

# REVIEW OF CHARLOTTE'S TOD & PED DISTRICTS FOR NEIGHBORHOOD COMPATIBILITY

PREPARED FOR  
THE CHARLOTTE-MECKLENBURG PLANNING COMMISSION  
MAY 1, 2006

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April 10, 2006

Ms. Debra Campbell  
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Charlotte-Mecklenburg Planning Commission  
600 E. Fourth Street, 8<sup>th</sup> Floor  
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**Re: PED and TOD Code Analysis – Preliminary Findings**

Dear Ms. Campbell:

As a follow-up to our discussions on April 5, we are submitting a synopsis of our preliminary findings based upon our review of Charlotte’s Pedestrian Overlay (PED) and Transit Oriented Development (TOD) zoning districts.

**Strengths of Districts**

In general, PED and TOD provide excellent regulatory mechanisms to implement the City’s goals of promoting pedestrian-oriented, mixed-use districts in Charlotte’s urban commercial corridors and in and around future transit station areas. The City and its community partners are to be commended for developing districts that:

- Use development standards that promote high-quality, pedestrian-oriented design of buildings and streetscapes;
- Promote mixed-use development consistent with past development patterns and current development trends;
- Use area plans to tailor requirements to unique neighborhood contexts;
- Provide base design standards that are consistent with national best practices;
- Require building height transitions from surrounding single family areas;
- Utilize a market-based approach to parking supply that is consistent with progressive public- and private-sector national trends;
- Provide standards for screening parking structures;
- Require developer-provided open space in transit areas;
- Establish residential density limits through height restrictions and setbacks.

**Opportunities for Improving District Standards**

While the strengths of these districts are evident, we have identified a number of ways in which the standards in these districts could be improved, especially in areas where these zoning districts interface with adjacent low-density neighborhoods. The issues identified reflect feedback from local developers, neighborhoods, and staff as well as best-practices in urban development from around the U.S.

**GDP Principles:** The purpose statement and development standards for the TOD districts do not explicitly incorporate policy statements regarding neighborhood compatibility such as those found in the City’s *General Development Policies*.

**Non-residential Use Restrictions:** Current TOD requirements do not limit non-residential uses adjacent to or across from low density residential uses.

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**Residentially-compatible Design Standards:** Additional design standards for development that fronts on low density residential areas could be added to TOD and PED. For example, form-based design standards requiring residential architectural features such as porches, raised entries, and separate entries at grade may be appropriate.

**Maximum Building Height:**

- PED and TOD height-limit formulas alone may not adequately protect existing development and may detract from the architectural character of new development.
- Current maximum building height in PED may not be appropriate in all wedge areas.

**Parking Standards:**

- The absence of minimum parking ratios for TOD prevents the City from leveraging more efficient and equitable shared parking resources in station areas.
- PED standards do not limit the number of parking spaces that can be built.
- Current parking standards in PED and TOD do not provide enough options for meeting parking requirements based on more nuanced factors of development type, context, etc.

**Historic Resources:** While the development standards of PED and TOD make it easier to re-use a historic building, the additional intensity that the districts allow may encourage redevelopment rather than preservation of historic resources.

**Open Space Requirements:**

- PED does not include open space requirements.
- TOD open space standards do not require or incent development of or contributions toward publicly-accessible open space.

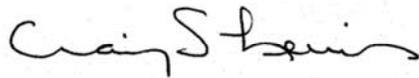
**Development Incentives:** TOD and PED could go farther in leveraging the significant development rights allowed by these districts to encourage private participation in meeting public policy goals such as: public art; open space; undergrounding utilities, etc.

**Neighborhood Input:** Due to the intensity of uses allowed by-right in PED and TOD, it may be appropriate to identify opportunities in the planning or zoning process for additional neighborhood input.

**Text Format:** Changes in formatting, including graphics and tables, would make PED and TOD text more easily interpreted and reader-friendly.

Based on Planning Commission staff input on these and other related issues, we will make detailed recommendations for modifications to the PED and TOD zoning districts [which are contained in this document].

We appreciate the opportunity to work with you and your staff in this effort.



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# I.0 TOD Purpose Statement

## Issue

The purpose statement and development standards for the Transit Oriented Development (TOD) districts do not explicitly incorporate policy statements regarding neighborhood compatibility such as those found in the City's *General Development Policies* and other related districts.

## Discussion/Explanation

While the TOD ordinance language accomplishes many of the principles embodied in the *GDP's Transit Station Area Principles*, the text should more explicitly include in the purpose statement and throughout the text the very good and specific policy language from the *Principles* (and to some extent the language from the *GDP's Residential Location and Design* standards) regarding transitioning to lower density residential areas.

## Recommendations

1. Consider using language from the Pedestrian Overlay District (PED): “. . .development, which complements adjacent neighborhoods;” or the Transit Supportive Overlay District (TSO) “. . . transit supportive mix of uses that complement adjacent neighborhoods” in the TOD purpose statement.
  
2. Consider incorporating language from “Transit Station Area Principles” and/or the “Residential Location & Design” standards of the GDPs such as:
  - “Preserve and protect existing and stable neighborhoods”
  - “lower densities adjacent to single family neighborhoods”
  - “In some cases, station area plans will recommend lesser intensities or densities for new development. . .to preserve existing structures. . .protect existing neighborhoods. . .mitigate traffic.”
  - “Limit building heights. . .buildings adjacent to established neighborhoods limited to low-rise structures.”
  - Protect/enhance the character of existing neighborhoods; new development should provide transition to neighborhood
  - Encourage a range of housing types and densities that will meet the needs of different types of households
  - Develop multifamily housing as part of the fabric of a larger neighborhood

Implementation Mechanisms	Examples/Resources
Text amendment	PED and TSO ordinance language  <i>General Development Policies</i> Transit Station Area Principles and Residential Location and Design standards

## 2.0 Non-Residential Use Restrictions

### Issue

Current TOD requirements do not limit nonresidential uses adjacent to or across from low density residential uses.

### Discussion

Currently, uses in TOD are restricted through the sub-districts, TOD-E (Employment), TOD-R (Residential), TOD-M (Mixed-Use). While the mix of uses allowed in these districts may be appropriate on an area-wide scale, the use restrictions leave the determination of what uses may be appropriate on a parcel-by-parcel level completely up to the market. In the heart of transit station areas, this approach will probably be reasonably effective. However, when it comes to transitioning from a transit station area to a surrounding neighborhood, as well as concentrating the most pedestrian-oriented uses (i.e. consumer retail) to the most appropriate “main street” locations, a more fine-grained approach to regulating uses may be in order.

Today, the most appropriate TOD district adjacent to an existing residential neighborhood is TOD-R. However, this district allows a density credit for non-residential uses. While the density credit is limited to 20% of the gross square footage, the total amount of non-residential uses is not technically capped. This means that retail and office uses could front single family residential uses along the same street. This condition may not occur frequently since TOD districts will generally back up to residential neighborhoods rather than front them. However, in cases where it does occur (Euclid Avenue, at the Dilworth edge of the South End Transit Station Area Plan area, is a good example of this condition), the current text language provides no recourse for limiting the amount or type of non-residential uses.

The other side of this issue is that transit station areas will be most successful as pedestrian-oriented districts when retail and other pedestrian-generating uses are concentrated in walkable nodes (and especially in the core of the districts) rather than scattered throughout the area. While the market may take care of this issue over time, Charlotte and most American cities have seen the effects of over-zoning for retail, which leads to a de-concentrating of commercial uses. Therefore, it may be in the best interest of the transit station areas to both encourage pedestrian attractors (such as ground floor retail) in some areas and restrict them in others.

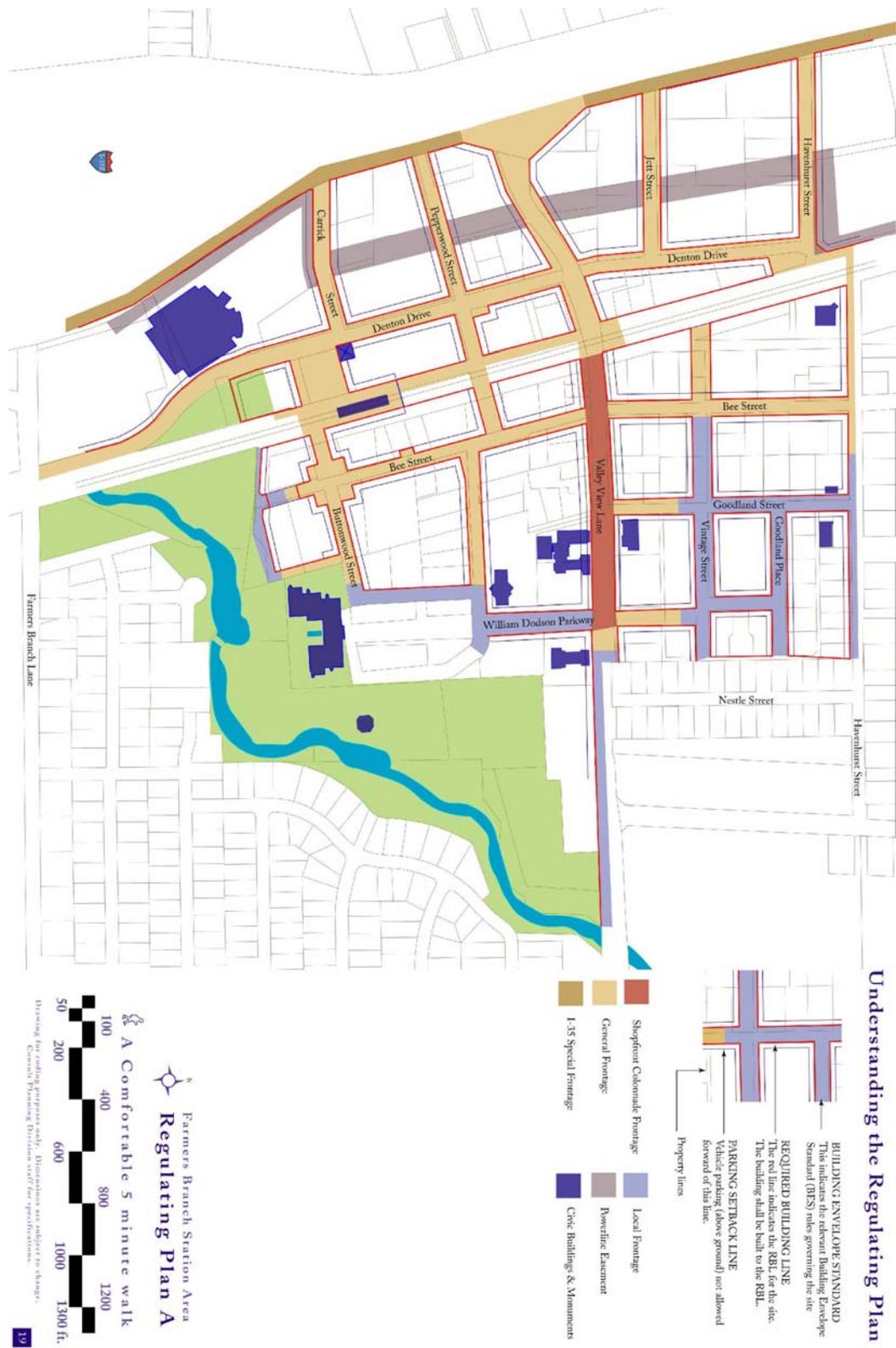
### Recommendations

Consider use restrictions based on block frontage (see Figure 1 and Figure 2):

1. Restrict developments fronting low density residential areas, along local/minor streets, to residential and related uses (leasing offices, tenant amenity spaces – lounges, private cyber cafes, etc. – only).
2. Require ground floor retail uses along block frontages where it is most appropriate, such as along thoroughfares and other locations identified in station area plans.
3. Provide incentives for non-residential uses (e.g. density bonuses for office uses) in specific locations within transit station areas where they will have the most impact.

Implementation Mechanisms	Examples/Resources
Text amendment	<i>Columbia Pike Special Revitalization District – Form-based Code</i>
With area plans	<i>Farmer’s Branch Form-based Station Area Code</i>

**Figure 1:** The Farmer's Branch, TX Form-based Station Area Code restricts building design and allowed uses based on frontage-type.



### 3.0 Residentially-compatible Design Standards

#### Issue

Although TOD and PED have basic urban design standards (height, placement of windows and doors, etc.), other design requirements may be needed to ensure that development fronting low-density residential is architecturally compatible.

#### Discussion

The City has developed good policy language in the GDPs and neighborhood plans regarding how new development can be designed to complement existing low density single family areas.

The following design guidelines are from the draft *Dilworth Land Use and Streetscape Plan*:

- “Relating the scale of new development to the scale of the surrounding community.”
- “Using the scale of adjacent existing development to determine the appropriate scale of new infill.”
- “Locating taller buildings closer to street corridors and taper building height as they approach lower density residential development.”
- “Designing porches and balconies to be usable space.”
- “Using porches, balconies, or other architectural elements to generate visual interest. . .in higher density residential development.”
- “Raising the first floor of [higher density residential development] at least two feet above the street level to protect privacy. . .”

This policy language can be translated into regulatory requirements in urban zoning districts where sensitive transitions to surrounding single-family neighborhoods are necessary.

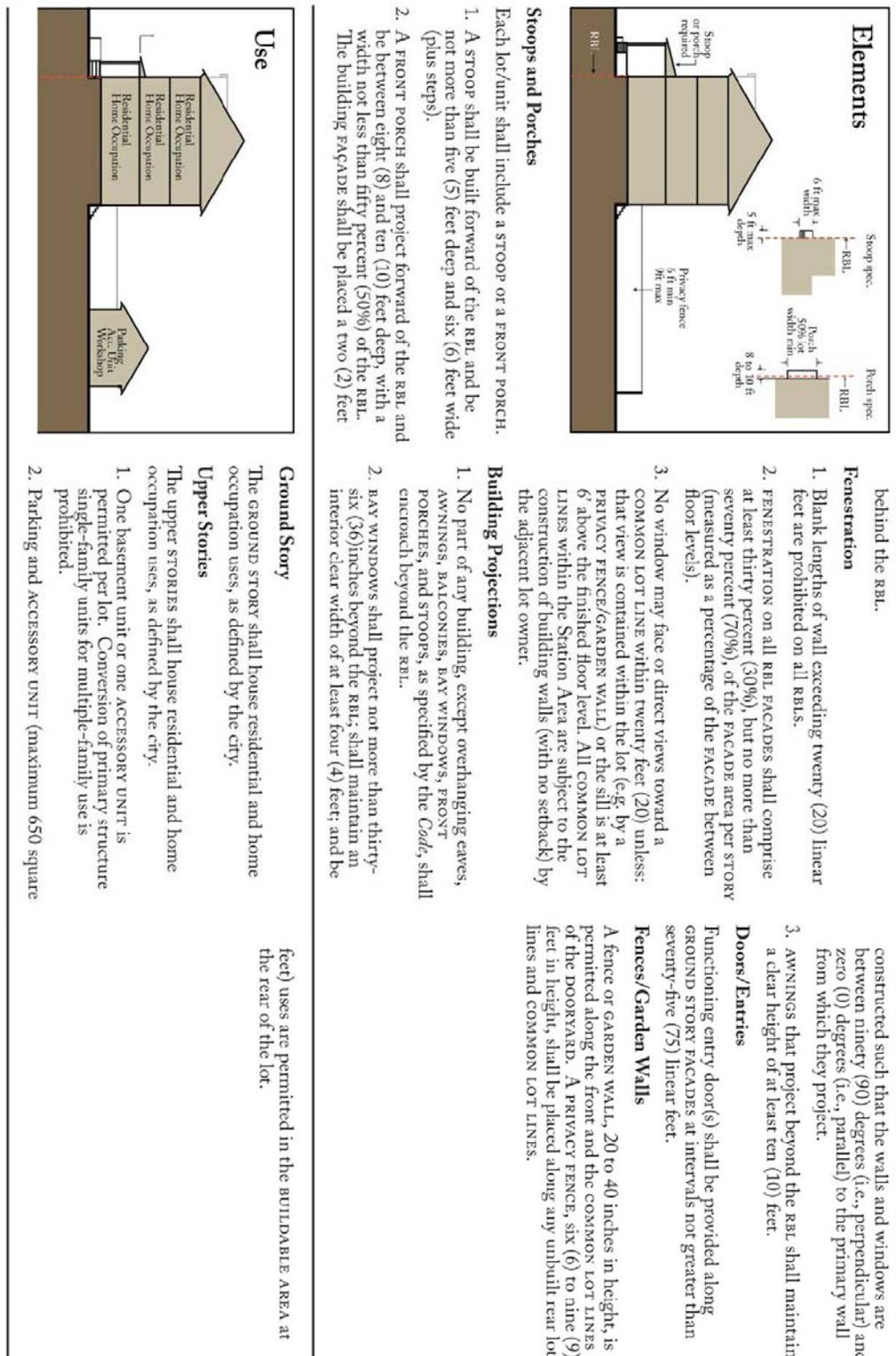
#### Recommendations

Additional design standards for new development that fronts on low density residential areas (especially along minor streets) could be added to TOD and PED. For example, form-based design standards requiring residential architectural features such as porches, raised entries, and separate entries at grade may be appropriate.

1. Consider form-based design standards based on block frontage: Require consistent building types (residential, commercial/mixed-use) fronting one another across streets. (See Figure 1)
2. Consider requiring residential architectural features for new development, especially development fronting existing low density residential development (See Figure 2 and Figure 6):
  - a. Require first floor elevation to be 18-60 inches above grade for all residential uses
  - b. Require (usable: 6-10 feet deep) porches along a certain percentage (30-50%, for example) of building frontages for residential uses fronting low density residential development
  - c. Require lower level residential units to have separate entries to the street
  - d. Consider roof type(s) to be allowed: pitched, flat/parapet; define roof pitches to be allowed; also, consider requirements for overhangs (eaves, soffits, brackets, etc.)
3. Consider additional requirements for parking structures fronting low density residential areas

Implementation Mechanisms	Examples/Resources
Text amendment	<i>Columbia Pike Special Revitalization District – Form-based Code</i>
With area plans	<i>Farmer’s Branch Form-based Station Area Code</i> <i>Knightdale, NC Unified Development Ordinance</i>

**Figure 2: Residential building (“local frontage”) design standards from the Farmer’s Branch, TX Form-based Station Area Code.**



## 4.0 Maximum Building Height

### Issues

- PED and TOD height-limit formulas, based on maximum height only and not stories, may not adequately protect existing development.
- Current maximum building height in PED may not be appropriate in all wedge areas.

### Discussion

The current height limit ratio used in TOD and PED is a straightforward means to determine the appropriate building height in relation to adjacent single-family residential areas: For each 10 feet away from existing residential areas, an additional foot of building height is allowed. However, there are some limitations associated with using this formula alone.

Using maximum number of stories versus (or in addition to) maximum height has advantages:

- Reduces incentive to create small story heights
- Allows greater variation in floor-floor heights
- Provides more flexibility in achieving sustainability and green building goals: allows deeper daylight penetration & use of under-floor ventilation
- Increases distinctiveness and variation of buildings

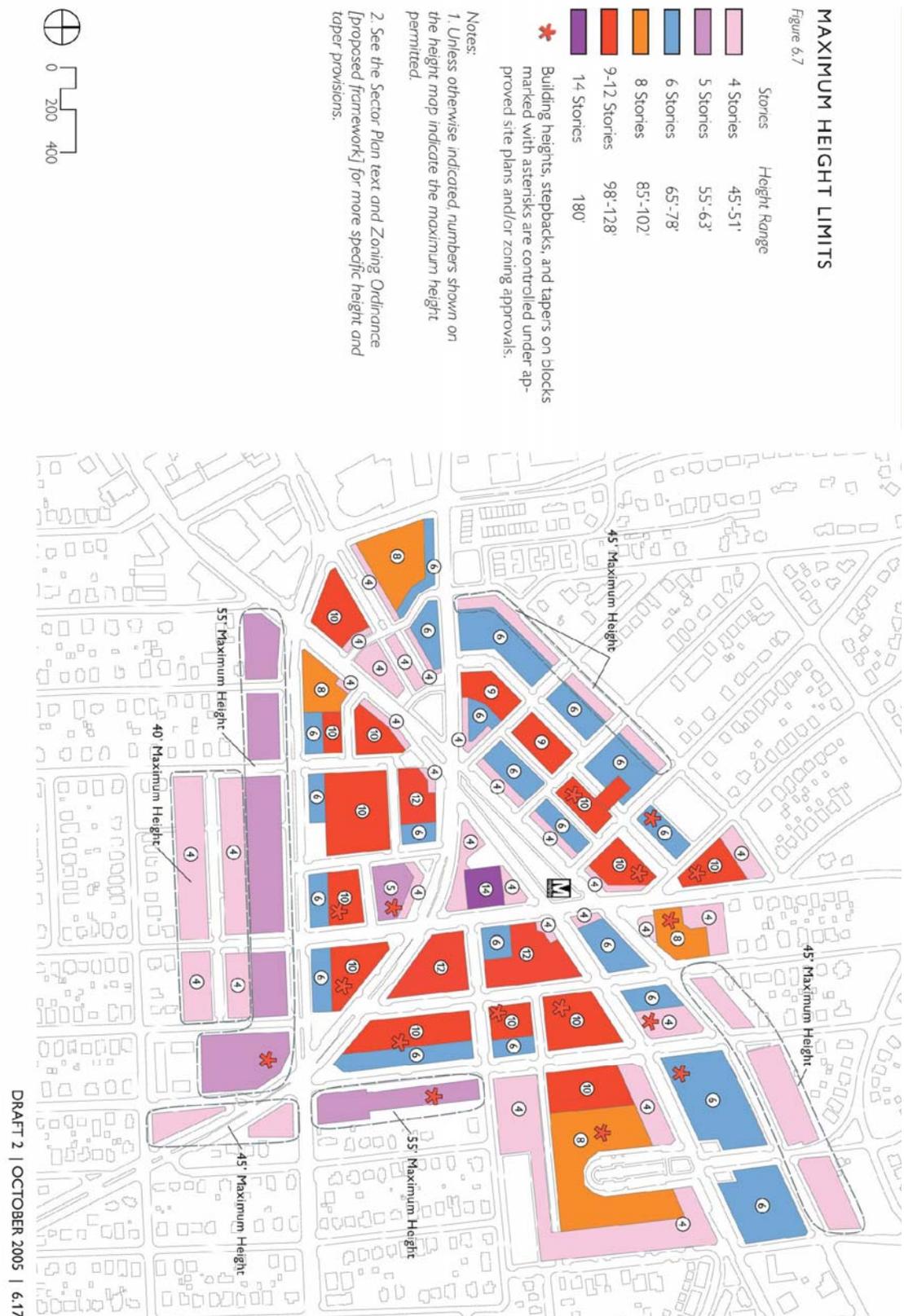
Further, it may be difficult to strictly apply the height formula since the distance from residential areas will vary in odd patterns across lots, potentially resulting in odd building configurations and difficult enforcement. For example, the height gradient for the *South End Station Area Plan* is perpendicular to South Boulevard at one point meaning that buildings would have to step down *along* the street rather than simply toward the neighborhood behind. Furthermore, there may be specific locations where shorter or taller buildings are more appropriate than the formula would provide for. For example, changes in topography may make certain buildings higher than others; or surrounding buildings that provide context and precedents for new buildings may be taller than the formula would allow.

### Recommendations

1. Consider using maximum number of stories with a maximum height limit/range. (See Figure 3)
2. Consider appropriate building heights on a block-block basis in each area plan based on the context of the area including topography, existing buildings, street type, etc. This may require testing building heights elevations/street cross-sections, especially at neighborhood edge areas.
  - a. Use the height gradient as a guide, but base maximum building stories/height on a series of logical steps for each block frontage/depth rather than requiring building design to conform to a strict gradient.
  - b. Step-backs may be recommended on certain blocks to protect/respect historic or otherwise significant buildings and facades.
3. Consider by-right height maximums and maximums allowed under special conditions:
  - a. Provide a default maximum height/stories in ordinance, but allow maximum height to be determined through area plans. Maximums may be more/less than allowed by ordinance.
  - b. Provide incentives/conditions under which maximum heights may be achieved/exceeded

Implementation Mechanisms	Examples/Resources
Text amendment	<i>Columbia Pike Special Revitalization District – Form-based Code</i> <i>Arlington Clarendon Sector Plan (draft)</i>
With area plans	<i>Farmer’s Branch Form-based Station Area Code</i>

**Figure 3:** Building height regulations from Arlington County, VA's draft Clarendon Sector Plan Update.



## 5.0 Parking Standards

### Issues

- The absence of *minimum* parking ratios for TOD prevents the City from leveraging more efficient and equitable shared parking resources in station areas.
- PED standards do not limit the number of parking spaces that can be provided.
- Current parking standards in PED and TOD do not provide enough options for meeting parking requirements based on more specific factors of development type, context, etc.

### Discussion

The City has instituted progressive parking policies in PED and TOD by reducing the amount of parking required in both districts and instituting parking maximums in TOD. These standards reflect the fact that mixed-used, transit-served, walkable areas do not require the same amount of parking as suburban development. Research has shown that as density doubles in major cities, auto ownership falls by 32 to 40 percent (Holtzclaw, et al). Increased parking requirements also impact the overall cost of development, housing affordability, neighborhood walkability, and limit taxable development.

On the other hand, insufficient parking for new development can create potential spillover on neighborhood streets. Residential parking permits (such as are in place in 4<sup>th</sup> Ward) are valuable tools in neighborhoods adjacent to transit station areas and other high-density, mixed-use nodes. This will need to be part of the solution. Furthermore, the fact that almost no parking minimums are currently required in TOD provides an incentive for developers to make the most of existing on-street parking resources. While it is good to make efficient use of existing infrastructure, the current standards allow the use of existing shared on-street parking without requiring any contribution to the future supply, the availability of which will be critical to the success of these mixed-use districts.

On a related note, TOD encourages several very beneficial objectives – structured parking, shared parking, hidden parking lots, shared driveways/access, inter-connected parking lots – by allowing parking maximums to be exceeded. However, the current parking maximums are typically more than sufficient for most new development in mixed-use areas, so there will be little incentive for developers to exceed parking maximums (especially with expensive structured parking). There are also few reasons for the City to support excess parking unless it is shared, so the good objectives set forth above will likely go unmet unless a more attractive set of incentives or requirements are in place.

### Recommendations

- I. Consider parking minimums for all uses in TOD with the understanding that the minimums can be met in various ways or reduced. This will allow the City to leverage the provision of shared parking in station areas.
  - a. For example, consider a minimum ratio for residential development (perhaps 1 per unit/bedroom), but allow exceptions based on more nuanced factors: number of bedrooms, level of affordability, presence of age restrictions, distance from station, parking plan, TDM measures, parking mitigation measures, and other such factors that impact parking demand
  - b. Consider limiting the number of reserved spaces that may be provided (e.g. 1 space per 1000 sf non-residential GFA; 2 spaces per residential unit or 1 space per bedroom)
  - c. If parking minimums are used, consider a sunset clause for elimination after certain community parking objectives are reached (see Petaluma Code)
  - d. Consider requiring developers to provide parking studies to show parking demand and where parking will be provided if not on-site

- e. Consider requiring no minimum on-site parking for sites under a certain size (e.g. >20,000sf). This will encourage the reuse of small buildings and the development of small infill sites.
- 2. Consider requiring developers to provide some shared (unreserved parking) in PED and TOD. This could be in the form of on-street parking, in-lieu fees, etc.
- 3. Consider parking maximums in PED in order to limit the impact of parking in these areas.
- 4. Consider other recommendations in the *South End Parking Study* and apply, as appropriate, to other station areas and PED districts:
  - a. Provide flexibility in meeting minimum requirements
  - b. Monitor on-street occupancy
  - c. Support TDM improvements
  - d. Metered parking (as demand grows)
  - e. Residential parking permits (as demand grows)
  - f. Shared public (or publicly available) parking
- 5. Consider requiring any parking provided above the maximum to be shared parking, open to the public
- 6. Consider requiring interconnected lots, shared driveways/access, hidden parking outright or incenting them through other more attractive means, such as additional density, relief from other requirements.

<b>Implementation Mechanisms</b>	<b>Examples/Resources</b>
Text amendment	<i>Arlington Clarendon Sector Plan (draft)</i> <i>Historic South End Parking Study</i> <i>EPA Parking Spaces/Community Places</i> <i>Parking Management: Strategies, Evaluation, and Planning</i>

## 6.0 Historic Resources

### Issues

While the development standards of PED and TOD make it easier to re-use a historic building, the additional intensity that the districts allow may encourage redevelopment rather than preservation of historic resources.

### Discussion

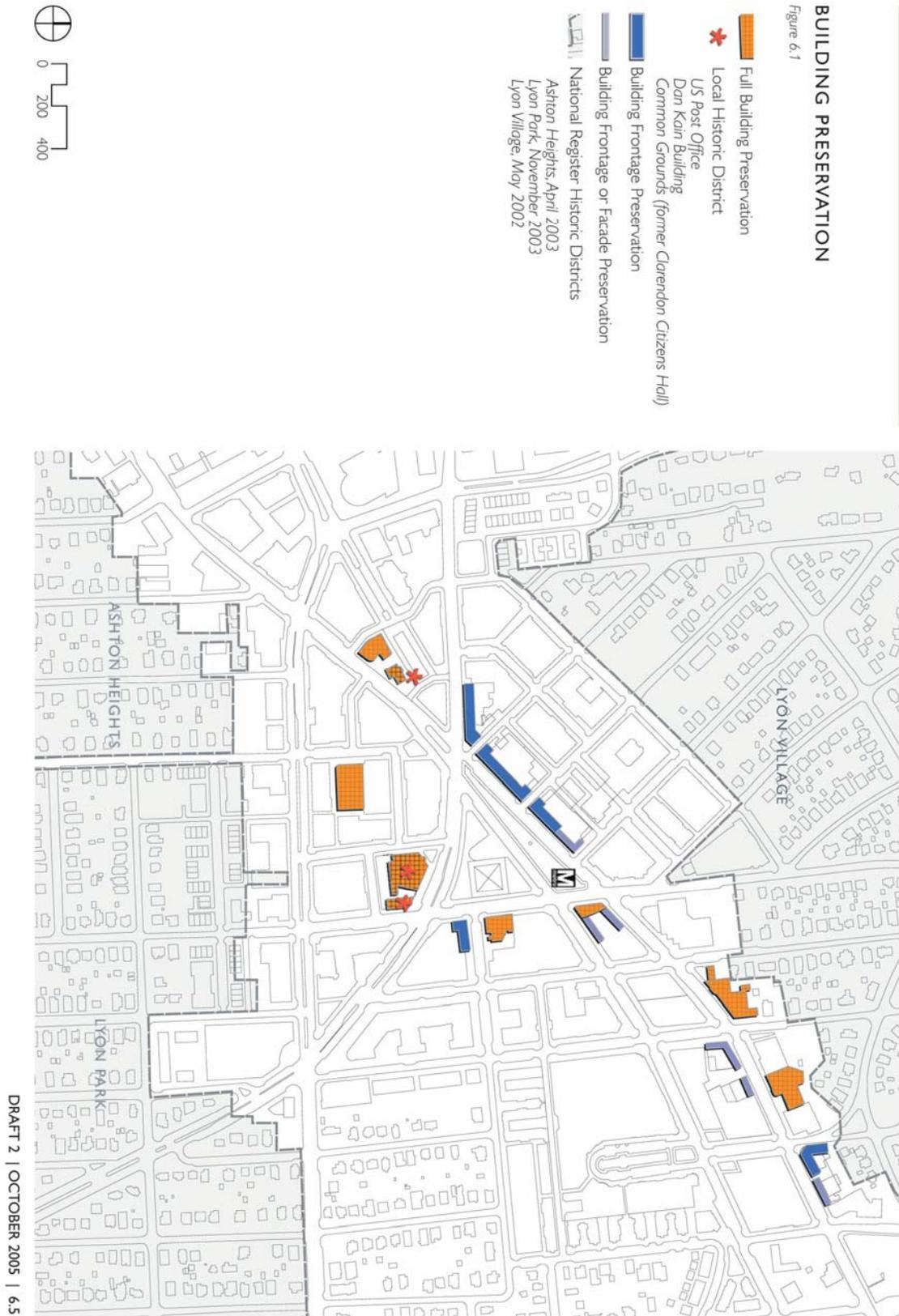
Currently, TOD and PED encourage the conservation of existing buildings by providing relief from parking requirements for the reuse of existing buildings and setback requirements for new development that incorporates existing buildings. These are good incentives and should be continued. However, they may not be enough to prevent the removal of buildings and other historic resources (such as facades, cemeteries, monuments, historic trees, etc.) that reflect the history and character of certain neighborhoods, especially where land costs are increasing faster than the value of the buildings and much greater development potential is permitted through the new zoning districts. Additional incentives and tools will be necessary if the City and neighborhoods want to protect specific buildings and established building forms in certain planning areas.

### Recommendations

1. Identify historic resources (including building facades, building types/development types, and even significant trees) through the area planning process that need to be protected. (See Figure 4)
2. Consider additional development incentives/requirements for building preservation including:
  - a. Density credits for preserved buildings/facades
  - b. Transfer of development density rights within plan areas
  - c. Height limitations to preserve historic buildings, facades, and neighborhood fabric
3. Also, consider the use of other preservation tools such as the County's Landmark Revolving Fund.

<b>Implementation Mechanisms</b>	<b>Examples/Resources</b>
With area plans	<i>Arlington Clarendon Sector Plan (draft)</i>
Text amendment	<i>Columbia Pike Special Revitalization District – Form-based Code</i>
Meck Co. Landmark Revolving Fund	

**Figure 4:** Map of building preservation locations from Arlington County, VA's draft Clarendon Sector Plan Update.



## 7.0 Open Space

### Issues

- PED does not include open space requirements.
- Although TOD standards require private open space to be provided for large developments, they not require or adequately incent development of or contributions toward publicly-accessible open space for all development.

### Discussion

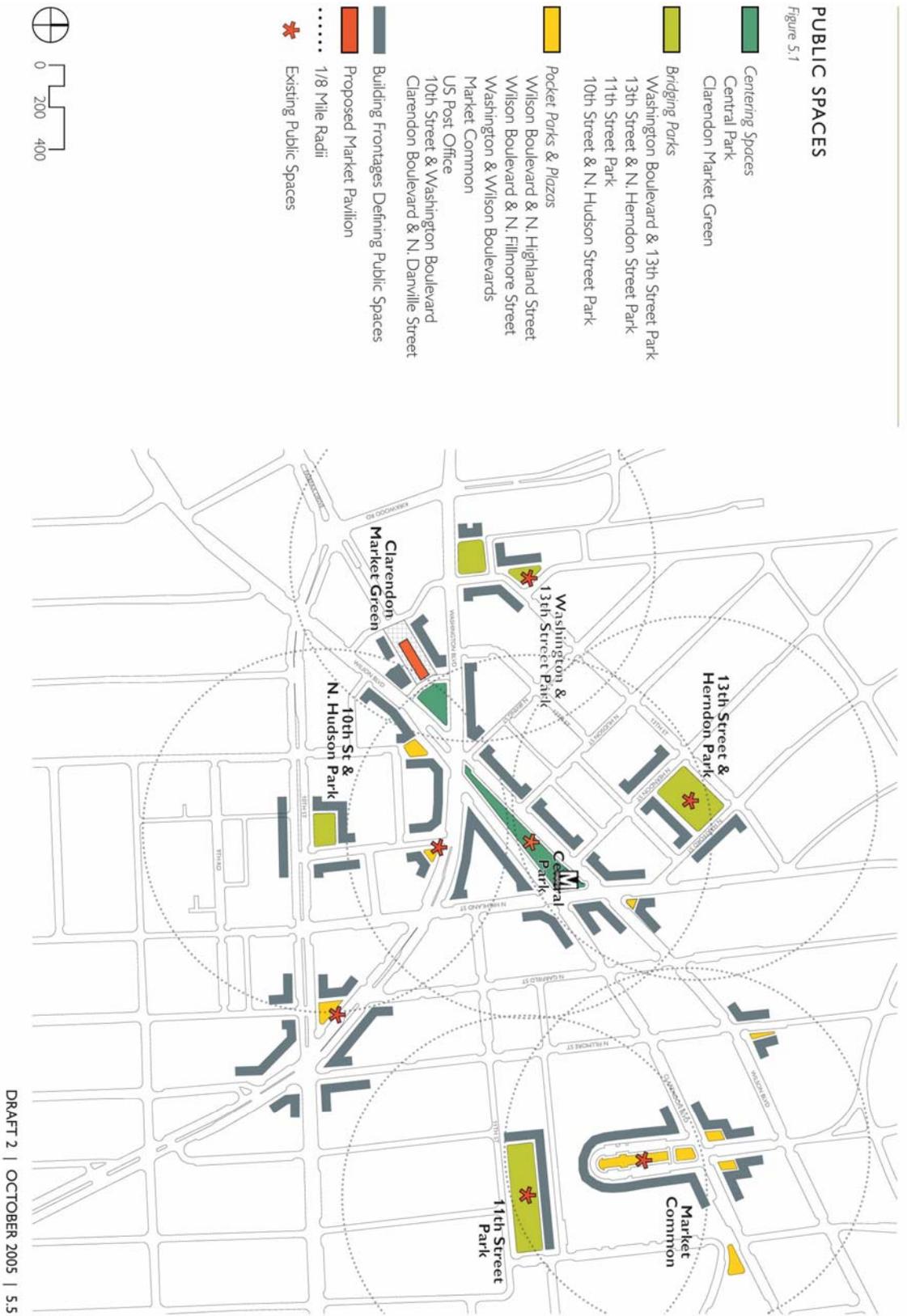
Public spaces for active and passive recreation and gathering are critical to the success of the kind of mixed-use districts that are envisioned for Charlotte's station areas and mixed-use commercial districts. Currently, TOD zoning includes requirements for the provision of open space with new development, including density credit for publicly accessible open space. (PED includes no such provisions.) Unfortunately, the TOD incentive for publicly accessible open space will only be attractive to projects that cannot or do not meet the minimum density requirements.

### Recommendations

1. Consider establishing open space requirements in PED.
2. Consider requiring all TOD projects to provide or contribute to open space in the district.
3. Consider requiring some portion of open space dedication be public for projects of a certain size.
4. Consider allowing in-lieu fees to meet open space requirements off-site to contribute to publicly identified open spaces in area plans.

<b>Implementation Mechanisms</b>	<b>Examples/Resources</b>
With area plans Text amendment Fees-in-lieu program for open space	<i>Arlington Clarendon Sector Plan (draft)</i>

**Figure 5:** Map of public open spaces from Arlington County, VA's draft Clarendon Sector Plan Update.



## 8.0 Development Incentives

### Issue

TOD and PED could go farther in leveraging the significant development rights allowed by these districts to encourage private participation in meeting public policy goals such as: public art, open space, affordable housing, undergrounding utilities, tree preservation, etc.

### Discussion

TOD and PED provide a significant increase in development potential over conventional zoning districts through increased maximum heights, reduced setbacks, and reduced parking requirements. While these new districts do also increase the design standards and streetscape requirements (and open space requirements in TOD) for new development, the apparent demand for maximizing density in certain transit station areas and PED districts means that the City may be in a position to leverage contributions to meet certain public policy objectives in exchange for additional density/development allowances.

This may require reducing the allowable densities/heights in certain plan areas below what is currently allowed in the TOD and PED text currently and allowing the current ordinance maximums to be achievable only when certain conditions are met. Reducing densities in certain plan areas below what is allowed in the ordinance is supported by the following policy statement from the *Transit Station Area Principles*:

*“In some cases, station area plans will recommend lesser intensities or densities for new development. These lesser intensities might be necessary to preserve existing structures, to insure that new development is consistent with the character of existing transit supportive development, to protect existing neighborhoods, or to mitigate traffic impacts.” (General Development Policies, p. 13)*

### Recommendation

Set “by-right” maximum densities/heights and “maximums with conditions.” (See Figure 6) Provide development incentives (density and other) to achieve additional streetscape and other objectives beyond what is already required, such as:

- Undergrounding utilities
- Providing public art
- Providing public open space
- Preserving existing trees
- Providing affordable housing
- Preservation of historic structures
- Consistency with adopted plans
- Environmental standards (LEED, LID)

Implementation Mechanisms	Examples/Resources
With area plans	Arlington Clarendon Sector Plan (draft)
Text amendment	

**Figure 6:** Sample development incentives from Arlington County, VA's draft Clarendon Sector Plan Update.

SUMMARY OF DENSITY PROVISIONS  
Table 4.3

Density Provisions	Central Park District		Market Common	Western Gateway District	Wilson Shops	10th Street Corridor	13th Street Corridor
	Central Park District (Prime Office)	Central Park District (Non-Prime Office)					
<b>"Site Plan Maximum" Density Provisions</b>	<b>3.0-3.8 FAR</b>	<b>3.0 FAR</b>	<b>1.5 FAR</b>	<b>3.0 FAR</b>	<b>1.5 FAR</b>	<b>1.5 FAR</b>	<b>1.5 FAR</b>
Streetscape Improvements	•	•	•	•	•	•	•
Public Spaces and Rights-of-Way	•	•	•	•	•	•	•
Minimum Commercial Uses	•	•	•	•	•	•	•
Form Requirements (Build-To Lines, Frontage Types, Heights, Step Backs)	•	•	•	•	•	•	•
Retail Space Requirements (max. 6500 sq.ft. unless large floor plate permitted)	•	•	•	•	•	•	•
Compliance with any affordable housing ordinance	•	•	•	•	•	•	•
General Design Guidelines	•	•	•	•	•	•	•
<b>"Site Plan 'Historic' Maximum Density Provisions</b>							
Building Preservation (500% density credit for area of building square footage preserved with some exceptions)	•	•	•	•	•	•	•
<b>"Site Plan 'Plus' Maximum" Density Provisions</b>	<b>5.0-5.8 FAR</b>	<b>4.5 FAR</b>	<b>2.5 FAR</b>	<b>5.0 FAR</b>	<b>3.0 FAR</b>	<b>3.0 FAR</b>	<b>3.0 FAR</b>
Office uses in excess of minimums set by plan (up to 1.25 FAR)	•	•	•	•	•	•	•
Office uses in excess of minimums set by plan (up to .50 FAR)	•	•	•	•	•	•	•
Provision of green building technology and minimum LEED certification of "Certified" to "Platinum" (up to 0.15 to .35 FAR)	•	•	•	•	•	•	•
Retention of existing local/independent retailers (up to 200% of the area dedicated to retained tenants)	•	•	•	•	•	•	•
Retail Set Aside Space for local/independent retailers or space dedicated for community-based organizations, BID, or other approved incubator entities leased/sold at below-market rates (up to 200% of the area offered for sale or lease at below market rates, or as otherwise approved by the County Board	•	•	•	•	•	•	•
Incorporation of alternative office products (0.15 FAR) (e.g. live/work, work/live, loft space, etc.)	•	•	•	•	•	•	•
Public Market Pavilion (up to 200% of area provided or contribution for the creation or maintenance of the market)	•	•	•	•	•	•	•
Public Art (up to 0.15 FAR)	•	•	•	•	•	•	•
Dedication of space for art galleries/artists' studios (up to 200% of area provided)	•	•	•	•	•	•	•

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## 9.0 Neighborhood Input

### Issue

Due to the intensity of uses allowed by-right in PED and TOD, it may be appropriate to identify opportunities in the planning or zoning process for additional neighborhood input.

### Discussion

As noted above, TOD and PED typically provide an increase in by-right development potential over the zoning districts that they replace/overlay due to decreased height restrictions, reduced parking requirements, and reduced setbacks. To balance the by-right development potential with neighborhood concerns, the application of PED and TOD is preceded by an area plan process, which allows neighborhood input in many development standards for the area (such as setback and streetscape requirements). PED and TOD have increased design standards compared to conventional zoning districts, which ensures a baseline for good design. PED and TOD also require increased developer contribution to streetscapes and open space. Public input is also solicited during the corrective rezoning process for TOD and PED.

However, like all by-right zoning districts, once applied development occurs without neighborhood input, except when a rezoning is required. The City may want to consider allowing neighborhood stakeholders to have some input in or at least be made aware of the details of specific projects, especially larger projects (such as over 50,000 square feet, for example). At the same time, if additional development details and requirements are determined in the planning process (as recommended in this report), the predictability of new development will be greater for both neighborhoods and developers and may mitigate the need for additional public review.

### Recommendations

1. Consider requiring neighborhood representation in the development review process:
  - a. PED and TOD already require two “Preliminary Review” meetings with City staff, so this might be an opportunity for specific neighborhood groups to participate in the process.
  - b. Alternatively or in addition, developers could be required to meet with affected neighborhood groups (for information purposes, at least) prior to submittal of development plans for approval.
  - c. Thresholds for the size of development that might trigger such neighborhood input/review might be worth considering so that large projects (for example, 50,000 square feet or larger) would be subject to additional scrutiny, but smaller projects would be allowed to proceed as long as the base requirements are met.
2. Also consider protections for developers’ rights by listing certain development standards/thresholds that are by-right and not subject to neighborhood review.

Implementation Mechanisms	Examples/Resources
Text amendment  Additional neighborhood input in plan and/or development process	<i>Columbia Pike Special Revitalization District – Form-based Code</i>

# 10.0 Text Format

## Issue

Changes in formatting, including graphics and tables, would make PED and TOD text more easily interpreted and reader-friendly.

## Discussion

TOD and PED are two of Charlotte’s most design intensive zoning districts, yet the format used to describe the district regulations is completely text-based. No graphics or tables are included to illustrate key topics (especially those related to building design, for example) or to make the text provisions easier to follow. Further, many subsection paragraphs lack headings that would make finding information in the text much easier.

## Recommendations

1. Consider adding graphics to illustrate key design concepts in the district regulations. Regulations related to the following topics could be illustrated with example graphics (See Figure 6):
  - a. setbacks
  - b. building projections (balconies)
  - c. arcades
  - d. heights
  - e. FAR
  - f. Screening and buffer standards
  - g. Structured parking
  - h. Connectivity and circulation standards
  - i. Urban design standards (including streetscape standards)
2. Consider tables for topics that can be more simply conveyed in this manner. For example, the following topics from the TOD regulations could be described in tables
  - a. Density/use requirements
  - b. Applicability requirements
  - c. Conditions for exceeding parking maximums
3. Consider additional subsection headings for text heavy paragraphs to make information in the ordinance requirements easier to find and to follow. Make these headings bold or somehow differentiated from the *paragraph text*. (See Figure 6)

<b>Implementation Mechanisms</b>	<b>Examples/Resources</b>
Changes to text formatting	<i>Knightdale, NC Unified Development Ordinance</i>

**Figure 6:** Sample ordinance format from Knightdale, NC with graphics and clear heading styles

**CHAPTER 5: BUILDING TYPES AND ARCHITECTURAL STANDARDS**

**6. Design Details:** All townhouse buildings shall provide detailed design along all elevations. Detailed design shall be provided by using many of the following architectural features on all elevations as appropriate for the proposed building type and style (may vary features on rear/side/front elevations):

- a. Dormers
- b. Gables
- c. Recessed entries
- d. Covered porch entries
- e. Cupolas or towers
- f. Pillars or posts
- g. Eaves (minimum 10 inch projection which may include gutter)
- h. Off-sets in building face or roof (minimum 16 inches)
- i. Window trim (minimum 4 inches wide)
- j. Bay windows
- k. Balconies
- l. Decorative patterns on exterior finish (e.g. scales/shingles, wainscoting, ornamentation, and similar features)
- m. Decorative cornices and roof lines (for flat roof)

TOWNHOME BUILDINGS

*Multi-Family Townhomes with Alley*

*Multi-Family Townhomes with Alley*

*Live-Work Units*

**D. Materials**

1. Residential building walls shall be wood clapboard, cementitious fiber board, wood shingle, wood drop siding, primed board, wood board and batten, brick, stone, stucco, or vinyl.
2. Residential roofs shall be clad in wood shingles, standing seam metal, terne, slate, copper, or asphalt shingles.

**E. Other Requirements**

1. **Roof Pitch:** Main roofs on residential buildings shall be symmetrical gables or hips with a pitch between 6:12 and 12:12. Monopitch (shed) roofs are allowed

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**5-10** **KNIGHTDALE, NC UNIFIED DEVELOPMENT ORDINANCE**

## References/Resources

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City of Charlotte, NC. *Historic South End District Parking Study*. June, 2004.

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Litman, Todd. *Parking Management: Strategies, Evaluation and Planning*. Victoria, BC: Victoria Transportation Policy Institute, March 2006. [www.vpti.org](http://www.vpti.org)

Town of Knightdale, North Carolina. *Knightdale Unified Development Ordinance*. Adopted November 2005. <http://www.ci.knightdale.nc.us/government/documents/udo.htm>

## Appendix: Factors that Affect Parking Demand

From *Parking Management* page 20. These types of factors can be considered in setting and determining parking requirements in transit station areas and other mixed-use districts.

### **More Accurate and Flexible Standards**

*More accurate and flexible standards* means that the parking requirements at a particular location are adjusted to account for various factors (“Parking Evaluation,” VTPI, 2005). Table 9 summarizes various factors that should be used to adjust parking requirements.

**Table 9 Parking Requirement Adjustment Factors**

<b>Factor</b>	<b>Description</b>	<b>Typical Adjustments</b>
Geographic Location	Vehicle ownership and use rates in an area.	Adjust parking requirements to reflect variations identified in census and travel survey data.
Residential Density	Number of residents or housing units per acre/hectare.	Reduce requirements 1% for each resident per acre: Reduce requirements 15% where there are 15 residents per acre, and 30% if there are 30 residents per acre.
Employment Density	Number of employees per acre.	Reduce requirements 10-15% in areas with 50 or more employees per gross acre.
Land Use Mix	Range of land uses located within convenient walking distance.	Reduce requirements 5-10% in mixed-use developments. Additional reductions with shared parking.
Transit Accessibility	Nearby transit service frequency and quality.	Reduce requirements 10% for housing and employment within ¼ mile of frequent bus service, and 20% for housing and employment within ¼ mile of a rail transit station.
Carsharing	Whether a carsharing service is located nearby.	Reduce residential requirements 5-10% if a carsharing service is located nearby, or reduce 4-8 parking spaces for each carshare vehicle in a residential building.
Walkability	Walking environment quality.	Reduce requirements 5-15% in walkable communities, and more if walkability allow more shared and off-site parking.
Demographics	Age and physical ability of residents or commuters.	Reduce requirements 20-40% for housing for young (under 30) elderly (over 65) or disabled people.
Income	Average income of residents or commuters.	Reduce requirements 10-20% for the 20% lowest income households, and 20-30% for the lowest 10%.
Housing Tenure	Whether housing are owned or rented.	Reduce requirements 20-40% for rental versus owner occupied housing.
Pricing	Parking that is priced, unbundled or cashed out.	Reduce requirements 10-30% for cost-recovery pricing (i.e. parking priced to pay the full cost of parking facilities).
Unbundling Parking	Parking sold or rented separately from building space.	Unbundling parking typically reduces vehicle ownership and parking demand 10-20%.
Parking & Mobility Management	Parking and mobility management programs are implemented at a site.	Reduce requirements 10-40% at worksites with effective parking and mobility management programs.
Design Hour	Number of allowable annual hours a parking facility may fill.	Reduce requirements 10-20% if a 10 <sup>th</sup> annual design hour is replaced by a 30 <sup>th</sup> annual peak hour. Requires overflow plan.
Contingency-Based Planning	Use lower-bound requirements, and implement additional strategies if needed.	Reduce requirements 10-30%, and more if a comprehensive parking management program is implemented.

*This table summarizes various factors that affect parking demand and optimal parking supply.*