemptions are available?					
Affordable or senior housing	Yes	Yes	No	Yes	Yes
Providing private park	No	Yes	Yes	Yes	Yes
Stormwater	No	Yes	No	No	No
Other	Reductions allowed for infill and transit-oriented development	Yes	No	Improvements to city-owned land and “land-in-lieu of fee”	N/A

	Aurora, CO	Austin, TX	Fort Worth, TX	Los Angeles, CA	St. Paul, MN
<ul style="list-style-type: none"> * Other land dedication policies or requirements may exist within the city. ** Policy may apply to multiple or additional land types with varying requirements based on land type. 	<ul style="list-style-type: none"> * Unless development qualifies as infill, in which case the "infill incentive rate" applies. ** Fees from Transit-Oriented Development (TOD) sites can be spent anywhere, as can open space fees. 	<ul style="list-style-type: none"> * Austin uses a distance-based approach for its nexus that prioritizes that the PDO requirement be met within a half-mile of the development where possible. If a half-mile isn't possible, the city allows for the requirement to be met within 2 miles. If 2 miles isn't possible, the requirement can be met within the cities park planning area (of which there are 27). ** Five-year average of purchasing parkland across the city. *** Ranked priority of ½-mile, 2-miles, and park planning area. **** Tied to average development cost for new parks. 	<p>If land is not available within the neighborhood unit, the city may spend within an adjacent neighborhood unit. If no opportunities are available in the adjacent neighborhood unit, then areas within the community park unit or park planning district may be considered.</p>	<ul style="list-style-type: none"> * Fee payments must be within 2, 5, or 10 miles of the development based on the classification of the park receiving the Park Fees. The three park classifications are Neighborhood (2), Community (5), and Regional (10). ** At discretion of Recreation and Parks. 	<ul style="list-style-type: none"> * Also applies to mixed-use, commercial, industrial and warehousing/storage, with different requirements for each land type. ** Fees must be spent within 0.5 miles.

DEDICATION WITH ZONES OR CITYWIDE NEXUS

	Arlington, TX	Colorado Springs, CO	Columbus, OH	Lewisville, TX	Madison, WI
What policies does the city have?					
Policy reviewed*	Dedication ordinance				
Link to city ordinance	https://tinyurl.com/mrhbasj7	https://tinyurl.com/v9bykm5x	https://tinyurl.com/4fv5fvm3	https://tinyurl.com/yc3jdb96	https://tinyurl.com/yc3jdb96
Link to additional city background		https://tinyurl.com/38f9u2fb		https://tinyurl.com/3vfht3t8	https://tinyurl.com/3vfht3t8
Applicable land type reviewed**	Residential	All residential	Other	Residential, multi-family	Residential, single-family
Option for land dedication	Yes	Yes	Yes	Yes	Yes
Option for developer-built park	Yes	Yes	Yes	Yes	Yes
Option for land acquisition/fee-in-lieu/impact fee	Yes	Yes	Yes	Yes	Yes
Option for land improvement fee	No	No	No	Yes	Yes
Options for credits or exemptions	Yes	Yes	Yes	No	Yes
How does the city approach nexus?					
Approach	Zones	Zones	Zones	Citywide	Zones
Number of zones (if using zone-based approach)	12	8	6	1	5
What requirements does the city have for dedicated land?					
Floodplain requirements	No	No*	No*	No	Yes
Slope requirements	No	No*	No**	No	Yes
Size requirements	No	Yes	No***	No	Yes
Location requirements	No	Yes	No****	No	Yes

	Arlington, TX	Colorado Springs, CO	Columbus, OH	Lewisville, TX	Madison, WI
What formula does the city use for calculating land donation requirements?					
Formula	N/A	# of units x acres of dedication per unit = land dedication requirement acres (Overall: 5.5 acres/1,000 people)	# of proposed dwelling units x median household size for owner-occupied residents/1,000 x 5.5 acres	Ratio of 3 acres for each 100 dwelling units; for those with less than 100 dwelling units, each dwelling unit shall equal .03 acres	1,081 square feet per unit
How does the city construct its fee-in-lieu, acquisition, or impact fee?					
Fee basis	Fair market value (FMV) of site	Average FMV of city	Average FMV of city	Constant value, city (not tied to FMV assessment)	Average FMV of city
Frequency of updates to formula	Annual—e.g., tied to annual FMV assessment/Construction Cost Index/inflation	On regular basis—every 1–5 years	On regular basis—every 1–5 years	On regular basis—every 1–5 years	Annual—e.g., tied to annual FMV assessment/Construction Cost Index/inflation
How can the fee be used	Acquisition or park development	Acquisition only	Acquisition or park development	Acquisition or park development	Acquisition or park development
Nexus—where can fees be spent	Anywhere in city (subject to approval)	Within zone**	Within zone	Anywhere in city (subject to approval)	Within zone
How does the city construct its improvement fee?					
Fee type	No fee present	No fee present	No fee present	Development fee that supplements dedication requirement	Development fee that supplements dedication requirement
Formula basis	N/A	N/A	N/A	Constant value based on one-time study, not indexed	Tied to development cost index (e.g., Construction Cost Index)
Frequency of updates to formula	N/A	N/A	N/A	On regular basis—every 1–5 years	Annual—e.g., tied to annual index/inflation
Nexus—where can fees be spent	N/A	N/A	N/A	Anywhere in city (subject to approval)	Within zone
Usage of fees	N/A	N/A	N/A	Dedication or park development	Park development only
What credits and exemptions are available?					
Affordable or senior housing	No	No	No	No	Yes
Providing private park	No	Yes	Yes	No	Yes
Stormwater	No	No	Yes	No	No
Other	No	There are several “alternative compliance” measures available for developers to meet the dedication requirement. The city must come to terms on these changes with the developer: <ul style="list-style-type: none"> • Development of park by developer with land conveyed to e.g., a district (an alternative owner and management entity) • Creation of multi-use trail when it aligns with the Park System Master Plan (PSMP). • Dedication of open space must align with department objectives • Alternative parks (e.g., mini-park, plaza, special purpose park) if they support 5.5 acres/1,000 people. • Improvements to existing park facilities (should align with PSMP, Capital Improvements Program lists, or other recognized needs) 	Credits can be provided for improvements made to dedicated land	No	No

	Arlington, TX	Colorado Springs, CO	Columbus, OH	Lewisville, TX	Madison, WI
* Other land dedication policies or requirements may exist within the city.		* These elements are considered in the evaluation of a site, but there are no specific requirements.	* Floodplain land within parkland can be accepted for land donated as part of Floodplain land within park boundary accepted for PDO		
** Policy may apply to multiple or additional land types with varying requirements based on land type.		** Or an adjacent zone.	** Riparian and ravine land within parkland can be accepted for land donated as part of Riparian and ravine land within park boundary accepted for PDO. *** Five acres is preferred, but will accept smaller sizes depending on neighborhood and existing park adjacency. **** Prefers parcels adjacent to existing parkland and requires road frontage.		

IMPACT FEES

	Lincoln, NE	Long Beach, CA	Oklahoma City, OK	Portland, OR	Raleigh, NC
What policies does the city have?					
Policy reviewed*	Impact fee				
Link to city ordinance	https://tinyurl.com/3kndu5p9	https://tinyurl.com/mwn6yfuu	https://tinyurl.com/4np3z3me		https://tinyurl.com/24fauf3v
Link to additional city background	https://tinyurl.com/y966psxz		https://tinyurl.com/ms53eurr	https://tinyurl.com/mryxhkww	https://tinyurl.com/444bzysj
Applicable land type reviewed**	Residential, multi-family	Residential, multi-family	Residential, multi-family	Other	Residential, multi-family
Option for land dedication	No	No	No	No	No
Option for developer-built park	No	No	Yes	No	No
Option for land acquisition/fee-in-lieu/impact fee	Yes	Yes	Yes	Yes	Yes
Option for land improvement fee	No	Yes	Yes	Yes	Yes
Options for credits or exemptions	Yes	Yes	Yes	Yes	No
How does the city approach nexus?					
Approach	Zones	Citywide	Zones	Zones	Zones
Number of zones (if using zone-based approach)	7	1	5	2	4
What requirements does the city have for dedicated land?					
Floodplain requirements	No	No	No	No	No
Slope requirements	No	No	No	No	No
Size requirements	No	No	No*	No	No*
Location requirements	No	No	No	No	No**

	Lincoln, NE	Long Beach, CA	Oklahoma City, OK	Portland, OR	Raleigh, NC
What formula does the city use for calculating land donation requirements?					
Formula	N/A	N/A	N/A	N/A	N/A
How does the city construct its fee-in-lieu, acquisition, or impact fee?					
Fee basis	Constant value, city (not tied to fair market value [FMV] assessment)	Tied to development cost index (e.g., Construction Cost Index)	Constant value, city (not tied to FMV assessment)	Other*	Average FMV of zone
Frequency of updates to formula	On regular basis—every 1–5 years	Not regularly or not applicable	Annual—e.g., tied to annual FMV assessment/Construction Cost Index/inflation	Annual—e.g., tied to annual FMV assessment/Construction Cost Index/inflation	Annual—e.g., tied to annual FMV assessment/Construction Cost Index/inflation
How can the fee be used	Acquisition or park development	Acquisition or park development	Acquisition or park development	Acquisition or park development	Acquisition or park development
Nexus—where can fees be spent	Within zone	Anywhere in the city, subject to approval	Within zone	Within zone	Within zone
How does the city construct its improvement fee?					
Fee type	No fee present	Impact fee that can fund acquisition or improvements	Impact fee that can fund acquisition or improvements	Impact fee that can fund acquisition or improvements	Impact fee that can fund acquisition or improvements
Formula basis	N/A	N/A	N/A	N/A	N/A
Frequency of updates to formula	N/A	N/A	N/A	N/A	N/A
Nexus—where can fees be spent	N/A	N/A	N/A	N/A	N/A
Usage of fees	N/A	N/A	N/A	N/A	N/A
What credits and exemptions are available?					
Affordable or senior housing	Low and moderate income housing	Yes	No	Yes	No
Providing private park	No	No	Yes	No	No
Stormwater	No	No	No	No	No
Other	No	No	N/A	No	No
* Other land dedication policies or requirements may exist within the city. ** Policy may apply to multiple or additional land types with varying requirements based on land type.			* 3.5% of the gross area of the plat must be parkland.	* Based on replacement value per person.	* There are requirements for the size of greenway easements that are dedicated. ** Greenway easement dedication is required from residential development along specific corridors.

Appendix C

Park Openings and Acquisitions Analysis

TPL researchers collected park opening and acquisition data between 2018 and 2023 from staff in 10 U.S. cities to document the prevalence of development policy in shaping park acquisition and development across the country. Additional information on the methodology can be found in [Appendix A](#).

Publicly Accessible Park Openings and Acquisitions Across 10 Cities, 2018–23

From 2018 to 2023, the parks and recreation agencies in the 10 cities opened 76 parks and acquired an additional 98 undeveloped sites for a total of 174 acquisitions in this analysis (Table C.1). Additionally, four of the 10 cities were able to provide data on publicly accessible park openings managed by a private or quasi-public entity. Across these four cities, private entities were responsible for opening an additional 35 parks in this time period, bringing those cities' total park openings to 48. The parks opened by private entities comprised 73 percent of these 48 openings.

Table C.1. Publicly Accessible Park Openings and Acquisitions Across 10 Cities, 2018–23

City	State	City Park and Recreation Agency Acquisitions and Openings			Public and Private Park and Greenway Openings		
		Openings, Agency-Managed	Undeveloped Agency Acquisitions	Total Openings/Acquisitions	Openings, Privately Managed	Total Openings	Of Openings, % Privately Managed
Aurora	CO	2	13	15	No data		
Cleveland	OH	3	–	3	4	7	57%
Columbus	OH		40	40	No data		
Denver	CO	27	18	45	No data		
Irvine	CA	2	NA	2	20	22	91%
Lewisville	TX	28	20	48	No data		
Lexington	KY	3	3	6	No data		
Long Beach	CA	3	NA	3	2	5	40%
Portland	OR	3	4	7	No data		
Washington, DC	DC	5	NA	5	9	14	64%
Total		76	98	174	35	48	73%
% of Total		44%	56%	100%			

Acquisition and Development Methods for the 76 Parks and Recreation Agency Park and Greenway Openings, 2018–23

Of the 76 city-managed park openings from 2018 to 2023, 67 percent were constructed on a site acquired via dedication or development fees. The remainder were constructed on sites acquired through direct city purchase (5 percent), interagency transfer (13 percent), or other methods (14 percent). The acquisition year for these 76 city-managed park openings could have been earlier than 2018—city staff did not readily have acquisition years for many of these openings (Table C.2).

A similar picture emerged from analysis of the entities responsible for construction of the parks. Sixty-two percent of the parks were constructed by the developer or a private entity before being transferred to the city. Thirty-seven percent were constructed by the city or another public agency (Table C.2).

Table C.2. Acquisition and Development Methods for the 76 Parks and Recreation Agency Park and Greenway Openings, 2018–23

City	State	Openings	Land Acquisition Mechanism				Entity Responsible for Park Development		
		Total	Via Dedication or Development fees	City Purchase	Interagency Transfer	Other	Developer or Private	City or Public	Other
Aurora	CO	2	1	1				2	
Cleveland	OH	3	2	1			1	2	
Columbus	OH	–							
Denver	CO	27	16		5	6	16	10	1
Irvine	CA	2	2				2	–	
Lewisville	TX	28	24	1	3		23	5	
Lexington	KY	3	–	–	1	2	1	2	
Long Beach	CA	3	–	1	1	1	1	2	
Portland	OR	3	3	–	–	–	–	3	–
Washington, DC	DC	5	3	–		2	3	2	
Total		76	51	4	10	11	47	28	1
% of Total		100%	67%	5%	13%	15%	62%	37%	1%

Acquisition Methods for the Combined 174 Openings and Undeveloped Acquisitions, 2018–23

This analysis presents the same acquisition analysis as [Table C.2](#), but for the combined sample of both the 76 openings and 98 undeveloped acquisitions (174 total sites).

Of the 174 sites of either a park opening or site acquisition between 2018 and 2023, 62 percent were acquired via dedication or development fees. The remainder were constructed on sites acquired through direct city purchase (17 percent), interagency transfer (12 percent), or other methods (9 percent).

Two cities acquired sites as part of significant planned developments. In Denver, several sites are in the process of being transferred to the city from the Stapleton development. In Lewisville, the city annexed the Castle Hills development and its many parks. For this reason, we also include a sub-analysis that compares the acquisition methods without Denver and Lewisville. Excluding these two cities, the trend remains similar: 59 percent of sites were acquired via dedication or development fees, 22 percent via city purchase, 7 percent via interagency transfer, and 11 percent via other methods (Table C.3).

Table C.3. Acquisition Methods for the Combined 174 Openings and Undeveloped Acquisitions, 2018–23

City	State	Total Acquisitions by Park Development Status			Acquisition Mechanism, Undeveloped and Developed Acquisitions			
		Undeveloped	Developed (Openings)*	Total	Via Dedication or Development Fees	City Purchase	Interagency Transfer	Other
Aurora	CO	13	2	15	14	1	–	–
Cleveland	OH	–	3	3	2	1	–	–
Columbus	OH	40	–	40	20	14	3	3
Denver	CO	18	27	45	22	9	7	7
Irvine	CA	–	2	2	2	–	–	–
Lewisville	TX	20	28	48	38	2	8	–
Lexington	KY	3	3	6	–	1	2	3
Long Beach	CA	–	3	3	–	1	1	1
Portland	OR	4	3	7	7	–	–	–
Washington	DC	–	5	5	3	–	–	2
Total		98	76	174	108	29	21	16
% of Total		56%	44%	100%	62%	17%	12%	9%
Subtotal, Excluding Denver and Lewisville**		60	21	81	48	18	6	9
% of Subtotal		74%	26%	100%	59%	22%	7%	11%

* Some of the “openings” listed here were for land acquired prior to 2018 but still included in this sample. In other words, this sample includes any land acquired or park opened between 2018 and 2023.

** Denver’s and Lewisville’s openings each include the acquisition of significant planned developments—in Denver’s case, the transfer of parks developed as part of the Stapleton development, and in Lewisville’s case, the annexation of the Castle Hills development, including transfer of parks management to the city. The exclusions of these cities and their large developments do not affect the overall trends seen in the data; thus it is recommended to not exclude them.

Status of 98 Undeveloped Acquisitions, 2018–23

Of the 98 undeveloped acquisitions, 30 percent are awaiting park construction. City staff reported not anticipating any additional development for the remaining 70 percent of the sites—mostly because they would remain natural areas or open space (e.g., as part of a greenway), and in four cases because they represented expansion of an existing park site (Table C.4).

TABLE C.4. STATUS OF 98 UNDEVELOPED ACQUISITIONS, 2018–23

City	State	Total Undeveloped Acquisitions	Of Undeveloped Acquisitions, Why Undeveloped		
			Natural Area or Open Space	Awaiting Development	Expansion of Existing Site
Aurora	CO	13	13		
Cleveland	OH	–			
Columbus	OH	40	21	19	–
Denver	CO	18	10	4	4
Irvine	CA	–			
Lewisville	TX	20	18	2	
Lexington	KY	3		3	
Long Beach	CA	–			
Portland	OR	4	3	1	–
Washington	DC	–			4
Total		98	65	29	4%
% of Total		100%	66%	30%	4%

Appendix D

Park Acreage Per Resident Trend Analysis

TPL compared park acreage per resident—a commonly used metric for setting acreage requirements in park dedication ordinances—among the 100 most populous cities between 2016 and 2023 to determine whether city park creation is keeping pace with population growth. For most cities, it is not. Of the 91 cities able to provide data, 58 (64%) have less park acreage per resident in 2023 compared to 2016 (Table D.1).

The data was collected as part of TPL’s annual City Park Facts Survey of the 100 most populous cities. Cities that were not part of the survey in both 2016 and 2023 (e.g., they were not among the 100 most populous cities in both years) were excluded. Cities that experienced significant changes in how they reported park acreage—such as shifting from reporting at the city level to the county level (e.g., Honolulu)—were also excluded. This resulted in a sample of 91 cities.

TPL also adjusted data where applicable to ensure consistency in reporting between 2016 and 2023. For example, significant park acreages were added to some city surveys in subsequent years, so TPL added those acres to the 2016 reported values to better reflect actual park creation trends. Because of these adjustments, the values reported here may not always match the data as originally published, but they represent TPL’s most accurate understanding of the data as of the time of publication.

Table D.1. Comparison of Park Acreage Per Capita Among the Most Populous U.S. Cities, 2016–23

City	2016			2023			Change		
	Population	Park Acreage	Park Acreage Per 1,000 Pop.	Population	Park Acreage	Park Acreage Per 1,000 Pop.	Population	Park Acreage	Park Acreage Per 1,000 Pop.
1. Pittsburgh, PA	305,150	2,983	9.8	305,298	4,175	13.7	0%	40%	40%
2. Tucson, AZ	529,346	4,369	8.3	548,705	6,195	11.3	4%	42%	37%
3. Richmond, VA	215,292	2,027	9.4	231,285	2,755	11.9	7%	36%	27%
4. Memphis, TN	653,480	9,145	14.0	631,187	11,163	17.7	-3%	22%	26%
5. Santa Ana, CA	333,189	517	1.6	309,050	600	1.9	-7%	16%	25%
6. Hialeah, FL	227,149	198	0.9	225,489	238	1.1	-1%	20%	21%
7. Louisville, KY	750,667	17,572	23.4	642,889	17,922	27.9	-14%	2%	19%
8. Colorado Springs, CO	437,068	11,031	25.2	495,511	14,785	29.8	13%	34%	18%
9. San Antonio, TX	1,380,401	26,132	18.9	1,453,138	32,001	22.0	5%	22%	16%
10. Buffalo, NY	257,895	1,903	7.4	279,145	2,383	8.5	8%	25%	16%
11. Cleveland, OH	383,389	2,998	7.8	371,562	3,311	8.9	-3%	10%	14%

	2016			2023			Change		
City	Population	Park Acreage	Park Acreage Per 1,000 Pop.	Population	Park Acreage	Park Acreage Per 1,000 Pop.	Population	Park Acreage	Park Acreage Per 1,000 Pop.
12. Jacksonville, FL	845,254	64,603	76.4	978,003	84,324	86.2	16%	31%	13%
13. Cincinnati, OH	300,747	6,891	22.9	311,917	8,057	25.8	4%	17%	13%
14. Baltimore, MD	620,218	4,905	7.9	576,870	5,102	8.8	-7%	4%	12%
15. St. Louis, MO	316,704	3,720	11.7	297,651	3,889	13.1	-6%	5%	11%
16. St. Petersburg, FL	245,960	4,555	18.5	259,920	5,342	20.6	6%	17%	11%
17. Milwaukee, WI	587,561	5,143	8.8	576,366	5,591	9.7	-2%	9%	11%
18. Fremont, CA	222,279	18,816	84.7	235,898	21,957	93.1	6%	17%	10%
19. Chicago, IL	2,737,877	12,588	4.6	2,750,534	13,866	5.0	0%	10%	10%
20. Fresno, CA	510,677	2,931	5.7	547,499	3,429	6.3	7%	17%	9%
21. Columbus, OH	826,587	11,926	14.4	927,811	14,513	15.6	12%	22%	8%
22. Sacramento, CA	477,381	5,561	11.6	534,959	6,747	12.6	12%	21%	8%
23. Riverside, CA	312,090	3,673	11.8	316,692	3,976	12.6	1%	8%	7%
24. Greensboro, NC	278,584	7,578	27.2	303,787	8,795	29.0	9%	16%	6%
25. Miami, FL	426,312	1,442	3.4	455,738	1,639	3.6	7%	14%	6%
26. Glendale, AZ	236,192	1,910	8.1	251,644	2,100	8.3	7%	10%	3%
27. Denver, CO	649,214	5,957	9.2	744,729	7,028	9.4	15%	18%	3%
28. San Francisco, CA	832,330	5,693	6.8	883,822	6,164	7.0	6%	8%	2%
29. Baton Rouge, LA	230,000	1,451	6.3	227,473	1,455	6.4	-1%	0%	1%
30. Scottsdale, AZ	226,562	28,817	127.2	246,001	31,598	128.4	9%	10%	1%
31. Virginia Beach, VA	448,653	24,936	55.6	464,214	25,993	56.0	3%	4%	1%
32. Houston, TX	2,216,413	40,727	18.4	2,355,890	43,486	18.5	6%	7%	0%
33. Anaheim, CA	349,504	4,626	13.2	346,023	4,584	13.2	-1%	-1%	0%
34. Toledo, OH	280,406	3,128	11.2	268,744	2,995	11.1	-4%	-4%	0%
35. El Paso, TX	685,272	30,081	43.9	687,301	30,012	43.7	0%	0%	-1%
36. Anchorage, AK	301,202	914,121	3,034.9	290,509	871,794	3,000.9	-4%	-5%	-1%
37. Long Beach, CA	471,210	3,123	6.6	464,125	3,034	6.5	-2%	-3%	-1%
38. Los Angeles, CA	3,887,115	40,122	10.3	3,903,648	39,626	10.2	0%	-1%	-2%
39. Washington, DC	636,737	8,525	13.4	706,367	9,296	13.2	11%	9%	-2%
40. Madison, WI	240,627	6,358	26.4	277,146	7,145	25.8	15%	12%	-2%
41. Albuquerque, NM	556,866	22,493	40.4	567,242	22,157	39.1	2%	-1%	-3%
42. Winston-Salem, NC	236,833	3,666	15.5	253,749	3,797	15.0	7%	4%	-3%
43. Kansas City, MO	470,312	17,683	37.6	517,971	18,816	36.3	10%	6%	-3%
44. Chesapeake, VA	236,285	56,326	238.4	255,227	58,693	230.0	8%	4%	-4%

City	2016			2023			Change		
	Population	Park Acreage	Park Acreage Per 1,000 Pop.	Population	Park Acreage	Park Acreage Per 1,000 Pop.	Population	Park Acreage	Park Acreage Per 1,000 Pop.
45. Detroit, MI	663,728	5,543	8.4	637,423	5,134	8.1	-4%	-7%	-4%
46. Irvine, CA	232,628	8,325	35.8	319,103	11,008	34.5	37%	32%	-4%
47. Boston, MA	634,253	4,956	7.8	685,476	5,160	7.5	8%	4%	-4%
48. Stockton, CA	299,775	1,157	3.9	323,593	1,199	3.7	8%	4%	-4%
49. New York, NY	8,433,086	39,615	4.7	8,840,134	39,796	4.5	5%	0%	-4%
50. Philadelphia, PA	1,551,773	10,830	7.0	1,619,078	10,797	6.7	4%	0%	-4%
51. Phoenix, AZ	1,513,274	49,254	32.5	1,647,147	51,020	31.0	9%	4%	-5%
52. Lincoln, NE	270,141	3,650	13.5	297,371	3,808	12.8	10%	4%	-5%
53. Garland, TX	235,705	2,922	12.4	251,478	2,951	11.7	7%	1%	-5%
54. Atlanta, GA	439,696	4,990	11.3	515,426	5,530	10.7	17%	11%	-5%
55. Lexington/Fayette, KY	307,370	4,424	14.4	327,130	4,447	13.6	6%	1%	-6%
56. Tampa, FL	351,854	4,818	13.7	392,284	5,045	12.9	11%	5%	-6%
57. St. Paul, MN	290,681	4,932	17.0	314,825	4,973	15.8	8%	1%	-7%
58. Fort Worth, TX	805,796	11,787	14.6	966,549	13,156	13.6	20%	12%	-7%
59. Portland, OR	605,898	14,489	23.9	665,438	14,662	22.0	10%	1%	-8%
60. San Jose, CA	986,443	16,067	16.3	1,018,924	15,221	14.9	3%	-5%	-8%
61. Lubbock, TX	241,278	2,228	9.2	263,561	2,228	8.5	9%	0%	-8%
62. Charlotte/Mecklenburg, NC	999,426	21,293	21.3	1,164,981	22,655	19.4	17%	6%	-9%
63. Wichita, KS	389,463	4,629	11.9	399,769	4,327	10.8	3%	-7%	-9%
64. Chula Vista, CA	258,641	2,531	9.8	278,609	2,482	8.9	8%	-2%	-9%
65. Minneapolis, MN	397,511	5,064	12.7	439,124	5,078	11.6	10%	0%	-9%
66. Arlington, VA	221,812	1,747	7.9	246,301	1,759	7.1	11%	1%	-9%
67. Las Vegas, NV	614,520	16,700	27.2	649,600	16,010	24.6	6%	-4%	-9%
68. Dallas, TX	1,254,907	22,003	17.5	1,320,535	20,835	15.8	5%	-5%	-10%
69. Irving, TX	227,124	1,919	8.4	261,915	1,988	7.6	15%	4%	-10%
70. Bakersfield, CA	368,026	5,362	14.6	410,726	5,364	13.1	12%	0%	-10%
71. Newark, NJ	277,347	847	3.1	315,285	851	2.7	14%	0%	-12%
72. Mesa, AZ	462,376	2,521	5.5	513,977	2,470	4.8	11%	-2%	-12%
73. Tulsa, OK	405,021	9,401	23.2	419,459	8,579	20.5	4%	-9%	-12%
74. New Orleans, LA	381,348	27,561	72.3	388,624	24,737	63.7	2%	-10%	-12%
75. Corpus Christi, TX	318,103	8,036	25.3	320,242	7,077	22.1	1%	-12%	-13%
76. Aurora, CO	347,654	10,436	30.0	398,994	10,409	26.1	15%	0%	-13%
77. Reno, NV	237,063	3,382	14.3	273,593	3,390	12.4	15%	0%	-13%

City	2016			2023			Change		
	Population	Park Acreage	Park Acreage Per 1,000 Pop.	Population	Park Acreage	Park Acreage Per 1,000 Pop.	Population	Park Acreage	Park Acreage Per 1,000 Pop.
78. Boise, ID	215,171	4,351	20.2	240,861	4,227	17.5	12%	-3%	-13%
79. Jersey City, NJ	258,411	1,072	4.1	304,261	1,090	3.6	18%	2%	-14%
80. Norfolk, VA	246,717	2,153	8.7	239,027	1,792	7.5	-3%	-17%	-14%
81. Arlington, TX	373,453	4,714	12.6	399,679	4,321	10.8	7%	-8%	-14%
82. San Diego, CA	1,343,525	45,392	33.8	1,394,592	40,122	28.8	4%	-12%	-15%
83. Seattle, WA	650,834	6,590	10.1	761,152	6,480	8.5	17%	-2%	-16%
84. Durham, NC	247,536	2,747	11.1	296,031	2,755	9.3	20%	0%	-16%
85. Plano, TX	272,923	5,152	18.9	291,554	4,588	15.7	7%	-11%	-17%
86. Omaha, NE	422,895	10,621	25.1	497,645	10,336	20.8	18%	-3%	-17%
87. Chandler, AZ	249,634	1,623	6.5	284,103	1,518	5.3	14%	-6%	-18%
88. Henderson, NV	275,333	5,559	20.2	331,701	5,504	16.6	20%	-1%	-18%
89. Raleigh, NC	434,891	13,014	29.9	480,766	11,804	24.6	11%	-9%	-18%
90. Orlando, FL	259,448	3,387	13.1	321,040	3,411	10.6	24%	1%	-19%
91. Austin, TX	856,569	20,714	24.2	1,003,496	19,069	19.0	17%	-8%	-21%
Total	58,504,051	1,913,457	32.7	62,011,311	1,923,689	31.0	6%	1%	-5%

The park creation gap was even more pronounced in faster growing cities (Table D.2). Faster growing cities have been adding more park space than slower growing cities, but this additional park space has not been sufficient to keep pace with population growth.

Table D.2. Comparison of Park Acreage Per Capita Trends by City Population Growth Rates, 2016–23

Cities by Population Growth	# Cities	Average % Change		
		Park Acreage	Park Acreage Per 1,000 Pop.	% Cities "Keeping Pace"
Declining Population (<0%)	15	3%	8%	67%
Low Growth (0–5%)	17	4%	1%	35%
Medium Growth (5–13%)	40	6%	-2%	35%
High Growth (13%+)	50	7%	-9%	15%

Endnotes

- 1 Reuben, A., Rutherford, G. W., James, J., & Razani, N. (2020, December). Association of neighborhood parks with child health in the United States. *Preventive Medicine*, 141, 106265. <https://doi.org/10.1016/j.ypmed.2020.106265>.
- 2 Hughey, S. M., Shulaker, B., Mowen, A. J., & Kaczynski, A. T. (2019). Promoting physical activity in parks and recreation. In *Physical activity and public health practice*. Springer Publishing Company.
- 3 Sturm, R., & Cohen, D. (2014). Proximity to urban parks and mental health. *Journal of Mental Health Policy and Economics*, 17(1), 19–24.
- 4 Foderaro, L. W. (2024, May). *The power of parks to strengthen community: A special report*. Trust for Public Land. <https://www.tpl.org/parks-strengthen-community-report>.
- 5 U.S. Department of Health and Human Services. (2023). *Our epidemic of loneliness and isolation: The U.S. Surgeon General's advisory on the healing effects of social connection and community*. <https://www.hhs.gov/sites/default/files/surgeon-general-social-connection-advisory.pdf>.
- 6 Foderaro, L. W. (2022, May 4). *The power of parks to address climate change: A special report*. Trust for Public Land. <https://www.tpl.org/parks-address-climate-change-report>.
- 7 Hughey, S. M., Walsemann, K. M., Child, S., Powers, A., Reed, J. A., & Kaczynski, A. T. (2016, April). Using an environmental justice approach to examine the relationships between park availability and quality indicators, neighborhood disadvantage, and racial/ethnic composition. *Landscape and Urban Planning*, 148, 159–169. <https://doi.org/10.1016/j.landurbplan.2015.12.016>.
- 8 Rigolon, A., Browning, M., & Jennings, V. (2018, October). Inequities in the quality of urban park systems: An environmental justice investigation of cities in the United States. *Landscape and Urban Planning*, 178, 156–169. <https://doi.org/10.1016/j.landurbplan.2018.05.026>.
- 9 Frumkin, H. (2005). Guest editorial: Health, equity, and the built environment. *Environmental Health Perspectives*, 113(5), A290–A291.
- 10 Trust for Public Land. (2023). *ParkServe*®. <https://www.tpl.org/parkserve>.
- 11 Ibid.
- 12 Texas State Legislature. (2023). Texas House Bill 1526. <https://legiscan.com/TX/bill/HB1526/2023>.
- 13 Raitt, J. (2022, January). Ending zoning's racist legacy. *Zoning Practice*. <https://www.planning.org/publications/document/9227445/>.
- 14 Rothstein, R. (2017). *The color of law: A forgotten history of how our government segregated America*. Liveright Publishing Corporation.
- 15 Ibid.
- 16 McGhee, H. (2021). *The sum of us: What racism costs everyone and how we can prosper together*. One World.
- 17 Ibid.
- 18 Centers for Disease Control and Prevention. (2024, February 8). Strategies for Physical Activity Through Community Design. U.S. Department of Health and Human Services. <https://www.cdc.gov/physical-activity/php/strategies/increasing-physical-activity-through-community-design-prevention-strategies.html>.
- 19 Powell, L. M., Slater, S., Chaloupka, F. J., & Harper, D. (2006). *Availability of physical activity–related facilities and neighborhood demographic and socioeconomic characteristics: A national study*.
- 20 American Planning Association. (2022). *Equity in zoning policy guide*. <https://www.planning.org/publications/document/9264386/>.
- 21 Foderaro, L. W., & Klein, W. (2023). *The power of parks to promote health: A special report*. Trust for Public Land. <https://www.tpl.org/parks-promote-health-report>.
- 22 Trust for Public Land. (2020). *The heat is on*. <https://www.tpl.org/the-heat-is-on>.
- 23 National Recreation and Park Association. (2022). *The economic impact of local parks*. <https://www.nrpa.org/contentassets/f568e0ca499743a08148e3593c860fc5/2022economicimpactreport.pdf>.
- 24 American Society of Civil Engineers. (2021). Public parks. In *Report card for America's infrastructure*. <https://infrastructurereportcard.org/cat-item/public-parks-infrastructure/>.
- 25 American Planning Association. (2024). *Standard state zoning enabling act and standard city planning enabling act*. <https://www.planning.org/growingsmart/enablingacts/>.
- 26 Williams, D. A., Delgado, L. H., Cameron, N., & Steil, J. (2023). The properties of whiteness: Land use regulation and anti-racist futures. *Journal of the American Planning Association*, 89(4), 505–516. <https://doi.org/10.1080/01944363.2022.2144930>.
- 27 Cranz, G. (1989). *The politics of park design: A history of urban parks in America* (2020 ed.). The MIT Press.
- 28 Rothstein, R. (2017). *The color of law: A forgotten history of how our government segregated America*. Liveright Publishing Corporation.

- 29 Crompton, J. L. (2022). *Parkland dedication: Optimizing an underutilized resource*. Texas A&M AgriLife Extension. <https://agrilifelearn.tamu.edu/s/product/parkland-dedication-optimizing-an-underutilized-resource/01t4x000004Oi8mAAC>.
- 30 Nelson, A. C., Nicholas, J. C., Juergensmeyer, J. C., & Mullen, C. (2022). *Proportionate share impact fees and development mitigation*. Taylor & Francis.
- 31 Crompton, J. L. (2022). *Parkland dedication: Optimizing an underutilized resource*. Texas A&M AgriLife Extension. <https://agrilifelearn.tamu.edu/s/product/parkland-dedication-optimizing-an-underutilized-resource/01t4x000004Oi8mAAC>.
- 32 Mullen, C. (2018). State impact fee enabling acts. <https://www.impactfees.com/state-acts/>.
- 33 Newport Partners, LLC, & Virginia Polytechnic Institute and State University. (2008). *Impact fees and housing affordability: A guidebook for practitioners*. U.S. Department of Housing and Urban Development.
- 34 Crompton, J. L. (2022). *Parkland dedication: Optimizing an underutilized resource*. Texas A&M AgriLife Extension. <https://agrilifelearn.tamu.edu/s/product/parkland-dedication-optimizing-an-underutilized-resource/01t4x000004Oi8mAAC>.
- 35 For discussion of a recent Texas ban on commercial ordinances and limitations on higher-density areas, see: Hernandez, N. (2023, September 28). New state law limits Austin's Parkland Dedication Ordinance. *Austin Monitor*. <https://www.austinmonitor.com/stories/2023/09/new-state-law-limits-austins-parkland-dedication-ordinance/>.
- 36 Crompton, J. L. (2022). *Parkland dedication: Optimizing an underutilized resource*. Texas A&M AgriLife Extension. <https://agrilifelearn.tamu.edu/s/product/parkland-dedication-optimizing-an-underutilized-resource/01t4x000004Oi8mAAC>.
- 37 City of Atlanta. (2024, August 2). Code of Ordinances, Chapter 1, Development Impact Fees, Section 19-1008: Sec. 19-1008. Requirements for assessment and calculation of impact fees—generally. https://library.municode.com/ga/atlanta/codes/code_of_ordinances?nodeld=PTIIICOORANDECO_PT19FEPELICH_CH1DEIMFE_S19-1008REASCAIMFEEN.
- 38 Crompton, J. L. (2022). *Parkland dedication: Optimizing an underutilized resource*. Texas A&M AgriLife Extension. <https://agrilifelearn.tamu.edu/s/product/parkland-dedication-optimizing-an-underutilized-resource/01t4x000004Oi8mAAC>.
- 39 Texas State Legislature. (2023). Texas House Bill 1526. <https://legiscan.com/TX/bill/HB1526/2023>.
- 40 Crompton, J. L. (2022). *Parkland dedication: Optimizing an underutilized resource*. Texas A&M AgriLife Extension. <https://agrilifelearn.tamu.edu/s/product/parkland-dedication-optimizing-an-underutilized-resource/01t4x000004Oi8mAAC>.
- 41 Newport Partners, LLC, & Virginia Polytechnic Institute and State University. (2008). *Impact fees and housing affordability: A guidebook for practitioners*. U.S. Department of Housing and Urban Development.
- 42 Ibid.
- 43 Mullen, C. (2018). State impact fee enabling acts. <https://www.impactfees.com/state-acts/>.
- 44 Ibid.
- 45 Newport Partners, LLC, & Virginia Polytechnic Institute and State University. (2008). *Impact fees and housing affordability: A guidebook for practitioners*. U.S. Department of Housing and Urban Development.
- 46 Illinois Association of Realtors. (2018). Impact fees in Illinois. https://www.illinoisrealtors.org/wp-content/uploads/2018/01/Impact_Fees.pdf.
- 47 A list of these cities and their policies is shared in Appendices A and B of this report.
- 48 Crompton, J. L. (2022). *Parkland dedication: Optimizing an underutilized resource*. Texas A&M AgriLife Extension. <https://agrilifelearn.tamu.edu/s/product/parkland-dedication-optimizing-an-underutilized-resource/01t4x000004Oi8mAAC>.
- 49 Duncan Associates. (2016). *Park impact fee and land dedication policy and public facility needs assessment*. City of Madison, Wisconsin. <https://www.cityofmadison.com/parks/documents/ImpactFeesNeedsAssessment.pdf>.
- 50 Ibid.
- 51 Ibid.
- 52 Ibid.
- 53 Newport Partners, LLC, & Virginia Polytechnic Institute and State University. (2008). *Impact fees and housing affordability: A guidebook for practitioners*. U.S. Department of Housing and Urban Development.
- 54 U.S. Census Bureau. (2022, December 29). *Nation's urban and rural populations shift following 2020 census* [Press release]. <https://www.census.gov/newsroom/press-releases/2022/urban-rural-populations.html>.
- 55 Harnik, P., & Yaffe, L. (2013). *Who's going to pay for this park?* Trust for Public Land. https://www.tpl.org/wp-content/uploads/2013/12/ccpe_who_is_going_to_pay.pdf.
- 56 Crompton, J. L., & Ellis, G. D. (2020). Is a decline in park provision inevitable in fast-growth cities? Evidence from Texas. *Journal of Park and Recreation Administration*, 40(2). <https://js.sagamorepub.com/index.php/jpra/article/view/10618>.

- 57 Crompton, J. L. (2022). *Parkland dedication: Optimizing an underutilized resource*. Texas A&M AgriLife Extension. <https://agrilifelearn.tamu.edu/s/product/parkland-dedication-optimizing-an-underutilized-resource/01t4x000004Oi8mAAC>.
- 58 Harnik, P., & Yaffe, L. (2013). *Who's going to pay for this park?* Trust for Public Land. https://www.tpl.org/wp-content/uploads/2013/12/ccpe_who_is_going_to_pay.pdf.
- 59 Crompton, J. L. (2022). *Parkland dedication: Optimizing an underutilized resource*. Texas A&M: AgriLife Extension. <https://agrilifelearn.tamu.edu/s/product/parkland-dedication-optimizing-an-underutilized-resource/01t4x000004Oi8mAAC>.
- 60 Rigolon, A., Giamarino, C., & Christensen, J. (2023). Development fees and park equity in Los Angeles. *Journal of the American Planning Association* 90(2), 230–246. <https://www.tandfonline.com/doi/abs/10.1080/01944363.2023.2201279>.
- 61 Harnik, P., & Yaffe, L. (2013). *Who's going to pay for this park?* Trust for Public Land. https://www.tpl.org/wp-content/uploads/2013/12/ccpe_who_is_going_to_pay.pdf.
- 62 City of Madison Parks Division. (2018). *2018–2023 park and open space plan*. City of Madison, Wisconsin. <https://www.cityofmadison.com/parks/projects/2018-2023-park-open-space-plan>.
- 63 Office of the City Clerk, San Diego. (2021, August 13). Resolution of the Council of the City of San Diego adopting a new citywide park development impact fee. https://docs.sandiego.gov/council_reso_ordinance/rao2021/R-313688.pdf.
- 64 Ibid.
- 65 Rigolon, A., Giamarino, C., & Christensen, J. (2024). Development fees and park equity in Los Angeles. *Journal of the American Planning Association*, 90(2), 230–246. <https://doi.org/10.1080/01944363.2023.2201279>.
- 66 Rigolon, A., & Németh, J. (2020). Green gentrification or “just green enough”: Do park location, size and function affect whether a place gentrifies or not? *Urban Studies*, 57(2), 402–420. <https://doi.org/10.1177/0042098019849380>.
- 67 Reibel, M., Rigolon, A., & Rocha, A. (2021). Follow the money: Do gentrifying and at-risk neighborhoods attract more park spending? *Journal of Urban Affairs*, 45(5), 923–941. <https://www.tandfonline.com/doi/full/10.1080/07352166.2021.1886857>.
- 68 Rigolon, A., & Christensen, J. (2019). *Greening without gentrification: Learning from parks-related anti-displacement strategies nationwide*. Institute of the Environment and Sustainability, University of California, Los Angeles. <https://www.ioes.ucla.edu/wp-content/uploads/Greening-without-Gentrification-report-2019.pdf>.
- 69 Rigolon, A. (2024). *Great parks should not uproot communities: Green gentrification risk factors and anti-displacement options*. Trust for Public Land. <https://www.tpl.org/great-parks-should-not-uproot-communities>.
- 70 Klein, W. (2022). Why are city parks struggling to keep up? *GFRC Blog*. Government Finance Research Center, College of Urban Planning and Public Affairs, University of Illinois, Chicago. <https://grfc.uic.edu/the-government-finance-research-blog/why-are-city-parks-struggling-to-keep-up/>.
- 71 Roth, K. (2021, February). How strained budgets led to maintenance deferments and capital project delays. *Parks & Recreation*. <https://www.nxtbook.com/nrpa/ParksRecreationMagazine/february-2021/index.php#p/14>.
- 72 See: U.S. Census Bureau. (2019, April). *Individual state descriptions: 2017*. <https://www.census.gov/content/dam/Census/library/publications/2017/econ/2017isd.pdf>.
- 73 Unger, A. (2019). Business improvement districts in the United States: Private government and public consequences. *Journal of Urban Affairs*, 41(6), 875–877. <https://www.tandfonline.com/doi/abs/10.1080/07352166.2018.1547550?journalCode=ujua20>.
- 74 Rigolon, A., & Németh, J. (2018). Privately owned parks in new urbanist communities: A study of environmental privilege, equity, and inclusion. *Journal of Urban Affairs*, 40(4), 543–559. <https://www.tandfonline.com/doi/full/10.1080/07352166.2017.1360739>.
- 75 Ibid.
- 76 Central Park Conservancy. (n.d.). *Five Borough Program*. New York City. <https://www.centralparknyc.org/institute/five-borough-program>.
- 77 Foderaro, L. (2014, October 19). With training program, Central Park Conservancy spreads its wealth. *New York Times*. <https://www.nytimes.com/2014/10/20/nyregion/with-training-program-central-park-conservancy-spreads-its-wealth.html>.
- 78 Uberoy, U., & Collins, K. (2023, July 21). New Yorkers got broken promises. Developers got 20 million sq. ft. *New York Times*. <https://www.nytimes.com/interactive/2023/07/21/nyregion/nyc-developers-private-owned-public-spaces.html>.



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