RESOLUTION NO. 2013 – 802

A RESOLUTION TO AMEND THE 2030 COMPREHENSIVE PLAN

CP-3-13

WHEREAS, the purpose of the 2030 Comprehensive Plan is to provide policy guidance to elected and appointed officials, City staff and the general public; and

WHEREAS, the recently-adopted Unified Development Ordinance contains a number of transportation enhancements; and

WHEREAS, the amendments to the Comprehensive Plan are necessary to align with language contained within the recently adopted Unified Development Ordinance; and

WHEREAS, the new street typology map will provide policy guidance related to the street classification system in the City of Raleigh; and

WHEREAS, these enhancements were reviewed and discussed with public input; then

THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF RALEIGH, NORTH CAROLINA that the 2030 Comprehensive Plan be amended to include the edits identified in CR-11545 of the Planning Commission known as CP-3-13 as included on Attachment A.

Adopted: September 3, 2013

Distribution: Planning – Silver, Bowers, Crane

Attachment A - Comprehensive Plan Recommendations

Section 1: Introductory Text

This item is comprised of one amendment. This amendment would remove the term "thoroughfare" and replace with "streets." This amendment would occur on page 12 within the Land Use element in a section that describes the relationship between land use and zoning.

Item 1.1: **Land Use and Zoning** (Page 12)
Both the single-family and multi-family areas lack the street connectivity that helps facilitate walking, which in turn funnels all car trips to major ~~thoroughfares~~ streets even for local trips such as grocery shopping, and presents challenges to first responders in emergencies.

Section 2: Future Land Use Element

This item is mostly comprised of one simple amendment: removing the term "thoroughfare" and replacing it with "major street" or another comparable street section contained within the UDO. The major street category in the UDO is similar in nature to the thoroughfare designation. The categories to be altered are: Office and Residential Mixed Use, Office/Research and Development, Business and Commercial Services, and General Industrial.

Item 2.1: Future Land Use Categories (Pages 33-35)

Office Residential—Mixed Use
This category is applied primarily to frontage lots along ~~thoroughfares~~ major streets where low density residential uses are no longer appropriate, as well as office parks and developments suitable for a more mixed-use development pattern. This category encourages a mix of moderate to medium density residential and office use. Retail not ancillary to employment and/or residential uses is discouraged so that retail can be more appropriately clustered and concentrated in retail and mixed-use centers at major intersections and planned transit stations. OX is the closest corresponding zoning district. The Office and Institution zones provide the closest match with the proposed use pattern, although higher-impact uses such as hotels and hospitals are not contemplated or recommended in this land use category except as limited uses in appropriate locations. Heights would generally be limited to four stories when near neighborhoods, with additional height allowed for larger sites and locations along major corridors where adjacent uses would not be adversely impacted.

Office/Research and Development
This category identifies major employment centers where housing is not considered an appropriate future land use. Principal uses are office parks, free-standing office buildings or corporate headquarters, banks, research and development uses, hotels, and ancillary service businesses and retail uses that support the office economy. This category can also apply in appropriate locations to office-industrial hybrids such as light fabrication and assembly ancillary to an R&D use, flex parks, and office-distribution combinations. OP is the most appropriate zoning district for this category, although OX could be used if conditioned to restrict housing development.

Business and Commercial Services
This category is for higher-impact or "heavy" commercial activities that would not be compatible with residential uses, or that have locational needs (such as ~~thoroughfare or interstate frontage~~ frontage along freeways, expressways, or other major streets) that are not conducive to mixed use development. Examples would include auto dealerships, auto repair and service businesses, lumberyards, nurseries, contractor suppliers, warehousing, printers, truckstops, distribution centers, and other uses that are quasi-industrial or highway-oriented in character. These areas would generally be zoned IX. Housing would be limited, but live-work units or housing combined with an employment-generating ground floor could be permitted in certain locations.

General Industrial
This category designates areas programmed for industrial land uses, including manufacturing, concrete plants and other extractive industries, junkyards/ scrap yards, and outdoor storage uses. These uses tend to have greater impacts than the commercial service uses, and may require additional buffering or separation from nearby uses. Some of these uses are dependent on rail for freight movement, and others require convenient ~~thoroughfare or interstate~~ access to freeways or other major streets for truck deliveries and shipments. Railyards, power plants, and similar uses are also included in this designation. Most of these areas should be zoned IH to prevent use conflicts with housing or retail.

Item 2.2: Land Use Policy Guidance (pages 47-58)
This item would replace the term "thoroughfare" with the term "major" in several policies and some land use narrative.

Policy LU 4.10 - Development at Freeway Interchanges
Development near freeway interchanges should cluster to create a node or nodes located at a nearby intersection of two streets, preferably classified ~~minor thoroughfare~~ two-lane avenue or higher, and preferably including a vertical and/or horizontal mixture

of uses. Development should be encouraged to build either frontage or access roads behind businesses to provide visibility to the business from the major ~~thoroughfare~~ street while limiting driveway connections to the major ~~thoroughfare~~ street. (4)

Policy LU 7.3 - Single-Family Lots on ~~Thoroughfares~~ Major Streets *(page 51)*
No new single-family residential lots should have direct vehicular access from ~~thoroughfares~~ major streets, in an effort to minimize traffic impacts and preserve the long-term viability of these residential uses when located adjacent to ~~thoroughfares~~ major streets. (3, 4)

A.10 Retail Land Uses (*page 57*)
Raleigh's retail uses are primarily located within mixed-use centers—such as downtown Raleigh, North Hills, and Crabtree Valley—and along commercial corridors. Downtown Raleigh contains a number of mixed-use districts—Fayetteville Street, Moore Square, Glenwood Avenue—that provide an expanding base of local retail goods and services and limited national retailers. Cameron Village is one of the first retail shopping centers built in this country after WWII, and offers a strong and diverse mix of local and national retailers in a pedestrian-friendly environment. North Hills is the location of Raleigh's first enclosed retail shopping mall, built with large national department stores to anchor smaller national and local retailers. North Hills is now a pedestrian-oriented lifestyle center with a greater mix of office and residential uses. Crabtree Valley, Raleigh's second and larger enclosed shopping mall, is also undergoing a transformation into a more mixed-use center, and is attracting more retail uses through infill development. Triangle Town Center is Raleigh's most recently built enclosed retail shopping mall. The remainder of Raleigh's retail uses are located in commercial shopping centers along the City's ~~thoroughfares~~ major streets. Raleigh's retail policies focus on strengthening its current mixed-use centers, encouraging retail uses within new pedestrian-friendly, mixed-use centers, and minimizing the impact of auto-oriented commercial retail uses.

Policy LU 10.4 - Siting of Regional Retail (*page 58*)
Regional retail uses—including big box, power centers, and regional malls—should be located where access is available from at least two roadways ~~classified as Major Thoroughfare or higher on the Thoroughfare Map (see Element B: 'Transportation' for the Thoroughfare Map, Map T-1)~~ providing a minimum of four-lanes each. Access should be obtained from both roadways. (3, 4)

Policy LU 10.6 - Retail Nodes *(page 58)*
Retail uses should concentrate in mixed-use centers and should not spread along ~~thoroughfares~~ major streets in a linear "strip" pattern unless ancillary to office or high-density residential use. (3, 4)

Section 3: Transportation Element

Many of the proposed amendments are located within the Transportation Element. The amendments would remove terms "arterial" "collector" and "thoroughfare" in favor of UDO street cross sections. A new map is introduced to replace the existing *Arterials, Collectors and Thoroughfares* map. The new map provides street designations consistent with the street cross sections in the UDO. Action items that have been completed would be removed from the document.

Item 3.1: Transportation Policies and Narrative (pages 62-66)
Outdated language is removed in the narrative, while the terms "arterial," "collector" and "thoroughfare" are removed and replaced with UDO street cross section types.

Raleigh has a well-established roadway network of ~~approximately 130 miles of arterials and thoroughfares and 1,631 miles of collectors and local streets~~ streets, arteries, expressways and freeways. While some of these roads are maintained by the NCDOT, the City itself maintains ~~approximately 1,017 miles of thoroughfares, collectors, and local streets~~ over 1,000 miles of streets, as well as 1,190 miles of sidewalks, nearly ~~60~~ 100 miles of bikeable greenway trails and bikeways, and ~~4~~ 22 miles of bicycle ~~lanes~~ facilities.

By 2035, Raleigh's roadway network is projected to become more congested, with both the amount of time and number of miles spent on the roads increasing. Vehicle miles traveled (VMT) and vehicle hours traveled (VHT) are both projected to increase from 2005 levels by over 50 percent – travel along ~~freeway, collector, and local roadways~~ freeways and other major streets will be most affected. In addition, the total number of trips (AM, PM, and overall) taken on Raleigh's road network is projected to increase by over 50 percent. Capital Boulevard (north of I-540), I-540 (from Capital Boulevard to I-40), and U.S. 401 (north of I-540) in north Raleigh are three roadways where both the traffic and level of service are projected to worsen greatly from 2005 to 2035. To affect these projections, not only will existing facilities and services have to be improved, but new mobility options – including increased and higher capacity transit service – must be created to meet the growing needs of Raleigh through the year 2030.

Traffic calming will continue to be an issue for many neighborhoods as traffic levels increase on major ~~thoroughfares~~ streets and drivers seek alternative routes using local residential streets;
There are limited multi-modal facilities

B.1 Land Use and Transportation Coordination *(Page 64)*
Land use patterns have a significant effect on trip generation and travel behavior. Compact, mixed-use and walkable developments mitigate traffic generation and ~~thoroughfare~~ impacts to the street system by shortening trip distances, capturing a

greater share of trips internally, and facilitating transit and non-motorized trip-making. Successful mixed-use areas with multi-modal access can thrive with lower parking ratios, freeing up land and capital for open space amenities and productive, revenue-producing uses.

Sensitive Area ~~Thoroughfares~~ Streets *(Page 65)*
Sensitive area ~~thoroughfares~~ streets are ~~thoroughfares~~ generally designed with a shoulder and swale section. They are ~~defined as any major or minor thoroughfare located~~ typically utilized within a Metro Park or Watershed Protection Overlay District, or in other areas approved by the City Council. Special design standards for these ~~thoroughfares~~ streets are contained within the ~~Streets, Sidewalks, and Driveway Access Handbook~~ Raleigh Street Design Manual.

Action T 1.3 - Context Sensitive Solutions (*page 66*)
Adopt Context Sensitive Solution practices to determine the most appropriate transportation improvements to minimize environmental impacts and serve adjacent and future land uses within a multi-modal network. These practices should be included in a revision to the ~~Streets, Sidewalks, and Driveway Access Handbook~~ Raleigh Street Design Manual.

Thresholds for Transportation Impact Analysis (*page 66*)
NCDOT has adopted guidelines for when and how a Transportation Impact Analysis (TIA) should be performed. Many local jurisdictions, including Wake County, have also adopted TIA thresholds, typically lower than those chosen by NCDOT. NCDOT recommends a TIA when one of the following conditions is met:

- Access is from a ~~major arterial roadway~~ four-lane street or greater;
- Daily trips exceed 3,000 vehicles per day (VPD);
- Within 1,000 feet of an interchange;
- Affects a location with a high crash history;
- Involves existing or proposed median crossover;
- Involves an active roadway construction project; or
- Involves an active TIP project.

Item 3.2: Section B.2 (pages 66-70)
This item would completely replace the existing text contained within section B.2 of the Transportation Element. The revised text would use the same terminology and street section types as the UDO.

B.2 Roadway System and Transportation Demand Management

Raleigh is currently served by a mixture of streets striking different balances between the two major functions: providing mobility for through traffic, and providing access to adjacent land uses. Historically, Raleigh's roadway system was planned according to the common functional classification scheme of arterials, thoroughfares and collectors. This approach, while useful for determining road function and width, did not provide for much variation in street design based on land use context, nor did it identify how to implement a "complete streets" approach to integrating other modes (pedestrians, cyclists, and transit riders) within the right-of-way.

With the adoption of a new development code in 2013, Raleigh has implemented an entirely new street classification system that is reflected in three locations: the policy basis for the street system is described in this section of the *Comprehensive Plan*; the regulatory requirements are set forth in the *Unified Development Ordinance*; and the engineering standards are detailed in the *Raleigh Street Design Manual*. The new street classification system addresses contexts ranging from high volume avenues to low-speed neighborhood streets and mixed-use main streets. It also sets forth requirements for bicycle and pedestrian facilities within streets. The function and purpose of each of the street types illustrated on **Map T.1** are described below:

Street System

Map T.1 reflects the adopted Street Plan for the urbanized area, approved by the City Council and set forth in the *Unified Development Ordinance*. The adopted Street Plan is a component of the regional Comprehensive Transportation Plan, which is mutually approved by the governing bodies of all local jurisdictions in the region through the Capital Area Metropolitan Planning Organization (CAMPO) and the North Carolina Department of Transportation (NCDOT).

The street system is classified into six major categories:

- **Sensitive Area Streets** for locations such as watersheds or other environmentally sensitive lands where storm sewer infrastructure is not available or recommended.
- **Local Streets** provide access to primarily residential areas.
- **Mixed Use Streets** provide access to areas with ground floor commercial uses and generally feature on-street parking.
- **Major Streets** are facilities of four or more lanes that primarily serve mobility functions while providing varying levels of access to adjacent land uses.
- **Industrial and Service Streets** serve low volumes and provide access to industrial and commercial areas where demand for pedestrian and bicycle amenities is low.
- **Limited Access Highways** are major transportation facilities serving heavy volumes of traffic, often of a regional nature. These facilities are designed to

handle the heavy peak hour demands of commuting, or to serve concentrated destinations such as sports and entertainment facilities.

A more detailed description of these categories and the specific street types found in each is provided below:

Sensitive Area Streets

Portions of the City adjacent to environmentally-sensitive areas require streets to be designed in a manner that reflect this context and the need for a higher degree of environmental and/or aesthetic control. The City has utilized sensitive area street designs for some time within designated watershed areas and adjacent to Umstead State Park. Streets in these areas have historically employed narrower impervious surface footprints and utilized open channel shoulder and ditch cross-sections. Newer facility designs for this class of streets have included pedestrian or greenway infrastructure located behind the ditchline. The following roadway cross-sections are intended for use in these "Sensitive" areas.

- **Sensitive Area Parkways** are four-lane streets intended to support regional travel. Medians are a standard feature of parkways in almost every case, except where a narrower cross-section is needed to minimize right-of-way and environmental impact.

- **Sensitive Area Avenues** are two-lane streets for use in low-intensity areas. They have relatively narrow paved widths, which includes paved shoulders for bicycle and pedestrian uses in retrofit situations lacking sidewalks.

- **Sensitive Area Residential Streets** are appropriate in rural conditions with large lot homes, typically without water and sewer provisions.

Local Streets

The local street system provides direct access to individual property throughout the City and makes up the majority of the City's street inventory. Design of these streets can provide substantial flexibility relative to the adjacent land use context and an area's multimodal transportation needs. However the street design must not be taken for granted, as poorly designed local streets can lead to unsafe driving conditions, negative aesthetics, and poor bicycle and pedestrian access for the community. Local Streets should place a high priority on pedestrian accessibility, and they should also be considered as low speed bicycle and vehicle routes. Local streets should be relatively short in total distance and used less frequently compared to other street typologies. Sidewalks on both sides of the street should be provided in all cases. Travel lanes should not be striped, consistent with the flexible shared-use nature of these streets.

- **Neighborhood Local** streets come in three varieties that vary in the width allocated to travel and parking lanes. At their narrowest, opposing cars may need to yield to one another in order to pass. Street widths should be chosen based on anticipated traffic demand and consistent with the *Raleigh Street Design Manual*.
- **Multifamily Streets** are a special street type for use in townhouse and apartment/condominium communities where much of the parking demand is accommodated in continuous parking areas adjacent to the public right-of-way. These streets look like a street with parallel, diagonal or perpendicular street, but with an arrangement by which the parking is outside of the public right of way.

Mixed Use Streets

Mixed-use streets come in two basic types: Avenues, which are intended for areas of more suburban development, and Main Streets, which are appropriate for urban mixed-use settings where buildings front on the sidewalk.

- **Mixed-Use Avenues** are two- or three-lane facilities that provide access to abutting commercial and mixed land uses as well as higher density residences. They serve as primary bicycle and pedestrian routes with bicycle lanes and sidewalks, and may also accommodate local transit vehicles. Avenues may feature a median or center turn lane, and may provide on-street parking.

- **Main Streets** are intended for denser, more urban areas with lower vehicular speeds. Unlike Avenues, bike lanes are not provided, as cyclists are intended to use the full travel lane. Wider sidewalks and the option of diagonal on-street parking are also provided.

Major Streets

The Major Street category includes Avenues of four or more lanes, and also introduces a new street type, the multi-way boulevard.

- **Avenues** functioning as Major Streets have a similar purpose to two- and three-lane Avenues but apply to thoroughfare and arterial streets that require four or more lanes to accommodate traffic demand. Avenues with four or more lanes always feature medians. Signalized intersections are spaced further apart on major streets to better facilitate vehicular mobility. Major transit routes are often found on these corridors. Midblock pedestrian crossings shall be installed on long blocks to maintain walkability in areas where pedestrian usage could be heavy and to provide easy access to transit facilities. On-street parking on facilities of six or more lanes is not recommended; such streets should be designed as Boulevards.

- **Boulevards** represent a unique street cross-section that are intended to provide a high level of both access and mobility—accommodating a significant volume of through traffic, while also providing a high level of access to urban land uses with welcoming pedestrian amenities. Multi-way boulevards solve this conflict by using medians to separate through travel lanes from lanes used for parking access and bicycle circulation. Pedestrian accessibility is typically provided directly adjacent to the land uses and separated from the through travel lanes.

Industrial and Service Streets

Streets within industrial and service areas typically carry lower traffic volumes but accommodate a higher proportion of truck traffic. Pedestrian facilities do not need to be as generous as in mixed-use areas, and separate bicycle facilities are not provided. On-street parking may be provided along these streets, however parking may be restricted in cases where industrial access points require additional space to accommodate larger vehicles.

Limited Access Highways

Limited Access Highways include both limited-access freeways and expressways. **Freeways** are multi-lane, median-divided highways designed to the highest possible standard. Freeways are characterized by complete control of access and are subject to regulation by NCDOT and the Federal Highway Administration (FHWA). These facilities are designed to carry heavy amounts of traffic at higher rates of speed and do not typically include any multimodal infrastructure within the corridor. Access is provided through grade-separated interchanges and no perpendicular access via at-grade intersections or driveways is allowed. Examples of this type of roadway are Interstates 40 and 440. **Expressways** are multi-lane, median-divided highways with lower design standards than freeways and a high degree of access restriction, however at-grade intersections, traffic signals, and direct driveway access may be utilized. Multimodal infrastructure within these corridors is usually provided via separated, parallel facilities. Capital Boulevard between Wade Avenue and Wake Forest Road is an example of an expressway.

Table T-1 Summary of General Street Capacity

Street Type	Typical Two-Way Volumes	Typical Section	Examples
Freeway	> 40,000 Vehicles per Day (VPD)	At least two or three lanes in each direction, with medians no direct	I-40, I-440, US 64 Bypass

		driveway access	
Eight-Lane Street	40,000-60,000 VPD	Four lanes in each direction with medians and limitations on driveway access	Portions of Glenwood Ave., Capital Blvd., S. Saunders St.
Six-Lane Street	25,000 – 45,000 VPD	Three lanes in each direction, with medians or a center turn lane and limitations on driveway access	US 401 (Louisburg Rd.), NC 50 (Creedmoor Rd.), Wake Forest Rd., Falls of Neuse Rd., Hammond Rd.,
Four-Lane Street	15,000 – 35,000 VPD	Two lanes in each direction, with medians or a center turn lane and varying limitations on driveway access	Millbrook Rd., Lynn Rd., Hillsborough St., Blue Ridge Rd., Leesville Rd., Martin Luther King Jr. Blvd., Brier Creek Pkwy.
Three-Lane Street	8,000 – 20,000 VPD	At least one lane in each direction, with medians or a center turn lane	Clark Avenue, Ray Rd., Newton Rd., Lassiter Mill Rd., Peace St.
Two-Lane Street	<10,000 VPD	One lane in each direction with various configurations for on-street parking	Various

Special Study Areas

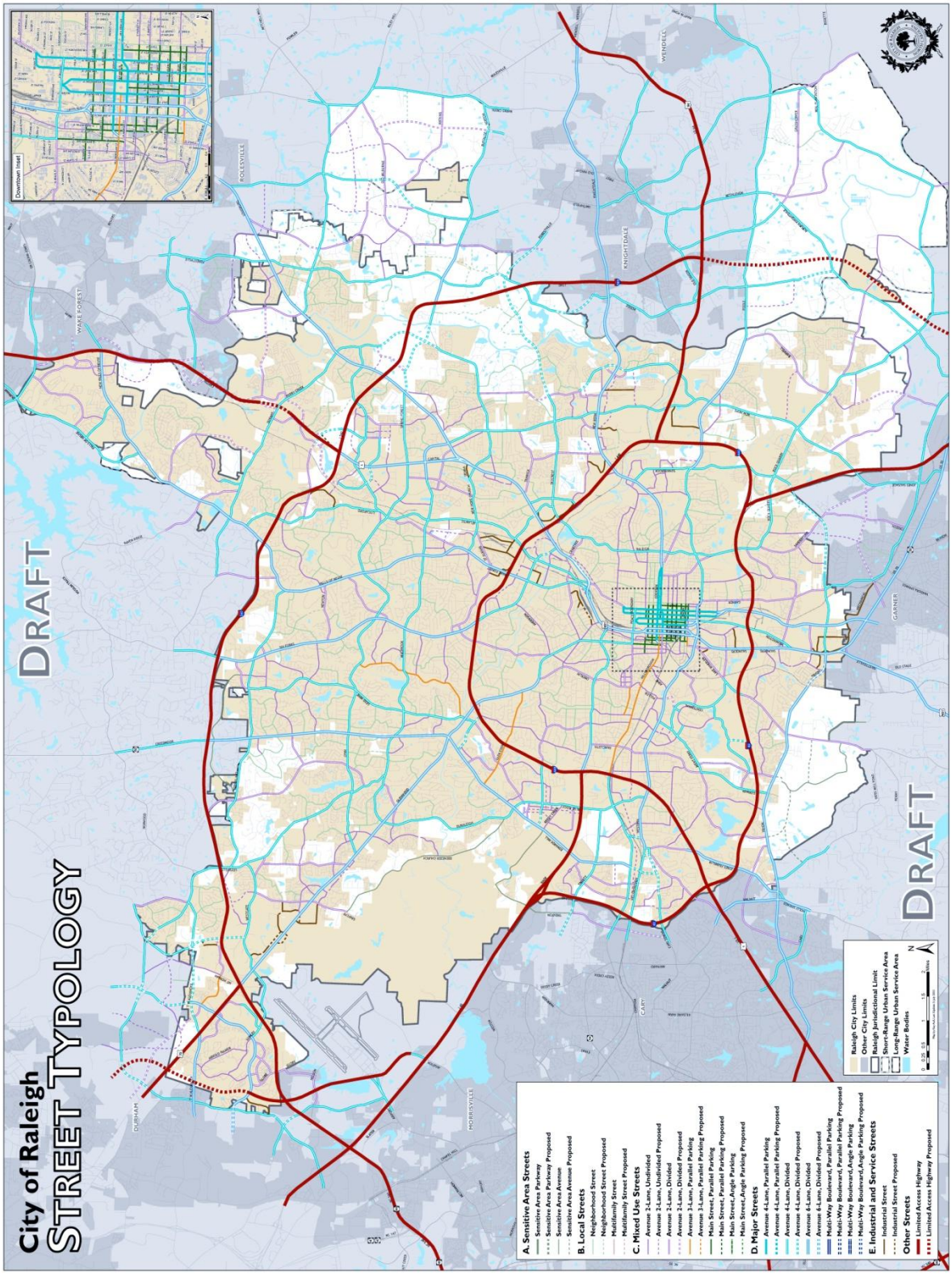
During the comprehensive planning process, five specific areas of Raleigh were identified for focused transportation studies to either determine preferred roadway alignments, locate potential new connections, or identify other roadway projects needed to address specific transportation and land use issues or problems. Some areas

are forecasted to suffer from significant congestion based 2040 growth projections; some require increased connectivity to set the stage for future redevelopment; and in some cases the City and affected property owners would greatly benefit from resolving uncertainty regarding future alignments. Two of the original five area studies have been completed; the remaining three areas and the study purpose are described below:

1. Six Forks/Wake Forest Road Corridor: Evaluate the growth projections for this area from I-440 to Wake Forest Road. Future volume projections indicate roadways in this area may be significantly over capacity in the future.
2. Centennial Parkway/Lake Wheeler Road/Maywood Avenue Area: Evaluate future roadway improvements and connectivity needs, consistent with the recommendations of the "Big Ideas" workshops to accommodate a new land use vision for this area.
3. Atlantic Avenue Corridor: Evaluate the growth projections for the corridor between Capital Boulevard and Millbrook Road. Future volume projections indicate Atlantic Avenue may be over capacity in the future and may warrant reclassification.

Item 3.3 Map T-1 Arterials, Thoroughfares and Collectors (Page 69)

This amendment would remove existing Map T-1 and replace it with a new Map T-1. The new map would identify the street typology based on the UDO classifications.


City of Raleigh
STREET TYPOLOGY
DRAFT
DRAFT
Downtown Inset
A. Sensitive Area Streets
Sensitive Area Parkway
Sensitive Area Parkway Proposed
Sensitive Area Avenue
Sensitive Area Avenue Proposed
B. Local Streets
Neighborhood Street
Neighborhood Street Proposed
Multifamily Street
Multifamily Street Proposed
C. Mixed Use Streets
Avenue 2-Lane, Undivided
Avenue 2-Lane, Undivided Proposed
Avenue 2-Lane, Divided
Avenue 2-Lane, Divided Proposed
Avenue 3-Lane, Parallel Parking
Avenue 3-Lane, Parallel Parking Proposed
Main Street, Parallel Parking
Main Street, Parallel Parking Proposed
Main Street, Angle Parking
Main Street, Angle Parking Proposed
D. Major Streets
Avenue 4-Lane, Parallel Parking
Avenue 4-Lane, Parallel Parking Proposed
Avenue 4-Lane, Divided
Avenue 4-Lane, Divided Proposed
Avenue 6-Lane, Divided
Avenue 6-Lane, Divided Proposed
Multi-Way Boulevard, Parallel Parking
Multi-Way Boulevard, Parallel Parking Proposed
Multi-Way Boulevard, Angle Parking
Multi-Way Boulevard, Angle Parking Proposed
E. Industrial and Service Streets
Industrial Street
Industrial Street Proposed
Other Streets
Limited Access Highway
Limited Access Highway Proposed
Raleigh City Limits
Other City Limits
Raleigh Jurisdictional Limit
Short-Range Urban Service Area
Long-Range Urban Service Area
Water Bodies
N
0 0.25 0.5 1 1.5 2 Miles
Projection: Lambert Conformal Conic
DURHAM
WAKE FOREST
ROLESVILLE
KNIGHTDALE
WENDELL
GARNER
CARY
MORRISVILLE

Item 3.4 Transportation Element: (Pages 71- 96)
This amendment would remove the reference to thoroughfares and replace with the appropriate street classification contained within the UDO. Completed transportation studies would be removed from an action item. Completed actions that direct staff to alter the *Streets* handbook would be removed.

Policy T 2.9 - Curb Cuts *(Page 71)*

The development of curb cuts along public streets—particularly on ~~thoroughfares and arterials~~ major streets —should be minimized to reduce vehicular conflicts, increase pedestrian safety, and improve roadway capacity. (3, 4, 5)

Action T 2.7 - Special Transportation Studies *(Page 74)*

Undertake special studies for the ~~five~~ three areas identified in the introduction to this section:
~~1. Gorman Street Extension Corridor~~
~~2~~ 1. Six Forks/Wake Forest Road Corridor
~~3~~ 2. Centennial Parkway/Lake Wheeler Road/Maywood Avenue Area
~~4~~ 3. Atlantic Avenue Corridor
~~5. Crabtree Valley~~

B.3 Complete Streets: Hierarchy and Design *(Page 75-76)*

~~Currently, Raleigh's Thoroughfare Plan (Comprehensive Transportation Plan) classifies roadways based on vehicle capacity and function. The resulting classifications—major and minor thoroughfares and arterials—provide little to no guidance on how such streets should relate to the land uses they serve, and the role of pedestrian and bicycle circulation and transit. Looking long-term, there is a desire to move to a new typology that would include the dimensions of street character and land use in addition to capacity and function, and to broaden the notion of capacity to encompass the movement of people, not just cars. Classification might include typologies such as Main Streets and Boulevards, for example. It is recommended that the City undertake an in-depth study and evaluation of its hierarchy based on the Complete Streets concept~~
While the CAMPO Comprehensive Transportation Plan classifies roadways based on vehicle capacity and function, the Raleigh Street Plan provides guidance on how streets should relate to the land uses they serve, and the role of pedestrian and bicycle circulation and transit. Raleigh has transitioned to a new typology that includes the dimensions of street character and land use in addition to capacity and function, and broadens the notion of capacity to encompass the movement of people, not just cars.

The new classifications include typologies such as Avenues, Boulevards, Parkways, and Main Streets.

~~The current classification system is deeply embedded in the transportation planning framework promulgated by CAMPO and NCDOT, making such a move difficult at present. As an alternative, this Comprehensive Plan updates the traditional Thoroughfare Map, displayed in Map T-1, and further applies a new system of street overlays as part of the Growth Framework Map (see Map F-1 in 2 'Framework'). There are four types of corridors identified on the Map: highway, multi-modal, urban, and parkway. These types have been applied to all existing and proposed streets in Raleigh classified as minor thoroughfares or higher. It modifies the existing thoroughfare map in the following ways:~~ NCDOT is considering similar transitions to its street classification system as part of its implementation of its Complete Streets Policy. The Street Map, displayed in Map T-1, further applies a new system of street overlays as part of the Growth Framework Map (see Map F-1 in 2 'Framework'). There are four types of corridors identified on the Map: highway, multi-modal, urban, and parkway. These types have been applied to all existing and proposed major streets within the City.

Highways: These are limited-access, grade separated roadways providing little to no direct access to adjacent land uses. ~~Such streets are classified as primary arterials on the Thoroughfare Plan~~ NCDOT maintains jurisdiction over these facilities and no changes are proposed to how these are planned and developed.

~~**Action T 3.3** - Streets, Sidewalks, and Driveway Access Handbook~~ *(page 78)*
~~Update the Streets, Sidewalks, and Driveway Access Handbook to better address all modes of travel. Examples include provisions for bicycles in the road bed cross-section; requiring sidewalks on both sides of a greater number of streets; and addressing how different transit modes might be accommodated within the right-of-way.~~

~~**Action T 5.3 Sidewalk Requirements**~~ *(page 91)*
~~Revise the city's Streets, Sidewalks, and Driveways Access Handbook to require sidewalks on both sides of the street for most contexts.~~

Action T 6.2 - Shopping Center Park and Ride (*Page 94-95)*
Require shopping centers on existing or planned transit routes that provide 400 or more parking spaces to designate at least 5 percent of the required spaces as "Park and Ride" spaces. In addition, amend the parking design standards in the ~~Streets, Sidewalks, and Driveway Access Handbook~~ Street Design Manual to encourage these spaces to be contiguous and located near the transit facility. See also B.5 'Public Transportation'.

B.7 Transportation Safety Improvements (*page 95*)
While it is important to provide a multi-modal transportation system that efficiently moves users to their destinations, it is more important that the users arrive to their

destinations safely. Reducing the conflict points between modes, such as vehicles with bicycles and pedestrians, can greatly enhance safety.

Traffic calming is another way to enhance safety and is a common desire in many neighborhoods and communities. As traffic levels increase on major ~~thoroughfares~~ streets, drivers will use alternative routes to make their trips.

Policy T 7.2 - Traffic Calming (*page 96)*
Incorporate traffic calming techniques and treatments into the design of new or retrofitted local and ~~collector~~ neighborhood streets, as well as within school, park, and pedestrian-oriented business areas, to emphasize lower auto speeds, encourage bicycling and walking, and provide pedestrians with a convenient, well-marked, and safe means to cross streets. (3, 5, 6)

Policy T 7.5 - Reducing Cut-Through Traffic *(page 96)*
Work with the community on an individual-project basis to identify feasible solutions to lessen the impacts of ~~arterial, thoroughfare, and collector~~ major street improvements on local streets. (5)

Item 3.5 Transportation Element (pages 99-102)
This proposed amendment would remove the terms "arterial" and "thoroughfare" and replace with the corresponding UDO terminology. The street classification would also be removed from Table T-2. Street sections that have been improved are removed from the table. Table T-3 *Widening Projects* would be removed from the Plan. This table will be replaced with new language and a new map in the future.

B.9 Future ~~Thoroughfare~~ Street Improvements *(page 99)*
The following tables list identified improvements to ~~Arterial and Thoroughfare~~ major streets necessary to bring these streets up to the City's guidelines for cross section, create new points of connection, and to ensure adequate vehicular capacity into the future. The tables address two types of improvements. New Location projects, listed in Table T-2, involve the extension of existing roadways and the creation of new connections. These correspond to the dashed lines on Map T-1: ~~Arterial, Thoroughfare and Collector Streets~~ Street Plan. ~~The second class of project, listed in Table T-3, are specific road segments proposed to be widened to increase capacity and better align the roadway cross section with its intended function.~~

Table T-2 New Location Projects

~~Road~~ Street Name	Segment Description	~~Ultimate~~ Proposed Future Cross Section	~~Classification~~

ACC Boulevard	Existing ACC Boulevard to Leesville-Westgate	3 lanes	~~Minor Thoroughfare~~
Auburn-Knightdale Road	Bethlehem Road to existing Auburn-Knightdale Road	4-lane divided	~~Major Thoroughfare~~
Aviation Parkway	Brier Creek Parkway to Wake County line	~~6-lane divided~~ Freeway	~~Minor Thoroughfare~~
Barwell Road	Pearl Road to Auburn Church Road	3 lanes	~~Minor Thoroughfare~~
Beckom Drive	Spring Forest Road Ext to Perry Creek Road Ext	3 lanes	~~Major Thoroughfare~~
Brier Creek Parkway	TW Alexander Parkway Ext to Andrews Chapel Road	4-lane divided	~~Major Thoroughfare~~
Capital Boulevard	Realign U.S. 1 from south of Durant Road to Thornton Road	~~8-lane divided~~ Freeway	~~Major Thoroughfare~~
Carpenter Pond Road	Hickory Grove Church Road to Wake County line	4-lane divided	~~Major Thoroughfare~~
Carpenter Pond Road	West of Olive Branch Road to existing Carpenter Pond Road	4-lane divided	~~Major Thoroughfare~~
Crabtree Valley Avenue	Blue Ridge Road to Glenwood Avenue	4-lane divided	~~Major Thoroughfare~~
Creech Road	Sanderford Road to Wilmington Road	~~4-lane divided~~ 2-lane divided	~~Major Thoroughfare~~
Dunn Road	Falls River Avenue to Durant Road	3 lanes	~~Minor Thoroughfare~~
Edwards Mill Road	Chapel Hill Road to	4-lane divided	~~Secondary Arterial~~

	Western Boulevard		
Edwards Mill Road	Western Boulevard Ext to existing Edwards Mill Road	~~6-lane divided~~ 4-lane divided	~~Secondary Arterial~~
~~Falls of Neuse Road~~	~~Realign with N.C. 98 Highway~~	~~4-lane divided~~	~~Major Thoroughfare~~
Globe Road	East of Page Road to Durham County	6-lane divided	~~Secondary Arterial~~
~~Gorman Street~~	~~South of Tryon Road to Yates Mill Pond Road~~	~~4-lane divided~~	~~Major Thoroughfare~~
Greshams Lake Road	Reba Drive to Capital Boulevard	~~4-lane divided~~ 2-lane divided	~~Major Thoroughfare~~
Highwoods Boulevard	Realign Highwoods Boulevard to Westinghouse Boulevard	4-lane divided	~~Minor Thoroughfare~~
Hodge Road	Auburn-Knightdale Road to existing Hodge Road	4-lane divided	~~Major Thoroughfare~~
Hodge Road	Knightdale Boulevard to Old Milburnie Road	4-lane divided	~~Major Thoroughfare~~
Lake Boone Trail	Atrium Drive to Edwards Mill Road	4-lane divided	~~Major Thoroughfare~~
Leesville-Westgate Connector	Westgate Road to Leesville Road	4-lane divided	~~Major Thoroughfare~~
Louisbury Road	Mitchell Mill Road to existing Louisbury Road	3 lanes	~~Minor Thoroughfare~~
~~Lynn Road~~	~~Realign at Glenwood Avenue~~	~~4-lane divided~~	~~Major Thoroughfare~~

Morgan Street ~~Connector~~ Extension	~~Western Boulevard to existing Morgan Street~~ Existing Morgan Street to Ashe Avenue	~~4-lane divided~~ 2 lanes	~~Major Thoroughfare~~
~~New Falls of Neuse Road~~	~~Fonville Road to existing New Falls of Neuse Road~~	~~6-lanes divided~~	~~Secondary Arterial~~
New Leesville Boulevard	Existing New Leesville Boulevard to Carpenter Pond Road and Realign intersection of Carpenter Pond Road and Shady Grove Road	4-lane divided	~~Major Thoroughfare~~
New Pearl Road	Pearl Road to Wall Store Road	3 lanes	~~Minor Thoroughfare~~
Old ~~Milburne~~ Milburnie Road	Forestville Road to existing Old Milburnie Road	3 lanes	~~Minor Thoroughfare~~
Page Road	Glenwood Avenue to east of Aviation Parkway Ext	4-lane divided	~~Major Thoroughfare~~
Pearl Road/Barwell Road Realignment	Realign Pearl Road at Barwell Road intersection	3 lanes	~~Minor Thoroughfare~~
Perry Creek Road	Fox Road to Buffaloe Road	4-lane divided	~~Major Thoroughfare~~
Poyner Road	Burcliff Place to Longhill Lane	~~3~~ 2 lanes	~~Minor Thoroughfare~~
Rogers Lane	New Bern Avenue to existing Rogers Lane	4-lane divided	~~Major Thoroughfare~~

Shady Grove Road Realignment	North of N. Exeter Way to existing Shady Grove Road	4-lane divided	~~Major Thoroughfare~~
Six Forks Road	East of Atlantic Avenue to Capital Boulevard	4-lane divided	~~Major Thoroughfare~~
Skycrest Drive	Southall Road to Forestville Road	4-lane divided	~~Major Thoroughfare~~
Southall Road	Rogers Lane to Raleigh Beach Road	4-lane divided	~~Major Thoroughfare~~
Southall Road	Skycrest Drive to existing Southall Road	~~4-lane~~ 3-lane divided	~~Major Thoroughfare~~
Southall Road	Groundwater Place to Hedingham Boulevard	4-lane divided	~~Major Thoroughfare~~
Spring Forest Road	Louisburg Road to Buffaloe Road	4-lane divided	~~Major Thoroughfare~~
Sumner Boulevard	Old Wake Forest Road to Capital Boulevard	5 lanes	~~Minor Thoroughfare~~
Sumner Boulevard	Ruritana Street to Gresham Lake Road	3 lanes	~~Minor Thoroughfare~~
Sunnybrook Road	Creech Road to existing Sunnybrook Road	4-lane divided	~~Major Thoroughfare~~
Triangle Town Boulevard	I-540 to Capital Boulevard	4-lane divided	~~Major Thoroughfare~~
Tryon Road	Cyrus Street to Sanderford Road	4-lane divided	~~Major Thoroughfare~~
TW Alexander Drive	Brier Creek Parkway to Leesville Road	4-lane divided	~~Major Thoroughfare~~
TW Alexander Drive	Glenwood Avenue to Brier Creek Parkway	~~6-lane~~ 4-lane divided	~~Secondary Arterial~~

Watkins Road	Mitchell Mill Road to Louisbury Road	3 lanes	~~Minor Thoroughfare~~
Western Boulevard	Jones Franklin Road to existing Western Boulevard	~~6-lane~~ 4-lane divided	~~Secondary Arterial~~
Whitaker Mill Road	Atlantic Avenue to ~~Capital Boulevard~~ Six Forks Road	3 lanes	~~Minor Thoroughfare~~

Table T-3 Widening Projects – This table will be removed in its entirety.

Section 4: Other Elements

This section contains proposed amendments to the Environmental Protection, Parks, Urban Design and Downtown Elements. The amendments are similar to those preceding; the terms "arterial" and "thoroughfare" are removed and replaced with language consistent with UDO street cross sections.

Item 4.1 Other Elements This item would amend language in the Environmental Protection, Parks, Urban Design and Downtown Elements.

Policy EP 5.5 - Forested Buffers (page 130)
Conserve forested buffers along Raleigh's ~~arterial highways~~ freeways and expressways through the use of Special Highway Overlay Districts and conditional use zoning. (3, 5)

Policy PR 4.4 - Park Visibility (page 195)
Enhance access to and awareness of Raleigh's recreational opportunities by locating and developing some active recreational facilities along major ~~thoroughfares~~ streets near other commercial development and in highly visible areas. (5, 6)

Urban Design Narrative *Page 234*
The Urban Design Element 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 a connected and usable pedestrian circulation system throughout the City;
- Visual clutter and the lack of an urban identity along Raleigh's major ~~thoroughfares~~ streets;

Urban Form Map

The Urban Form Map is comprised of centers and corridors, and includes two types of designations. Areas where frontage is recommended, and specific locations have been identified, are designated with a solid color. Areas where frontage is generally recommended, but where property-specific guidance has yet to be developed, are highlighted with a transparent color. 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, the Downtown Element of the Comprehensive Plan, areas zoned for Pedestrian Business, 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 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.

Centers

- Downtown: The Downtown Element boundaries define the Downtown. An urban approach to frontage is recommended throughout Downtown, and the Downtown Element provides specific guidance.

- City Growth Centers: These designations, based on the Growth Framework Map, 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 which provide frontage guidance, such as Northeast and Brier Creek.

- Transit Oriented Districts (TODSs): 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 below). As additional corridor and area plans are completed, more such centers will appear on the Map.

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: A subset of the Multi-Modal corridors on the Growth Framework Map, these corridors are identified in the Wake County Bus plan and programmed for a much higher level of bus-based service, including frequent buses, amenities at every stop, the completion of the pedestrian network, and potentially traffic signal priority for transit. As these corridors are major streets ~~thoroughfares and arterials~~, a hybrid approach to frontage is recommended.

- Urban Thoroughfares: A subset of Multi-Modal and Urban corridors on the Growth Framework Map, 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 multi-modal 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.

Policy UD 3.2 - Highlighting Important Intersections (page 240)
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 ~~thoroughfares~~ streets merge (Louisburg-Capital, Wake Forest-Falls of Neuse, etc.). (4, 6)

Guidelines (page 247)
In addition to the Guidelines included in the 1989 Comprehensive Plan, there also exist numerous other design guidelines, including:

- 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; and
- ~~Streets, Sidewalks, and Driveway Access Handbook~~ Raleigh Street Design Manual.

~~**Action UD 7.3 - Streets, Sidewalks, and Driveway Access Handbook Revision**~~ (page 248)
~~Revise the Streets, Sidewalks, and Driveway Access Handbook to:~~

- ~~Revise the sidewalk widths for different uses and contexts;~~
- ~~Include pedestrian-oriented design standards including maximum distance between crosswalks and high-visibility markings at intersections;~~
- ~~Differentiate between various designations of streets as defined on the Growth Framework Map;~~
- ~~Differentiate between corridors that are programmed to be transit-intensive; and~~
- ~~Revise street cross sections to enhance the distance between the curb and sidewalk to allow street tree planting.~~

~~*See also B.5 'Pedestrian and Bicycle Circulation' in Element B: 'Transportation' for addition actions and policies regarding pedestrian-oriented design.*~~

Table UD-1 Design Guidelines for Mixed-Use Developments (page 250)
#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 ~~thoroughfare or arterial~~ street.

#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 ~~Thoroughfare~~ Street Plan.

Policy DT 1.15 - High Density Development (page 321)
Highest density development should occur along the axial streets (Hillsborough Street, Fayetteville Street and New Bern Avenue), major ~~corridors~~ streets (as identified by the ~~thoroughfare~~ Street plan), surrounding the squares, and within close proximity to planned transit stations. (1, 3, 4, 6)

Multi-modal and Connected Street Grid (page 322)
The City's greenway system plays a significant role in providing recreational opportunities for downtown residents and visitors. The greenway system should be expanded in downtown. Because downtown presents a more urban development pattern compared to other areas of the City, an urban greenway type should be incorporated on the ~~major pedestrian thoroughfares~~ streets identified as Green Streets on Map DT-4. An urban greenway is defined as a street meeting the requirements specified by Action DT-19 'Green Street Design Standards'.

Policy DT 2.3 - Restore Two-Way Traffic (page 323)
Improve circulation within downtown by converting one-way streets ~~classified as minor thoroughfares and below~~ to two-way traffic flow, where feasible. (4)

Action DT 2.5 - Downtown Street Design Standards (page 326)
Develop downtown-specific design standards for street, sidewalk, and bicycle networks for incorporation into the ~~Streets, Sidewalks, and Driveways Access Handbook (SSDAH)~~ Street Design Manual. Specifically, conduct a study to define, designate and develop street sections and design standards for inclusion in the ~~SSDAH~~ Street Design Manual for key types of streets within downtown.

Section 5: Area Plans

These proposed amendments would modify language contained within the Area Plans sections. The terms "collector" and "thoroughfare" would be removed and replaced with specific street names. Also, all references to the *Streets* handbook have been replaced with "Raleigh Street Design Manual."

Item 5.1: Area Plans

Policy AP-BC 9 - CORE Transit Loop Regional Connections (page 380)
A transit corridor separated from street traffic should extend through the Brier Creek Village Center with passenger stops located for convenient access from activity nodes and residential areas. The transit corridor enters the Village Center from the RDU Airport on the east side of Globe Road. From Globe Road the transit corridor turns east and runs down the middle of ~~the collector street~~ Alm Street in a median through the central activity node. It then turns west to parallel the south side of Brier Creek Parkway (using an easement to be located within the 50-foot ~~thoroughfare~~ street yard) to Aviation Parkway and into Durham County.

Action AP-BC 1 - Brier Creek Parkway Transit Easement (page 381)
Establish a transit easement in the ~~thoroughfare~~ street buffer yard along the south side of Brier Creek Parkway from ~~the collector street~~ Alm Street to Aviation Parkway. The easement from ~~the collector~~ Alm Street to Globe Road has been established. Remaining section is from Globe Road to Aviation Parkway.

Policy AP-FL 10 - Falls Lake Watershed Street Design(page 405)
~~Thoroughfares and streets~~ Streets in the Falls Lake watershed should be designed to sensitive area standards.

~~**Action AP-FON 5 - Falls of Neuse/Wide River Drive Connection**~~ (page 409)
~~Area 5: Connect Falls of Neuse Road to Wide River Drive at New Falls of Neuse Boulevard with a new-location Sensitive Area Major Thoroughfare as shown on Figure 5 of the Streets, Sidewalks, and Driveway Access Handbook.~~

Policy AP-FV 1 - Forestville Village East – Street A (page 413)
A commercial street (Street A on Map AP-FV-1) should extend east from Forestville Road and be designed according to Figure 14b., Secondary Pedestrian Way, as noted in the Guidelines for Mixed-Use Centers in the ~~Streets, Sidewalks, and Driveway Access Handbook~~ Street Design Manual.

Policy AP-FV 2 - Forestville Village-East – Street B
Another commercial street (Street B on map) should extend south from U.S. 401 and be designed according to Figure 14b., Secondary Pedestrian Way, as noted in the Guidelines for
Mixed-Use Centers in the ~~Streets, Sidewalks, and Driveway Access Handbook~~ Street Design Manual. Street B will continue south beyond the Core as a Transitional Pedestrian Way (Figure 14a.).

Policy AP-FV 3 - Forestville Village East – Street A Extension
Street A should extend east of Street B as a Transitional Pedestrian Way as noted in Figure 14a. of the ~~Streets, Sidewalks, and Driveway Access Handbook~~ Street Design Manual.

Policy AP-FV 4 - Forestville Village East - Street C
Street C (as noted on map) should extend south from U.S. 401 as a Transitional Pedestrian Way (Figure 14a.) and continues south through the Transition Area to ~~a proposed Collector Street~~ the future extension of Oak Marsh Drive.

Policy AP-FV 9 - Forestville Village West – Street A (page 414)
A commercial street (Street A on Map AP-FV-1) extends east off U.S. 401 to Forestville Road through the Core Area of the development. Application of the site, street, and building design recommendations of the Urban Design Guidelines (see Table UD-1 in the Urban Design Element) is appropriate within the Core with the exception of on-street parking within the first block off U.S. 401. Street A should be designed according to Figure 14b., Secondary Pedestrian Way, as noted in the Guidelines for Mixed Use Centers in the ~~Streets, Sidewalks, and Driveway Access Handbook~~ Street Design Manual.

Policy AP-FV 10 - Forestville Village West – Street B (page 414)
Street B extends south from Street A and serves as a transitional street to the adjacent residential neighborhood and should be designed according to Figure 14a., Transitional Pedestrian Way, as noted in the Guidelines for Mixed-Use Centers in the ~~Streets, Sidewalks, and Driveway Access Handbook~~ Street Design Manual. While maintaining a strong pedestrian-orientation through streetscape design and building placement, a development transition using architectural design to reduce the height and massing of buildings should be incorporated as proximity to the neighborhood increases. Housing should also transition in density with the highest in the Core.

Policy AP-FV 12 - U.S. 401 Frontage in Forestville Village (page 415)
The Urban Design Guidelines do not apply to the frontage of Forestville Village on U.S. 401 since the pedestrian orientation is to an internal street system. This roadway frontage should include ~~thoroughfare~~ street yard landscape buffers.

Policy AP-FV 13 - Forestville Road Building Frontage (page 415)
While Forestville Road is also a ~~major thoroughfare~~ four-lane divided avenue with landscape buffers and minimized building orientation onto the street, application of the Urban Design Guidelines is appropriate in relation to streetscape design, sidewalks, and pedestrian crossings especially at street and driveway intersections leading into the development to provide connectivity to the residential areas east of the street. Buildings should frame the Forestville Road entry onto Street A.

Policy AP-FV 14 - Medians at Forestville Road Intersections (page 415)
A median is recommended at entry #2 and Street A access points onto Forestville Road as shown on the Concept Plan dated 2/17/04 to provide a safe pedestrian haven in crossing the ~~thoroughfare~~ street. Additional right-of-way may be necessary at these locations to provide the median.

Policy AP-GT 3 - Garner-Tryon Pedestrian-Oriented Design (page 417)
The site, street, and building design recommendations of the Urban Design Guidelines (see Table UD-1 'Design Guidelines for Mixed-Use Developments' in Element I: 'Urban Design') should apply to Streets A, B, and C within the Core and Transition Areas. Within the Core Area, Streets A, B, and C shall be designed as Secondary Pedestrian Ways as detailed in Figure 14b. of the Guidelines for Mixed-Use Centers in the ~~Streets, Sidewalks, and Driveway Access Handbook~~ Street Design Manual and should include on-street parking where not in conflict with transportation objectives.

Policy AP-GT 4 - Garner-Tryon Transition Areas
Beyond the Core Area on Streets A and C, a development transition using architectural design should be incorporated to reduce building height and massing as proximity to single-family residential uses is approached. Appropriate commercial uses in the Transition are office and retail sales-personal services. A transition in housing density should also be provided with the highest densities occurring in the Core. Within the Transition Area, streets shall be designed according to Figure14a. in the ~~Streets, Sidewalks, and Driveway Access Handbook~~ Street Design Manual with on-street parking where appropriate.

Policy AP-540F 2 - Residential Access on Falls of Neuse Road (page 421)
New single-family residences fronting ~~the thoroughfare~~ on Falls of Neuse Road are discouraged. See also Policy AP-FON 6 in Area Plan 8: 'Falls of Neuse Corridor'.

Policy AP-RQB 1 - Rock Quarry-Battle Bridge Design Guidelines (page 433)
The site, street, and building design recommendations of the Urban Design Guidelines (see Table UD-1 in the Urban Design Element) should apply to an extension of Pearl Road east of Rock Quarry Road as well as to Streets A, B, and C that extend from Battle Bridge Road and intersect on the tract interior to establish the focus of the Core Area.

Within the focus of the Core Area, the streets illustrated with a bold dotted-line on the attached map shall be designed as Secondary Pedestrian Ways as detailed in Figure 14b. of the Guidelines for Mixed-use Centers in the ~~Streets, Sidewalks, and Driveway Access Handbook~~ Street Design Manual and should include on-street parking where not in conflict with transportation objectives.

Policy AP-RQB 2 - Rock Quarry-Battle Bridge Non-Core Area Guidelines
Beyond the focus of the Core Area, Streets A, B, C, and Pearl Road extension as well as a street extension north off Street A into the Z-44-04 site should be designed according to Figure 14a. in the ~~Streets, Sidewalks, and Driveway Access Handbook~~ Street Design Manual with on-street parking where appropriate.

Policy AP-RQB 6 - Rock Quarry-Battle Bridge Building Orientation(page 434)
Buildings should frame the intersection of Pearl Road extension as well as Streets A, B, and C with the adjacent ~~thoroughfares~~ major streets.

Policy AP-SC 6 - Swift Creek Sensitive Area ~~Thoroughfares~~ Streets (page 446)
~~Thoroughfares~~ Streets within the Swift Creek watershed protection area should be designed and classified as Sensitive Area ~~Thoroughfares~~ Streets as shown ~~on Figure 5 of the Streets, Sidewalks, and Driveway Access Handbook~~ in Article 8 of the Unified Development Ordinance.

Policy AP-TTC 4 - Triangle Town Center NE Urban Design Character (page 449)
Create a comfortable and convenient pedestrian environment by fronting buildings on the sidewalk and street area with on-street parking along the ~~collector and~~ local access streets. Multi-storied buildings containing commercial services and office uses on the lower floors and residential or office above are appropriate along these corridors.

Policy AP-TTC 14 - Capital Boulevard Development Access (page 451)
Development sites fronting Capital Boulevard should derive primary access from the ~~private~~ street network around the Mall and not from the ~~thoroughfare~~ major street system.

Policy AP-TTC 16 - Triangle Town Center NW Pedestrian Crossings
A pedestrian connector should extend north from the Triangle Town Center Mall across Old Wake Forest Road adjacent to the stormwater facility to ~~a pedestrian-friendly collector street~~ connect to the future extension of Town Center Drive. ~~The collector~~ This pedestrian-friendly street should then extend to Triangle Town Boulevard where another pedestrian connector crosses the street to the northeast quadrant. Roadway designs at the pedestrian crossings of Old Wake Forest Road and Triangle Town

Boulevard should include features to calm vehicular traffic and enhance the pedestrian environment.

Policy AP-TTC 17 - Triangle Town Center NW Building Orientation
Buildings should front ~~the collector street~~ Town Center Drive with entrances onto the sidewalk and street area. On-street parking should be provided along ~~the collector and~~ local access streets and around the Neighborhood Center to create a comfortable and convenient pedestrian environment.

Policy AP-TTC 18 - Triangle Town Center NW Mixed-Uses (page 452)
Multi-storied buildings containing a mix of uses should be included along ~~the collector street~~ Town Center Drive and frame a public square within the Neighborhood Center. Parking should be located behind the buildings.

Policy AP-WC 9 - Wake Crossroads Street Grid (page 462)
An interconnecting grid of public streets should guide the development pattern within the Wake Crossroads neighborhood center. The core area public streets should be designed to ~~collector street~~ Main Street standards. The street grid should create 400-foot to 500-foot block faces with on-street parking and streetscape.

Section 6: Action Matrix

The action Matrix would be modified to remove completed actions.

Item 6.1 Action Matrix

B.3 Complete Streets: Hierarchy and Design

Number	Action	Responsible Agency	Time Frame	Action Type	Priority Level	Capital Funds Needed (Y/N)
~~Action T 3.3~~	~~Street, Sidewalk and Driveway Access Handbook Street Design~~	~~DCP, PW~~	~~Short-term~~	~~Development Regulations~~		~~N~~

	~~Manual~~					

Number	Action	Responsible Agency	Time Frame	Action Type	Priority Level	Capital Funds Needed (Y/N)
~~Action T 5.3~~	~~Sidewalk Requirements~~	~~DCP, CAO,PW~~	~~Short-term~~	~~Development Regulations~~		~~N~~

Number	Action	Responsible Agency	Time Frame	Action Type	Priority Level	Capital Funds Needed (Y/N)
~~Action UD 7.3~~	~~Street, Sidewalk and Driveway Access Handbook Street Design Manual Revision~~	~~DCP, PW~~	~~Short-term~~	~~Development Regulations~~		~~N~~

Section 7: Glossary

The glossary would be modified to remove the reference to the Streets, Sidewalks and Driveway Access Handbook.

Page XIII

~~Streets, Sidewalks, and Driveways Access Handbook (SSDAH)~~ Street Design Manual: A publication of the City of Raleigh Public Works Department containing regulations and standards for adequate and coordinated construction of transportation facilities.