

section 11

Urban Design

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Good design ensures attractive, usable, durable, and adaptable places and is a key element in achieving sustainable development. Good design is integral to good planning.

Urban design influences the physical form of the city and how residents experience public spaces such as streets, parks, plazas, or squares. The policies and actions of municipal government and the motivation of private developers largely determine the physical form of the city. While individual buildings may be attractive in themselves, there are numerous other design elements that contribute to the organization of a space including architectural design, building placement, height, scale, open space, transportation rights-of-way, and infrastructure. The cumulative interaction of these design elements and adjacent buildings in organizing public space is vital for achieving an environment that supports and promotes social interaction.

Raleigh has many of the physical components that contribute to a successful and vibrant city, but it continues to grapple with issues of walkability, bikeability, and identity. The transit network planned for Raleigh's future will be the principal driver of change in the urban form and function of the city. Its effects will be most apparent around proposed rail and bus rapid transit stations, where high-density, mixed-use development will be required by the city. With the transit station as the focal point, additional design considerations that promote walking and cycling, such as small block lengths, wide sidewalks, mid-block crossings, retail and restaurant uses on the ground floor, and parking garages with wrap-around retail, will be encouraged.

Frontage and Urban Design

Frontage refers to the approach a commercial, mixed-use or multifamily development takes towards the street. The parameters of frontage include the placement of the building on the site, the location of primary entrances, landscaping provided along the front of the property, and the location of parking. Frontage is a fundamental urban design attribute, as it governs the relationship between private investment on private land and the public investment in the public realm.

The suburban approach to frontage, seen throughout Raleigh, emphasizes streetyard landscaping and, for retail, an abundance of front door parking. In urban settings where land is scarce and pedestrians abundant, buildings are often located at or near the front property line(s) and the quality of the frontage depends more on architecture than landscaping. A hybrid approach to frontage combines allowance for front door parking with smaller setbacks and quality pedestrian connections.

As Raleigh continues to develop and redevelop, a more urban and pedestrian-friendly approach to frontage is desired, consistent with the movement towards multimodal transportation solutions. While pedestrian-friendly designs are always welcomed, not all sites are appropriate for an urban approach to frontage. An Urban Form Map provides guidance as to when frontage should be directly shaped by zoning. The map is based upon the following principles:

- *Urban frontage should be used in urban locations, such as downtown, pedestrian business districts, and transit-oriented districts (TOD) to create streetwalls and a pedestrian-oriented environment. In these contexts, vehicular access and front door parking is accommodated on-street. Off-street parking is located at the sides or rear of buildings, but never between the building and the street.*
- *Hybrid frontage should be used in intensifying suburban areas, particularly where multimodal investments are programmed to occur; and where on-street parking is not an option for front-door access. In such areas urban frontage, if used at all, would be confined to side or interior streets where on-street parking is an option. Elsewhere, off-street front door parking would be available but limited in depth so that pedestrian connections remain convenient and direct.*
- *Suburban frontage is an acceptable solution where densities are low and multimodal access is not anticipated to be significant within the time horizon of the plan, or where other frontage approaches are not feasible or practical. While pedestrian access and circulation must still be accommodated, prescriptive standards for building location are not required, and front door parking is an acceptable design solution.*

Urban Form Map

The Urban Form Map is composed of centers and corridors. A frontage is recommended where either of these designations are shown. In these areas, frontage standards would be applied either through the rezoning petition process, referencing Comprehensive Plan policies, or through future area plans.

The Urban Form map draws from a variety of sources: Area Plans and Area Specific Guidance, the Downtown Section of the Comprehensive Plan, the zoning map, policy guidance found elsewhere in the Comprehensive Plan, the Growth Framework Map, planned transit and streetscape investments, the presence of curb parking, and in some cases areas recognized for their distinctive character. It is anticipated that the Urban Form Map will evolve and gain specificity with the completion of additional transit plans, as well as more area studies for specific centers and corridors.

The following text describes the centers and corridors that appear on the Urban Form Map. These areas include only a minority of property frontage in the city. Outside of these areas, frontages will comply with general ordinance requirements. When an area is designated as being part of two or more centers or corridors, guidance from the more urban of the overlapping designations should prevail.

Centers

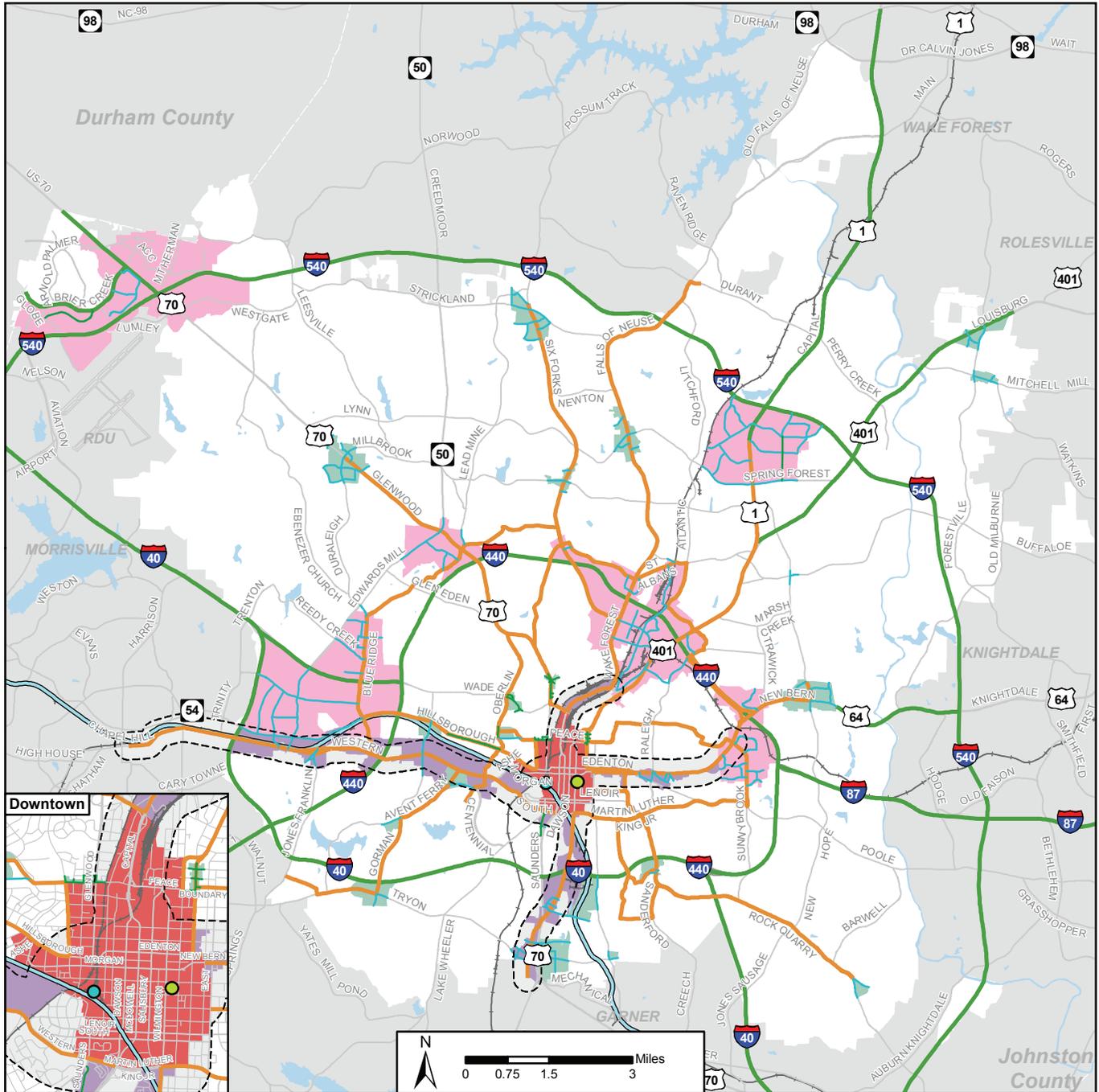
- **Downtown:** *The Downtown Section boundaries define the downtown. An urban approach to frontage is recommended throughout Downtown, and the Downtown Section provides specific guidance.*
- **City Growth:** *These designations are where significant infill development and redevelopment are anticipated in the future. While an urban and/ or hybrid approach to frontage is recommended to encourage walkability, built conditions and site constraints may require alternative approaches. Some City Growth Centers are subject to area plans that may provide frontage guidance.*
- **Transit-oriented Districts (TODs):** *TODs should utilize an urban frontage approach where possible, and a hybrid approach elsewhere to ensure a pedestrian-friendly urban form. Specific frontage recommendations will be developed as part of future TOD plans.*
- **Mixed-use Centers:** *Ranging from small neighborhood retail nodes to larger mixed-use areas, this category captures special areas where a more walkable and mixed-use development pattern is desired. Some of these correspond to centers with an adopted area plan, some are established centers such as the Five Points business district, and others are activity nodes located along Transit Emphasis Corridors (see next page). As additional corridor and area plans are completed, more such centers will appear on the Map.*
- **Core Transit Area:** *This designation refers to areas within a quarter-mile of corridors proposed for bus rapid transit or within a half-mile of identified commuter rail station locations. An urban or hybrid approach to frontage is recommended, depending on context.*

Corridors

- **Main Streets:** This designation applies to traditional, pedestrian commercial streets, both existing (e.g. Hillsborough Street) and proposed as part of an area plan (e.g. parts of Oberlin Road). An urban frontage approach is recommended.
- **Transit Emphasis Corridors:** These corridors are identified in the GoRaleigh 2040 Bus Development Plan or Wake County Transit Plan and programmed for a much higher level of bus service, including frequent buses, improved stop amenities, a more complete pedestrian network, and potentially traffic signal priority for transit. As these corridors often follow major streets, a hybrid approach to frontage is recommended.
- **Urban Thoroughfares:** These areas are planned or programmed for public investments such as bike lanes and/or pedestrian-oriented streetscapes that encourage multiple modes. An urban or hybrid frontage approach is recommended, based on context.
- **Parkway Corridors:** These are corridors where multimodal access is not emphasized, and a heavily landscaped approach to street frontage is either called for in adopted plans, or represents the prevailing character of the area. A suburban approach to frontage is recommended.



UD-1: Urban Form



- Raleigh Union Station
- GoRaleigh Bus Station
- Main Street
- Urban Thoroughfare
- Transit Emphasis Corridor
- Parkway Corridor
- Commuter Rail Corridor
- Core Transit Area (1/4mi Bus Rapid Transit Corridor Buffer)
(1/2mi Station Buffer)
- Mixed-Use Center
- Transit Oriented District (TOD)
- City Growth Center
- Downtown

Primary Urban Design Issues

The Urban Design Section provides broad recommendations to address some of the primary issues that the city needs to focus on:

- *Need for quality architecture to define the public realm and road network.*
- *Need for connected and usable pedestrian and cycling circulation systems throughout the city.*
- *Visual clutter and the lack of an urban identity along Raleigh’s major streets.*
- *Need for connectivity between individual sites.*
- *Commercial site design with large parking lots separating business uses from the street.*
- *Design needs of alternate travel modes such as transit, bicycle and walking.*
- *Transit accommodation, such as bus shelters, benches, trash receptacles and landscaping. Raleigh should design a standard style for these elements to create a unique brand identity for the city.*
- *Obsolete provisions within the zoning code.*
- *Design guidelines that do not meet the requirements or provide adequate direction for higher-density, mixed-use, and pedestrian-oriented urban development.*

In addressing these issues and embracing the principal tenets of urban design and placemaking— such as creating compact and walkable neighborhoods with distinctive focal points, a mix of land uses with access to transit, and shared public spaces that are the center of community activity— Raleigh will be fulfilling all six of its vision themes.

Distinct neighborhoods with civic centers and complete streets will help achieve the theme *Growing Successful Neighborhoods and Communities*. Coordinating new mixed-use

development with the transportation and transit network will ease the burden of congestion on city streets, contributing to the vision themes of *Managing Our Growth* and *Coordinating Land Use and Transportation*. Encouraging diverse and varied neighborhoods will advance the goal of *Expanding Housing Choices*. This will also improve the variety of jobs available, and will help achieve *Economic Prosperity and Equity*. Finally, focusing on creating mixed-use neighborhoods will reduce the dependency on fossil fuels by reducing travel demand. It will also eliminate the need for extending infrastructure networks further from the center of the city, helping to preserve valuable land and natural resources. Ensuring that new buildings are energy-efficient will also go a long way towards fulfilling the vision theme of *Greenprint Raleigh*.

For more information about the underlying issues and existing urban design conditions, please consult the City of Raleigh Community Inventory Report, the companion background data volume for the Comprehensive Plan, available at www.RaleighNC.gov. For more information about complete streets, refer to ‘4.3 Complete Streets: Hierarchy and Design’ in Section 4: ‘Transportation.’

To track the efficiency of the city’s policies, any of the Comprehensive Plan’s vision themes that may be relevant to a particular policy are indicated by one of six icons. The vision themes are:

-  Economic Prosperity and Equity
-  Expanding Housing Choices
-  Managing Our Growth
-  Coordinating Land Use and Transportation
-  Greenprint Raleigh
-  Growing Successful Neighborhoods and Communities

In this Section and throughout the Plan, Key Policies used to evaluate zoning consistency are noted as such with an orange dot (●).



11.1 Raleigh's Identity

A more memorable identity for Raleigh will be created in the future by enhancing the aesthetic qualities of Raleigh's corridors with a high-quality built environment, greenway network, and preserving its natural landscapes and scenic resources.

Downtown Raleigh's five local historic districts – Blount Street, Boylan Heights, Capitol Square, Moore Square, and Oakwood – represent unique residential, commercial, and institutional districts. East-Raleigh – South Park, one of downtown Raleigh's national historic districts, also contributes to Raleigh's unique sense of place. This national historic district contains many residential buildings that provide integrity to downtown. It offers a window into the architectural heritage of the city's residential development.

Outside of downtown, many stable residential neighborhoods still exist along streets such as Halifax, New Bern, and Hillsborough, with streetside planting areas and sidewalks on the axial streets. Buildings and their entrances are oriented toward the sidewalk and formal architectural elements organize the public street spaces. Early suburbs such as Cameron Park and Glenwood/Brooklyn also have very distinctive characteristics that are worth preserving and could help in establishing Raleigh's identity. Suburban residential areas are the core residential neighborhoods of the city, and additional attention to their desired form and density is required to distinguish them as Raleigh neighborhoods.

In addition to Raleigh's established identity, the city's rapid growth translates into new demands and opportunities to form new identities. Dense, mixed-use development is altering the form and character of areas such as Downtown, Hillsborough Street, North Hills, and Glenwood Avenue. Strong urban design policies and guidelines will help Raleigh form a unique contemporary identity.

See also Section 3: 'Land Use' for policies related to land use or mixed-uses.

Policy UD 1.1 Protecting Neighborhood Identity

Use Neighborhood Conservation Overlay Districts (NCOD), Historic Overlay Districts (HOD), or rezonings to retain the character of Raleigh's existing neighborhoods and strengthen the sense of visual order and stability.



Policy UD 1.2 Architectural Features

● Quality architecture should anchor and define the public realm. Elements of quality architecture include architectural accents and features conducive to pedestrian scale and usage, such as a distinct base, middle, and top (for high-rise buildings); vertical and horizontal articulation; rooflines that highlight entrances; primary entrances on the front façade; transparent storefront windows and activated uses on the ground floor; and corner buildings with defining landmark features.



See also Section '11.7: Design Guidelines' for additional policies and actions.

Policy UD 1.3 Creating Attractive Facades

● Well-designed and articulated building facades, storefront windows, and attractive signage and lighting should be used to create visual interest. Monolithic or box-like facades should be avoided to promote the human quality of the street.



See also '5.8 Light and Noise Pollution Controls.'

Policy UD 1.4 Maintaining Façade Lines

● Maintain the established building edge of neighborhood streets by aligning the front façade of new construction with the prevailing facades of adjacent buildings, unless doing so results in substandard sidewalks. Avoid violating this pattern by placing new construction in front of the historic façade line unless the streetscape is already characterized by such variations. Where existing façades are characterized by recurring placement of windows and doors, new construction should complement the established rhythm.



Policy UD 1.5 Pedestrian Wayfinding

Support the creation of a unified and comprehensive system of pedestrian wayfinding signs, kiosks, and other environmental graphics to provide directions to the pedestrian.



Policy UD 1.6 City Gateways

Create more distinctive and memorable gateways at points of entry to the city, and points of entry to individual neighborhoods and neighborhood centers. Gateways should provide a sense of transition and arrival, and should be designed to make a strong and positive visual impact.





Policy UD 1.7 Scenic Corridors

Retain and enhance our visual and natural assets including vistas, boulevard medians, tree-lined streets, forested hillsides, wetlands, and creeks along scenic corridors into and through Raleigh, including designated Parkway Corridors on the Urban Form Map.



Policy UD 1.8 Tree Planting and Preservation

Enhance Raleigh’s image as a city of trees with a comprehensive tree planting program for every major roadway, and by protecting and preserving significant stands of existing trees along or adjacent to major roadways.



See also ‘5.5: Tree Canopy Conservation and Growth’ in Section 5: ‘Environmental Protection.’

Policy UD 1.9 Skyline Views

Views of the evolving downtown skyline from downtown gateway corridors should be preserved. Public and private investments should take advantage of opportunities to create new skyline views.



Policy UD 1.10 Frontage

● Coordinate frontage across multiple sites to create cohesive places. Encourage consistency with the designations on the Urban Form Map. Development in centers and along corridors targeted for public investment in transit and walkability should use a compatible urban form.



See Text Box: Urban Form Map

Policy UD 1.11 Falls of Neuse Corridor

Maintain and protect the character of the Falls of Neuse corridor adjacent to the Falls Lake watershed north of Durant Road by preserving the extensive roadside vegetation, the Falls Lake dam, and Falls Community.

Policy UD 1.12 Reserved

Policy UD 1.13 Ecological Identity

Promote and enhance ecological function in the design of private and public developments. Incorporate climate- and water-sensitive design features that support ecological health for plants, animals, and soils, as well as the city’s residents.



Policy UD 1.14 Community Identity

Raleigh’s diversity is reflected in a range of architectural and landscape design traditions and styles. Public and private development should be consistent with and incorporate the aesthetic identities of the surrounding populations, including, but not limited to, neighborhood branding and wayfinding.





Action UD 1.1 Wayfinding Improvements

Explore and coordinate wayfinding strategies for mixed-use areas in the city to enhance identity and wayfinding.

Action UD 1.2 Converted to Policy 2016

Action UD 1.3 Converted to Policy 2016

Action UD 1.4 Gateway Design in Focus Areas

Develop special gateway design features for focus areas such as the three crossings of the Neuse River: Capital Boulevard, Louisburg Road, and New Bern Avenue.

Action UD 1.5 Moved 2018

Action UD 1.6 Using Zoning to Achieve Design Goals

Explore zoning and other regulatory techniques to promote excellence in the design of new buildings and public spaces.

11.2 Design of Mixed-use Developments

Walkable mixed-use developments are critical to the future of Raleigh and cities around the world. They are efficient in terms of land use and urban service delivery. They encourage the use of mass transit and help in the preservation of open space. They create active and vibrant urban spaces. By encouraging new mixed-use neighborhoods to also be mixed-income neighborhoods, the city can ensure that low- and moderate-income residents have equal access to all the advantages and opportunities of urban living.

Good urban design helps promote and implement the ideals of mixed-use neighborhoods. Residential uses should be connected to retail uses and transit through safe and attractive sidewalks that are universally accessible. Shared open spaces should be welcoming, well-lit, and equipped to serve a diverse group of users. Transit stops should function efficiently and protect riders from the elements during all seasons.

See also Section 3: 'Land Use' for additional policies related to mixed-use and land use and transportation coordination.

Policy UD 2.1 Building Orientation

- Buildings in mixed-use developments should be oriented along streets, plazas, and pedestrian ways. Their facades should create an active and engaging public realm.



Policy UD 2.2 Multi-modal Design

- Mixed-use developments should accommodate all modes of transportation to the greatest extent possible.



Policy UD 2.3 Activating the Street

- New retail and mixed-use centers should activate the pedestrian environment of the street frontage in addition to internal pedestrian networks and connections, particularly along designated Main Street corridors.



Policy UD 2.4 Transitions in Building Identity

- Establish gradual transitions between large scale and small-scale development. The relationship can be improved by designing larger buildings to reduce their apparent size and recessing the upper floors of the building to relate to the lower scale of the adjacent properties planned for lower density.



See also '3.5: Land Use Compatibility' in Section 3: 'Land Use' for additional policies and actions related to transitions.

Policy UD 2.5 Greenway Access

- Safe and clearly marked access points to the city's greenway system should be provided in new and existing mixed-use centers where feasible.





Policy UD 2.6 **Reserved**

Action UD 2.1 **Completed 2013**

Policy UD 2.7 **Public Open Space**

Usable and well-appointed urban public open space should be provided within mixed-use centers to serve as focal points and community gathering spots.



Action UD 2.2 **Completed 2013**

Policy UD 2.8 **Open Space in Large Mixed-use Developments**

Large mixed-use developments should include a range of open spaces, from small parklets, to pocket parks, squares, and larger active and passive recreation areas. These spaces should serve the immediate and surrounding communities.



11.3 Appearance and Function of Raleigh's Corridors

The appearance of Raleigh's commercial corridors, especially U.S. 1, New Bern, U.S. 70, Hillsborough, and South Saunders, has been detrimental to the city's image and are unbecoming of entry points into a capital city. As primary entry corridors for visitors to the city, it is essential that these roadways convey a positive impression.

There is also a need to mitigate air and noise pollution. The creation of boulevards with landscaped medians, street trees, and sidewalks will greatly improve the appearance of Raleigh's corridors, mitigate air and noise pollution, and address the needs of pedestrians and transit users.

Raleigh's existing streets must be retrofit to accommodate the needs of pedestrians, bicyclists, motorists, and transit users of all ages and abilities. Corridor Studies are the primary tool the city employs in directing and regulating the design and development of the city's streets and thoroughfares. Table UD-1: Corridor Studies and Map UD-2: Corridor Studies provide additional information on such studies.

For more information about complete streets, refer to '4.3 Complete Streets: Hierarchy and Design' in Section 4: 'Transportation.'

Policy UD 3.1 Gateway Corridor Design Quality

- Promote high quality development along gateway corridors to improve aesthetics and encourage higher levels of investment. Design of new development should contribute to the overall visual quality of the corridor and define the street space.



Policy UD 3.2 Highlighting Important Intersections

Promote the use of gateways and landmarks to highlight access points and important intersections along key corridors. Examples include the places where roadways split to become one-way pairs entering and exiting downtown (Blount-Person, Wilmington- Salisbury, McDowell-Dawson); the proposed roundabouts along Hillsborough Street at Rosemary, Pullen, and Morgan streets; and places where key streets merge (Louisburg- Capital, Wake Forest-Falls of Neuse, etc.).



Policy UD 3.3 Strip Shopping Centers

Ensure that zoning and parking standards discourage strip commercial shopping centers and auto-oriented building designs along Main Street and Transit Emphasis Corridors, and in City Growth, TOD and Mixed-Use Centers on the Urban Form Map.



Policy UD 3.4 Enhanced Sidewalks

Promote a higher standard of storefront design and architectural detail in downtown and along the city's Main Street corridors. Along walkable shopping streets, create streetwalls with relatively continuous facades built to the front lot line to provide a sense of enclosure and improve pedestrian comfort.



Policy UD 3.5 Visually Cohesive Streetscapes

Create visually cohesive streetscapes using a variety of techniques including landscaping, undergrounding of utilities, and other streetscape improvements along street frontages that reflect adjacent land uses.



Policy UD 3.6 Median Plantings

Median plantings should be used where feasible and appropriate to preserve and enhance the visual character of corridors and boulevards.



Policy UD 3.7 Parking Lot Placement

New parking lots on designated Main Street and Transit Emphasis corridors on the Urban Form Map should be located at the side or rear of buildings when on-street parking is available, with only limited front door parking provided elsewhere. Where feasible, parking lots abutting these corridors should be landscaped to create a pedestrian-friendly streetscape with business visibility.



See also '4.6 Parking Management' in Section 4: 'Transportation' for additional policies and actions.

Policy UD 3.8 Screening of Unsightly Uses

The visibility of trash storage, loading, and truck parking areas from the street, sidewalk, building entrances and corridors should be minimized. These services should not be located adjacent to residential units and useable open space.



Policy UD 3.9 Parking Lot Design

Encourage efficient site design, shared parking between complementary uses, and reduced amounts of impervious surface in parking lot design.



Policy UD 3.10 Planting Requirements

Enhance and expand the required planting and tree coverage for parking lots by incorporating design standards that promote long term tree growth and health. Planting standards should improve permeability and reduce the heat island effect.



Policy UD 3.11 Parking Structures

● Encourage creative solutions including landscaping and other aesthetic treatments to design and retrofit parking structures to minimize their visual prominence. Where feasible, the street side of parking structures should be lined with active and visually attractive uses to lessen their impact on the streetscape.



Policy UD 3.12 Heritage and Champion Trees

When either heritage or champion trees are located adjacent to Urban Thoroughfares or Main Streets, the application of frontage which would encourage the removal or destruction of the tree is discouraged.



Action UD 3.1 Completed 2013

Action UD 3.2 Completed 2013

Action UD 3.3 Completed 2013

Action UD 3.4 Completed 2015

Action UD 3.5 New Bern Avenue Planting Guidelines

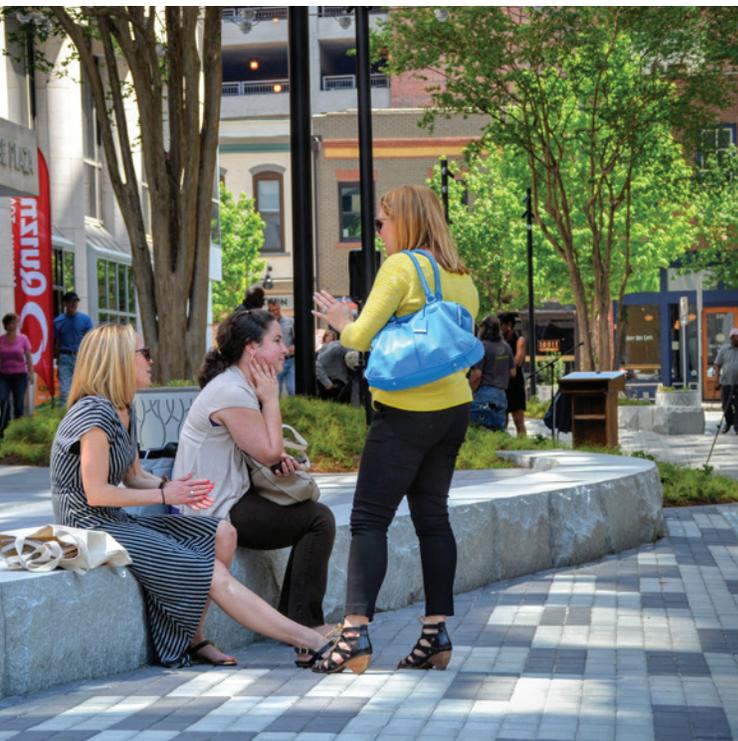
Use tree types and planting locations on New Bern Avenue that avoid obscuring the view of the Capitol.

11.4 Creating Inviting Public Spaces

The network of public spaces – streets, squares, plazas, parks, and sidewalks – that connect residents in their daily lives most clearly define a city. The character of public spaces is formed by the arrangement and details of the elements that define them such as building edges, public squares, and storefronts along a commercial street or dwellings that line a residential avenue.

City-owned parks and greenways are considered to be the key public spaces designed to be used by the broader community. Their role has been central to the vision of the City of Raleigh. However, smaller gathering spaces such as plazas, streets, and sidewalks have not been used to their best capacity, and can be improved to better serve the community.

Recognizing contemporary trends in areas such as “tactical urbanism,” Raleigh should promote innovative, cost- and time-effective strategies to augment existing public spaces, as well as provide new spaces for the city’s residents and visitors.



Policy UD 4.1 Public Gathering Spaces

Encourage the development of public gathering spaces within all developments. Such spaces should be designed to attract people by using common and usable open space, an enhanced pedestrian realm, streetscape activation, and retail uses.



Policy UD 4.2 Streets as Public Spaces

Design streets as the main public spaces scaled for pedestrian use within City Growth, TOD, and Mixed-use Centers as designated on the Urban Form Map.



Policy UD 4.3 Improving Streetscape Design

Improve the appearance and identity of Raleigh’s streets through the design of street lights, paved surfaces, landscaped areas, bus shelters, street “furniture,” and adjacent building facades.



Policy UD 4.4 Management of Sidewalk Space

Manage Raleigh’s sidewalk space in a way that promotes pedestrian safety, efficiency, and comfort and provides adequate space for tree boxes. Sidewalks should enhance the visual character of streets, with landscaping and buffer planting used to reduce the impacts of vehicle traffic.



Policy UD 4.5 Improving the Street Environment

Create attractive and interesting commercial streetscapes by promoting ground level retail and desirable street activities, making walking more comfortable and convenient, ensuring that sidewalks are wide enough to accommodate pedestrian traffic, minimizing curb cuts and driveways, and avoiding windowless facades and gaps in the street wall.



Policy UD 4.6 Activated Public Space

Provide urban squares, public plazas, and similar areas that stimulate vibrant pedestrian street life and provide a focus for community activities. Encourage the “activation” of such spaces through the design of adjacent structures; for example, through the location of shop entrances, window displays, awnings, and outdoor dining areas.



Policy UD 4.7 Indoor/Outdoor Transitions

Encourage private owners to take the “indoors” outdoors by extending interior space like dining areas and small merchandise displays onto walkways and plazas. Conversely, outdoor spaces should be integrated into the building by opening interior spaces like atriums to views, sunshine, and public use.



Policy UD 4.8 Private Sector Public Space Improvements

As appropriate and necessary, require publicly accessible plazas or open spaces to be provided by the private sector in conjunction with development or redevelopment of multi-family, commercial, or mixed-used developments.



Policy UD 4.9 Drought-tolerant Landscaping

Encourage the use of native, drought-resistant plants, and other xeriscaping techniques in landscaping public spaces (xeriscaping is landscaping which does not require irrigation).



See also '9.3 Drinking Water' in Section 9: 'Public Utilities' for additional policies and actions on drought-tolerant landscaping.

Policy UD 4.10 Improving Pedestrian Safety

Improve pedestrian safety by providing clear transitions between vehicular and pedestrian areas through landscaping and other streetscape improvements.



See also '4.5: Pedestrian and Bicycle Circulation' in Section 4: 'Transportation' for additional policies and actions.

Policy UD 4.11 Large Park Edges

● Activate the edges of large city parks, such as Dorothea Dix Park, with active, mixed-use urban form. Such mixed-use developments should be permeable and provide visual and pedestrian access into and out of the adjacent open space.



Policy UD 4.12 Parklets

Public space opportunities in established mixed-use centers like Downtown are limited. Encourage the reclamation and repurposing of underutilized, on-street parking spaces for use as small open spaces with amenities such as seating, plantings, and green infrastructure.



Policy UD 4.13 Urban Soundscape

Encourage the use of trees, vertical landscapes such as trellises and green walls, and water features to absorb noise and to create comfortable and inviting environments in active-use areas and urban areas adjacent to major thoroughfares.



Action UD 4.1 Completed 2013

11.5 Designing Successful Neighborhoods

Raleigh’s existing and new neighborhoods must be retrofit to meet the changing demands of the economy and environment. Auto-oriented suburbs without sidewalks or access to transit are lifestyle choices that the city must discourage, focusing instead on housing and transportation choices that promote sustainability. Raleigh’s neighborhoods, prior to the easy availability of the automobile, provided urban design features that were sustainable, such as street trees, wide sidewalks, smaller buildings, readily accessible commercial services, and shared public spaces. In order to meet the challenges of global climate change and rising fuel and energy costs, a return to an environmentally-sustainable and responsible lifestyle is in order, as outlined by the policies below.

See also ‘3.5 Land Use Compatibility’ in Section 3: ‘Land Use’ for additional policies and actions related to infill development.

Policy UD 5.1 Contextual Design

- Proposed development within established neighborhoods should create or enhance a distinctive character that relates well to the surrounding area.



Policy UD 5.2 Pedestrian Access to Downtown

Enhance clear and safe pedestrian networks and connections between downtown and nearby center city neighborhoods.



Policy UD 5.3 Improving Neighborhood Connectivity

Explore opportunities to conveniently connect existing neighborhoods to adjacent commercial centers and community facilities and services.



Policy UD 5.4 Neighborhood Character and Identity

Strengthen the defining visual qualities of Raleigh’s neighborhoods. This should be achieved in part by relating the scale of infill development, alterations, renovations, and additions to existing neighborhood context.



Policy UD 5.5 Areas of Strong Architectural Character

Preserve the architectural continuity and design integrity of historic districts and other areas of strong architectural character. New development within such areas does not need to replicate prevailing architectural styles exactly but should be complementary in form, height, and bulk.



See also Section 12: ‘Historic Preservation’ for additional policies and actions related to historic districts.

Policy UD 5.6 Protection of Neighborhood Open Space

Infill development should respect and improve the integrity of neighborhood open spaces and public areas. Buildings should be designed to avoid the loss of sunlight and reduced usability of neighborhood parks and plazas.





Policy UD 5.7 Neighborhood Commerce

Promote small-scale commercial services in new and established neighborhoods to promote walking and cycling and to discourage unnecessary automobile trips.



Policy UD 5.8 Neighborhood Community Centers

Ensure that each of Raleigh's neighborhoods has well-programmed community facilities, including recreation centers and libraries, within walking distance.



Action UD 5.1 LEED-ND Program

Implement the new LEED Neighborhood Design (ND) certification program for neighborhoods as a possible new strategy to reduce energy and resource consumption and improve the long-term sustainability of Raleigh.

Action UD 5.2 Completed 2014

11.6 Active Mobility

As Raleigh continues to grow and transition to a denser, more mixed-use profile, active transportation will need to become an integral component of public and private development. Policies should encourage and accommodate cyclists and pedestrians, including those who couple those active choices with transit use.

Raleigh's pedestrian network is strongest within downtown, Planned Development Districts, pedestrian business districts/Main Streets, and mixed-use centers. In other parts of the city, pedestrian connections are often missing. While the development code provides for the dedication of adequate open space, sidewalks, tree conservation, and connectivity, these issues are addressed on a site-by-site basis rather than in a comprehensive network-based approach. In some cases, the development code actually impedes connectivity by requiring separation of uses and transitional protective yards.

Pedestrian-friendly design not only encourages social engagement and active urban spaces, it has been proven to promote the health and well-being of residents. Obesity and obesity-related diseases such as hypertension and diabetes are a national concern today. Ensuring that all future development within the city is pedestrian-friendly will encourage residents to walk more frequently to meet their daily needs. This will also help in reducing vehicle miles traveled (VMT) and help the city to uphold its commitment to implement the U.S. Mayors Climate Protection Agreement.

Bike Raleigh, the city's bicycle plan, encourages cycling in Raleigh through on-road facility design, safety and education promotion, and events to encourage residents and visitors to choose this sustainable transportation mode. Like pedestrian-friendly design, urban design policies that promote cycling promote community engagement, public health, and environmental stewardship. Bike-friendly urban design features include ample



on-street and separated bicycle lanes, bicycle parking incorporated into private developments and the public realm, and wayfinding geared to cyclists, among others.

An important consideration in designing a pedestrian- and cycling-friendly Raleigh will be incorporating design features into existing historic districts and new and established public spaces. Raleigh's historic districts developed prior to the establishment of accessibility regulations, meaning that portions of these areas are not accessible to all. Where feasible and contextually appropriate, policies should promote retrofitting inaccessible historic environments. In addition, all new environments should carefully consider providing accessibility amenities beyond those required by the Americans with Disabilities Act and the Unified Development Ordinance to achieve universal design standards.

See also '4.5 Pedestrian and Bicycle Circulation' in Section 4: 'Transportation' for additional actions and policies related to pedestrian-friendly design.

Policy UD 6.1 Encouraging Pedestrian-oriented Uses

● New development, streetscape, and building improvements in Downtown, Main Streets, and TOD areas should promote high intensity, pedestrian-oriented use and discourage automobile-oriented uses and drive-through uses.



Policy UD 6.2 Ensuring Pedestrian Comfort and Convenience

Promote a comfortable and convenient pedestrian environment by requiring that buildings face the sidewalk and street area, avoid excessive setbacks, and provide direct pedestrian connections. On-street parking should be provided along pedestrian-oriented streets and surface parking should be to the side or in the rear. This should be applied in new development, wherever feasible, especially on Transit Emphasis and Main Street corridors and in mixed-use centers.



Policy UD 6.3 Pedestrian-scale Lighting

Ensure that pedestrian-scale lighting is provided as a means of providing a safe and visible pedestrian realm as well as establishing a theme or character for different streets and neighborhoods.



See also '5.8 Light and Noise Pollution Controls.'

Policy UD 6.4 Appropriate Street Tree Selection

Street tree plantings should be appropriate to the function of the street. For example:

- *Trees on commercial streets should complement the face of the buildings.*
- *Trees on residential streets should shade both the street and sidewalk, and serve as a means of establishing a transition between the street and the home.*
- *In high traffic areas and downtown, trees should be planted in tree wells with grates over the top to protect the roots.*



Policy UD 6.5 New Planting Techniques

Planting techniques in streetscape design should include wide planting/landscape strips between the curb and sidewalk and tree pits that will extend tree life.



Refer to Street Design Manual available at www.Raleighnc.gov.

Action UD 6.1 Converted to Policy 2014

Action UD 6.2 Completed 2013

11.7 Design Guidelines

Urban design guidelines help promote coordinated and high quality development and enhance the public realm and the city's image. In Raleigh, a number of guidelines were included in the 1989 Comprehensive Plan. There also exist numerous other design guidelines outside the 1989 Comprehensive Plan (See Text Box: Guidelines).

As part of the planning effort for the Comprehensive Plan, a thorough audit of all the existing guidelines was undertaken to determine which guidelines should become part of the 2030 Comprehensive Plan. As a result of the sheer number and complexity of the existing guidelines, the age of some of the guidelines, and the overlap between the guidelines and zoning regulations, the audit resulted in a substantially shortened list of guidelines for inclusion. Relevant citywide design guidelines are contained in Table UD-1, while downtown-specific guidelines are located in '15.7 Urban Design' in Section 15: 'Downtown Raleigh.' These guidelines replace and supersede prior adopted guidelines.

The policies below contain broad guiding principles that should influence the review of all new development in the city, as well as guidance regarding the application of the Design Guidelines for Mixed-Use Areas listed at the end of this section.

Guideline documents not superseded by this chapter and still in force include the following:

- *Design Guidelines for Raleigh Historic Districts.*
- *Downtown Streetscape Master Plan.*
- *Fayetteville Street Downtown Urban Design Handbook.*
- *Guidelines for Exterior Rehabilitation for the Moore Square Historic District.*
- *Raleigh Downtown Urban Design Guidelines.*
- *Standards for Private Use of Public Spaces: A Downtown Urban Design Handbook.*
- *Raleigh Street Design Manual.*

Policy UD 7.1 Economic Value of Quality Design

Recognize and emphasize the economic value of quality design in redevelopment, infill, adaptive use of existing structures, and development of public spaces.



Policy UD 7.2 Promoting Quality Design

Promote quality urban design through the use of design standards, zoning regulations, promotional materials, design awards, programs, and competitions.



Policy UD 7.3 Design Guidelines

● The Design Guidelines in Table UD-1 shall be used to review rezoning petitions and development applications for mixed-use developments; or rezoning petitions and development applications along Main Street and Transit Emphasis Corridors or in City Growth, TOD and Mixed-Use Centers, including preliminary site plans and development plans, petitions for the application of Downtown Overlay Districts, Planned Development Districts, and Conditional Use zoning petitions.



Action UD 7.1 Completed 2014

Action UD 7.2 Completed 2013

Action UD 7.3 Completed 2013

Action UD 7.4 Completed 2014

Action UD 7.5 Completed 2013

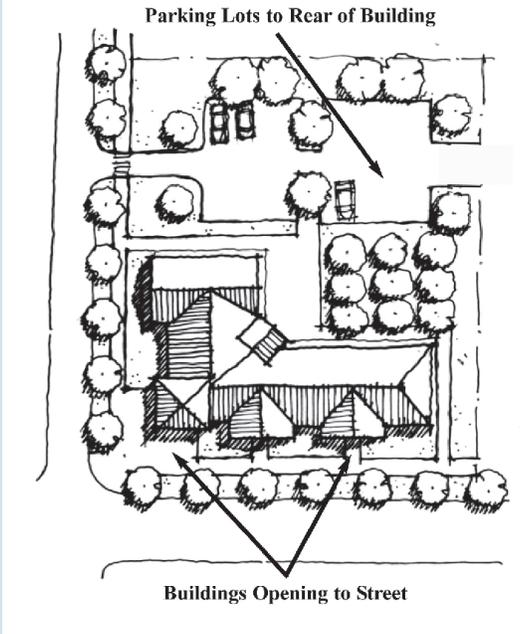
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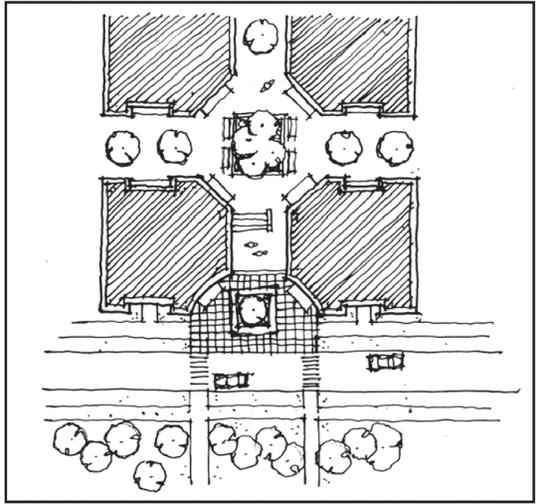
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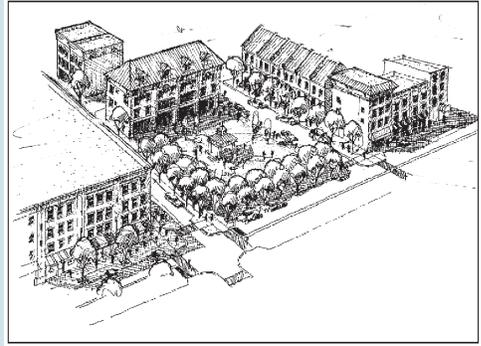
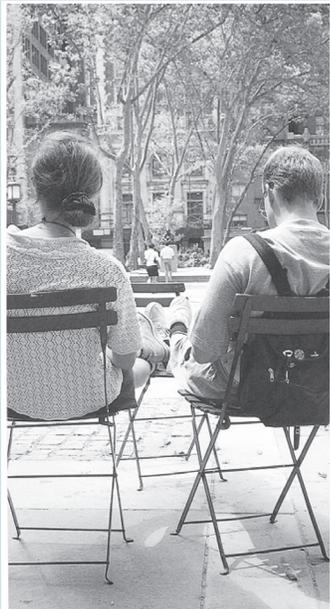
Action UD 7.8 Completed 2013

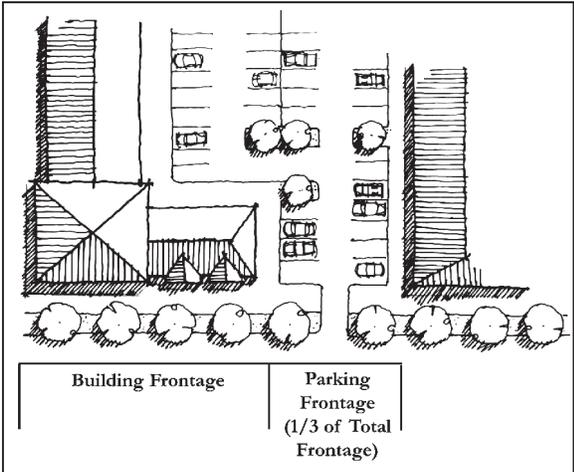
Table UD-1 Design Guidelines for Mixed-use Developments

#	Guideline	
Elements of Mixed-use Developments		
1	All mixed-use developments should generally provide retail (such as eating establishments, food stores, and banks), and other uses such as office and residential within walking distance of each other. Mixed uses should be arranged in a compact and pedestrian-friendly form.	
Mixed-use Areas: Transition to Surrounding Neighborhoods		
2	Within all mixed-use areas, buildings that are adjacent to lower density neighborhoods should transition (height, design, distance, and/or landscaping) to the lower heights or be comparable in height and massing.	
Mixed-use Areas: The Block, The Street, and The Corridor		
3	A mixed-use area's road network should connect directly into the neighborhood road network of the surrounding community, providing multiple paths for movement to and through the mixed-use area. In this way, trips made from the surrounding residential neighborhood(s) to the mixed-use area should be possible without requiring travel along a major street.	<p>Preferred and discouraged street networks</p> <p>Diagram by Callhorpe Associates</p>
4	Streets should interconnect within a development and with adjoining development. Cul-de-sacs or dead-end streets are generally discouraged except where topographic conditions and/or exterior lot line configurations offer no practical alternatives for connection or through traffic. Street stubs should be provided with development adjacent to open land to provide for future connections. Streets should be planned with due regard to the designated corridors shown on the Street Plan.	<p>Streets should connect adjacent developments</p> <p>Diagram by Callhorpe Associates</p>
5	New development should be composed of blocks of public and/or private streets (including sidewalks). Block faces should have a length generally not exceeding 660 feet. Where commercial driveways are used to create block structure, they should include the same pedestrian amenities as public or private streets.	

#	Guideline
Site Design: Building Placement	
6	A primary task of all urban architecture and landscape design is the physical definition of streets and public spaces as places of shared-use. Streets should be lined by buildings rather than parking lots and should provide interest especially for pedestrians. Garage entrances and/or loading areas should be located at the side or rear of a property.
7	<p>Buildings should be located close to the pedestrian-oriented street (within 25 feet of the curb), with off-street parking behind and/or beside the buildings. When a development plan is located along a high volume corridor without on-street parking, one bay of parking separating the building frontage along the corridor is a preferred option.</p> <p style="text-align: right;">Parking should be located behind buildings</p> 
8	<p>If the site is located at a street intersection, the main building of a complex or main part of a single building should be placed at the corner. Parking, loading, or service should not be located at an intersection.</p> <p style="text-align: right;">Locate buildings on the corner to create pedestrian interest and reduce the visual impact of parking</p> 

#	Guideline
Site Design: Urban Open Space	
9	<p>To ensure that urban open space is well-used, it is essential to locate and design it carefully. The space should be located where it is visible and easily accessible from public areas (building entrances, sidewalks). Take views and sun exposure into account as well.</p> <p>Squares are bound by buildings and create public gathering places for special events and casual interaction.</p> 
10	<p>New urban spaces should contain direct access from the adjacent streets. They should be open along the adjacent sidewalks and allow for multiple points of entry. They should also be visually permeable from the sidewalk, allowing passersby to see directly into the space.</p> <p>Internal public space must be designed properly to be safe and usable, providing wide pathways and elements such as fountains and seating.</p> 

#	Guideline
Site Design: Urban Open Space	
11	<p>The perimeter of urban open spaces should consist of active uses that provide pedestrian traffic for the space including retail, cafés, and restaurants and higher-density residential.</p> <p>A public space that is enclosed by active buildings around its perimeter encourages its use and maintains its safety.</p> 
12	<p>A properly defined urban open space is visually enclosed by the fronting of buildings to create an outdoor “room” that is comfortable to users.</p>
Site Design: Public Seating	
13	<p>New public spaces should provide seating opportunities.</p> <p>Movable chairs give people the flexibility to adapt public spaces to their immediate needs.</p> 

#	Guideline
Site Design: Automobile Parking	
14	<p>Parking lots should not dominate the frontage of pedestrian-oriented streets, interrupt pedestrian routes, or negatively impact surrounding developments.</p> <p>When a parking lot is adjacent to a street, screen it using a wall and/or landscaping.</p> 
15	<p>Parking lots should be located behind or in the interior of a block whenever possible. Parking lots should not occupy more than 1/3 of the frontage of the adjacent building or not more than 64 feet, whichever is less.</p> <p>Parking should go in the interior of the block</p> 

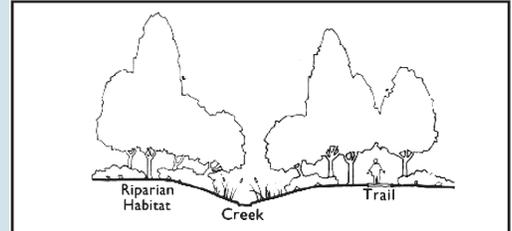
#	Guideline
Site Design: Automobile Parking	
16	<p>Parking structures are clearly an important and necessary element of the overall urban infrastructure, but, given their utilitarian elements, can have serious negative visual effects. New structures should merit the same level of materials and finishes as that a principal building would. Care in the use of basic design elements can make a significant improvement.</p> <p>Parking structures should be placed in mid-block and wrapped with liner buildings that provide active retail storefronts.</p> 
Transit-oriented Planning and Design	
17	<p>Higher building densities and more intensive land uses should be within walking distance of transit stops, permitting public transit to become a viable alternative to the automobile.</p> <p>Bus stops should be architecturally integrated with the surrounding development and provide such basic amenities and shelter and seating.</p> 
18	<p>Convenient, comfortable pedestrian access between the transit stop and the building entrance should be planned as part of the overall pedestrian network.</p>

Guideline

Site Design: Environmental Protection

19 All development should respect natural resources as an essential component of the human environment. The most sensitive landscape areas, both environmentally and visually, are steep slopes greater than 15 percent, watercourses, and floodplains. Any development in these areas should minimize intervention and maintain the natural condition except under extreme circumstances. Where practical, these features should be conserved as open space amenities and incorporated in the overall site design.

Preservation and low-impact uses should define environmentally-sensitive areas



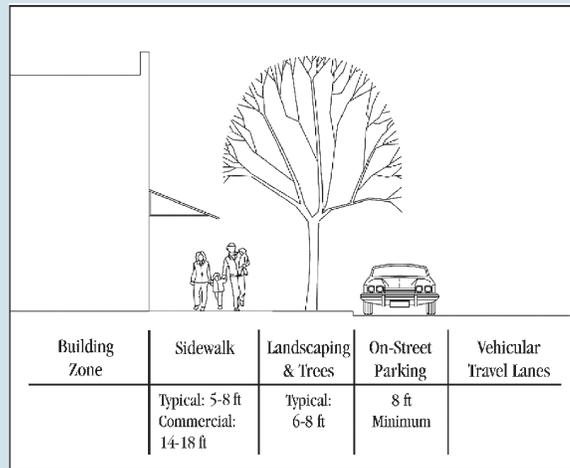
20 All development should incorporate high-quality, productive landscapes that serve multiple functions. Such functions include noise mitigation and absorption; capturing and cleaning of particulate matter; collection and filtering of stormwater; and reduction of the urban heat island effect. Strategies include green walls, trellises, carefully planted trees, green infrastructure, and green roofs.

Street Design: General Street Design Principles

21 It is the intent of these guidelines to build streets that are integral components of community design. Public and private streets, as well as commercial driveways that serve as primary pedestrian pathways to building entrances, should be designed as the main public spaces of the city and should be scaled for pedestrians.

22 Sidewalks should be 5-8 feet wide in residential areas and located on both sides of the street. Sidewalks in commercial areas and other areas where walkability is a focus should be a minimum of 14-18 feet wide to accommodate sidewalk uses such as vendors, merchandising, and outdoor seating.

Wide sidewalks and street trees enhance the pedestrian experience and lead to more street activity

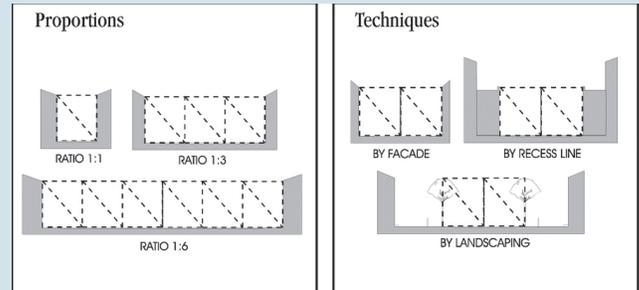


23 Streets should be designed with street trees planted in a manner appropriate to their function. Commercial streets should have trees that complement the face of the buildings and that shade the sidewalk. Residential streets should provide for an appropriate tree canopy, which shadows both the street and sidewalk and serves as a visual buffer between the street and the home. The typical width of the street landscape strip is 6-8 feet. This width ensures healthy street trees, precludes tree roots from breaking the sidewalk, and provides adequate pedestrian buffering. Street trees should be at least 6 1/4" caliper and should be consistent with the city's landscaping, lighting, and street sight distance requirements.

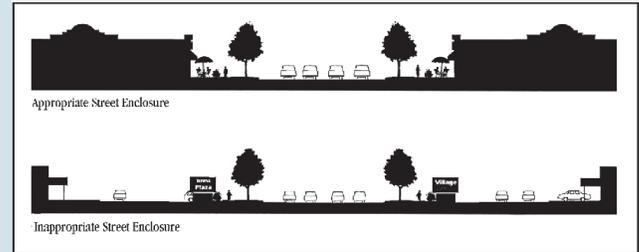
Guideline

Street Design: Spatial Definition

24 Buildings should define the streets spatially. Proper spatial definition should be achieved with buildings or other architectural elements (including certain tree plantings) that make up the street edges aligned in a disciplined manner with an appropriate ratio of height to width.



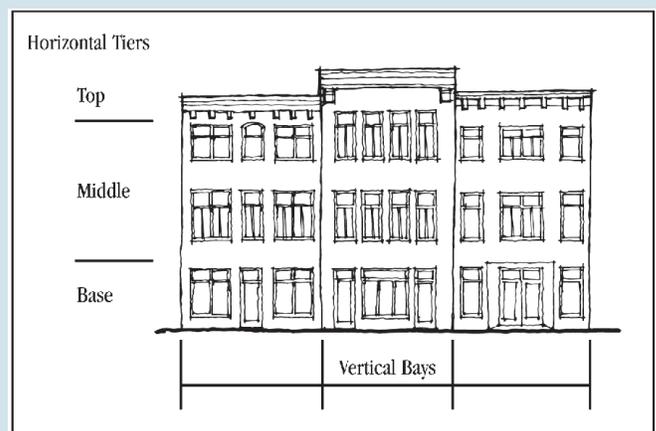
The enclosure of the street is most effectively accomplished using buildings placed behind the sidewalk



Building Design: Facade Treatment

25 The primary entrance should be both architecturally and functionally on the front facade of any building facing the primary public street. Such entrances should be designed to convey their prominence on the fronting facade.

Easily-identifiable entrances should front along the public street

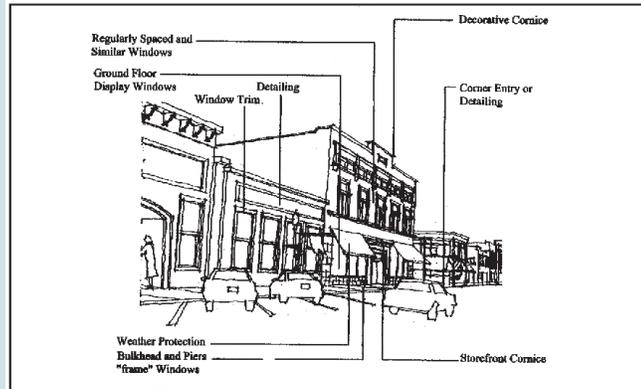


#	Guideline
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Streets and Sidewalks

26 The ground level of the building should offer pedestrian interest along sidewalks. This includes windows, entrances, and architectural details. Signage, awnings, and ornamentation are encouraged.

Prominent windows, entrances, and design details should provide interest at street level



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Guideline

Streets and Sidewalks

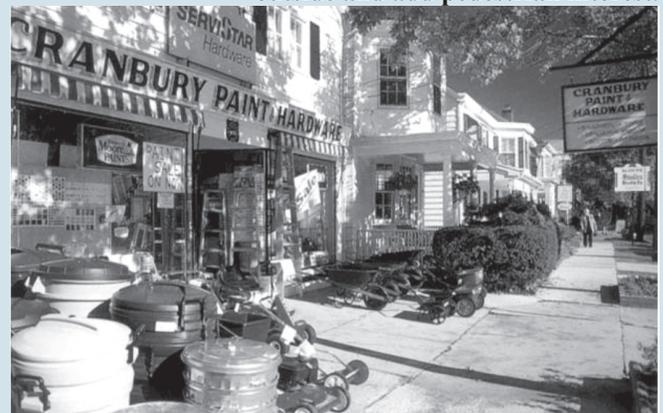
27

The sidewalks should be the principal place of pedestrian movement and casual social interaction. Designs and uses should be complementary to that function.

Moore Square is a good example of a walkable urban village with a continuing tradition of street-level retail and well-designed facades that create a wonderful place.



Small sidewalk displays help bring the indoors outside and add pedestrian interest.



11.8 Transit-supportive Design

Raleigh, Wake County and the city’s regional and national partners continue to expand transit options in the city and region. Transit enhances mobility options, reduces vehicle miles traveled, and supports dense, mixed-use development around planned transit stations, all of which require and also provide for unique urban design strategies. Raleigh’s Strategic Plan initiative GNR 4.5 calls for “guidelines and standards for transit supportive development” to guide the quality of developments oriented around transit stations.

Transit-supportive design guidelines encourage greater intensity of use and bulk immediately surrounding transit stations, with development tapering down in both use and size as distance from the station increases. Transit-supportive design features include wide sidewalks and bicycle facilities to welcome non-auto uses, ample public realm and streetscape amenities to accommodate transit users waiting for or alighting from transit, engaging yet simple wayfinding, and structured parking designed to make efficient use of land limit visual and roadway clutter.

See also ‘4.4 Public Transportation.’

Policy UD 8.1 Transit-oriented Development

- Promote dense, mixed-use development within the core area around transit stations. Development intensity should be greatest within walking distance of existing and proposed rail stations and bus rapid transit stations.



Policy UD 8.2 Transit Area Transitions

- There should be a transition of use, intensity and scale from higher-density transit corridors to adjacent neighborhoods. Developments of greater bulk and height in areas should be located immediately surrounding transit stations. As distance from such stations increases, development should taper down in bulk and height in order to balance the needs of transit-supportive density with established neighborhood character.



Policy UD 8.3 Transit Area Infill

Encourage sensitive densification in areas surrounding transit routes by promoting “missing middle” housing and accessory dwelling units in nearby residential areas, and the retrofit or redevelopment of existing underutilized properties.



Policy UD 8.4 Transit-supportive Pedestrian Networks

- Sidewalks in areas within walking distance of rail transit stations and bus rapid transit stops should be no less than eight feet wide and should be accompanied by complementary streetscape elements such as plantings, bike racks, and furniture, including places to sit. Sidewalks in these areas should be prioritized over sidewalks in non-transit areas.



Policy UD 8.5 Transit-supportive Bicycle Networks

- Areas within two miles of fixed-rail and bus rapid transit stations should include on-street bike lanes and off-street bicycle paths, where feasible. Where such improvements cannot be made, traffic calming devices and other streetscape design interventions should be used to encourage bicycling to and from transit stations.



Policy UD 8.6 Auto-oriented Uses in Transit Area

● Automobile-oriented uses such as drive-thrus, which detract from the character and function of transit corridors and negatively affect the pedestrian environment, should be located away from transit stations. 

Policy UD 8.7 Connections to Transit Stops

Encourage additional street and pedestrian connections to help minimize travel distances to transit stops. When new street connections cannot be made, mid-block pedestrian connections can minimize walking distance for transit users. 

Policy UD 8.8 Station Area Public Realm

● Private and public development within one-quarter of a mile of fixed-rail and bus rapid transit stations should include streetscapes and public spaces that allow transit users places to sit and rest when waiting for or alighting from transit. 

Policy UD 8.9 Transit Wayfinding

Within two miles of fixed rail and bus rapid transit stations, provide simple and easily identifiable signage and other wayfinding devices to promote ease of transit use. 

Policy UD 8.10 Transit Area Parking

Areas within close proximity of fixed rail and bus rapid transit stations are ideally suited for park-and-ride locations. Such parking facilities should be structured, rather than large lots, to limit visual and roadway clutter. 

Policy UD 8.11 Transit Area CPTED

Promote the use of Crime Prevention Through Environmental Design techniques within one mile of fixed rail and bus rapid transit stations to ensure that transit users are safe and comfortable while accessing and alighting from transit. 

Action UD 8.1 Station Area Plans

Study and implement land use, transportation and urban design recommendations for areas within one-half mile of fixed rail stations and one-quarter mile of bus rapid transit stations. Recommendations should include guidance on density, use and bulk transitions from station areas to surrounding neighborhoods.

Action UD 8.2 Transit-supportive Pedestrian Networks

Create and implement pedestrian infrastructure plans in all areas within a one-mile radius of fixed-rail and bus rapid transit stations.

Action UD 8.3 Transit-supportive Bicycle Networks

Create and implement bicycle infrastructure plans in all areas within a two-mile radius of fixed-rail and bus rapid transit stations.

Action UD 8.4 Station Area Parking Facilities

Pursue acquisition and/or development of public parking facilities immediately surrounding transit stations through public funds and incentives to private developers.