





San Diego Gas Light District is an example of successful infill redevelopment.

DEVELOPMENT CODE AMENDMENTS

n order to achieve development envisioned by Dallas residents, the City must quickly update three key provisions in its zoning code –urban design standards for walkability, a parking overlay and four mixed-use zoning districts that fit within the current zoning code. While the City could review its entire repertoire of zoning tools, this would be a daunting task given the code hasn't been updated in more than 20 years. In order to realize the goals of forwardDallas!, new tools should be written and adopted so future development in targeted areas reflects the ideals expressed in the Building Blocks and Vision.

These codes should be developed and applied as three key integrated zoning code implementation tools. All three proposed revisions implement a sliding scale of development standards based on three basic design districts—Standard, Transit and Pedestrian—and all three should be applied in specific areas to achieve the type of development envisioned by Dallas residents.

The Implementation Plan's recommendations should be used to guide development of new walkable districts, design standards and parking tools. The following proposals identify issues that should be considered in preparing code amendments. Preparation of code amendments will require additional research and analysis and will be developed with public input and within the public review process.

District Type	Standard	Transit	Pedestrian
Description	These standards would be designed for basic, single- use districts that are not particularly walkable. They would emphasize a basic set of design standards, and to increase the attractiveness and tree canopy of the city. Example: Northwest Highway.	These standards are designed for transit or other districts that have a moderately walkable environment. They should develop a comfortable walking environment, with buildings close to the street and moderate transparency. However, these districts will have some surface parking, and be a mixture of traditional, small format main street buildings and more contemporary large format buildings, including single-use buildings such as retail. Example: Mockingbird Station.	These standards are designed for a more traditional pedestrian district. These districts would have primarily on-street parking or public parking facilities, few or no private parking (except for residential or hotel uses); have all buildings near the sidewalk, a high level of building transparency, and mostly common wall, small format buildings. Example: Bishop Arts District.



Bringing buildings to the street encloses the sidewalk space, creating a sense of comfort for pedestrians.



Seating, planters and unique storefront signs can make sidewalks more appealing to pedestrians.

Making Dallas a Walkable City

Creating a more walkable environment in Dallas is a key strategy to achieving the goals of the citizens of Dallas. Making Dallas' many neighborhoods and communities more pleasant and safe for pedestrians will greatly enhance quality of life and livability for Dallas.

While much of Dallas has been designed with the automobile in mind, many successful areas in Dallas focus on pedestrian-friendly design. Deep Ellum, the West End, Uptown and the Bishop Arts District all have similar design features reminiscent of Old World cities and villages, where walking is a part of daily life. Establishing a regulatory framework to guide pedestrian-oriented development is the goal of this plan.

The tools needed to achieve this goal include developing consistent urban design standards and implementing new zoning districts. The Urban Design Standards Program Plan provides a framework for the development of the type of design standards, districts and regulations that can be used to achieve more walkable communities. The following describes the basic principles that should be applied to achieve safe and pedestrian-friendly communities throughout Dallas. While encouraging pedestrianoriented development, these standards will also accommodate automobile dependent activities such as trash pickup and deliveries.

The Density, Diversity and Design Principles of Walkability

People will naturally walk more if their daily destinations are close to home and if the walking environment is safe, interesting and pleasant. Walkable communities share several design characteristics that are different from auto-oriented development. These are:

- Walkable communities are compact and built at somewhat higher densities than post-war, conventional development. Compact development brings people and potential destinations closer together, making walking easier and more efficient. This is also a more efficient use of land.
- Walkable communities contain a diverse mix of uses, with daily conveniences such as shopping or daycare clustered within the community. A mix of uses minimizes distances between housing and various destinations. In commercial centers, a mix of uses fosters higher levels of pedestrian activity, which in turn creates a sense of safety. Transit service is often available at the core of a walkable community and is used to link higher-intensity areas to surrounding communities.
- Walkable communities are human-scale and make pedestrian activities and bicycling more enjoyable. Non-residential buildings are set close to the street, with many doors and windows. Such a configuration enhances the relationship between the private realm of buildings and the public realm of the street, creating an interactive environment. Walkable communities can accommodate cars, but narrower streets serve to slow traffic and minimize crosswalk distances for pedestrians.

Plans for successful walkable communities must include consistent urban design characteristics. Individual plans can be modified to fit the specific situations; however some basic urban design elements are essential to successful pedestrian districts worldwide. The proposed Urban Design Standards Program Plan is intended to be used as a basis for developing new codes to be applied in specific areas and to be applied to new planned developments. In addition, a consistent set of design standards will make the planning process more predictable and easier to implement.



Street-facing building orientation, crosswalks and storefront windows help create a more comfortable pedestrian realm.

BASIC DESIGN ISSUES



Continuous sidewalks, trees, storefront windows, bicycle parking and street furniture encourage people to walk or ride their bikes.



Discouraged building orientation.



Preferred building orientation.

I. Use Buildings to Frame the Street: Continuious Frontage

Buildings in walkable communities should create a fairly continuous "streetwall," with few breaks for driveways, curb cuts, parks and plazas and side yards. Continuous frontage can be used to enhance the pedestrian experience and to create visual and physical continuity between buildings and uses.

Minimize building setbacks from street

In walkable communities, buildings should be close to and face the sidewalk to create a more interactive environment. Ideally, commercial and mixed-use buildings should be at or within five feet of the public sidewalk. Residences may be set back farther from the street in certain cases. A regulatory device known as a "build-to line" can be used to illustrate areas where buildings are required to be at the street. Build-to lines should provide some flexibility to allow for outdoor seating and variation in architectural elements.

Retrofit strip commercial areas for walkability

The modern "strip commercial" landscape is a familiar sight characterized by one shopping center after another along a wide street with no sidewalks. Many of these districts are successful economically, but they are difficult to walk to and tend to be separated from one another. This physical layout discourages walking between neighboring buildings and commercial strips. Buildings usually are set back far from the street behind large parking lots.

The following describes some ways to improve walkability in these commercial strips.

- Add continuous sidewalks. Sidewalks, landscaped with trees and planters, should be on both sides of the street to link shopping centers.
- Improve crosswalks. Crosswalks and pedestrian crossing signals at intersections and between high-volume shopping centers could be added or improved to allow pedestrians to safely cross busy streets.
- Remove fences and encourage shared access between adjacent shopping centers. Businesses could be encouraged to remove barriers by explaining the benefits from increased pedestrian patronage.
- Reinforce pedestrian connections through parking lots.

Solutions include painted or colored pavement, different paving material or texture, raised walkways and adding shrubs, shade trees and other landscaping.

- Make parking lots cooler. Parking lots get oppressively hot in the summer. Regularly spaced trees will shade parking lots and make them more hospitable to walking.
- Infill parking lots with small buildings that face the street. Position smaller business with lower square footage requirements at the street to make walking along the sidewalk more interesting. This strategy of infill development will increase the economic use of underutilized parking lots. Parking lots on streets that extend into neighborhoods should have the highest priority for this type of infill development.

2. Ensure Facade Transparency

Street-facing facades

The street-facing facades of buildings should not have large segments of blank wall. Windows and entries can break up solid facades into segments, creating a more pleasant environment for pedestrians as well as providing commercial display opportunities for businesses. A large proportion of the linear length of streetfacing facades for non-residential buildings should contain windows, doors or arcades at all levels. The primary building entry and windows should be visible from the street(s) on which the building is located.

Parking structures along pedestrian-oriented streets should contain shops or other inhabitable spaces. The frequency of garage doors or entrances to parking structures along pedestrian-oriented streets should be minimized.

Building entries and window form

Building design should be used to highlight the location of building entries. Primary pedestrian entries should be clearly identified and recessed or framed by a sheltering element such as an awning, arcade, porch or portico. Greater height can be used to accentuate entries in the form of tower elements, tall openings or a central mass at an entry plaza. Windows and doors should be recessed from walls or exterior trim to create shadows and visual interest.

Ensuring facade transparency in "big box" retail buildings

While it can be difficult to get "big box" retailers to face their main entry toward streets, the businesses are usually supportive of



This is a diagram of a preferred building corner entrance.



This grocery store is a good example of a well-designed corner entrance.

BASIC DESIGN ISSUES



Discouraged building orientation



Preferred building orientation



On-street parking provides good access to retail for shoppers. It also buffers the pedestrians on the sidewalk from through traffic.

placing small shops along the streetside property line. These streetfacing shops are critical for making shopping on foot attractive. Views from the street to the "big box" store can be preserved with occasional gaps between the smaller street-facing shops.

It is also possible to modify large retailers to have some streetfacing entries. For example, flower shops, delis, film processing counters and cafes that are usually hidden within the store may be placed at the street with their own doors and window displays. In this case, the building can have a main entry facing a parking lot.

3. Minmize the Dominance of Parking

Parking location

A compact, pedestrian-friendly setting can be created with the use of surface parking placed behind buildings and away from the street, with on-street 'teaser' parking. On-street parking in front of a building will help meet demand, however development at the highest intensities will likely require structured parking as well.

On-street parking

Streets within walkable communities are comfortable for pedestrians while also accommodating cars. On-street parking is an important component of street design, providing a "buffer" between the traffic on the street and the pedestrians on the sidewalk. On-street parking should occur on all streets and on both sides of the street. Whether parallel or diagonal, on-street parking is appropriate depending on the street width, parking demand and traffic volumes.

Parking structures

Parking structures or garages are discouraged along walkable pedestrian streets unless they include ground-floor retail, office or civic uses.

Parking lots

Parking lots for commercial and industrial uses should be behind buildings, away from the street, or to the side of buildings in long narrow lots that minimize street frontage. Existing parking lots that abut streets can be softened in several ways.

The following describes some important design standards that can be used to address parking lots on the street:

- Connect Building Entrances to Sidewalks. Some buildings, such as retail "anchor" stores, may not have entrances accessible from the street. Rather, these buildings are behind parking lots. In these instances, entries should be linked to the street with "connecting walkways." These walkways connect the building through the parking lot using sidewalks that are tree-lined, landscaped, lighted and detailed for pedestrian safety and comfort.
- Screen Parking Lots from the Street. "Landscaped frontages" can be used to screen large parking lots from the street by adding landscaping, walls or street trees. Design and siting of landscaped frontages, however, should not create safety issues or obstruct views. Walls and hedges should be low to offer screening while maintaining visual surveillance. Trees should be planted at reasonable intervals to provide a "streetwall" without overcrowding.
- Break up Large Parking Lots. Large parking lots should be segmented into portions through the use of connecting walkways as described above.
- Shade Parking Spaces with Tree Planting. Parking lots should include shade trees that are spread uniformly throughout the parking area. Trees should be set into a tree well and protected by bollards or tree guards.

Bicycle parking

Bicycle parking should be provided in accessible locations. The amount of bicycle space can be tied to levels of use, which is often a function of the square footage of building space. Bicycle parking should be visible from storefronts or the front doors of an office building to create a secure environment for parked bicycles.



Surface parking



Structured parking



It is important to locate bike racks near building entrances, in visible areas.



This commercial building utilizes concrete brick to create an aesthetically pleasing design.

Screen service areas

Service areas for loading docks, refuse bins and mechanical equipment should be away from and screened from view of streets, landscaped walkways and parks and plazas, and adjacent residential areas. Appropriate screening strategies include vinecovered walls or fences, trellises, arcades, dense landscaping reaching a height of at least 6 feet, or some combination thereof. Where service areas cannot be avoided along a street, park or plaza, they should be recessed within a building's envelope.

4. Use of Appropriate Scale and Materials for Barriers and Facades

A compact, walkable community should be aesthetically pleasing as well as functional and safe.

The following describes some key components that should be included in the design standards implementation program.

Walls and fences

Parks or plazas should be built with attractive, durable materials, such as wood, wrought iron, masonry or stone. Chain link and wire fencing should be avoided. With the exception of tall walls between non-residential and residential uses, walls and fences in proximity to streets, parks and plazas should be low. Where commercial uses abut residential uses, masonry walls are preferred.

Sense of permanence

Exterior materials should be durable and construction materials that are simulated should be avoided. Materials should be properly detailed to improve their appearance, extend their life and to avoid conditions where veneers can be chipped.

Climatic response

The City should encourage/require building designs that address Dallas' climate by increasing human comfort and reducing energy use and energy system costs. Awnings, arcades, trellises, eaves and/or recessed windows can be used, and should have greater depth than is typical to maximize protection from the sun and rain. Building entrances should always be covered either by being deeply recessed or by an overhanging roof or porch. HVAC equipment should be shaded. Deciduous shade trees are also encouraged near south- and west-facing facades to block the sun during the summer and allow light during the winter.

Aesthetic compatibility

Architecture that responds to the context of its location is strongly encouraged. Whenever a new development is proposed immediately next to historic buildings or existing neighborhoods, or when adding to or remodeling an existing building, a heightened level of visual harmony is desired. This can be achieved through the use of building materials, colors, and textures, proportions of openings, roof form and transitional mass and scale.

Regulatory format

These standards should be used to apply a set of urban design standards to a variety of situations. They also can be used by reference in new or revised zoning districts.



Awnings, arcades and eaves can be used to create shade for people on the sidewalk.

PARKING CODE REVISIONS



The park and ride lot at White Rock station is a good example of the need for sufficient parking at transit stops.

urrently, the City of Dallas' zoning regulations employ a minimum off-street parking requirement that is based on ratios calculated by building size. These ratios were largely determined by interpreting the "rules of thumb" which governed the real estate industry in the development of post-war buildings such as large shopping centers. While the use of these ratios is common, many cities are beginning to adopt parking standards that are more in line with existing developments and travel modes.

If the City continues to implement parking standards as currently written without any alternative provisions, it will impede infill development and redevelopment of urban core areas of the city. This work program focuses first on developing alternative parking standards and tools that can be applied to targeted areas through rezoning and the Area Planning process. In addition, general parking standards should be reviewed and amendments made to update parking standards based on best industry practices.

The program plan result is a draft parking ordinance that outlines the necessary changes and recommended new tools. The intent is to provide adequate parking and to ensure that a continued oversupply of parking will not inhibit the creation of more walkable, livable communities.

Industry Standards

Parking lots have traditionally been designed to have enough capacity to accommodate the "20th" peak shopping hour of the year. In other words, there must be enough parking to accommodate all the people that will shop on December 12, from 1 to 3 p.m. This means that parking standards are based on meeting demand for 1 percent of the operating hours a shopping center is open during year. Even during this time, when demand reaches the "functional capacity" threshold (85-95 percent occupied) the standard is designed to exceed demand so that patrons can find a parking space as soon as entering the parking area. This requirement produces a parking lot that is only half full during half the time a typical shopping center is open. In most cases, these parking lots are never used to 100 percent capacity. In a study conducted by the Urban Land Institute, 43 percent of shopping centers reported that their parking lots were never full, and only 25 percent reported being "functionally full" for 10 days a year.

Typical zoning and industry standards require enough parking that:

- Parking is 50 percent vacant for 50 percent of the year
- Parking lots that are 85 percent full are "functionally" full
- Parking lots are "functionally" full only 20 hours a year (0.3 percent of the year)

The Dallas parking standards have the same requirements, regardless of the design and location of the development. New tools such as allowing on-street parking, shared parking, and an environment that invites shoppers to park once and walk between uses will promote new walkable development.

Why Parking Standards Matter So Much

The impact of these high parking standards can be limiting to an area that is striving to foster redevelopment and become more pedestrian oriented. The following outlines some of the negative impacts standard parking requirements can have on creating more pedestrian friendly and economically successful areas.

- Large surface parking lots increase walking distances. When parking is provided at a standard that is typical for strip commercial developments, people are much less likely to walk because of the inconvenience.
- Surface parking can create a substantial separation between buildings which works against the natural formation of a business district. Businesses seeking to locate or relocate do not view separated or spread-out commercial areas as a destination district where people will arrive and visit multiple businesses. Rather, these areas are seen as just a collection of unrelated businesses. Unfortunately, potential pedestrians also tend to share that view.
- Surface parking competes against a building's footprint for the available lot area, reducing development intensity. In other words, the more surface parking on a site, the less room there is for a building. High parking requirements increase development costs by forcing a developer to find a larger site for a proposed building. This trend can seriously impede potential redevelopment projects within transit and pedestrian-oriented districts where large tracts of land are usually unavailable and where large parking lots would be undesirable.



Streetside parking provides immediate access to adjacent retail and housing.



Diagonal parking can be a great way to add on-street spaces.



Parking areas with walkways, vegetation and porous pavement contribute toward safety, climate control and on-site storm water management.

New Tools for Dallas Parking Standards

The forwardDallas! Vision is designed to encourage reinvestment and to make many areas more pedestrian friendly. Where infill and pedestrian or transit oriented design is anticipated, different parking requirements should be available.

The Dallas parking code should be revised to create three new parking overlay districts which reflect the actual parking needs based on the environment within which a particular use is located. The three districts are: Standard, Transit and Pedestrian. In the pedestrian districts the assumption is that there will be some public parking available such as on-street parking and public or private parking facilities. There should be a district parking study to ensure the amount of parking required is adjusted to actual average demand. In addition, some transit districts would benefit from a parking study. Some pedestrian districts (such as the Bishop Arts District) would benefit in reducing off-street parking requirements and relying heavily on a public parking district. In addition to these reduced parking standards, the Dallas parking code should also consider giving parking credits or lower standards in certain instances, such as:

- Credits toward meeting parking requirements if adjacent onstreet parking can be used.
- Reduction of parking requirements if there is an existing or planned shared parking facility.
- In areas where there is sufficient public parking existing or planned, (such as Main Streets, or Transit Oriented Developments) minimum off-street parking should be required.

The fundamental idea is that parking is a necessary element of a modern city. However, to the extent feasible, Dallas should be a city for people, not cars, and more space should be devoted to human needs rather than automotive storage.

The program plan presents some key provisions that should be considered in developing new effective parking tools to promote desired development in targeted areas. The new parking standards should always be used with design standards to ensure that they go hand in hand with pedestrian-friendly provisions.

Spaces required

Initially, the required number of spaces should be reduced in pedestrian and transit districts through development of parking overlays. Second, parking requirements should be reviewed and amended if needed to reflect industry standards and historical demands for parking.

Credit for on-street parking

The amount of off-street parking required could be reduced by providing credits for on-street parking in certain conditions.

Stacked parking

Stacked or valet parking should be considered if an attendant is present to move vehicles. If stacked parking is used for required parking spaces, some form of guarantee should be required ensuring that an attendant will always be present when the lot is in operation.

Institutional parking plans

Institutions such as colleges, universities, medical institutions, large employment complexes and mixed-use developments that exceed 100,000 square feet should be permitted to provide off-street parking and loading facilities consistent with their needs according to a comprehensive parking study. In order to accomplish this objective, each use must maintain and monitor a comprehensive parking, loading and storage plan for the entire campus or institution. In addition, each use must establish a facilitywide permit system to implement its plan. Institutional parking plans should require that objective findings be made by the Planning Commission prior to approval.

Waivers

Consider allowing waivers by the Planning Commission based on a parking demand study. These studies should demonstrate the best available data to forecast the demand and time of use of the anticipated parking needs and on parking demand estimation techniques by the Institute of Traffic Engineers (ITE), the Urban Land Institute (ULI) or other generally recognized parking demand estimation technique.



Many large parking lots in the Dallas area experience significant periods when there is limited use.



Example of how a form-based code can specify different building types for each face of the block. By contrast, conventional zoning often assigns a single use/density category for an entire block or group of blocks.

Proposal

ew zoning districts should be developed to allow for mixed use in a variety of densities that are compatible with the forwardDallas! Building Blocks. These zoning districts should also incorporate the new urban design guidelines and parking codes. These districts can be applied to areas both as part of an Area Plan, or in lieu of planned development districts. The districts are in four densities, from a lower density suitable for a residential neighborhood to urban high-rise mixed use suitable for Downtown. While they are intended specifically for transit oriented development in DART station areas, these districts can be used anywhere a walkable district is desired. The combination of uses, development standards and densities should allow for financially feasible development in most of the areas that they will be applied, and be tested using a "return on investment" analysis. These new zoning districts should *always* be used with the urban design standards, as they are intended to go hand in hand with appropriate form control.

Form-based Codes

One option that should be considered is the development of a form-based code for these new districts. Form-based codes are a replacement for the standard use-based zoning with an overlay of design standards. It basically is a way to focus on urban form rather than on use. They typically rely on many of the basic tools and include:

- Districts defined in terms of urban form rather than use. Therefore, a district will have a name like "Town Center" or "Urban Neighborhood" rather than "Office," "Industrial" or "Residential."
- 2) Street types. These are defined by their context, so that in addition to "arterial" they will have an additional designation, such as "main street" or "Multi-modal Corridor," that will define their design characteristics.

Building Types

Building types include site location, architectural specifications and use regulations. For example, in a "town center" on a "neighborhood street," the "corner store" is a permitted building type. Within that prototype, regulations could allow retail on the ground floor, require two stories, specify basic form and lot configuration. This approach is more flexible and permits a wider variety of uses that are specified by building type. Since uses are permitted through the building type, potential problem uses can be better isolated. Non-traditional uses can conform to building standards that maintain the character and integrity of the district while still providing important services to the community. For example, auto repair and sales are often thought of as being incompatible with a main street district. However, authentic main streets typically have such uses, often without harm. However, these main street auto service stations should not be contained in a large open lot, but within a building that is part of the fabric of the main street. With a form-based code, uses such as this can be permitted on the ground floor of a mixed-use building, but not on an "open lot". The idea is to allow the greatest feasible amount of flexibility in use regulation, provide many options for cost effective development, while retaining the basic form and design goals of an area.

This three-tiered system is entirely predictable and objective in its review and is superior to discretionary review. Discretionary review should be used only for uses that don't conform or are somehow exceptional and don't fit the system.

The Effect of Zoning and Parking on FAR

One of the key tests when developing any district is to understand the development that is dictated by the combination of regulations in the zoning and building codes. While zoning codes often allow Floor Area Ratios (FAR) of 2, 3 or more, the combinations of parking and landscaping requirements can make any FAR over 0.4 virtually impossible. A successful zoning district should be developed with an understanding of how density, land cost and building costs interact. Without subsidy, desired development will only occur if it is financially feasible. While a detailed financial analysis of each building in an Area Plan is not feasible, a simpler "return on investment" analysis can provide an indication of where development begins to be feasible. One key factor to consider is the effective FAR, or what can realistically be built under the numerous regulations contained in a zoning district.



This is an example of a neighborhood street in a Town Center.

NEW TRANSIT ORIENTED ZONING DISTRICTS



Mixed-use zones allow for a greater variety of land uses and structures, including adaptive reuse of existing structures and flexibility in site planning.

Developing Four Basic Mixed-Use Zones

his Action Plan is intended to develop new, compatible zoning districts quickly, and adapt them to the basic Dallas zoning code structure. While they may need to be less than ideal form based codes, the innovative aspects of the zoning codes can be successfully implemented with some basic zoning approaches.

These zoning districts should use the following tools in their structure:

Include broad uses based on the current Dallas use list

The current Dallas zoning code attempts to reach its regulatory goals by restricting uses. The unwritten concept is that certain uses are associated with certain impacts: for example, restaurants all have similar impacts, and therefore they are regulated as a group. This has obvious problems, as a fast food restaurant has very different impacts when compared to a fine dining establishment. To deal with this, the zoning code has evolved many variations over time. However, the entire concept of use-based regulation ought to be rethought, as there are better ways to regulate land use that are both more flexible and more effective. Therefore, the zoning use list in these districts should be flexible and permissive, allowing a wide variety of uses, as many of the regulatory goals will be met by using other, more modern tools.

Include a basic set of performance standards

Address intensity, height, bulk, lot coverage and physical impacts of development through performance standards. Performance standards are an important aspect of a modern zoning code, allowing for flexible implementation but maintaining clear and objective standards. Possible performance standards include height (in feet, not stories), FAR, lot coverage percentage, landscaping percentage and tree canopy percentage.

Establish setbacks and landscaping standards based on street typology

One of the key concepts supported by Dallas citizens is the use of Context Sensitive Design. This could require that setbacks and landscaping standards vary according to the street typology.

Develop a list of building types, and include a basic matrix of uses permitted by building type for each district

This could provide for the basic introduction of a form-based code that would permit more flexibility in use types if paired with specific building types.

Provide project oversight

A steering committee of local developers, neighborhood leaders, bankers, architects and other stakeholders should be formed to oversee the plan development. The draft codes should be subjected to a ROI analysis, and also should be tested for implementation feasibility by a "mock approval" process where real developments are tested against the codes to ensure they have the desired effect.

Project products

Adopted revisions of the Development Code for Design Standards, Parking Standards, and four new zoning districts.



Mockingbird transit station.

