

NORTH TEXAS SUSTAINABLE ZONING GUIDEBOOK



**North Central Texas
Council of Governments**

SUSTAINABLE DEVELOPMENT
DECEMBER 2016

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Introduction

The North Central Texas Region, centered around the cities of Dallas and Fort Worth, continues to grow in population and employment. By the year 2040 the North Central Texas Council of Governments (NCTCOG) estimates the region’s population will expand from 6.9 million people (2015) to over 10.6 million¹. With this growth will come the demand for new housing and commercial development which will place increased demand on our transportation system. Meeting the mobility needs of this growth will require not only innovative transportation projects, but coordinated land use regulations that facilitate multimodal transportation and create beneficial returns on transportation investment for the region.

Transportation and land use policies are interdependent. Transportation provides the mobility which enables access to and from properties, essential for their economic value. The design and use of properties in turn determines accessibility which influences the demand for different types of mobility. Both the infrastructure and real estate development permitted determine the ease of travel in an area. Land use regulators and transportation planners must align the appropriate property use and design regulated by zoning with the most appropriate transportation options. To illustrate this concept, compare Figures 1 and 2 of two different retail sites in North Texas. In Figure 1 there is abundant parking and widely-spaced buildings with little shade. In Figure 2 a tree-lined street with closely-spaced buildings creates an environment where customers can comfortably walk to businesses. Zoning plays a critical role in the design of both sites and ultimately how North Texans choose to travel to the same types of businesses with very different land use designs.



Figure 2: Contemporary suburban shopping center



Figure 1: Revitalized retail street in suburban downtown

In 2014, NCTCOG and the City of Cedar Hill applied for and were awarded a smart growth technical assistance grant from the Environmental Protection Agency through Smart Growth America (SGA), a national non-profit organization, to advance land use and transportation coordination through zoning. As part of the technical assistance, SGA hired Clarion Associates, a national planning and land use firm, to draft a report outlining the key issues and options related to zoning for an urban city center with a planned rail transit station.

The report provided a preliminary audit of Cedar Hill’s existing zoning ordinance for the purpose of identifying potential amendments that would encourage transit-oriented development (TOD) as part of the city’s City Center Plan. As part of the technical assistance, NCTCOG agreed to leverage the process by sharing the information gained with other communities in the region interested in mixed-use (MU) walkable districts or supporting rail transit station areas.

Why use this guidebook?

This guidebook is a resource for professionals and public officials in North Texas that will present information on locally adopted zoning approaches supporting walkable, mixed-use, and transit-oriented developments. This includes where, how, and what various zoning strategies have been implemented. The guidebook does not lay out a model ordinance or suggest that any one zoning district is best suited for other communities. The intent is to provide a picture of sustainable zoning trends in the region and provide an array of

¹ NCTCOG (2015) Regional Data Center, Demographic Forecast <http://rdc.nctcog.org/Members/ServiceGroup.aspx?id=5>

zoning options cities can easily review and possibly adopt in support of sustainable land use and transportation coordination.

Information on best practices in zoning for mixed-use, transit-oriented, and walkable places in North Texas has been derived from a review of 71 local municipal zoning districts and the recommendations provided to NCTCOG by SGA in their document “Mixed-Use Transit-Oriented Development Zone District Standards: Key Issues and Options”, found in Appendix 4. Using the six key issues (see Figure 3) and their zoning standards suggested in the SGA document, NCTCOG began searching for zoning codes that embodied the recommended standards for mixed-use and transit-oriented zones. The codes selected represent 36 cities in the 12-county NCTCOG Metropolitan Planning Area, from small cities with no long-term plans for transit, to the largest cities with existing rail and bus service. The commonality is a stated purpose or goal in the zoning district promoting the creation of walkable and often transit-friendly places. Specific strategies, explained throughout the text, were selected from the SGA recommendations to evaluate for each local zoning district.

- 1. Zoning Mechanism:** Should it be form-based, conventional, or something in-between?
- 2. Mix of Uses:** How to best promote a realistic mix of uses in targeted MU and TOD areas?
- 3. Accessory and Temporary Uses:** What accessory and temporary uses should be accommodated and encouraged?
- 4. Intensity and Dimensional Standards:** What are appropriate standards such as height, setbacks, and densities?
- 5. Off-Street Parking:** What off-street parking regulations better support and encourage MU and TOD?
- 6. Design and Compatibility:** How can development design support multimodal transportation and be compatible with existing single family home neighborhoods?

Figure 3: SGA Six Key Issues for TOD and Mixed-use Zoning

Each zoning district was reviewed to determine how it did or did not address each of the six key issues. In the case of codes with sub-districts, the sub-district described as most dense or closest to the transit station was used, as this is where pedestrians should have the highest accessibility. Additional municipal code documents such as street design manuals or landscaping standards that would apply to developments but were not found in the zoning district text were also reviewed if referenced in code. NCTCOG contacted applicable staff at the 36 represented cities for feedback and verification on those zoning districts.

The research described above has been condensed into summaries, select examples, and a strategy matrix for the 71 codes in the final data set. It is suggested users first review the summaries of each key issue which provides an overview and description of the specific strategies. The matrix in Appendix 1 displays the presence of each selected sustainable strategy standard in the district reviewed, sorted by large to small size city, and transit status. The presence of transit now or in the future is based on maps in the Mobility 2040 plan from NCTCOG. With the exception of Issue 1, the section for each issue will be laid out as outlined below:

ISSUE # - Guidebook Issue Outline

Summary explaining the significance and purpose of looking at this issue.

- Best practice: Describes what codes in North Texas do well to support this issue.

Strategies
 Specific actions or standards that can be set in zoning to achieve the best practice. These are what NCTCOG looked for in each zoning district.

Regional Trends

How many codes use these strategies? Are they difficult to measure and how much diversity in implementation is there?

Implementation Example

An example of one or more local city implementing the strategies.

ISSUE 1 – Zoning Mechanism

Zoning mechanism refers to the implementation structure of the zoning district, its approach to land use regulation, and how it relates to existing ordinances. Zoning mechanism in this study includes form-based codes (FBC), conventional zoning codes, hybrid codes, and overlay districts. **Form-based codes** are those which typically prioritize standards for the built form over land use and are more likely to focus on urban areas with a mix of residential and non-residential land uses. **Conventional zoning codes** refer to standard Euclidian zoning which focuses on permitted uses and usually provides minimum dimensional requirements such as setbacks, floor area ratios (FAR), and height restrictions. **Hybrid codes** typically fall somewhere in between form-based and conventional codes and come in a large variety of formats. **Overlay codes** can embody any of these approaches but do so by modifying existing base zoning districts as an additional layer of regulation. These categories are not exhaustive in describing types of zoning but were selected to help understand the regulatory approach commonly taken for mixed-use and transit-oriented zoning in North Texas.

All of the zones reviewed are either adopted for specific location or set standards for floating zones (zoning not determined for a specific location but applied upon request). Planned development districts, a type of floating zone, were not reviewed due to the difficulty of consistently accessing exact text of each planned development and its negotiated terms. While many TOD projects in North Texas have been completed under planned development zoning because it's responsive to the market and provides needed flexibility, SGA recommended that cities should proceed cautiously with use of the planned development process because it is more time consuming, not always bound to support the community vision, and results in an entitlement for the selected properties that may become inconsistent with the surrounding zones as time goes on.

- Apply best suited mechanism aimed at walkable form: Use zoning most suited to your community that includes specific design requirements to enact a vision for a walkable vibrant place rather than ambiguous zoning based solely on land use.

Table 1 provides an overview of how many districts were classed into each group through this review. A separate document is included in Appendix 3 to describe the methodology used to classify each code into the four categories. Zoning districts labeled as conventional comprised the largest share of this study.

Table 1: Number of Districts by Zoning Transit Mechanism and Transit Status

	FBC	Hybrid	Conventional	Overlay	Totals
<i>Existing Rail Transit-served districts</i>	8	7	10	2	27
<i>Future Rail Transit-served districts</i>	0	2	6	1	9
<i>No Rail Transit service planned</i>	7	7	20	2	36
Total Districts Reviewed	15	16	36	5	72

ISSUE 2 – Mix of Uses

The term mixed-use can have broad application but in the context of improving transportation it must meet a more specific definition. Mixed land use means having a complementary and context-appropriate combination of residential and commercial opportunities within the same area. Mixed-use can include vertical mixing within a building, such as commercial on the ground floor and residential above; horizontal mixing, with commercial buildings located adjacent to residential buildings; or a mix of uses within a wider walkable area.² Increasing land use diversity has been shown to reduce travel distance, and therefore automobile reliance, by increasing one’s access to activities and services.³ Thus in the transportation context, mixed-use is a development designed where it would be reasonably expected for people to be able to walk from one use to another.

- ☑ **Permit mixed-use at site level:** Allow for mix of uses by-right within the district and within the same lot. Vertical development should be allowed and options for building new or allowing conversions should be allowed for flexing the use of space.

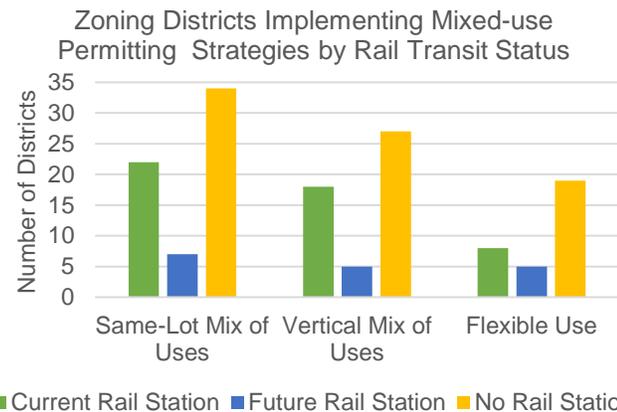
Strategies

Same-Lot Mix of Uses: The zoning district allows for both residential and commercial land uses in the same lot.

Vertical Mix of Uses: The zoning district has standards that allow for or require vertical use mixing (e.g. building can be vertically mixed-use by-right).

Flexible Use: The zoning district’s land uses permit flex space or adaptive re-use (e.g. ground floor retail requirement, existing building use variation with sensitivity to parking).

Regional Trends



The majority of zoning districts identifying as “mixed-use” allow a mix of both residential and commercial in the same lot. Of the zoning districts within a half-mile of existing rail stations, 85 percent allow mixed-use on the same property. The same is true for 78 percent of zoning districts within a half-mile of planned rail stations, and for 94 percent of zones with no planned or existing rail transit stations.

Vertical mixing of uses is also allowed by-right in a majority of these districts. Flexible use, which allows for either by-right or administrative review permitting change of use in the same structure, is mostly seen in newer developments in the form of a ground floor retail building standard requirement. Usually a 15 foot ground floor height and minimum 30 foot depth are required in this type of flex space often intended to transition from residential to commercial as the market emerges.

Implementation Example

The City of Duncanville takes a form-based approach to zoning for its downtown, identified in long-term plans at the site of a future rail station. This zoning district focuses on the built form for its street frontages and includes a general use table. Residential units are allowed by-right on the upper floors of all development in the district while commercial retail design standards and flexible use are applied along ground floors of appropriate street frontages.

² TransLink. 2010, September). Transit-oriented communities: A literature review on the relationship between the built environment and transit ridership. Retrieved from www.translink.ca.

³ Chen, C., Gong, H., & Paaswell, R. (2008). Role of built environment on mode choice decisions: Additional evidence on the impact of density. *Transportation*, 35, 285-299.

- ☑ **Incentivize mixed-use:** Ensure that developments can effectively offer a mix of residential and complementary non-residential uses by either offering incentives or setting flexible requirements for use mixing that can be met as the market emerges.

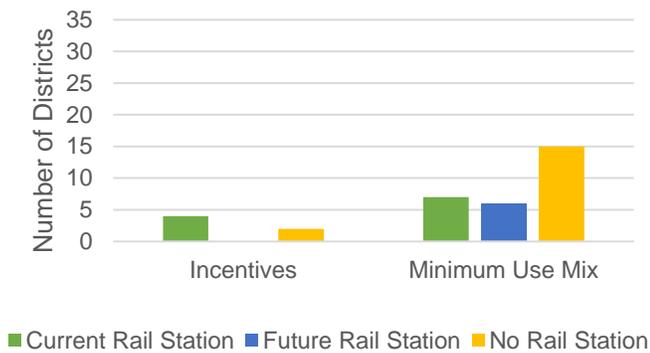
Strategies

Incentives: Incentives written into the code for mixing land uses (e.g., a density bonus, a broader range of permitted uses, or streamlined development review).

Mixed-Use Minimums: Zoning district standards that ensure a minimum mix of residential and nonresidential uses (e.g., a minimum of 10 percent of three use types, or a residential and non-residential requirement).

Regional Trends

Zoning Districts Implementing Mixed-use Requirement/ Incentive Strategies by Rail Transit Status



Mixed-use minimum requirements are relatively rare in North Texas when not around rail stations. Just under 40 percent of all districts reviewed contained mixed-use requirements. However, in districts with a planned rail station, over 67 percent use this strategy.

Only six districts reviewed provide an incentive for mix of uses in the code. There is not a clear pattern from this review between location relative to transit service and the implementation of mixed-use incentives such as density bonuses, reduced parking, or expedited review.

Implementation Example

The City of Plano’s Urban Mixed-use District requires each development to contain three or more use categories based on a percentage of gross floor area (GFA). The primary use must make up 40 to 70 percent of GFA; the secondary use 20 to 40 percent of the GFA, and the tertiary use less than 20 percent of the GFA.

In another approach, the City of Fort Worth’s Near Southside Development Standards test projects three acres or larger to require either internal mixed-use or contribution to the mix of uses within a 1,000-foot radius of the project. Projects should not be more than two-thirds of any one use aside from mixed-use buildings. Or they can satisfy the vicinity test where the proposed project is within a 1,000-foot walking distance of a different use and contributes to the overall diversity of uses in that area.



Figure 4: New residential adjacent to existing commercial in Fort Worth Near South Side

An example of incentives are the City of Dallas’ three mixed-use districts, which award additional residential density and floor area ratio as projects increase their mix of residential and other uses. Projects can qualify by meeting a minimum percentage of two or more different uses with additional points if part of it is residential. For example in the lowest intensity mixed-use district, a development with a mix of two uses may add five more residential units per acre than a single-use district. It can increase the FAR for other uses from 0.85 to 0.9 if one of those two uses is residential.

ISSUE 3 – Accessory and Temporary Uses

Accessory and temporary uses should be carefully considered in a mixed-use or TOD district. Key objectives such as allowing increased density and creating active and inviting streetscapes can be reinforced through accessory and temporary uses. These can be especially important to revitalizing existing areas. Strategies were reviewed related to: accessory dwelling units, outdoor dining, temporary farmers markets, food trucks, pop-up markets and prohibition of drive-through facilities. Some of these will be present in the zoning while others are not always included, meaning the regional trends may not reflect how well a jurisdiction can support these place making activities.

- ☑ **Regulate accessory and temporary uses:** Permit accessory dwelling units by-right in single family lots. Permit outdoor dining and seating by-right for restaurants with minimal additional parking required. Prohibit auto-oriented drive-through uses and similar building additions.

Strategies

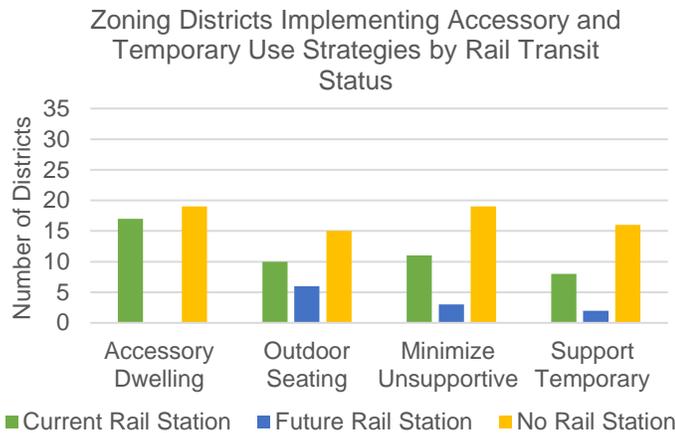
Accessory Dwelling Units: A residential unit incidental to the main use allowed on the same lot.

Outdoor Seating: Restaurant, café, or bar seating not permanently enclosed but placed on a sidewalk or other public realm adjacent to the main use.

Minimize Unsupportive Accessory Uses: Drive-throughs and auto service facilities for restaurants, banks, and other uses should be prohibited as they directly discourage pedestrian activity through excessive driveways, parking, and curb cuts.

Facilitate Supportive Temporary Use: Zoning can include language permitting temporary use of sites for farmers markets, food trucks, and other pop-up vendors to activate empty lots and stimulate foot traffic.

Regional Trends



A majority of districts with existing rail stations and with no planned transit allow accessory dwelling units. Outdoor seating appears less common, however this may be because it is not included in the text of many codes. At least 45 percent of all districts included via a use table the prohibition or restriction of drive-throughs as accessory or even a main use. Even less common to North Texas codes is explicit support for temporary uses such as farmers markets and food trucks. More investigation into municipal policies and programs

outside of zoning would be needed to discuss how these temporary activities are best facilitated by cities in the region.

Implementation Example

The City of Carrollton Transit Center District regulations effectively implement standards on accessory uses by expressly prohibiting new drive-throughs in a form-based approach around their Dallas Area Rapid Transit (DART) stations. The use table in this code included accessory and some temporary uses as permitted by-right in the zone and include various outdoor kiosks that may entice more pedestrian activity around their downtown and transit centers.



Figure 5: Outdoor seating at a TOD in Downtown Carrollton

ISSUE 4 – Intensity and Dimensional Standards

Establishing appropriate intensity and dimensional standards for development features such as density, block and lot dimensions, setbacks, and height for mixed-use and TOD zones is critical to facilitating multimodal transportation. A commonly held standard for mixed-use places and TOD is increased density of residential and commercial space which supports more accessible trip origins and destinations needed for effective transit and walking or bicycling trips. Zoning districts are expected to provide increased detail on the form, orientation and design of development intensity and dimensional standards.

While not all North Texas communities want or need to conform to the density found in a major central business district, it is recognized that walkable areas should be a denser node within their communities designed to make the most of transit access or use mixing. Exactly how dense and intense zoning permits will depend on the community and the market for urban development. Comparing North Texas zoning to the suggested metrics from SGA, this review examined the density of the core, or most intense part of each zoning district.

- Allow greater development intensity:** Permit by-right an intensity of development which allows residential units greater than single family detached housing, lot coverage allowing a majority of the lot to be developed, and building heights appropriate for such intensity.

Strategies

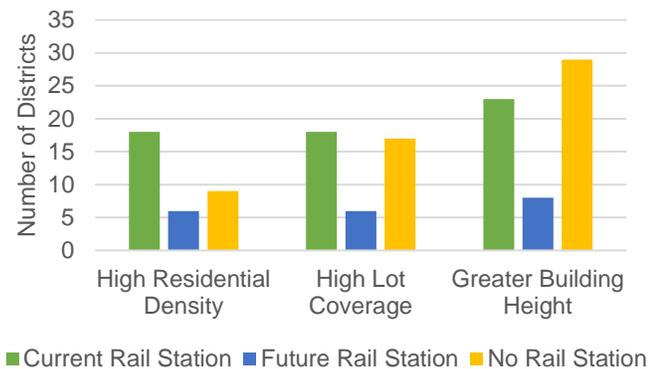
Higher Residential Density: The zoning district’s density standards, if present, encourage higher residential density (i.e., ≥ 15 dwelling units per acre).

High Lot Coverage: Permissible lot coverages are high (i.e., ≥ 60 percent) to foster compact growth.

Greater Building Height: The minimum allowable height standards encourage transit-supportive densities (i.e., \geq three stories minimum).

Regional Trends

Zoning Districts Implementing Greater Intensity Strategies by Rail Transit Status



A variety of standards are used in North Texas zoning to control the effective intensity of development from general floor area ratios to very descriptive building types. Given that the effective residential density of a development doesn’t need to be explicitly stated as other standards can control it, many districts may not place it in zoning text. However, in both districts with existing and future transit stations over two-thirds of the codes include a residential density standard as well as allow lot coverage or FAR over 60 percent of lot. Over

80 percent of districts reviewed allow a building height of at least three stories. A combination of high lot coverage and height are needed for greater density.

Implementation Example

The City of Irving’s TOD District zone is a floating zone applied to the half-mile area around their stations. This code is written to facilitate higher density development closer to rail by requiring a



Figure 6: High density development near Las Colinas Urban Center Station

minimum of 40 residential units per acre within a half-mile of rail stations. Projects adjacent to the station must be at least 60 units per acre. Building heights are set at a minimum of 45 feet for residential and five stories or 65 feet for non-residential to ensure building intensity. The exact lot coverage requirements are not set through this zone however, building design guidelines and placements set a clear expectation of urban style development.

- ☑ **Scale dimensions for pedestrians:** Set dimensional standards for blocks and buildings which are more compact and closer to the right-of-way to encourage pedestrian activity.

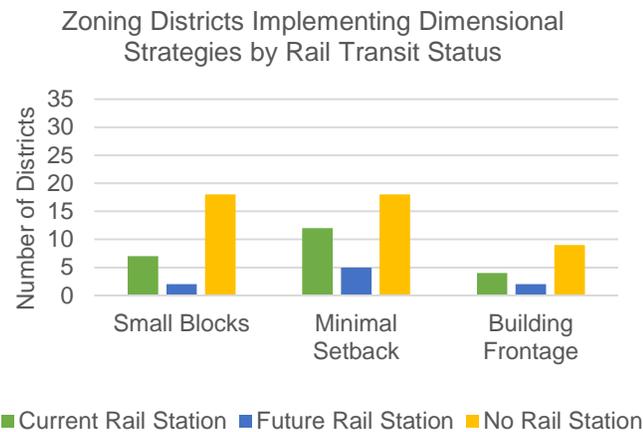
Strategies

Smaller Block Size: The district’s block standards encourage shorter blocks that promote walking (i.e., < 600 feet maximum length).

Minimal Setbacks: Minimal setback requirements or built-to-lines (i.e., zero feet minimum setback from sidewalk) enable buildings to be close to the street.

Maximize Building Frontage: Standards for amount of building façade close to street to ensure urban sense of place (e.g. minimum building width as a percentage of the lot width located in the build-to zone, i.e., ≥ 80 percent minimum).

Regional Trends



While block size is critical to building a pedestrian-friendly environment, not all zones regulate this as evidenced by less than 40 percent using either new block size or the effective width of buildings without a pedestrian access cut through. Slightly more zoning districts use reduced minimum setbacks or build-to lines to achieve more pedestrian-friendly building standards. Ideally structures should be less than 12 feet from the property line or sidewalk adjacent to the street. Half of all the codes reviewed allow for this in the most intense part of the district.

To count as “maximizing building frontage” codes are recommended to require 80 percent of the building façade fronting a primary street. While many zones didn’t meet this threshold, it’s more common in North Texas to require at least 50 percent of the building façade pulled up to the street. This captures the idea but may also reduce the positive impact.

Implementation Example

The City of Farmers Branch Station Area Code Form-Based Code is applied around its DART Rail Station. The district’s regulations are tied to a regulating plan developed out of the 2002 master plan for the area. While each building’s intensity varies with its designated street frontage, blocks are limited to 400 feet before an alley, pedestrian path, or common access is required. Individual lots within these blocks are limited to 250 feet of developed frontage before similar through-access is required.

Building standards within the form-based code use a set of detailed diagrams to communicate building placement and form. In the most intense street frontages, buildings must place 85 percent of their façade with the required built-to zone which is within zero to 15 feet of the property line. Side lot setbacks are not required unless adjacent to single-family residential, which is a fairly common requirement among North Texas codes.

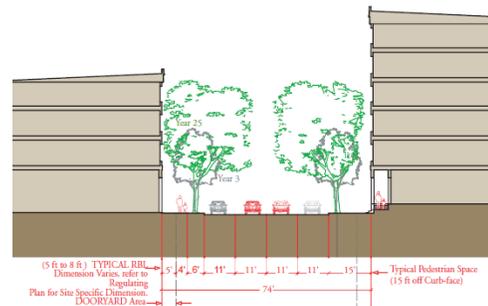
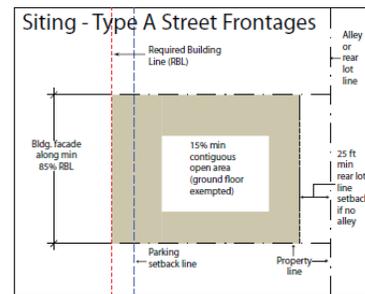


Figure 7: Diagrams depicting building siting in Farmers Branch form-based code

ISSUE 5 – Off-Street Parking

The Smart Growth America zoning audit by Clarion Associates summarizes the issue with parking in mixed-use areas and transit-oriented developments: “Excessive surface parking undermines the pedestrian-oriented character of a TOD district. Thus it is important to make sure minimum off-street parking requirements are indeed “minimum” and reflect the reduced vehicular trips and parking demand inherent with mixed-use development and with the availability of transit as an alternative means of transportation.”

Municipal zoning codes are the primary regulatory power concerning parking in North Texas. Numerous codes in this region included strategies, standards, and guidelines to tackle the issue of providing adequate parking supply while mitigating the negative impact of poorly designed oversupply. Many standards can be written into municipal zoning to manage parking, but only the most commonly used parking reduction, management, and design strategies found locally are included in this report. Minimum required supply ratios were not examined in depth. This report looks only at reduction and management strategies in the zoning.

- ☑ **Encourage efficient parking supply:** Provide flexible options for supplying parking that maximize all parking assets through wide spread shared parking, parking studies, and targeted reductions.

Strategies

Automatic Reduction: A reduction in minimum required off-street parking spaces granted by-right in the zone or when specific criteria are met (e.g. reduction of 25 percent if within 1,000 feet from train station; no off-street parking required in this specific zone).

Study Reduction: Developments are allowed to present evidence or studies demonstrating that the number of spaces needed is less than the minimum requirement.

Max spaces/ lot size: A maximum limit is placed on surface parking spaces a development may provide (e.g., 125 percent of the minimum requirement; no more than 50 surface spaces per lot).

Shared Parking: Parking spaces are shared by the occupants of more than one building or use at different times of the day resulting in a reduction of overall parking for those developments combined.

On-Street Counts: Developments may provide shared on-street spaces or use existing adjacent on-street spaces to count towards the minimum requirement.

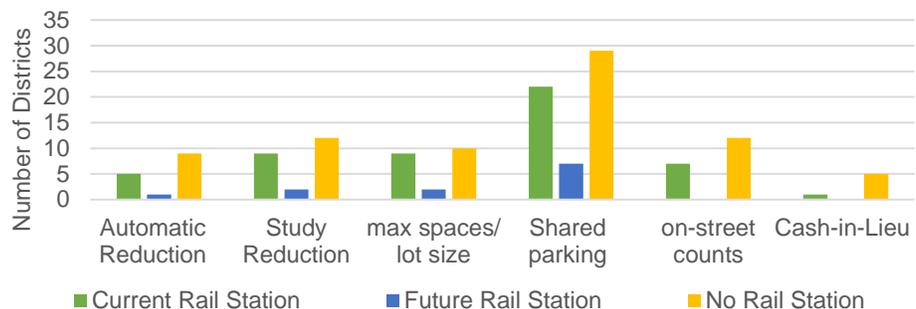
Cash-in-Lieu: Instead of building required parking, payment is made to a fund to cover the value of the spaces not developed.

Regional Trends

Shared parking is the most common strategy for improving parking efficiency in North Texas. However, its implementation comes in several different forms ranging from broad mandatory districts, to limited voluntary sharing between very specific uses which mitigates effectiveness.

The next tier of common strategies includes space reduction via a professional study, a maximum limit on the number of spaces or size of a single lot, and use of on-street spaces to satisfy minimum requirements.

Zoning Districts Implementing Parking Supply Strategies by Transit Status



Roughly less than one-third of all districts allow professional study justification or on-street parking to reduce the off-street spaces built. When implemented, studies offer a modest reduction usually capped at 10 to 25 percent of the minimum spaces required. Similarly,

counting on-street parking spaces towards the minimum requirement for developments has been adopted in even fewer codes given the limited places where street parking is feasible because of the street's design.

Automatic reduction in spaces was found by-right in 15 districts. Usually this comes with the caveat of being near transit, being a certain distance from single family homes, or simply developing in a historic downtown to preserve the walkable environment. These can be anywhere from absolutely no minimum parking required to as small as a one or two percent reduction in required spaces.

Use of cash-in-lieu fees and funds for spaces are used in even fewer municipalities. Only six districts (three in the same city) provide this option among mixed-use and TOD districts in North Texas.

Implementation Example

Out of the North Texas sustainable development zoning examples, one of the most detailed and comprehensive toolboxes of parking reform and management is found in section 51A-13.400, Parking Regulations of the Dallas Form-Based Districts.

Developments are authorized to take up to a maximum of 50 percent reduction in supplied off-street spaces. Those closest to rail transit (within 600 feet) can take a 25 percent automatic reduction in required spaces. This reduction decreases with distance and is also offered at a smaller level to bus and trolley transit. This reduction is modified if close to single family districts to protect from spillover street parking.

Among the numerous other reduction opportunities are reductions for access to car-sharing, affordable

housing, increased pedestrian amenities, underground parking, and tree preservation. In addition to these, shared parking may be implemented for different uses according to the Urban Land Institute's Shared Parking Model. On-street parking spaces adjacent to the development can be counted toward the minimum required but only for the hours available to the general public.

All surface parking is capped at a maximum of 125 percent of the minimum required spaces. The portion of parking that may be reserved by the property owner is limited as a ratio of spaces to residential bedrooms and commercial square feet. Special parking exceptions allow developers to seek a reduction in the number of spaces if it can be demonstrated that the minimum spaces required exceeds the demand generated by the site.



Figure 8: On-street parking at form-based district development in Dallas

- ☑ **Set parking design standards:** Use design standards that mitigate the negative effect parking spaces have on the built environment, improve the aesthetic character of a street, and allow flexible placement on constrained sites.

Strategies

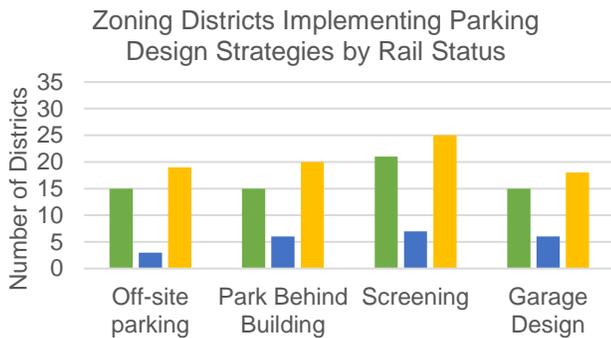
Off-Site Parking: Required parking need not be located on the same lot as the development. Limitations such as distance and wayfinding may apply (e.g. no more than 500 feet from development, must provide sidewalk).

Park Behind Building: Contains parking setbacks or other rules that limits parking spaces to the rear or side of a building, effectively preventing spaces between the sidewalk and building.

Screening: Fencing, walls, or landscaping required to conceal off-street parking adjacent to the right-of-way intended to facilitate pedestrian comfort and reduce visual impact of surface parking.

Garage Design: Parking structures should be wrapped with non-parking uses at the ground floor level or have architectural detail to conceal the garage.

Regional Trends



■ Current Rail Station ■ Future Rail Station ■ No Rail Station

Almost three-fourths of all codes reviewed require some form of surface parking screening along a street. Other parking design strategies are less frequent but still implemented by more than 50 percent of districts. However, it should be noted enforcement and quality required by districts are highly variable and a detailed examination of codes of interest is recommended.

The parking design best practice seen in North Texas usually includes detailed diagrams illustrating the appropriate design treatments such as building location relative to a concealed or screened parking lot or structured parking. Usually these codes also provide options for constrained sites by allowing remote parking within a short walking distance. Parking garage design standards appear in approximately half the districts and the development practice of wrapped garages for modern urban multi-family projects usually satisfies this design treatment.

Implementation Example

The City of North Richland Hills uses a hybrid form-based code around its future TEX Rail station sites. In meeting minimum parking requirements, developers are allowed to locate needed spaces up to 1,200 feet (less than one-quarter mile) away or as shared parking. The code utilizes a combined build-to zone and a parking setback line to restrict parking placement. This is illustrated below where a built-to zone (A, B) and parking setbacks (O, Q) are 0-5 feet and 10-25 feet respectively from the property line.

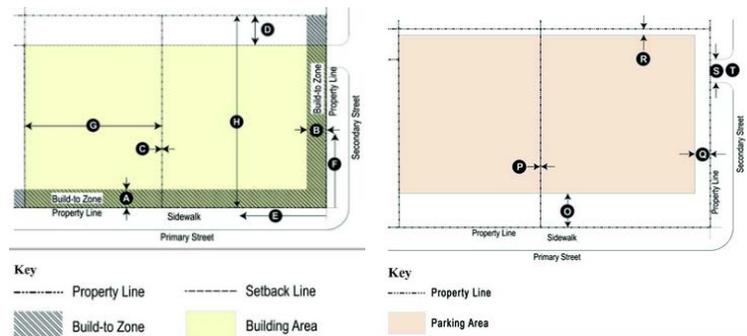


Figure 4: NRH Building setback diagram (left) combined with parking setback (right)

The district also mandates surface lot parking provide a planted landscape screen at least four feet high where a building does not conceal the parking spaces. Additionally, all structured parking is required to have active uses along the ground floor along priority street frontages and driveways should be located on alley ways or minor streets.

- ☑ **Facilitate parking management and other modes:** Districts should require bike parking, facilitate active parking management and leverage other reductions or improvements to parking as needed to meet goals of the community or address a key site sensitivity.

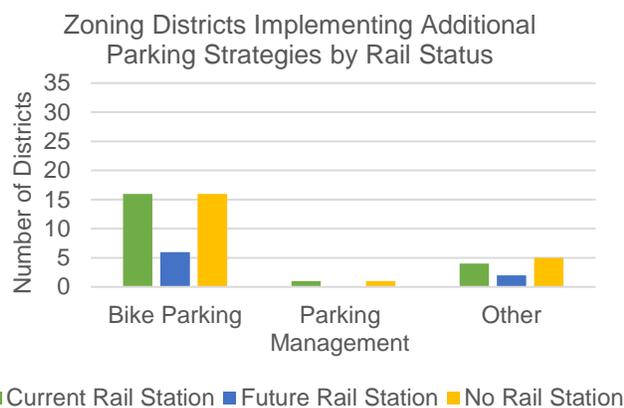
Strategies

Bike Parking: Standards and requirements for the provision of bike parking throughout the district or at each development.

Parking Management: Code provides guidance or allows methods for actively maximizing use of fewer parking spaces through written agreements with employers, property managers, or special districts (e.g. employer carpool incentive programs, parking management districts, parking cash out programs, etc.).

Other: Any other method in the code designed to reduce parking spaces or encourage better use of parking to meet district vision or goals (e.g. reduction in spaces for tree preservation, special reduction for historic districts).

Regional Trends



Additional strategies are less frequently used but can provide innovative ways to improve parking at mixed-use or TOD sites. Bicycle parking for example, is essential to support bicycling in conjunction with bike lanes and trails. Over 60 percent of current transit served and future station districts included bicycle parking while less than half of all other districts have similar requirements.

Parking management strategies through zoning are rare in North Texas but those which are included offer some of the most innovative methods and get the most efficiency from parking in mixed-use districts. It should be noted that parking supply and design strategies previously reviewed can also be considered parking management, while this section refers to long-term active practices. Most of the miscellaneous reductions in the region come from historic district protection, such as in a smaller community's downtown. This demonstrates a need to mitigate the effect parking has on walkable environments.

Implementation Example

The Carrollton Transit Center district recognizes the need for safe and convenient places for cyclists to park their bikes by requiring bike parking at a ratio of one bike space per every 10 automobile spaces. Detailed standards and guidelines on placement and design of bike parking are also offered through the code.

The Transit Center district includes a provision to encourage shared parking by limiting spaces that can be offered as reserved parking to one space per 1,000 square feet non-residential and one space per every residential dwelling unit. Further additional strategies to protecting its historic downtown included offering a parking space credit for commercial on the ground floor in the Historic Square sub-district.

The Dallas Form Districts again provide an innovative example of active parking management in zoning. Section 51A-13.410 of the Dallas Form Districts provides authority to establish a parking management overlay within contiguous form districts and mixed-use zones. Developments must meet several requirements to apply but once established the parking management overlay can be treated as one lot for the purposes of meeting the minimum parking ratios.

On a smaller scale the Dallas Form Districts also authorize employers to set up Employer Transportation Demand Management programs and receive corresponding parking reductions up to 25 percent of the required minimum. Demand management approaches include using a coordinator to disseminate ride-sharing and other alternative transportation options, preferential parking for carpools, financial incentives for alternative commutes, telecommuting, and provision of "emergency ride home" services.

ISSUE 6 – Design and Compatibility

Urban design supporting multimodal transportation with sufficient levels of density and diversity involves the creation of attractive and visually interesting buildings, streetscapes, and public amenities.⁴ Studies have shown that people are more likely to walk longer distances in areas of greater density of housing and retail, and with more sidewalks and trees.⁵ Recent research suggests that even additional fenestration (windows and doors) on buildings is one of the most important factors in promoting walkability.⁶ Zoning districts must address the compatibility of more intense mixed-use and transit-oriented districts in areas of redevelopment and infill with existing development.

- ☑ **Design a pedestrian-oriented public realm:** Districts should create safe and convenient streets for multimodal transportation and pedestrian activity through requirements supporting high amenity streetscapes and public spaces.

Strategies

Sidewalk Standards: The code requires pedestrian walkways adjacent to the street.

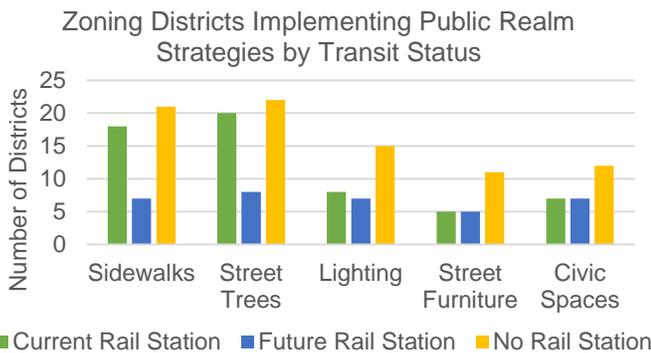
Street Trees: Requires trees planted along public walkways for shade and pedestrian comfort.

Lighting: Requires lighting designed to improve accessibility, visual appeal, and safety of the pedestrian realm.

Street Furniture: Promotes inclusion and standards for items such as trash cans and seating in the public realm.

Civic Space: Standards beyond an open space requirement that encourage high quality design and define space types such as plazas, courtyards, squares, or other inviting public spaces.

Regional Trends



The majority of districts reviewed require sidewalks and street trees, however not all have detailed guidance on streetscapes specified in zoning. This may be because of development ordinances with separate design guides, or in older zoning codes the assumption is made that the streetscape being public realm will be constructed by the public entity controlling the right of way.

Zoning codes with more emphasis on built form are more likely to specify standards for streetscapes that

improve pedestrian comfort. Typically form-based and hybrid zones recognize the need for detailed standards on lighting, street furniture, and civic space standards. These had to be designed and written for pedestrian-scaled streetscapes, not standards set for automobile-oriented streets to be included in the final matrix.

Implementation Example

The City of Rowlett created a form-based code implemented in different areas of their city including their downtown served by DART rail. The code seeks to create more pedestrian-friendly mixed-use places while being compatible with existing neighborhoods.

The code sets clear standards for the public realm, sidewalks at a minimum of six feet, required street trees for shade, and types of lighting focused on walkways. A detailed design guide with visual



Figure 5: Streetscape in Rowlett's urban village zoning district.

⁴ Pikora, T. Giles-Corti, B., Bull, F., Jamrozik, K., & Donovan, R. (2003). Developing a framework for the assessment of the environmental determinants of walking and cycling. *Social Science and Medicine*, 56, 1693-1703.

⁵ Canepa, B. (2007). Bursting the bubble: Determining the transit-oriented development's walkable limits. *Transportation Research Record*, 1992, 28-34.

⁶ Ameli, S., Hamidi, S., Garfinkel-Castro, A., Ewing, R. (2015). Do Better Urban Design Qualities Lead to More Walking in Salt Lake City, Utah?. *Journal of Urban Design*, Volume 20, Issue 3, 393-410.

references provides guidance on buildings and street types as well as open space types.

amenities are listed with ranges of dimensions and acceptable materials to be placed in the street amenity zone.

This specifies how each civic space will improve pedestrian comfort. Streetscape elements, or street

- ☑ **Adopt urban building design standards:** Buildings in mixed-use, walkable, or TOD places should be designed to enhance pedestrian activity and capitalize on density and intensity with added visual interest that creates a sense of place.

Strategies

Fenestration: Standards requiring a certain amount of doors and windows to ensure transparency in facades for the benefit of the pedestrian experience.

Articulation: Standards requiring a variation in the surface material, projection, shape, or form of a wall as to avoid a blank, barrier like wall along a pedestrian way.

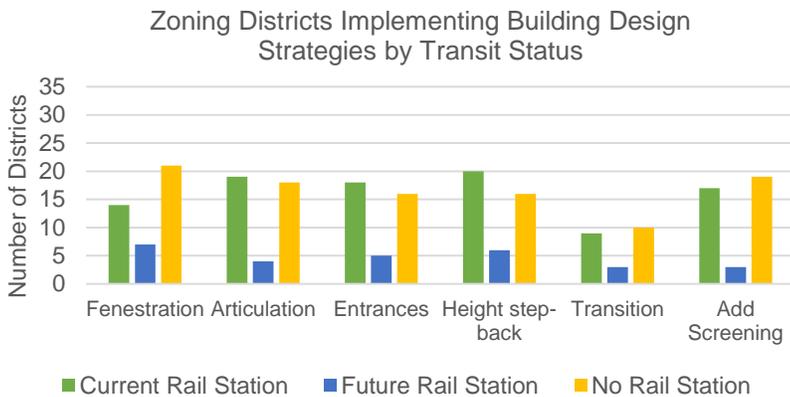
Entrances: Standards requiring entrances to be oriented to pedestrians entering from the street rather than from a vehicle parking lot.

Transition Zones: Parts of the zoning district used to adjust building form to match or complement the existing community.

Height Step-Back: Requirement that establish a reduction in the height or building form that is sensitive to existing adjacent neighbors.

Additional Screening: Fencing, walls, or landscaping is required to conceal utilities or other back door facilities adjacent to the right-of-way or existing developments.

Regional Trends



the zones use sub-districts between higher and lower density zones. Form-based codes often write this into the regulating or master plan, while conventional districts may utilize an additional zoning district for this same purpose. Additional screening, fencing and landscaping, is also frequently used in these transitions and improved streetscapes.

A majority, 59 percent, of the districts reviewed are using standards to promote more windows and transparency (fenestration) along walkable streets. Many of these districts also apply advanced treatments for articulation and entrance placement through guidelines on permissible building types and visual examples of desired architecture in their codes.

Most districts, especially those around existing transit, utilize a height step-back for buildings adjacent to single family homes to ensure compatibility. In addition to transition treatments between buildings, a third of

The City of Frisco developed a Form-Based Code Manual allowing developers using planned development zoning the option of utilizing form-based code for expedited approval.



Figure 11: Pedestrian-oriented building design at Frisco Square

The manual details design standards for building types related to their land use. Retail at grade in urban sites must have 60 to 80 percent of the façade as windows or doors. Specifications for different treatments of building entrances and articulation are provided for each type following the principles of pedestrian orientation and visual interest. The standard for compatibility between

higher intensity developments and lower density residential uses requires landscape screening combined with a setback distance equal to twice the height of the building.

Recommendations and Resources

Current zoning for mixed-use and transit-oriented places in the North Central Texas region provides a key benchmark for communities looking to modernize and adopt best practice in their zoning to support and facilitate multimodal transportation. This report looked at how each of the six key issues were addressed in zones across the region and provided examples of how each best practice (included in the summary table below) has been implemented.

ISSUES:	Best Practices
1 – Zoning Mechanism	<input checked="" type="checkbox"/> Apply best suited mechanism aimed at walkable form
2 – Mix of Uses	<input checked="" type="checkbox"/> Permit mixed-use at site level
	<input checked="" type="checkbox"/> Incentivize mixed-use
3 – Accessory and Temporary Uses	<input checked="" type="checkbox"/> Regulate accessory and temporary uses
4 – Intensity and Dimensional Standards	<input checked="" type="checkbox"/> Allow greater development intensity
	<input checked="" type="checkbox"/> Scale dimensions for pedestrians
5 – Off-Street Parking	<input checked="" type="checkbox"/> Encourage efficient parking supply
	<input checked="" type="checkbox"/> Set parking design standards
	<input checked="" type="checkbox"/> Facilitate parking management and other modes
6 – Design and Compatibility	<input checked="" type="checkbox"/> Design a pedestrian-oriented public realm
	<input checked="" type="checkbox"/> Adopt urban building design standards

These local best practices can be further enhanced through use of the resources and guidance listed below. Further examination of the examples in the text is recommended for cities looking to understand the implementation of those standards. Using the matrix in Appendix 1, codes can be sorted by city size, presence of rail transit stations, and strategies used. In combination with detailed understanding of a community’s needs, this guidebook provides quick access to zoning examples from across the region to help implement and craft sustainable zoning.

Resources

Mixed-Use Transit-Oriented Development Zone District Standards: Key Issues and Options. Prepared for the North Central Texas Council of Governments and the City of Cedar Hill, TX.

<http://www.smartgrowthamerica.org/documents/091814-final-issues-and-options-paper-cedar-hill.pdf>

NCTCOG – Sustainable Zoning Practice Website

http://www.nctcog.org/trans/sustdev/landuse/formbased_codes.asp

Form-Based Codes Institute

<http://formbasedcodes.org/>

Codes That Support Smart Growth Development

<https://www.epa.gov/smartgrowth/codes-support-smart-growth-development>



APPENDICES



Appendix 1 – Matrices of Zoning Standards

List of Tables to follow:

Issue 1 – Zoning Mechanism and Link to Zoning Text

Issue 2 – Mix of Uses

Issue 3 – Accessory and Temporary Uses

Issue 4 – Intensity and Dimension Standards

Issue 5 – Off-Street Parking (table is split into two parts)

Issue 6 – Development Design and Compatibility (table is split into two parts)

Issue 1 - Zoning Mechanism & Link to Zoning Text (continued)

City Name	Pop. Size ^a	Zone/Code Name	Rail Station Status ^b			Zoning Mechanism ^c	Zoning Text Web link
			Current	Future	N/A		
Duncanville	M	Mixed-Use 1			x	H	www.municode.com/library/tx/duncanville/codes/code_of_ordinances?nodeId=COORDUTE-APXAZOOR-ARTXII-JMIUSDIRE
	M	Mixed-Use 2			x	O	www.municode.com/library/tx/duncanville/codes/code_of_ordinances?nodeId=COORDUTE-APXAZOOR-ARTXII-KMIUSDIREMIUS
Farmers Branch	M	Station Area Form Based Code	x			F	http://farmersbranchtx.gov/DocumentCenter/View/595
Flower Mound	M	Mixed-Use District			x	C	www.municode.com/library/tx/flower_mound/codes/code_of_ordinances?nodeId=SPBLADERE-CH98ZO-ARTIHDIRE-DIV25MUMIUSDI
Forney	M	Mixed-Use District			x	C	www.cityofforney.org/DocumentCenter/Home/View/74
Frisco	M	Form-Based Code Manual			x	H	www.ci.frisco.tx.us/DocumentCenter/View/1522
Hurst	M	Town Center District			x	C	www.municode.com/library/tx/hurst/codes/code_of_ordinances?nodeId=PTIICO-CH27ZO-S27-15-2TCTOCEDI
Mansfield	M	The Reserve Planned Development			x	H	www.mansfieldtexas.gov/sites/default/files/media/thereservedevelopmentrequirements.pdf
North Richland Hills	M	TOD Code		x		H	www.municode.com/library/tx/north_richland_hills/codes/building_and_land_use_regulations?nodeId=PTIICOOR-CH118ZO-ARTIVDI-DIV15TRORDECO
Rockwall	M	Downtown District			x	H	www.municode.com/library/tx/rockwall/codes/code_of_ordinances?nodeId=PTIUIUNDECO-ARTVIDIDEST-S4CODI-S4-8DODTDI
Rowlett	M	Form Based - Urban Village	x			F	www.rowlett.com/DocumentCenter/View/8842
Sachse	M	Mixed-Use District			x	C	www.municode.com/library/tx/sachse/codes/code_of_ordinances?nodeId=PTIICOOR-CH11ZOOR-ART3DI-S12XEUSRE
Terrell	M	Central Business District			x	C	www.cityofterrell.org/ord-pdf/2612.pdf
Weatherford	M	Central Business District			x	C	http://weatherfordtx.gov/DocumentCenter/Home/View/1855
Wylie	M	Downtown Historic District			x	C	www.wylietexas.gov/Departments/Planning/Ordinances/Zoning_Ordinance_August_2015.pdf
Granbury	S	Central Business District			x	C	www.granbury.org/DocumentCenter/Home/View/275
Joshua	S	Joshua Station Overlay District		x		O	http://z2.franklinlegal.net/franklin/Z2Browser2.html?showset=joshuaset
Richland Hills	S	Special District Mixed-Use	x			C	www.municode.com/library/tx/richland_hills/codes/code_of_ordinances?nodeId=PTIICOOR-CH90ZO-ART2ZODI-S2.05SPZODI
Roanoke	S	Oak Street Corridor Zoning District			x	H	www.municode.com/library/tx/roanoke/codes/code_of_ordinances?nodeId=PTIICOOR-CH12CIROTECOZOR-ARTIIZODI-DIV15OASTCOZODI

a. Based on NCTCOG 2014 Demographic Forecast Population: Large 90,000 and over, Medium 89,999 to 10,000, and Small Under 10,000

b. All or part of the zoning district applies to the half-mile radius area of a rail transit station

c. C = Conventional, F = Form-Based Code, H = Hybrid FBC, O = Overlay

Issue 2 - Mix of Uses

City Name	Pop. Size ^a	Zone/Code Name	Rail Station Status ^b			Same-Lot Mix of Uses	Vertical Mix of Uses	Flexible Use	Incentives	Minimum Use Mix
			Current	Future	N/A					
Allen	L	Central Business District			x	x	x		x	
Arlington	L	Entertainment District Overlay		x		x				x
	L	Neighborhood Mixed-Use			x	x		x		x
	L	Lamar Collins Mixed-Use Overlay			x	x	x			x
	L	Regional Mixed-Use			x	x				x
Carrollton	L	Transit Center District	x			x	x	x		
Dallas	L	Central Area 1	x			x		x		
	L	Central Area 2	x			x				
	L	Form District - Walkable Urban Mixed-Use	x			x	x			
	L	Form District - Walkable Urban Residential	x							
	L	Mixed-Use 1	x			x	x		x	x
	L	Mixed-Use 2	x			x	x		x	x
	L	Mixed-Use 3	x			x	x		x	x
Denton	L	Neighborhood Residential Mixed-Use	x			x	x			
	L	Neighborhood Residential Mixed-Use - 12	x			x	x			
	L	Downtown General Commercial	x			x	x			
	L	Regional Center Commercial - Neighborhood	x			x	x			
	L	Regional Center Commercial - Downtown	x			x	x			
	L	Regional Center Residential 1	x			x	x			
	L	Regional Center Residential 2	x			x	x			
	L	Community Mixed-Use General			x	x	x			
Fort Worth	L	Community Mixed-Use Employment			x	x	x			
	L	Near Southside	x			x	x	x		x
	L	Low-Intensity Mixed-Use District (MU-1)		x		x	x	x		x
	L	High Intensity Mixed-Use District (MU-2)		x		x	x	x		x
	L	Camp Bowie District			x	x	x	x		
	L	Trinity Lakes District			x	x	x	x		
Garland	L	Trinity Uptown			x	x	x	x		
	L	Downtown District	x			x	x	x		x
Grand Prairie	L	Mixed Residential			x	x		x		x
	L	Mixed-Use			x	x		x		x
Irving	L	TOD District	x			x	x	x		x
Lewisville	L	Mixed-Use Ninety District	x			x				
	L	Mixed-Use-Shopping Center District			x	x	x			x
	L	Mixed-Use Thirty District			x	x				
	L	Old Town Mixed-Use 1	x							
	L	Old Town Mixed-Use 2	x							
McKinney	L	Town Center District			x	x	x	x		
Mesquite	L	North Gus Thomasson Corridor District			x	x	x	x		
	L	Kaufman-Interstate 20 District			x	x	x	x		x
	L	Traditional Neighborhood Mixed Residential			x	x	x			
	L	Truman Heights Neighborhood District			x	x	x	x		
Plano	L	Downtown Business/Government	x			x	x	x		
	L	Urban Residential	x							

Issue 2 - Mix of Uses (continued)

City Name	Pop. Size ^a	Zone/Code Name	Rail Station Status ^b			Same-Lot Mix of Uses	Vertical Mix of Uses	Flexible Use	Incentives	Minimum Use Mix
			Current	Future	N/A					
Plano	L	Urban Mixed-Use			x	x	x	x		x
Richardson	L	Bush Central Station Code	x			x	x	x		
Addison	M	Urban Center		x		x	x			x
Burleson	M	TOD Design Standards		x		x		x		
Cedar Hill	M	Uptown Overlay District		x						
Corinth	M	Mixed-Use Residential			x	x	x			x
DeSoto	M	Mixed-Use 1			x	x	x			x
	M	Mixed-Use 2			x	x	x			x
Duncanville	M	Downtown Duncanville District		x		x	x	x		x
	M	Mixed-Use 1			x	x	x	x	x	x
	M	Mixed-Use 2			x	x	x	x		x
Farmers Branch	M	Station Area Form Based Code	x			x	x	x		
Flower Mound	M	Mixed-Use District			x	x	x	x		
Forney	M	Mixed-Use District			x					
Frisco	M	Form-Based Code Manual			x	x	x	x		x
Hurst	M	Town Center District			x	x	x			
Mansfield	M	The Reserve Planned Development District			x	x	x			x
North Richland Hills	M	TOD Code		x		x	x	x		x
Rockwall	M	Downtown District			x	x	x	x		
Rowlett	M	Form Based - Urban Village	x			x	x	x	x	x
Sachse	M	Mixed-Use District			x	x				
Terrell	M	Central Business District			x	x	x	x		
Weatherford	M	Central Business District			x					
Wylie	M	Downtown Historic District			x	x				
Granbury	S	Central Business District			x	x	x	x		
Joshua	S	Joshua Station Overlay District		x						
Richland Hills	S	Special District Mixed-Use	x			x				
Roanoke	S	Oak Street Corridor Zoning District			x	x	x	x		

a. Based on NCTCOG 2014 Demographic Forecast Population: Large 90,000 and over, Medium 89,999 to 10,000, and Small Under 10,000

b. All or part of the zoning district applies to the half mile radius area of a rail transit station

Issue 3 - Accessory and Temporary Uses

City Name	Pop. Size ^a	Zone/Code Name	Rail Station Status ^b			Accessory Dwelling Unit	Outdoor Seating	Prohibits Unsupportive Uses	Transit Supportive Temp. Uses
			Current	Future	N/A				
Allen	L	Central Business District			x			x	x
Arlington	L	Entertainment District Overlay		x					
	L	Neighborhood Mixed-Use			x		x	x	
	L	Lamar Collins Mixed-Use Overlay			x				
	L	Regional Mixed-Use			x		x	x	
Carrollton	L	Transit Center District	x			x	x	x	
Dallas	L	Central Area 1	x			x	x		x
	L	Central Area 2	x			x	x		x
	L	Form District - Walkable Urban Mixed-Use	x			x	x	x	
	L	Form District - Walkable Urban Residential	x			x		x	x
	L	Mixed-Use 1	x			x			
	L	Mixed-Use 2	x			x			
	L	Mixed-Use 3	x			x			
Denton	L	Neighborhood Residential Mixed-Use	x					x	x
	L	Neighborhood Residential Mixed-Use - 12	x			x		x	x
	L	Downtown General Commercial	x					x	
	L	Regional Center Commercial - Neighborhood	x						
	L	Regional Center Commercial - Downtown	x				x		
	L	Regional Center Residential 1	x				x	x	
	L	Regional Center Residential 2	x				x	x	
	L	Community Mixed-Use General			x		x		
Fort Worth	L	Community Mixed-Use Employment			x		x		
	L	Near Southside	x			x			x
	L	Low-Intensity Mixed-Use District (MU-1)		x			x		x
	L	High Intensity Mixed-Use District (MU-2)		x			x		x
	L	Camp Bowie District			x	x	x		x
	L	Trinity Lakes District			x	x			x
Garland	L	Trinity Uptown			x		x	x	
	L	Downtown District	x			x	x	x	x
Grand Prairie	L	Mixed Residential			x	x		x	
	L	Mixed-Use			x	x		x	
Irving	L	TOD District	x			x	x		x
Lewisville	L	Mixed-Use Ninety District	x						
	L	Mixed-Use-Shopping Center District			x	x	x		
	L	Mixed-Use Thirty District			x	x	x		
	L	Old Town Mixed-Use 1	x			x		x	
	L	Old Town Mixed-Use 2	x			x			
McKinney	L	Town Center District			x		x		x
Mesquite	L	North Gus Thomasson Corridor District			x	x		x	
	L	Kaufman-Interstate 20 District			x	x		x	x
	L	Traditional Neighborhood Mixed Residential			x	x		x	

Issue 3 - Accessory and Temporary Uses (continued)

City Name	Pop. Size ^a	Zone/Code Name	Rail Station Status ^b			Accessory Dwelling Unit	Outdoor Seating	Prohibits Unsupportive Uses	Transit Supportive Temp. Uses
			Current	Future	N/A				
Mesquite	L	Truman Heights Neighborhood District			x	x		x	x
Plano	L	Downtown Business/Government	x			x			x
	L	Urban Residential	x			x		x	
	L	Urban Mixed-Use			x	x	x		x
Richardson	L	Bush Central Station Code	x				x	x	x
Addison	M	Urban Center		x			x	x	
Burleson	M	TOD Design Standards		x			x		
Cedar Hill	M	Uptown Overlay District		x					
Corinth	M	Mixed-Use Residential			x	x		x	
DeSoto	M	Mixed-Use 1			x				x
	M	Mixed-Use 2			x				x
Duncanville	M	Downtown Duncanville District		x			x	x	
	M	Mixed-Use 1			x	x		x	x
	M	Mixed-Use 2			x	x		x	x
Farmers Branch	M	Station Area Form Based Code	x			x	x	x	
Flower Mound	M	Mixed-Use District			x			x	x
Forney	M	Mixed-Use District			x				x
Frisco	M	Form-Based Code Manual			x	x	x		x
Hurst	M	Town Center District			x	x		x	x
Mansfield	M	The Reserve Planned Development District			x		x		
North Richland Hills	M	TOD Code		x			x	x	
Rockwall	M	Downtown District			x		x	x	x
Rowlett	M	Form Based - Urban Village	x			x	x	x	x
Sachse	M	Mixed-Use District			x	x			
Terrell	M	Central Business District			x		x		
Weatherford	M	Central Business District			x	x			
Wylie	M	Downtown Historic District			x	x		x	x
Granbury	S	Central Business District			x		x	x	x
Joshua	S	Joshua Station Overlay District		x					
Richland Hills	S	Special District Mixed-Use	x						
Roanoke	S	Oak Street Corridor Zoning District			x		x	x	x

a. Based on NCTCOG 2014 Demographic Forecast Population: Large 90,000 and over, Medium 89,999 to 10,000, and Small Under 10,000

b. All or part of the zoning district applies to the half mile radius area of a rail transit station

Issue 4 - Intensity and Dimensional Standards

City Name	Pop. Size ^a	Zone/Code Name	Rail Station Status ^b			Small Block Size	High Residential Density	High Lot Coverage	Minimal Setback	High Building Street Frontage	Greater Building Height	
			Current	Future	N/A							
Allen	L	Central Business District			x		x	x	x		x	
Arlington	L	Entertainment District Overlay		x		x	x	x			x	
	L	Neighborhood Mixed-Use			x	x	x	x			x	
	L	Lamar Collins Mixed-Use Overlay			x	x	x	x	x		x	
	L	Regional Mixed-Use			x	x	x	x			x	
Carrollton	L	Transit Center District	x			x			x	x	x	
Dallas	L	Central Area 1	x				x	x			x	
	L	Central Area 2	x				x	x	x		x	
	L	Form District - Walkable Urban Mixed-Use	x			x		x		x	x	
	L	Form District - Walkable Urban Residential	x					x			x	
	L	Mixed-Use 1	x				x	x			x	
	L	Mixed-Use 2	x				x	x			x	
Denton	L	Mixed-Use 3	x				x	x			x	
	L	Neighborhood Residential Mixed-Use	x				x	x	x		x	
	L	Neighborhood Residential Mixed-Use - 12	x					x			x	
	L	Downtown General Commercial	x				x	x	x		x	
	L	Regional Center Commercial - Neighborhood	x				x	x			x	
	L	Regional Center Commercial - Downtown	x				x	x	x		x	
	L	Regional Center Residential 1	x				x				x	
	L	Regional Center Residential 2	x				x	x			x	
Fort Worth	L	Community Mixed-Use General			x			x	x		x	
	L	Community Mixed-Use Employment			x			x			x	
	L	Near Southside	x						x		x	
	L	Low-Intensity Mixed-Use District (MU-1)		x			x		x		x	
	L	High Intensity Mixed-Use District (MU-2)		x			x		x		x	
	L	Camp Bowie District			x	x			x	x	x	
Garland	L	Trinity Lakes District			x	x				x	x	
	L	Trinity Uptown			x			x	x		x	
	L	Downtown District	x			x	x	x	x		x	
	Grand Prairie	L	Mixed Residential			x						
		L	Mixed-Use			x						
	Irving	L	TOD District	x			x	x				x
Lewisville	L	Mixed-Use Ninety District	x								x	
	L	Mixed-Use-Shopping Center District			x						x	
	L	Mixed-Use Thirty District			x						x	
	L	Old Town Mixed-Use 1	x				x		x			
	L	Old Town Mixed-Use 2	x				x		x			
McKinney	L	Town Center District			x	x		x	x		x	
Mesquite	L	North Gus Thomasson Corridor District			x	x		x	x		x	
	L	Kaufman-Interstate 20 District			x	x	x	x		x	x	
	L	Traditional Neighborhood Mixed Residential			x			x				
	L	Truman Heights Neighborhood District			x	x		x			x	
Plano	L	Downtown Business/Government	x			x	x	x	x		x	
	L	Urban Residential	x					x				
	L	Urban Mixed-Use			x	x	x	x			x	
Richardson	L	Bush Central Station Code	x					x	x	x	x	
Addison	M	Urban Center		x		x	x	x	x		x	
Burleson	M	TOD Design Standards		x			x					
Cedar Hill	M	Uptown Overlay District		x				x			x	

Issue 4 - Intensity and Dimensional Standards (continued)

City Name	Pop. Size ^a	Zone/Code Name	Rail Station Status ^b			Small Block Size	High Residential Density	High Lot Coverage	Minimal Setback	High Building Street Frontage	Greater Building Height
			Current	Future	N/A						
Corinth	M	Mixed-Use Residential			x	x			x	x	x
DeSoto	M	Mixed-Use 1			x	x	x		x		x
	M	Mixed-Use 2			x	x	x		x		x
Duncanville	M	Downtown Duncanville District		x				x	x	x	x
	M	Mixed-Use 1			x			x	x		x
	M	Mixed-Use 2			x						
Farmers Branch	M	Station Area Form Based Code	x			x		x	x	x	x
Flower Mound	M	Mixed-Use District			x	x			x		x
Forney	M	Mixed-Use District			x						x
Frisco	M	Form-Based Code Manual			x	x	x	x	x	x	x
Hurst	M	Town Center District			x						
Mansfield	M	The Reserve Planned Development District			x	x		x		x	x
North Richland Hills	M	TOD Code		x				x	x	x	x
Rockwall	M	Downtown District			x	x				x	x
Rowlett	M	Form Based - Urban Village	x			x	x		x	x	x
Sachse	M	Mixed-Use District			x	x					x
Terrell	M	Central Business District			x			x	x		x
Weatherford	M	Central Business District			x			x	x		
Wylie	M	Downtown Historic District			x				x		
Granbury	S	Central Business District			x			x	x		x
Joshua	S	Joshua Station Overlay District		x			x	x			x
Richland Hills	S	Special District Mixed-Use	x					x			x
Roanoke	S	Oak Street Corridor Zoning District			x			x			x

a. Based on NCTCOG 2014 Demographic Forecast Population: Large 90,000 and over, Medium 89,999 to 10,000, and Small Under 10,000

b. All or part of the zoning district applies to the half-mile radius area of a rail transit station

Issue 5 - Off-Street Parking (Part 1 of 2)

City Name	Pop. Size ^a	Zone/Code Name	Rail Station Status ^b			Automatic Reduction zones	Parking Study Reduction	Max spaces/lot size	Shared parking	Off-site parking	On-street counts	Cash-in-Lieu
			Current	Future	N/A							
Allen	L	Central Business District			x		1		1	1	1	1
Arlington	L	Entertainment District Overlay		x			1	3	1	1	1	
	L	Neighborhood Mixed-Use			x		1		1	1	1	
	L	Lamar Collins Mixed-Use Overlay			x	1	1		1	1	1	
	L	Regional Mixed-Use			x		1		1	1	1	
	L	Transit Center District	x						3	1	1	1
Dallas	L	Central Area 1	x			1	1	3	1	1	1	
	L	Central Area 2	x			1	1	3	1	1	1	
	L	Form District - Walkable Urban Mixed-Use	x				1					
	L	Form District - Walkable Urban Residential	x				1					
	L	Mixed-Use 1	x				1					
	L	Mixed-Use 2	x				1					
	L	Mixed-Use 3	x				1					
Denton	L	Neighborhood Residential Mixed-Use	x					2	1	1	1	
	L	Neighborhood Residential Mixed-Use - 12	x					2	1	1	1	
	L	Downtown General Commercial	x					2	1	1	1	
	L	Regional Center Commercial - Neighborhood	x					2	1	1	1	
	L	Regional Center Commercial - Downtown	x					2	1	1	1	
	L	Regional Center Residential 1	x					2	1	1	1	
	L	Regional Center Residential 2	x					2	1	1	1	
	L	Community Mixed-Use General			x			2	1	1	1	
Fort Worth	L	Community Mixed-Use Employment			x			2	1	1	1	
	L	Near Southside	x			1		3			1	
	L	Low-Intensity Mixed-Use District (MU-1)		x		1		2	1	1	1	
	L	High Intensity Mixed-Use District (MU-2)		x		1		2	1	1	1	
	L	Camp Bowie District			x	1		2	2			
	L	Trinity Lakes District			x			2		1		
Garland	L	Trinity Uptown			x			2		1		
	L	Downtown District	x				1	2	2	1	1	
Grand Prairie	L	Mixed Residential			x		1		1			
	L	Mixed-Use			x		1		1			
Irving	L	TOD District	x			1		2	1		1	
Lewisville	L	Mixed-Use Ninety District	x						1	1		
	L	Mixed-Use Shopping Center District			x				1	1		
	L	Mixed-Use Thirty District			x				1	1		
	L	Old Town Mixed-Use 1	x						1	1		
	L	Old Town Mixed-Use 2	x						1	1		
McKinney	L	Town Center District			x	1			1	1		
Mesquite	L	North Gus Thomasson Corridor District			x				2		1	1
	L	Kaufman-Interstate 20 District			x				2		1	1
	L	Traditional Neighborhood Mixed Residential			x				2		1	1
	L	Truman Heights Neighborhood District			x			2				
Plano	L	Downtown Business/Government	x				1		1	1	1	
	L	Urban Residential	x				1		1	1		
	L	Urban Mixed-Use			x		1	2	1	1		
Richardson	L	Bush Central Station Code	x						1			
Addison	M	Urban Center		x					1		1	
Burleson	M	TOD Design Standards		x					1			
Cedar Hill	M	Uptown Overlay District		x					1			
Corinth	M	Mixed-Use Residential			x		1		1			
DeSoto	M	Mixed-Use 1			x			3	1			

Issue 5 - Off-Street Parking (Part 1 of 2) (continued)

City Name	Pop. Size ^a	Zone/Code Name	Rail Station Status ^b			Automatic Reduction zones	Parking Study Reduction	Max spaces/lot size	Shared parking	Off-site parking	on-street counts	Cash-in-Lieu
			Current	Future	N/A							
DeSoto	M	Mixed-Use 2			x			3	1		1	
Duncanville	M	Downtown Duncanville District		x		1			1			
	M	Mixed-Use 1			x	1			1			
	M	Mixed-Use 2			x				1			
Farmers Branch	M	Station Area Form Based Code	x			1		2	3		1	
Flower Mound	M	Mixed-Use District			x		2		1			
Forney	M	Mixed-Use District			x				1	1		
Frisco	M	Form-Based Code Manual			x				1	1		
Hurst	M	Town Center District			x							
Mansfield	M	The Reserve Planned Development District			x			2				
North Richland Hills	M	TOD Code		x		1			1	1		
Rockwall	M	Downtown District			x	1			1	1	1	1
Rowlett	M	Form Based - Urban Village	x			1	1		1		1	1
Sachse	M	Mixed-Use District			x					1		
Terrell	M	Central Business District			x	1			1	1		
Weatherford	M	Central Business District			x	1	1		1	1		
Wylie	M	Downtown Historic District			x	1	1			1	1	
Granbury	S	Central Business District			x	1			1	1		
Joshua	S	Joshua Station Overlay District		x			1					
Richland Hills	S	Special District Mixed-Use	x									
Roanoke	S	Oak Street Corridor Zoning District			x		1		1			

a. Based on NCTCOG 2014 Demographic Forecast Population: Large 90,000 and over, Medium 89,999 to 10,000, and Small Under 10,000

b. All or part of the zoning district applies to the half mile radius area of a rail transit station

1 = Allowed, 2 = Encouraged, 3 = Required

Issue 5 - Off-Street Parking (Part 2 of 2)

City Name	Pop. Size ^a	Zone/Code Name	Rail Station Status ^b			Park Behind Building	Screening	Garage Design	Bike Parking	Parking Management	Other
			Current	Future	N/A						
Allen	L	Central Business District			x						
Arlington	L	Entertainment District Overlay		x		2	3	3	3		
	L	Neighborhood Mixed-Use			x	3	3	3	3		
	L	Lamar Collins Mixed-Use Overlay			x	3	3	3	3		
	L	Regional Mixed-Use			x	3	3	3	3		
Carrollton	L	Transit Center District	x			3	3	3	3		1
Dallas	L	Central Area 1	x			3	3	3	3	1	1
	L	Central Area 2	x			3	3	3	3	1	1
	L	Form District - Walkable Urban Mixed-Use	x						3		1
	L	Form District - Walkable Urban Residential	x						3		1
	L	Mixed-Use 1	x						3		1
	L	Mixed-Use 2	x						3		1
	L	Mixed-Use 3	x						3		1
Denton	L	Neighborhood Residential Mixed-Use	x			3	3		3		
	L	Neighborhood Residential Mixed-Use - 12	x			3	3		3		
	L	Downtown General Commercial	x			3	3		3		1
	L	Regional Center Commercial - Neighborhood	x			3	3		3		
	L	Regional Center Commercial - Downtown	x			3	3		3		
	L	Regional Center Residential 1	x			3	3		3		
	L	Regional Center Residential 2	x			3	3		3		
	L	Community Mixed-Use General			x	3	3		3		
L	Community Mixed-Use Employment			x	3	3		3			
Fort Worth	L	Near Southside	x			3	3	3	3		1
	L	Low-Intensity Mixed-Use District (MU-1)		x		3	3		3		1
	L	High Intensity Mixed-Use District (MU-2)		x		3	3		3		1
	L	Camp Bowie District			x	3	3	3	3		1
	L	Trinity Lakes District			x	3	3	3	3		
	L	Trinity Uptown			x	3	3	3	3		
Garland	L	Downtown District	x			3		3	3		
Grand Prairie	L	Mixed Residential			x						
	L	Mixed-Use			x						
Irving	L	TOD District	x			2		3	3		
Lewisville	L	Mixed-Use Ninety District	x								
	L	Mixed-Use-Shopping Center District			x						
	L	Mixed-Use Thirty District			x						
	L	Old Town Mixed-Use 1	x								
	L	Old Town Mixed-Use 2	x								
McKinney	L	Town Center District			x	3	3	3			
Mesquite	L	North Gus Thomasson Corridor District			x	3	3	3	3		
	L	Kaufman-Interstate 20 District			x	3	3	3	3		
	L	Traditional Neighborhood Mixed Residential			x	3	3	3	3		
	L	Truman Heights Neighborhood District			x	3	3	3			
Plano	L	Downtown Business/Government	x			2	3			1	
	L	Urban Residential	x							1	
	L	Urban Mixed-Use			x		3			1	

Issue 5 - Off-Street Parking (Part 2 of 2) (continued)

City Name	Pop. Size ^a	Zone/Code Name	Rail Station Status ^b			Park Behind Building	Screening	Garage Design	Bike Parking	Parking Management	Other
			Current	Future	N/A						
Richardson	L	Bush Central Station Code	x			2	1	1			
Addison	M	Urban Center		x			3	3			
Burleson	M	TOD Design Standards		x		2	3				1
Cedar Hill	M	Uptown Overlay District		x			3				
Corinth	M	Mixed-Use Residential			x						
DeSoto	M	Mixed-Use 1			x						
	M	Mixed-Use 2			x		3	3			
Duncanville	M	Downtown Duncanville District		x		3	3	3			
	M	Mixed-Use 1			x		3				
	M	Mixed-Use 2			x		3				1
Farmers Branch	M	Station Area Form Based Code	x			3		3			
Flower Mound	M	Mixed-Use District			x		3		3		
Forney	M	Mixed-Use District			x				3		
Frisco	M	Form-Based Code Manual			x	3	3	3			
Hurst	M	Town Center District			x						
Mansfield	M	The Reserve Planned Development District			x	2	3	3			
North Richland Hills	M	TOD Code		x		3	3	3			
Rockwall	M	Downtown District			x	3	3	3	3		1
Rowlett	M	Form Based - Urban Village	x			3	3	3	3		
Sachse	M	Mixed-Use District			x		3	3			
Terrell	M	Central Business District			x	3					
Weatherford	M	Central Business District			x		3				
Wylie	M	Downtown Historic District			x	3	3		3		
Granbury	S	Central Business District			x						1
Joshua	S	Joshua Station Overlay District		x							
Richland Hills	S	Special District Mixed-Use	x								
Roanoke	S	Oak Street Corridor Zoning District			x	3	3				

a. Based on NCTCOG 2014 Demographic Forecast Population: Large 90,000 and over, Medium 89,999 to 10,000, and Small Under 10,000

b. All or part of the zoning district applies to the half mile radius area of a rail transit station

1 = Allowed, 2 = Encouraged, 3 = Required

Issue 6 - Development Design and Compatibility (Part 1 of 2)

City Name	Pop. Size ^a	Zone/Code Name	Rail Station Status ^b			Sidewalks	Street Trees	Lighting	Street Furniture	Civic Spaces
			Current	Future	N/A					
Allen	L	Central Business District			x	x				
Arlington	L	Entertainment District Overlay		x		x	x	x	x	
	L	Neighborhood Mixed-Use			x					
	L	Lamar Collins Mixed-Use Overlay			x					
	L	Regional Mixed-Use			x					
Carrollton	L	Transit Center District	x			x	x	x		
Dallas	L	Central Area 1	x			x	x			
	L	Central Area 2	x				x			
	L	Form District - Walkable Urban Mixed-Use	x			x	x	x	x	
	L	Form District - Walkable Urban Residential	x			x	x	x	x	
	L	Mixed-Use 1	x							
	L	Mixed-Use 2	x							
	L	Mixed-Use 3	x							
Denton	L	Neighborhood Residential Mixed-Use	x			x	x			
	L	Neighborhood Residential Mixed-Use - 12	x			x	x			
	L	Downtown General Commercial	x			x	x			
	L	Regional Center Commercial - Neighborhood	x			x	x			
	L	Regional Center Commercial - Downtown	x			x	x			
	L	Regional Center Residential 1	x			x	x			
	L	Regional Center Residential 2	x			x	x			
	L	Community Mixed-Use General			x	x	x			
L	Community Mixed-Use Employment			x	x	x				
Fort Worth	L	Near Southside	x			x	x	x	x	
	L	Low-Intensity Mixed-Use District (MU-1)		x		x	x	x	x	
	L	High Intensity Mixed-Use District (MU-2)		x		x	x	x	x	
	L	Camp Bowie District			x	x	x	x	x	
	L	Trinity Lakes District			x	x	x	x	x	
	L	Trinity Uptown			x	x	x	x	x	
Garland	L	Downtown District	x			x	x	x	x	
Grand Prairie	L	Mixed Residential			x	x	x			
	L	Mixed-Use			x	x	x			
Irving	L	TOD District	x			x	x	x	x	
Lewisville	L	Mixed-Use Ninety District	x							
	L	Mixed-Use-Shopping Center District			x					
	L	Mixed-Use Thirty District			x					
	L	Old Town Mixed-Use 1	x			x	x			
	L	Old Town Mixed-Use 2	x			x	x			
McKinney	L	Town Center District			x				x	
Mesquite	L	North Gus Thomasson Corridor District			x	x	x	x	x	
	L	Kaufman-Interstate 20 District			x	x	x	x	x	
	L	Traditional Neighborhood Mixed Residential			x	x	x		x	
	L	Truman Heights Neighborhood District			x	x	x	x	x	
Plano	L	Downtown Business/Government	x							

Issue 6 - Development Design and Compatibility (Part 1 of 2) (continued)

City Name	Pop. Size ^a	Zone/Code Name	Rail Station Status ^b			Sidewalks	Street Trees	Lighting	Street Furniture	Civic Spaces
			Current	Future	N/A					
Plano	L	Urban Residential	x							
	L	Urban Mixed-Use			x	x	x		x	
Richardson	L	Bush Central Station Code	x			x	x	X	x	X
Addison	M	Urban Center		x		x	x	x	x	x
Burleson	M	TOD Design Standards		x		x				x
Cedar Hill	M	Uptown Overlay District		x			x	x		
Corinth	M	Mixed-Use Residential			x		x	x	x	
DeSoto	M	Mixed-Use 1			x			x	x	
	M	Mixed-Use 2			x			x	x	
Duncanville	M	Downtown Duncanville District		x		x	x			x
	M	Mixed-Use 1			x					
	M	Mixed-Use 2			x					
Farmers Branch	M	Station Area Form Based Code	x			x	x	x		x
Flower Mound	M	Mixed-Use District			x	x	x			x
Forney	M	Mixed-Use District			x					
Frisco	M	Form-Based Code Manual			x	x	x	x		x
Hurst	M	Town Center District			x		x			
Mansfield	M	The Reserve Planned Development District			x	x	x	x	x	x
North Richland Hills	M	TOD Code		x		x	x	x	x	x
Rockwall	M	Downtown District			x	x	x	x	x	x
Rowlett	M	Form Based - Urban Village	x			x	x	x	x	x
Sachse	M	Mixed-Use District			x	x	x	x	x	
Terrell	M	Central Business District			x	x	x	x	x	
Weatherford	M	Central Business District			x					
Wylie	M	Downtown Historic District			x	x				
Granbury	S	Central Business District			x			x		
Joshua	S	Joshua Station Overlay District		x			x	x		
Richland Hills	S	Special District Mixed-Use	x							
Roanoke	S	Oak Street Corridor Zoning District			x	x	x			

a. Based on NCTCOG 2014 Demographic Forecast Population: Large 90,000 and over, Medium 89,999 to 10,000, and Small Under 10,000

b. All or part of the zoning district applies to the half mile radius area of a rail transit station

Issue 6 - Development Design and Compatibility (Part 2 of 2)

City Name	Pop. Size ^a	Zone/Code Name	Rail Station Status ^b			Fenestration	Articulation	Entrances	Height step-back	Sub-districts	Add Screening
			Current	Future	N/A						
Allen	L	Central Business District			x	x					
Arlington	L	Entertainment District Overlay		x		x		x	x		
	L	Neighborhood Mixed-Use			x	x			x		
	L	Lamar Collins Mixed-Use Overlay			x				x		
	L	Regional Mixed-Use			x	x			x		
Carrollton	L	Transit Center District	x			x	x	x	x	x	
Dallas	L	Central Area 1	x						x		
	L	Central Area 2	x						x		
	L	Form District - Walkable Urban Mixed-Use	x			x	x	x	x	x	x
	L	Form District - Walkable Urban Residential	x			x	x	x	x	x	x
	L	Mixed-Use 1	x						x		
	L	Mixed-Use 2	x						x		
Denton	L	Mixed-Use 3	x						x		
	L	Neighborhood Residential Mixed-Use	x			x	x	x	x	x	x
	L	Neighborhood Residential Mixed-Use - 12	x			x	x	x	x	x	x
	L	Downtown General Commercial	x			x	x	x	x		x
	L	Regional Center Commercial - Neighborhood	x				x	x	x		x
	L	Regional Center Commercial - Downtown	x				x	x	x		x
	L	Regional Center Residential 1	x				x	x	x		x
	L	Regional Center Residential 2	x				x	x	x		x
Fort Worth	L	Community Mixed-Use General			x		x	x	x		x
	L	Community Mixed-Use Employment			x		x	x	x		x
	L	Near Southside	x			x	x	x	x	x	
	L	Low-Intensity Mixed-Use District (MU-1)		x		x	x	x	x		
	L	High Intensity Mixed-Use District (MU-2)		x		x	x	x	x		
	L	Camp Bowie District			x	x	x	x		x	
Garland	L	Trinity Lakes District			x	x	x	x	x	x	x
	L	Trinity Uptown			x	x	x	x		x	
	L	Downtown District	x			x	x	x	x	x	x
	L	Mixed Residential			x						x
	L	Mixed-Use			x						x
Irving	L	TOD District	x			x	x	x			x
Lewisville	L	Mixed-Use Ninety District	x								x
	L	Mixed-Use-Shopping Center District			x				x		x
	L	Mixed-Use Thirty District			x						x
	L	Old Town Mixed-Use 1	x			x	x	x			x
	L	Old Town Mixed-Use 2	x			x	x	x			x
McKinney	L	Town Center District			x	x	x	x	x	x	x
Mesquite	L	North Gus Thomasson Corridor District			x	x	x	x	x	x	
	L	Kaufman-Interstate 20 District			x	x	x	x		x	
	L	Traditional Neighborhood Mixed Residential			x				x		
	L	Truman Heights Neighborhood District			x		x				
Plano	L	Downtown Business/Government	x			x	x	x			
	L	Urban Residential	x								
	L	Urban Mixed-Use			x	x					
Richardson	L	Bush Central Station Code	x			x	x	x		x	x
Addison	M	Urban Center		x		x					x
Burleson	M	TOD Design Standards		x		x					x
Cedar Hill	M	Uptown Overlay District		x			x		x		
Corinth	M	Mixed-Use Residential			x	x			x		x
DeSoto	M	Mixed-Use 1			x	x	x	x	x		x

Issue 6 - Development Design and Compatibility (Part 2 of 2) (continued)

City Name	Pop. Size ^a	Zone/Code Name	Rail Station Status ^b			Fenestration	Articulation	Entrances	Height step-back	Sub-districts	Add Screening
			Current	Future	N/A						
DeSoto	M	Mixed-Use 2			x	x	x	x	x		x
Duncanville	M	Downtown Duncanville District		x		x		x	x	x	
	M	Mixed-Use 1			x						x
	M	Mixed-Use 2			x						x
Farmers Branch	M	Station Area Form Based Code	x			x	x	x	x	x	x
Flower Mound	M	Mixed-Use District			x	x	x	x		x	
Forney	M	Mixed-Use District			x						x
Frisco	M	Form-Based Code Manual			x	x	x	x	x	x	x
Hurst	M	Town Center District			x						x
Mansfield	M	The Reserve Planned Development District			x	x	x	x	x	x	x
North Richland Hills	M	TOD Code		x		x	x	x	x	x	
Rockwall	M	Downtown District			x	x	x	x	x		
Rowlett	M	Form Based - Urban Village	x			x	x	x	x	x	x
Sachse	M	Mixed-Use District			x	x					
Terrell	M	Central Business District			x	x	x	x			
Weatherford	M	Central Business District			x						
Wylie	M	Downtown Historic District			x	x	x				
Granbury	S	Central Business District			x						x
Joshua	S	Joshua Station Overlay District		x						x	x
Richland Hills	S	Special District Mixed-Use	x				x		x		x
Roanoke	S	Oak Street Corridor Zoning District			x	x	x	x		x	x

a. Based on NCTCOG 2014 Demographic Forecast Population: Large 90,000 and over, Medium 89,999 to 10,000, and Small Under 10,000

b. All or part of the zoning district applies to the half-mile radius area of a rail transit station

Appendix 2 – Sample of District Evaluation Form

City Name:
Code Name:
Transit status (Existing, Future, or N/A)

Sample Town
Mix Use Zone 1
Existing

Zoning mechanism	
FBC	
Hybrid	
Conventional	x
Overlay	

SGA/Clarion
Document &
Memo Reference
Pg. #



I. Mix of Uses

Measurement	Zoning Tool	Present	
<u>Principal Uses</u> : Does the zoning district allow for both residential and commercial land uses?	Allow in same lot	x	17
	Allow in same district		
<u>Minimum Use Mix</u> : Are there standards intended to ensure that the district includes at least some mix of residential and nonresidential uses as it is built out (e.g., a minimum of 10% of three different use types, or not allowing residential development unless non-residential is proposed with it)?	Allow, encourage or require a minimum mix of uses		17
<u>Incentives</u> : Are there incentives for mixing land uses (e.g., a density bonus, a broader range of permitted uses, or streamlined development review)?	Mix use incentives	x	18
<u>Vertical Mixing</u> : Are there standards that allow for or require vertical use mixing?	Allow, encourage or require vertical mix use	x	17
<u>Flexible Use</u> : Do the zoning district's land uses permit flex space or adaptive re-use?	Allow, encourage, or require flexible use or re-use		20

II. Accessory and Temporary Uses

Measurement	Zoning Tool	Present	
<u>Transit-Supportive Accessory Uses</u> : Does the zoning district permit accessory uses, specifically accessory dwelling units (ADUs), home-based business, outdoor display and sale of merchandise, outdoor seating?	ADUs allowed		19-21
	Outdoor seating		
	Home business/ live/work		
<u>Transit-Supportive Temporary Uses</u> : Does the district permit temporary farmers markets, food trucks, or pop-up/street vendors?	Temporary uses allowed	x	22-23
<u>Un-Supportive Accessory Uses</u> : Does code prohibit low-intensity auto oriented uses such as drive-through, large surface parking in the core/most dense part of district?	Auto-oriented uses prohibited	x	

III. Intensity and Dimensional Standards

Measurement	Zoning Tool	Present	
<u>Block Standards</u> : Do the district's block standards encourage shorter blocks that promote walking?	< 600' max. length		6 (memo)
<u>Density</u> : Do the district's density standards encourage higher residential density (in general, or in the core if the zoning district contains sub-districts)?	≥ 35 du/ac		25
	≥ 15 du/ac	x	
<u>Lot Coverage</u> : Are the permissible lot coverages high to foster compact growth?	≥ 60 %	x	23 & 25
<u>Front Setback</u> : Buildings should be closer to street to encourage pedestrian activity and street wall. Includes min value of build-to zones and lines *	0' min	x	25
	≤ 10' min		

Building Street Frontage: Does the zoning district include standards for building street frontage (min. building width as a % of the lot width that must be located in the build-to zone) to ensure that buildings help to frame public realm and create an inviting pedestrian environment?*	≥ 80%		25
Height: Do the maximum allowable height standards encourage transit-supportive densities?	≥ 6 stories		23
	3-5 stories	x	

*measurements apply in highest density /core of zoning district

IV. Off-Street Parking (1 = Allowed, 2 = Encouraged, 3 = Required)

Measurement	Zoning Tool	Present	
Off-Street Supply: Is there an automatic reduction in the minimum number of off-street parking spaces required under the city's parking regulations (e.g., 25% in the Core, 15% in the Ring); or are developments allowed to do parking studies showing that the number of spaces needed is less than the minimum requirement?	Automatic reduction		29
	Parking studies reduction	1	
Alternative Arrangements: Are there provisions for alternative parking arrangements to allow flexibility in how a developer can comply with off-street parking standards (e.g., shared parking, off-site parking, on-street parking, and in-lieu payment to municipal fund)?	Shared parking	1	31-32
	Off-site parking	1	
	On-street parking	1	
	Cash-in-lieu payment	1	
Off-Street Supply: Does the zoning district have a maximum limit on parking (e.g., 125% of the minimum requirement), or on the number of spaces per parking lot?	Max. # of spaces		29-30
	Max. lot size		
Parking Design: Does the zoning district restrict parking to the rear or side of buildings, requires ornamental fencing or masonry wall, or requires that parking structures be wrapped with commercial uses at the ground level in order to ensure that off-street parking does not undermine the district's pedestrian-friendly environment?	Park Behind or side of building		30
	Requires screening		
	Ground floor commercial or improved façade		
Additional Strategies: Tools that do not fit into other categories but influence design and supply of parking such as bike parking, parking management strategies that actively influence the supply and demand of parking, and any other strategy that reduces effective ratio or influences design.	Bike parking		31
	Parking management		
	Other strategies		

V. Development Design and Compatibility

Measurement	Zoning Tool	Present	
Pedestrian Amenities: Are there standards for the public realm that enhance the streetscape and pedestrian experience? Standards would require elements and provide some reference on design.	Sidewalks	x	28
	Street trees	x	35
	Lighting		28
	Street furniture		
Civic Spaces: Are there standards for outdoor gathering spaces, such as plazas, courtyards, or squares, not just an open space requirement?	Civic space design		34-35
Building Design: Are there building design standards intended to improve the pedestrian environment, specifically fenestration, articulation and similar standards that reduce the perceived mass and scale of buildings, and building entrance standards?	Fenestration	x	33
	Articulation		
	Entrances		
Development Compatibility: Are there provisions to enhance compatibility with surrounding development, including height step-backs, sub-districts, additional screening or other provisions to ensure that the perimeter of the district has the most compatible uses or development density.	Height step-back		35
	Sub-district(s)		32
	Additional screening		

Appendix 3 – Zoning Mechanism Definition and Categorization

All zoning codes reviewed were classed into one of four general types of zoning referred to as a Zoning Mechanism. These have been defined below. Note that this is not a comprehensive list but rather the most appropriate for this specific code review.

I. Form-Based Code

Form-based codes can be adopted for an entire city, or for a specific planning area such as a neighborhood or district.

Must be a “yes” answer to all questions (FBCI, 2015):

1. Is the code’s focus primarily on regulating urban form and less on land use?
2. Are regulations and standards keyed to specific locations on a development plan?
3. Does the code emphasize standards for form with predictable physical outcomes (build-to lines, frontage type requirements, etc.) rather than relying on more numerical parameters (FAR, density, lot coverage, etc.) that allow for greater variability in building form?
4. Does the code require private buildings to shape public space through the use of building form standards with specific requirements for building place?
5. Does the code promote and/or conserve an interconnected street network and pedestrian-scaled blocks?
6. Are the diagrams in the code unambiguous, clearly labeled, and accurate in their presentation of spatial configurations? (Unambiguous diagrams, appropriately scaled, would include the numerical parameters (e.g., 0-10 ft. built-to zone) that apply to the diagram. An ambiguous diagram would lack quantitative measurements).
7. Is the code regulatory rather than advisory?

If there is not a “yes” answer to all of the form-based code criteria, then the zoning district will be classified as either a hybrid code or a conventional zoning code.

II. Hybrid Code

Hybrid codes involve the meshing of conventional zoning codes with graphic urban design standards and public realm standards that typically address block standards, setbacks, building bulk, parking placement, architectural features (e.g., fenestration, articulation), sidewalk width, or street trees (Rangwala, 2009). Hybrid codes usually meet most but not all of the requirements for FBC.

To be a hybrid code, the zoning district must meet all of the following criteria:

1. The purpose or intent of the zoning district mentions form or shaping the built environment (as is typical of a form-based code), instead of solely emphasizing the district’s land use.
2. It employs some use of diagrams and illustrations.
3. It contains public realm standards.

III. Conventional Zoning

If the zoning district does not meet all of the criteria of a form-based code or a hybrid code, then it is to be classified as a conventional zoning code—either with or without an overlay district.

Conventional Euclidian codes, or use-based codes, separate zones by land use. They contain tables of allowed, conditional, and prohibited land uses in each zoning district. Variances are required if a development is not an allowed land use (DVRPC, 2007). However, it is not uncommon for conventional zoning codes to have some design or public realm standards (e.g., street trees, building materials and architectural standards, and signage standards).

Typical attributes of a conventional zoning code.

1. The zoning district's purpose is focused on land use rather than the form of the built environment.
2. It is primarily text-based (although may include some illustrations).
3. It does not contain any sub-districts.
4. Intensity and dimensional standards utilize/rely on numerical parameters (e.g., FAR, density, lot coverage) that allow for uncertainty in the extent that buildings will shape the public realm as desired.
5. It relies on tables of allowed land uses.

IV. Overlay District/Design Standards

An overlay district is a special set of standards that modify the base zoning code for a particular geographical area. Developers must conform to the base code, as well as to the specifications of the overlay (DVRPC, 2007).

Typical attributes of an overlay zoning code.

1. Term "overlay" is included in title or zone description.
2. Geographically covers more than one base zone district.
3. Promotes a specific objective such as historical districts, wetland preservation, walkable entertainment areas, etc.

References

American Planning Association (2015). Property Topics and Concepts.

<https://www.planning.org/divisions/planningandlaw/propertytopics.htm#Overlay>

Delaware Valley Regional Planning Commission (DVRPC). (2007, July). Innovations in zoning for smart growth.

Retrieved from <http://www.dvrpc.org/reports/07029.pdf>

Form-Based Codes Institute. (2015). Identifying and evaluating form-based codes.

<http://formbasedcodes.org/identifying-evaluating>

Rangwala, Kaizer. (2009, April-May). Hybrid codes versus form-based codes. New Urban News, 12-13.

Retrieved from <http://www.growsmartri.org/training/Hybrid%20Codes%20vs%20Form%20Based%20Codes%20-%20%20Article%20New%20Urban%20News.pdf>

Appendix 4 – Final Memo to NCTCOG from Smart Growth America

Overview

Pursuant to the technical assistance award with the North Central Texas Council of Governments (NCTCOG), this Memorandum constitutes the final report summarizing the workshop on Smart Growth Zoning Codes for Small Cities and suggesting possible next steps the city could take to craft a vision for future development in Cedar Hill.

Focus of the technical assistance

Based on pre-workshop discussions with staff from NCTCOG and the City of Cedar Hill, Texas, Planning Department, the SGA/Clarion team focused its code audit on the issue of encouraging mixed-use and transit-oriented development (MU/TOD). MU/TOD is envisioned in the regional mobility plan and in the city's recently completed Center City Development Plan that includes the potential transit station area in Cedar Hill. As background for the October 22-23, 2014, workshop, Clarion Associates produced a detailed discussion paper that focused on key zoning code issues and options related to encouraging MU/TOD.

Engagement and participation

On the evening of October 22, the SGA/Clarion team conducted a public meeting to explain the project and key issues that would be discussed at the workshop. About 24 people attended this public meeting, including Mayor Rob Franke and City staff. The full-day workshop took place on October 23, with a working group of about 15 people that included city and NCTCOG staff; representatives from the development community; U.S. EPA and FEMA staff; and Councilperson Jami McCain, who is a former member of the Cedar Hill Main Street Development and Preservation Board and lives in Old Town Cedar Hill. Mayor Franke joined the group for lunchtime discussions. Together the working group reviewed the code audit recommendations from the SGA/Clarion team.

Local context

Prior to the public meeting, City of Cedar Hill and NCTCOG staff led an on-the-ground tour of a transit-oriented development in the Dallas suburb of Carrollton, as well as potential TOD station area sites in Cedar Hill. This tour provided valuable background and context for the workshop.

During the tour, it was learned that NCTCOG has an extensive Sustainable Development Funding Program. The program has provided support for transit-oriented development planning in terms of technical assistance as well as grants for planning and infrastructure improvements. Additionally, while it is likely it will be ten to twenty years before Cedar Hill sees a transit station within its jurisdiction, a major mixed-use project with over 300 units has recently been developed close to the potential Midtown transit station site. This new development indicates a market for other such mixed-use projects in the community.

Key issues addressed

Based on the background discussion at the workshop, there was consensus to focus on six key issues during the workshop:

1. What is the best zoning vehicle to promote mixed-use/TOD? Options included a new mixed-use/TOD zone to replace the current base and overlay zones applicable in the area, a revised base zone district and/or an improved planned development district (PDD) process.
2. How do we best promote a realistic mix of uses in targeted MU/TOD areas?
3. What accessory and temporary uses should be accommodated and encouraged in the TOD area?
4. Are current dimensional standards in the base and overlay districts applicable in the TOD area appropriate (e.g., height, setbacks, densities, etc.)?
5. Can off-street parking regulations be improved to better support and encourage MU/TOD?
6. How can we ensure new MU/TOD projects are compatible with surrounding neighborhoods in terms of design and infrastructure capacity?

Discussion and recommendations

This section summarizes the six key issues and options for potential zoning code and other ordinance amendments discussed at the workshop. The page numbers denote where the issue is addressed in the workshop discussion paper.

MU/TOD Zones (p. 10)

There was general consensus that neither of the two zone districts that apply to the Cedar Hill station area appears to be up to the task of promoting mixed-use/transit-oriented development. Both focus primarily on commercial development and allow some land-intensive uses usually considered inappropriate in a station area (e.g., large-scale big box stores, auto dealers), restrict other desired uses such as residential and do not allow the intensity or density of development necessary for a successful TOD.

The working group also discussed the potential of continuing to use the planned development district (PDD) process that has been used for many large projects in Cedar Hill, including the large apartment complex constructed in Midtown. While the planned development process does allow a great deal of flexibility to tailor a development to a particular site, staff cautioned that the process can be time-consuming and does not necessarily provide certainty as to project outcomes. Such projects can also potentially attain vested rights that would prevent future changes by the City once the plan was approved, even if circumstances have changed. One developer echoed the concern about the uncertainty and time-consuming nature of this process.

The working group thus concluded that the city should consider drafting a new TOD zone district for Cedar Hill. One model that appeared attractive to many in the working group is San Diego's approach in its Centre City downtown district that has been used for many successful mixed-use projects. District regulations establish clear standards for key characteristics such as intensity/density, height, and other dimensional standards. If a project complies with these standards, then design review is administratively by a staff or a design review board made up of design professionals.

The TOD district regulations from Carrollton also are worth reviewing. These regulations establish some clear standards in a limited number of areas such as permitted uses, building form and placement and architectural features. Another good source are the model mixed-use transit-oriented development regulations recently prepared for the Hartford, Connecticut, council of governments. (These regulations can be found at http://www.sustainableknowledgecorridor.org/site/sites/default/files/CRCOG_MU_TOD_FINAL_4-4-2014.pdf.)

The working group suggested that the planned development district process still be available for projects that needed maximum flexibility and variances due to unique site characteristics or other considerations. However, its use might be reduced if the staff were given the ability to make minor administrative modifications to development standards such as height and setbacks. Many modern zoning codes allow staff to grant modifications of from 5-20 percent of such standards if the modifications meet basic principles. For example, such staff modifications cannot result in serious adverse impacts on surrounding neighborhoods. This increased flexibility would likely make it less necessary to use the planned development process to secure multiple variances or waivers, as is now reportedly the case.

Mix of uses (p. 17)

In most communities with MU/TOD zones, code provisions include standards intended to ensure that projects include at least some minimum mix of nonresidential and residential uses as they are built out. Neither of the two applicable city zone districts addresses this issue. However, the working group agreed that Cedar Hill and other communities in the Dallas region need to proceed cautiously in this arena. A mandatory mix of uses in a MU/TOD zone may be a disincentive and lead a developer to propose a single-use development in a base zone instead or simply not proceed with a proposal. On the other hand, allowing one use to dominate in a designated MU/TOD area (e.g., 90 percent residential) can undercut the goals of a lively transit station area and also fail to provide the jobs and retail stores near transit stations that are key to supporting transit ridership.

Demonstrating the challenge of ensuring a real use mix in a TOD project is the experience of the Trammel Crow Company mixed-use development in Carrollton, which was the focus of the October 22 tour. In that project, the city secured a mix of residential and commercial uses by financially subsidizing seven ground floor spaces/units within the development until the developer could secure commercial tenants. Two years after completion of the project,

two of the commercial spaces are still empty. Moreover, one working group member pointed out there is a surfeit of cheap commercial space already available in Cedar Hill in other nearby locations that might make it challenging to dictate a residential/commercial use mix.

The working group considered several options it felt might be workable. First, a new MU/TOD base zone district might establish a maximum percentage that any one use could be developed instead of specifying a minimum percentage, as is done in some MU/TOD ordinances in other communities. Thus the new regulations might specify that no use (e.g., commercial, residential, civic, industrial) exceed 80 percent of the total floor area in any MU/TOD zone. This would prevent any one use from predominating and gives the developer wide latitude on the desired market supported mix in a specific area, rather than having to adhere to a minimum for each type of use.

Another option to promote mixed-use rather than requiring it may be to offer incentives such as increased densities, a broader range of permitted uses, shared infrastructure costs (e.g., stormwater) or streamlined development review for projects that include two or more uses in a development.

Other communities have helped their TOD areas achieve a healthier use mix by contributing city owned land to the project or opening or building civic uses in the area to attract more people. For example, NCTCOG staff report that the City of Garland has developed a performing arts center near its transit station that helps attract people to the area. Other communities have opened civic uses such as libraries or city offices near their transit stations or partnered to provide structured parking. The Center for Transit Oriented Development has published a useful paper that summarizes similar tools and techniques used in other jurisdictions around the country. This report, *Downtowns, Greenfields, and Places In Between: Promoting Development Near Transit*, can be accessed at http://www.ctod.org/pdfs/20130528_DntnsGreenfieldsEtc.FINAL.pdf.

The working group also discussed the issue of vertical versus horizontal mixed-use. Some supported the notion that the city should allow horizontal use mixing so that mixing would not be required in each building within the TOD area. While there are some distinct advantages to this approach (not the least of which is greater flexibility for developers), city staff cautioned that enforcing horizontal mixed-use in a larger area over time might be challenging. Developers might, for example, favor 100 percent residential uses in an early phase of TOD area development because, like now, there is significant residential demand and weaker commercial demand. However, in five to ten years when the city was pushing for more commercial in the area to pursue its mixed-use policy, developers might resist because the commercial market was still modest or weak. Enforcing the horizontal mixed-use requirement might then be problematic.

Accessory and temporary uses (p. 19)

It is also important to carefully consider accessory uses and structures that will be allowed in a new TOD zone district. The working group discussed a number of these uses that it felt were appropriate in the TOD area, such as home-based businesses/live-work units, small solar collection systems and farmers markets. Several people made the point that organizing programming like farmers markets and other temporary uses that help create a lively atmosphere in the TOD area will require a strong guiding hand from the city. The zoning code does not currently address many potentially appropriate accessory and temporary uses like farmers markets. NCTCOG staff summarized several successful zoning ordinances and other standards for farmers markets in the region that might be a good model for Cedar Hill.

On a related matter, the group agreed that low-intensity accessory uses and those that are auto oriented should be prohibited or severely limited in the TOD area. These include uses like drive-through facilities, large parks and recreation areas, large surface parking lots and outdoor storage. The workshop discussion paper (p. 11) and the Carrollton Transit Center District Regulations both contain detailed use lists that may also be helpful.

Intensity and dimensional standards (p. 23)

This important issue addresses features of development such as residential densities, block and lot standards, setbacks and height. A hallmark of TOD zone districts is increased density of residential development and intensity of commercial projects to support the transit and create a lively living atmosphere. In some communities, minimum residential densities are imposed to preserve key locations near transit stops for projects that benefit transit and help promote an urban environment. Permissible lot coverages are usually high to foster compact growth and open space requirements are typically reduced, with space-saving alternatives such as rooftop gardens and plazas encouraged. To promote denser, more compact development, minimum height standards are often featured and maximum heights of up to six stories and more are allowed in suburban locations.

Block standards usually promote shorter blocks (e.g., 200-400 feet) that encourage walking, while minimum lot areas are usually reduced to promote smaller residential units and businesses. Front setbacks are in many cases entirely eliminated to encourage buildings to be brought up to the street, which helps create a more pedestrian-oriented environment. Deeper setbacks may be allowed in the TOD Ring Subdistrict, particularly for residential developments.

The city's LR-Local Retail District contains fairly liberal height standards (6 stories) that would allow a mid-rise building in the TOD area. Also, several of the dimensional standards are appropriate for a TOD (e.g., no minimum lot area or maximum lot coverage). However, no residential uses are allowed and there is a minimum 20-foot side yard standard that would make compact, "Main Street" type pedestrian-friendly development difficult.

Some of the existing UT-Uptown Overlay District development standards in Section 3.14.5 are also a step in the right direction and could be further tailored for a TOD zone district. To illustrate, there are no side or rear yard setbacks required for buildings less than 10,000 square feet along a public street unless adjacent to a residential development. For a TOD zone district, these regulations might be extended to all buildings and the yard restrictions linked to residential adjacency removed within the district. Similarly, the requirement of a ten foot "build-to" line on streets less than 65-feet in width might be applied to all pedestrian-oriented streets and reduced to zero in some cases to create a "Main Street" feel.

The working group also agreed that the block standards in the city's subdivision regulations should be reexamined. These standards indicate a preference for block lengths between 1,000 and 1,200 feet and a minimum of 500 feet that will make it very challenging to develop pedestrian-oriented, walkable streets within the TOD area. Experience in other communities demonstrates that maximum block lengths of 400-600 feet are preferable.

Off-street parking (p. 30)

Parking is a perennial challenge in most MU/TOD developments. Because these sites are often very constrained, extensive surface parking is usually infeasible and structured parking is very expensive. Many communities have taken aggressive steps to reduce the off-street parking requirements for MU/TOD based on numerous studies that demonstrate they typically do not generate as much vehicle traffic as single use projects. Thus it is recommended that the City require less parking for MU/TOD development than suburban greenfield development. However, in the Dallas region as elsewhere in the United States, parking can still be a hot button issue when a higher density MU/TOD development is proposed in a neighborhood already experiencing congestion and a perceived shortage of off-street parking.

The SGA/Clarion team suggested the city consider an automatic reduction in minimum off-street parking requirements (e.g., 25 percent in the core and 15 percent in the ring). The City might also approve a proposal to further reduce number of off-street vehicle parking spaces required for a development, provided the development application includes a study demonstrating that because of the development's specific location, nature or mix of uses, there is a reasonable probability the number of parking spaces actually needed to serve the development is less than the minimum requirement. The city might also consider including maximum limits on parking in its zoning ordinance. Such maximums are particularly important in TOD districts to where large surface parking lots make such areas much less pedestrian friendly. A common maximum is 125 percent of the minimum requirement. As an incentive to build parking garages rather than surface parking lots, some jurisdictions exempt any structured parking spaces from this limitation.

Development design and compatibility (p. 32)

Compatibility of new development in a MU/TOD area with existing residents and surrounding neighborhoods is often a key issue for projects being proposed around transit stations. While some neighborhoods welcome access to mass transit and increased shopping and dining opportunities, others object and resist, fearing adverse impacts such as increased traffic and parking problems.

Indeed, one of the lead articles in the morning Dallas newspaper the day of the workshop focused on the opposition to a new transit stop in an established Dallas neighborhood due to fears of noise and traffic from more restaurants that might be opened in the area. NCTCOG staff also related that some communities in the region have asked to be removed from the future transit system map due to fears over crime and noise around transit stations.

While there are no existing residential neighborhoods around the currently designated transit station area near Cedar Hill's city hall, conflicts may arise as that area develops with additional mixed-uses. Also, if the station area location were to be shifted in the future (say to Old Town), compatibility may be an important issue. Thus compatibility is likely to be an issue in either instance.

Most MU/TOD zone districts around the nation contain some building design standards to ensure structures are attractive and enhance the streetscape and pedestrian experience. Section 3.14.5.B of the UT-Uptown Overlay District contains architectural style requirements for non-residential uses including standards for building orientation, articulation, exterior building materials, architectural features, roofs and color that are a good starting point for similar regulations in the TOD zone district. However, they will need to be tailored because, according to staff, they were adopted to apply primarily to large big-box retail establishments, not smaller structures and multi-story buildings likely to be developed in the TOD district. Section 3.14.6 sets forth standards for residential buildings including a 50 percent masonry requirement and specifications for windows along primary facades. These residential building requirements may not be suitable in the TOD zone district (e.g., requiring bay windows or turrets on multi-story residential buildings). Other code standards require six-foot tall walls between commercial and residential structures, which again may not be suitable in MU/TOD areas. At the same time, some of the standards regarding building location and articulation that apply to non-residential uses would seem appropriate for residential buildings.

Cedar Hill should explore creating a consolidated set of guidelines or standards focusing on compatibility and transitions as it seeks to encourage more intense mixed-use development in infill and redevelopment areas. Compatibility standards should not only address physical tools such as step backs, setbacks, landscaping buffers and the like, but also operational compatibility (noise, hours of operation, lighting, placement of trash/recycling facilities, location of delivery and loading zones, etc.). These standards that could be applied administratively by staff in a mixed-use base zone or PDD.

From a process perspective, the working group agreed that it would be highly preferable if design/compatibility requirements were handled administratively by staff or by a design review board made up of design professionals without a public hearing, as is done in the Centre City district in San Diego.